## 4.750.042 BASE RATES (in dollars)

## MT 750 - SALES AREA

CITE .	Size Ranges - m <sup>2</sup>	Size 1 (0-49)		Size 2 (50-249)		Size 3 (250-699)		Size 4 (700 & over)	
ST Code	Structure	K	AR	K	AR	K	AR	K	AR
61 Ma	ain Level & Concrete Slab	6 600	390	14 800	227	24 800	182	44 500	158
91 Sal	les Area Finish	1200	84	1 600	77	2 100	75	2 800	74

# MT 751 - BAYS (Average Size Per Bay)

	Size Ranges - m <sup>2</sup>		ze 1 -49)	Size 2 (50 & over)	
ST Code	Structure	K	AR	K	AR
61 M	ain Level & Concrete Slab	1 600	171	3 700	131
90 W	arehouse Finish	100	26	100	24

ST Code 61 designates the base structure of a main level with a concrete slab on grade.

Total Base Rates are produced when base structure Base Rates are combined with applicable interior finish Base Rates.

**Note:** MT 751, Service Station Bays, is a structure which is meant to be attached to a Service Station Sales Area. The base structure Base Rates for MT 751 have been designed accordingly.

## 4.750.043 MODULE RATES (in dollars)

Concrete Slab on Grade - Sales Area (MT 750 QU 04 ST 50)

Size Ranges - m <sup>2</sup>	~	Size 1 0-49)	Siz (50-	e 2 249)		ee 3 -699)	Size (700 &	
<b>Code</b> Component	K	AR	K	AR	K	AR	K	AR
0300 Excavation	70	8.20	180	6.10	370	5.30	600	5.00
0702 Piles	480	25.00	1200	10.60	2 450	5.60	4 010	3.30
0922 Concrete Pads	0	0.00	0	0.00	-350	2.90	-710	3.40
1123 Grade Beams	840	44.00	2100	18.60	4 310	9.80	7 050	5.90
1524 Concrete Slab	0	16.80	0	16.80	0	16.80	0	16.80
6104 Plumbing Basic	30	2.10	80	1.20	150	0.90	250	0.80
6504 Heating	110	7.50	280	4.20	540	3.20	870	2.70
6704 Electrical Basic	90	6.20	230	3.40	440	2.60	720	2.30
Miscellaneous	30	2.20	80	1.20	160	1.00	260	0.80
Architect Fees	80	5.60	210	3.10	410	2.40	660	2.10
Total:	1 730	117.60	4 360	65.20	8 480	50.50	13 710	43.10

ST Code 90 designates typical warehouse interior finish for this classification on a per bay basis.

ST Code 91 designates typical sales areas interior finish for this classification and usually includes limited office space.

# 4.750.043 MODULE RATES (in dollars)

Concrete Slab on Grade - Bays (MT 751 QU 04 ST 50) - per bay

Size Ranges - m <sup>2</sup>		Size 1 (0-49)		ze 2 & over)
Code Component	K	AR	K	AR
0300 Excavation	20	5.40	40	4.90
0702 Piles	120	6.20	300	2.60
1123 Grade Beams	210	11.00	520	4.70
1536 Concrete Slab	0	23.80	0	23.80
6104 Plumbing Basic	10	1.10	20	0.80
6504 Heating	30	3.70	70	2.90
6704 Electrical Basic	20	3.00	60	2.40
Miscellaneous	10	1.10	20	0.90
Architect Fees	20	2.80	50	2.20
Total:	440	58.10	1080	45.20

**Main Level Base Structure - Sales Area** (MT 750 QU 04 ST 60)

Size Ranges - m <sup>2</sup>		Size 1 0-49)	Siz (50-2	te 2 49)	Size (250-6	_	Size 4 (700 & c	
Code Component	K	AR	K	AR	<u>K</u>	AR	K	AR
0100 Sitework	500	0.00	500	1.00	500	0.90	500	0.80
1704 Columns	0	0.00	0	0.00	-150	1.20	-300	1.50
1902 Beams	0	0.00	0	0.00	-560	5.70	-970	6.30
2546 Base Wall Constr.	2 660	139.50	6 670	59.00	13 660	31.10	22 350	18.60
2703 Ext. Wall Finish	270	14.00	670	5.90	1 370	3.10	2 240	1.90
2951 Base Roof Constr.	0	23.50	0	23.50	0	23.50	0	23.50
3313 Roof Finish	0	22.80	0	22.80	0	22.80	0	22.80
6104 Plumbing Basic	150	7.10	250	4.90	420	4.30	640	4.00
6504 Heating	520	24.90	890	17.40	1 490	15.30	2 260	14.20
6704 Electrical Basic	420	20.40	730	14.30	1230	12.60	1 860	11.70
Miscellaneous	150	7.40	270	5.20	450	4.60	680	4.20
Architect Fees	240	13.10	500	7.80	930	6.30	1 480	5.60
Total:	4 910	272.70	10 480	161.80	19 340	131.40	30 740	115.10

**Main Level Base Structure - Bays** (MT 751 QU 04 ST 60) - per bay

Size Ranges - m <sup>2</sup>		Size 1 (0-49)	Size 2 (50 & over)	
Code Component	K	AR	K	AR
0100 Sitework	0	0.00	0	1.00
2546 Base Wall Constr.	650	34.80	1 660	14.80
2703 Ext. Wall Finish	70	3.50	170	1.50
2951 Base Roof Constr.	0	23.50	0	23.50
3313 Roof Finish	0	22.80	0	22.80
6104 Plumbing Basic	50	2.70	70	2.20
6504 Heating	160	9.40	260	7.60
6704 Electrical Basic	130	7.70	210	6.30
Miscellaneous	50	2.80	80	2.30
Architect Fees	60	5.40	120	4.20
Total:	1170	112.60	2 570	86.20

# 4.750.043 MODULE RATES (in dollars)

## Sales Area Finish

(MT 750 QU 04 ST 91) - finish height - 2.4 m

Size Ranges - m <sup>2</sup>		Size 1		2	Size 3		Size 4	
	(0	-49)	(50-2	<b>49</b> )	(250-699)	(700 & over)		
<b>Code</b> Component	K	AR	K	AR	K	AR	K	AR
4102 Int. Wall Finish	160	8.30	400	3.50	820	1.90	1 330	1.10
4337 Partitions 0	23.20	0	23.20	0 0	23.20	0 2	23.20	
4533 Ceiling Finish	0	11.00	0	11.00	0	11.00	0	11.00
4712 Interior Doors	980	0.40	980	0.40	980	0.40	980	0.40
4903 Baseboards & Trim	40	2.30	110	1.00	220	0.50	360	0.30
5103 Floor Finish	0	18.50	0	18.50	0	18.50	0	18.50
6905 Electric. Fixtures	0	16.00	0	16.00	0	16.00	0	16.00
Architect Fees	60	4.00	80	3.70	100	3.60	130	3.60
Total:	1240	83.70	1 570	77.30	2 120	75.10	2 800	74.10

# Warehouse Finish - Bays

(MT 751 QU 04 ST 90) - per bay - finish height - 2.4 m

Size Ranges - m <sup>2</sup>		Size 1 (0-49)	Size 2 (50 & over)		
<b>Code Component</b>	K	AR	K	AR	
4102 Int. Wall Finish	50	2.60	120	1.10	
4500 Ceiling Finish	0	4.40	0	4.40	
5179 Floor Finish	0	4.70	0	4.70	
6904 Electric. Fixtures	0	13.00	0	13.00	
Architect Fees	10	1.20	10	1.20	
Total:	60	25.90	130	24.40	

# 4.750.044 PRECALCULATED ADJUSTMENTS (in dollars)

# **Height - Sales Area**

per metre of height - add or deduct

Size Ranges - m <sup>2</sup>		ze 1 49)		ze 2 249)	Size 3 (250-699)		ze 4 & over)	
Component	K	AR	K	AR	K	AR	K	AR
Exterior Wall								_
Base Wall Constr.	890	46.50	2 220	19.70	4 550	10.40	7 450	6.20
Ext. Wall Finish	90	4.70	220	2.00	460	1.00	750	0.60
Interior Columns	0	0.00	0	0.00	-40	0.40	-90	0.50
Plumbing Basic	20	1.10	50	0.50	110	0.30	180	0.20
Heating 80	4.10	190	1.7	0 400	0.	90650	0.60	
Electrical Basic	70	3.60	170	1.50	350	0.80	570	0.50
Total:	1 150	60.00	2 850	25.40	5 830	13.80	9 510	8.60
Int. Wall Finish	70	3.50	170	1.50	340	0.80	560	0.50

## 4.750.044 PRECALCULATED ADJUSTMENTS (in dollars)

# **Height - Bays**

per metre of height - add or deduct per bay

Size Ranges - m <sup>2</sup>		ze 1 49)	Size 2 (50 & over)		
Component	K	AR	K	AR	
Exterior Wall					
Base Wall Constr.	220	11.60	550	4.90	
Ext. Wall Finish	20	1.20	60	0.50	
Plumbing Basic	10	0.30	10	0.10	
Heating 20	1.00	50	0.40	)	
Electrical Basic	20	0.90	40	0.40	
Total:	290	15.00	710	6.30	
Int. Wall Finish	20	0.90	40	0.40	

# **Plumbing**

per fixture - add \$ 470.00

## **Spans**

(for each metre more or less than 6.1 m)

roof along joists - add or deduct \$ 1.60 per m<sup>2</sup> of area roof along beam - add or deduct \$ 0.80 per m<sup>2</sup> of area

#### 4.750.045 UNIT COST ADJUSTMENTS

#### Windows

average double glazed aluminum window, per  $m^2$  - add \$ 182.00 average clear single glazed aluminum framing system, per  $m^2$  - add \$136.00 average clear sealed unit aluminum framing system, per  $m^2$  - add \$172.00

## Doors, Exterior

average clear aluminum door, EA - add \$ 670.00 average hollow steel, EA - add \$ 480.00 overhead wood sectional door, per m<sup>2</sup> - add \$ 100.00 overhead aluminum sectional fully glazed, per m<sup>2</sup> - add \$ 166.00

## Wall Openings

(areas replaced by doors and windows)
unit masonry or wood frame wall systems - **deduct 60% of wall cost** 

Note: Wall Cost (as per Component Description)
2546 Base Wall Construction \$77.70
2703 Exterior Wall Finish 7.80
4102 Interior Wall Finish 5.70
Total: m<sup>2</sup> \$91.30

## 4.750.046 GENERAL INFORMATION

The Base Cost of a building is calculated by applying appropriate Total Base Rates to the building's floor areas.

Total Base Cost is produced when the Base Cost is combined with applicable height adjustments.

Base structure designates a structure excluding interior finish.

To calculate average size per bay, divide the total bay floor area by the number of bays.

Determine floor areas from exterior measurements.

For Perimeter and/or Design adjustments see section 1.160.000.

For Overall Structural Height adjustments see section 1.170.000.

Assume concrete block back-up for brick variations, thereby giving obsolescence to older type buildings.

## 4.760.050 MODEL TYPE 760 QUALITY 05

## SERVICE STATION KIOSK - SEMI CUSTOM

#### 4.760.051 GENERAL DESCRIPTION

# Wall Heights

Architect Fees: 5.6 % Exterior Wall - Main 3.0 m

Window Area: 40.0 %

## COMPONENT DESCRIPTION

Concrete Slab - 150 mm medium reinforced precast slab with a steel perimeter channel

Framing - bearing walls

Base Wall Construction - wood framing, sheathing, insulation; bullet resistant cashier area

Exterior Wall Finish - insulated painted metal panels

Base Roof Construction - wood joists and deck system

Roof Finish - rigid insulation, 3-ply built-up or equivalent

Windows - good clear sealed unit aluminum framing system

Exterior Doors - Front - three good to expensive aluminum

- Rear - one good hollow steel

Interior Wall Finish - prefinished paneling

Partitions - prefinished paneling; bullet resistant cashier area

Ceiling Finish - suspended panels

Interior Doors - average hollow core wood

Baseboards & Trim - average to good quality

Floor Finish - colored floor hardener

Plumbing Basic - average •

Heating - average to good forced air and air conditioning

**Electrical Basic -** average to good wiring

**Electrical Fixtures -** average to good lighting

## 4.760.052 BASE RATES (in dollars)

All Sizes - m<sup>2</sup>

ST
Code Structure K AR
61 Main Level & Concrete Slab 10 000 650

ST Code 61 designates a service station kiosk with a concrete slab on grade.

**Note:** These structures are normally pre-built and transported to site.

## **4.760.053 INSTALLATIONS**

Concrete Slab	$\mathbf{m}^2$	\$ 72.00
Base Wall Construction including		
metal panels	$\mathbf{m}^2$	60.00
Base Roof Construction including		
finish	$\mathbf{m}^2$	59.00
Windows	$\mathbf{m}^2$	184.00
Exterior Doors - Front	EA	1 100.00
- Rear	EA	620.00
Interior Wall Finish	$\mathbf{m}^2$	30.00
Partitions	$\mathbf{m}^2$	38.00
Ceiling Finish	$\mathbf{m}^2$	11.00
Interior Doors	EA	320.00
Floor Finish	$\mathbf{m}^2$	4.00
Plumbing Basic 7.5% of Total Base Cost		
Heating & Air Conditioning Unit	EA	3 400.00
Electrical Basic including		
fixtures 6.5% of Total Base Cost		
Counters, average 3.3 m	EA	1 090.00
Extra features: 1 exhaust fan	EA	180.00
0.8 kW air compressor	EA	1 300.00
wall mounted tire •		
inflator	EA	850.00

## 4.760.054 PRECALCULATED ADJUSTMENTS

#### Height

per metre of height - add or deduct K	\$ 600.00	
1 6	ΛR	\$ 40 00

# Walls, Exterior

good face brick, per m² - **add \$ 81.00** precast flat exposed aggregate panels, per m² - **add \$ 92.00** uninsulated painted metal panels, per m² - **deduct \$ 7.00** 

## **Eaves**

300 mm wide x 600 mm high prefinished aluminum soffit and fascia, per m - add \$ 44.00 each additional 300 mm width, per m - add \$ 26.00

# Plumbing

per fixture - add \$ 470.00

## Heat

electric wall furnaces - **deduct \$ 1 400.00** nil air conditioning - **deduct \$ 1 850.00** 

## 4.760.056 GENERAL INFORMATION

Total Base Cost is produced when the Base Cost is combined with applicable height adjustments.

# 4.762.030 MODEL TYPE 762 QUALITY 03

# **SERVICE STATION CANOPY - FAIR**

## 4.762.031 GENERAL DESCRIPTION

**Architect Fees: 4.1** 

## COMPONENT DESCRIPTION

Concrete Pads - reinforced
Framing - wood frame on pipe or wood columns
Base Roof Construction - wood joists and deck
Roof Finish - 3-ply built-up
Fascia - aluminum or painted plywood; 0.6 metre height
Ceiling Finish - painted plywood
Electrical Basic - fair wiring
Electrical Fixtures - fair lighting

## 4.762.032 BASE RATES (in dollars)

ST		All Siz	es - m²
Code	Structure	K	AR
60	Main Level	400	95

ST Code 60 designates a detached service station canopy.

# **4.762.033 INSTALLATIONS**

Ceiling Finish	$m^2$	\$ 13.40
Electrical Basic	K	100.00
	AR	10.00
Electrical Fixtures	$m^2$	5.00

## 4.762.034 PRECALCULATED ADJUSTMENTS

## Canopy

attached to another structure - deduct	K	\$ 1	50.00
	AR	\$	3.00

# 4.762.035 UNIT COST ADJUSTMENTS

**Dispenser Island** per m<sup>2</sup> - add \$ 60.00

Concrete Apron per  $m^2$  - add \$ 27.50

## 4.762.036 GENERAL INFORMATION

# 4.762.040 MODEL TYPE 762 QUALITY 04

## **SERVICE STATION CANOPY - STANDARD**

## 4.762.041 GENERAL DESCRIPTION

**Architect Fees:** 4.8 %

#### COMPONENT DESCRIPTION

Piles - reinforced concrete

Framing - steel or glue laminated columns and beams or equivalent

Base Roof Construction - open web steel joists, steel decking or wood truss joists with wood decking

**Roof Finish -** 3-ply built-up

Fascia - painted metal or aluminum; one metre height

Ceiling Finish - painted metal or aluminum

Electrical Basic - average wiring

Electrical Fixtures - average lighting; open or recessed fluorescent fixtures

## 4.762.042 BASE RATES (in dollars)

All Sizes - m<sup>2</sup>

ST			
Code	Structure	K	AR
60	Main Level	1 000	160

ST Code 60 designates a detached service station canopy.

## **4.762.043 INSTALLATIONS**

#### **BASE STRUCTURE**

Ceiling Finish	$m^2$	\$ 32.00
Fascia	$m^2$	66.00
Electrical Basic	K	100.00
	AR	12.00
Electrical Fixture	$s m^2$	15.50

## 4.762.044 PRECALCULATED ADJUSTMENTS

Fascia

per metre of height - add or deduct K \$ 1 400.00 AR \$ 13.00

Canopy

attached to another structure - deduct K \$400.00 AR \$ 2.00

## 4.762.045 UNIT COST ADJUSTMENTS

**Dispenser Island** 

per m<sup>2</sup> - add \$ 97.00

**Concrete Apron** 

per m<sup>2</sup> - add \$ 40.00

**Convex Mirror** 

EA - add \$ 225.00

**Fascia Lighting** 

fluorescent strip with acrylic lamp enclosures, per m - add \$ 138.00

## 4.762.046 GENERAL INFORMATION

# 4.762.050 MODEL TYPE 762 QUALITY 05

## **SERVICE STATION CANOPY - SEMI CUSTOM**

## 4.762.051 GENERAL DESCRIPTION

**Architect Fees:** 5.6 %

## COMPONENT DESCRIPTION

**Piles -** reinforced concrete or concrete spread pad footings

Framing - steel columns and beams

Base Roof Construction - open web steel joists, steel decking or wood stress skin panels

**Roof Finish -** 3-ply built-up

Fascia - painted metal or aluminum; 1.2 metre height

Ceiling Finish - painted metal or aluminum

Electrical Basic - average to good wiring

Electrical Fixtures - average to good lighting; mercury vapor or high pressure sodium fixtures

## 4.762.052 BASE RATES (in dollars)

CITE.		All Sizes - m <sup>2</sup>		
ST Code	Structure	K	AR	
60	Main Level	2 000	190	

ST Code 60 designates a detached service station canopy.

## **4.762.053 INSTALLATIONS**

Ceiling Finish	$m^2$	\$ 32.00
Fascia	$m^2$	66.00
Electrical Basic	K	100.00
	AR	12.00
Electrical Fixture	$s m^2$	26.50

## 4.762.054 PRECALCULATED ADJUSTMENTS

## Fascia

per metre of height - add or deduct K  $$1\,200.00$$  AR  $$1\,4.00$ 

# Canopy

attached to another structure - **deduct K**  $\qquad$  \$ 460.00 AR \$ 2.20

## 4.762.055 UNIT COST ADJUSTMENTS

# **Dispenser Island**

per m<sup>2</sup> - add \$ 97.00

# **Concrete Apron**

per m<sup>2</sup> - add \$ 40.00

# **Convex Mirror**

EA - add \$ 225.00

## **Fascia Lighting**

fluorescent strip with acrylic lamp enclosures, per m - add \$ 138.00

# 4.762.056 GENERAL INFORMATION

#### 4.762.060 MODEL TYPE 762 QUALITY 06

## **SERVICE STATION CANOPY - CUSTOM**

## 4.762.061 GENERAL DESCRIPTION

**Architect Fees:** 7.0 <sup>0</sup>/0

## COMPONENT DESCRIPTION

**Piles -** reinforced concrete or concrete spread pad footings

Framing - steel columns and beams boxed with painted metal or aluminum

Base Roof Construction - open web steel joists, steel decking or wood stress skin panels

**Roof Finish -** 3-ply built-up

Fascia - painted metal or aluminum integrated fascia and soffit; 1.2 metre height

Ceiling Finish - metal or aluminum with baked on finish

Electrical Basic - good wiring

Electrical Fixtures - good lighting; mercury vapor or high pressure sodium fixtures

## 4.762.062 BASE RATES (in dollars)

ST		All Size	es - m <sup>2</sup>
Code	Structure	K	AR
60	Main Level	3 000	210

ST Code 60 designates a detached service station canopy.

# **4.762.063 INSTALLATIONS**

$\mathbf{m}^2$	\$ 44.00
$m^2$	73.00
K	100.00
AR	12.00
30.50	
	m <sup>2</sup> K AR

## 4.762.064 PRECALCULATED ADJUSTMENTS

## Fascia

per metre of height - add or deduct K	\$ 1 350.00		
	AR	\$	15.50
Canopy attached to another structure – <b>deductK</b>	\$ 500.00 AR	\$	2.40
nil boxed columns – <b>deduct</b>	K	\$ 7	00.00
	AR	\$	12.50

## 4.762.065 UNIT COST ADJUSTMENTS

**Dispenser Island** 

per m<sup>2</sup> - **add \$ 97.00** 

**Concrete Apron** 

per m<sup>2</sup> - **add \$ 40.00** 

**Convex Mirror** 

EA - add \$ 225.00

**Fascia Lighting** 

fluorescent strip with acrylic lamp enclosures, per m - add \$ 138.00

## 4.762.066 GENERAL INFORMATION

## 4.770.020 MODEL TYPE 770 QUALITY 02

## **BULK OIL WAREHOUSE - SUBSTANDARD**

## 4.770.021 GENERAL DESCRIPTION

## **Wall Heights**

Architect Fees: 2.6 % Foundation - Basementless 0.9 m Exterior Wall - Main 2.1 m

## COMPONENT DESCRIPTION - BASE STRUCTURE

Concrete Pads - unreinforced

Foundation Walls - cross-braced wood posts & beams, corrugated galvanized steel skirts

Framing - mill type construction or equivalent

Base Floor Construction - wood joists & plank floor system

Stair - one wood stair, unpainted

Base Wall Construction - wood framing with horizontal purlins

Exterior Wall Finish - corrugated galvanized steel

Base Roof Construction - wood trusses or equivalent

Roof Finish - corrugated galvanized steel

Electrical Basic - fair wiring •

**Electrical Fixtures -** explosion proof fixtures and receptacles

**Platform -** 1.8 m wide by the length of the building

## 4.770.022 BASE RATES (in dollars)

ST		All Size	es - m <sup>2</sup>
Code	Structure	K	AR
62	Main Level & Foundation	2 400	153

ST Code 62 designates a main level with a basementless foundation.

## 4.770.023 INSTALLATIONS

Foundation Walls	K	\$ 1 200.00
	AR	51.00
Base Floor Construction	$m^2$	35.00
Exterior Walls	$m^2$	23.00
Stair	EA	100.00

## 4.770.024 PRECALCULATED ADJUSTMENTS (in dollars

## Height

per metre of height - add or deduct

All Sizes - m<sup>2</sup>

#### Wiring

(including fixtures)

nil - deduct 7.8% of Total Base Cost

## **Platform**

along perimeter of building, per m<sup>2</sup> - **add or deduct \$ 86.00** extending away from perimeter of building, per m<sup>2</sup> - **add \$ 110.00** 

## 4.770.025 UNIT COST ADJUSTMENTS

## Windows

industrial steel sash, per m<sup>2</sup> - add \$ 114.00

## Doors, Exterior

metal clad sliding door, EA - add \$ 450.00

## Wall Openings

(areas replaced by doors and windows) adjustments for openings are not applicable for this classification

# 4.770.026 GENERAL INFORMATION

Total Base Cost is produced when the Base Cost is combined with applicable height adjustments.

Determine floor areas from exterior measurements.

# 4.770.030 MODEL TYPE 770 QUALITY 03

## **BULK OIL WAREHOUSE - FAIR**

#### 4.770.031 GENERAL DESCRIPTION

## Wall Heights

**Architect Fees:** 2.6 % **Foundation -** Basementless 0.9 m **Exterior Wall -** Main 2.4 m

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Concrete Pads - unreinforced

Foundation Walls - cross-braced wood posts & beams, galvanized steel skirts

Base Floor Construction - wood joists & plank floor system

Stair - one wood stair, unpainted

Base Wall Construction - galvanized steel self-framing panels

Base Roof Construction - galvanized steel self-framing panels, 150 mm open eaves

Electrical Basic - fair wiring

**Electrical Fixtures -** explosion proof fixtures and receptacles

**Platform -** 1.8 m wide by the length of the building

## 4.770.032 BASE RATES (in dollars)

		All Size	es - m <sup>2</sup>
ST Code	Structure	K	AR
62	Main Level & Foundation	2 700	160

ST Code 62 designates a main level with a basementless foundation.

#### 4.770.033 INSTALLATIONS

Foundation Walls	K	\$ 1 400.00
	AR	52.00
Base Floor Construction	$m^2$	38.00
Exterior Walls	$m^2$	26.00
Stair	EA	150.00

## 4.770.034 RECALCULATED ADJUSTMENTS (in dollars)

## Height

per metre of height - add or deduct

All Sizes - m<sup>2</sup>

**K AR** 630 5.60

# Wiring

(including fixtures)

nil - deduct 7.8% of Total Base Cost

#### Platform

along perimeter of building, per m<sup>2</sup> - add or deduct \$ 90.00 extending away from perimeter of building, per m<sup>2</sup> - add \$ 142.00

#### Concrete Slab

elevated on compacted fill, per  $m^2$  - **deduct K** \$ **300.00** AR \$ **42.00** 

#### 4.770.035 UNIT COST ADJUSTMENTS

#### Wall Sections

painted panels, per m<sup>2</sup> - add \$ 4.00

#### Windows

industrial steel sash, per m<sup>2</sup> - add \$ 247.00

#### **Doors**

hollow steel

low grade 0.9 m, EA - **add \$ 330.00** fair 0.9 m, EA - **add \$ 350.00** standard 0.9 m, EA - **add \$ 520.00** 

standard slide, EA - add

AR m<sup>2</sup> \$ 27.00

K \$350.00

## **Wall Openings**

(areas replaced by doors and windows)

adjustments for openings are not applicable for this classification

#### 4.770.036 GENERAL INFORMATION

Total Base Cost is produced when the Base Cost is combined with applicable height adjustments.

Determine floor areas from exterior measurements.

# 4.775.020 MODEL TYPE 775 QUALITY 02

## **BULK OIL OFFICE - SUBSTANDARD**

#### 4.775.021 GENERAL DESCRIPTION

# Wall Heights

Architect Fees: 2.6 % Exterior Wall - Main 2.4 m

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Concrete Footings - unreinforced or equivalent

Framing - mill type construction or equivalent

Base Floor Construction - wood joists, insulation, sheathing

Base Wall Construction - wood framing, insulation, sheathing

Exterior Wall Finish - corrugated galvanized steel, paint

Base Roof Construction - wood rafters, insulation, sheathing or equivalent

Roof Finish - corrugated galvanized steel, paint

Electrical Basic - substandard wiring

## **COMPONENT DESCRIPTION - OFFICE FINISH**

Interior Wall Finish - plywood, paint or equivalent

Partitions - nil

Ceiling Finish - plywood, paint or equivalent

Baseboards & Trim - low grade

Floor Finish - low grade tile or equivalent

Electrical Fixtures - fair lighting

## 4.775.022 BASE RATES (in dollars)

		All Sizes -	
ST	_		
<u>Code</u>	Structure	<u>K</u>	AR
62	Main Level & Foundation	1 950	171
83	Office Finish	300	49

ST Code 62 designates the base structure of a main level with a basementless foundation.

ST Code 83 designates typical office finish for this classification.

Total Base Rates are produced when base structure Base Rates are combined with applicable interior finish Base Rates.

## 4.775.023 INSTALLATIONS

#### BASE STRUCTURE

<b>Base Floor Construction</b>	m2	\$ 35.30
Base Wall Construction	m2	14.90
Exterior Wall Finishm2	21.50	
Base Roof Construction	m2	17.30
Roof Finish	m2	21.50

#### **OFFICE FINISH**

Interior Wall Finis	sh	<b>m2</b>	13.40
Ceiling Finish		<b>m2</b>	13.40
Baseboards	m	2.90	)
Floor Finish		<b>m2</b>	9.90

## 4.775.024 PRECALCULATED ADJUSTMENTS

#### **Concrete Slab**

on grade, per m? - deduct \$ 14.80

## Walls, Exterior

nil paint - **deduct K** \$80.00 **AR** \$4.50

#### Eaves

per m<sup>2</sup> - add \$ 39.70

#### Roof

nil paint, per m<sup>2</sup> - deduct \$ 4.00

## Plumbing

per fixture - add \$ 300.00

#### 4.775.025 UNIT COST ADJUSTMENTS

#### Windows

industrial steel sash, per m<sup>2</sup> - add \$ 114.00

#### Doors, Exterior

low grade glazed hollow steel door, EA - add \$ 390.00

#### Wall Openings

(areas replaced by doors and windows)

adjustments for openings are not applicable for this classification

## 4.775.026 GENERAL INFORMATION

The Base Cost of a building is calculated by applying appropriate Total Base Rates to the building's floor area.

Total Base Cost is produced when the Base Cost is combined with applicable height adjustments.

Determine floor areas from exterior measurements.

# 4.775.030 MODEL TYPE 775 QUALITY 03

## **BULK OIL OFFICE - FAIR**

## 4.775.031 GENERAL DESCRIPTION

## Wall Heights

**Architect Fees:** 2.6 % **Exterior Wall -** Main 2.4 m

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Concrete Footings - unreinforced or equivalent
Base Floor Construction - wood joists, insulation, sheathing
Wall & Roof Construction - galvanized steel self-framing panels, paint
Insulation - average batt or equivalent
Electrical Basic - fair wiring

# **COMPONENT DESCRIPTION - OFFICE FINISH**

Interior Wall Finish - plywood, paint or equivalent Partitions - nil
Ceiling Finish - plywood, paint or equivalent
Baseboards & Trim - low grade
Floor Finish - fair tile or equivalent
Electrical Fixtures - fair lighting

## 4.775.032 BASE RATES (in dollars)

All Sizes - m<sup>2</sup>

ST			
Code	Structure	K	AR
62	Main Level & Foundation	2 500	177
83	Office Finish	300	55

ST Code 62 designates the base structure of a main level with a basementless foundation.

ST Code 83 designates typical office finish for this classification.

Total Base Rates are produced when base structure Base Rates are combined with applicable interior finish Base Rates.

## 4.775.033 INSTALLATIONS

#### BASE STRUCTURE

Base Floor Construction	m2	\$ 35.30
Base Wall Construction	m2	22.00
Exterior Wall Finishm2	4.0	0
Base Roof Construction	m2	22.00
Roof Finish	m2	4.00

#### **OFFICE FINISH**

Interior Wall Finish	1	m2	13.40
Ceiling Finish		m2	13.40
Baseboards	m	2.90	
Floor Finish		m2	13.00

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#### 4.775.034 PRECALCULATED ADJUSTMENTS

#### **Concrete Slab**

on grade, per m<sup>2</sup> - **deduct \$ 14.80** 

## Walls, Exterior

#### **Eaves**

per m<sup>2</sup> add \$ 31.00

#### Roof

nil paint, per m<sup>2</sup> deduct \$ 4.00

## **Plumbing**

per fixture - add \$ 400.00

## 4.775.035 UNIT COST ADJUSTMENTS

## Windows

industrial steel sash, per m<sup>2</sup> - add \$ 114.00

## Doors, Exterior

low grade glazed hollow steel door, EA - add \$ 390.00

## Wail Openings

(areas replaced by doors and windows)

adjustments for openings are not applicable for this classification

## 4.775.036 GENERAL INFORMATION

The Base Cost of a building is calculated by applying appropriate Total Base Rates to the building's floor area.

Total Base Cost is produced when the Base Cost is combined with applicable height adjustments. Determine floor areas from exterior measurements.

# 4.850.030 MODEL TYPE 850 QUALITY 03

## **GRAIN ELEVATOR - FAIR**

# 4.850.032 BASE RATES (in dollars)

# **560 to 1400 tonnes**

$\mathbf{ST}$			PER
Code	Structure	K	TONNE
60	Main Level	272 000	136

ST Code 60 designates a standard type grain elevator.

## 4.850.033 INSTALLATIONS

<b>1. Drive Shed</b> 5.5 m x 18.3 <b>m</b> x <b>4</b> .	9 m high	EA	\$ 28 900
2. Driveways two ends, each set			\$ 8 100
3. Receiving Scales see Precalculated A	.djustments 4.850.0	)44	
<b>4. Hopper Scale</b> 2.72 tonne		EA	\$ 6 300
<b>5. Boot Pan and Pit</b> sloped two sides		EA	\$ 21 950
6. Leg Conveyor Syste	ms, wood		
250 mm belt	230 mm bucket	EA	\$ 26 250
to	to		to
305 mm belt	280 mm bucket	EA	\$ 31 500
7. Head Drive			
5.6 Kw to 7.5 Kw		EA \$ 3 3	300 to 4 000
8. Distributor included in leg con-	veyor systems		
9. Man Lift tension type		EA	\$ 6 300
10.Box Car Loading Sp	oout	EA	\$ 1 600
11.Hoist			
electric or hydraulic	2	EA	\$ 6 830

**Note:** Installations provide costs for components or unit costs which are already included in Base Rates.

## 4.850.034 PRECALCULATED ADJUSTMENTS

## Capacity adjustment

for each tonne less than 1400 tonnes, per tonne -deduct \$ 124.00

**Side Bins** 

flat bottom - deduct K \$ 3 000.00

per tonne\$ 1.60

half hoppered – deduct K \$ 1 100.00

per tonne\$ 0.20

## 4.850.036 GENERAL INFORMATION

Cleaner House - add only if cleaner house is used for cleaning grain.

For other adjustments see 4.850.044.

Suggested Age Life: 50 years.

Capacity conversion - to establish tonne capacity multiply bushel capacity by a factor of 0.028

e.g.  $40\ 000$  bushels  $x\ 0.028 = 1\ 120.0$  tonne

# 4.850.040 MODEL TYPE 850 QUALITY 04

# GRAIN ELEVATOR - STANDARD COMPOSITE GRAIN ELEVATOR - STANDARD

# 4.850.042 BASE RATES (in dollars)

		1401 to 2800 tonnes	Over 2800 tonnes	
ST		PER	PER	
Code	Structure	K TONNE	K TONNE	
60	Main Level	241 000 158	454 000 82	

ST Code 60 designates a standard type grain elevator or a composite type grain elevator.

**Note:** In the case of a composite elevator, determine total capacity of main elevator house and attached annexes and apply above rates to total capacity.

# **4.850.043 INSTALLATIONS**

1. Drive Shed

5.5 m x 18.3 m x 4.9	m high	EA	\$ 28 900
<b>2. Driveways</b> two ends, each set			\$ 10 400
<b>3. Receiving Scales</b> see Precalculated Ad	ljustments 4.850.04	4	
<b>4. Hopper Scale</b> 2.72 tonne		EA	\$ 6 300
<b>5. Boot Pan and Pit</b> sloped two sides		EA	\$ 21 950
	280 mm bucket	EA	\$ 31 500
to 355 mm belt	to 330 mm bucket	EA	to \$ 37 800
7. Head Drive 7.5 Kw to 14.9 Kw  EA \$ 4 000 to 6 000  8. Distributor included in leg conveyor systems			00 to 6 000
9. Man Lift tension type	9, 01 2, 0001113	EA	\$ 7 550
10.Box Car Loading Spo	out	EA	\$ 1 600
<b>11. Hoist</b> electric or hydraulic		EA	\$ 9 400

Note: Installations provide costs for components or unit costs which are already included in Base Rates.

## 4.850.044 PRECALCULATED ADJUSTMENTS

## 1. Drive Shed

In rate, 5.5 m x 18.3 m x 4.9 m high Area Adjustment

add or deduct m<sup>2</sup> \$ 242.00

Wall Height Adjustment, per m

K \$550.00

AR \$10.00

Cleaner House, attached, built to house grain cleaning system

Raised drive shed roof, 2.75 m wall height, no floor joists, flooring or cleaner timbers,

EA - add K \$ 1 600.00 AR \$ 29.00

Complete cleaner house, includes floor joists, flooring, cleaner timbers, bins, spouting, hopper and stairway,

EA - add K \$7 100.00 AR \$136.00

Wall Height Adjustment (see Drive Shed)

Overhead Door,

wood-sectional, EA - **add \$ 2 100.00** steel rolling, EA - **add \$ 3 000.00** 

Electric Door Opener, EA - add \$ 1 500.00

# 2. Concrete Retaining Walls per m<sup>2</sup> - add \$ 88.00

# 3. Receiving Scales - beam type, wood deck - add

<b>Platform Size</b>	Capacity		
m	tonnes		
2.7 x 6.7	up to 15	EA	\$ 14 150
3.0 x 9.1	15-20	EA	19 800
3.0 x 10.4	20-30	EA	20 750
3.0 x 9.1	30-40	EA	24 600
3.0 x 10.4	50-60	EA	30 700
3.0 x 12.2	50-60	EA	32 300
3.0 x 15.2	50-60	EA	40 950
3.0 x 18.3	50-60	EA	47 300
3.0 x 21.3	50-60	EA	51 800
3.0 x 24.4	60	EA	60 200
3.0 x 21.3	70	EA	53 650
3.0 x 24.4	70	EA	62 000
3.0 x 21.3	80	EA	55 400
3.0 x 24.4	80	EA	63 750

## **Decks**

Wood Deck, platform size, per m<sup>2</sup> - add \$ 29.00 Concrete Deck, platform size, per m<sup>2</sup> - add \$ 15.00 Steel Deck, platform size, per m<sup>2</sup> - add \$ 110.00

Electronic readout, EA - add \$ 3 750.00

Ticket or tape printer, EA - add \$ 2 650.00

## 4.850.044 PRECALCULATED ADJUSTMENTS

## 4. Hopper Scale

2.72 tonne, EA - add \$ 6 300.00 4.53 tonne, EA - add \$ 10 500.00

## **Shipping Scale Electronic Conversions**

Standard shipping scale converted to electronic weighing only - includes conversion kit, console with readout and printer, EA - add \$ 8 060.00

Standard shipping scale converted to electronic scale - includes conversion kit, console with readout, totalizer, batch control, 2 airgates and compressor, EA - add \$ 22 580.00

Printer (console add-on), EA - add \$ 2 960.00

Automatic Shipping Scale - includes programmable console with readout, printer, totalizer, batch control; top garner bin; hopper; 2 airgates, compressor; 2 720 kg to 3 175 kg capacity, EA - add \$ 48 370.00

with bottom surge bin, EA - add \$ 3 780.00 additional pneumatic airgates, EA - add \$ 1 600.00

Note: If no Hopper Scale (2.72 tonne), EA - deduct \$ 6 300.00

- **5. Boot Pan and Pit,** used with double leg, sloped one side only, EA  **add \$ 17 950.00**
- 6. Wood Leg Conveyor Systems, includes wood leg, belt and buckets, head drive and distributor add

			Approximate Tonnes		
Belt Size	Buckets Size	Head Drive Size	Per Hour Handling		Total System
250 mm	230 mm	5.6 Kw	70	EA	\$ 29 550
280 mm	250 mm	7.5 Kw	84	EA	32 350
305 mm	280 mm	7.5 Kw	98	EA	35 500
330 mm	305 mm	11.2 Kw	112	EA	40 500
355 mm	330 mm	14.9 Kw	126	EA	43 800
330 mm	305 mm	18.7 Kw	140	EA	45 300
330 mm	305 mm	22.4 Kw	154	EA	48 300
330 mm	305 mm	29.8 Kw	168	EA	53 850
355 mm	330 mm	18.7 Kw	140	EA	52 650
355 mm	330 mm	29.8 Kw	196	EA	61 200
380 mm	355 mm	18.7 Kw	168	EA	60 000
380 mm	355 mm	22.4 Kw	196	EA	65 100
430 mm	355 mm	37.4 Kw	210	EA	77 150

Note: above conveyor systems are applicable for upgraded or double leg installations in Fair or Standard elevators.

Legs, steel, EA - add \$ 3 700.00

Grain Sampler, automatic, EA - add \$ 1 5750.00

## 4.850.044 PRECALCULATED ADJUSTMENTS

# 7. Head Drives

In rate 560 tonnes to 1400 tonnes	}	
5.6 Kw	EA	\$ 3 300.00
7.5 Kw	EA	4 000.00
over 7.5 Kw		
11.2 Kw	EA - add	\$ 800.00
14.9 Kw	EA - add	2 000.00
In rate, 2800 tonnes, 2801 tonnes	and over	
7.5 Kw	EA	\$ 4 000.00
14.9 Kw	EA	6 000.00
Over 14.9	Kw	
18.9 Kw	EA - add	\$ 1 000.00
22.7 Kw	EA - add	\$ 2 400.00
29.8 Kw	EA - add	\$ 5 850.00
37.4 Kw	EA - add	\$ 9 750.00

8. Electric Operated Distributor EA - add \$ 16 380.00

Leg Distributor Overflow Warning System (Simple Horn) - add per leg \$ 920.00

9. Man Lift, electric EA - add \$ 25 880.00

10. Loading Spouts, EA - add \$ 1 600.00 hopper car

outside truck EA - add \$ 2 400.00

## 12. Miscellaneous

Sensor Bin Warning Systems

24 volt, conduit electrical circuits, individual bin sensors, control panel

- add per bin \$ 1 000.00

12 volt, exposed electrical circuits,

- add per bin 330.00 individual bin sensors, control panel

Bin Sliders, air operated, On./ compressor, control panel

Up to 2800 tonnes - add \$ 10 500.00 Over 2800 tonnes 15 750.00 - add

Side Bins

flat bottom - **deduct** K \$ 3 000.00 per tonne \$ 1.60

half hoppered - deduct K \$ 1 100.00 per tonne \$ 0.20

## 4.850.044 RECALCULATED ADJUSTMENTS

# 12. Miscellaneous, cont'd

Dust Control Systems - includes motor and storage facilities:

2.2 Kw no exterior tank	EA - add	\$ 6860
2.2 Kw exterior tank	EA - add	\$ 13 720
3.7 Kw exterior tank	EA - add	\$ 14 940
5.6 Kw exterior tank	EA - add	\$ 18 300
7.5 Kw exterior tank	EA - add	\$ 22 870
11.2 Kw exterior tank	EA - add \$ 27	200
14.9 Kw exterior tank	EA – add \$35	900

# Car Pullers

Electric Capstan Type

1.5 Kw	EA - add	\$ 2650
2.2 Kw	EA - add	\$ 3 100
3.7 Kw	EA - add	\$ 4 600
7.5 Kw	EA - add	\$ 7 250

Electric Progressioner Type

7.5 Kw EA – **add** \$ **32 500** 

## 4.850.046 GENERAL INFORMATION

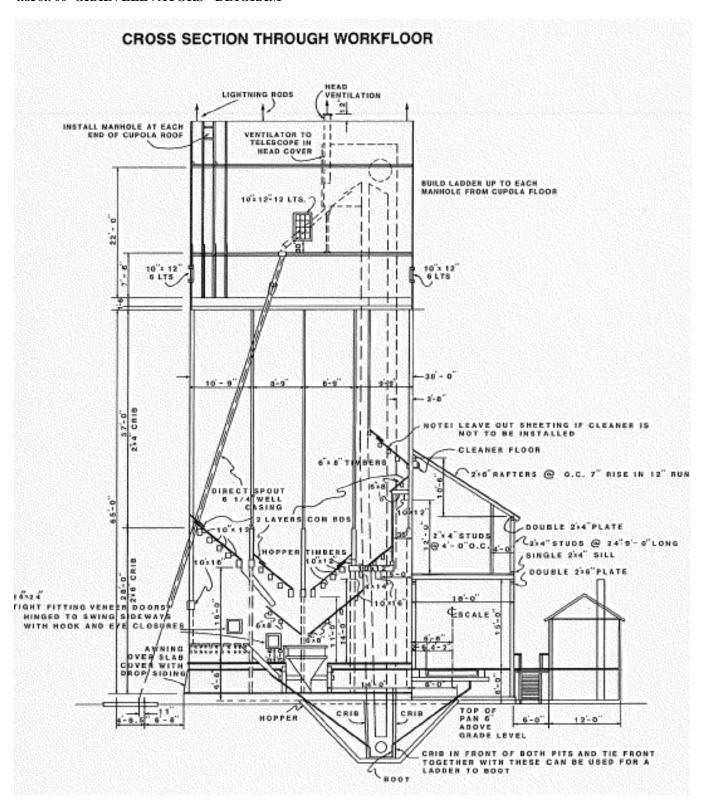
Cleaner House - add as found.

Suggested Age Life: 50 years.

Capacity conversion - to establish tonne capacity multiply bushel capacity by a factor of 0.028

e.g.  $60\ 000$  bushels x  $0.028 = 1\ 680.0$  tonne

## 4.850.900 GRAIN ELEVATORS - DIAGRAM



## 4.852.030 MODEL TYPE 852 QUALITY 03

## TWIN ELEVATOR - FAIR

#### 4.852.032 BASE RATES (in dollars)

560 to 1400 tonnes

ST			PER
Code	Structure	K	<b>TONNE</b>
60	Main Level	272 000	136

ST Code 60 designates a standard type twin elevator.

**4.852.033 INSTALLATIONS** are the same as those included in 4.850.033, Grain Elevator - Fair. The twin elevator is usually used as an annex and some of the installations may have been removed.

## 4.852.034 PRECALCULATED ADJUSTMENTS

- 1. Drive Shed EA deduct S 28 900.00
- 2. Driveways

two ends, each set deduct - each set \$ 8 100.00

11. Hoist

electric or hydraulic EA - deduct \$ 6 830.00

12. Miscellaneous

Conveyor

top EA - **add \$ 7 400.00** bottom EA - **add 9 750.00** 

Capacity adjustment

for each tonne less than 1400 tonnes, per tonne - deduct \$ 124.00

Side Bins

## 4.852.036 GENERAL INFORMATION

For other adjustments see 4.850.034 and 4.850.044.

Suggested Age Life: 50 year life.

# 4.852.040 MODEL TYPE 852 QUALITY 04

## TWIN ELEVATOR - STANDARD

# 4.852.042 BASE RATES (in dollars)

1401 to 2800 tonnes

ST Code	Structure	K	PER TONNE
60	Main Level	241 000	158

ST Code 60 designates a standard type twin elevator.

**4.852.043 INSTALLATIONS** are the same as those included in 4.850.043, Grain Elevator - Standard. The twin elevator is usually used as an annex and some of the installations may have been removed.

## 4.852.044 PRECALCULATED ADJUSTMENTS

1.	Drive Shed		EA	- dedu	ıct	\$ 28 900.00
2	<b>Driveways</b> two ends		each set -	deduct		\$ 10 400.00
11.	<b>Hoist</b> electric or hydraulic		EA	a – deduc	ct	\$ 9 400.00
12.	Miscellaneous					
	Conveyor					
	top	EA - add	\$99	00.00		
	bottom	EA - add	13 0	00.00		
	Side Bins					
	flat bottom - deduc	t		K \$ 3	00.00	
			per tonne	\$	1.60	
	half hoppered - ded	luct		K \$ 1	100.00	
			per tonne	\$	0.20	

# 4.852.046 GENERAL INFORMATION

For other adjustments see 4.850.034 and 4.850.044.

Suggested Age Life: 50 year life.

# 4.855.040 MODEL TYPE 855 QUALITY 04

## **CRIBBED ANNEX - STANDARD**

## 4.855.042 BASE RATES (in dollars)

All Sizes

ST			PER
Code	Structure	K	TONNE
60	Main Level	73 000	80

ST Code 60 designates a standard type cribbed annex.

#### 4.855.043 INSTALLATIONS

Top Conveyor, EA \$9 900

Bottom Conveyor, EA \$ 13 000

**Note:** Installations provide costs for components or unit costs which are already included in Base Rates.

## 4.855.044 PRECALCULATED ADJUSTMENTS

**Side Bins** 

 $\begin{array}{cccc} \text{flat bottom} - \text{deduct} & & \$1\ 750.00 \\ & & \text{PER\ TONNE} & \$ & 2.45 \end{array}$ 

half hoppered – deduct K \$ 875.00

PER TONNE \$ 0.35

## 4.855.046 GENERAL INFORMATION

For other adjustments see 4.850.034 and 4.850.044.

Suggested age life: 50 year life.

## 4.856.020 MODEL TYPE 856 QUALITY 02

## **BALLOON OR FRAME ANNEX - SUBSTANDARD**

#### 4.856.021 GENERAL DESCRIPTION

# **COMPONENT DESCRIPTION - BASE STRUCTURE**

Base Floor Construction - gravel or wooden planks
Base Wall Construction - wood framing and sheathing or equivalent
Base Roof Construction - wood rafters and sheathing or equivalent
Roof Finish - wood or composite shingles, corrugated metal or equivalent

## 4.856.022 BASE RATES (in dollars)

		A	All Sizes
ST			PER
Code	Structure	K	TONNE
60	Main Level	15 600	41

ST Code 60 designates a balloon or frame annex with a gravel or wooden plank floor.

## 4.856.023 INSTALLATIONS

Spouting

gravity feed, top distribution

Note: Installations provide costs for components or unit costs which are already included in Base Rates.

## 4.856.024 PRECALCULATED ADJUSTMENTS

Wood Sills with wood floor joists and decking	- add	K	2 000.00
		per tonne	\$ 6.40
Concrete Foundation with wood floor joists and decking			
	- add	K	\$ 4 800.00
		per tonne	\$ 13.00
Concrete Slab on Grade	- add	K	4 800.00
		per tonne	\$ 10.30
Single Bin	- deduct	K	\$ 400.00
		per tonne	\$ 2.80
Conveyor, Bottom	- add	K	\$ 2 300.00
		per tonne	\$ 4.00
Conveyor, Top	- add	K	\$ 2 300.00
		per tonne	\$ 2.00

## 4.856.024 PRECALCULATED ADJUSTMENTS

Paint - add K \$ 600.00

per tonne \$ 2.00

 $Wood\ or\ Metal\ Siding-add \qquad K\qquad \$\ 1\ 700.00$ 

per tonne \$ 5.20

## 4.856.026 GENERAL INFORMATION

Substandard or "temporary" ballon or frame annex refers to certain annexes constructed during the period 1939 – 1941. These annexes have, in the past, been referred to as wartime annexes and are, in general, inferior to the Standard Balloon or Frame Annex. Many have been dismantled but some remain in service and adjust for upgrading features (e.g. concrete slab floor, siding, paint, conveyors, etc.) from Precalculated Adjustments.

Suggested Age Life: Concrete slab or raised foundation - 45 years

Wood or mud sills - 40 years

Capacity Conversion: to establish tonne capacity multiply bushel capacity by a factor of 0.028

e.g. 60,000 bushels x 0.028 = 1.680.0 tonne

## 4.856.030 MODEL TYPE 856 QUALITY 03

## **BALLOON OR FRAME ANNEX - FAIR**

#### 4.856.031 GENERAL DESCRIPTION

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Concrete Footings - medium reinforced
Foundation Wall - medium reinforced
Concrete Slab - heavy reinforced
Base Wall Construction - wood framing and sheathing or equivalent
Exterior Wall Finish - wood or metal siding, paint
Base Roof Construction - wood rafters and sheathing or equivalent
Roof Finish - wood or composite shingles, corrugated metal or equivalent

## 4.856.032 BASE RATES (in dollars)

## All Sizes

ST			PER
Code	Structure	K	TONNE
61	Main Level & Concrete Slab	31 700	57

ST Code 61 designates a balloon or frame annex with a concrete slab on grade.

## 4.856.033 INSTALLATIONS

Conveyor - Bottom Spouting gravity feed, top distribution

Note: Installations provide costs for components or unit costs which are already included in Base Rates.

## 4.856.034 PRECALCULATED ADJUSTMENTS

Gravel or wood planks	- deduct	K per tonne	\$ 4 800.00 \$ 10.30
Wood floor joists and decking	- add	K per tonne	\$ 100.00 \$ 2.50
Single Bin	- deduct	K per tonne	\$ 400.00 \$ 2.80
Conveyor, Bottom	- deduct	K per tonne	\$ 2 300.00 \$ 4.00
Conveyor, Top	- add	K per tonne	\$ 2 300.00 \$ 2.00

# 4.856.034 PRECALCULATED ADJUSTMENTS

Wood or Metal Siding – deduct K \$ 1 700.00

per tonne \$ 5.20

# 4.856.036 GENERAL INFORMATION

Suggested Age Life: Concrete slab or raised foundation - 45 years

# 4.857.040 MODEL TYPE 857 QUALITY 04

## STEEL GRAIN BIN ANNEX - STANDARD

## 4.857.041 GENERAL DESCRIPTION

Corrugated galvanized steel, bolted bin with standard flat bottom.

## 4.857.042 BASE RATES (In dollars)

		280 to 1 650 tonnes	1 651 to 5 000 tonnes		
ST Code	Structure	PER K TONNE	PER K TONNE		
61	Main Level & Concrete Slab	10 500 39	14 700 37		

ST Code 61 designates a steel grain bin annex with a concrete slab on grade.

# **4.857.043 INSTALLATIONS**

Reinforced concrete footings Reinforced concrete slab Steel wall stiffeners, bracing and roof ladder

## 4.857.044 PRECALCULATED ADJUSTMENTS

## **Steel Ladders**

Exterior Wall, per m - add \$ 36.00 Exterior Wall, with safety hoops, per m - add \$ 76.00 Interior Bin, per m - add \$ 51.00

## **Steel Catwalks**

Standard, with side handrails and no conveyor framing, per m - add \$ 270.00 Heavy Duty, with side handrails and top conveyor floor framing, per m - add \$ 345.00

## **Top Conveyor**

per m - add \$ 520.00

## **Bottom Conveyor**

per m - add \$ 495.00

# **Bindicator Warning System**

per bin - add \$ 1 050.00

## **Bin Sweeps**

200 mm, 1.49 kW (2 HP), per bin - **add \$ 2 450.00** 200 mm, 2.24 kW (3 HP), per bin - **add \$ 2 930.00** 200 mm, 5.60 kW (7<sup>1</sup>/<sub>2</sub> HP), per bin- **add \$ 4 850.00** 

## 4.857.045 UNIT COSTS

**Bin Aeration Equipment - add** as found from section 5.085.110

## 4.857.046 GENERAL INFORMATION

For other adjustments see 4.850.043 and 044.

Suggested Age Life: 50 years

# 4.857.050 MODEL TYPE 857 QUALITY 05

# STEEL GRAIN BIN ANNEX - SEMI CUSTOM

## 4.857.051 GENERAL DESCRIPTION

Corrugated galvanized steel, bolted tank with hoppered bottom.

## 4.857.052 BASE RATES (in dollars)

112 to 1 120 tonnes

$\mathbf{ST}$		PER		
Code	Structure	K	TONNE	
61	Main Level & Concrete Slab	11 300	67	

ST Code 61 designates a steel grain bin annex with a concrete slab on grade.

## 4.857.053 INSTALLATIONS

Reinforced concrete piles Reinforced concrete slab Steel support legs, bracing, anchors and roof ladder Exterior steel wall stiffeners

Note: Installations provide costs for components or unit costs which are already included in Base Rates.

## 4.857.054 PRECALCULATED ADJUSTMENTS

## **Steel Ladders**

Exterior Wall, per m - add \$ 36.00 Exterior Wall, with safety hoops, per m - add \$ 76.00 Interior Bin, per m - add \$ 51.00

## **Steel Catwalks**

Standard, with side handrails and no conveyor framing, per m - add \$ 270.00 Heavy Duty, with side handrails and top conveyor floor framing, per m - add \$ 345.00

## **Top Conveyor**

per m - add \$ 520.00

## **Bottom Conveyor**

per m - add \$ 495.00

# **Bindicator Warning System**

per bin - add \$ 1 050.00

## 4.857.055 UNIT COSTS

**Bin Aeration Equipment - add** as found from section 5.085.110

## 4.857.056 GENERAL INFORMATION

For other adjustments see 4.850.043 and 044.

Suggested age life: 50 years.

## 4.860.020 MODEL TYPE 860 QUALITY 02

## **GRAIN ELEVATOR OFFICE - SUBSTANDARD**

## Wall Heights

**Foundation** - Basementless 1.2 m **Exterior Wall -** Main 2.7 m

## 4.860.021 GENERAL DESCRIPTION

#### **COMPONENT DESCRIPTION - BASE STRUCTURE**

Concrete Footings - unreinforced

**Foundation Wall - Lift -** 200 mm concrete and/or wood framing, sheathing, wood, metal siding or equivalent, paint

Base Floor Construction - wood joists, subflooring, ply sheathing or equivalent

Base Wall Construction - wood framing, sheathing, insulation

Exterior Wall Finish - fair wood siding, corrugated metal siding or equivalent, paint

**Base Roof Construction -** wood rafters, sheathing ceiling joists, insulation

Roof Finish - wood or composite shingles, corrugated metal or equivalent

Exterior Doors - fair wood door or equivalent

Windows - fair wood door or equivalent

Electrical Basic - substandard wiring

## **COMPONENT DESCRIPTION - OFFICE FINISH**

Interior Wall Finish - plywood, prefinished wall panels or equivalent Ceiling Finish - plywood, prefinished wall panels or equivalent Baseboards & Trim - fair
Floor Finish - fair inlaid linoleum or equivalent
Electrical Fixtures - fair lighting

## 4.860.022 BASE RATES (in dollars)

ST		All Sizes - m <sup>2</sup>		
Code	Structure	K	AR	
62	Main Level & Foundation	4 200	175	
83	Office Finish	600	65	

ST Code 62 designates the base structure of a main level with a basementless foundation.

ST Code 83 designates typical office interior finish for this classification.

Total Base Rates are produced when base structure Base Rates are combined with applicable interior Finish Base Rates.

## 4.860.024 PRECALCULATED ADJUSTMENTS

Eaves, open

per m<sup>2</sup> - add \$ 45.00

**Attached Office Common Wall** 

per m<sup>2</sup> - **deduct \$ 61.00** 

**Plumbing** 

per fixture add \$400.00

Heating

gas line and chimney only -add K \$110.00

AR \$ 4.80

floor furnace - add K \$ 160.00

AR \$ 6.80

gravity - add K \$ 320.00

\$ AR 13.7

0

forced air fair - add K \$ 360.00

AR 15.5

# 4.860.030 MODEL TYPE 860 QUALITY 03

## **GRAIN ELEVATOR OFFICE - FAIR**

## Wall Heights

**Foundation -** Basement 2.4 m **Exterior Wall -** Main 3.0 m

#### 4.860.031 GENERAL DESCRIPTION

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Concrete Footings - light reinforced

Foundation Walls - 200 mm light reinforced concrete

Foundation Wall - Lift - 200 mm light reinforced concrete and wood framing, sheathing, insulation

Concrete Slab - Basement & On Grade - 100 mm reinforced

Base Floor Construction - wood joists, subflooring, ply sheathing or equivalent

Stairs - wood stairs, tile finish

Base Wall Construction - wood framing, sheathing, insulation

Exterior Wall Finish - average wood siding, corrugated metal siding or equivalent, paint

Base Roof Construction - wood rafters, sheathing or equivalent, ceiling joists, insulation

Roof Finish - wood or composition shingles, corrugated metal or equivalent

Exterior Doors - average hollow steel or equivalent

Windows - average aluminum or equivalent

Plumbing Basic - fair

Heating - average forced air or equivalent

Electrical Basic - fair wiring

## **COMPONENT DESCRIPTION - OFFICE FINISH**

Interior Wall Finish - prefinished wall panels or equivalent

Partitions - prefinished wall panels or equivalent

Ceiling Finish - suspended panels

Interior Doors - fair hollow core wood

Baseboards & Trim - fair

Floor Finish - average inlaid linoleum or equivalent

**Electrical Fixtures -** average lighting

# 4.860.032 BASE RATES (in dollars)

ST		All Sizes - m <sup>2</sup>		
Code	Structure	K	AR	
61	Main Level & Concrete Slab	6 400	292	
63	Main Level & Basement	9800	401	
64	Main Level & Basement			
	<sup>1</sup> / <sub>2</sub> Above Grade	9800	400	
83	Office Finish	1 400	75	

ST Code 61 designates the base structure of a main level with a concrete slab on grade.

ST Code 63 designates the base structure of a main level with a basement.

ST Code 64 designates the base structure of a main level with a basement <sup>1</sup>/<sub>2</sub> above grade.

ST Code 83 designates typical office interior finish for this classification.

Total Base Rates are produced when base structure Base Rates are combined with applicable interior Finish Base Rates.

## 4.860.034 PRECALCULATED ADJUSTMENTS

## Wall Height

per metre of height - add or deduct K  $\qquad$  \$ 600.00 AR  $\qquad$  \$ 32.00

Eaves, boxed

per m<sup>2</sup> - add \$ 70.00

#### **Attached Office Common Wall**

per m<sup>2</sup> - **deduct \$ 76.00** 

**Plumbing** 

basic - nil - deduct K \$ 250.00 AR \$ 8.50

per fixture - add \$ 470.00

Fair Air Conditioning - add K\$ 2 000.00

AR \$28.00

Heating

nil - deduct K \$ 400.00 AR \$ 17.20

**Baseboard Electric Heater** 1500 W, EA - add \$ 240.00

## 4.870.030 MODEL TYPE 870 QUALITY 03

## **RELOCATABLE OFFICE - FAIR**

#### 4.870.031 GENERAL DESCRIPTION

**Architect Fees: 3.3 %** 

## CODE COMPONENT DESCRIPTION - BASE STRUCTURE

Substructure - WF beam steel skids with pipe bracing or steel frame and running gear

Base Floor Construction - wood joists, insulation and fir plywood deck system

Base Wall Construction - wood framing, insulation, plywood sheathing

Exterior Wall Finish - 30 gauge colored aluminum sheathing

Base Roof Construction - wood rafters, insulation, plywood sheathing

Roof Finish - 30 gauge galvanized steel sheathing

Windows - aluminum double sliding

Exterior Door - aluminum clad solid core wood

**Interior Wall Finish -** prefinished panelling

Ceiling Finish - prefinished panelling

Baseboards & Trim - fair

Floor Finish - fair sheet vinyl or equivalent

**Heating** - space heater

Electrical Basic - fair wiring

**Electrical Fixtures -** fair lighting

#### 4.870.032 BASE RATES (in dollars)

All Sizes -

ST

Code	e Component	K	AR
60	Main Level	3 700	180

ST Code 60 designates a relocatable office building without footings or foundation.

**Note:** Size range for this quality of structure is normally up to 3.0 m x 6.1 m. These structures are pre-built and transported to a site.

## 4.870.040 MODEL TYPE 870 QUALITY 04

## **RELOCATABLE OFFICE - STANDARD**

## 4.200.031 GENERAL DESCRIPTION

**Architect Fees:** 4.8%

#### **COMPONENT DESCRIPTION - BASE STRUCTURE**

**Substructure -** WF beam steel skids with pipe bracing

Base Floor Construction - wood joists, insulation and fir plywood deck system

Base Wall Construction - wood framing, insulation, plywood sheathing

**Exterior Wall Finish -** 30 gauge colored metal sheathing

Base Roof Construction - wood rafters, insulation, plywood sheathing

**Roof Finish** - 30 gauge galvanized metal sheathing

Windows - aluminum double sliding

Exterior Doors - two aluminum clad solid core wood

Interior Wall Finish - prefinished panelling or vinyl covered gypsum wallboard

Partitions - prefinished panelling or vinyl covered gypsum wallboard; partition area 50%

Ceiling Finish - prefinished panelling

**Interior Doors** - two prefinished hollow core wood

Baseboards & Trim - average

Floor Finish - average sheet vinyl or equivalent

Heating - average forced air

Electrical Basic - average wiring

**Electrical Fixtures -** average lighting

# 4.870.042 BASE RATES (in dollars)

All Sizes - m<sup>2</sup>

ST			
Code	Structure	K	AR
60	Main Level	700	342

ST Code 60 designates a relocatable office building without footings or foundation.

**Note:** Size range for this quality of structure is normally 3.0 **m x** 7.3 m and over. These structures are pre-built and transported to a site.

# 4.870.044 PRECALCULATED ADJUSTMENTS

#### **Plumbing**

per fixture - add \$ 400.00

#### 4.870.045 UNIT COST ADJUSTMENTS

#### **Partitions**

average prefinished hardboard panelling or vinyl covered gypsum wallboard, per m2 - add or deduct \$ 37.60

#### Doors, Exterior

average metal clad wood door, EA - add or deduct \$ 530.00 average clear aluminum door, EA - add \$ 670.00

## Doors, Interior

average hollow core finished door, EA - add or deduct \$ 320.00

## Wall Openings

(areas removed where series units are joined)

adjustments for door and window openings are not applicable for this classification

**Note:** Wall Cost (as per Component Description)

Base Wall Construction \$22.20Exterior Wall Finish 18.00Interior Wall Finish 14.30Total:  $m^2$  54.50

#### 4.870.046 GENERAL INFORMATION

This classification is designed to provide costs for relocatable office accommodation. When two or more of these units are employed in series to construct complexes containing facilities such as dining room, cooking, washroom, dormitory, classroom, office, recreation, etc., the following procedures are recommended.

#### Single Units

- add for all foundations as found
- adjust for partition areas as found
- add or deduct for interior and exterior doors as found
- add for plumbing fixtures, kitchen cabinets, etc.

#### Series Units

- a Constant and Area Rate must be applied for each unit
- add for all foundations as found
- adjust for partition areas as found
- add or deduct for interior and exterior doors as found
- deduct for exterior walls removed between units where large open areas occur such as dining rooms, recreation halls, classrooms and/or commercial offices
- add for plumbing fixtures, kitchen equipment, cabinets, etc.

Base structure designates a structure including interior finish.

The Base Cost of a building is calculated by applying appropriate Total Base Rates to the building's floor areas.

Determine floor areas per unit from exterior measurements.

Perimeter and/or design adjustments are not applicable for this classification.

An adjustment for Architect Fees must be made against any cost adjustments attributable to variations from Model Type specifications.

## 4.875.040 MODEL TYPE 875 QUALITY 04

## RELOCATABLE COMMUNICATIONS EQUIPMENT BUILDING - STANDARD

## 4.875.041 GENERAL DESCRIPTION

**Architect Fees:** 4.8 %

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

**Substructure -** WF beams braced with steel pipe

Base Wall Construction - wood framing, sheathing, insulation

Exterior Wall Finish - 24 gauge aluminum siding

Base Roof Construction - wood joists and deck system

Roof Finish - 24 gauge galvanized steel

Exterior Door - average hollow steel

Interior Wall & Ceiling Finish - 24 gauge aluminum panels or equivalent

Baseboards & Trim - average

Floor Finish - average tile or equivalent

**Heating** - average electric baseboard heaters or equivalent

Electrical Basic - average wiring

**Electrical Fixtures -** average lighting

#### 4.875.042 BASE RATES (in dollars)

ST

<u>Code</u> 60

	All Sizes - m <sup>2</sup>		
Structure	K	AR	

2 700

ST Code 60 designates a communications equipment building without footings or foundation.

537

**Note:** These structures are normally pre-built and transported to site.

#### 4.875.044 PRECALCULATED ADJUSTMENTS

**Steel Skids** 

**Main Level** 

per m2 - add \$ 71.00

# 4.876.040 MODEL TYPE 876 QUALITY 04

## RELOCATABLE METAL OILFIELD BUILDING - STANDARD

#### 4.876.041 GENERAL DESCRIPTION

Wall Heights

**Architect Fees:** 4.1 % **Exterior Wall** - Main 2.4 m

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Substructure - WF steel beam skids and bracing
Base Floor Construction - steel checker plate decking
Wall and Roof Construction - galvanized steel self-framing panels
Insulation - fibreglass bait or equivalent
Interior Wall and Ceiling Finish - 24 gauge aluminum panels
Floor Finish - paint

## 4.876.042 BASE RATES (in dollars)

	Size Ranges - m <sup>2</sup>		Size 1 (0-49)	Size 2 (50 & over)
ST				
<b>Code</b>	Structure	K	AR	K AR
60	Main Level	(	413	1 400 380

ST Code 60 designates a main level structure with a steel skid and floor system.

Note: These structures are normally pre-built and transported to a site.

## 4.876.043 INSTALLATIONS

Substructure and Base Floor 
$$0 - 19 \text{ m}^2$$
  $\mathbf{m}^2$  \$ 135.00  $20 - 49 \text{ m}^2$   $\mathbf{m}^2$  192.00  $\mathbf{m}^2$  50  $\mathbf{m}^2$  & over  $\mathbf{m}^2$  269.00

## 4.876.044 PRECALCULATED ADJUSTMENTS (in dollars)

#### Height

per metre of height - add or deduct

All Sizes - m<sup>2</sup>

K AR 250 24.00

## 4.876.044 PRECALCULATED ADJUSTMENTS (in dollars)

## **Exterior Finish - Walls and Roof**

painted panels, per  $m^2$  - add \$ 5.90 aluminum panels, per  $m^2$  - add \$ 8.60

# Interior Finish - Walls and Ceiling

nil aluminum liner panel, per  $m^2$  - **deduct \$ 11.50** nil batt insulation, per  $m^2$  - **deduct \$ 4.20** 

## **Floors**

steel grated floor systems 0 - 19 m<sup>2</sup>, per m<sup>2</sup> - **deduct \$ 22.00** 20 - 49 m2, per m<sup>2</sup> - **deduct \$ 29.00** 

concrete slab, grade beam and piles

0 - 19 m<sup>2</sup>, per m<sup>2</sup> - **add \$ 27.00** 20 - 49 m<sup>2</sup>, per m<sup>2</sup> - **deduct \$ 101.00** 

 $50 \text{ m}^2$  and over, per m<sup>2</sup> - **deduct \$ 201.00** 

 $50 \text{ m}^2$  and over, per m<sup>2</sup> - **deduct \$ 40.00** 

#### 4.876.045 UNIT COST ADJUSTMENTS

## Wiring

basic, explosion proof service - **add \$ 3 510** fixture and switches, - refer to 5.016.510 and 6.210.200

## Heating

catalytic explosion proof gas heaters

Size	kW Rating	Single Unit	3.5 3.4 3 57 4.
			<b>Multiple Unit</b>
200 x 200 mm	0.88	\$ 300.00	\$ -
300 x 300 mm	1.46	340.00	-
150 x 600 mm	1.46	340.00	-
300 x 600 mm	2.93	460.00	-
300 x 600 mm +			
150 x 600 mm	4.40	-	750.00
2 x 300 x 600 mm	5.859	-	900.00
600 x 600 mm	6.5	790.00	-
3 x 300 x 600 mm	8.79	-	1 340.00
600 x 900 mm	9.9	1 110.00	-
4 x 300 x 600 mm	11.72	-	1 730.00
600 x 1200 mm	13.2	1 400.00	-

#### -Rates include:

explosion proof wiring and junction box starting element, 12V or 120V gas connection orifice and line safety shut off valve pressure regulators temperature control valve wall mounting brackets grill installation

**Note:** Single and Multiple Units may be determined by counting the number of electrical start-up and gas connections on the rear of these units. A Single Unit will have one electrical and one gas connection. Multiple Units will have one electrical and one gas connection for each plate or grill component as stacked or banked.

#### 4.876.045 UNIT COST ADJUSTMENTS

#### Windows

single glazed steel sash, per m<sup>2</sup> - add \$ 247.00 double glazed steel sash, per m<sup>2</sup> - add \$ 286.00 average double glazed aluminum, per m<sup>2</sup> - add \$ 182.00

## Doors, Exterior

insulated steel entry plain glazed fair, EA - add \$400.00 \$470.00 average, EA - add \$480.00 \$550.00

#### Wall Openings

(areas replaced by doors and windows) adjustments for openings are not applicable for this classification

**Note:** Wall Cost (as per Component Description) galvanized steel self-framing panels, m<sup>2</sup> \$ **39.00** 

#### Louvres

fixed and adjustable - refer to 5.015.625

#### **Fans**

propeller fan with weatherhood, EA - add \$ 600.00 exhaust fan with aluminum dome cover, EA - add \$ 850.00

#### **Translucent Panels**

wall or roof, per m<sup>2</sup> - add \$ 65.00

#### Vents

gravity vent, EA - add \$ 55.00 rotating vent, EA - add \$ 220.00 ridge vent, continuous, per m - add \$ 105.00

#### 4.876.046 GENERAL INFORMATION

This classification is not provided with mechanical installations such as heat and lighting. Where installations are found,, adjustments for heating and/or electrical must be considered.

The Base Cost of a building is calculated by applying appropriate Total Base Rates to the building's floor areas.

Total Base Cost is produced when the Base Cost is combined with applicable height adjustments.

Base structure designates a structure including interior finish.

Determine floor areas from exterior measurements.

For perimeter and/or design adjustments see section 1.160.000.

For Overall Structural Height adjustments see section 1.170.000.

An adjustment for Architect Fees must be made against any cost adjustments attributable to variations from Model Type specifications.

# 4.880.030 MODEL TYPE 880 QUALITY 03

## FRAME & FABRIC BUILDING - FAIR

## 4.880.031 GENERAL DESCRIPTION

# Wall Height

**Architect Fees:** 3.3% **Exterior Wall** - Main 3.0m

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Substructure - galvanized steel twist ground anchors at columns

Floor - nil

**Base Wall Construction -** small open web galvanized steel pipe tubing shaped columns, 4.6m o.c., galvanized steel pipe girts

**Base Roof Construction -** small open web galvanized steel pipe tubing bow trusses, clear span, 4.6m o.c., galvanized steel pipe purlins

Exterior Wall & Roof Finish - light gauge vinyl coated polyester fabric panels, colored and flame retarded

## 4.880.032 BASE RATES (in dollars)

	Size Ranges - m <sup>2</sup>		Size 2 (0-249)		Size 3 (250-69		Size 4 (700 & o	
ST Code	Structure	K	AR	K	AR	k	K AR	
60	Main Level	50		5	000	76	28 000	46

ST Code 60 designates a fabric covered structure without footings or foundation.

#### 4.880.035 UNIT COST ADJUSTMENTS

# **Strip Footings**

150mm x 300mm, per m - add \$ 12.00

#### Concrete Slab

on grade - 75mm unreinforced, per m<sup>2</sup> - add \$ 10.50

#### Doors, Exterior

fair hollow steel door, EA - add \$ 400.00

## **Wall Openings**

(areas replaced by doors and windows) adjustments for openings are not applicable for this classification.

## 4.880.036 GENERAL INFORMATION

This classification is designed to provide costs for prefabricated semi-permanent multi-purpose fabric shelter systems.

The Base Cost of a building is calculated by applying appropriate Total Base Rates to the building's floor area.

Determine floor areas from exterior measurements.

Base structure designates a structure excluding interior finish.

This classification is not provided with any mechanical installations such as heat and lighting. Where such installations are found, adjustments must be considered.

Perimeter and/or design adjustments are not applicable for this classification.

Overall Structural Height adjustments are not applicable for this classification.

An adjustment for Architect Fees must be made against any cost adjustments attributable to variations from Model Type specifications.

The Suggested Age Life for this classification is 10 years.

# 4.880.040 MODEL TYPE 880 QUALITY 04

## FRAME & FABRIC BUILDING - STANDARD

#### 4.880.041 GENERAL DESCRIPTION

**Architect Fees:** 4.1%

Wall Height
Exterior Wall - Main 3.0m

## COMPONENT DESCRIPTION - BASE STRUCTURE

**Substructure** - rectangular steel tube base, steel ground anchors

Floor - nil

Base Wall Construction - high strength hollow steel straight wall columns, bracing and girts

Base Roof Construction - high strength steel clear span gable truss rafters and purlins

Exterior Wall & Roof Finish - colored fire-proof heavy weight vinyl coated nylon or vinyl polyester fabric panels

## 4.880.042 BASE RATES (in dollars)

	Size Ranges - m <sup>2</sup>		Size 2 (0-249)		Size 3 250-699)		Size 4 700 & ove	r)
ST			,	·	•	·		
Code	Structure	K	AR	K	AR	K	AR	
60	Main Level	3	00 110	6	000	88	8 000	85

ST Code 60 designates a fabric covered structure without footings or foundation.

## 4.880.044 PRECALCULATED ADJUSTMENTS (in dollars)

## Height

per metre of height - add or deduct

Size Ranges - m <sup>2</sup>		Size 2 0-249)		size 3 50-699)		Siz (700 &	e 4 & over)
Component	K	AR	K	AR	K		<u>AR</u>
Exterior Wall							
Framing & Exterior							
Wall Finish	480	15.00	630	13.30		2760	10.60

## 4.880.045 UNIT COST ADJUSTMENTS

## **Strip Footings**

150mm x 400mm, per m - add \$ 13.50

## **Concrete Slab**

on grade - 100mm light reinforced, per m<sup>2</sup> - add \$ 15.90

# Wall Section, Exterior

wall area deleted, per  $m^2$  - **deduct \$ 58.00** 

## **Arctic Package**

special fabric for northern cold zones and Arctic locations - add 18% to Total Base Cost

#### Doors, Exterior

steel frame fabric covered entry door, EA - add \$ 170.00 3.0m x 3.0m fabric swinging equipment door, EA - add \$ 450.00 3.7m x 3.7m fabric swinging equipment door, EA - add \$ 510.00 4.3m x 4.3m fabric swinging equipment door, EA - add \$ 570.00

# **Wall Openings**

(areas replaced by doors and windows) adjustments for openings are not applicable for this classification.

## 4.880.046 GENERAL INFORMATION

This classification is designed to provide costs for prefabricated semi-permanent multi-purpose fabric shelter systems.

The Base Cost of a building is calculated by applying appropriate Total Base Rates to the building's floor area.

Total Base Cost is produced when Base Cost is combined with applicable height adjustments.

Determine floor areas from exterior measurements.

Base structure designates a structure excluding interior finish.

This classification is not provided with any mechanical installations such as heat and lighting. Where such installations are found, adjustments must be considered.

Perimeter and/or design adjustments are not applicable for this classification.

For Overall Structural Height adjustments see section 1.170.000.

An adjustment for Architect Fees must be made against any cost adjustments attributable to variations from Model Type specifications.

The Suggested Age Life for this classification is 15 years.

# 4.880.060 MODEL TYPE 880 QUALITY 06

## FRAME & FABRIC BUILDING - CUSTOM

## 4.880.061 GENERAL DESCRIPTION

**Architect Fees:** 5.1%

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Substructure - steel column base plates and steel pin ground anchors

Floor - nil

Base Wall & Roof Construction - heavy extruded clear span aluminum arch ribs and purlins

**Exterior Wall & Roof Finish -** heavy gauge fire retarded acrylic and P.V.C. coated, colored polyester fabric panels

## 4.880.062 BASE RATES (in dollars)

		All S	izes - m <sup>2</sup>
ST			
Code	Structure	K	AR
60	Main Level	-1000	161

ST Code 60 designates a fabric covered structure without footings or foundation.

## 4.880.064 PRECALCULATED ADJUSTMENTS (in dollars)

## **Deluxe Finish Package**

tedlar film coat laminated to P.V.C. fabric, per m<sup>2</sup> floor area - add \$ 10.80

## 4.880.065 UNIT COST ADJUSTMENTS

#### **Strip Footings**

200mm x 400mm unreinforced, per m - add \$ 17.50 200mm x 400mm reinforced, per m - add \$ 20.50

#### **Grade Beam**

200mm x 600mm reinforced, per m - add \$ 57.00

## **Concrete Slab**

on grade - 100mm medium reinforced, per m<sup>2</sup> - add \$ 16.80 on grade - 125mm medium reinforced, per m<sup>2</sup> - add \$ 19.30

## Wall Section, Exterior

wall area deleted, per  $m^2$  - deduct \$83.00

## **Arctic Package**

heavier gauge acrylic coated fabric - add 4% to Total Base Cost

## Doors, Exterior

good single hollow steel entry door, EA - add \$ 620.00 good double hollow steel entry door, EA - add \$1240.00 end or side wall sliding door, fabric and aluminum frame, EA - add double panel end rolling door, fabric and aluminum frame, EA - add K \$1600.00 ARm<sup>2</sup> \$ 67.00

# **Wall Openings**

(areas replaced by doors and windows) adjustments for openings are not applicable for this classification.

## 4.880.066 GENERAL INFORMATION

This classification is designed to provide costs for prefabricated semi-permanent multi-purpose fabric shelter systems.

The Base Cost of a building is calculated by applying appropriate Total Base Rates to the building's floor area.

Determine floor areas from exterior measurements.

Base structure designates a structure excluding interior finish.

This classification is not provided with any mechanical installations such as heat and lighting. Where such installations are found, adjustments must be considered.

Perimeter and/or design adjustments are not applicable for this classification.

Overall Structural Height adjustments are not applicable for this classification.

An adjustment for Architect Fees must be made against any cost adjustments attributable to variations from Model Type specifications.

The Suggested Age Life for this classification is 20 years.

## 4.881.040 MODEL TYPE 881 QUALITY 04

## **AIR-SUPPORTED BUILDING - STANDARD**

#### 4.881.041 GENERAL DESCRIPTION

**Architect Fees:** 4.1%

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

**Grade Beams -** reinforced concrete with recessed continuous aluminum track and fabric anchor system

Framing - nil

Base Floor Construction - nil

Wall & Roof Construction - heavy duty fire resistant, high strength vinyl coated colored polyester, inflatable fabric membrane

Exterior Wall & Roof Finish - tedlar coating self-cleaning finish

Interior Wall & Roof Finish - insulated inner liner membrane

Exterior Doors - hollow metal emergency exit fire doors

**Heating -** one primary inflation unit with electrical air fan and gas furnace, insulated perimeter underground or wall-hung duct system, automatic controls; one back-up secondary unit, automatic cut-in controls.

Electrical Basic - good wiring, pre-wired lighting standards

Electrical Fixtures - good lighting, metal halide tilt mounted fixtures with wire guards

## 4.881.042 BASE RATES (in dollars)

		All Sizes - n		
ST				
Code	Structure	K	AR	
61	<b>Main Level</b>	59 60	00	81

ST Code 61 designates an air-supported structure with a concrete grade beam foundation.

#### 4.881.044 PRECALCULATED ADJUSTMENTS (in dollars)

#### **Electrical Fixtures**

low density warehouse lighting - deduct K = 300.00  $ARm^2 = 10.00$ 

#### 4.881.045 UNIT COST ADJUSTMENTS

#### **Concrete Floor**

slab on-grade, 75mm unreinforced, per m<sup>2</sup> - add \$ 10.50

#### **Tennis Court Surfaces**

add for excavation, fill and paving from Unit Cost Sections

## **Tennis Court Fencing**

refer to section 5.002.435

## **Pedestrian Entrances**

aluminum and safety glass revolving door air-lock system EA - add \$ 12 500.00

#### **Vehicle & Equipment Entrances**

rigid frame pressurized air-lock passageway with shrouds,

2 metal roll-up doors and controls; per m<sup>2</sup> passageway floor area- add \$1080

## **Wall Openings**

(areas replaced by doors and windows)

adjustments for openings are not applicable for this classification.

## 4.881.046 GENERAL INFORMATION

This classification is designed to provide costs for an air-supported domed inflatable fabric structure. These structures may be semi-permanent or temporary and are used as enclosures for sports and recreational facilities, industrial storage, showrooms, fabrication and assembly projects, and construction site coverage.

The Base Cost of a building is calculated by applying appropriate Total Base Rates to the building's floor area.

Determine floor areas from exterior measurements.

Base structure designates a structure including interior finish.

Perimeter and/or design adjustments are not applicable for this classification.

Overall Structural Height adjustments are not applicable for this classification.

An adjustment for Architect Fees must be made against any cost adjustments attributable to variations from Model Type specifications.

The Suggested Age Life for this classification is 15 years.

# 4.882.040 MODEL TYPE 882 QUALITY 04

## POST-TENSION BUILDING - STANDARD

#### 4.882.041 GENERAL DESCRIPTION

**Architect Fees:** 5.6%

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Substructure - heavy reinforced bell caissons and piers, steel anchor system

Framing - steel pipe masts and poles, heavy steel tension cables

Base Floor Construction - nil

Base Roof Construction - heavy duty fire resistant vinyl coated, colored polyester fabric membrane

## 4.882.042 BASE RATES (in dollars)

		All S	izes - m <sup>2</sup>
ST			
Code	Structure	K	AR
61	Main Level	51 600	381

ST Code 61 designates a cable and fabric tensioned shelter with a concrete pile and pier foundation.

**NOTE:** Ground floor area of a tension structure is calculated the same as swimming pools. Where the projected points of fabric join the poles or masts, connect these points with straight lines around the perimeter to produce total measurements and area.

## 4.882.046 GENERAL INFORMATION

This classification is designed to provide costs for a cable and mast supported fabric shelter, either temporary or permanent.

The Base Cost of a building is calculated by applying appropriate Total Base Rates to the building's floor area.

Determine floor areas from exterior measurements.

Base structure designates a structure excluding interior finish.

This classification is not provided with any mechanical installations, such as lighting. Where such installations are found, adjustments must be considered.

Perimeter and/or design adjustments are not applicable for this classification.

Overall Structural Height adjustments are not applicable for this classification.

An adjustment for Architect Fees must be made against any cost adjustments attributable to variations from Model Type specifications.

The Suggested Age Life for this classification is 15 years.

# 4.890.020 MODEL TYPE 890 QUALITY 02

# **QUONSET TYPE GREENHOUSE - SUBSTANDARD**

## 4.890.021 GENERAL DESCRIPTION

**Architect Fees: 2.2 %** 

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Substructure - wood sills or equivalent

Floor - nil

CT

Framing - quonset type galvanized steel ribs 1.2 m o.c., wood or pipe girts and purlins

Exterior Wall & Roof Finish - single ply 4 mil polyethylene with cable type hold downs

Electrical Basic - substandard wiring

**Electrical Fixtures - poor lighting** 

## 4.890.022 BASE RATES (in dollars)

All Sizes - m

Code	Structure	K	AR
60	Main Level	500	20

ST Code 60 designates a greenhouse without footings or foundation.

**Note:** This structure is normally a single unit built in a range from 6.4 m to 9.1 m widths and 17.9 m2 to 30.7 m2 end wall areas.

## 4.890.023 INSTALLATIONS

Electrical Basic K \$ 500.00

AR 2.50

Electrical Fixtures m2 1.50

## 4.890.024 PRECALCULATED ADJUSTMENTS

## **End Wall**

attached to another structure, per m<sup>2</sup> - deduct \$ 9.00

## Wall and Roof Finish

two ply 4 mil polyethylene	- add	K	150.0
		AR	1.50
single ply 6 mil polyethylene	- add	K	\$ 50.0
		AR	0.50
corrugated fibreglass	- add	K	\$1 700.00
		AR	15.00

## 4.890.025 UNIT COST ADJUSTMENTS

## **Strip Footings**

150 mm x 300 mm, per m - **add \$ 12.00** 

## **Concrete Slab**

on grade - 75 mm unreinforced, per m<sup>2</sup> - add \$ 10.50

## **Doors, Exterior**

economy wood door, EA - add \$ 190.00 low grade storm door, EA - add \$ 140.00

## **Wall Openings**

(areas replaced by doors and windows) adjustments for openings are not applicable in this classification

# 4.890.026 GENERAL INFORMATION

The Suggested Age Life for this classification is 15 years.

# 4.890.030 MODEL TYPE 890 QUALITY 03

# **QUONSET TYPE GREENHOUSE - FAIR**

## 4.890.031 GENERAL DESCRIPTION

**Architect Fees:** 3.3 %

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Substructure - wood sills or equivalent

Floor - nil

Framing - quonset type aluminum bow ribs 1.2 m o.c., wood or pipe girts and purlins

Exterior Wall & Roof Finish - double ply 4 mil inflated polyethylene

Electrical Basic - fair wiring

Electrical Fixtures - economy lighting

# 4.890.032 BASE RATES (in dollars)

CITE		All Si	zes - m²
ST Code	Structure	K	AR
60	Main Level	1 700 20	<u>.</u>

ST Code 60 designates a greenhouse without footings or foundation.

**Note:** This structure is normally a single unit built in a range from 6.7 m to 9.8 m widths and 17.7 m<sup>2</sup> to 37.3 m<sup>2</sup> end wall areas.

## 4.890.033 INSTALLATIONS

Electrical Basic K \$700.00 AR 3.50 Electrical Fixtures  $m^2$  3.50

## 4.890.034 PRECALCULATED ADJUSTMENTS

## **End Wail**

attached to another structure, per  $m^2$  - **deduct \$ 14.50** 

## Wall and Roof Finish

single ply 6 mil polyethylene -  $\frac{100.00}{4R}$  single ply 4 mil polyethylene

## 4.890.035 UNIT COST ADJUSTMENTS

## **Strip Footings**

150 mm x 300 mm, per m - add \$ 12.00

## Doors, Exterior

low grade wood door, EA - add \$ 310.00 fair storm door, EA - add \$ 160.00

# Wall Openings

(areas replaced by doors and windows) adjustments for openings are not applicable in this classification

## 4.890.036 General Information

The Suggested Age Life for this classification is 20 years.

# 4.890.040 MODEL TYPE 890 QUALITY 04

# **QUONSET TYPE GREENHOUSE - STANDARD**

## 4.890.041 GENERAL DESCRIPTION

**Architect Fees: 4.1** 

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Substructure - wood sills or equivalent

Floor - nil

Framing - quonset type aluminum bow ribs 1.2 m o.c., wood or pipe girts and purlins

Exterior Wall & Roof Finish - corrugated fibreglass

Electrical Basic - average wiring

Electrical Fixtures - substandard lighting

# 4.890.042 BASE RATES (in dollars)

All Sizes - m

ST			
Code	Structure	K	AR
60	Main Level	3 000	66

ST Code 60 designates a greenhouse without footings or foundation.

**Note:** This structure is normally a single unit built in a range from 6.7 m to 9.8 m widths and 17.7 m<sup>2</sup> to 37.3 m<sup>2</sup> end wall areas.

## **4.890.043 INSTALLATIONS**

Electrical Basic K \$ 1 400.00

AR 4.50

Electrical Fixtures m<sup>2</sup> 6.50

## 4.890.044 PRECALCULATED ADJUSTMENTS

## **End Wall**

attached to another structure, per m<sup>2</sup> - deduct \$ 16.00

## Wall and Roof Finish

double ply 4 mil inflated polyethylene

- deduct K \$ 200.00

AR 19.00

single ply 6 mil polyethylene - deduct~~K~~\$~300.00

AR 20.00

single ply 4 mil polyethylene - **deduct** K **\$400.00** 

AR 21.00

## 4.890.045 UNIT COST ADJUSTMENTS

## **Strip Footings**

150 mm x 300 mm, per m - add \$ 12.00

## **Concrete Slab**

on grade - 75 mm light reinforced, per m<sup>2</sup> - add \$ 13.20

## Doors, Exterior

low grade wood door, EA - add \$ 310.00 fair storm door, EA - add \$ 160.00

## **Wall Openings**

(areas replaced by doors and windows) adjustments for openings are not applicable in this classification

## 4.890.046 GENERAL INFORMATION

The Suggested Age Life for this classification is 25 years.

# 4.891.020 MODEL TYPE 891 QUALITY 02

## **BOW RIB TYPE GREENHOUSE - SUBSTANDARD**

## 4.891.021 GENERAL DESCRIPTION

## Wall Heights

Architect Fees: 2.2 % Exterior Wall - Main 3.0 m

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Substructure - concrete piles or equivalent

Floor - nil

Framing - bow rib type galvanized steel ribs 1.8 m o.c. on steel posts 3.7 m o.c., wood or metal purlins o.c. on steel posts 3.7 m o.c., wood or metal purlins o.c., o.

Exterior Wall & Roof Finish - double ply 4 mil inflated polyethylene roof with corrugated fibreglass sidewalls

Electrical Basic - substandard wiring

Electrical Fixtures - poor lighting

## 4.891.022 BASE RATES (in dollars)

ST		All	Sizes - m
Code	Structure	K	AR
60	Main Level	4 300	27

Concrete Piles or Strip Footings V \$ 300.00

ST Code 60 designates a greenhouse with concrete piles or footings.

**Note:** This structure may be a single unit or multiple units that are gutter connected, built in 4.6 m widths and 17.9 m<sup>2</sup> end wall areas.

# **4.891.023 INSTALLATIONS**

Concrete Files of Surp rootings <b>K</b>	\$ 200.00	
	AR	3.00
Electrical Basic	K	500.00
	AR	2.50
Electrical Fixtures	$m^2$	1.50

## 4.891.024 PRECALCULATED ADJUSTMENTS

# Height

per metre of height - add	d or deduct	K \$	600.00
		AR	1.50
Wall and Roof Finish			
single ply 4 mil polyethy	lene – <b>deduct</b>	K \$1	850.00
		AR	14.00
corrugated fibreglass	- add	K \$	500.00
		AR	16.00

## 4.891.025 UNIT COST ADJUSTMENTS

#### **Concrete Slab**

on grade - 75 mm unreinforced, per m<sup>2</sup> - add \$ 10.50

## **Doors, Exterior**

economy wood door, EA - add \$ 190.00 low grade storm door, EA - add \$ 140.00

# Wall Openings

(areas replaced by doors and windows) adjustments for openings are not applicable in this classification

Note: Wall Cost

wood or metal purlins and polyethylene, m<sup>2</sup> \$ 14.50

## 4.891.026 GENERAL INFORMATION

The Suggested Age Life for this classification is 20 years

# 4.891.030 MODEL TYPE 891 QUALITY 03

## **BOW RIB TYPE GREENHOUSE - FAIR**

## 4.891.031 GENERAL DESCRIPTION

## Wall Heights

**Architect Fees:** 3.3 % **Exterior Wall** - Main 3.0 m

## COMPONENT DESCRIPTION - BASE STRUCTURE

Substructure - concrete piles or equivalent

Floor - nil

Framing - bow rib type galvanized steel ribs on steel posts 1.2 m o.c., wood or pipe girts and purlins

Exterior Wall & Roof Finish - single ply 4 mil polyethylene with cable type hold downs

Electrical Basic - fair wiring

**Electrical Fixtures -** economy lighting

## 4.891.032 BASE RATES (in dollars)

All Sizes - m<sup>2</sup>

ST

Code	Structure	K	AR
60	Main Level	2 400	43

ST Code 60 designates a greenhouse with concrete piles or footings.

**Note:** This structure may be a single unit or multiple units that are gutter connected.

Usual widths 4.9 m to 9.1 m End wall area 9.3  $m^2$  to 32.9  $m^2$ 

## 4.891.033 INSTALLATIONS

Concrete Piles or Strip Footings	K	\$ 300.00
	AR	3.00
Electrical Basic	K	700.00
	AR	3.50
Electrical Fixtures	$m^2$	3.50

25.00

AR

## 4.891.034 PRECALCULATED ADJUSTMENTS

**	•	
н	616	Thi

per metre of height	- add or deduct	K \$	300.00
		AR	2.50
Wall and Roof Finish			
single ply 6 mil polyethyle	ene - add K	\$ 100.00	0
		AR	1.00
two ply 4 mil polyethylen	e - add	К\$	200.00
		AR	2.50
double ply 4 mil inflated			
polyethylene	- add	K \$	200.00
1 7 7		AR	3.50
double ply 4 mil inflated			
polyethylene roof with			
corrugated fibreglass end	l and		
sidewalls	- add	K	\$2 300.00
		AR	8.00
corrugated fibreglass	- add	K	\$2 100.00

# 4.891.035 UNIT COST ADJUSTMENTS

## **Doors, Exterior**

low grade wood door, EA - add \$310.00 fair storm door, EA - add \$160.00

# **Wall Openings**

(areas replaced by doors and windows) adjustments for openings are not applicable in this classification

Note: Wall Cost

wood or pipe girts, purlins and polyethylene \$ 14.00

# 4.891.036 GENERAL INFORMATION

The Suggested Age Life for this classification is 25 years.

# 4.891.040 MODEL TYPE 891 QUALITY 04

#### **BOW RIB TYPE GREENHOUSE - STANDARD**

## 4.891.041 GENERAL DESCRIPTION

## Wall Heights

Architect Fees: 4.1 % Exterior Wall - Main 3.0 m

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Substructure - concrete piles or equivalent

Floor - nil

**Framing -** bow rib type galvanized steel trusses on galvanized steel posts 3.7 m o.c., galvanized steel girts and purlins

Exterior Wall & Roof Finish - corrugated fibreglass

Electrical Basic - average wiring

**Electrical Fixtures -** substandard lighting

Ventilation - continuous sidewall or roof top

## 4.891.042 BASE RATES (in dollars)

All Sizes - m<sup>2</sup>

ST			
Code	Structure	K	AR
60	Main Level	11 000	62

ST Code 60 designates a greenhouse with strip footings or piles.

**Note:** This structure may be a single unit or multiple units that are gutter connected.

Usual widths 11 m and 12.8 m End wall area  $51.8 \text{ m}^2$  and  $65.3 \text{ m}^2$ 

#### 4.891.043 INSTALLATIONS

Concrete Piles or Strip Footings ${\bf K}$	\$ 300.00 AR	1.00
Electrical Basic	K AR	1 400.00 4.50
Electrical Fixtures	$m^2$	6.50
Ventilation System	m	31.50

# 4.891.044 PRECALCULATED ADJUSTMENTS

Height per metre of height - add or deduct		K AR	\$1 400.00 8.00	
Wall and Roof Finish double ply 4 mil inflated polyethylene roof with corrugated fibreglass end and				
sidewalls	- add	K	\$	100.00
		AR		12.00
Plumbing Basic	-add	K AR	\$	400.00 2.00
<b>Heating</b> forced air unit heaters	- add	K AR	<b>\$</b>	600.00 12.00
forced air poly airbag system	- add	K AR	\$	\$1 600.00 13.00
hot water/steam pipe radiation system	- add	K AR	\$	\$5 300.00 19.00

# 4.891.045 UNIT COST ADJUSTMENTS

#### **Concrete Slab**

on grade - 75 mm light reinforced, per m<sup>2</sup> - add \$ 13.20

# **Doors, Exterior**

fair wood door, EA - add \$370.00 average storm door, EA - add \$220.00

# **Ventilating Systems**

rack and pinion continuous system, 2 rows on the length of each unit, per m - add \$ 60.00

AR \$28.00

exhaust fans including automatic shutters

emiddet fans merdaing dateinad	o bilatters	
300 mm	EA - add	\$ 300.00
450 mm		400.00
600 mm		600.00
750 mm		700.00
900 mm		800.00
1 050 mm		900.00
1 200 mm	1 000.00	
automatic shutters only	K	\$ 80.00
	AR m <sup>2</sup>	\$ 200.00
automatic ventilation control	K	\$ 550.00

# 4.891.045 UNIT COST ADJUSTMENTS

# **Circulating Fans with Poly Tubes**

Tube Size	Manual Shutter System		Motorized System			
450 mm per meter of tube	K	\$	350.00 1.00	K	\$	700.00 1.00
600 mm per meter of tube	K	\$	550.00 1.20	K	\$	800.00 1.00
750 mm per meter of tube	K	\$	650.00 1.60	K		\$ 1 100.00 1.60

## **Automatic Temperature Controller**

average, EA - add \$ 1 000.00 good, EA - add \$ 2 300.00

## **Watering Systems**

pre-heating system, **EA - add \$ 1 500.00** overhead system, **per m<sup>2</sup> - add \$ 2.50** bench system, per m<sup>2</sup> - **add \$ 3.00** spaghetti system, **per m<sup>2</sup> - add \$ 4.50** 

# CO<sub>2</sub> Generator

EA - add \$ 400.00

(average nine generators per acre needed)

## Humidifier

average, EA - add \$ 200.00 good, EA - add \$ 250.00

## **Plant Benches**

plastic, per  $m^2$  - add \$ 18.50 wooden, per  $m^2$  - add \$ 27.00

## Wall Openings

(areas replaced by doors and windows)

adjustments for openings are not applicable in this classification

Note: Wall Cost

galvanized steel grits, purlins and fibreglass, m<sup>2</sup> \$ 24.00

## 4.891.046 GENERAL INFORMATION

The Suggested Age Life for this classification is 30 years.

# 4.892.020 MODEL TYPE 892 QUALITY 02

## GABLE TYPE GREENHOUSE - SUBSTANDARD

## 4.892.021 GENERAL DESCRIPTION

## Wall Heights

**Architect Fees:** 2.2 % **Exterior Wall -** Main 1.5 m

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Substructure - wood sills or equivalent

Floor - nil

Framing - bearing walls, wood posts and beams

Base Wall Construction - wood framing, sheathing 0.6 metre height

Exterior Wall Finish - single ply glass, paint on exposed members

Base Roof Construction - wood non-grooved rafters

Roof Finish - single ply glass, paint on exposed members

Electrical Basic - substandard wiring

**Electrical Fixtures - poor lighting** 

## 4.892.022 BASE RATES (in dollars)

All Sizes - m<sup>2</sup>

ST			
Code	Structure	K	AR
60	Main Level	2 400	45

ST Code 60 designates a greenhouse without footings or foundation.

**Note:** This structure may be a single unit or multiple units that are gutter connected, built in a range from 6.1 m to 11.0 m widths per unit.

## 4.892.023 INSTALLATIONS

Electrical Basic	K	\$ 500.00
	AR	2.50
Electrical Fixtures	$m^2$	1.50

## 4.892.024 PRECALCULATED ADJUSTMENTS

## **Strip Footings**

150 mm x 300 mm - add K \$ 300.00 AR 2.00

## 4.892.025 UNIT COST ADJUSTMENTS

#### **Concrete Slab**

on grade, 75 mm unreinforced, per m<sup>2</sup> - add \$ 10.50

## **Doors, Exterior**

economy wood door, EA - add \$190.00 low grade storm door, EA - add \$140.00

## **Ventilating System**

trap type windows with cable pulleys, 75% of the length of each unit, per m - add \$ 28.00

## **Wall Openings**

(areas replaced by doors and windows) adjustments for openings are not applicable in this classification

Note: Wall Cost

painted wood frame and glass - m<sup>2</sup> \$ 30.00

## 4.892.026 GENERAL INFORMATION

The Suggested Age Life for this classification is 20 years.

# 4.892.030 MODEL TYPE 892 QUALITY 03

## **GABLE TYPE GREENHOUSE - FAIR**

## 4.892.031 GENERAL DESCRIPTION

## Wall Heights

**Architect Fees:** 3.3 % **Exterior Wall -** Main 2.1 m

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

**Substructure -** concrete piles or equivalent

Floor - nil

**Framing -** gable type pipe trusses on steel posts 3.0 m o.c. or equivalent

Base Wall Construction - aluminum glazing bars 0.6 m o.c. between steel posts, sheathing 0.6 metre height

Exterior Wall Finish - single ply glass, paint on exposed members

Base Roof Construction - aluminum glazing bars 0.6 m o.c. between pipe trusses

Roof Finish - single ply glass, paint on exposed members

Electrical Basic - fair wiring

Electrical Fixtures - economy lighting

## 4.892.032 BASE RATES (in dollars)

<b>A 11</b>	Sizes -	$m^2$
$\boldsymbol{A}$	- 717ES -	

ST			
<b>Code</b>	Structure	K	AR
60	Main Level	3 800	49

ST Code 60 designates a greenhouse with piles.

**Note:** This structure may be a single unit or multiple units that are gutter connected, built in a range from 7.6 m to 11.0 m widths per unit.

#### 4.892.033 INSTALLATIONS

Concrete Piles	K	\$ 200.00
	AR	1.00
Electrical Basic	K	700.00
Electrical Basic	AR	3.50
Electrical Fixtures	$m^2$	3.50

## 4.892.034 PRECALCULATED ADJUSTMENTS

Strin	Footings	
Bulb	Toomigs	,

150 mm x 300 mm	- add	K\$ AR	800.00 1.50
<b>Foundation Wall</b> 200 mm x one m high	- add	K AR	\$3 900.00 2.00
Wall and Roof Finish corrugated fibreglass	- deduct	K AR	\$1 100.00 12.00
Walls Only corrugated fibreglass	- deduct	K	<b>\$1 100.00</b>

## 4.892.035 UNIT COST ADJUSTMENTS

## **Concrete Slab**

on grade, 75 mm unreinforced, per m<sup>2</sup> - add \$ 10.50

## **Doors, Exterior**

low grade wood door, EA - add \$ 310.00 fair storm door, EA - add \$ 160.00

## **Ventilating System**

screw type continuous system, 1 row on the length of each unit, per m - add \$ 31.50

AR

1.00

# **Wall Openings**

(areas replaced by doors and windows) adjustments for openings are not applicable in this classification

Note: Wall Cost

aluminum frame and glass - m<sup>2</sup> \$ 24.00

# 4.892.036 GENERAL INFORMATION

The Suggested Age Life for this classification is 25 years.

## 4.892.040 MODEL TYPE 892 QUALITY 04

## GABLE TYPE GREENHOUSE - STANDARD

## 4.892.041 GENERAL DESCRIPTION

#### **Wall Heights**

**Architect Fees:** 4.1% **Exterior Wall** - Main 2.4 m

## **COMPONENT DESCRIPTION - BASE STRUCTURE**

Substructure - concrete piles or equivalent

Floor - nil

**Framing -** gable type aluminum trusses on aluminum posts 3.0 m o.c. with galvanized steel purlins or equivalent **Base Wall Construction -** aluminum glazing bars 0.6 m o.c. between framing posts, sheathing 0.6 metre height

Exterior Wall Finish - single ply glass, paint on exposed members

**Base Roof Construction -** aluminum glazing bars 0.6 m o.c. between trusses

Roof Finish - single ply glass, paint on exposed members

Electrical Basic - average wiring

**Electrical Fixtures -** substandard lighting

## 4.892.042 BASE RATES (in dollars)

		All Sizes - m <sup>2</sup>	
ST Code	Structure	K	AR
60	Main Level	9 500	81

ST Code 60 designates a greenhouse with piles.

**Note:** This structure may be a single unit or multiple units that are gutter connected, built in a range from 11.0 m to 12.8 m widths per unit.

## 4.892.043 INSTALLATIONS

Concrete Piles	K	\$ 300.00
	AR	1.00
Electrical Basic	K	1 400.00
	AR	4.50
Electrical Fixtures	$m^2$	6.50

## 4.892.044 PRECALCULATED ADJUSTMENTS

Foundation Wall				
light reinforced				
200 mm x one m high	- add		K	<b>\$5 900.00</b>
			AR	1.50
Strip Footings				
150 mm x 300 mm	- add		K	\$ 800.00
			$\mathbf{A}\mathbf{R}$	1.50
Wall and Roof Finish				
corrugated fibreglass	<ul> <li>deduct</li> </ul>		K	\$1 100.00
			AR	12.00
15.9 mm acrylic polycarbonate	- add		K	\$7 400.00
panels	uuu	AR		4.00
paneis		7111		1.00
Walls Only				
corrugated fibreglass	<ul> <li>deduct</li> </ul>		K	\$1 100.00
			AR	1.00
15.9 mm acrylic polycarbonate	- add		K	\$7 400.00
panels		AR	5	.50
1		T7		
Plumbing Basic	- add	K	\$ 400 AR	
TT 4*			AK	2.00
Heating				<b>d coo</b> oo
forced air unit heaters	- add		K	\$ 600.00
			AR	12.00
forced air poly airbag system	- add		K	\$1 600.00
forced air poly airbag system	- auu		AR	13.00
hot water/steam pipe			AK	13.00
1 1	- add		K	¢5 200 00
radiation system	- aud		AR	\$5 300.00 19.00
			AN	19.00

# 4.892.045 UNIT COST ADJUSTMENTS

## **Concrete Slab**

on grade, 75 mm light reinforced, per  $\ensuremath{\text{m}}^2$  -  $add\ \$\ 13.20$ 

# **Doors, Exterior**

fair wood door, EA - add \$ 370.00 average storm door, EA - add \$ 220.00

# **Ventilating Systems**

rack and pinion continuous system, 2 rows on the length of each unit, per m - add \$ 60.00

exhaust fans including automatic	c shutters		
300 mm	EA	- add	\$ 300.00
450 mm			400.00
600 mm			600.00
750 mm			700.00
900 mm			800.00
1 050 mm			900.00
1 200 mm			1 000.00
automatic shutters only		K	\$ 80.00
		AR m <sup>2</sup>	200.00
automatic ventilation control		K	\$ 550.00
		AR	28.00

## 4.892.045 UNIT COST ADJUSTMENTS

## **Circulating Fans with Poly Tubes**

<b>Tube Size</b>	<b>Manual Shutter System</b>			<b>Motorized System</b>		ed System
450 mm per meter of tube	K	\$	350.00 1.00	K	\$	700.00 1.00
600 mm per meter of tube	K	\$	550.00 1.20	K	\$	800.00 1.00
750 mm per meter of tube	K	\$	650.00 1.60	K	\$	1 100.00 1.60

# **Automatic Temperature Controller**

average, EA - add \$ 1 100.00 good, EA - add \$ 2 300.00

## **Watering Systems**

pre-heating system, EA - add \$ 1 500.00 overhead system, per  $m^2$  - add \$ 2.50 bench system, per  $m^2$  - add \$ 3.00 spaghetti system, per  $m^2$  - add \$ 4.50

# CO<sup>2</sup> Generator

EA - add \$ 400.00

(average nine generators per acre needed)

## Humidifier

average, EA - add \$ 200.00 good, EA - add \$ 250.00

## **Plant Benches**

plastic, per  $m^2$  - add \$ 18.50 wooden, per  $m^2$  - add \$ 27.00

## **Light Growing Systems**

intensified light fixtures, per m<sup>2</sup> - add \$ 39.50

#### 4.892.045 UNIT COST ADJUSTMENTS Continued

#### **Shading Systems**

automated retractable foil blanket shade systems, including rollers, motors and wiring, per m<sup>2</sup> of roof area

Small Areas,  $0 - 2325 \text{ m}^2$ single pull blanket system, per m<sup>2</sup> - add \$ 22.00 multiple pull blanket system, per m<sup>2</sup> - add \$ 35.50

Medium Areas, 2325 - 4650 m<sup>2</sup> multiple pull blanket system, per m<sup>2</sup> - add \$ 30.00

Large Areas, over 4650 m2 multiple pull blanket system, per m<sup>2</sup> - add \$ 28.50

## **Cooling Systems**

costs include cellulose cell, drainage system, supports, tanks, pump, motor, piping, electrical and installation

coolpad evaporative cold water system, per m<sup>2</sup> - add \$ 9.00

# **Computer Control Systems**

costs are for a basic One Zone System and include a computer base station; temperature, humidity and light sensors, wiring and controls

One Zone environmental climatic control system **EA** \$ 10 650.00

Additional Zones and controls, per zone add EA \$80.00

Additional Sensors in added Zones, per sensor add EA \$1020.00

Datalog Weather Sensing Station, including steel mast, sensors and wiring to computer control add EA \$4 400.00

## Hydroponic (Soil - Less) Growing Systems

Spray and Fog Watering Boom System, including pump, drive, overhead boom, nozzles, 30.5 m track system, piping and installation, per m2 add \$ 22.00

Track Variation - for each metre of track system greater than or less than 30.5 m in length add or deduct \$ 59.00

Trickle or Dripper Systems, including plastic tubing, drip nozzles, reservoir, pump, compensators and electrical, per m<sup>2</sup>

lectrical, per  $m^2$  \$ 4.40

optional solution reclamation system including sloped beds, gutters and drains, per m add \$ 33.00

#### 4.892.045 UNIT COST ADJUSTMENTS Continued

# Hydroponic (Soil - Less) Growing Systems Continued

Ebb and Flow Systems, including sloped tray beds, bottom flood reclamation closed loop system, drains piping, reservoir, pump and electrical, per m<sup>2</sup>

\$ 64.00

## **Automated Fertilizer Management Systems**

costs include batch tanks, plastic lines and nozzles, electronic batch, manifold, injection, metering and monitoring controls, computer and installation

Small System - 0 to 0.405 ha

contains 3 heads, 25 mm lines EA \$ 5360.00

additional or less heads add or deduct EA \$ 1880.00

Average System - 0.5 to 1.9 ha

contains 6 heads, 25 mm lines EA \$ 10 700.00

additional or less heads add or deduct EA \$ 2 230.00

Large System - 2.0 ha and over

contains 10 heads, 50 mm lines EA \$ 25 800.00 additional or less heads add or deduct EA \$ 2 580.00

## **Wall Openings**

(areas replaced by doors and windows) adjustments for openings are not applicable in this classification

Note: Wall Cost

aluminum frame and glass - m2 \$ 30.00 aluminum frame and acrylic polycarbonate - m<sup>2</sup> \$ 65.00

## 4.892.046 GENERAL INFORMATION

The Suggested Age Life for this classification is 30 years.

# 4.894.040 MODEL TYPE 894 QUALITY 04

## **SOLARIUM - STANDARD**

#### 4.894.041 GENERAL DESCRIPTION

## Wall Heights

**Architect** Fees: 5.6% **Exterior Wall -** 2.4 m

## CODE COMPONENT DESCRIPTION - BASE STRUCTURE

0700	Piles - reinforced concrete
0920	Concrete Pads - reinforced
1120	Grade Beams - reinforced concrete or equivalent
1524	Concrete Slab - On Grade - 100 mm light reinforced

**Framing -** painted light gauge aluminum members

**Base Wall Construction -** clear safety tempered single glazed panels; finished pony stub wall, colored aluminum panels or glazed to the floor

Base Roof Construction - painted light gauge aluminum sloped members, straight eaves

Roof Finish - clear, safety tempered, single glazed panels

6514 Heating - average forced air and ventilation

6704 Electrical Basic - average wiring

6904 Electrical Fixtures - average lighting

## 4.894.042 BASE RATES (in dollars)

		All Si	zes - m <sup>2</sup>
ST Code	Structure	K	AR
61	Main Level & Concrete Slab	2 400	468
70	Upper Level	2 400	417
72	<b>Upper Level Cantilever Extension</b>	2 400	515

ST Code 61 designates the base structure of a main level with a concrete slab on grade.

ST Code 70 designates the base structure of an upper level.

ST Code 72 designates the base structure of an unsupported portion of an upper level

## 4.894.043 INSTALLATIONS

Heating AR \$11.70
Electrical Basic AR 8.00
Electrical Fixtures AR 13.00

# 4.894.044 PRECALCULATED ADJUSTMENTS (in dollars

## Height

per metre of height - add or deduct

**All Sizes** 

**K** AR 660 73.00

## Heating

average multi-zone forced air - add total cost of heating times 0.5 average air conditioning - add total cost of heating times 1.6 average multi-zone forced air and air conditioning - add total cost of heating times 2.1

## 4.894.045 UNIT COST ADJUSTMENTS

#### **End Wall**

deleted end wall section, per m2 - deduct \$ 167.00

#### Floor Finish

average sheet vinyl, per  $m^2$  - add \$ 35.50 average vinyl tile, per  $m^2$  - add \$ 18.50 average carpet, per  $m^2$  - add \$ 17.00 average quarry tile, per  $m^2$  - add \$ 83.00

## Windows

equivalent to base wall panels

## **Doors, Exterior**

patio doors - equivalent to base wall panels average clear aluminum door, EA - add \$ 670.00

## **Wall Openings**

(areas replaced by doors and windows)
adjustments for openings are not applicable for this Classification

#### 4.894.046 GENERAL INFORMATION

Model Type 894 Solarium is a three-sided structure which is built and normally found attached to another commercial structure, usually a store, restaurant, hotel, office, etc. The base structure Base Rates for MT 894 have been designed accordingly.

The Base Cost of a building is calculated by applying appropriate Total Base Rates to the building's floor area.

Determine floor areas per level from exterior measurements.

Total Base Cost is produced when Base Cost is combined with applicable height adjustments.

Wall Height is determined by measuring the height of the solarium wall, where it attaches or adjoins a main structure or building.

The base floor of a Structure Code 70 Solarium Upper Level is formed by the base roof of the existing structure or building that the solarium is situated on.

Structure Code 72 Solarium rates contain an extended base floor necessary to support a cantilevered structure.

Base Structure designates a structure including interior finish.

For perimeter and/or design adjustments see section 1.160.000.

For Overall Structural Height adjustments see section 1.170.000.

An adjustment for Architect Fees must be made against any cost adjustments attributable to variations from Model Type specifications.

# 4.894.060 MODEL TYPE 894 QUALITY 06

#### **SOLARIUM - CUSTOM**

#### 4.894.061 GENERAL DESCRIPTION

## Wall Heights

**Architect Fees:** 7.0% **Exterior Wall -** 2.4 m

## CODE COMPONENT DESCRIPTION - BASE STRUCTURE

- 0555 Concrete Footings medium reinforced
- **0702** Piles reinforced concrete
- 0924 Concrete Pads reinforced
- 1124 Grade Beams reinforced concrete or equivalent
- 1326 Foundation Walls 200 mm medium reinforced concrete
- 1526 Concrete Slab On Grade 150 mm light reinforced

**Framing -** bronzed or black anodized medium to heavy aluminum members, straight or curved; heavy cedar columns with aluminum capping or wood glu-lam finished and shaped columns

**Base Wall Construction -** double glazed tinted safety panels, straight or curved, or double acrylic panels; finished pony stub wall or glazed panel walls to the floor

**Base Roof Construction -** bronzed or black anodized, medium to heavy aluminum members, sloped or curved; heavy cedar beams with aluminum capping or shaped wood glu-lam finished members; straight or curved eaves **Roof Finish -** double glazed tinted safety panels, straight or curved; or double acrylic panels

- 6556 Heating roof top heat and air conditioning
- 6706 Electrical Basic good wiring
- **6906** Electrical Fixtures good lighting

## 4.894.062 BASE RATES (in dollars)

		All Sizes - m <sup>2</sup>	
ST Code	Structure	K	AR
61	Main Level & Concrete Slab	4 200	1 036
70	Upper Level	4 200	959
72	<b>Upper Level Cantilever Extension</b>	4 200	1 080

- ST Code 61 designates the base structure of a main level with a concrete slab on grade.
- ST Code 70 designates the base structure of an upper level.
- ST Code 72 designates the base structure of an unsupported portion of an upper level.

# **4.894.063 INSTALLATIONS**

Heating and air conditioning AR \$36.60

Electrical Basic - main AR 18.40

- upper **AR 8.40** 

Electrical Fixtures AR 21.00

#### 4.894.064 PRECALCULATED ADJUSTMENTS (in dollars

## Height

per metre of height - add or deduct

All Sizes - m2

K AR 1 690 176.00

## Heating

average forced air - deduct total cost of heating times 0.7 average forced air and air conditioning - deduct total cost of heating times 0.52

## Glazed Panels, glass or acrylic

single glazing, wall and roof area, per m<sup>2</sup> - **deduct \$ 175.00** clear glazing, wall and roof area, per m<sup>2</sup> - **deduct \$ 43.00** 

## **Framing**

plain anodized aluminum members, wall and roof area, per m<sup>2</sup> - deduct \$ 18.00

# 4.894.065 UNIT COST ADJUSTMENTS

#### **End Wall**

deleted end wall section, per m2 - deduct \$ 386.00

## Floor Finish

good sheet vinyl, per  $m^2$  - add \$ 49.50 good vinyl tile, per  $m^2$  - add \$ 23.50 good carpet, per  $m^2$  - add \$ 25.00 good ceramic tile, per  $m^2$  - add \$ 136.00

#### Windows

equivalent to base wall panels

## **Doors, Exterior**

patio doors - equivalent to base wall panels good bronze aluminum door, EA - add \$ 1 000.00 good black aluminum door, EA - add \$ 1 200.00

## **Wall Openings**

(areas replaced by doors and windows)
adjustments for openings are not applicable for this classification

## 4.894.066 GENERAL INFORMATION

Model Type 894 Solarium is a three-sided structure which is built and normally found attached to another commercial structure, usually a store, restaurant, hotel, office, etc. The base structure Base Rates for MT 894 have been designed accordingly.

The Base Cost of a building is calculated by applying appropriate Total Base Rates to the building's floor area.

Determine floor areas per level from exterior measurements.

Total Base Cost is produced when Base Cost is combined with applicable height adjustments.

Wall Height is determined by measuring the height of the solarium wall where it attaches or adjoins a main structure or building.

The base floor of a Structure Code 70 Solarium Upper Level is formed by the base roof of the existing structure or building that the solarium is situated on.

Structure Code 72 Solarium rates contain an extended base floor necessary to support a cantilevered structure.

Base Structure designates a structure including interior finish.

For perimeter and/or design adjustments see section 1.160.000.

For Overall Structural Height adjustments see section 1.170.000.

An adjustment for Architect Fees must be made against any cost adjustments attributable to variations from Model Type specifications.

# 4.894.080 MODEL TYPE 894 QUALITY 08

#### **SOLARIUM - EXPENSIVE**

#### 4.894.081 GENERAL DESCRIPTION

## Wall Heights

Architect Fees: 9.0% Exterior Wall - 2.4 m

## CODE COMPONENT DESCRIPTION - BASE STRUCTURE

- 0555 Concrete Footings medium reinforced
- 0702 Piles reinforced concrete
- 0924 Concrete Pads reinforced
- 1124 Grade Beams reinforced concrete or equivalent
- 1328 Foundation Walls 300 mm medium reinforced concrete
- 1526 Concrete Slab On Grade 150 mm light reinforced

**Framing -** heavy bronzed or black anodized insulated aluminum members, straight, curved or custom shaped **Base Wall Construction -** straight or shaped, heavy float laminated tempered safety glass or acrylic double glazed thermal insulated panels, bronze or silver tinted; finished pony stub wall or glazed to the floor

**Base Roof Construction -** heavy bronzed or black anodized insulated aluminum members, straight, curved or custom shaped

**Roof Finish -** sloped or shaped, heavy float laminated tempered safety glass or acrylic double glazed thermal insulated panels, bronze or silver tinted

- **6546 Heating -** good hot water and ventilation
- 6566 Air Conditioning good
- 6706 Electrical Basic good wiring
- **6907** Electrical Fixtures good to expensive lighting

# 4.894.082 BASE RATES (in dollars)

All Sizes - m<sup>2</sup>

ST Code	Structure	K	AR
81	Main Level & Concrete Slab	5 800	1 135
70	Upper Level	5 800	1 048
72	<b>Upper Level Cantilever Extension</b>	5 800	1 190

ST Code 61 designates the base structure of a main level with a concrete slab on grade.

ST Code 70 designates the base structure of an upper level.

ST Code 72 designates the base structure of an unsupported portion of an upper level.

#### 4.894.083 INSTALLATIONS

Heating - main	AR	\$35.50
- upper	AR	27.60
Air Conditioning - main - upper	AR AR	28.70 22.30
Electrical Basic - main - upper	AR AR	19.90 15.40
Electrical Fixtures	AR	27.00

## 4.894.084 PRECALCULATED ADJUSTMENTS (in dollars

#### Height

per metre of height - add or deduct

All Sizes - m<sup>2</sup>

<u>K</u> AR 1 910 181.00

Glazed Panels, glass or acrylic

clear glazing, wall and roof area, per m<sup>2</sup> - deduct \$ 87.00

#### 4.894.085 UNIT COST ADJUSTMENTS

## **End Wall**

deleted end wall section, per  $m^2$  - **deduct K** \$ 300.00 AR  $m^2$  \$ 269.00

## Floor Finish

expensive sheet vinyl, per  $m^2$  - add \$ 71.00 expensive vinyl tile, per  $m^2$  - add \$ 34.50 expensive carpet, per  $m^2$  - add \$ 46.50 expensive ceramic tile, per  $m^2$  - add \$ 260.00 expensive marble tile, per  $m^2$  - add \$ 320.00

## **Motorized Shade and Track System**

wall or roof area, per m<sup>2</sup> - add \$ 249.00

#### Windows

equivalent to base wall panels

## **Doors, Exterior**

patio doors - equivalent to base wall panels good to expensive bronze aluminum door, EA - add \$ 1 300.00 good to expensive black aluminum door, EA - add \$ 1 500.00

## **Wall Openings**

(areas replaced by doors and windows)
adjustments for openings are not applicable for this classification

#### 4.894.086 GENERAL INFORMATION

Model Type 894 Solarium is a three-sided structure which is built and normally found attached to another commercial structure, usually a store, restaurant, hotel, office, etc. The base structure Base Rates for MT 894 have been designed accordingly.

The Base Cost of a building is calculated by applying appropriate Total Base Rates to the building's floor area.

Determine floor areas per level from exterior measurements.

Total Base Cost is produced when Base Cost is combined with applicable height adjustments.

Wall Height is determined by measuring the height of the solarium wall where it attaches or adjoins a main structure or building.

The base floor of a Structure Code 70 Solarium Upper Level is formed by the base roof of the existing structure or building that the solarium is situated on.

Structure Code 72 Solarium rates contain an extended base floor necessary to support a cantilevered structure.

Base Structure designates a structure including interior finish.

For perimeter and/or design adjustments see section 1.160.000.

For Overall Structural Height adjustments see section 1.170.000.

An adjustment for Architect Fees must be made against any cost adjustments attributable to variations from Model Type specifications.

# **SCHEDULE 5**

Subsection 10(1), paragraphs 10(2)(a) and (d) and subsections 10(4), 10(6) and 14(1)

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# **SCHEDULE 5**

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# 5.002.000 SITEWORK

## **5.002.050 DEMOLITION**

## 5.002.055 LIGHT DEMOLITION no salvage

	$\mathbf{m}^3$
Low rise building	\$ 9.60
5.002.060 HEAVY DEMOLITION	
Concrete	$\mathbf{m}^2$
Foundation walls 300 mm Unreinforced Reinforced	\$ 32.00 65.50
Slab-on-grade 100 mm Unreinforced Reinforced	7.50 12.00
Steel	19.50
5.002.160 STOCKPILE TOPSOIL	
	$\mathbf{m}^3$
Strip and Stockpile topsoil	\$ 2.20
5.002.165 SITE LEVELLING	
	$\mathbf{m}^2$
Site grading	\$ 0.70

# 5.002.200 EXCAVATION & BACKFILL

# 5.002.205 MACHINE EXCAVATION

	m <sup>3</sup>
Bulk Excavation incl. Disposal	\$ 9.90
Trench Excavation for Footing foundation walls	14.00

**Note:** To obtain cubical contents of bulk excavation add 1.2 m to length and width of basement for wall forms and working space.

## 5.002.210 HAND EXCAVATION

	$\mathbf{m}^{\circ}$
Normal Soil	\$ 42.00
5.002.215 BACKFILL	
	$\mathbf{m}^3$
Excavated material and gravel	\$ 13.50
	$\mathbf{m}^2$
Backfill for foundation walls below grade	\$ 8.30

# 5.002.217 SAND AND GRAVEL FILL

	$\mathbf{m}^2$
75 mm	\$ 1.30
100 mm	1.60
125 mm	2.20
150 mm	2.70
300 mm	5.30
600 mm	10.50

## 5.002.220 **DISPOSAL**

Hauling \$ 5.60

## 5.002.250 PILE FOUNDATIONS

## 5.002.260 PRECAST CONCRETE PILES

	m
300 x 300 mm	\$ 82.50
400 x 400 mm	99.00

## **5.002.265 STEEL PILES**

	m
Steel H-Piles 300 mm, 79 kg/m	\$ 120.00
Steel pipe piles concrete filled 250 mm	80.00

## 5.002.270 FRICTION PILES

	III
300 mm	\$ 15.50
350 mm	22.00
400 mm	25.00

## 5.002.275 CAISSONS

Drilled Bell Caissons	<u> </u>
400 mm	\$ 47.00
600 mm	70.00
750 mm	97.00
900 mm	140.00

**Note:** For structures, such as small warehouses, stores or offices 400 mm diameter friction piles approximately 6 m deep are usually sufficient. For other structures normally 1.00 percent to a maximum of 2.00 percent of total building cost is considered average for piling cost.

# 5.002.280 SHEET PILING left in place

	$147 \text{ kg/m}^2$	\$ 258.00
5.002.285 U	NDERPINNING including	
		m <sup>3</sup>
	Excavation and support concrete	\$ 663.00
5.002.350	SITE DRAINAGE	
5.002.355	WEEPING-TILE perforated	
		m
	100 mm	\$ 14.50
	150 mm	20.50

# 5.002.400 SITE IMPROVEMENTS

# 5.002.405 PAVING

Bituminous Paving including gravel base	m2
50mm layer	\$11.50
75mm layer	\$15.00

# **NOTE:** Concrete paving see section 5.003.190

# **5.002.410 CURBS** precast

cito certas precasi		
		m
200 x 150 mm		\$ 23.50
5.002.415 GAURDRAILS AND POSTS		
Bumper Posts, 1.2 m painted steel pipe with concrete fill	EA	<b>\$100</b>
Guardrails, painted metal and posts	per m	\$49.00
5.002.420 PARKING LOT PLUG-INS		
Double weatherproof receptacle, 2 stalls per post On building meter On suite meter	per stall per stall	
Double weatherproof receptacle, 4 stalls per post On building meter On suite meter	per stall per stall	

## 5.002.430 FENCES

Chain Link galvanized steel posts and wire mesh		No Security Top		With Security Top	
	Height		m	m	
11 Gauge	1.2 m 1.5 m 1.8 m	\$	17.00 21.50 22.00	\$ - - 23.50	
9 Gauge Height adjustment, per 300 mm, add	1.2 m 1.5 m 1.8 m 2.1 m 2.4 m 3.7 m	\$	20.50 22.00 26.00 29.50 33.00 43.00 2.50	28.00 31.00 35.00 45.50 \$ 2.60	
6 Gauge Height adjustment, per 300 mm, add	1.8 m 2.4 m 3.7 m	\$ \$	36.50 45.00 64.00 4.80	\$ 38.00 47.00 66.50 \$ 4.90	

Note: 11 Gauge fence is considered light-weight and is used for minimum security or protective purposes.

9 Gauge fencing is medium weight and the most commonly used for commercial and industrial purposes.

6 Gauge fencing is heavy duty and used only in high-risk security areas such as jails, defense establishments and/or where greater heights are necessary.

Watchman with T-rail steel posts and 150 x 150 mm page-wire mesh

Height		No Security Top m	With Security Top m	
	1.5 m	\$ 11.00	\$ 13.50	
	1.8 m	12.50	14.50	
	2.1 m	14.50	16.50	
	2.1 m	14.50	16.	

### 5.002.435 TENNIS COURT FENCES

Includes tennis net posts, enclosure fence with galvanized steel posts

	<u> </u>
\$	41.00
	51.00
add or deduct	5.00
	<u>m</u> _
\$	47.00
	52.50
add or deduct	6.50
n high	
add EA \$	380
add EA	440
	add or deduct  add or deduct  high  add EA \$

**Note:** For a complete tennis court cost, additions must be made for excavation, fill, and surface finish such as asphalt, etc.

### 5.002.440 BALL PARK BACKSTOPS

Screen fencing for baseball or softball parks, including galvanized steel posts and chain link mesh with 1.2 m sloped overhang.

		m
3.7 m high and overhang		\$ 148.00
4.9 m high and overhang		189.00
6.1 m high and overhang		205.00
Height adjustment, per 300 mm	add or deduct	\$ 40.00

**Note:** The sloped projecting overhang is not part of the height adjustment. Height refers only to the vertical wall portion of the backstop screen.

### 5.002.450 GATES

Vehicle Access galvanized steel posts and chain link mesh

9	Haiaka	No Security Top	Тор
Swing Type	Height 1.5 m	m \$ 72.00	<u>m</u> \$ 88.00
Swing Type	1.8 m	85.00	101.00
	2.4 m	113.00	132.00
	3.7 m	132.00	137.00
Sliding Type	1.5 m	\$ 183.00	\$ 200.00
g	1.8 m	197.00	213.00
	2.4 m	225.00	230.00
	3.7 m	244.00	249.00

Man Gates galvanized steel posts and chain link mesh 0.9 to 1.2 m wide

<u>Height</u>	Each
1.5 m	\$ 240
1.8 m	260
2.1 m	280
2.4 m	310
3.7 m	400

### 5.002.455 GATE CONTROLS

Where mechanical assisted and activated access or gate security control is required, the following items may be encountered and must be added to the costs of a standard gate system.

Electric Slide Gate Operator, includes concrete pad, metal housing, electric motor and drive, installation and push butt	on		
controls		EA	\$ 5 400
<b>Electric Swing Gate Operator,</b> all specifications as the slide operator plus swing arm		EA	\$ 6 000
Telephone access station		add EA	\$ 4 000
Magnetic card station		add EA	800
Intercom station		add EA	500
Key lock station		add EA	1 000
Time clock control station		add EA	500
Radio transmitter control station		add EA	350
Combination code lock station		add EA	2 000
Vehicle loop detector system		add EA	3 000
Micro Card Access Control System - consists of 3 major components - one programmable micro card reader station, a central control micro computer programmer, and a micro printer verification status and data record control system	EA	\$ 17 500	
Additional micro card reader stations		EA	\$ 4 500

### **5.003.000 CONCRETE**

### 5.003.050 FORMWORK

### **5.003.055 STRIP FOOTING FORMS** 2 sides

150 mm	200 mm	300 mm
m	m	m
\$ 8.80	\$ 11.50	\$ 14.50

**Note:** For stepped footing increase above rates by 12.5%.

### 5.003.060 SPREAD FOOTING (Pad) FORMS

150 mm	200 mm	300 mm
m	m	m
\$ 4.40	\$ 5.90	\$ 8.80

### 5.003.065 FOUNDATION WALL AND GRADEBEAM FORMS

	m²
2 sides	\$ 60.50

### 5.003.070 SLAB ON GRADE FORMS

	m
per 25 mm of thickness	\$ 0.70

### 5.003.100 CONCRETE REINFORCEMENT

### 5.003.105 REINFORCING BARS installed per tonne

\$ 840.00

Steel Bars	Bar Sizes	Unit W	eight
	mm	kg/m	kg
	10	0.785	\$ 1.00
	15	1.570	1.00
	20	2.355	0.80
	25	3.925	0.80
	30	5.495	0.80
	35	7.850	0.80
	45	11.775	0.80
	55	19.625	0.80

### **5.003.110 REINFORCING MESH** 150 x 150 mm

Wire	Diameter
------	----------

mm	$\mathbf{m}^2$
4.88 x 4.88	\$ 2.90
4.12 x 4.12	2.10
3.40 x 3.40	2.00

### 5.003.120 REINFORCING in place

Walls, floors	$m^2$
Light	\$ 1.60 to 5.40
Medium	5.40 to 11.00
Heavy	11.00 to 21.50
Extra Heavy	21.50 to 24.00
Strip Footings	m
Light one 15 mm bar	\$ 1.50
Medium two 15 mm bars	3.00
Heavy four 15 mm bars	5.90

### 5.003.150 CAST-IN-PLACE CONCRETE

### **5.003.155 CONCRETE**

	n	<u> </u>
25 MPa up to 150 mm	\$	86.00
35 MPa over 150 mm	11	0.00

### 5.003.160 STRIP FOOTINGS unreinforced

		Depth		
	150 mm	200 mm	250 mm	300 mm
Width	m	m	m	m
300 mm	\$ 12.00	\$ 16.00	\$ 20.00	\$ 24.00
350 mm	12.50	17.00	21.00	25.50
400 mm	13.50	17.50	22.00	26.50
450 mm	14.00	18.50	23.00	28.00
500 mm	14.50	19.50	24.50	29.00
550 mm	15.00	20.50	25.50	30.50
600 mm	16.00	21.00	26.50	32.00

### 5.003.165 SPREAD PAD FOOTINGS

Unreinforced		
600 x 600 x 150 mm	EA \$	15
750 x 750 x 200 mm	EA	27
750 x 750 x 300 mm	EA	39
900 x 900 x 300 mm	EA	51
1 200 x 1 200 x 300 mm	EA	76
1 200 x 1 200 x 450 mm	EA	110
1 500 x 1 500 x 450 mm	EA	160
Reinforced		
900 x 900 x 250 mm	EA \$	47
1 200 x 1 200 x 250 mm	EA	85
1 500 x 1 500 x 300 mm	EA	150
1 800 x 1 800 x 375 mm	EA	240
2 100 x 2 100 x 425 mm	EA	360
2 400 x 2 400 x 500 mm	EA	520
2 700 x 2 700 x 575 mm	EA	740
3 000 x 3 000 x 625 mm	EA	950
3 600 x 3 600 x 725 mm	EA	1 600
3 900 x 3 900 x 775 mm	EA	1 900
4 200 x 4 200 x 825 mm	EA	2 400
4 500 x 4 500 x 875 mm	EA	2 900

### 5.003.170 FOUNDATION WALLS unreinforced

	$\mathbf{m}^2$
150 mm	\$ 53.00
200 mm	56.50
250 mm	59.00
300 mm	62.50

### 5.003.175 CONCRETE GRADEBEAMS reinforced

		Width		
	200 mm	300 mm	450 mm	
Depth	m	m	<u>m</u>	
600 mm	\$ 57.00	\$ 65.50	\$ 79.50	
900 mm	83.00	97.00	118.00	
1 200 mm	112.00	128.00	155.00	
1 500 mm	-	160.00	195.00	
1 800 mm	-	191.00	232.00	

### 5.003.180 CONCRETE COLUMNS reinforced

	Square	Round
	m	m
300 mm	\$ 64.00 \$	
400 mm	91.50	60.00
500 mm	121.00	78.00
600 mm	156.00	92.00
700 mm	195.00	125.00
800 mm	245.00	151.00
900 mm	272.00	186.00
1 000 mm	312.00	230.00

5.003.185 CONCRETE BEAMS reinforced		Width 250 mm	
		m	300 mm
Donth	200 mm		m
Depth		ф	ф.
200 mm 250 mm	\$ 29.50	\$ - 42.00	\$ -
	39.00	43.00	- 
300 mm	44.00	48.50 55.50	53.50
350 mm	50.00	55.50	61.00
400 mm	56.00	60.50	66.50
450 mm	62.00	66.50	72.50
500 mm	66.50	73.00	79.50
550 mm 600 mm	74.00 79.00	80.00 87.00	85.00 91.50
		07.00	71.50
Over 600 mm deep, beam becomes a Slab Band			02.50
750 mm	66.50	77.00	93.50
900 mm	71.00	89.50	107.00
1 050 mm	87.50	98.50	120.00
1 200 mm	96.50	109.00	134.00
		Width	
	350 mm	400 mm	450 mm
<b>Depth</b>	m	m	m
350 mm \$	66.50	\$	\$ -
400 mm	70.50	76.50	·
450 mm	78.00	85.00	88.50
500 mm	84.50	90.50	96.50
550 mm	91.50	98.00	107.00
600 mm	100.00	104.00	112.00
Over 600 mm deep, beam becomes a Slab	Band or Beam laid flat		
750 mm	103.00	113.00	122.00
900 mm	118.00	128.00	139.00
1 050 mm	132.00	144.00	156.00
1 200 mm	146.00	159.00	173.00
		Width	
	500 mm	550 mm	600 mm
Depth	m	m	m
500 mm	\$ 105.00	\$ -	\$ -
550 mm	113.00	116.00	-
600 mm	118.00	125.00	131.00
Over 600 mm deep, beam becomes a Slab	Band or Beam laid fla	t	
	131.00	142.00	151.00
750 mm	101.00		
750 mm 900 mm	150.00	161.00	172.00
			172.00 192.00

### 5.003.190 SLAB ON GRADE unreinforced

	$m^2$
50 mm	\$ 7.20
75 mm	8.90
100 mm	11.00
125 mm	13.00
150 mm	15.00
175 mm	17.00
200 mm	19.00
225 mm	21.50
250 mm	23.50
300 mm	27.50

### 5.003.195 CONCRETE SLAB for metal deck, unreinforced

	$\mathbf{m}^2$
50 mm	\$ 7.50
64 mm	8.60
75 mm	9.50
88 mm	10.50
100 mm	11.50
113 mm	12.50
125 mm	13.50
138 mm	14.50
150 mm	15.50

Note: add for reinforcing

### 5.003.200 CONCRETE SLAB, exposed aggregate, unreinforced

	$\mathbf{m}^2$
50 mm	\$ 16.00
75 mm	18.00
100 mm	20.00
125 mm	22.00
150 mm	24.00
175 mm	28.50
200 mm	30.50
225 mm	32.50
250 mm	34.50
300 mm	38.50

### 5.003.205 CONCRETE TOPPING

	m²
<del>25 mm</del>	\$ 5.10
38 mm	6.90
50 mm foamcell	8.30

### 5.003.250 SUSPENDED FLOOR OR ROOF FRAMING SYSTEMS

### Live Loads

		2.4 kN/m <sup>2</sup>	$4.8 \text{ kN/m}^2$	9.6 kN/m <sup>2</sup>
Type	Bay Size	$\mathbf{m}^2$	$m^2$	
Flat Plate	4.6 x 4.6 m	\$ 45.00	\$ 49.50	\$ -
	4.6 x 6.1 m	49.00	55.00	_
	4.6 x 7.6 m	55.50	62.00	_
	4.6 x 9.1 m	60.00	68.00	-
	6.1 x 6.1 m	50.50	55.00	-
	6.1 x 9.1 m	61.00	66.50	-
	6.1 x 12.2 m	73.00	81.00	-
	7.6 x 7.6 m	57.00	62.50	-
	7.6 x 10.7 m	66.50	73.50	-
	7.6 x 12.2 m	79.50	-	-
	7.6 x 13.7 m	-	88.50	-
One-Way	4.6 x 6.1 m	\$ 46.00	\$ 49.00	\$ -
Joist Slab	4.6 x 7.6 m	47.00	51.50	-
	4.6 x 9.1 m	48.50	52.50	-
	6.1 x 9.1 m	50.50	55.00	-
	6.1 x 10.7 m	52.50	57.00	-
	6.1 x 12.2 m	56.50	62.00	-
	7.6 x 12.2 m	58.50	65.00	-
	7.6 x 13.7 m	-	68.00	-
One-Way Beam				
and Slab	4.6 x 6.1 m	\$ 55.00	\$ 59.00	\$ 69.00
	6.1 x 7.6 m	59.50	62.00	72.00
	7.6 x 9.1 m	63.50	69.00	80.00
	7.6 x 12.2 m	69.50	- -	-
	10.7 x 13.7 m	-	104.00	-
Two-Way Beam			h <2 =0	A = 4 = 0
and Slab	4.6 x 6.1 m	-	\$ 63.50	\$ 71.50
	6.1 x 7.6 m	-	70.50	80.50
	7.6 x 9.1 m	-	79.50	91.00
Flat Slab	6.1 x 6.1 m	\$ 53.00	\$ 56.50	\$ 63.00
	6.1 x 9.1 m	65.00	70.00	78.50
	6.1 x 12.2 m	78.00	85.00	97.50
	7.6 x 7.6 m	60.00	64.50	76.00
	7.6 x 10.7 m	71.00	76.50	-
	7.6 x 12.2 m	84.00	-	91.00
	7.6 x 13.7 m	-	91.50	111.00
	9.1 x 9.1 m	67.50	-	83.50
	9.1 x 12.2 m	78.50	82.50	99.50
	9.1 x 13.7 m	-	84.50	-
	9.1 x 15.2 m	91.00	99.00	116.00

### 5.003.250 SUSPENDED FLOOR OR ROOF FRAMING SYSTEMS - CONT'D

### **Live Loads**

		2.4 kN/m <sup>2</sup>	4.8 kN/m <sup>2</sup>	9.6	kN/m <sup>2</sup>
Type	Bay Size	$m^2$	$m^2$		m <sup>2</sup>
Waffle Slab	7.6 x 7.6 m	\$ 51.50	\$ 56.00	\$	-
(1 m Modules)	7.6 x 10.7 m	54.50	60.00		-
	7.6 x 12.2 m	61.00	-		-
	7.6 x 13.7 m	-	67.00		-
	9.1 x 9.1 m	54.00	-	-	
	9.1 x 12.2 m	60.00	59.50		-
	9.1 x 13.7 m	-	66.00		-
	9.1 x 15.2 m	66.00	66.50		-
	10.7 x 10.7 m	60.00	66.50		-
	10.7 x 13.7 m	66.00	73.50		-
	10.7 x 16.8 m	72.00	80.50		-
	12.2 x 12.2 m	65.00	72.00		-
	12.2 x 15.2 m	69.00	76.50		-
	12.2 x 18.3 m	76.50	85.00		-
Waffle Slab	7.6 x 7.6 m	\$ -	\$ 52.00	\$	_
(1.5 m	9.1 x 12.2 m	-	60.50		-
Modules)	9.1 x 13.7 m	-	63.50		-
,	9.1 x 15.2 m	-	66.00		-
	10.7 x 10.7 m	-	59.50		-
	12.2 x 12.2 m	-	63.00		-
	12.2 x 15.2 m	-	68.00		-
	15.2 x 15.2 m	-	73.50		-

# 5.003.300 FLOOR & ROOF FRAMING SYSTEM COLUMNS 5.003.305 INTERIOR COLUMNS

Live Loads

		$2.4 \text{ kN/m}^2$	4.8 kN/m <sup>2</sup>	9.6 kN/m <sup>2</sup>
Type	Bay Size	m	m	<u>m</u>
Flat Plate	4.6 x 4.6 m	\$ 64.00	\$ 64.00	\$ -
	4.6 x 6.1 m	64.00	90.00	-
	4.6 x 7.6 m	80.50	90.50	-
	4.6 x 9.1 m	97.00	103.00	-
	6.1 x 6.1 m	78.00	81.50	-
	6.1 x 9.1 m	112.00	129.00	-
	6.1 x 12.2 m	163.00	174.00	-
	7.6 x 7.6 m	112.00	122.00	-
	7,6 x 10.7 m	161.00	174.00	-
	7.6 x 13.7 m	237.00	251.00	-
	9.1 x 9.1 m	157.00	-	-
One-Way	4.6 x 6.1 m	\$ -	\$ 67.50	\$ -
Joist Slab	4.6 x 7.6 m	-	70.50	-
	4.6 x 9.1 m	-	77.50	-
	6.1 x 9.1 m	-	94.00	-
	6.1 x 10.7 m	-	111.00	-
	6.1 x 12.2 m	-	132.00	-
	7.6 x 12.2 m	-	157.00	_
	7.6 x 13.7 m	-	176.00	-
One-Way Beam	4.6 x 6.1 m	\$ 64.00	\$ 64.00	\$ 69.00
and Slab	6.1 x 7.6 m	68.00	74.50	81.50
	7.6 x 9.1 m	87.00	98.50	110.00
Flat Slab	6.1 x 6.1 m	\$ 78.00	\$ 81.50	\$ -
	6.1 x 9.1 m	101.00	116.00	-
	6.1 x 12.2 m	149.00	166.00	-
	7.6 x 7.6 m	78.00	163.00	-
	7.6 x 10.7 m	163.00	175.00	-
	7.6 x 13.7 m	214.00	251.00	-
	9.1 x 9.1 m	157.00	166.00	-
	9.1 x 12.2 m	214.00	227.00	-
	9.1 x 15.2 m	289.00	306.00	-
Waffle Slab	7.6 x 7.6 m	-	\$ 107.00	\$ -
(1 m Modules)	7.6 x 10.7 m	-	139.00	-
	7.6 x 13.7 m	-	178.00	-
	9.1 x 9.1 m	-	138.00	-
	9.1 x 12.2 m	-	186.00	-
	9.1 x 15.2 m	-	243.00	-
	10.7 x 10.7 m	-	189.00	-
	10.7 x 13.7 m	-	251.00	-
	10.7 x 16.8 m	-	319.00	-
	12.2 x 12.2 m	-	249.00	-
	12.2 x 15.2 m	-	310.00	-
	12.2 x 18.3 m	-	390.00	-
	15.2 x 15.2 m	-	410.00	-

### 5.003.305 INTERIOR COLUMNS - CONT'D

### Live Loads

		$2.4 \text{ kN/m}^2$	$4.8 \text{ kN/m}^2$	$9.6 \text{ kN/m}^2$
Type	Bay Size	m	m	m
Waffle Slab	7.6 x 7.6 m	\$-	\$ 99.00 \$	-
(1.5 m Modules)	7.6 x 10.7 m	-	135.00	-
	7.6 x 13.7 m	-	165.00	-
	9.1 x 9.1 m	-	139.00	-
	9.1 x 12.2 m	-	174.00	-
	9.1 x 15.2 m	-	212.00	-
	10.7 x 10.7 m	-	178.00	-
	10.7 x 13.7 m	-	222.00	-
	10.7 x 16.8 m	-	255.00	-
	12.2 x 12.2 m	-	225.00	-
	12.2 x 15.2 m	-	279.00	-
	12.2 x 18.3 m	-	353.00	-
	15.2 x 15.2 m	-	371.00	-

### 5.003.310 EXTERIOR COLUMNS

### Live Loads

		$2.4 \text{ kN/m}^2$	$4.8 \text{ kN/m}^2$	$9.6 \text{ kN/m}^2$
Type	Bay Size	m	m	m
Flat Plate	4.6 x 4.6 m	\$ 64.00	\$ 64.00	\$ -
	4.6 x 6.1 m	64.00	64.00	-
	4.6 x 7.6 m	64.00	64.00	-
	4.6 x 9.1 m	64.00	64.00	-
	6.1 x 6.1 m	64.00	64.00	-
	6.1 x 9.1 m	77.00	78.00	-
	6.1 x 12.2 m	109.00	112.00	-
	7.6 x 7.6 m	72.00	78.00	-
	7.6 x 10.7 m	106.00	122.00	-
	7.6 x 13.7 m	139.00	156.00	-
	9.1 x 9.1 m	99.50	-	-

### 5.003.310 EXTERIOR COLUMNS - CONT'D

Live Loads

		2.4 kN/m <sup>2</sup>	4.8 kN/m <sup>2</sup>	9.6 kN/m <sup>2</sup>
Type	Bay Size	m	m	m
One-Way	4.6 x 6.1 m	\$ -	\$ 64.00	<b>\$</b> -
Joist Slab	4.6 x 7.6 m	-	64.00	-
00250 5246	4.6 x 9.1 m	_	64.00	_
	6.1 x 9.1 m	_	68.00	-
	6.1 x 10.7 m	_	73.50	-
	6.1 x 12.2 m	_	85.50	_
	7.6 x 12.2 m	_	96.50	_
	7.6 x 13.7 m	-	110.00	-
One-Way Beam	4.6 x 6.1 m	\$ 64.00	\$ 64.00	\$ 64.00
and Slab	6.1 x 7.6 m	64.00	64.00	64.00
	7.6 x 9.1 m	64.00	68.00	72.00
Flat Slab	6.1 x 6.1 m	\$ 64.00	\$ 64.00	\$ -
1100 0100	6.1 x 9.1 m	71.00	81.50	•
	6.1 x 12.2 m	95.00	102.00	_
	7.6 x 7.6 m	65.50	72.00	-
	7.6 x 10.7 m	95.00	103.00	_
	7.6 x 13.7 m	130.00	156.00	_
	9.1 x 9.1 m	99.00	106.00	-
	9.1 x 12.2 m	130.00	137.00	_
	9.1 x 15.2 m	163.00	179.00	-
Waffle Slab	7.6 x 7.6 m	\$ -	\$ 70.00	\$ -
(1 m Modules)	7.6 x 10.7 m	-	93.00	
(1 11110000100)	7.6 x 13.7 m	_	108.00	-
	9.1 x 9.1 m	_	100.00	-
	9.1 x 12.2 m	_	119.00	-
	9.1 x 15.2 m	_	144.00	-
	10.7 x 10.7 m	_	120.00	-
	10.7 x 13.7 m	-	149.00	-
	10.7 x 16.8 m	_	185.00	-
	12.2 x 12.2 m	-	148.00	-
	12.2 x 15.2 m	-	182.00	-
	12.2 x 18.3 m	_	220.00	-
	15.2 x 15.2 m	-	230.00	-
Waffle Slab	7.6 x 7.6 m	\$ -	\$ 66.50	\$ -
(1.5 m Modules)	7.6 x 10.7 m	· -	86.50	· •
(,	7.6 x 13.7 m	-	103.00	-
	9.1 x 9.1 m	-	88.00	-
	9.1 x 12.2 m	-	108.00	-
	9.1 x 15.2 m	-	128.00	-
	10.7 x 10.7 m	-	110.00	-
	10.7 x 13.7 m	-	133.00	-
	10.7 x 16.8 m	-	157.00	-
	12.2 x 12.2 m	-	135.00	-
	12.2 x 15.2 m	-	162.00	-
	12.2 x 18.3 m	-	157.00	-
	15.2 x 15.2 m	-	211.00	-

### 5.003.350 PRECAST CONCRETE

### 5.003.355 ARCHITECTURAL WALL PANELS

Solid, non load bearing	m <sup>2</sup>
plain grey, smooth finish	\$ 174.00
plain grey, textured finish	181.00
plain grey, exposed aggregate	192.00
white, textured finish	182.00
white, exposed aggregates	205.00
Sandwich panels, non bearing	
plain grey, smooth finish	\$ 205.00
plain grey, textured finish	212.00
plain grey, exposed aggregate	225.00
white, textured finish	214.00
white, exposed aggregates	236.00
Solid, load bearing	
plain grey, smooth finish	\$ 205.00
white, textured finish	214.00
Sandwich panels, load bearing	
plain grey, smooth finish	\$ 221.00
white, textured finish	236.00

**Note:** For precast concrete panels with architecturally integrated window openings, multiply total wall area by appropriate panel cost and add for windows.(No allowance for wall area replaced by windows.)

### 5.003.360 FLAT WALL PANELS

		$m^2$
1 <del>00 mm brushed finish</del>		<del>\$ 105.00</del>
100 mm exposed aggregate finish		138.00
For 50 mm urethane insulation fire resistant	add	26.50
For 50 mm fibreplank insulation	add	28.00

### 5.003.365 SITECAST TILTUP WALL PANELS

		Brushed Finish m <sup>2</sup>	Exposed Aggregate Finish m <sup>2</sup>
1 <del>38 mm panel</del>		\$ 69.00	<del>\$ 76.00</del>
150 mm panel		72.00	79.00
175 mm panel		77.50	83.50
200 mm panel		83.50	89.00
For vertical ribs	add	37.50	37.50

### 5.003.400 PRECAST PRESTRESSED CONCRETE

### 5.003.405 HOLLOW CORE SLABS

	${\color{red}200~\text{mm} \atop \text{m}^2}$	$\begin{array}{c} 300 \ mm \\ m^2 \end{array}$
	\$ 64.50	\$ 76.00
		m
Note: Joint Filling	add	\$ 2.00
Concrete topping 25 mm	add	3.50
Machine trowelling	add	3.90

### **Maximum Specified Loads Based on Spans 200**

mm	n		mm
Span	Live load	Span	Live load
4.9 m	$7.2 \text{ kN/m}^2$	6.1 m	$7.2 \text{ kN/m}^2$
5.5 m	$6.2 \text{ kN/m}^2$	6.7 m	$6.7 \text{ kN/m}^2$
6.1 m	$5.8 \text{ kN/m}^2$	7.3 m	$6.2 \text{ kN/m}^2$
6.7 m	$5.3 \text{ kN/m}^2$	7.9 m	$5.8 \text{ kN/m}^2$
7.3 m	$4.8 \text{ kN/m}^2$	8.5 m	$5.3 \text{ kN/m}^2$
7.9 m	$3.8 \text{ kN/m}^2$	9.1 m	$4.8 \text{ kN/m}^2$
8.5 m	$3.4 \text{ kN/m}^2$	9.8 m	$4.3 \text{ kN/m}^2$
9.1 m	$2.4 \text{ kN/m}^2$	10.4 m	$3.4 \text{ kN/m}^2$
9.8 m	$1.9 \text{ kN/m}^2$	11.0 m	$2.9 \text{ kN/m}^2$
10.4 m	$1.4 \text{ kN/m}^2$	11.6 m	$2.4 \text{ kN/m}^2$
		12.2 m	$1.9 \text{ kN/m}^2$

### 5.003.410 SINGLE TEE SLABS

39.6 m

2.4 m top width for parkades, gymnasiums and auditorium roofs

### 1.5-2.4 2.4-3.6 3.6-4.8 $kN/m^2$ $kN/m^2$ kN/m<sup>2</sup> $m^2$ $m^2$ $m^2$ Spans 12.2 m \$ 119.00 \$ 119.00 \$ 131.00 15.2 m 119.00 131.00 144.00 147.00 18.3 m 127.00 144.00 21.3 m 144.00 150.00 147.00 154.00 24.4 m 27.4 m 150.00 150.00 147.00 30.5 m 154.00 33.6 m 150.00 36.6 m 154.00

154.00

**Live Loads** 

### 5.003.415 DOUBLE TEE SLABS

2.4 m top width for moderate floor & roof spans

### Live Loads

Spans	1.5-2.4 kN/m <sup>2</sup> m <sup>2</sup>	2.4-3.6 kN/m <sup>2</sup> m <sup>2</sup>	3.6-4.8 kN/m <sup>2</sup> m <sup>2</sup>	4.8-6.0 kN/m <sup>2</sup> m <sup>2</sup>
9.1 m	\$ 90.50	\$ 90.50	\$ 93.00	\$ 93.00
12.2 m	93.00	95.50	95.50	99.00
15.2 m	95.50	99.00	103.00	-
18.3 m	99.00	103.00	-	-
21.3 m	103.00	-	-	-
22.9 m	103.00	_	-	_

### 5.003.420 PRECAST PURLIN JOISTS

Spacing	510 mm deep 7.6-12.2 m spans m <sup>2</sup>	710 mm deep 15.2-18.3 m spans m <sup>2</sup>
2.4 m o.c.	\$ 28.50	\$ 43.00
2.1 m o.c.	32.00	48.50
1.8 m o.c.	38.00	57.00
1.5 m o.c.	45.50	68.50
1.2 m o.c.	57.00	85.00

### 5.003.450 CONCRETE STAIRS

### 5.003.454 SHAFTS & STAIRWELLS

Concrete	Block	Elevator	Shafts
----------	-------	----------	--------

in all disconnected finish	D D:
including spray plaster finish	Per m Rise
Single	\$ 670.00
Double	1 170.00
Triple	1 670.00
Quadruple	1 985.00
<b>Concrete Elevator Shafts</b>	
including spray plaster finish	Per m Rise
Single	\$ 1 000.00
Double	1 650.00
Triple	2 300.00
Quadruple	2 680.00
Mechanical Shafts	
including spray plaster finish	Per m Rise
Concrete Block	\$ 340.00
Conquete	460.00

Wicciamen Shares				
including	sprav	plaster	finish	

merading spray praster rimsir	I CI III IUGC
Concrete Block	\$ 340.00
Concrete	460.00

Stairwells	Per m Rise
Concrete Block and paint	\$ 885.00
Concrete Block and spray plaster	870.00

\$ 1 100.00 Concrete and paint 1 080.00 Concrete and spray plaster

### 5.003.455 CONCRETE STAIRS including landing and pipe railing

	Unfinished	Painted	Quarry Tile
Width	Per m Rise	Per m Rise	Per m Rise
0.9 m width	\$ 460.00	\$ 480.00	\$ 750.00
1.1 m width	520.00	545.00	840.00
1.2 m width	575.00	605.00	935.00
1.4 m width	635.00	665.00	1 030.00
1.5 m width	690.00	725.00	1 120.00
1.8 m width	805.00	845.00	1 310.00

### 5.003.500 SPECIALLY FINISHED CONCRETE

### 5.003.505 BUSHHAMMERED CONCRETE chipped off, walls

	m²
Light finish	\$ 26.50
Medium finish	36.50
Heavy finish	45.50

### 5.003.510 BLASTED CONCRETE walls

	$\mathbf{m}^2$
Light finish	\$ 7.80
Medium finish	9.70
Heavy finish	16.50

### 5.003.515 CONCRETE FLOOR FINISHES

	Standard Finished	m²
	Screeding	\$ 1.10
	Machine trowel	2.30
	Special Finishes	
	Machine grinding	\$ 12.50
	Broom finish	1.10
	Acid etching	1.70
	Stair treads	17.50
5.003.520 CC	ONCRETE FLOOR HARDENERS	
	Standard Hardener — non metallic	m²
	2 kg/m <sup>2</sup> 3 kg/m <sup>2</sup>	\$ 0.90 1.10
	Colored Hardener — standard colors	
	$2 \text{ kg/m}^2$	\$ 4.00
	$3 \text{ kg/m}^2$	4.70
5.003.525	CONCRETE COATINGS	
		$\mathbf{m}^2$
	Traffic Topping — grey polyurethane membrane	\$ 29.50
	Traffic Topping — black epoxy neoprene membrane	28.00

5.004.065

5.004.070

### 5.004.000 MASONRY

### 5.004.050 BRICKWORK

### 5.004.055 BRICK VENEER 90 mm

DRICK VENEER 90 IIIIII		$m^2$
Common Red Face	\$	84.50
Plain Red Face		95.00
Average Face (e.g. Rugtex)		102.00
Good Face (Pressed)		109.00
Excellent Face (Sculptured)		121.00
Luxurious Face (Glazed)		141.00
Note: Slop Joint	deduct	12%
Used Brick equate to Good Face Brick		
BACK-UP BRICK common		
		$m^2$
90 mm Single Wythe	\$	80.00
90 mm Double Wythe		139.00
STRUCTURAL BRICK Giant		
		$m^2$
100 x 100 x 400 mm Yellow/Red/Brown	\$	94.50
100 x 150 x 400 mm Yellow/Red/Brown		118.00
100 x 200 x 400 mm Yellow/Red/Brown		141.00

### 5.004.100 CONCRETE BLOCKWORK

## **5.004.105** LIGHT WEIGHT stretcher, running, or stackbond, plain face

LIGH	<b>WEIGHT</b> stretcher, running, or stackbond, p	olain face	
			$\mathbf{m}^2$
90 1 140 1 190 1 240 1 290 1	mm mm mm		\$ 52.00 55.00 61.00 69.00 75.00
Note:	Scored Blocks Shadow Block Ribbed Blocks Screen Blocks Exposed Aggregate Blocks	add add add add add	\$ 8.70 19.00 20.50 24.00 8.70
	Colored Block	add	5 %
Back-uj	p Block		m²
90 1 140 1 190 1 240 1 290 1	mm mm mm		\$ 47.00 49.50 55.00 62.00 67.50

### 5.004.110 ARCHITECTURAL BLOCK

Glazed Block single face, stretcher or running bond		m <sup>2</sup>
90 mm		\$ 113.00
140 mm		122.00
190 mm		135.00
240 mm		150.00
290 mm		166.00
Note: Double face	add	45%
Stack bond	add	5%

### 5.004.115 STRUCTURAL BLOCK

Bondbeam or Lintel	m
190 x 190 mm Wall	\$ 24.50
190 x 240 mm Wall	27.50
190 x 290 mm Wall	30.50
390 x 190 mm Wall	40.00
390 x 240 mm Wall	48.50
390 x 290 mm Wall	56.00
Pilasters	m
190 x 190 x 390 mm	\$ 50.00
240 x 190 x 390 mm	55.50
290 x 190 x 390 mm	64.00
390 x 190 x 390 mm	86.50

**Interlocking Panel Block** exterior and interior metal pan facing, reinforced concrete/ rigid insulation sandwich core. Pan size 190 x 380 mm, running bond.

	$\mathbf{m}^2$
Painted Pan Face 240 mm thick	\$ 89.50
Galvanized Pan Face 240 mm thick	93.50

### 5.004.120 DU-AL BLOCK

	$\mathbf{m}^2$
2 <del>00 mm</del>	<del>\$ 77.00</del>
250 mm	80.50
300 mm	86.50

### **5.004.125 GLASS BLOCK**

	m²
150 x 150 mm	\$ 568.00
130 X 130 IIIII	φ 300.00
200 x 200 mm	323.00
300 x 300 mm	142.00

5.004.150	STONE		
5.004.155	IMITATION		
	Cultured		\$ 124.00
5.004.160	FIELD STONE		
			$\mathbf{m}^2$
	Unsplit		\$ 200.00
	Split		250.00
5.004.165	RUNDLE SHALE		
	Dry Stack, random shaped		\$ 215.00
5.004.170	TYNDALL STONE		
			$\mathbf{m}^2$
	Rough Face		\$ 178.00
	Sawn Face		285.00
5.004.175	SLATE		
3.004.173	SEATE		2
	TIL: 65		m <sup>2</sup>
	Thin 6.5 mm Thick 22 mm		\$ 131.00 216.00
5.004.180	TRAVERTINE		
5.004.100	IRAVERIINE		
	Veined		\$ 334.00
5.004.185	MARBLE		
		Over 2 m <sup>2</sup> m <sup>2</sup>	Under 2 m <sup>2</sup> m <sup>2</sup>
	Good white, beige, pink	\$ 384.00	\$ 617.00
	Expensive black Luxurious imported black	453.00 657.00	658.00 794.00
	_	037.00	794.00
5.004.190	GRANITE black or red		1
		Over 2 m <sup>2</sup> m <sup>2</sup>	Under 2 m <sup>2</sup> m <sup>2</sup>
	Set in mortar	\$ 655.00	\$ 821.00
			$\mathbf{m}^2$
	Panels, with steel pins and brackets		\$ 215.00
	Sandwich panels, with insulation and concrete		440.00

### **5.004.195 STONE VENEER** 6 - 25 mm

	$\mathbf{m}^2$
Quartzite, thin	\$ 115.00
Quartzite, thick	120.00
Silver Mica	118.00
Rundle Shale	132.00
Split Marble	233.00

### **5.004.200 SANDSTONE**

Ashlar Coursing 5.004.205 LIMESTONE	m <sup>2</sup> \$ 227.00
	m <sup>2</sup>
Ashlar Coursing	\$ 213.00
Single Coursing	307.00

### 5.004.250 MASONRY ACCESSORIES

## 5.004.255 JOINT REINFORCEMENT ladder or truss design

	Every	Every	Every
	Course	2nd	3rd
	200 mm	Course	Course
	_	400 mm	600 mm
Standard	$m^2$	$\mathbf{m}^2$	$m^2$
	(Heavy)	(Medium)	(Light)
90 mm wall	\$ 4.90	\$ 2.40	\$ 1.80
140 mm wall	4.90	2.60	1.60
190 mm wall	5.30	2.60	1.80
240 mm wall	5.40	2.70	1.80
290 mm wall	5.20	2.80	1.90
Heavy Duty 5 mm galvanized			
90 mm wall	\$ 6.60	\$ 3.40	\$ 2.10
140 mm wall	6.70	3.40	2.30
190 mm wall	7.00	3.50	2.30
240 mm wall	7.10	3.50	2.30
290 mm wall	7.30	3.60	2.40

Note: for Stack Bond minimum is every 2nd course

# 5.005.000 METALS5.005.050 STRUCTURAL METAL FRAMING5.005.055 STRUCTURAL STEEL

	Tonne	kg
Beams	\$ 1 320.00	\$ 1.30
Columns		
Wide flange	1 980.00	2.00
Tubular	2 200.00	2.20
Spandrels	2 125.00	2.10
Trusses	2 310.00	2.30
Open Web Joists	1 880.00	1.90

### 5.005.100 STEEL PIPE COLUMNS/POSTS

### **5.005.105 PIPE COLUMNS**

Diameter	m
50 mm	\$ 12.00
63 mm	19.50
75 mm	25.50
88 mm	30.50
100 mm	36.00
125 mm	49.00
150 mm	63.50

### **5.005.150 METAL JOISTS**

### 5.005.155 OPEN WEB STEEL JOISTS

### **Roof Loads**

Span	1.9 kPa/m² m²	2.4 kPa/m <sup>2</sup> m <sup>2</sup>	2.9 kPa/m <sup>2</sup> m <sup>2</sup>	3.4 kPa/m <sup>2</sup> m <sup>2</sup>
3.7 m	\$ 6.80	\$ 6.80	\$ 7.00	\$ 7.20
4.6 m	7.70	8.10	8.80	9.30
5.2 m	8.80	9.30	10.00	11.00
6.1 m	9.80	10.50	11.50	12.00
7.6 m	11.00	12.00	13.00	14.00
9.1 m	13.00	14.00	14.50	15.50
10.7 m	14.00	15.00	15.50	17.00
12.2 m	16.50	17.50	18.50	20.00
13.7 m	18.50	20.00	21.50	23.00
15.2 m	21.00	22.50	24.00	26.00
18.3 m	25.50	27.50	29.50	32.00
21.3 m	30.50	32.50	35.00	38.00
24.4 m	35.00	37.50	40.00	44.00
27.4 m	39.50	42.50	46.00	50.00
30.5 m	44.50	51.50	51.50	56.00
33.5 m	49.00	53.00	56.50	62.00
36.6 m	54.00	58.00	62.00	68.00

### 5.005.155 OPEN WEB STEEL JOISTS - CONT'D

### Floor Loads

Span	5.8 kPa/m <sup>2</sup>	6.2 kPa/m <sup>2</sup>	6.7 kPa/m <sup>2</sup>	7.2 kPa/m <sup>2</sup>
	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>
3.7 m	<b>\$ 7.90</b>	\$ 8.10	\$ 8.20	\$ 8.40
4.6 m	11.50	13.00	14.50	16.00
5.2 m	12.50	14.00	15.50	17.00
6.1 m	15.50	16.50	17.50	19.00
7.6 m	19.00	19.00	20.00	21.00
9.1 m	20.00	21.00	22.00	23.50
10.7 m	22.50	24.50	26.00	28.00
12.2 m	28.00	30.00	32.00	34.00

### 5.005.200 METAL DECKING

### 5.005.205 ROOF DECKS non-cellular

	Depth	
Thickness	38 mm m <sup>2</sup>	76 mm m <sup>2</sup>
0.9 mm	\$ 12.00	\$ 19.00
1.0 mm	13.00	20.00
1,2 mm	14.50	22.00
1.6 mm	16.00	23.50

### 5.005.210 FLOOR DECKS non-cellular

	Dep	Depth	
	38 mm	76 mm	
Thickness		m <sup>2</sup>	
0.9 mm	\$ 15.50	\$ 23.50	
1.0 mm	16.50	24.50	
1.2 mm	18.50	26.50	
1.6 mm	20.50	27.50	

### Flat V-Rib Pan galvanized

Thickness	$\mathbf{m}^2$
0.5 mm	\$ 6.60
0.6 mm	7.50
0.8 mm	8.80

### 5.005.250 LIGHT GAUGE METAL FRAMING

### **5.005.255 STEEL STUDDING** 25 gauge 400 mm o.c.

	$\mathbf{m}^2$
41 mm	\$ 7.80
64 mm	8.90
92 mm	9.90
152 mm	17.50

### 5.005.300 METAL FABRICATIONS

### **5.005.305 METAL STAIRS**

<b>Steel Grate Treads</b> with 1.2 x	1.2 m landing and pipe railing	Per m Rise
0.9 m wide		\$ 1 140.00
1.1 m wide		1 290.00
1.2 m wide		1 430.00
1.4 m wide		1 575.00
1.5 m wide		1 715.00
1.8 m wide		2 000.00
Landings	add or deduct per m <sup>2</sup>	435.00
Pan Treads with finished concrete, 1.2 x	1.2 m landing and railing	Per m Rise
	1.2 III landing and lannig	
0.9 m wide 1.1 m wide		\$ 1 255.00 1 415.00
1.1 m wide 1.2 m wide		1 415.00
1.4 m wide		1 725.00
1.4 m wide 1.5 m wide		
1.5 m wide 1.8 m wide		1 885.00
	add or deduct per m <sup>2</sup>	2 200.00 791.00
Landings	and of deduct per in	791.00
Pan Treads with Precast Terrazz with 1.2 x 1.2 m landing and a		Per m Rise
0.9 m wide		\$ 1 545.00
1.1 m wide		1 740.00
1.2 m wide		1 935.00
1.4 m wide		2 130.00
1.5 m wide		2 320.00
1.8 m wide		2 710.00
Landings	add or deduct per m <sup>2</sup>	842.00
Pan Tread Closed Risers		
0.9 m wide	add per tread	\$ 104
1.0 m wide	add per tread	116
1.2 m wide	add per tread	150
1.4 m wide	add per tread	184
1.5 m wide	add per tread	201
1.8 m wide	add per tread	247
CIRCULAR STEEL STAIRS		

\$ 51.50

### 5.005.310 LADDERS

Open Steel Ladder	m
400 mm wide	\$ 90.50
With safety loops	272.00
5.005.315 HANDRAILS AND RAILINGS	
Handrails on Wall Brackets	m
Steel pipe rails, 50 mm	\$ 31.50
Plastic covered steel, 50 mm	40.00
Steel Pipe Railing	
50 mm, 900 mm high	\$ 98.00
13 mm tube pickets, 900 mm high	135.00
Wrought Iron Railing	

### 5.005.320 METAL GRATINGS

50 mm flat railings

Walkway Gratings welded	m²
0.9 m span	\$ 78.00
1.2 m span	91.50
1.8 m span	141.00
3.1 m span	228.00
Walkway Grating expanded metal	
Overall Thickness (Nominal)	m²
12.7 mm	\$ 31.00
15.9 mm	40.50
19.0 mm	51.00
25.4 mm	61.00
31.8 mm	72.00
Standard Trench Grating frame and grate	m²
150 mm wide	\$ 67.00
300 mm wide	85.50
450 mm wide	106.00
<b>Ductalloy Trench Grating</b>	m²
Medium duty 150 mm wide	\$ 267.00
Medium duty 300 mm wide	479.00
Heavy duty 300 mm wide	563.00
Extra heavy 450 mm wide	993.00

### 5.005.325 STEEL FLOOR PLATE anti-skid surface

Thickness	
(Nominal)	$\mathbf{m}^2$
6.4 mm	\$ 102.00
9.5 mm	144.00
12.7 mm	189.00

**5.005.340 STEEL FLOOR SYSTEMS**Includes steel framing, bracing and painted steel floor surface; nil insulation.

		Checker Plate	Grated
Small size 0 - 19 m <sup>2</sup>	$m^2$	\$ 135	\$ 113
Medium size 20 - 49 m <sup>2</sup>	$m^2$	192	163
Large size 50 m <sup>2</sup> & over	$\mathbf{m}^2$	269	229

### 5.006.000 WOOD & PLASTICS

### 5.006.050 STRUCTURAL FRAMING

### 5.006.055 POSTS AND BEAMS solid fir

	m
89 x 89 mm	\$ 5.10 11.50
140 x 140 mm	15.50
140 x 191 mm	19.50
140 x 241 mm	20.50
191 x 191 mm	25.50
191 x 241 mm	32.00
241 x 241 mm	39.00
241 x 292 mm	47.50
292 x 292 mm	

### 5.006.065 FLOOR JOISTS including bridging

Correspon	300 mm o.c. m <sup>2</sup>	400 mm o.c. m <sup>2</sup>	600 mm o.c
Spruce			m <sup>2-</sup>
38 x 89 mm	\$ <b>7.80</b>	\$ 6.20	\$ 4.80
38 x 140 mm	11.50	9.20	6.20
38 x 184 mm	16.50	12.50	8.70
38 x 235 mm	20.00	15.50	10.50
38 x 286 mm	25.00	19.00	13.00
38 x 337 mm	29.50	22.00	15.00
Fir			
38 x 89 mm	\$ 8.70 13.00	\$ 7.90	\$ 5.40
38 x 140 mm	18.00 23.50	10.50	7.00
38 x 184 mm	28.50 34.50	13.50	9.20
38 x 235 mm		18.50	12.50
38 x 286 mm		21.50	14.50
38 x 337 mm		25.50	17.50

### **5.006.075 WOOD STUDDING**

Spruce	300	mm o.c. m <sup>2</sup>	400 mm o.c. m <sup>2</sup>	600 mm o.c. m <sup>2</sup>	
38 x 38 mm	\$	3.90	\$ 3.30	\$ 2.50	
38 x 64 mm		6.90	5.40	4.10	
38 x 89 mm		11.50	9.40	7.60	
38 x 140 mm		18.00	15.00	11.50	
38 x 184 mm		24.00	20.50	16.50	
38 x 89 mm @ 400 mm double wa	ıll			19.00	
38 x 89 mm @ 400 mm staggered	wall			18.50	
38 x 140 mm @ 400 mm staggered				29.50	
Fir					
38 x 38 mm	\$	4.50	\$ 3.60	\$ 2.70	
38 x 64 mm	·	7.60	6.20	4.60	
38 x 89 mm		13.00	10.50	8.70	
38 x 140 mm		20.50	17.00	13.50	
38 x 184 mm		27.50	24.00	19.00	
38 x 89 mm @ 400 mm double wa	ıll			21.00	
38 x 89 mm @ 400 mm staggered	wall			20.50	
38 x 140 mm @ 400 mm staggered				33.00	

Note: Roof joists or ceiling joists of flat roof construction must be treated as floor joists.

### 5.006.080 RAFTERS AND TRUSSES

Truss Rafters	m²
3.7 - 5.8 m	\$ 9.60
6.1 - 7.3 m	14.00
7.6 - 8.5 m	15.50
8.5 - 9.1 m	16.00
9.4 - 11.0 m	17.50
11.3 - 12.2 m	20.50
12.5 - 13.4 m	24.50
13.7 - 14.6 m	26.50
14.9 - 15.8 m	28.50
16.1 - 17.1 m	30.00
17.4 - 18.3 m	31.50

**Note:** Costs of trusses include gable ends, eave overhang, ladder trusses, etc. All truss rates are at "0" pitch. To calculate final in-place truss costs, select truss rate at applicable span (building width) and multiply by the appropriate pitch factor. The result will provide actual truss cost per m of main floor area.

Roof Pi	tch	Multiplica	tion Factors
3/12		1.03	
4/12		1.05	Roof pitch equals the number
5/12	(30 degrees)	1.08	of millimetres of rise in 12
6/12		1.12	millimetres of horizontal
7/12		1.16	run.
8/12		1.20	
9/12		1.25	To find the number of square
10/12		1.30	metres of roof surface, any
11/12	(45 degrees)	1.36	pitch, take the entire flat
12/12	(43 degrees)	1.41	or horizontal area of the
13/12		1.47	roof (including overhang)
14/12		1.54	and multiply by the
15/12		1.60	Multiplication Factor.

### 5.006.150 PREFABRICATED STRUCTURAL WOOD

### 5.006.155 ARCHRIBS Shed Style

**Type S2** - designed for 600 mm centres

**Type S4** - designed for 1 200 mm centres

Type S8 - designed for 2 400 mm centres

### Rate per Span

Width of Bldg		<b>S2</b>		<b>S4</b>		<b>S8</b>
7.3 m	EA	\$ 55	EA	\$ 76	EA	\$ -
8.5 m	EA	61	EA	81	EA	-
9.8 m	EA	73	EA	96	EA	260
11.0 m	EA	79	$\mathbf{E}\mathbf{A}$	120	EA	280
12.2 m	EA	93	EA	140	EA	350
14.0 m	EA	130	$\mathbf{E}\mathbf{A}$	180	$\mathbf{E}\mathbf{A}$	-
15.3 m	EA	150	EA	200	EA	500
18.39 m	EA	230	EA	-	EA	-
19.5 m	EA	-	EA	570	EA	840
21.3 m	EA	-	EA	700	EA	940

**Note:** All S2 and S4 archribs are 38 mm wide except widths 19.5 m and 21.3 m are 76 mm wide. All S8 archribs are 76 mm wide. Facia rafters are 1/2 the rate of the equivalent width archrib.

### **Archrib End Wall Area Table**

Span	Height	Arch Length	Area Per End
7.3 m	4.47 m	12.60 m	24.7 m <sup>2</sup>
8.5 m	4.65 m	13.86 m	$30.8 \text{ m}^2$
9.8 m	4.82 m	15.14 m	$36.6 \text{ m}^2$
11.0 m	5.00 m	16.42 m	$42.7 \text{ m}^2$
12.2 m	5.18 m	17.68 m	$49.1 \text{ m}^2$
14.0 m	5.46 m	19.56 m	$58.9 \text{ m}^2$
15.3 m	5.64 m	20.84 m	$65.8 \text{ m}^2$
18.39 m	7.47 m	25.76 m	$101.1 \text{ m}^2$
19.5 m	7.67 m	27.02 m	$110.6 \text{ m}^2$
21.3 m	7.98 m	28.96 m	$124.9 \text{ m}^2$

### 5.006.160 LAMINATED BEAMS nailed

		Spruce	Fir
-		m	<u> </u>
	114 x 235 mm	\$ 16.50	\$ 19.00
	152 x 235 mm	22.00	25.50
	152 x 286 mm	27.00	32.00
	190 x 286 mm	34.00	40.00
	190 x 337 mm	39.50	46.50

### 5.006.165 GLUED LAMINATED BEAMS

38 mm nominal laminate thicknesses are associated with straight, pitched or tapered beams.

19 mm nominal laminate thicknesses are associated with curved beams or shaped arches.

	Straight Members m <sup>3</sup>	Curved Members m <sup>3</sup>	Shaped Members m <sup>3</sup>
Industrial Grade	\$ 689.00	\$ -	\$ -
Paint Grade	707.00	744.00	-
Quality Grade	713.00	756.00	842.00

Note: Hardware add 10 to 15% to final cost.

A glued laminated beam must be classified and an estimate of cost per lineal metre determined from the above information and the following formula:

Determine actual volume of beam in m<sup>3</sup> per lineal metre.

$$m^3 = \underbrace{actual\ width\ (mm)\ x\ depth\ (mm)\ x\ 1\ m\ (length)}_{1\ 000\ 000}$$

Cost per lineal metre of beam is:

Volume (m' per m) x Rate (\$ per m<sup>3</sup>) Cost (\$ per m)

Glued Laminated Beams common sizes, industrial grade	<u>m</u>
152 x 254 mm	\$ 38.00
203 x 254 mm	\$ 51.00
203 x 305 mm	\$ 59.00
254 x 305 mm	\$ 74.50
254 x 365 mm	\$ 85.00

### 5.006.165 GLUED LAMINATED BEAMS - CONT'D

### Glued Laminated Beams 41 mm Nominal Stock

Based on 2.4 kN/m<sup>2</sup> Total Load

Size			Ra	ate Per Metr	
of Beam	Span	Spacing	Industrial	Paint	Quality
76 x 305 mm	4.9- 5.5 m	2.4 m	\$ 31.50	\$ 32.50	\$ 32.50
76 x 343 mm	4.9- 6.1 m	3.7-2.4 m	35.00	36.00	36.50
76 x 381 mm	4.9- 5.5 m	4.9-3.7 m	38.50	40.00	40.50
76 x 419 mm	6.1- 7.3 m	3.7-2.4 m	43.00	44.50	44.50
127 x 343 mm	5.0 m	4.9 m	52.50	54.00	54.50
127 x 381 mm	5.5- 6.1 m	6.1-4.9 m	58.50	60.00	61.00
127 x 419 mm 127 x 457 mm	6.1- 8.5 m 7.3- 9.8 m	6.1-2.4 m 4.9-2.4 m	64.00 70.00	66.00 72.00	67.00 73.00
127 x 497 mm	7.3- 9.8 III 7.3 m	4.9-2.4 III 6.1 m	76.00 76.00	72.00 78.00	79.00 79.00
127 x 493 mm 127 x 533 mm	7.3 m 8.5- 9.8 m	4.9-3.7 m	76.00 81.50	78.00 84.00	85.00
127 x 533 IIIII	8.5-11.0 m	6.1-3.7 m	93.50	96.50	97.00
127 x 686 mm	9.8-12.2 m	6.1-3.7 m	105.00	108.00	109.00
171 x 648 mm	13.4 m	3.7 m	132.00	136.00	138.00
171 x 686 mm	11.0-12.2 m	6.1-4.9 m	140.00	144.00	146.00
171 x 724 mm	11.0-14.6 m	7.3-3.7 m	148.00	153.00	154.00
171 x 762 mm	12.2-13.4 m	6.1-4.9 m	155.00	160.00	162.00
171 x 800 mm	14.6-15.8 m	4.9 m	163.00	168.00	170.00
171 x 838 mm	12.2-17.1 m	7.3-3.7 m	171.00	177.00	178.00
171 x 876 mm	15.8 m	4.9 m	179.00	184.00	186.00
171 x 914 mm	13.4-18.3 m	7.3-3.7 m	187.00	193.00	194.00
171 x 953 mm	17.1 m	4.9 m	195.00	201.00	203.00
171 x 991 mm	14.6-19.5 m	7.3-3.7 m	202.00	208.00	210.00
171 x 1029 mm	20.7 m	3.7 m	210.00	217.00	219.00
222 x 914 mm	18.3 m	4.9 m	233.00	241.00	243.00
222 x 953 mm	15.8-17.1 m	7.3-6.1 m	243.00	251.00	253.00
222 x 991 mm	19.5-21.9 m	4.9-3.7 m	253.00	261.00	264.00
222 x 1029 mm	17.1-20.7 m	7.3-4.9 m	263.00	271.00	274.00
222 x 1067 mm	21.9-23.2 m	6.1-3.7 m	272.00	281.00	283.00
222 x 1105 mm	18.3-24.4 m	7.3-3.7 m	282.00	291.00	294.00
222 x 1143 mm	20.7-23.2 m	6.1-4.9 m	292.00	301.00	304.00
222 x 1181 mm 222 x 1219 mm	21.9-26.8 m 21.9-24.4 m	7.3-3.7 m 6.1-4.9 m	301.00 312.00	311.00 321.00	314.00 324.00
222 x 1219 IIIII 222 x 1257 mm	20.7 m	7.3 m	321.00	331.00	334.00
222 x 1237 IIIII 222 x 1295 mm	20.7 m 23.2-28 m	6.1-3.7 m	329.00	341.00	344.00
222 x 1233 mm	21.9-29.3 m	7.3-3.7 m	341.00	351.00	355.00
273 x 1219 mm	24.4 m	6.1 m	430.00	443.00	447.00
273 x 1217 mm	23.2 m	7.3 m	443.00	457.00	461.00
273 x 1295 mm	25.6-30.5 m	6.1-3.7 m	457.00	471.00	475.00
273 x 1372 mm	29.3 m	4.9 m	483.00	498.00	503.00
273 x 1410 mm	25.6-30.5 m	7.3-4.9 m	497.00	512.00	517.00
273 x 1486 mm	26.8-29.3 m	7.3-6.1 m	524.00	540.00	545.00
273 x 1562 mm	28-30.5 m	7.3-6.1 m	550.00	567.00	573.00
273 x 1638 mm	29.3 m	7.3 m	577.00	595.00	601.00

Note: Relate **Span** range to **Spacing** range as follows:

- e.g. 76 x 343 mm glue laminated beam:
- 4.9 m Span relates to 3.7 m Spacing,
- 6.1 m Span relates to 2.4 m Spacing

Glued Laminated Columns - Determine costs in accordance with procedure used for glue laminated beams

Note: Usual Appearance Grade Specifications

Quality - Churches, Houses, Offices

Paint - Schools, Stores, Halls

**Industrial - Warehouses and Factories** 

### 5.006.200 SUBFLOORS, SHEATHING & DECKING

### **5.006.204 SUBFLOORS**

Laid Square	Spruce m <sup>2</sup>	Fir m <sup>2</sup>
19 x 89 mm	\$ 9.80	\$ 11.00
19 x 140 mm	10.50	12.50
19 x 184 mm	10.50	13.00
19 x 89 mm T&G	12.00	-
19 x 140 mm T&G	12.00	-
Laid Diagonal		
19 x 89 mm	\$ 12.50	<b>\$ 14.00</b>
19 x 140 mm	13.00	15.50
19 x 184 mm	13.00	16.50
19 x 89 mm T&G	15.00	-
19 x 140 mm T&G	15.00	-

### 5.006.205 FLOORS AND ROOFS

Aspenite floors or flat roofs	<u>m²</u>
7.5 mm	\$ 5.30
9.5 mm	5.50
12.5 mm	6.00

Plywood Sheathing floors or flat roofs	Standard Spruce m²	Standard Fir m <sup>2</sup>
7.5 mm	\$ 6.00	\$ 6.40
9.5 mm	6.70	6.80
12.5 mm	8.10	8.40
15.5 mm	9.40	9.90
18.5 mm	10.50	11.00
Plywood Sheathing floors or flat roofs	Select Spruce	Select Fir

	m <sup>2</sup>	m <sup>2</sup>
5 mm	\$ 6.60	\$ 7.70
6 mm	7.20	8.30
8 mm	7.80	9.00
11 mm	9.20	10.50
14 mm	10.50	12.00
17 mm	12.00	13.00

### 5.006.205 FLOORS AND ROOFS - CONT'D

Plywood fir tongue and groove			m <sup>2</sup>
15.5 mm			\$ 10.50
18.5 mm			14.00
Particle Board			m
9.5 mm			\$ 4.90
12.5 mm			6.00
15.5 mm			6.70
Floor or Roof Decking	Spruce m <sup>2</sup>	Fir m <sup>2</sup>	Cedai m²
Plain			
38 x 89 mm	\$ 16.50	\$ 19.00	\$ 28.00
38 x 140 mm	17.00	20.00	28.50
38 x 184 mm	17.50	20.50	
38 x 235 mm	19.00	22.50	_
38 x 286 mm	19.50	24.00	-
Tongue & Groove			
38 x 140 mm	\$ 25.00	\$ 29.00	\$ 35.00
38 x 184 mm	26.00	30.00	36.50
64 x 140 mm	36.50	44.00	51.50
89 x 140 mm	49.00	58.50	69.00

### 5.006.210 WALLS AND SHEATHING

Plywood Sheathing	Standard Spruce			Standard Fir	
		$m^2$		$m^2$	
7.5 mm 9.5 mm 12.5 mm 15.5 mm	\$	6.70 7.50 8.80 9.90 11.00	\$	7.30 7.70 9.20 10.50 11.50	
		Select Spruce m <sup>2</sup>		Select Fir m <sup>2</sup>	
5 mm 8 mm 11 mm 14 mm 17 mm	\$	7.40 8.60 9.90 11.50 12.50	\$	8.50 9.80 11.00 12.50 13.50	
Wood Fibre Sheathing					
11 mm Asphalt Impregnated				\$ 6.20	

### 5.006.250 ARCHITECTURAL WOODWORK

### **5.006.255 WOOD STAIRS**

Basement Stairs			$\mathbf{W}_{1}$	idth		
		0.9 m	1.2 m		1.5 m	1.8 m
Straight painted (per metre rise)	\$	90.00	\$ 110.00		\$ 133.00	\$ 152.00
Straight unpainted (per metre rise)		68.50	82.00		97.50	110.00
U or L Stairs including landing						
Unfinished (per metre rise)	_		\$ 138.00		\$ 172.00	\$ 192.00
Painted (per metre rise)	-		167.00		207.00	235.00
Stair Finish					Width	
Tile or Sheet Vinyl			1.2 m		1.5 m	1.8 m
Low Grade (per metre rise)			\$ 51.00	\$	64.00 \$	76.50
Fair (per metre rise)			62.50		78.00	93.50
Average (per metre rise)			96.50		121.00	145.00
Good (per metre rise)			164.00		205.00	246.00
Carpeting						
Fair (per metre rise)			\$ 81.50		\$ 102.00	\$ 122.00
Average m(per metre rise)			109.00		137.00	164.00
Good (per metre rise)			143.00		179.00	214.00
Note: For wrap around stairs					add	5%
For angle or pie shape stain	rs				add	10%
For upholstered stairs 1 e					add	40%
2 (	ends				add	100%

### 5.006.260 WOOD FIRE ESCAPES

		]	Per m rise
1.2 m unpainted stairs, posts, railings		\$	93.00
1.2 m as above painted			142.00
1.5 m unpainted stairs, posts, railings			104.00
1.5 m as above painted			162.00
			m²
Landings unpainted	add	\$	36.00
painted	add		43.50

### 5.007.000 THERMAL & MOISTURE PROTECTION

### 5.007.050 WATERPROOFING AND DAMPPROOFING

### 5.007.055 VAPOUR BARRIER

	$\mathbf{m}^2$
Building paper 1 ply	\$ 1.10
2 ply	1.40
Roof felt 1 ply and flood coat	1.80
2 ply and flood coat	3.60
Vapour barrier on grade 2 mil	0.40
4 mil	0.60
6 mil	0.70
Vapour barrier on frame 2 mil	1.10
4 mil	1.30
6 mil	1.40
Thermal barrier - unfinished gypsum board	2.70

### 5.007.060 FLUID APPLIED WATERPROOFING rubberized asphalt sheet reinforced

On horizontal surfaces	\$ 9.30
On vertical surfaces	15.00

### 5.007.065 DAMPPROOFING asphalt

1 coat	\$ 2.20
2 coats	4.20
3 coats	7.70

### 5.007.075 WATER REPELLENT COATING silicone base on concrete and masonry walls

1 coat	\$ 3.80
2 coats	5.60
3 coats	7.70

### 5.007.100 WALL INSULATION

### 5.007.105 LOOSE FILL

Concrete block	$m^2$
90 mm	\$ 1.50
140 mm	4.70
190 mm	7.10
240 mm	8.30
290 mm	11.50

### 5.007.110 FIBREGLASS BATT

	m_
1.2 RSI 65 mm	\$ 2.90 3.30
I 4 RSI 70 mm	3.60
1.7 RSI 89 mm	4.20
2.1 RSI 110 mm	6.00
3.5 RSI 152 mm	7.60
4.9 RSI 216 mm	8.40
5.6 RSI 250 mm	9.20
6.2 RSI 300 mm	11.50
7.0 RSI 350 mm	

### 5.007.115 RIGID BOARD polystyrene

	Whiteboard m <sup>2</sup>	Blueboard m <sup>2</sup>
25 mm	\$ 11.00	\$ 20.00
38 mm	12.00	21.50
50 mm	13.00	23.00
75 mm	16.00	-
100 mm	19.50	-

### 5.007.150 ROOF AND DECK INSULATION

### 5.007.155 WOOD FIBREBOARD

	m <sup>2</sup>
Asphalt impregnated	
13 mm board	3.20
25 mm	5.40

### 5.007.160 MINERAL FIBREBOARD perlite panels

	III
25 mm	\$ 4.30
38 mm	6.50
50 mm	8.00

### **5.007.165** GLASS FIBREBOARD asphalt impregnated panels

	m
25 mm	\$ 6.50
38 mm	8.50
50 mm	11.50 12.50
63 mm	14.50 19.00
75 mm	
100 mm	

## 5.007.170 RIGID BOARD polystyrene

	Whiteboard	Blueboard
	$\mathbf{m}^2$	$m^2$
25 mm	\$ 2.30	\$ 5.90
38 mm	3.40	8.10
50 mm	4.50	10.00
63 mm	5.60	12.50
75 mm	6.80	15.00
100 mm	9.00	20.00
125 mm	11.00	-
150 mm	13.50	-
175 mm	15.50	-
200 mm	18.80	-

## 5.007.180 PERIMETER AND UNDER-SLAB INSULATION

Rigid board polystyrene	
-------------------------	--

	Whiteboard m <sup>2</sup>	Blueboard m <sup>2</sup>
25 mm	\$ 7.20	\$ 9.50
38 mm	8.50	12.00
50 mm	9.50	14.00

### **5.007.250 ROOFING**

## 5.007.255 ASPHALT SHINGLES

	$\mathbf{m}^2$
$10.3 \text{ kg/m}^2$	\$ 6.20
$11.5 \text{ kg/m}^2$	8.30
11.5 kg/m <sup>2</sup> low slope	10.00

## **5.007.260 WOOD SHINGLES**

	$m^2$
Cedar #1	\$ 17.50
Cedar #1 low slope	26.00
Cedar shakes	15.50
Cedar shakes low slope	25.00
Pine shakes (sawn)	15.50
Pine shakes (sawn) low slope	25.00

## 5.007.262 METAL SHINGLES

	$\mathbf{m}^2$
Colored aluminum, standard type	\$ 33.00
Colored aluminum, diamond locking	35.00

## 5.007.265 SLATE

$\mathbf{m}^2$
\$ 88.00

## 5.007.270 BUILT-UP ROOFING asphalt and gravel

	m <sup>2</sup>
4-ply, over wood roof deck	\$ 18.00
4-ply, over poured concrete	16.50
3-ply, over insulation	16.00
4-ply, over insulation	18.00

**Note:** The above built-up roofing does not include insulation, vapour barrier, decking and joists.

### 5.007.275 ROLLED ROOFING

	$\mathbf{m}^2$
20.4 kg	\$ 2.10
24.9 kg	2.20
29.5 kg	2.60
40.8 kg	2.70

## **5.007.280 CONCRETE TILE**

	$\mathbf{m}^2$
Normal slope	\$ 21.50
Low slope	32.00

## 5.007.285 METAL TILE

	$\mathbf{m}^2$
Steel, color enamelled	\$ 38.00
Steel_stone chip and acrylic coated	44.50

## 5.007.290 SHEET METAL ROOFING

	$m^2$
Copper, 0.45 kg	\$ 198.00

### 5.007.295 CORRUGATED OR V RIBBED METAL ROOFING

	Galvanized m <sup>2</sup>	Colored m <sup>2</sup>
30 gauge	\$ 14.00 14.50	\$ 18.00
28 gauge	15.50 17.50	19.00
26 gauge	19.00 21.00	20.00
24 gauge		22.00
22 gauge		23.50
20 gauge		25.50

## 5.007.350 ROOF ACCESSORIES

## 5.007.360 RAIN WATER DISPOSAL

	m
Aluminum 100 mm	\$ 7.40 8.30
Aluminum 125 mm	7.60 9.10
Galvanized steel 100 mm	
Galvanized steel 125 mm	

Note: Use horizontal measurements only.

## 5.007.365 FLASHING

	m²
Galvanized steel 26 gauge	\$ 36.50
Aluminum 0.8 mm 22 gauge	41.00
Stainless Steel 0.4 mm	52.00
Copper 0.45 kg	71.00
Butyl 1.6 mm	29.50

### 5.008.000 DOORS & WINDOWS

# 5.008.050 METAL DOORS AND FRAMES

# 5.008.055 HOLLOW STEEL

Economy	EA	9	\$ 290
Low Grade	$\mathbf{E}\mathbf{A}$		320
Fair	EA		400
Average	EA		480
Good	EA		620
Expensive	EA		880
Note: add for opening including glazing add	EA	\$	70
for fire-rated doors $1^{-1}/_2$ hr.	$\mathbf{E}\mathbf{A}$		70
3 hr.	EA		150

### 5.008.065 ALUMINUM

		Clear	Bro	nze	Bl	ack
Fair Average Good	EA EA EA	\$ 540 670 890	EA \$ EA EA	760 1 000	EA \$ EA EA	890 1 200
Good to Expensive	EA	1 100	EA	1 300	EA	1 500
Expensive with wood pa metal panel		ith			EA EA	\$ 1 800 2 500
Luxurious monumental b	oronze				EA	\$ 4 800
Note: add for panic bars	1				EA	\$ 280

**Add** 75% for additional door in one frame up to Good to Expensive **Add** 100% for additional door in one frame for Expensive and Luxurious

## 5.008.100 EXTERIOR WOOD DOORS finished

		In Wood Frame		In Steel Frame	
Economy		EA	\$ 190	EA	<u>\$</u> —
Low Grade		EA	310	EA	300
Fair		EA	370	EA	370
Average		EA	460	$\mathbf{E}\mathbf{A}$	460
Good		EA	550	EA	580
Expensive		EA	650	EA	760
Note: <b>add</b> for opening, including glazing 100% for additional door in one frame	add			EA	\$ 70

### 5.008.150 INTERIOR WOOD DOORS

5.008.155 PASSAGE DOORS	Standard Height			Full Height		
Solid Core finished						
Low Grade	EA	\$ 260	EA	<b>\$</b> —		
Fair	EA	330	EA	_		
Average	EA	410	EA	500		
Good	EA	470	EA	550		
Expensive	EA	580	EA	690		
Luxurious	EA	800	EA	910		
Hollow Core finished						
Low Grade	EA	\$ 220				
Fair	EA	260				
Average	EA	320				
Good	EA	380				
Expensive	EA	500				

**Note: add** 100% for additional door in one frame.

## 5.008.200 SPECIAL DOORS

### 5.008.215 OVERHEAD DOORS

Wood Sectional	m²
Wood panel	\$ 100.00
Flush hollow wood slab	97.00
Flush insulated wood slab	115.00
	Insulated
	Single Double
Steel Sectional, painted	Skin Skin m² m²
24 gauge	\$ 87.00 \$ 121.00
20 gauge	95.50 132.00
16 gauge	132.00 184.00
Aluminum Sectional	m²
Glass panel	\$ 166.00
Aluminum panel	240.00
Fibreglass Sectional	m²
up to 20 m <sup>2</sup>	\$ 144.00
over 20 m <sup>2</sup>	168.00
Steel Multiblade vertical lift	m²
up to 45 m <sup>2</sup>	\$ 671.00
up to $90 \text{ m}^2$	556.00
over $90 \text{ m}^2$	529.00

## 5.008.215 OVERHEAD DOORS - CONT'D

Rolling Overhead Industrial Steel		$\mathbf{m}^2$
Non fire rated		
up to 9 m <sup>2</sup>		\$ 154.00
over to 9 m <sup>2</sup>		142.00
Fire rated, Class A, 3 hour		
up to $7.5 \text{ m}^2$		289.00
over $7.5 \text{ m}^2$		225.00
*Note: overhead doors with glazing add		$\mathbf{m}^2$
	3 mm	\$ 18.00
	4 mm	21.50
	6 mm acrylic	74.00
	6 mm wired	101.00

Note: add for hoists (see Sec. 5.008.365)

add for accessories (see Sec. 5.008.370)

## 5.008.220 ROLLING COUNTER SHUTTERS

Aluminum or steel m<sup>2</sup>
\$ 516.00

## 5.008.225 STOREFRONT GRILLS

	Rolling Overhead m²	Sliding m <sup>2</sup>	
Aluminum, clear	\$ 235.00	\$ 164.00	
Aluminum, colored	304.00	235.00	

Note: add for hoists (see Sec. 5.008.365)

add for accessories (see Sec. 5.008.370)

## **5.008.235 SLIDING DOORS** pocket stacking

	Multi Track m²	Single Track m²
Clear	\$ 296.00	\$ 343.00
Bronze	379.00	398.00
Black	414.00	426.00

### 5.008.240 REVOLVING DOORS

Standard height 2m Standard diameter 2m

Manual Type	6	mm Glass	12.5 r	nm Glass
			(No C	Centre Post)
Anodized Aluminum Bronze	EA EA	\$ 20 700 31 100	EA EA	\$ 22 200 32 600
Stainless Steel	LA	31 100	LA	32 000
Stalliess Steel				
Satin Finish	EA	\$ 25 200	EA	\$ 26 700
Mirror Finish	EA	31 100	EA	32 600
Add: Tinted Glass			EA	\$ 590
Glass Ceiling			$\mathbf{E}\mathbf{A}$	1 100
Power Assistance Operated			EA	5 180

## 5.008.250 AIRCRAFT HANGER DOORS

Costs include steel framing, track, rollers, electric geared motors, wiring, winches, cables, brackets, mountings, controls, safety chains, insulation, exterior and interior finish, trim, and installation.

Bi-Fold Overhead, wood clad		$\mathbf{m}^2$
Non-insulated Insulated		\$ 257.00 278.00
Bi-Fold Overhead, metal-clad Average single clad, non-insulated Good single clad, non-insulated Average double clad, insulated Good double clad, insulated		\$ 263.00 269.00 286.00 303.00
Sliding, wood clad	$0 - 275 \text{ m}^2 \text{ m}^2$	276 m <sup>2</sup> & Over m <sup>2</sup>
Non-insulated Insulated	\$ 409.00 430.00	\$ 489.00 510.00
Sliding, metal clad		
Average single clad, non-insulated	\$ 414.00	\$ 494.00
Good single clad, non-insulated	421.00	501.00
Average double clad, insulated	441.00	521.00
Good double clad, insulated	455.00	535.00

### 5.008.350 HARDWARE & SPECIALTIES

## 5.008.360 AUTOMATIC EQUIPMENT

Automatic Entrance Mechanism of	only
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Overhead mounted for	single door	EA	\$ 2 540
	double doors	EA	4 370
Floor mounted for	single door	EA	3 100
	double doors	EA	5 500

Note: add for doors (see sec. 5.008.065)

## **Automatic Slide Bi-parting**

Bi-part 3.7 rn opening, inc. doors EA \$8 300

	m2
Add: Tinted Glass	\$ 15.00

#### 5.008.365 DOOR HOISTS

Chain Hoist	EA	\$ 120
Gear Hoist		
Light Medium Heavy	EA \$ EA EA	810 960 1 500
Large Industrial	EA	1 800

### 5.008.370 DOOR ACCESSORIES

-Safety Edge		m \$ 72.00
Pressure Treadle Electric Timer Photo Cell Detector Loop Detector Key Switch, Pedestal Magnetic Card, Hanging or Pedestal mounted	EA EA EA EA EA	\$ 170 83 440 1 100 220 660
, , ,		

## 5.008.375 OVERHEAD DOOR OPENERS

Belt, chain or gear drive\*

Fair	EA	\$ 310
Average	EΑ	380
Custom	EΑ	410
Expensive	EA	460

**Note:** The above rates are applicable for residential type openers used on small overhead sectional doors that may be found with structures such as car washes, bulk oil warehouses, etc.

## 5.008.380 ACCESS DOORS & HATCHES exterior, double leaf

		Plain Steel	Galv	anized
Cellar Doors				
1.4 x 1.0 m	EA	<b>\$ 970</b>	EA	\$ 1 000
<b>Interior Floor Doors</b>				
0.9 x 0.9 m	EA	\$ 380	EA	\$ 410
Exterior Floor Doors				
0.9 x 0.9 m	EA	\$ 440	EA	\$ 500
Roof Hatches				
0.8 x 0.9 m	EA	\$ 320	EA	\$ 340
0.8 x 1.4 m	EA	400	EA	430
0.8 x 2.3 m	EA	640	EA	690
Add for glazed opening			EA	<b>\$ 150</b>

## 5.008.500 WINDOW FRAMING SYSTEMS

## 5.008.505 ALUMINUM (STORE FRONT TYPE)

Single Glazed	Clear m²	Bronze m <sup>2</sup>	Black m <sup>2</sup>
Fair Average	\$ 88.50 \$ 136.00	154.00	\$ 237.00
Sealed Units			
Fair Average Good Good to Expensive Expensive Note: Stainless steel Tinted Glass	\$ 157.00 172.00 184.00 201.00 237.00	189.00 231.00 249.00 287.00 add	\$ 268.00 286.00 314.00 343.00 35% m <sup>2</sup>
Green, Gray, or Bronze		Add	\$ 15.00
Reflective Glass light & heat			m <sup>2</sup>
Bronze, Silver, Gold or Chrome Insulating Glass (Sealed Units) Triple Glazing Framing. Reinforcing		add add add add	53.00

## **5.008.550 METAL WINDOWS**

## **5.008.555 STEEL WINDOWS**

Industrial Type 500 mm x 500 mm panes			m²
Prime Coated Baked Enamel			\$ 114.00 128.00
Note: Ventilating Units	add	EA	\$ 55
<b>Tubular Type</b> Non Thermally Broken <b>Punched Openings or Ribbon Type</b> fixed			m²
Prime Coated Baked Enamel			\$ 247.00 253.00
Note: Ventilating Units Wired glass, transparent, 6 mm	add add	EA EA	\$ 350 50

Note: Translucent glass, 6 mm thick equal to clear glass

# 5.008.560 ALUMINUM WINDOWS

		Single Glazed m <sup>2</sup>	Double Glazed m <sup>2</sup>
Low Grade Fair Average (Plain) Good (Baked Enamel)	<b>\$</b>	101.00 106.00 112.00	\$ 157.00 173.00 182.00 191.00
Expensive (Anodized Color)  Note: add for ventilating units  Plain Finish Unit	EA	119.00 \$ 130	200.00 EA \$ 180
Baked Enamel Unit Color Finish Unit	EA EA	140 160	EA 190 EA 200 m <sup>2</sup>
Tinted Glass Triple Glazing		add add	\$ 13.00 48.00

## 5.008.600 WOOD & PLASTIC WINDOWS

# 5.008.605 WOOD WINDOWS painted

	Single Glazed m <sup>2</sup>	Double Glazed m <sup>2</sup>
Economy	\$ 74.50	\$ -
Low Grade	102.00	161.00
Fair	122.00	193.00
Standard	137.00	215.00
Good	148.00	228.00
Expensive	156.00	239.00
Note: add for ventilating units	EA \$130.00 to	\$ 180.00
		$\mathbf{m}^2$
Tinted Glass	add	\$ 13.00
Triple Glazing	add	48.00
5.008.615 ALUMINUM OR PLASTIC COVERED WOOD		
		$m^2$
Single Glazed		\$ 141.00
Double Glazed		226.00
Note: add for ventilating units	EA	\$ 170.00
		$m^2$
Tinted Glass	add	\$ 13.00
Triple Glazing	add	48.00

## 5.008.650 WINDOW WALL/CURTAIN WALLS

## 5.008.655 SINGLE GLAZED

## 2.4 - 2.7 m Spans (floor to floor)

### **Modules (Mullion Spacing)**

Finish	0.6 m m <sup>2</sup>	0.9 m m <sup>2</sup>	1.2 m m <sup>2</sup>	1.5 m m²
Clear Anodized	\$ 235.00	\$ 221.00	\$ 204.00	\$ 235.00
Baked Enamel	248.00	229.00	217.00	248.00
Color Anodized	255.00	235.00	224.00	254.00
		3.1 - 3.7 m Spa	ans (floor to floor)	
Clear Anodized	\$ 254.00	\$ 235.00	\$ 222.00	\$ 260.00
Baked Enamel	259.00	247.00	229.00	265.00
Color Anodized	265.00	254.00	235.00	272.00

## **5.008.660 DOUBLE GLAZED 2.4 - 2.7 m Spans** (floor to floor)

## **Modules (Mullion Spacing)**

Finish	0.6 m m <sup>2</sup>	0.9 m m <sup>2</sup>	1.2 m m <sup>2</sup>	1.5 m m <sup>2</sup>
Clear Anodized	\$ 378.00	\$ 353.00	\$ 321.00	\$ 378.00
Baked Enamel	391.00	358.00	326.00	391.00
Color Anodized	398.00	365.00	333.00	402.00
		3.1 - 3.7 m S	pans (floor to floo	or)
Clear Anodized	\$ 410.00	\$ 378.00	\$ 353.00	\$ 407.00
Baked Enamel	424.00	391.00	358.00	424.00
Color Anodized	430.00	398.00	365.00	430.00
				m <sup>2</sup>
Note: Tinted Glas	S		add	\$ 15.00
Triple Glaz	zing		add	55.50
Reflective	Glass			
Single Gla	ızed		add	\$ 31.00
Insulating	(Sealed Units)		add	53.00

### 5.008.700 SKYLIGHTS

## 5.008.705 PLASTIC SKYLIGHTS

	Single Skin m²	Double Skin m <sup>2</sup>
To 1.0 m <sup>2</sup> To 1.9 m <sup>2</sup> Over 1.9 m <sup>2</sup>	\$ 308.00 236.00 197.00	\$ 410.00 297.00 257.00

## 5.008.710 ALUMINUM-FRAMED SKYLIGHTS

Single, Clear Wired Glass	Less 19-4		19-4	l5 m² m²	over 45 m² m²
Clear anodized finish Baked enamel finish Colour anodized finish	42	33.00 21.00 79.00	3(	45.00 64.00 02.00	\$ 326.00 345.00 364.00
Double, Clear Wired Glass					
Clear anodized finish Baked enamel finish Colour anodized finish	\$ 767.\ 843.\ 919.\	00	\$ 671.00 728.00 805.00	\$ 498.00 536.00 574.00	)

### 5.008.750 GLAZING

### 5.008.755 SHEET GLASS installed

	$\mathbf{m}^2$
2 mm	\$ 37.00
3 mm	41.00

### 5.008.760 FLOAT/PLATE GLASS installed

	Clear m <sup>2</sup>	Tinted m <sup>2</sup>
4 mm	\$ 45.50	<u> </u>
5 mm	51.50	
6 mm	55.00	66.00
7 mm	63.50	-
8 mm	71.00	83.00
10 mm	84.00	98.50
12 mm	107.00	118.00
Heat Strengthened Glass		<u>m<sup>2</sup></u>
Add to cost of Clear Float/Plate		\$ 60.00
Add to cost of Tinted Float/Plate		69.50

## **5.008.765 WIRED GLASS**

		$m^2$
	Transparent (Polished) Glass, 6 mm thick	\$ 106.00
	Translucent (Cast) Glass, 6 mm thick	62.50
	Double Glass Installation: Silver Gold	216.00 227.00
	Spandrel Glass 6 mm Black	96.00
	6 mm Silver	215.00
	6 mm Gold	227.00
5.008.770	LAMINATED GLASS	
		m2
	Single Lamination, 6 mm thick	\$ 181.00
	Bullet Resistant: 30 mm thick 50 mm thick	431.00 685.00
5.008.775	INSULATING GLASS Sealed Units	
	Clear (2 panes)	
		m2
	3 mm	\$ 112.00
	4 mm	114.00
	5 mm	120.00
	6 mm	125.00
	Tinted (1 pane only) Solar Gray or Bronze	
	3 mm	\$ 127.00
	4 mm	136.00
	5 mm 6 mm	145.00 163.00
5.008.780	MIRROR GLASS	
		m2
	-Unframed Mirrors, 6 mm, smooth edge	<del>\$ 126.00</del>
	Framed (Tamper Proof) Mirrors, 6 mm, stainless steel frame	\$ 203.00
	Transparent, One-way, 6 mm	\$ 149.00
	Wall Tiles	
	300 x 300 mm Plain 300 x 300 mm Veined	\$ 33.50 37.00
5.008.800	<b>GLASS BALUSTRADES</b> for stair side panels and balcony walls. Panels are 18.5 mm tempered safety plate glass and 1050 to 1150 mm <b>high</b>	
		m
	50 mm brass or chrome railings and post system	\$ 610
	75 mm brass or chrome railings and post system	\$ 690

## 5.009.000 FINISHES

### 5.009.050 EXTERIOR CLADDING

## 5.009.055 STUCCO

m <sup>2</sup>
\$ 21.00
30,00
32.00
m
\$ 32.00
41.50
$m^2$
\$ 11.00
$\mathbf{m}^2$
\$ 53.50
91.00

## **5.009.060 WOOD SIDING**

Grooved Waferboard 9.5 mm	m² \$ 8.30
Cedar	m²
Economy	\$ 20.00
Low Grade	22.50
Fair	23.50
Average	25.00
Average to Good	27.00
Good	29.00
Good to Expensive	30.00
Expensive	31.50
Luxurious	35.00
Diagonal Cedar	m²
Fair	\$ 33.50
Average	37.00
Average to Good	42.00
Good	47.50
Expensive	52.50

# 5.009.065 ASBESTOS CEMENT

	Flat Panels		m <sup>2</sup>
	6 mm textured finish 6 mm coloured finish		\$ 47.00 59.50
	Corrugated Panels		$m^2$
	6 mm coloured finish		\$ 47.00
	Sandwich Panels		$m^2$
	38 mm coloured finish		\$ 112.00
5.009.070 M	IETAL SIDING		
2.005.070 172	Aluminum/Vinyl		m <sup>2</sup> _
	Uninsulated Insulated		\$ 17.00 18.50
	Corrugated or V Ribbed Metal Siding	Galvanized m <sup>2</sup>	Colored m <sup>2</sup>
	30 gauge	\$ 14.00	\$ 18.00
	28 gauge	14.50	19.00
	26 gauge	15.50	20.00
	24 gauge	17.50	22.00
	22 gauge	19.00	23.50
	20 gauge	21.00	25.50
	Single Skin Metal Siding		
	Exposed Fasteners 15.9 to 75 mm profiles,	Average	Good
	600 to 900 mm coverage	$\mathbf{m}^2$	$m^2$
	Prefinished Steel 26 gauge	\$ 32,00	\$ 35.50
	24 gauge	33.50	38.50
	22 gauge	40.50	46.00
	Prefinished Aluminum 0.6 mm	\$ 28.50	\$ 31.50
	0.8 mm	35.50	40.50
	1.0 mm	41.00	47.50
	Concealed Fasteners flat, rib or V groove	Average	Good
	up to 38 mm profiles, 150 to 300 mm coverage	$m^2$	$\mathbf{m}^2$
	Prefinished Steel 26 gauge	\$ 33,50	\$37.50
	24 gauge	35.50	40.50
	22 gauge	42.50	48.50
	Prefinished Aluminum 0.6 mm	\$ 31.00	\$ 34.50
	0.8 mm	40.50	48.00
	Anodized Aluminum, expensive quality formed		
	profiles 19 to 22 mm depth, extruded shapes		
	profiles 19 to 22 mm depth, extruded shapes	Good m <sup>2</sup>	Expensive m <sup>2</sup>
	profiles 19 to 22 mm depth, extruded shapes		
	profiles 19 to 22 mm depth, extruded shapes  Insulated Panels, flat	m <sup>2</sup>	

\$ 84.00

Prefinished Steel 20 gauge, 25 mm rigid insulation

## 5.009.070 METAL SIDING - CONT'D

## **Single Skin Metal Fascia Panels**

Exposed Fasteners, same profiles	Average	Good
and coverage as siding	$\mathbf{m}^2$	$m^2$
Prefinished Steel 26 gauge	\$ 33.50	\$ 38.50
24 gauge	35.50	41.50
22 gauge	42.50	49.50
Prefinished Aluminum 0.6 mm	\$ 28.50	\$ 31.50
0.8 mm	35.50	40.50
Concealed Fasteners, same profiles	Average	Good
and coverage as siding	$\mathbf{m}^2$	$\mathbf{m}^2$
Prefinished Steel 26 gauge	\$ 34.50	\$ 38.50
24 gauge	38.00	42.00
22 gauge	45.50	50.50
Prefinished Aluminum 0.6 mm	\$ 31.50	\$ 44.00
0.8 mm	37.50	49.50
Anodized Aluminum same profiles		
and coverage as siding		
Custom		\$ 104.00
Expensive		154.00
Single Skin Soffit Panels		
Concealed Fasteners, same profiles	Average	Good
and coverage as fascia panels	$m^2$	m <sup>2</sup>
Prefinished Steel 26 gauge	\$ 26.50	\$ 30.00
24 gauge	32.50	36.50
Prefinished Aluminum 0.6 mm	\$ 31.50	\$ 44.00
0.8 mm	37.50	49.50
	Custom	Expensive
Anodized Aluminum	$\mathbf{m}^2$	
	\$ 104.00	\$ 154.00

Note: Fascia and Soffit Panel Costs do not include cost of framing system

## **Metal Roofing Panel Systems**

Prefinished steel or aluminum panels with concealed		
fasteners, ribbed batten or standing seam profiles 38		
mm deep, 300 mm coverage, 26 gauge or 0.8 mm	Average	Good
thickness.	m2	m2
	\$ 57.50	\$ 89.00
Linear Siding		$m^2$
Baked enamel		\$ 57.50
Mirror finish (nickel, brass, chrome, stainless steel)		123.00

## 5.009.075 SANDWICH PANELS

	Steel, with foamed insulation	Enamelled One Side m²	Enamelled Two Sides
	38 mm thick		
	50 mm thick	\$ 101.00	\$ 104.00
		103.00 106.00	106.00 108.00
	75 mm thick	110.00	113.00
	100 mm thick	22000	110.00
	Aluminum, with foamed insulation	Enamelled One Side	Enamelled Two Sides m <sup>2</sup> m <sup>2</sup>
	38 mm thick	\$ 136.00	\$139.00
	50 mm thick	138.00	140.00
	75 mm thick	140.00	143.00
	100 mm thick	145.00	147.00
Architectura	l Porcelain Enamel Steel Panel Systems		
	Exterior Wall Panels		<b>m</b> <sup>2</sup>
	Uninsulated Panel System, 38 mm (with 100 mm fibreglass plank backing) Uninsulated Panel 38 mm		\$ 268.00
	(with 125 mm fibreglass plank backing) Insulated Sealed Panel System, 50 mm		273.00 205.00
	Soffit and Fascia Panel System 38 or 50 mm pa	inels	m <sup>2</sup>
			205.00
	Suspended Ceiling Panel System		$m^2$
	150 to 300 mm drop		
	301 to 600 mm drop		\$ 148.00 159.00
	900 to 1200 mm drop		182.00
	Interior Wall Panel Systems		$\mathbf{m}^2$
	Average		\$ 171.00
	Average to Good		228.00
	Good		285.00
	Expensive (architectural)		342.00
5.009.080 M	ASONITE SIDING		2
			m <sup>2</sup>
	Primed 300 mm		\$ 25.50
	Colorlok Groove Panel		29.50 16.00
5 000 000 61	LASS FIBRE corrugated filon panels including wo	ood stranning, colour	
5.007.070 G1	EASO I IDICE COTTUGUICA ITION PANCIS INCIUMING WO	od strapping, colour	m <sup>2</sup>
	Light Gauge		\$ 10.50
	Medium Gauge		\$ 13.20
	Heavy Gauge		\$ 15.20 \$ 16.30
	incavy dauge		φ 10.30

## **5.009.095 SLICED BRICK PANELS** 400 mm x 1.2 m, 50 mm thick

(sliced brick, polyurethane core, plywood backing)

	m <sup>2</sup>
Average Face	\$ 71.50
Good Face	76.50

### 5.009.150 FURRING AND LATHING

### 5.009.155 STEEL CHANNEL FURRING

	m²
19 mm	\$ 3.70
38 mm	4.00

Metal Drop Ceiling, 1.2 x 400 mm

\$ 16.50

# **5.009.160 GYPSUM LATH**

		Ceilings & Exterior	Beams &
	Walls m <sup>2</sup>	Soffits m <sup>2</sup>	Columns m <sup>2</sup>
Plain, 9 mm	\$ 5.10	\$ 5.80	\$ 7.00
Perforated, 9 mm	5.30	6.20	7.50
Foilback, 9 mm	5.80	6.40	7.70
5.009.165 METAL LATH			
Painted			
$1.36 \text{ kg/m}^2$	\$ 5.40	\$ 6.40	\$ 7.70
$1.63 \text{ kg/m}^2$	6.10	6.70	8.20
$1.84 \text{ kg/m}^2$	6.60	7.00	8.50
Galvanized			
$1.36 \text{ kg/m}^2$	\$ 6.10	\$ 6.70	\$ 8.20
$1.63 \text{ kg/m}^2$	6.60	7.00	8.50
$1.84 \text{ kg/m}^2$	6.90	7.50	9.00

## 5.009.200 PLASTER

## 5.009.215 SPRAYED PLASTER

	m <sup>2</sup>
Spraytex, 1 coat on gypsum	\$ 3.70
Span-tex, 1 coat on concrete	5.20

## 5.009.220 PORTLAND CEMENT PLASTER

	Walls & Ceilings m <sup>2</sup>	Beams & Columns m <sup>2</sup>
2 coats on metal lath	\$ 22.50	\$ 29.00
2 coats on masonry	21.00	27.00
2 coats on concrete	22.50	25.00
3 coats on metal lath	32.00	38.50
3 coats on masonry	25.50	32.00

### 5.009.250 GYPSUM WALLBOARD

Standard	Walls & Ceilings m²	Beams & Columns m <sup>2</sup>
9.5 mm unfinished		
	\$ 5.70	\$ 8.90
12.7 mm unfinished	6.20	9.60
9.5 mm finished	8.80	13.50
12.7 mm finished	9.20	14.00
15.9 mm finished	10.00	15.00
Fire Resistant		
12.7 mm finished	\$ 9.30	\$ 14.00
15.9 mm finished	10.50	15.50
15.9 mm finished, laminated	17.00	-
<b>Gypsum Panels, Vinyl Face</b>		
12.7 mm plain core	\$ 14.50	\$ 19.00
15.9 mm plain core	16.00	21.00
15.9 mm fire resistant core	16.50	21.00

5.009.265

## 5.009.260 GYPSUM BACKING BOARDS

Standard	Walls & Ceilings m <sup>2</sup>	Beams & Columns m <sup>2</sup>
9.5 mm	\$ 8.40	\$ 13.00
12.7 mm	8.60	13.00
15.9 mm	10.00	15.00
Fire Coded		
9.5 mm	\$ 8.80	\$ 13.50
12.7 mm	9.20	14.00
15.9 mm	10.50	15.00
Foil Backed		
9.5 mm	\$ 9.30	\$ 11.00
12.7 mm	11.00	12.50
15.9 mm	14.00	16.00
WOOD FIBRE WALLBOARD		
		$\mathbf{m}^2$
11 mm Donnacona Plain (sound board)		\$ 6.20
11 mm Donnacona Primed		7.60

## **5.009.300 WALL FINISHES**

## **5.009.305 PANELING**

Hardboard 6 mm	m <sup>2</sup>
Fair	\$ 9.4
Average	11.0
Average to Good	14.5
Good	16.5
Plywood Paneling 6 mm excluding finish	
Fir	\$ 17.0
Rotary Mahogany	19.5
Ribbon Mahogany	20.0
Ash	22.0
Knotty Pine	23.0
Birch	23.0
Knotty Cedar	23.5
Red Oak - random	29.0
- book matched	36.0
White Oak - random	41.5
- book matched	50.5 41.5
Teak - random - book matched	41.5 50.5
- book matched Aromatic Cedar - random	42.5
- book matched	51.0
Black Walnutrandom	51.0 51.0
- book matched	60.0
Cherrywood - random	51.5
- book matched	61.0
Rosewood - random	51.5
- book matched	61.0
Satin Walnut - random	60.5
- book matched	72.0
Recessed Oak - straight	148.0
- curved	225.0
Wood Paneling 19 x 140 mm excluding finish	m2
Pine	\$ 33.5
Cedar	39.5
Redwood	49.0
Fir	43.0
Birch	39.5
Mahogany	53.5
Walnut	68.0
Teak	70.0
Oak	49.0
Metal Paneling	m <sup>2</sup>
Baked Enamel	\$ 57.5
Mirror Finish (nickel, brass, chrome, stainless steel) Light Gauge	123.0
'Stainless Steel - 18 gauge (for kitchens, etc.)	195.0

## 5.009.310 WALL COVERINGS

	Vinyl-Coated Fabric Wall Covering	$m^2$
	Plain Patterns	\$ 13.50
	Decorative Patterns	14.50
	Vinyl Wall Coverings	
	Light	\$ 18.00
	Medium	22.50
	Heavy	25.00
	Wallpaper	
	Fair Patterns	\$ 9.80
	Average Decorative Patterns	12.50
	Good Embossed Patterns	14.50
5.009.315 C	ERAMIC WALL TILE	
	Imitation Tile Panel	$m^2$
		 \$ 25.00
	Marlite — Acrylic Fibreglass Panels (for kitchens, etc.)	56.00
	Ceramic Tile	$m^2$
	Low Grade	\$ 47.00
	Fair	66.00
	Average	78.50
	Good	101.00
	Good to Expensive	145.00
	Expensive	260.00
	Luxurious	971.00
	Unique	1894.00
		$m^2$
	Terra Cotta	\$ 71.00
	Slate	S 136.00
	Mosaic Tile	$m^2$
	Fair	\$ 71.00
	Average	94.50
	Good	124.00
	Expensive	166.00
	Marble Tile	 m <sup>2</sup>
	Good	\$ 154.00
	Good to Expensive	207.00
	Expensive	296.00
	Backing Board	\$ 59.00

## **5.009.320 PAINTING**

Interior Standard Paint, Sprayed or Rolled	Two Coat m <sup>2</sup>	Three Coat m <sup>2</sup>
General Surface	\$ 4.40	\$ 5.10
Concrete Block	4.70	5.80
Open Web Steel Joists (measure 2 x height)	6.40	-
Structural Steel (measure exposed area or girth)	5.80	8.70
Pipes and Ducts (measure girth)	6.30	-
Trim	6.60	8.40
		m
Pipes not exceeding, 50 mm diameter		\$ 1.80
Interior Plastic Paint	Two	Three
	Coat	Coat
	$\mathbf{m}^2$	$m^2$
Concrete	\$ 6.80	\$ 9.40
Concrete Block	7.30	9.80
Drywall	6.30	8.80
Exterior Standard Paint	Two	Three
	Coat	Coat
	$m^2$	$m^2$
General Surfaces	\$ 5.00	\$ 6.70
Concrete Block	6.10	7.80
Exterior Trim	5.90	7.70
Fascias	5.30	6.90

## 5.009.325 MILLWORK

Baseboards and Trim	m
Economy	\$ 2.40
Low Grade	2.90
Fair	3.60
Average	3.80
Average to Good	4.50
Good	5.70
Good to Expensive	8.70
Expensive	10.00
Luxurious	15.00
Vinyl - 40 mm	\$ 3.50
- 57 mm	4.40
Rubber - 64 mm	3.90
- 102 mm	4.20

## **5.009.350 PARTITIONS**

5.009.360

# 5.009.355 DEMOUNTABLE PARTITIONS including studding

		$\mathbf{m}^2$
Gypsum painted or vinyl covered, lead soundproofing		\$ 68.50
Steel baked enamel or vinyl clad		79.00
baked enamel or vinyl clad, lead soundproofing		98.50
	12.5 mm	15.9 mm
Vinyl faced gypsum	$m^2$	m <sup>2</sup> _
Average	\$ 54.00	\$ 63.00
Good	65.00	68.00
Expensive	76.50	83.00
	Clear	Tinted
Glazed	$m^2$	
Average	\$ 141.00	\$ 157.00
Good	149.00	165.00
Expensive	162.00	179.00
FOLDING PARTITIONS		
Wood		$m^2$
Room divider, classroom type		\$ 217.00
Bifold partitions, gymnasium type		236.00

## 5.009.400 CEILING PANELS AND TILES

## **5.009.405 CEILING TILE**

Wood Fibre	Stapled m <sup>2</sup>	Glued m <sup>2</sup>	With Wood Furring <u>m<sup>2</sup></u>
300 x 300 mm 400 x 400 mm 300 x 600 mm	\$ 11.00 10.00 9.50	\$ 12.50 12.00 11.00	\$ 17.50 15.00 13.00
Note: Acoustic or sculptured tile		add	\$ 1.90 m <sup>2</sup>
Mineral Fibre with wood furring 300 x 300 mm 400 x 400 mm			\$ 21.50 19.00
Metal Pans	Steel Painted m²	Aluminum m²	Stainless Steel m <sup>2</sup>
305 x 305 mm 305 x 610 mm	\$ 25.50 20.00	\$ 31.50	\$ 53.00 48.00

# **5.009.420 SUSPENDED CEILINGS** including suspension system

	600 x 1200 mm Grid m <sup>2</sup>	600 x 600 mm Grid m <sup>2</sup>	300 x 300 mm Grid m <sup>2</sup>
Fibreglass Panel	\$ 10.50 11.00	\$ 12.00 13.00	\$ 18.00
Mineral Board	14.50 14.50	16.50	18.00
Fire-rated Mineral Board Boldface	20.50	16.00	19.00
Panel		22.50	-
Fire-rated Ceramic Panel			_

## 5.009.425 SPECIALTY PANELS

	Eggcrate			$m^2$
	Acrylic 13 x 13 x 13 m			\$ 31.00
	Polystyrene 9 x 9 x 13			20.00
	13 x 13 x	13 mm cubes		19.50
	Luminous			m <sup>2</sup> _
	Prismatic acrylic			\$ 17.00
	Prismatic polystyrene			20.50
	Cork Style 600 x 600 mm			26.00
	<b>Soft Fabric Style</b> 600 x 600	mm		74.00
	Mirror Glass Panel 600 x 60	00 mm		131.00
	<b>Wood Veneer Panel</b> 600 x 6	600 mm		155.00
	Fineline Grid 600 x 600 mm	1		28.50
	Linear Softwood flexible str	ip system		114.00
	<b>Linear Hardwood</b> flexible s	trip system		144.00
	Coffered Ceiling System (w	ithout light fixture)		30.00
5.009.430 SU	USPENSION SYSTEMS			
	Concealed T Bar System			$\mathbf{m}^2$ _
				\$ 8.80
	Exposed T Bar System			$\mathbf{m}^2$
	600 x 600 mm grid 600			\$ 8.00
	x 1200 mm grid			6.70
	Wood Furring Strips	300 mm o.c.	400 mm o.c.	600 mm o.c.
		$m^2$	$\mathbf{m}^2$	$\mathbf{m}^2$
	25 x 51 mm	\$ 6.80	\$ 4.90	\$ 3.50
	25 x 76 mm	7.30	5.50	3.60
	25 x 102 mm	7.50	5.80	3.80

## 5.009.500 FLOOR FINISHES

## 5.009.505 WOOD FLOORING

		Birch/Maple	Oak/Plain Sawn
	Wood Strip Flooring 57 mm wide x 20 mm thick	m <sup>2</sup>	m <sup>2</sup>
	Fair	\$ 38.50	\$ 35.50
	Average	40.50	37.50
	Good	43.00	39.50
	Expensive	45.50	42.00
	Flat Grain Fir		\$ 71.00
	Edge Grain Fir		94.50
	Cherrywood		178.00
	Parquet Flooring 8 mm thick		<u>m²</u>
	Fair (Maple)		\$ 47.50
	Average (Oak)		94.50
	Good (Teak)		101.00
	Expensive (Walnut)		142.00
5.009.510 RI	ESILIENT FLOORING		
	Vinyl, sheet flooring		$\mathbf{m}^2$
	Economy		\$ 15.50
	Low Grade		18.00
	Fair		29.50
	Average		35.50
	Average to Good		43.50
	Good		49.50
	Good to Expensive		59.00
	Expensive		71.00
	Vinyl, tile flooring		<u>m²</u>
	Economy vinyl asbestos 1.6 mm		\$ 9.70
	Low Grade vinyl asbestos 1.6 mm		9.90
	Fair vinyl asbestos 2 mm		13.00
	Average vinyl asbestos 3 mm		18.50
	Good solid vinyl (solid color) 3 mm		23.50
	Expensive solid vinyl (marblized) 3 mm		34.50
	Synthetic Turf 10 mm		10.50

## **5.009.515 CARPETING**

	Yard Goods	$\mathbf{m}^2$
	Fair nylon or polypropylene	\$ 12.50
	Average nylon or polypropylene	17.00
	Average to Good antron nylon	21.00
	Good nylon	25.00
	Good to Expensive heavy antron nylon	31.00
	Expensive acrylic or light weight wool	46.50
	100% berber wool	54.00
	wool prints with under cushion	59.00
	Luxurious heavy berber wool or cut pile	94.50
	<b>Note:</b> Expensive or Luxurious special design, color, etc., <b>add</b> additional \$ 116.00 to \$ 175.00 or more per square metre.	
	Carpet Tiles glue down 450 x 450 mm	m <sup>2</sup>
	Average nylon and polypropylene	\$ 33.50
	Good 100% nylon or antron	43.50
	Expensive 100% wool	54.50
5.009.520 M	ASONRY FLOORING	
	Ceramic Tile	m <sup>2</sup> _
	Fair	\$ 89.00
	Average	107.00
	Good	136.00
	Expensive	260.00
	Luxurious	971.00
		m
	Ceramic Baseboard	\$ 17.00
	Quarry Tile	<u>m²_</u>
	Unglazed	\$ 83.00
	Terra Cotta Clay	83.00
	Quarry Tile Stair Nosing	38.50
	Mosaic Tile	m <sup>2</sup> _
	Fair	\$ 83.00
	Average	107.00
	Good	136.00
	Expensive	178.00
	Marble Tile	m <sup>2</sup> _
	Good	<b>\$ 178.00</b>
	Good to Expensive	231.00
	Expensive	320.00

5.009.530

## 5.009.525 SPECIAL FLOORING

Portland Cement Terrazzo Floor with 3 mm zinc strip 750 x 750 mm Grid		m <sup>2</sup> \$ 52.5
_		
Precast Terrazzo Stair Treads (steel stairs)		m \$ 73.5
Stair Treads (steer stairs)		Ф 13.
	Epoxy	Latex
	Type	Type
Plastic Matrix Accessories	m2	m2
6 mm thick	\$ 65.50	\$ 50.50
9 mm thick	71.00	55.00
Trim and Accessories terrazzo cove base trim		m
100 mm high		\$ 26.50
150 mm high		24.50
Poured Plastic Flooring		<u>m2</u>
Urethane Resin with coloured chips (glossy finish)		\$ 30.00
	General	Computer
	Office	Floor
	Areas	Areas
Access Floors Raised 600 mm x 600 mm grids m2	;	m2
Laminated Finish	\$ 122.00 \$	133.00
Carpeted Finish	149.00	154.00
ECIAL COATINGS		
<b>Fire Resistant Coatings</b> sprayed fireproofing 2 hour rating, based on floor or roof area	;	m2
Beams — average Columns — average Open Web Steel Joists Floor Decks		0.90 2.50 7.40 3.90

## **5.010.000 SPECIALTIES**

## 5.010.150 COMPARTMENTS AND CUBICLES

## 5.010.155 TOILET AND SHOWER PARTITIONS metal

5.010.155 10	OILET AND SHOWER PARTITIONS metal		Standard Cubicle	A	lcove Type
	Floor mounted, overhead braced Floor mounted, pilaster type Ceiling Hung	EA EA EA	\$ 370 400 520	EA EA EA	330
5.010.200 PO	OSTAL SPECIALTIES				
5.010.205 MA	AIL CHUTES with glass fronts		Normal Letter Size 200 x 62 mm m		Bundle Size 375 x 100 mm m
	Aluminum Bronze Stainless Steel		\$ 413.00 674.00 453.00		\$ 675.00 - 754.00
	Collection Boxes				
	Aluminum Stainless Steel			EA EA	\$ 2 100 2 300
5.010.210 MA	AIL BOXES				
	Apartment Type				
	Back loading Front Loading			EA EA	\$ 55.00 63.00
	Post Office Type				
	Drawer Type			EA	\$ 110.00
5.010.300 SC	ALES excluding pit construction				
5.010.305 LT	VESTOCK SCALES				
	Mechanical including full beam capacity indicator				
	9 tonne capacity, 4.9 x 2.4 m platform			EA	\$ 10 800
	18 tonne capacity, 9.1 x 4.3 m platform			EA	20 400

## **5.010.310 TRUCK SCALES**

Mechanical	including f	ull beam	capacity	indicator

18 tonne capacity, 9.1 x 3.0 m platform	EA	\$ 16 700
45 tonne capacity, 18.3 x 3.0 m platform	EA	36 300
68 tonne capacity, 18.3 x 3.0 m platform	EA	42 100
Note: add for registering beam type add for direct dial type add for automatic print type		\$ 1400 4700 3900
Electronic including digital indicator print out		
45 tonne capacity, 18.3 x 3.0 m platform	EA	\$ 55 700
68 tonne capacity, 18.3 x 3.0 m platform	EA	74 300

## **5.011.000 EQUIPMENT**

### **5.011.050 CABINETS**

### 5.011.055 KITCHEN CABINETS

Economy	\$ 278.00
Low Grade	451.00
Fair	577.00
Average	884.00
Average to Good	1 010.00
Good	1 346.00
Good to Expensive	1 653.00
Expensive	2 021.00
Luxurious	2 804.00

## **5.011.060 VANITIES**

m

Economy	\$ 162.00
Low Grade	235.00
Fair	271.00
Average	397.00
Average to Good	451.00
Good	794.00
Good to Expensive	938.00
Expensive	1 191.00
Luxurious	1 606.00

## 5.011.170 HOODS AND FANS Commercial kitchen exhaust hoods, wall or

ceiling mounted including filter, air curtain jets, air intakes and exhauster.

	Galvanized Steel	Stainless Steel	
	m	m	
1 150 mm wide x 525 mm high	\$ 475.00	\$ 606.00	
1 800 mm wide x 525 mm high	739.00	951.00	
2 300 mm wide x 525 mm high	844.00	1 214.00	

### 5.011.175 HOOD MOUNTED FIRE EXTINGUISHER, carbon dioxide,

including CO<sub>2</sub> cylinder, piping and 2 to 4 heads

EA \$ 2 600

## 5.011.250 FOOD SERVICE EQUIPMENT

## 5.011.260 DISHWASHING EQUIPMENT

### **Hood and Door Dishwashers**

Front opening, free standing or under counter, stainless steel

12 racks per hour, 40 persons per meal	EA	\$ 4 000
15 racks per hour, 45 persons per meal	EA	4 600
Stainless steel semi-automatic type		
38 racks per hour, 50 persons per meal	EA	\$ 6 100
53 racks per hour, 100 - 250 persons per meal	EA	9 000
Automatic two tank rack type, two inspection doors, stainless steel		
234 racks per hour, 300 - 700 persons per meal	EA	\$ 26 300
360 racks per hour, 500 - 900 persons per meal	EA	27 300

## 5.011.300 REFRIGERATING EQUIPMENT

### 5.011.320 ICE MAKING MACHINES

Self-Contained Cubers		Baked Enamel		nless el
15.9 kg storage capacity	EA	\$ 1 300	EA	\$ 1 600
81.7 kg storage capacity	EA	2 600	EA	3 200
158.8 kg storage capacity	EA	4 000	EA	5 000
Self-Contained Flaker				
68.0 kg storage capacity	EA	\$ 3 200	EA	\$ 3 400

## 5.011.325 REACH-IN REFRIGERATOR self contained, medium temperature

	Finish		Capacity		Doors	
	Ext.	Int.	$m^3$		Long	Half
Fair	Enamel	Enamel	0.6	EA	\$ 2 100	\$ 2 200
Average	S. Steel	Enamel	0.6	EA	2 500	2 700
Good	S. Steel	S. Steel	0.6	EA	2 900	3 100

**Note: add** 35% to above types for approximately  $1.4 \text{ m}^3$  capacity add 75% to above types for approximately  $2.2 \text{ m}^3$  capacity

#### 5.011.330 REACH-IN FREEZER self contained

	Finish		Capacity		Doors	
	Ext.	Int.	$m^3$		Long	Half
Fair	Enamel	Enamel	0.6	EA	\$ 2 700	\$ 3 100
Average	S. Steel	Enamel	0.6	EA	3 200	3 300
Good	S. Steel	S. Steel	0.6	EA	3 600	3 900

**Note: add** 35% to above types for approximately  $1.4 \text{ m}^3$  capacity add 75% to above types for approximately  $2.2 \text{ m}^3$  capacity

### 5.011.350 WASTE HANDLING EQUIPMENT

# 5.011.360 GARBAGE COMPACTORS - wet or dry

Small - apartments, schools, motels

Includes photo eye sensor, odor suppressor and chute hopper 0.19 m<sup>3</sup> to 0.38 m<sup>3</sup> capacity, 1.5 to 2.2 kW Motor

EA \$ 7 500

Light Duty - restaurants, hotels, small office towers, stores

Includes pressure gauge, walk on ramp, safety rails, remote control, container guide rails, hopper, 1.15 m<sup>3</sup> capacity, 3.7 to 7.5 kW Motor

EA \$ 14 400

**Medium to Heavy Duty** - shopping centres, office towers, distribution centres, plants

Includes all items in Light Duty class plus security chute, safety lock, override panels, emergency stop, 1.53 m<sup>3</sup> to 1.91 m<sup>3</sup> capacity, 7.5 to 11.2 kW Motor Manual side cart dumper

EA \$ 19 000

\$ 780

EA

Hydraulic cart dumper add EA \$4800

add

Chutes add as found

**Note:** Costs do not include container bins

### 5.011.365 WASTE SHREDDER COMPACTORS

Includes hopper, power unit, controls, hydraulic winch floor clamp, 18.5 kW hydraulic motor		EA	\$ 42 700
Steel door protector plates	add	EA	\$ 2400

Note: Costs do not include container bins

5.011.370 VERTICAL BALER COMPACTORS - dry materials			
0.75 kW - 68 kg to 104 kg bale		EA	\$ 6 500
3.7 kW - 181 kg to 227 kg bale		EA	8 700
5.6 kW - 136 kg to 272 kg bale		EA	13 000
7.5 kW - 272 kg to 499 kg bale		EA	13 500
11.8 kW - 408 kg to 544 kg bale		EA	15 600
<b>Note:</b> Suggested age life for compactor, shredder or baler is 10 years.			
5.011.400 INTERCOM AND SECURITY SYSTEMS			
5.011.420 APARTMENT SECURITY			
Entrance directory and base unit Intercom per suite	add	EA EA	\$ 1 000 100
5.011.500 PARKING EQUIPMENT			
<b>5.011.505 BARRIER GATES</b> including steel casing with motor and 2.4 m wooden gate arm			
One way Two way		EA EA	\$ 3 000 3 200
<b>5.011.510 BARRIER GATE CONTROL DEVICES</b> vehicle detector for entrance or exit, including power supply and sensor mat			
Coin or Token Control Ticket Dispenser including Control		EA EA	\$ 620 4 800
5.011.515 REVENUE CONTROL DEVICES			
Cash register Cash control logic enclosure Fee indicator Clock Rate computer		EA EA EA EA	\$ 6 100 900 1 000 580 720
5.011.520 CASHIER OR ATTENDANT'S BOOTH prefabricated			
<b>Exterior Use</b> 1.2 x 2.1 m steel construction, including insulation, fluorescent lighting, duplex outlet, counter, aluminum framed windows with horizontal slider on two sides		EA	\$ 5 800
Interior Use 1.7 x 1.2 m		EA	\$ 5 500

steel construction, excluding insulation

# 5.011.550 LOADING DOCK EQUIPMENT

## 5.011.555 DOCK LEVELLERS platform

	Mec	Mechanical		raulic
Size 1.8 x 1.8 m	EA	\$ 2 800	EA	\$ 3 600
Size 1.8 x 2.4 m	EA	3 400	EA	4 100

## 5.011.560 DOOR SEALS

<b>Truck Docks</b> 2.3 x 2.4 m	I	Fixed		Vith ljustable Head
2.4 m high	EA	\$ 1 000	EA	\$ 1 500
2.7 m high	EA	1 100	EA	1 600
3.1 m high	EA	1 200	EA	1 700
Rail Docks	1	Fixed		Vith ljustable Head
To 9.3 m <sup>2</sup>	EA	\$ 1 800	EA	\$ 2 100
9.3 to 13.4 m <sup>2</sup>	EA	2 200	EA	2 400

# **5.011.565 PROTECTIVE BUMPERS** 100 mm projection for truck docks

		zontal m Wide		tical m Wide
To 350 mm deep	EA	\$ 160	EA	\$ 180
475 mm deep	EA	-	EA	280
900 mm deep	EA	220	EA	-

# 5.011.600 THEATRE EQUIPMENT

# 5.011.605 DRIVE-IN EQUIPMENT

Screen including framing and concrete foundations

	Reinf. Conc. m <sup>2</sup>	Steel Frame m <sup>2</sup>			Wood Frame m <sup>2</sup>
Painted plywood screen	\$ 290.00	\$ 230.00			\$ 180.00
Painted asbestos screen	300.00	240.00			190.00
Painted aluminum screen	-	123.00			-
Ticket Booth wood frame and covering					
Cheap (small, single)			E	A	\$ 3 300
Average (medium, single)				A	4 200
Expensive (large, double)			E	A	5 000
Sound Systems including trenching, wir and back up system	ing, fittings, transmitting base				
Standard Post and Speaker System					
Base sound system for single screen				EA	\$ 13 000
Sound for additional screen			add	EA	3 500
Speakers - per car			add	EA	90
Clip-On Aerial System					
Base sound system for single screen				EA	\$ 13 000
Sound for additional screen				EA	3 500
Aerial system - per car			add	EA	23
Free-Air Broadcast System - using conve	erted existing cable field				
Base sound system for single screen				EA	\$ 6 000
Sound for additional screen				EA	2 000
Antenna system - per car			add	EA	19
Free-Air Broadcast System - using new field and	induction cable antenna high watt output				
Base sound system for single screen				EA	\$ 6 000
Sound for additional screen			add		2 000
Antenna system - per car			add	EA	10
Service Points including trenching, wiring	ng, fittings				
Heater including controls				EA	\$ 150

Note: Suggested age life on equipment 20 years

# 5.011.650 BUILT-IN MAINTENANCE EQUIPMENT

# 5.011.655 POWERED WINDOW WASHING EQUIPMENT

## **Equipment** 2 point suspension

<ul><li>6.1 m stage, 20 storeys</li><li>6.1 m stage, 40 storeys</li></ul>	EA EA	\$ 139 100 193 200
Tracks		m
Steel		\$ 230.00

#### 5.011.660 VACUUM SYSTEMS

Base Unit for a commercial built-in vacuum system includes basic costs of a motor, vacuum pump, dirt canister, exhaust vent piping, electrical wiring and installation.

Per Inlet includes piping system, inlet valve and wall or floor plate and must be added on a per inlet basis as found.

**Average System -** suitable for apartments, fast food restaurants, small/medium churches & stores, low-rise offices, CRU's in malls, etc.

- normally has no outside venting
- single motor, 1.5kW and 11.5 amps or less
- maximum coverage is 550m<sup>2</sup>.

Base Unit		EA	<b>\$ 700</b>
Per inlet, PVC piping	add	EA	65
Per inlet, 50mm metal piping	add	EA	200

**Custom System -** most commonly found in apartments, restaurants, larger stores, churches, laboratories, funeral homes, offices, breweries, fire halls, golf and curling clubs, cultural centres, communication centres, etc.

- unit has 2 motors, 1.9kW each, 21 amps
- minimum coverage per level is 325m<sup>2</sup>
- maximum coverage area per base unit is 1100m<sup>2</sup>

Base Unit		EA	\$ 1 050
Per inlet, PVC piping	add	EA	65
Per inlet, 50mm metal piping	add	EA	200

Expensive System - large system for hotels, high-rise offices, cathedrals, transit garages, industrial complexes, etc.

- 5.6kW motor, 21.6 amps, 230/460 volt system
- 75mm airflow
- separate motor, canister and vacuum pump

Base Unit		EA	\$ 11 400
Per inlet, 75mm metal <b>pipe trunk line and 50mm</b>			
metal branch lines	add	EA	250

**Continuous Run System -** designed and used as part of a business such as large car washes, denture labs, sawdust collection, **etc.** 

- 2.2kW motor, 16.6 amps, 230 volt circuit
- separate motor, dirt canister and vacuum pump

Base Unit Per inlet, PVC piping Per inlet, 50mm metal piping Per inlet, 75mm metal piping		EA	\$ 3 950	
Per inlet, PVC piping	add	EA	65	
Per inlet, 50mm metal piping	add	EA	200	
Per inlet, 75mm metal piping	add	EA	250	

## 5.013.000 SPECIAL CONSTRUCTION

## 5.013.100 REFRIGERATION SYSTEMS

## 5.013.105 PREFABRICATED WALK-IN COOLERS including door

$2.4 \text{ m high, up to } 12 \text{ m}^2$	Constant Area Rate m <sup>2</sup>	\$ 2 000 278.00
Wall Height Variation  add or deduct per 0.3 m height	Constant Area Rate m <sup>2</sup>	\$ 140 23.00
$2.4 \text{ m high, over } 12 \text{ m}^2$	Constant Area Rate m <sup>2</sup>	\$ 2800 204.00
Wall Height Variation  add or deduct per 0.3 m height	Constant Area Rate m <sup>2</sup>	\$ 250 14.00
Note: Stainless Steel add 45% Partition Panel add		$m^2$
Aluminum or Galvanized Steel Stainless Steel		\$ 91.50 161.00
5.013.110 PREFABRICATED WALK-IN FREEZERS including door		
$2.4 \text{ m high, up to } 12 \text{ m}^2$	Constant Area Rate m <sup>2</sup>	\$ 2 200 410.00
Wall Height Variation  add or deduct per 0.3 m height	Constant Area Rate m <sup>2</sup>	\$ 160 27.00
$2.4 \text{ m high, over } 12 \text{ m}^2$	Constant Area Rate m <sup>2</sup>	\$ 2 900 376.00
Wall Height Variation  add or deduct per 0.3 m height	Constant Area Rate m <sup>2</sup>	\$ 290 16.00
Note: Stainless Steel add 45% Partition Panel add		$m^2$
Aluminum or Galvanized Steel Stainless Steel		\$ 91.50 161.00

Note: add for compressors from 5.013.115

## 5.013.115 WALK-IN REFRIGERATION EQUIPMENT

# **COOLER COMPRESSORS** temperature to 2°C, 2.4 m high ceiling

Maximum Coolable Area	Compressor Rating		
$2.3 \text{ m}^2$	249 W	EA	\$ 1 900
$4.6 \mathrm{m}^2$	373 W	EA	2 100
$8.8 \text{ m}^2$	560 W	EA	2 300
$13.0 \text{ m}^2$	746 W	EA	2 600
$18.6 \mathrm{m}^2$	1.12 kW	EA	3 100
$25.0 \mathrm{m}^2$	1.49 kW	EA	3 800
$34.4 \text{ m}^2$	2.24 kW	EA	4 800
$45.5 \mathrm{m}^2$	2.98  kW	EA	5 500
$58.5 \text{ m}^2$	3.73 kW	EA	6 000

**Note:** For 2.7 m and 3.0 m heights use next larger size compressor.

## FREEZER COMPRESSORS temperature to -23°C, 2.4 m high ceiling

Maximum Coolable Area	Compressor Rating		
Reach in only	373 W	EA	\$ 2500
$1.9 \text{ m}^2$	560 W	EA	2 800
$3.7 \text{ m}^2$	746 W	EA	3 100
$6.5 \text{ m}^2$	1.10 kW	EA	3 800
$10.2 \text{ m}^2$	1.49 kW	EA	4 600
$23.2 \text{ m}^2$	2.24 kW	EA	5 400
$30.7 \text{ m}^2$	2.98 kW	EA	6 400
$37.2 \text{ m}^2$	3.73 kW	EA	7 500
	4.48 kW	EA	8 600
	7.46 kW	EA	10 500

**Note:** For 2.7 m and 3.0 m heights use next larger size compressor.

#### 5.013.120 REFRIGERATION PREFABRICATED INSULATION PANEL SYSTEMS

These panels may be used in the design and construction of detached or attached refrigerated structures, or large refrigerated areas within an existing building. Typical installations may be found at locker plants, meat packing plants, ice cream plants, and produce storage areas at distribution warehouses.

Panels are prefabricated at various widths, lengths and thicknesses, with 2 sides of finished steel or aluminum and a urethane insulated core. Cooler panels are normally 22 gauge metal while freezer panels are 20 gauge metal or heavier.

**Exterior Panels**, dependent on structure size, these panels may be self-supporting or have structural framework support. Exterior wall panels usually replace typical base wall components found in a warehouse or store type structure and may be further protected against damage by installation of an additional exterior cladding such as metal siding or some other protective covering.

**Roof Panels** are normally attached to O.W.S.J., replacing the usual steel deck and insulation, but must be moisture and weather protected - generally by built-up roofing.

**Interior Wall and Ceiling Panels** are for indoor installation within an existing structure and are used as insulated lining, ceiling or partitioning, either on perimeter areas or for the construction of a partial or specific refrigerated area within a structure.

- 1. Insulated panel costs are applied to the actual insulated surface area of walls, floors and ceilings.
- To estimate the total cost of a refrigerated structure, first determine the cost of the basic building, then adjust component costs for exterior, roof, interior panels and floor system, add appropriate costs for refrigeration mechanical system and doors.
- 3. The following rating chart is a guide to select the appropriate interior wall and ceiling panels. The guide may also be used to select the appropriate refrigerated mechanical system (5.013.130).

#### TEMPERATURE GUIDE

Room Type	Rated Temperature Range
Cooler	$+ 2 \text{ to } +16^{0} \text{ C}$
Chiller	+ 2 to -15 <sup>o</sup> C
Freezer	-15 to -26 <sup>o</sup> C
Sharp Freeze	-26 to -40° C

\$ 142.00

\$ 174.00

\$179.00

\$ 185.00

#### 5.013.121 INSULATED EXTERIOR WALL AND ROOF PANELS

	m²
Baked enamel	\$ 130.00
Pebbled aluminum	130.00
Galvanized steel	118.00
Stainless steel	178.00

### 5.013.122 INSULATED INTERIOR WALL, PARTITION OR CEILING PANELS

Panel Thickness	Cooler/Chiller up to 100 mm m <sup>2</sup>	Freezer 100 to 150 mm m <sup>2</sup>	Sharp Freeze over 150 mm m <sup>2</sup>
Baked enamel	\$ 107.00	\$ 118.00	\$ 130.00
Pebbled aluminum	107.00	118.00	130.00
Galvanized steel	96.00	107.00	118.00
Stainless steel	154.00	166.00	178.00
5.013.123 GLASS WALL PANELS, non-opera	tive twin glazed thermo		
sealed units		per m <sup>2</sup>	\$ 900.00
5.013.124 INSULATED FLOOR PANEL SYS	TEM		
In a room or building with an insul the following is normally found.	ated floor system,		

Panels only - galvanized steel or aluminum, 12 to 14 gauge metal 2 sides, 100 mm urethane insulation core, per m<sup>2</sup>

Total Floor System - includes the following components in sequence; 150 mm gravel fill, heavy mesh reinforcing, 100 mm concrete sub-floor, 6 mil vapour barrier, 100 mm insulated panel, heavy mesh reinforcing, 100 mm concrete finished floor c/w hardener, per  $\rm m^2$ 

Total floor system with 125 mm concrete sub-floor and 125 mm finished floor, per  $m^2$ 

Total floor system with 150 mm concrete sub-floor and 150 mm finished floor, per  $\ensuremath{\text{m}}^2$ 

facilities where pallet loads are moved.

**Note:** The above total floor systems are usually found in large

#### 5.013.125 OTHER REFRIGERATION INSULATING SYSTEMS

When other types of insulating systems and materials are found, the following table, based on polystyrene whiteboard, may be used as a guide to determine insulation requirements.

#### OTHER REFRIGERATION INSULATION SYSTEM GUIDE

Room Type	Rate Temperature Range	Insulation Thickness (Whiteboard)
Cooler	$+16 \text{ to} + 2^{0} \text{ C}$	50 mm to 75 mm
Chiller	+ 2 to -15° C	100 mm to 125 mm
Freezer	-15 to -26 <sup>o</sup> C	150 mm to 175 mm
Sharp Freeze	-26 to -40° C	200 mm to 225 mm

 $\textbf{Note:} \hspace{0.5cm} \textbf{Insulation materials other than polystyrene whiteboard may be used but for equivalent} \\$ 

insulating factors they must be related to whiteboard insulation equivalents. See Unit

Cost Schedule, section 5.007.000 for other wall and roof insulation costs.

### 5.013.130 REFRIGERATION MECHANICAL SYSTEMS

Based on 3.0 m Height

Size Range	to	to	to	to	to
	$230 \text{ m}^2$	$700 \text{ m}^2$	$1850 \text{ m}^2$	$4650 \text{ m}^2$	$9300 \text{ m}^2$
COOLER					
Constant	\$ 650	\$ 2 600	<b>\$ 7 100</b>	\$17 200	\$39 100
Area Rate m <sup>2</sup>	\$ 70.00	\$ 61.50	\$ 55.00	\$ 49.50	\$ 44.50
Height Adjustment, pe	r 300 mm of height	add or deduct			
Constant	<b>\$ 70</b>	\$ 250	<b>\$ 700</b>	<b>\$ 1 700</b>	\$ 3 900
Area Rate m <sup>2</sup>	\$ 7.00	\$ 6.00	\$ 5.50	\$ 5.00	\$ 4.50
CHILLER					
Constant	\$ 800	\$ 2 650	\$ 8 650	<b>\$17 250</b>	\$65 000
Area Rate m <sup>2</sup>	\$ 83.00	\$ 75.50	\$ 66.50	\$ 62.00	\$ 51.50
Height Adjustment, pe	r 300 mm of height	add or deduct			
Constant	\$ 100	\$ 250	\$ 850	\$ 1 700	\$ 6 500
Area Rate m <sup>2</sup>	\$ 8.50	\$ 7.50	\$ 6.50	\$ 6.00	\$ 5.00
FREEZER					
Constant	\$ 900	\$ 3 600	\$ 8 650	\$17 250	-
Area Rate m <sup>2</sup>	\$101.00	\$ 89.00	\$ 82.00	\$ 77.50	-
Height Adjustment, pe	r 300 mm of height	add or deduct			
Constant	\$ 90	\$ 350	\$ 900	\$ 1 700	-
Area Rate m <sup>2</sup>	\$ 10.00	\$ 9.00	\$ 8.00	\$ 7.50	-
SHARP FREEZE					
Constant	\$ 1000	\$ 3600	\$10 250	-	-
Area Rate m <sup>2</sup>	\$123.00	\$112.00	\$102.00	-	-
Height Adjustment, pe	r 300 mm of height	add or deduct			
Constant	\$ 90	\$ 350	\$ 1 050	-	-
Area Rate m <sup>2</sup>	\$ 12.50	\$ 11.00	\$ 10.00	-	-

**Note:** Refrigeration mechanical system costs reflect equipment capacity sufficient to maintain the rated temperature of the storage area.

Area is determined on the inside dimensions of the storage area. Standard inside height is 3.0~m - adjust costs in accordance with rates provided for each 300~mm of height, or portion thereof, more or less than 3.0~m.

## 5.013.140 REFRIGERATION DOORS

**Cooler Doors** insulated with 75 mm polyurethane or 150 mm cork or fibreglass

Ç		amel on Steel d Galvanized		Stainless Steel
Left or Right Hand Swing Doors	an	a Gaivanizea m <sup>2</sup>		m <sup>2</sup>
V 10 2		Φ 467 00		Φ 5 45 00
Up to $1.9 \text{ m}^2$ $1.9 \text{ m}^2$ to $3.7 \text{ m}^2$		\$ 467.00		\$ 547.00
$1.9 \text{ m}^2 \text{ to } 3.7 \text{ m}^2$		354.00		434.00
Double Doors				
Over $1.9 \text{ m}^2$ to $3.7 \text{ m}^2$		\$ 917.00	!	\$ 1 094.00
Single Sliding Doors				
Over $1.9 \text{ m}^2$ to $3.7 \text{ m}^2$		\$ 982.00	\$	1 094.00
Over $3.7 \text{ m}^2$ to $5.6 \text{ m}^2$		660.00		772.00
Over $5.6 \text{ m}^2 \text{ to } 7.4 \text{ m}^2$		499.00	611.00	
Over $7.4 \text{ m}^2$ to $9.3 \text{ m}^2$		418.00		531.00
Double Sliding Doors				
Over $3.7 \text{ m}^2$ to $5.6 \text{ m}^2$		\$ 660.00	:	\$ 772.00
Over $5.6 \text{ m}^2$ to $7.4 \text{ m}^2$		547.00		660.00
Over $7.4 \text{ m}^2$ to $9.3 \text{ m}^2$		483.00		595.00
Reach-in Doors	Solid	Hinged	Glas	s Hinged
		Frame	witl	n Frame
0.6 m x 0.6 m	EA	\$ 300	EA	\$ 460
0.6 m x 0.9 m	EA	460	EA	560
0.6 m x 1.2 m	EA	600	EA	640
0.6 m x 1.4 m 0.6 m x 1.8 m	EA EA	-	EA EA	700 730
0.8 m x 2.0 m	EA EA	-	EA EA	810
0.0 III X 2.0 III	<b>D</b>		211	010
Glass Sliding Display Doors				
2 Door 1.4 m x 1.8 m			EA	<b>\$ 1 200</b>
3 Door 2.1 m x 1.8 m			EA	1 700

## 5.013.140 REFRIGERATION DOORS - CONT'D

**Freezer Doors** insulated with 100 mm polyurethane or 200 mm cork or fibreglass

or 200 mm cork or floreglass	Enamel on Steel and Galvanized	Stainless Steel
Left or Right Hand Swing Door	m <sup>2</sup>	m <sup>2</sup>
Not exceeding 1.9 m <sup>2</sup>	\$ 563.00	\$ 676.00
Over $1.9 \text{ m}^2$ to $3.7 \text{ m}^2$	434.00	546.00
Overlap Doors		
Not exceeding 1.9 m <sup>2</sup>	\$ 949.00	\$ 1 062.00
Over $1.9 \text{ m}^2$ to $3.7 \text{ m}^2$	676.00	789.00
Over $3.7 \text{ m}^2$ to $5.6 \text{ m}^2$	467.00	579.00
Double Doors		
Over $3.7 \text{ m}^2$ to $5.6 \text{ m}^2$	\$ 692.00	\$ 853.00
Over $5.6 \text{ m}^2$ to $7.4 \text{ m}^2$	595.00	708.00
Over $7.4 \text{ m}^2$ to $9.3 \text{ m}^2$	483.00	595.00
Single Sliding Doors		
Over $1.9 \text{ m}^2$ to $3.7 \text{ m}^2$	\$ 1 291.00	\$ 1 416.00
Over $3.7 \text{ m}^2$ to $5.6 \text{ m}^2$	869.00	998.00
Over $5.6 \text{ m}^2$ to $7.4 \text{ m}^2$	660.00	772.00
Over $7.4 \text{ m}^2$ to $9.3 \text{ m}^2$	531.00	676.00
<b>Double Sliding Doors</b>		
Over $3.7 \text{ m}^2$ not exceeding $5.6 \text{ m}^2$	\$ 868.00	\$ 997.00
Over 5.6 m <sup>2</sup> not exceeding 7.4 m <sup>2</sup>	659.00	789.00
Over $7.4 \text{ m}^2$ not exceeding $9.3 \text{ m}^2$	611.00	724.00
Reach-in Doors	Solid Hinged with Frame	Glass Hinged with Frame
610 x 610 mm	EA \$ 480	EA \$ -
610 x 914 mm	EA 640	EA -
610 x 1 219 mm	EA 780	EA -
610 x 1 422 mm 610 x 1 626 mm	EA -	EA 870
UIU X I UZU IIIIII	EA -	EA 1 100

## 5.013.200 SNOW MELTING EQUIPMENT - embedded in concrete

	m
Electric system, includes mat heater and controls	\$ 64.00
Glycol system, includes piping, pump, heat exchanger, glycol and controls	57.00

Note: Cost does not include concrete

### 5.013.300 LOADING DOCK RAMPS

Standard ramp costs include reinforced concrete foundation and walls, heavy reinforced concrete sloped slab and a bottom drain system. Standard depth is grade level at open end and sloped to 1.5 m at building dock end.

#### **BASE RATES (in dollars)**

Size Ranges - m <sup>2</sup>	Size 1 (0-49)			Size 2 (50-249)		Size 3 (250 & over)	
	K	AR	K	AR	K	AR	
	1 200	100.00	3 000	63.00	6 200	51.00	

#### PRECALCULATED ADJUSTMENTS (in dollars)

Height

per metre of height - add or deduct

Size Ranges - m <sup>2</sup>	Siz (0	e 1 -49)	Size (50-2		Size (250 &	
Component	K	AR	K	AR	K	AR
Foundation Wall	680	35.70	1 720	15.20	3 400	8.80

### UNIT COST ADJUSTMENTS

Concrete Steps - refer to 5.003.455

Steel Ladders - refer to 5.005.310

Steel Pipe Railing - refer to 5.005.315

Metal Gratings - refer to 5.005.320

Concrete Drain Trenches - refer to 5.075.225

**Bumper Posts** 

1.2 m pipe filled with concrete,

EA - add \$ 100

Loading Dock Equipment - refer to 5.011.550

Ramp Heating and Snow Melting Equipment - refer to 5.013.200

#### 5.013.400 COMMUNICATIONS

### 5.013.410 GUYED STEEL TOWERS

up to 122.0 metres high

Size		Per m of Height
254 mm	Ham Radio, Police and Fire Bands	\$ 125
508 mm	Taxi and Public Service Bands	197
588 mm	Radio, UHF, UHF Bands	246
1016 mm	Micro Wave Towers	492
1219 mm	Micro Wave Towers	640
1372 mm	Master TV System	713
1829 mm	Master TV System	984
2134 mm	Master TV System	1 476

Size - length of one side of the base of the tower.

The above costs include all concrete pads and foundations, guy wires, painting, aircraft warning lighting, integral ladder for maintenance work and all erection costs.

The above costs do not include antennas, coaxial cable, etc., or the erection of any of these items.

### 5.014.420 OTHER COMMUNICATION TOWERS AND STRUCTURES

Single Pole Wood Structure		\$231.00 per m
H-Frame or Two Pole Structure		\$551.00 per m
Self Supporting Triangular Pole Structure	\$460.00 per m	
Communications Shelter (Comshell)		\$9,244.00 per unit
Troposcatter Site (30.5 m length)		\$249,120.00 per unit
Satellite Dish (3.0 m diameter)		\$5,600.00 per unit

#### 5.013.500 RACQUETBALL/HANDBALL/SQUASH COURTS

All courts are pre-manufactured as a partial or full packaged unit and may be installed into any type of preconstructed building. Each court unit is considered and valued as a finish module only.

Standard racquetball/handball court size is  $6.1 \text{ m} \times 12.2 \text{ m} \times 6.1 \text{ m}$  high. Standard squash court size is  $6.4 \text{ m} \times 9.8 \text{ m} \times 6.1 \text{ m}$  high.

The following installed components are contained in the Base Rates for a standard court.

**Front Wall** - the major playing surface facing players, comprised of steel studs and 29 mm thick panels of bonded hardboard and plastic laminate surfaces over a high density particle board core.

**Side Walls** - steel studs and 21 mm thick tongue and groove panels with plastic laminate surfaces.

**Rear Wall** - identical frame and panel system as the side walls and also includes a solid core wood court entry door with safety glass viewport.

**Ceiling** - 6.1 m high, steel stud joists, 15.9 mm thick tongue and groove panels with plastic laminate surfaces and light fixture openings.

**Floor** - fully cushioned, wood sleepers, plywood underlay, 20 mm maple hardwood floor system laid over structural concrete slab.

#### Light

**Fixtures** - metal halide or 6 tube x 1.2 m fluorescent fixtures, flush mounted, heat and impact resistant, twin acrylic and tempered glass lenses, and remote multi-level switching and voltage control system.

**Note:** Only the light fixtures and their installation are part of a court cost. The basic electrical and wiring system must be provided and valued with **the** main structural building.

#### **BASE RATES**

	Base Rate Per Court
Racquetball / Handball Court	\$ 61 900
Squash Court	\$ 52 400

## 5.013.500 RACQUETBALL/HANDBALL/SQUASH COURTS continued

## PRECALCULATED ADJUSTMENTS

#### Masonry Walls and Ceilings, wall surface area

where structural portions of a building are concrete, concrete block or brick, and form part of a court perimeter, the following court finish systems may be found applied:

wood strapping and hardboard panelled wall/ceiling finish

- no adjustment

4 ply fibreglass acrylic masonry coating system, per m<sup>2</sup>

- deduct \$163.50

## Fixed Glass Wall Panels, wall surface area

12.7 mm tempered safety glass with supports, per m<sup>2</sup>

add \$414.00

### **Glass Doors**

in fixed glass rear walls

- add EA \$1050.00

### **Moveable Glass Backwall and Door**

aluminum framed, mounted on castors and track, converts a court from racquetball to squash or other uses

add per court \$9500.00

### 5.014.000 CONVEYING SYSTEMS

## 5.014.050 DUMBWAITERS including automatic call or send controls and car

Note: add hoisting and ancillary equipment together

## **Dumbwaiter Hoisting Equipment Electric**

		34 kg Capacity	(	90 kg Capacity		27 kg apacity
Speed - 15 mpm 2 stops	EA	\$ 9 700	EA	<b>\$ 16 100</b>	EA	\$ 22 500
Speed - 30 mpm 4 stops	EA	14 500	EA	24 200	EA	32 200
Speed - 45 mpm 4 stops	EA	19 300	EA	27 400	EA	37 000

Note: add \$3 500 for each additional stop

## **Ancillary Equipment**

Bi - Parting entrance with steel frame, sound deadened door panels, and glass window

		Paint	Stainless Steel
per stop	add	EA \$ 790	EA \$ 1 100

## 5.014.100 ELEVATORS including controls

## 5.014.105 FREIGHT ELEVATOR HOISTING EQUIPMENT medium duty

## **Hydraulic Hoisting Equipment** (up to 5 Floors)

ing armine in the same	Equipment (up )	(a 5 1 10010)		908 kg Capacity
Speed - 30 mpm			EA	\$ 46 900
<b>Electrical Hoisting</b> (up to 6 Floors)	Equipment			
		1 816 kg	2 724 kg	3 632 kg
		Capacity	Capacity	Capacity
Speed - 23 mpm	EA	\$ 67 600 EA	\$ 74 100 EA	\$ 82 100
Speed - 61 mpm	EA	80 500 EA	88 600 EA	97 400

**Note:** The above rates are for Hydraulic or Electrical Hoisting Equipment only. **Add** for car, entrances from 5.014.105 Ancillary Equipment.

**Note:** The following ancillary equipment must be **added** to Hoisting Equipment to determine the cost of a Freight Elevator System.

## **Ancillary Equipment**

Standard Freight Car	EA	\$ 7 200
Standard Freight Entrance baked enamel finish	EA	2 700

### 5.014.110 PASSENGER ELEVATOR HOISTING EQUIPMENT

## **Pre-manufactured Hydraulic Hoisting Equipment**

(5 floors) 38 mpm, 1 135 kg capacity (apartments and offices)

EA \$53 100

#### **Pre-manufactured Geared Electric Hoisting Equipment**

(5 floors) 90 mpm, 1 135 kg capacity (apartments and offices)

EA \$ 104 700

**Note:** The above rates are for Hoisting Equipment only. **Add** for car, entrances, etc. from 5.014.115, Passenger Elevator Ancillary Equipment.

### **Custom Hydraulic Hoisting Equipment** (up to 5 floors)

	Apartments & Offices 908 kg	Banks & Stores 1 816 kg	Hospitals 2 724 kg
Speed - 60 mpm	EA \$70 800	EA \$ 78 900	EA \$86 900

**Note:** The above rates are for Hoisting Equipment only. **Add** for car, entrances, etc. from 5.014.115 Passenger Elevator Ancillary Equipment.

### **Custom Geared Electric Hoisting Equipment**

	Apartments	Offices & Hotels	Banks & Stores
	681 kg	1 362 kg	2 043 kg
Speed - 30 mpm			
Suitable for			
5 - 7 floors			
Base Rate: 5 floors	EA \$72 500	EA \$ 78 900	EA \$ 83 700
Speed - 60 mpm			
Suitable for			
5 - 10 floors			
Base Rate: 5 floors	EA 85 300	EA 91 800	EA 99 800
Speed - 90 mpm			
Suitable for			
5 - 25 floors			
Base Rate: 10 floors	EA 124 000	EA 132 000	EA 141 700

Note: Base Rates are "per elevator"

**Note:** The above rates are for Hoisting Equipment only. **Add** for car entrances, etc. from 5.014.115, Passenger Elevator Ancillary Equipment.

## 5.014.110 PASSENGER ELEVATOR HOISTING EQUIPMENT - CONT'D

Gearless Hoisting Equipment			
	Hotels &	Stores &	Hospitals &
	Offices	Offices	Institutions
	908 kg	1 816 kg	2 270 kg
Speed - 120 mpm			
Suitable for			
6 - 12 floors			
Base Rate: 10 floors	EA \$ 143 100	EA \$ 157 800	EA \$ 165 800
Speed - 183 mpm			
Suitable for			
8 - 20 floors			
Base Rate: 10 floors	EA 188 400	EA 206 100	EA 217 400
Speed - 305 mpm			
Suitable for			
15 - 20 floors			
Base Rate: 20 floors	EA 281 800	EA 317 200	EA 333 300
Speed - 458 mpm			
Suitable for			
20 or more			
floors			
Base Rate: 30 floors	EA 362 300	EA 394 500	EA 418 600
<b>Note:</b> Base rates are "per elevator" Base Rates are based on the num	her of floors specified		
- for more or less floors <b>add</b> or	-		EA \$ 4 200
Express Elevators - for each floor by	-passed <b>deduct</b> per stop		EA \$ 2 100

**Note:** The above rates are for Hoisting Equipment only. **Add** for car, entrances, etc. from 5.014.115, Passenger Elevator Ancillary Equipment.

## 5.014.115 PASSENGER ELEVATOR ANCILLARY EQUIPMENT

**Note:** The following ancillary equipment costs must be **added** to Hoisting Equipment (from 5.014.110) to determine the cost of a Passenger Elevator system.

## Passenger Car

#### **Baked Enamel Finish**

Average Good		EA EA	\$ 10 600 15 900
Brushed Stainless Steel with laminated type finishes		EA	\$ 27 500
Polished Stainless Steel with wood veneer panelling and good ceiling		EA	\$ 33 000
Bronzed with good finished walls and ceiling		EA	\$ 33 000
Glass Rear Wall replaces back wall of a standard car to selected car class	add	EA	\$ 5 500
Glass Observation Car			
Custom - conventional shape 2 or 3 sides glazed		EA	\$ 33 000
Expensive - with added shape and expensive finishes		EA	\$ 44 000
<b>Luxurious or Unique</b> - specialty curved glass shapes with excellent finishes and special lighting		EA	\$ 55 000

## **Passenger Shaft Entrance Doors**

Baked Enamel		Single	Ι	Oouble
Average Good	EA EA	\$ 2 100 2 400	EA EA	\$ 4 000 4 500
Stainless Steel				
Brushed	EA	\$ 2 600	EA	\$ 5 300
Polished	EA	3 700	EA	6 900
Bronze	EA	\$ 3 900	EA	\$ 7 300
Wood Panelled		add		15%

Note: Do not apply Multiple Storey Adjustment to Elevator Hoisting and Ancillary Equipment costs.

EA \$ 568 400

610 500

EA

## 5.014.150 MOVING STAIRS AND WALKS

914 mm wide

1 118 mm wide

## **5.014.155 ESCALATORS**

800 mm Wide	Stainless Steel Inner Panels	Glass Inner Panels
3.10 m Rise	EA \$ 106 30	0 EA \$ 120 100
4.60 m Rise	EA 113 20	0 EA 127 000
6.10 m Rise	EA 120 10	0 EA 135 200
7.60 m Rise	EA 127 00	0 EA 142 100
1 200 mm Wide		
3.10 m Rise	EA \$ 110 40	0 EA \$ 124 200
4.60 m Rise	EA 120 10	0 EA 133 900
6.10 m Rise	EA 128 30	0 EA 144 900
6.60 m Rise	EA 138 00	0 EA 154 600
5.014.160 MOVING WALKS		
	Stainless St	
Horizontal Type	Inner Pan	
	m	m
1 118 mm wide	\$ 10 600	\$ 11 900

**Inclined Type** 4.9 m Rise - **Glass or Stainless Steel Inner Panels** 

## 5.014.200 CONVEYORS AND CHUTES

## 5.014.205 GRAVITY CONVEYORS WITH STEEL FRAME

		375 mm m	Conveyor Width 525 mm m		675 mm m
_	Light Duty				
	38 mm diameter rollers, 45.4 kg capacity	\$ 126.00	<b>\$ 140.00</b>	\$	5 154.00
	Medium Duty				
	50 mm diameter rollers, 136.2 capacity	182.00	238.00		-
	Heavy Duty				
	63 mm diameter rollers, 272.4 kg capacity	392.00	448.00		756.00
	Extra Heavy Duty				
	88 mm diameter rollers, 1 134 kg capacity	1 750.00	2 310.00		3 122.00
.014.210 PO	OWER BELT CONVEYORS standard electric motor and drive 373 watts	speed 18 to 30 mpm,			
.014.210 PO		speed 18 to 30 mpm,  375 mm  m	Belt Width 575 mm m		975 mm m
.014.210 PO		375 mm	575 mm		
-		375 mm m \$ 588.00	575 mm m		m
_	electric motor and drive 373 watts	375 mm m \$ 588.00	575 mm m		m
_	electric motor and drive 373 watts  HUTES Linen or Garbage Chutes 610 m  Aluminum or Galvanized Steel	375 mm m \$ 588.00	575 mm m		m \$ 882.00 m \$ 280.00
_	electric motor and drive 373 watts  HUTES Linen or Garbage Chutes 610 m  Aluminum or Galvanized Steel  Aluminum	375 mm m \$ 588.00	575 mm m		m \$ 882.00 m \$ 280.00 392.00
-	electric motor and drive 373 watts  HUTES Linen or Garbage Chutes 610 m  Aluminum or Galvanized Steel	375 mm m \$ 588.00	575 mm m		\$ 882.00 m \$ 280.00
-	electric motor and drive 373 watts  HUTES Linen or Garbage Chutes 610 m  Aluminum or Galvanized Steel  Aluminum	375 mm m \$ 588.00	575 mm m	EA	m \$ 882.00 m \$ 280.00 392.00
.014.215 CF	HUTES Linen or Garbage Chutes 610 m  Aluminum or Galvanized Steel Aluminum Stainless Steel	375 mm m \$ 588.00	575 mm m	EA	m \$ 882.00 m \$ 280.00 392.00 504.00
5.014.215 CF	HUTES Linen or Garbage Chutes 610 m  Aluminum or Galvanized Steel Aluminum Stainless Steel Chute Accessories (Sanitizer)	375 mm m \$ 588.00 nm diameter	575 mm m	EA	m \$ 882.00 m \$ 280.00 392.00 504.00
5.014.215 CF	HUTES Linen or Garbage Chutes 610 m  Aluminum or Galvanized Steel Aluminum Stainless Steel Chute Accessories (Sanitizer)  NEUMATIC TUBE SYSTEM	375 mm m \$ 588.00 nm diameter	575 mm m		m \$ 882.00 m \$ 280.00 392.00 504.00
5.014.215 CF	HUTES Linen or Garbage Chutes 610 m  Aluminum or Galvanized Steel Aluminum Stainless Steel Chute Accessories (Sanitizer)  NEUMATIC TUBE SYSTEM	375 mm m \$ 588.00 nm diameter	575 mm m		m \$ 882.00 m \$ 280.00 392.00 504.00
5.014.215 CF	HUTES Linen or Garbage Chutes 610 m  Aluminum or Galvanized Steel Aluminum Stainless Steel Chute Accessories (Sanitizer)  NEUMATIC TUBE SYSTEM  Station Controlled round or oval tub	375 mm m \$ 588.00 nm diameter	575 mm m	Pe	m \$ 882.00 m \$ 280.00 392.00 504.00 170

#### 5.014.300 HOISTS AND CRANES

#### 5.014.305 OVERHEAD TRAVELLING BRIDGE CRANES

Base Rates for an overhead travelling bridge crane contain the following major components.

Bridge - either a shaped or boxed heavy steel single girder or twin girders, which span the distance across or between two crane runway tracks, usually the width of a building, and supporting a mobile trolley and crane hoist system.

Bridge end trucks - are motorized gear driven wheeled trolleys or carriers attached to each end of a bridge, and run on a steel beam flange or steel track forming part of a crane runway. The trucks are used to move a bridge parallel along the length of a runway.

Trolley - an electric, motorized or manually operated steel framed carriage platform with wheels, which carries a mounted hoist and drive assembly laterally across the length of a bridge. A trolley may be either under running or top mounted on a single girder bridge, and is always top running mounted on a double girder bridge.

Hoist - is the lifting unit assembly mounted to a trolley and consists of a swivel safety hook, block pulleys, cable, cable drum, gear drives, electric motors, switches and control system.

Electrical - consists of installed power supply, separate panel breakers, load safety switches, conduit, flexible cable wiring, emergency limit switches, tagline cable loop trolley system and control panels.

#### Light/Medium Duty: Single Girder Bridge Crane

Top or under running, with floor controlled operation and internally located.

Hoist Capacity (tonnes)	Base Rate 9.1 m Span	Add or Deduct Per 1.5 m Bridge Span
0.91	\$ 18 200	\$ 680
1.81	19 430	780
2.72	22 100	780
4.54	28 700	950
6.80	32 700	950
9.07	38 970	1 050

#### 5.014.305 OVERHEAD TRAVELLING BRIDGE CRANES - CONTINUED

### **Heavy Duty: Double Girder Bridge Crane**

Top running, with floor controlled operation and internally located.

Hoist Capacity (tonnes)	Base Rate 9.1 m Span	Add or Deduct Po 1.5 m Bridge Spa	
4.54 6.80 9.07	\$ 33 900 40 300 47 500	\$ 1 050 1 085 1 350	
13.61 18.14 22.68	68 850 73 900 87 300	1 400 1 400 1 600	
<b>Two Speed Bridge</b> Single Girder Double Girder		add add	\$ 2 400 \$ 2 400
Steel Walkways on Crane Bri ladders per metre along brid	0,		tant \$ 1 850 per m \$354
Cab Controlled Operation open style cab enclosed cab		add add	\$ 4 900 \$ 14 930
Exterior Operation Bridge cranes operated partly operated totally outside Bridge		g or <b>add</b>	10%
<b>Manual Hoists</b>			
Bridge cranes with a manual h - Bridge Crane Base Rate	oist	deduct	20%

## **Multiple Hoists**

Where more than one hoist is found on one bridge, only one cost for one bridge crane shall be applied.

The total combined lifting capacity of all the hoists found on a bridge must be used to select the appropriate crane base rate.

When the total combined lifting capacity falls between two of the above listed capacities the higher capacity must be used to determine and select the base rate. **No interpolation shall be applied.** 

### 5.014.305 OVERHEAD TRAVELLING BRIDGE CRANES - CONTINUED

Examples:

2 hoists @ 4.54 tonnes each, equals a 9.07 tonne bridge crane with a base rate of: single girder - \$ 38 970 double girder - \$ 47 500

2 hoists @ 4.54 tonnes each, plus 1 hoist @ 1.81 tonnes equals 10.89 tonnes total capacity. Therefore apply base rate for a 13.61 tonne crane of \$ 68 850.

### 5.014.310 CRANE RUNWAYS

A runway or craneway is a system of two parallel steel beam tracks on which one or more bridge cranes may operate and travel horizontally overhead. Two major types are found.

Bracket Mounted Runway - a system of steel beam tracks mounted on steel support brackets. The support brackets in turn are attached to and integrated with the steel column framing members of a building.

**Free Standing Runway** - a structural system consisting of reinforced concrete piles, pile caps, steel columns, steel bracing, steel beam tracks, electrical supply, and independently constructed. This type of runway may be located both internally or externally from a building.

**Runway Capacity** - total capacity of a runway is determined and calculated by combining the lifting capacity of all bridge cranes located and operating on a single runway. Where total capacity found falls between two listed capacities, the higher capacity shall be the applicable rating, to a maximum of 22.68 tonnes. **No interpolation shall be applied.** 

#### **Bracket Mounted Runway**

Total Capacity (tonnes)		Base Rate		Add per m of Length
1.81	\$	200	\$	430
2.72	•	200	•	490
4.54		1 300		640
6.80		1 300		770
9.07		1 300		890
13.61		1 300		1 110
18.14		1 460		1 300
22.68		1 460		1 430

### Free Standing Runway

Total Capacity (tonnes)	Base Rate		Add per m of Length	
1.81	\$	4 300	\$ 600	
2.72	·	4 300	670	
4.54		4 700	770	
6.80		5 300	890	
9.07		5 800	1 010	
13.61		8 200	1 300	
18.14		10 200	1 580	
22.68		10 200	1 910	

#### 5.014.330 MONORAIL TRACK HOISTS

Base Rates for these systems include a crane runway of brackets, clamps, hangers, switches and steel beam monorail track, trolleys, hoists, electrical and installation costs.

The trolley is a carriage and wheel arrangement that moves the hoist along a runway. A monorail may have the following hoist and trolley combination:

- motorized trolley plus motorized hoist
- manual trolley plus motorized hoist
- manual trolley plus manual hoist.

## **Monorail Hoists & Trolleys**

Hoist Capacity (tonnes)	Manual Hoist Manual Trolley	Motorized Hoist Manual Trolley	Motorized Hoist Motorized Trolley
0.45	\$ 660	\$ 2180	\$ 2 660
0.43	Ψ 800 800	2 650	φ 2 000 3 230
1.81	1 090	3 590	4 380
2.72	1 370	4 530	5 530
3.63	1 650	5 470	6 680
4.54	1 940	6 410	7 830
6.80	1 550	8 430	10 290

#### 5.014.335 MONORAIL TRACK RUNWAYS

A runway or craneway may have a straight or curved monorail track, and may be free-standing or suspended and integrated into the structural framing system of the floor or roof of a building. This latter arrangement is the most common monorail configuration.

Total Capacity (tonnes)	Straight Runway/m	Curved Runway/m
0.45	<b>\$ 18</b>	\$ 50
0.91	18	75
1.81	42	126
2.72	83	177
3.63	116	228
4.54	151	278
6.80	223	387

Note: Determine total capacity of track runway as other crane runway systems.

#### **5.014.350 JIB CRANES**

Jib cranes are also referred to as jib boom shop cranes. Costs include crane materials package, base, electrical and installation.

Three major types are commonly found.

**Wall Bracket Mounted -** has no post and jib or boom is mounted on brackets attached to a main steel framing member of a building.

**Post Side-Mounted, Partial Rotation -** jib or boom is mounted on hinges to the side of a free-standing steel post. Hinges allow boom to swing or rotate 180° - 220°.

**Post Top-Mounted, Full Rotation -** jib or boom is attached to a revolving steel sleeve and mounted on top of a steel post, allowing a full 360° of rotation.

#### **Wall Bracket Jib Cranes**

Capacity (tonnes)	Hoist Type	Base Rate	Boom Length Add per m
0.23	manual electric	1 150 4 850	\$ 84 84
0.45	manual electric	1 150 5 050	86 86
0.91	manual	1 200	97
1.36	electric manual	5 <b>500</b> 1 <b>500</b>	97 130
	electric	6 750	130
1.81	manual electric	1 500 6 700	148 148
2.72	manual electric	2 000 11 050	276 276
4.54	manual	3 500	350 350
	electric	14 700	350

## **5.014.350 JIB CRANES - CONT'D**

## **Post Side-Mounted Jib Cranes**

Capacity (tonnes)	Hoist Type	Base Rate	Boom Length Add per m
0.23	manual	\$ 1600	\$ 326
	electric	5 300	326
0.45	manual	.1 <b>750</b>	294
	electric	5 650	294
0.91	manual	2 100	353
	electric	6 400	353
1.36	manual	2 400	473
	electric	7 700	473
1.81	manual	2 450	570
	electric	7 700	570
2.72	manual	3 300	576
	electric	12 500	576
4.54	manual	4 600	739
	electric	15 800	739

## **Post Top-Mounted Jib Cranes**

Capacity (tonnes)	Hoist Type	Base Rate	Boom Length Add per m
0.23	manual	1 800	\$ 308
	electric	5 500	308
0.45	manual	2 000	365
	electric	5 900	365
0.91	manual	1 700	578
	electric	6 000	578
1.36	manual	2 000	690
	electric	7 200	• 690
1.81	manual	2 000	740
	electric	7 250	740
2.72	manual	3 100	884
2.72	electric	12 250	884
4.54	manual	3 600	1 295
4.34	electric	14 800	1 295
			= => 0

## 5.014.350 JIB CRANES - CONT'D

## Post Column Height Adjustment

All post heights in rate provide a jib boom clearance of 3.7 m. For post or column height adjustments, greater than or less than 3.7 m, **add or deduct** as follows:

Capacity (tonnes)	Post Diameter	Height Adjustment per m
0.23	200 mm	<b>\$ 180</b>
0.45	250 mm	260
0.91	300 mm	310
1.36	350 mm	340
1.81	400 mm	400
2.72	500 mm	640
4.54	600 mm	790

## **5.015.000 MECHANICAL**

## 5.015.200 PLUMBING

5.015.230

5.015.235

## **5.015.225 WATER TREATMENT** water softeners

Capacity	Semi A	Automatic	A	<u>utomatic</u>
620 g	EA	\$ 480	EA	\$ 540
1116 g	EA	570	EA	670
1550 g	EA	670	EA	800
2325 g	EA	-	EA	1 200
3255 g	EA	-	EA	1 400
TE WATER DISPOSAL AND TREATMENT				
Septic Tank Systems and Disposal Field including				
excavation, stone bedding and backfilling				
3 273 litres			EA	\$ 3 700
9 092 litres			EA	6 00
22 730 litres			EA	10 80
WATER HEATERS				
Gas fired				
286 L/h			EA	\$ 1 100
459 L/h			EA	1 500
596 L/h			EA	1 800
1 068 L/h			EA	2 20
1 373 L/h			EA	2 500
Gas fired car wash unit high recovery				
791 L/h			EA	\$ 2 900
1 227 L/h			EA	3 100
1 754 L/h			EA	3 700
2 110 L/h			EA	4 200
2 655 L/h			EA	5 200
Gas fired coin laundry unit				
1 227 L/h			EA	\$ 3 800
1 754 L/h			EA	4 700
2 110 L/h			EA	5 300
2 655 L/h			EA	6 300
3 073 L/h			EA	6 700

### 5.015.240 PLUMBING FIXTURES

## **Drinking Fountains**

Vitreous China 1	non-refrigerated
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Wall hung 305 x 330 mm	EA	\$ 690
Semi-recessed 381 x 660 mm	EA	800

## **Fibreglass**

Wall hung 254 x 356 mm	EA	\$ 660
Semi-recessed 406 x 711 mm	EA	<b>750</b>

## Refrigerated

Wall mounted	EA	\$ 930
Floor mounted	EA	960

### 5.015.245 COMMERCIAL AND INDUSTRIAL FIXTURES

Commercial Sinks stainless steel with 203 mm high splash boards

## Single Compartment 356 mm deep

610 x 610 mm	EA	<b>\$ 900</b>
610 x 762 mm	EA	1 000
610 x 914 mm	EA	1 100

## **Double Compartment** 356 mm deep

381 x 610 mm	EA	\$ 1 100
508 x 610 mm	EA	1 300
610 x 762 mm	EA	1 500

## Triple Compartment 356 mm deep

381 x 610 mm	EA	<b>\$ 1 700</b>
508 x 610 mm	EA	1 900
610 x 610 mm	EA	2 100

<b>Note:</b> For drainboards either side	add	EA \$ 590
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## Laundry Sinks steel enamelled

Single Bowl 533 x 610 mm	EA	\$ 580
Double Bowl 533 x 813 mm	EA	660
Single Compartment 559 x 559 mm	EA	640
Double Compartment 559 x 1 118 mm	EA	<b>750</b>

## Service Sinks cast iron enamelled

Wall hung 457 x 559 mm	EA	<b>\$ 1 300</b>
Mop receptor, floor type, 457 x 559 mm	EA	1 200

## 5.015.245 COMMERCIAL AND INDUSTRIAL FIXTURES - CONT'D

### Washfountains

TD 4	TITO .
Precast	Terrazzo

Semi-circular 914 mm	EA	<b>\$ 1 600</b>
Semi-circular 1 372 mm	EA	1 900
Circular 914 mm	EA	1 800
Circular 1 372 mm	EA	2 000

### **Stainless Steel**

Semi-circular 914 mm	EA	\$ 1 900
Semi-circular 1 372 mm	EA	2 400
Circular 914 mm	EA	2 000
Circular 1 372 mm	EA	2 800

## 5.015.250 PLUMBING SPECIALTIES

## Floor Drains brass top including 3.3 m pipe

50 mm	EA	\$ 380
75 mm	EA	320
100 mm	EA	340

## 5.015.500 FIRE PROTECTION

## 5.015.505 AUTOMATIC SPRINKLER SYSTEM

Wet System	Protection Area Per Head				
Exposed Piping	8.4 m <sup>2</sup>	$9.3 \text{ m}^2$	12.1 m <sup>2</sup>	15.6 m <sup>2</sup>	18.6 m <sup>2</sup>
First Level					
Constant	\$ 2 800	\$ 2 500	\$ 1 900	\$ 1 500	\$ 1 300
Area Rate m <sup>2</sup>	12.00	11.00	8.40	6.50	5.50
Additional Levels					
Area Rate m <sup>2</sup>	10.00	9.30	7.30	5.50	4.60
<b>Concealed Piping</b>					
First Level					
Constant	\$ 2 800	\$ 2 500	\$ 1 900	\$ 1 500	\$ 1 300
Area Rate m <sup>2</sup>	14.50	13.00	10.00	7.80	6.70
Additional Levels					
Area Rate m <sup>2</sup>	13.00	11.50	8.70	6.80	5.80

#### 5.015.505 AUTOMATIC SPRINKLER SYSTEM - CONT'D

Flush Heads					
First Level Constant	\$ 2 800	\$ 2 500	<b>\$ 1 900</b>	\$ 1 500	<b>\$ 1 300</b>
Additional Levels					
Area Rate m <sup>2</sup>	15.50	14.00	11.00	8.50	7.50

Wet Pipe Systems The wet pipe system employs automatic sprinklers attached to piping containing water under pressure at all times. When fire occurs, individual sprinklers are actuated by the heat and water flows immediately. This system is generally used wherever there is no danger of the water in the pipes freezing, and wherever there are no special conditions requiring one of the other systems.

Dry System	Protection Area Per Head				
Exposed Piping	8.4 m <sup>2</sup>	9.3 m <sup>2</sup>	12.1 m <sup>2</sup>	15.6 m <sup>2</sup>	18.6 m <sup>2</sup>
First Level					
Constant	\$ 2 900	\$ 2 600	\$ 2 000	<b>\$ 1 600</b>	\$ 1 300
Area Rate m <sup>2</sup>	12.50	11.00	8.70	6.70	5.50
Additional Levels					
Area Rate m <sup>2</sup>	10.50	9.40	7.30	5.80	4.80
<b>Concealed Piping</b>					
First Level					
Constant	\$ 2 900	<b>\$ 2 600</b>	\$ 2 000	<b>\$ 1 600</b>	<b>\$ 1 300</b>
Area Rate m <sup>2</sup>	15.00	13.50	10.00	8.00	6.70
Additional Levels					
Area Rate m <sup>2</sup>	13.00	11.50	9.00	7.00	5.80
Flush Heads					
First Level					
Constant	\$ 2 900	<b>\$ 2 600</b>	\$ 2 000	<b>\$ 1 600</b>	<b>\$ 1 300</b>
Area Rate m <sup>2</sup>	17.50	16.00	12.00	9.60	8.00
Additional Levels					
Area Rate m <sup>2</sup>	16.00	14.50	11.00	8.70	7.30

**Dry Pipe System** A dry pipe system has automatic sprinklers attached to piping containing air under pressure. When a sprinkler is opened by heat from fire, air pressure is reduced, the dry pipe valve is opened by water pressure, and water flows to any open sprinklers. Dry pipe systems operate more slowly than wet types, and are also more expensive to install and to maintain. For these reasons, they are normally installed only where necessary (generally where freezing is a problem).

Pre-Action or Deluge Systems: add 50% to Dry System cost

#### 5.015.505 AUTOMATIC SPRINKLER SYSTEM - CONT'D

**Pre-Action Systems** Pre-action systems are designed primarily to counteract the operational delay of conventional dry pipe systems, and to eliminate the danger of water damage resulting from accidental damage to automatic sprinklers or piping.

In pre-action systems, the water supply valve is actuated independently of the opening of sprinklers; i.e., the valve is opened by the operation of an automatic fire detection system and not by the fusing of the sprinklers.

**Deluge Systems** The purpose of a deluge system is to deliver the most water in the least time. It wets down an entire fire area by admitting water to sprinklers or spray nozzles which are open at all times. By using automatic fire detection devices of the type used in pre-action systems or controls designed for individual hazards, it is possible to apply water to fire more quickly than with systems in which operation depends on the opening of sprinklers only as the fire spreads. Deluge systems are suitable for extra hazard occupancies in which flammable liquids are handled or stored, and where there is a possibility that fire may flash ahead of the operation of ordinary automatic sprinklers.

#### 5.015.510 SPRINKLER SYSTEM ANCILLARY EQUIPMENT

The following precalculated rates contain additional costs for miscellaneous equipment found in a structure in conjunction with and complementing any type of sprinkler fire protection system.

Inclusive costs are for a normal quantity and quality of items which include interior and exterior siamese connections, valves, fire hose cabinets, exit signs, manual pull downs, alarm bells, emergency lights, wiring and installation, and must be added to sprinkler system costs.

All Sizes - m <sup>2</sup>		K	AR
Hotel			
basement	add	\$ 1 920	\$ 1.60
main	add	5 020	1.90
upper	add	1 580	1.30
Store			
basement	add	\$ 1 920	\$ 1.60
main	add	4 580	1.60
upper	add	1 920	1.60
Office basement			
	add	\$ 1 920	\$ 1.60
main	add	4 580	1.60
upper	add	1 580	1.30
Warehouse			
basement	add	\$ 1 920	\$ 1.60
main	add	4 240	1.30
upper	add	1 580	1.30

#### 5.015.515 FIRE DETECTOR SYSTEMS

A fire detector system replaces or supplements a sprinkler system. Where water is not wanted, or has no effective use, sprinkler heads, etc. are replaced by a series of interconnected sensors, which detect gases, heat, or smoke fumes. Detectors are also located in air ducts and ventilation systems. All sensors are in turn linked electronically to control panels and automatic alarm systems.

Sensor detector systems of three types are normally found.

Ionization - are very fast, highly sensitive, and react to combustion gases, odors or changes in air quality. Uses are found in high hazard volatile areas, vaults, document and data centres or sensitive equipment areas.

Thermal - respond to heat changes from pre-set temperature limits and are used in high heat areas such as manufacturing or mechanical rooms.

Smoke - have slow response time and react to concentrated smoke fumes only. Uses are mainly found in apartments, small commercial businesses, public buildings, and other low hazard areas.

	Dete	ation ector tem	Dete	rmal ector etem	Det	noke tector stem
All Sizes m <sup>2</sup>						
Hotel	K	AR	K	AR	K	AR
basement	\$ 1 340	\$ 4.30	\$ 540	\$ 1.70	\$ 270	\$ 0.90
main floor	1 560	8.60	630	3.50	310	1.70
upper floor		8.60	-	3.50	-	1.70
Store						
basement	<b>\$ 1 560</b>	\$ 10.10	\$ 630	\$ 4.10	\$ 310	\$ 2.00
main floor	1 560	10.60	630	4.30	310	2.10
upper floor		10.60	-	4.30	-	2.10
Office						
basement	<b>\$ 1 340</b>	\$ 4.30	\$ 540	<b>\$ 1.70</b>	\$ 270	\$ 0.90
main floor	1 560	10.60	630	4.30	310	2.10
upper floor	-	10.60	-	4.30		2.10
Warehouse						
basement	\$ 670	\$ 4.50	\$ 270	<b>\$ 1.80</b>	<b>\$ 130</b>	\$ 0.90
main floor	670	4.50	270	1.80	130	0.90
upper floor	-	4.50	-	1.80	-	0.90

## 5.015.520 DETECTOR SYSTEM ANCILLARY EQUIPMENT

The following precalculated rates are for additional combined costs for miscellaneous equipment found in a structure in conjunction with and complementing any type of fire detector system.

Normal quantities and quality of items will include a standpipe system, interior and exterior siamese connections, valves, fire hose cabinets, exit signs, manual pull downs, alarm bells, emergency lights, wiring and installation costs, and must be added to detector system costs.

All Sizes - m <sup>2</sup>		K	AR
Hotel			
basement	add	\$ 3 400	\$ 2.80
main	add	8 680	4.90
upper	add	3 070	2.50
Store			
basement	add	\$ 3 400	\$ 2.80
main	add	8 230	4.50
upper	add	3 400	2.80
Office			
basement	add	\$ 3 400	\$ 2.80
main	add	7 900	4.30
upper	add	3 070	2.50
Warehouse			
basement	add	\$ 3 400	\$ 2.80
main	add	8 230	4.50
upper	add	3 070	2.50

#### 5.015.530 ANNUNCIATOR PANEL MONITORING ALARM SYSTEMS

In conjunction with a sprinkler or sensor detector fire protection system, a central remote monitoring annunciator alarm system and control facility is normally found.

Annunciator panels are located in close proximity to a building entrance. This system consists of audiovisual display panels, monitoring equipment, electric indicators to show source, origin, or location of a fire, alarm initiating devices, zone indicators, mechanical control centers for water flow, gate valve and pressure switches, activating sprinkler systems, and automatic controls for fans, vents, doors and air handling system zones.

In higher and larger type buildings a voice communication system forms part of an alarm system, with provisions for 2-way communication with amplifier, loudspeakers, and emergency telephones.

Costs for these monitoring alarm systems must be added to the cost of sprinkler or detector system and costs for ancillary equipment in order to arrive at a total fire protection system cost.

#### **Annunciator and Control Panel**

2 zone display - add EA \$ 1 500

4 zone display - add EA \$ 1 750

8 zone display - add EA \$ 2 000

12 zone display - add EA \$ 3 200

24 zone display - add EA \$ 4 500

32 zone display - add EA \$ 5 500

#### **Annunciator and Control Panel with Voice Alarm System**

2 zone display - add EA \$ 3 700

4 zone display - add EA \$ 5 900

8 zone display - add EA \$ 8 200

12 zone display - add EA \$ 12 300

24 zone display - add EA \$ 15 700

32 zone display - add EA \$ 19 100

Note: The number of zones can usually be counted on the annunciator display panels.

#### 5.015.540 HALON GAS FIRE SUPPRESSION SYSTEMS

Halon gas and carbon dioxide gas agent fire suppression systems are designed for use in isolated or high risk areas, unusual hazards or special environments, and where water sprinkler systems are of no use or undesirable. These are referred to as "clean" systems that leave no residue or do not contaminate contents such as documents, records or electronic equipment.

Total systems include costs of all electrical, mechanical, ancillary items and installation. Items included are gas storage cylinders, piping distribution system, discharge nozzles, automatic fire, heat and smoke photoelectric or ionization detectors, pull down stations, horn and bell alarms, annunciator control panel modules, activation modules for door closures, air system, computer system and exhaust system automatic shutdown. **No additional add-on costs are required with these systems.** 

Systems are used in such locations as libraries, museums, bank and security vaults, electronic data processing, tape and data storage, transformer rooms, telephone exchanges, laboratories, radio and television facilities, and flammable liquid storage areas.

Coverage	Area	per	System
----------	------	-----	--------

Size Ranges m2	Size 1 (0-49)		Size 2 (50-249)		Size 3 (250 & over)	
	K	AR	K	AR	K	AR
Regular Floor Area Access Floor Area	1 500 1 500	126 141	4 300 4 400	69 81	6 900 7 000	59 71

## 5.015.550 STAND PIPE & FIRE HOSE EQUIPMENT

#### Fire Hose Rack

Steel, painted with 22.9 m of hose	EA	\$ 340	
Fire Hose Cabinet recessed			
Steel, painted with 22.9 m of hose	EA	560	
Steel, painted with 22.9 m of hose and fire extinguisher	EA	700	
Chrome faced with 22.9 m of hose	EA	830	
Chrome faced with 22.9 m of hose and fire extinguisher	EA	910	
Fire Extinguisher Cabinet recessed			
Steel, painted with glass door	EA	290	

## 5.015.560 SPECIALTY ITEMS

The following are some of the items included in the precalculated costs of an Ancillary Equipment System. Individual costs are provided for use where a smaller structure does not contain a complete fire protection system and may have only a partial alarm system.

## **Siamese Pumper Connections**

		flush all Type		jection ll Type		lewalk Unit
60 x 60 x 100 mm 60 x 60 x 125 mm	EA EA	\$ 430 510	EA EA	\$ 380 430	EA EA	\$ 500 600
75 x 75 x 100 mm	EA	530	EA	_	EA	_
75 x 75 x 125 mm	EA	580	EA	_	EA	_
Polished Chrome add 10%	•					
Check Valves used with abo	ove connect	ions 100				
mm					EA	\$ 320
150 mm					EA	510
200 mm					EA	720
Alarm Bells						
150 mm diameter					EA	\$ 80
250 mm diameter					EA	140
Horns						
standard alert					EA	\$ 80
speaker and alert					EA	150
<b>Pull-Down Stations</b>						
standard metal					EA	\$ 80
key-lock 2 stage					EA	120
Exit Signs						
standard					EA	<b>\$ 70</b>
good					EA	120
<b>Emergency Lights</b>						
good, twin head c/w batte					EA	<b>\$190</b>
expensive, 150 x 600 mm	tube type				EA	310

#### 5.015.600 HEATING, COOLING, AIR DISTRIBUTION

## 5.015.620 HEAT TRANSFER EQUIPMENT

#### **Suspended Unit Heaters**

#### **Gas Fired**

11.7 kW	EA	<b>\$ 710</b>
23.4 kW	EA	830
35.2 kW	EA	1 020
46.9 kW	EA	1 300
58.6 kW	EA	1 700
70.3 kW	EA	2 100
82.0 kW	EA	2 400
93.8 kW	EA	2 700

#### **Gas Fired Infra-red Ceramic Plate Units**

These units may be made up from 1 to 8 ceramic plates. Each plate has a potential input of 4.4 kW each. While the unit itself is not required to be vented, its use is limited to commercial buildings where the water vapour created can be exhausted by other means.

4.4 kW	EA	\$ 530
8.8 kW	EA	590
14.7 kW	EA	680
17.6 kW	EA	770
22.0 kW	EA	900
26.4 kW	EA	1 000
30.8 kW	EA	1 100
35.2 kW	EA	1 200

#### **Infra-red Steel Tube Radiant Heat Systems**

Two types of horizontal steel tube radiant heaters are found. A vacuum induced continuous loop system has gas fired burners at spaced intervals on a continuous perimeter mounted burning tube, a vacuum pump, air supply blower fan, filters, and a fume exhaust system made up of ducts, vents and chimney.

An individual unit forced air combustion tube system may be made up of a single unit or a series of spaced individual burner tube units. Each unit has a burner head control, burner tube, forced air fan, thermostat and zone controls.

Both systems are suspended and have aluminum or steel heat reflector pans and grills.

Continuous Loop System	K ARm²	\$ 500 \$ 18.00
Individual Tube Unit System	K ARm²	\$ 300 \$ 14.00

## 5.015.620 HEAT TRANSFER EQUIPMENT - CONT'D

**Horizontal Type Unit Heaters** These are rectangular in shape and are suspended from the wall or ceiling. Installation includes wiring, thermostat and an average amount of piping. They do not include the cost of the boiler or heat source.

Steam		
10.6 kW	EA	\$ 500
18.5 kW	EA	600
36.6 kW	EA	840
52.7 kW	EA	1 100
70.3 kW	EA	1 400
103.2 kW	EA	2 100
Hot Water		
6.7 kW	EA	\$ 500
11.7 kW	EA	600
23.4 kW	EA	840
33.7 kW	EA	1 100
47.2 kW	EA	1 400
73.3 kW	EA	2 100

**Vertical Projection Unit Heaters** These heaters are round in shape and hang from the ceiling. Installation includes wiring, thermostat and an average amount of piping. They do not, however, include the cost of the boiler or heat source.

Steam		
4.9 kW	EA \$ 740	0
10.7 kW	EA 840	0
14.7 kW	EA 1000	0
26.1 kW	EA 1 400	D
Hot Water		
2.8 kW	EA \$ 740	0
7.6 kW	EA 840	0
10.4 kW	EA 1000	0
19.1 kW	EA 1400	0

## 5.015.620 HEAT TRANSFER EQUIPMENT - CONT'D

#### RADIANT ROLL HEATING SYSTEMS

A complete system includes a hot water boiler, water treatment system, pumps, water lines, gas line, supply and return headers, foil faced vapour barrier, rubberized propylene tubing mats or plastic piping, zone controls, electrical and installation costs.

Tubing or piping between wood floor joists or embedded in concrete usually have a spacing of 300 mm, while tubing or piping in concrete driveways and ramps will have a spacing of 75 mm.

#### Floor System Application

Concrete Slab-on-grade	per m² - add	\$ 21.00
Suspended Concrete Floor Framing Systems	per m² - add	21.00
Concrete Slab on Steel Deck	per m <sup>2</sup> - add	21.00
Wood Joisted Floor System	per m <sup>2</sup> - add	23.00
Parking Ramps, Driveways, Loading Dock Ramps	per m <sup>2</sup> - add	81.00

**NOTE:** Where this system is found embedded in gyperete or lightweight foamcell topping in conjunction with a wood joisted floor, an addition must also be made for costs of these toppings, and an addition made for costs of any insulation found.

The above rates must be applied to each level or floor of a structure, including basement slabs.

EA

EA

EA

EA

EA

1 100

1 800

2 100

3 600

3 800

## 5.015.625 AIR DISTRIBUTION

 $0.94 \text{ m}^3/\text{s}$ 

 $1.98 \text{ m}^3/\text{s}$ 

 $2.83 \text{ m}^3/\text{s}$ 

 $4.52 \text{ m}^3/\text{s}$ 

 $6.84 \text{ m}^3/\text{s}$ 

## Vaneaxial Fans belt drive, suspended

2		
$1.4 \text{ m}^3/\text{s}$	EA	\$ 1 700
$2.4 \text{ m}^3/\text{s}$	EA	1 900
$3.3 \text{ m}^3/\text{s}$	EA	2 200
$4.7 \text{ m}^3/\text{s}$	EA	3 300
$7.0 \text{ m}^3/\text{s}$	EA	4 100
$9.4 \text{ m}^3/\text{s}$	EA	6 000
Propeller Fans direct drive, wall type not including		
exhaust shutters		
$305 \text{ mm } 0.47 \text{ m}^3/\text{s}$	EA	\$ 430
$406 \text{ mm } 0.94 \text{ m}^3/\text{s}$	EA	490
$610 \text{ mm } 2.4 \text{ m}^3/\text{s}$	EA	600
$762 \text{ mm } 3.8 \text{ m}^3/\text{s}$	EA	650
914 mm 7.0 $m^3/s$	EA	1 000
1 067 mm 9.4 m <sup>3</sup> /s	EA	1 800
$1\ 219\ \text{mm}\ 14.2\ \text{m}^3/\text{s}$	EA	2 480
$1\ 372\ \text{mm}\ 18.0\ \text{m}^3/\text{s}$	EA	2 500
1 524 mm 23.6 m <sup>3</sup> /s	EA	3 200
1 829 mm 28.3 m <sup>3</sup> /s	EA	4 500
Roof Exhaust Fans centrifugal, aluminum		
Direct Drive		
$0.08 \text{ m}^3/\text{s}$	EA	\$ 370
$0.15 \text{ m}^3/\text{s}$	EA	400
$0.26 \mathrm{m}^3/\mathrm{s}$	EA	430
$0.39 \text{ m}^3/\text{s}$	EA	490
$0.65 \text{ m}^3/\text{s}$	EA	820
$1.10 \text{ m}^3/\text{s}$	EA	1 100
Belt Drive		
$0.28 \text{ m}^3\text{/s}$	EA	\$ 810
$0.56 \text{ m}^3/\text{s}$	EA	850

## 5.015.625 AIR DISTRIBUTION - CONT'D

## Recirculating Ceiling Fans including variable

speed control switch

Average steel 3 blade

Galvanized Steel

Aluminum

Average steel 3 blade				Down Thrust		Up & Down Thrust
914 mm			EA	\$ 370		\$ -
1 422 mm			EA	480	EA	540
Note: Control Switch - up to 5 fans				add	EA	\$ 170
- up to 10 fans				add	EA	200
Good, no light fixture						
		Steel			Wood	len
		3 Blade	4 Blade	3 Bla	ade	4 blade
914 mm	EA	\$ 490	\$ 580	\$ 60	00	<b>\$ 710</b>
1 219 mm	EA	540	630	6	80	800
1 422 mm	EA	610	-	7'	70	-
Light Fixture				add	EA	\$ 51
<b>Exhaust or Fresh Air Outlets</b>						
Fixed Louvres						m <sup>2</sup>
Galvanized Steel						\$ 303.00
Aluminum						357.00
Combination Fixed and Operating L	ouvers					
			(	Operation		
		Manual	I	Electric		Pneumatic
		$m^2$		$m^2$		$m^2$

\$ 366.00

413.00

\$ 462.00

510.00

\$ 396.00

444.00

## **5.016.000 ELECTRICAL**

## 5.016.300 ELECTRICAL FIXTURE ALLOWANCE IN MANUAL RATES

				Quality			
	Model Type	01	02	03	04	06	08
	300 Stores m <sup>2</sup>	\$ -	\$ 6.20	\$ 10.00	\$ 13.00	\$ 21.00	\$ 27.00
	350 Offices m <sup>2</sup>	-	10.00	13.00	16.00	27.00	35.00
	500 Warehouse m <sup>2</sup>	1.50	3.50	3.50	6.20	10.00	13.00
5.016.350 S	WITCHES AND RECEPT	ACLES					
	Switches 120-277V						
	Toggle switches (quiet)						
	Single pole					EA	\$ 24
	3-Way					EA	46
	Toggle switches (silent n	nercury)					
	Single pole					EA	\$ 27
	3-Way					EA	52
	4-Way					EA	83
	Toggle switches (premiu	m grade)					
	Single pole with glow-ha	_				EA	\$ 36
	Double pole					EA	50
	3-Way					EA	61
	4-Way					EA	82
	Switches 350V						
	Fluorescent loads 15 AM	IP					
	Single pole					EA	\$ 39
	Double pole					EA	62
	3-Way					EA	84
	4-Way					EA	110
	Fluorescent loads 20 AM	IP					
	Single pole					EA	\$ 45
	Double pole					EA	67
	3-Way					EA	86
	4-Way					EA	120
	15 AMP Receptacles						
	Standard, duplex U groun	nd				EA	\$ 25
	Weatherproof, duplex U	ground				EA	\$ 88
	20 AMP Receptacles						
	Standard, duplex U ground	nd				EA	\$ 41
	30 AMP Receptacles						
	Range and dryer type, 4	wire, 120/240				EA	\$ 95
	50 AMP Receptacles						
	Range and dryer type, 4	wire, 120/240				EA	<b>\$ 120</b>

## 5.016.500 LIGHTING FIXTURES

## 5.016.505 FLUORESCENT LIGHTING FIXTURES interior

	600	mm	1200	) mm	24	00 mm
Surface mounted strip						
1 Tube 40 Watt	EA	\$ 52	EA	\$ 56	EA	\$ 73
2 Tube 40 Watt	EA	63	EA	68	EA	-
74 Watt	EA	-	EA	-	EA	77
4 Tube 40 Watt	EA	-	EA	92	EA	-
74 Watt	EA	-	EA	-	EA	120
Surface mounted wrap around lens						
2 Tube 40 Watt	EA	<b>\$</b> -	EA	\$ 75	EA	\$ -
4 Tube 40 Watt	EA	-	EA	130	EA	-
Surface mounted lay-in lens						
2 Tube 40 Watt	EA	\$ -	EA	86	EA	\$ -
4 Tube 40 Watt	EA	· -	EA	150	EA	· -
Surface mounted dropped opal diffu	ıser					
2 Tube 40 Watt	EA	<b>\$</b> -	EA	140	EA	\$ -
4 Tube 40 Watt	EA	-	EA	230	EA	
6 Tube 40 Watt	EA	-	EA	380	EA	-
8 Tube 40 Watt	EA	-	EA	430	EA	-
Recessed lay-in acrylic lens						
2 Tube 40 Watt	EA	<b>\$</b> -	EA	76	EA	\$ -
4 Tube 40 Watt	EA	-	EA	95	EA	-
Recessed hinge frame acrylic lens						
2 Tube 40 Watt	EA	<b>\$</b> -	EA	97	EA	\$ -
4 Tube 40 Watt	EA	-	EA	110	EA	-
Recessed air handling lay-in acrylic	lens					
2 Tube 40 Watt	EA	<b>\$</b> -	EA	<b>\$ 140</b>	EA	\$ -
4 Tube 40 Watt	EA	-	EA	210	EA	-
Industrial turret type						
1 Tube 40 Watt	EA	<b>\$</b> -	EA	\$ 60	EA	\$ -
74 Watt	EA	-	EA	-	EA	100
2 Tube 40 Watt	EA	-	EA	89	EA	_
74 Watt	EA	-	EA	-	EA	130
High Bay VHO	EA	-	EA	190	EA	230
4 Tube 40 Watt	EA	-	EA	-	EA	170
Note: add Wire guard	1.2 m	1		EA		\$ 20.00
- <b>G</b> reen -	2.4 m			EA		39.00
add Metal louvre guard	1.2 m			EA		33 00
	2.4 m	1		EA		65.00

## 5.016.510 VAPOUR OR DUST TIGHT FLUORESCENT FIXTURES interior or exterior

# Surface mounted strip with

extruded clear acrylic						
lamp enclosures	12	00 mm	24	00 mm	48	00 mm
1 Tube 40 Watt	EA	\$ 130	EA	\$ -	EA	\$ -
105 Watt	EA	-	EA	160	EA	-
2 Tube 40 Watt	EA	180	EA	-	EA	-
105 Watt	EA	-	EA	240	EA	270
Surface mounted moulded fibreg	glass unit					
2 Tube 40 Watt	EA	\$ 170	EA	<b>\$</b> -	EA	\$ -
Recessed unit						
2 Tube 40 Watt	EA	\$ 160	EA	\$ -	EA	\$ -
Hinged frame unit						
2 Tube 40 Watt	EA	<b>\$ 170</b>	EA	<b>\$</b> -	EA	\$ -
3 Tube 40 Watt	EA	190	EA	-	EA	-
Hinged frame explosion proof un	nit					
2 Tube 40 Watt	EA	\$ 280	EA	\$ -	EA	\$ -
3 Tube 40 Watt	EA	290	EA	-	EA	-

## 5.016.515 INCANDESCENT

Industrial types	12	00 mm	240	00 mm	480	00 mm
RLM Dome 200 Watt	EA	\$ 40	EA	\$ -	EA	\$ -
500 Watt	EA	51	EA	-	EA	-
Prismatic glass reflector						
200 Watt	EA	\$ 50	EA	<b>\$</b> -	EA	\$ -
500 Watt	EA	110	EA	-	EA	-
Vapour tight ceiling mounted						
60 Watt	EA	\$ 49	EA	<b>\$</b> -	EA	\$ -
100 Watt	EA	63	EA	-	EA	-
200 Watt	EA	84	EA	-	EA	-
Outdoor Vapour or dust tight						
150 Watt	EA	<b>\$ 100</b>	EA	<b>\$</b> -	EA	\$ -
200 Watt	EA	130	EA	-	EA	-
Explosion proof ceiling mounted						
150 Watt	EA	<b>\$ 190</b>	EA	<b>\$</b> -	EA	\$ -
200 Watt	EA	230	EA	-	EA	-
Commercial types						
Glass enclosed 150 Watt	EA	\$ 59	EA	\$ -	EA	\$ -
Pot light 150 Watt	EA	88	EA	-	EA	-
Wash basin 60 Watt	EA	65	EA	-	EA	-
Wall washer 200 Watt	EA	100	EA	-	EA	-
Exit Lights						
Face type, wall or ceiling	EA	<b>\$ 110</b>	EA	\$ -	EA	<b>\$</b> -
Surface mounted 25 Watt	EA	75	EA	-	EA	-
Recessed 25 Watt	EA	66	EA	-	EA	-

5.016.525

5.016.530

## 5.016.520 MERCURY VAPOUR

Sing	e	250	Watt
OHE	ıc	430	vv att

Single 250 Watt		
Low Bay, open pot	EA	\$ 250
Recessed, open pot	EA	300
Single 400 Watt		
Low Bay, open pot	EA	\$ 200
High Bay, open pot	EA	210
Recessed Exterior, square covered	EA	390
Recessed Interior, square covered	EA	460
Double 400 Watt		
Low Bay, open pot	EA	\$ 460
High Bay, open pot	EA	490
Single 1000 Watt		
High Bay, open pot	EA	\$ 310
Wall Fixtures		
175 Watt covered	EA	\$ 230
250 Watt covered	EA	260
METAL HALIDE		
Single 400 Watt, open pot	EA	\$ 250
Single 1000 Watt, open pot	EA	400
HIGH PRESSURE SODIUM (HPS)		
Single 400 Watt		
High Bay, open pot	EA	\$ 340
Recessed Exterior, square covered	EA	560
Recessed Interior, square covered	EA	640

#### 5.019.000 SUGGESTED AGE LIFE TABLES

## 5.019.100 AUTOMOTIVE EQUIPMENT AND BULK OIL EQUIPMENT

#### 20 YEAR LIFE

Compressors

Tire Inflators Tire Fitting Equipment Water Dispenser

Lubrication Dispenser

Vehicle Hoists

Vehicle Wash Systems Vacuum Cleaner Paint Spray Booths

Gasoline Dispensers Submersible Pumps

Self-Serve Remote Consoles

Intercom

Micro-Computer Controlled Fuel

Dispenser System

Solid State Modular Electronic Control

Fuel Dispensing System

Underground Tanks Waste Oil Tank

Propane Fueling System Meter Propane Fueling System Dispenser Pumps

Truck Loaders **Bottom Truck Unloaders Bulk Plant Meters** 

**Barrel Fillers** 

Railway Tank Car Unloaders

Steel Fill Stand Concrete Spill Slab

Propane Pumping Systems

Anhydrous Ammonia Pumping Systems Propane/Anhydrous Ammonia Compressors Propane/Anhydrous Ammonia Meters

Railway Tank Car Unloading Lines

Aviation Equipment

Hoists (other than vehicle hoists)

Cranes

## 35 YEAR LIFE

Above Ground Tanks

Piping

Pump Manifolds Tank Manifolds Tank Catwalks Tank Farm Berms Vehicle Propane Fueling System Tanks

Outdoor Lighting

Propane/Anhydrous Ammonia Tanks

Steel Skids

## 5.019.100A COMMUNICATION EQUIPMENT

#### 35 YEAR LIFE

Guyed Steel Tower

#### 5.019.200 SITE IMPROVEMENTS

#### 20 YEAR LIFE

## 35 YEAR LIFE

**Bituminous Paving** Concrete Paving

**Industrial Fences** Yard Lighting Guard Rails and Posts Parking Lot Plug-ins

#### 5.019.300 GRAIN BIN, FERTILIZER, CONCRETE & OILWELL CEMENTING EQUIPMENT

## 20 YEAR LIFE

Fertilizer Blending Equipment Grain Bin Unloading & Aeration Equipment Concrete Batching Equipment Oilwell Cementing Equipment

# 5.019.400 RAILWAY EQUIPMENT

#### 20 YEAR LIFE

#### 35 YEAR LIFE

Tank Pumping Units

Storage Tanks Loading Platforms Stock Yards

## 5.020.000 HOTEL EQUIPMENT

## 5.020.050 TAVERN EQUIPMENT AND FIXTURES

#### 5.020.060 SERVE BARS

These units consist of a front wall section with a waiter and customer counter top, and a rear section with a bartender work counter and bottom storage cabinets. Incorporated into a serve bar may be such items as a glass washer, jockey station, water station, rinse sinks, glass cooler, liquor dispensers and beer tap boxes, which must be valued separately from the serve bar.

Low Grade, masonite panelling or painted wood	per m	\$ 400
Fair, finished plywood and formica	per m	510
Average, arborite and wood with stainless steel tops	per m	660
<b>Good</b> , padded vinyl, wood moulding or brass trim, good wood or stainless steel tops	per m	840
<b>Expensive</b> , oak, walnut, teak or glass panelling with marble, corian or glass counters	per m	1 180
5.020.070 BEER TAP SYSTEMS		
Single Zam - 2 keg capacity 1 tap c/w air lines		

and refrigeration	EA	\$ 3 300
<b>Double Zam -</b> 4 keg capacity, 2 taps, c/w air lines		

and refrigeration EA \$ 3 900

Direct Draw - complete se	elf-contained cabinet system
---------------------------	------------------------------

1 keg and 1 tap		$\mathbf{E}\mathbf{A}$	<b>\$ 1 400</b>
2 kegs and 2 taps		$\mathbf{E}\mathbf{A}$	2 500
3 kegs and 3 taps		$\mathbf{E}\mathbf{A}$	2 800
4 kegs and 4 taps		EA	3 050
Additional, per keg and tap	add	EA	300

**Cold Line or Cool Loop System -** complete system with refrigeration, air pressure pump, beverage lines, taps and cold air or glycol coil, 138 mm insulated flexible duct work

Single tap system		$\mathbf{E}\mathbf{A}$	\$ 2 500
Double tap system		$\mathbf{E}\mathbf{A}$	2 800
Additional taps	add	$\mathbf{E}\mathbf{A}$	500

## 5.020.080 GLASS WASHERS

Costs include electrical, plumbing hook-ups and installation into serve bar.

Rotary	0.6 m diameter	EA	\$ 3 400
in-Line	0.9 m	EA	4 730
In-Line	1.2 m	EA	5 400
In-Line	1.8 m	EA	5 670
In-Line	2.1 m	EA	5 940
in-Line	2.4 m	EA	6 070
T-Bar - for any above T-Bar installation	"In-Line Washer" installed as a	add	450
MISCELLANEOUS	EQUIPMENT		

## 5.020.090 M

600 mm

Cooler Chests, glass cooler and/or mug froster, installed

1 200 mm	EA	1 970
<b>Water Station -</b> 460 mm x 560 mm including glass fill, drip tray, waste sumps and bottom cabinet	EA	860
<b>Jockey Stations -</b> including bottle inserts, ice sinks, fruit trays and bottom cabinets		
1.07 m 1.5 m including water fill station	EA EA	\$ 1 170 2 050

EA

1 500

Walk-in Coolers - add as found (5.013.105)

Compressors - add as found (5.013.115)

Bottle Service Doors - Reach-in - add as found (5.013.140)

## **Example - Beer Tavern Bar**

Good Class Bar - 6.1 m length	
Serve Bar - 6.1 m <i>qi</i> ) \$ 840	\$ 5 124
Direct Draw Beer Tap System - 4 taps	3 050
Glass Washer - 2.4 m in-line	6 070
Glass Cooler Chest - 1200 mm	1 970
Water Station	860
Jockey Station - 1.07 m	1 170
Sink Unit - double s.s. sink	240
Total System	\$ 18 484

## 5.020.100 COCKTAIL LOUNGE EQUIPMENT AND FIXTURES

## 5.020.110 FRONT SERVICE BARS

These units are the same as the tavern serve bars

Average	per m	\$ 660
Good	per m	840
Expensive	per m	1 180

Note: Custom elbow and foot rails add as follows:

Padded elbow rail	per m	\$ 125
Wood moulded elbow rail	per m	160
Brass elbow rail	per m	145
Brass or wood foot rail	per m	160

## 5.020.120 BAR SINKS

Stainless steel, single compartment, 250 x 330 mm	$\mathbf{E}\mathbf{A}$	\$ 150
Stainless steel, single compartment, 400 x 450 mm	$\mathbf{E}\mathbf{A}$	170
Stainless steel, double compartment, 400 x 450 mm	EA	240

**Note:** For a complete cocktail lounge serve bar, items such as cooler chests, water stations and jockey stations must **be added** as found.

## 5.020.130 COCKTAIL BACK BARS

These are custom built units having three components - refrigerated storage cabinets, non-refrigerated storage cabinets, back wall liquor display and security doors.

## **Storage Cabinets**

Refrigerated, including compressor	per m	\$ 1 380
Non-refrigerated	per m	820
<b>Liquor Display</b> including shelving, light fixtures and glass mirror or wood panelling		
Average	per m	\$ 830
Good	per m	1 350
Expensive (stained glass or design panels)	per m	1 930
<b>Liquor Display Security Doors</b>		
Folding or swinging shutters, metal or wood	per m	\$ 415
Roll down, metal or wood	per m	700
Sliding, concealed, wood	per m	1 350

#### 5.020.140 OVERHEAD GLASS RACKS

Custom built, wood, slotted for stemware

Average	per m	\$ 260
Good	per m	655

## **5.020.150 BAR CANOPIES**

Custom units, including electrical

	Average Good	per m per m	470 1 120
5.020.160 WI	INE CABINETS		
	4 Bottle, refrigerated 5 Bottle, non-refrigerated Combination - 2 compartment, 6 bottle refrigerate	EA EA	1 470 1 010
	and 6 bottle non-refrigerated  Bag and Box Cabinet, including 2 dispenser fauce	EA	3 500 1 500
	Example - Cocktail Lounge Bar		
	All sizes assumed, good class rates		
	4.9 m front serve bar 4.9 m brass elbow rail	@ \$ 840/m @ \$ 145/m	\$ 4 116 710
	4.9 m brass foot rail 1 - double compartment sink	@ \$ 160/m	784 240
	1 - direct draw beer tap system - 2 taps 1 - cooler chest for glasses - 1200 mm		2 500 1 970
	1 - water station 2 - jockey stations 1.07 m	@ \$ 1 170 EA	860 2 340
	2 Jookey Stations 1107 III	Sub Total \$	
	3.7 m Good Class Back Bar		
	1.2 m refrigerated cabinet 2.4 m non-refrigerated cabinet	@ \$ 1 380/m @\$ 820/m	\$ 1 656 1 968
	3.7 m liquor display	@ \$ 1 350/m	4 995
	3.7 m security doors 1.2 m overhead glass rack	@ \$ 415/m @ \$ 655/m	1 535 786
	3.7 m canopy	@ \$ 1 120/m	4 144

Sub Total <u>\$15 084</u> Total Lounge Bar \$28 604

## 5.020.200 LIQUOR CONTROL SYSTEMS

## 5.020.210 ELECTRONIC LIQUOR DISPENSER SYSTEMS Flex Faucet System

Consists of flex line, hand-held push button gun head dispenser, 6 preset portion controls, electronic modules, reserve bottle system and racks, manifolds, lines and drink tally counters.

24 bottle system	EA	\$ 8 260
36 bottle system	EA	9 500
48 bottle system	EA	14 500

## **Multiple Dispenser Console**

Consists of a stainless steel console box, normally mounted under the serve bar counter, with glass pushed micro switches, pouring spouts, stainless steel lines and manifolds, reserve bottle racks and tally counters.

Base Console - can be expanded by adding up to 7 auxiliary consoles at different locations for pouring from 1 reservoir.

Brands - means different types of liquors. Base console has 4 brands and may be expanded by multiples of 2.

Bottles - minimum reservoir is 2 bottles per brand

- first expansion is a 4 bottle increase (from 2 to 6 bottles per brand)
  - second and any further expansion is in multiples of 6 bottles per brand; i.e. 6 to 12, 12 to 18, etc.

## Base Systems (first console with 2 bottles per brand reservoir)

4 brand - 8 bottles	EA	\$ 5 810
6 brand - 12 bottles	EA	6 870
8 brand - 16 bottles	EA	9 000
10 brand - 20 bottles	EA	11 050
12 brand - 24 bottles	EA	13 120

#### **Auxiliary Consoles** (extra console with no bottle reservoir)

4 brand	add EA	\$ 3 040
6 brand	add EA	4 200
8 brand	add EA	5 400
10 brand	add EA	6 570
12 brand	add EA	7 680

#### 5.020.200 LIQUOR CONTROL SYSTEMS CONT'D

#### **Bottle Reservoirs**

2 bottles for each brand is included in base system costs

\$ 340 First expansion - from 2 to 6 bottles add per brand EA Additional expansions - multiple of 6 bottles 440 add per brand EA

#### **Key or Card Reader Stations**

Before a console station and manifold will pour it must be activated by a waiter's card and the number and type of drinks key punched in.

6 key station - up to 6 waiters EA \$ 3100

12 key station - up to 12 waiters EA 5 600

**Note:** The above dispenser rates are not applicable to the computerized dispenser systems.

#### **Example - Multiple Dispenser System**

Base system - 6 brand, (1 rye, 1 gin, 1 scotch, 1 vodka,

1 light rum, 1 dark rum), 12 bottles \$6870

Auxiliary consoles - 2 x 6 brand @ 4 175 8 400

Bottle reservoir - has 18 bottles per brand, 108 bottles in total

1st expansion 2 to 6 = 6 brands @ \$ 340

\$ 2 040 2nd expansion 6 to 12 = 6 brands @ \$ 440 2 040 2 040 3rd expansion 12 to 18 = 6 brands @ 440

Total System \$ 22 590

## 5.020.220 COMPUTERIZED DISPENSER SYSTEMS

Draft Beer Dispenser

These systems contain custom designed units, each fully automated and computer controlled. Each performs a specific function and contains features such as serve bars, sink stations, glass washers, cabinets, etc. Integration of these units completely replaces the standard hotel tavern serve bar, bartenders, jockey stations, water stations, tap box, cash registers, etc. Dispensing is activated by I.D. insert card and key punch computer terminal heads.

**Note:** Cocktail lounge bars, back bars, canopies, etc. that are not part of the computerized system must be **added** as found.

Includes glass washer and primary key punch station	EA	\$ 54 000	)
Bottled Beer and Juice Dispenser Includes refrigeration, glass washer and primary key punch station		EA	\$ 49 100
<b>Liquor and Mix Dispensers</b> Includes refrigeration, lines and primary key punch station 8 brands, 36 bottle reservoir		EA	\$ 27 250
16 brands, 100 bottle reservoir		EA	\$ 32 750
<b>Liquor Reserve Storage Cabinet</b> Includes manifolds, lines and electronic counters, remote installation, in addition to primary bottle reservoir on dispenser		EA	<b>\$ 16 350</b>
<b>Shooter Bar Dispenser</b> Contains electronic controls and primary key punch station, automatically layers liquor		EA	\$ 16 400
Satellite Station  Additional I.D. card and key punch station for manager or waiter stations, over and above primary station on dispenser unit	EA	\$ 6500	

## 5.020.220 COMPUTERIZED DISPENSER SYSTEMS CONT'D

# **Example - Computerized Dispenser System**

All sizes assumed

1 draft beer dispenser unit			\$	54 000
1 bottled beer and juice dispenser unit				49 100
1 liquor and mix dispenser unit - 8 brand, 36 b	ottle			27 250
1 liquor reserve storage unit				16 350
1 shooter bar dispenser unit				16 400
glass washer				included
1 satellite waiter key punch station				6 500
1 satellite manager key punch station				6 500
	Co	omputerized System Sub Tota	al \$	176 100
Add: 3.7 m Good Lounge Back Bar				
1.2 m refrigerated cabinet	@ \$13	380/m	\$	1 656
2.4 m non-refrigerated cabinet	@,	820/m		1 968
3.7 m good liquor display	@	1 350/m		4 995
3.7 m security doors, wood	@	700/m		2 590
1.2 m overhead glass rack	@	655/m		786
3.7 m canopy	@	1 200/m		4 144
		Back Bar Sub Tota	al \$	16 139
		Total System	n \$	192 239

# 5.030.000 SUPERMARKET EQUIPMENT

## 5.030.050 DISPLAY CASES

## 5.030.055 MEAT DISPLAY CASES

Service Type Fresh Meat	Constant Add per m	\$ 4 700 1 600
Single Deck Self Serve	Constant Add per m	\$ 1 900 1 550
Multi-Deck Self Serve	Constant Add perm	\$ 4 000 2150
Delicatessen & Pastry	Constant Add per m	\$ 2 700 1 850
5.030.060 PRODUCE DISPLAY CASES		
Single Deck Non-Refrigerated	Constant Add per m	\$ 600 960
Multi Deck Non-Refrigerated	Constant Add per m	\$ 900 1 050
Single Deck Refrigerated	Constant Add per m	\$ 4 400 1 550
Multi-Deck Refrigerated	Constant Add per m	\$ 4 500 1 750
5.030.065 PRODUCE ISLES		
Display 2 Sides Non-Refrigerated	Constant Add per m	\$ 1 900 1 250
Display 2 Sides Refrigerated	Constant Add per m	\$ 7 800 1 350
5.030.070 DAIRY DISPLAY CASES		
Four Deck Case	Constant Add per m	\$ 5 100 1 900
Five Deck Case	Constant Add per m	\$ 5 700 2 200

## 5.030.080 FROZEN FOOD DISPLAY CASES

Single Deck Frozen Food & Ice Cream	Constant Add per m	\$ 5 100 1 850
Multi-Deck Frozen Food & Ice Cream	Constant Add per m	\$ 5 900 3 600
Vertical Frozen Food & Ice Cream Glass Door Freezer	Constant Add per m	\$ 2 900 3 250
DE A CHI INI DEEDICED A MED EGODE DIGDI AN	CAGEG	

## 5.030.085 REACH-IN REFRIGERATED FOODS DISPLAY CASES

Reach-In Refrigerated	Constant	\$ 2 900
-	Add per m	2 050

Note: All refrigerated display case rates include necessary condensing equipment

#### 5.049.000 SECURITY EQUIPMENT

**VAULTS,** Security - The logical construction of a vault is equal strengths of all components. No safety is gained by placing a heavy expensive door in a weak vault structure, and nothing is gained by constructing a heavy vault and placing therein a light door unless it is known that at some future date a heavier door is to be installed.

Vault classification, as established by the company insuring the contents, matches the door to the construction of the vault. The factors used to determine classification are the "effective thickness of door in mm", the thickness of concrete in mm, the weight of reinforcing steel in kg per square meters of actual wall, ceiling and floor area.

The following chart indicates classification characteristics.

Class Number	Door	Concrete	Reinforcing
No. 5	89 mm	300 mm	64 kg per m <sup>2</sup>
No. 6	89 mm	460 mm	93 kg per m <sup>2</sup>
No. 7	140 mm	460 mm	93 kg per m <sup>2</sup>
No. 8	152 mm	460 mm	93 kg per m <sup>2</sup>
No. 9	178 mm	460 mm	93 kg per m <sup>2</sup>
No. 10	254 mm	460 mm	181 kg per m <sup>2</sup>

The typical exterior width of security vaults is 3.4 m. When the span exceeds this limit additional reinforcing for structural purposes is required.

No particular limit is placed on the length of vaults. Long vaults are sometimes found divided into two end to end or side by side vaults with a common security wall.

#### 5.049.050 SECURITY VAULTS

#### COMPONENT DESCRIPTION

Concrete Footings - adequate reinforced spread footings
Foundation Walls - adequate reinforced concrete
Base Floor Construction - heavy reinforced concrete slab
Base Wall Construction - heavy reinforced concrete
Exterior Wall Finish - gypsum wallboard and paint
Base Roof Construction - heavy reinforced concrete
Interior Wall Finish - plaster and paint
Ceiling Finish - plaster and paint
Floor Finish - good tile
Electrical Basic - good wiring
Electrical Fixtures - good lighting

## 5.049.050 SECURITY VAULTS CONT'D

## BASE RATES (in dollars)

	0-19 m <sup>2</sup>	K	$20 \text{ m}^2$	& over
Single Vaults		AR	K	AR
Class 5	4 100	540	5 850	445
Class 6 to 9	5 750	715	8 150	588
Class 10	7 800	1 022	11 050	848
	0-19	9 m <sup>2</sup>	20 m <sup>2</sup>	& over
Two Storey Vaults	K	AR	K	AR
Class 5	7 200	966	10 800	772
Class 6 to 9	10 100	1 270	17 950	848
Class 10	14 200	1 804	20 950	1 441

## INSTALLATION RATES

## Foundations, Reinforced Footings, Excavation

	$0-19 \text{ m}^2$		20 m <sup>2</sup>	& over
	K	AR	K	AR
Class 5	\$ 300	\$ 20.00	\$ 400	\$ 13.00
Class 6, 9 & 10	350	24.00	500	16.00
<b>Plaster</b> , lining and ceiling, per m <sup>2</sup> of surface area		m²	\$ 22.50	
Paint, interior walls and ceiling, per	m <sup>2</sup> of surface	area	m²	\$ 5.10
Walls, concrete including reinforcer	nent			
Class 5			m²	\$ 128.00
Class 6 to 9			m²	164.00
Class 10			m²	243.00
Floor Finishes, tile			m²	\$ 34.50

Vent Piping, galvanized pipe

Single included
Two Storey included

## UNIT COST ADJUSTMENTS

Vault Doors	add as found
Day Gates	add as found
Ventilators	add as found
Alarm Systems	add as found

## 5.049.060 STORAGE VAULTS

## COMPONENT DESCRIPTION

**Concrete Footings -** adequate reinforced spread footings

Foundation Walls - adequate reinforced concrete

Base Floor Construction - adequate reinforced concrete slab

Base Wall Construction - heavy reinforced concrete

Exterior Wall Finish - gypsum wallboard and paint

Base Roof Construction - heavy reinforced concrete

Interior Wall Finish - plaster and paint

Ceiling Finish - plaster and paint

Floor Finish - good tile

Electrical Basic - good wiring

Electrical Fixtures - good lighting

BASE RATES (in dollars	$0-19 \text{ m}^2$		20 m <sup>2</sup> & over		
	K	AR	K	AR	
Single Storage Vault	2 350	370	4 500	254	
Vault Under Security Vault	2 400	228	3 500	169	

#### INSTALLATION RATES

<b>Plaster,</b> lining and ceiling, per m <sup>2</sup> of surface area		m2	\$ 22.50
Paint, interior walls and ceiling, per m <sup>2</sup> of surface area	<b>m2</b>	\$ 5.10	
Walls, concrete including reinforcement per m <sup>2</sup> of surface area	<b>m2</b>	\$ 90.50	
Floor Finishes, tile	m2	\$ 23.50	

Vent Piping, galvanized pipe

Single included Under included

## UNIT COST ADJUSTMENTS

Storage Vault Doors add as found Ventilators add as found Alarm Systems add as found

#### 5.049.070 UNITIZED VAULTS

Construction is of factory built heavy precast interlocking concrete panel sections for walls and roof and precut primed steel plate floor sections.

Base Rates are for a basic vault "starter package" with an interior dimension of 1.9 m in length.

Add-on Module Rates must be combined with Base Rates to produce total cost and total length of a vault.

#### COMPONENT DESCRIPTION

Substructure - adequate reinforced concrete slab

Base Floor Construction - 25 mm primed steel plate

Base Wall Construction - 125 mm and 330 mm precast concrete panels

Exterior Wall Finish - paint

Base Roof Construction - 125 mm precast concrete panels

Interior Wall Finish - gypsum wallboard and paint

Ceiling Finish - gypsum wallboard and paint

Electrical Basic - good wiring

## **BASE RATES (in dollars**

Basic Vault, 1.9 m long		\$ 21 400
Add-on Module, 1.0 m long	add EA	\$ 5 700

#### UNIT COST ADJUSTMENTS

Electrical Fixtures - good lighting

Vault door and accessories	add as found	
Floor Finish	add as found	
Alarm System	add as found	
Ventilator - wall mounted	add EA	\$ 1 180

#### 5.049.080 INSTA VAULTS

These vaults are similar to unitized vaults. Insta vaults are designed to replace a normal concrete vault of Class 6 or 9.

Panels are constructed of steel plate with high density steel fibre reinforced concrete bonded to one side. The steel surface is the interior vault surface.

Base Rates are for a basic vault "starter package" with an interior length of 1.9 m. Packages come with or without a steel panel floor. Floor panels are not required where 450 mm heavy reinforced concrete slabs are provided in a building.

Add-on Module Rates must be combined with Base Rates to produce total cost and total length of a vault.

## COMPONENT DESCRIPTION

Substructure - adequate reinforced concrete slab

Base Floor Construction - bonded reinforced concrete and steel plate

Base Wall Construction - bonded reinforced concrete and steel plate

Exterior Wall Finish - gypsum wallboard and paint

Base Roof Construction - bonded reinforced concrete and steel plate

Interior Wall Finish - gypsum wallboard and paint

Ceiling Finish - gypsum wallboard and paint

Electrical Basic - good wiring

Electrical Fixtures - good lighting

#### **BASE RATES**

Basic Vault, with steel floor, 1.9 m long		\$	<b>350</b>
Basic Vault without steel floor, 1.9 m long			16 450
Add-on Module, with steel floor, 1.0 m long	add EA	5 400	
Add-on Module, without steel floor, 1.0 m long	add E	A	4 100

#### UNIT COST ADJUSTMENTS

Vault door and accessories	add as found	
Floor Finish	add as found	
Alarm System	<b>add</b> as found	
Ventilator - wall mounted	add EA	1 180

#### 5.049.090 MINIVAULT

This is a "reach-in" steel vault and comes as a complete package with painted steel finish, 89 mm steel vault door and installation. Door opening is 0.9 m x 1.98 m.

Exterior size 2.15 m	high x 1 23	m wide x 0.98 m deep	EA S	8 14 500

#### UNIT COST ADJUSTMENTS

Time Lock - 2 movement	add	470
Alarm System	add	1 500

#### **5.049.100 MONEY SAFES**

The following safe costs include a steel reinforced concrete mounting block. Safes may be mounted inside or on top of the block pedestal. The block may be located above or below the floor level.

#### **Fair Quality Safe**

Used in service stations, corner stores, small restaurants

a 11	~ .		
Small	S17e -	In-F	loor

133 mm circular lift out door	EA	950
Medium Size - Above Floor		
190 mm circular front swinging door	EA	1 390

#### Average Quality Safe - Class 2 Label

Used in medium sized grocery stores, hardware and drug stores. Walls are 114 mm thick, steel clad, steel shelves and may have alarm wiring.

Small - 775 x 775 x 700 mm	EA	2 800
Medium - 925 x 875 x 700 mm	LA	3 450
Large - 1 092 x 1 092 x 700 mm	EA	4 700

#### Good Quality Safe - Class 1 Label

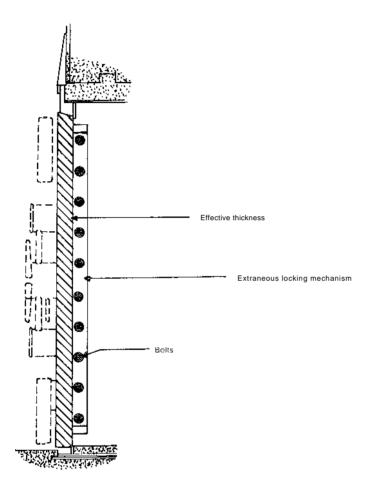
Safe with enamel and stainless steel finish, 147 mm thick walls, 216 mm thick door with step frame, full shelving, dual locks and alarm protection. In use at large grocery stores, jewelry stores and small credit unions, etc.

Small Size - 559 x 508 x 508 mm	EA	\$ 4 950
Medium Size - 1 168 x 508 x 517 mm	EA	6 300
Large Size - 1 625 x 508 x 517 mm	EA	7 750

## 5.049.110 SECURITY DOORS - GENERAL INFORMATION

Some of the items considered when establishing rates for security vault doors are freight, crating, loading at the source; installation which would include cartage, uncrating, positioning, grouting, shoring; federal sales tax applicable; finish and effective thickness. The "effective thickness" is that portion of the door which is of solid construction and does not include the thickness of the extraneous locking mechanism.

Storage vault doors are rated as to their degree of fire resistance. The extent of resistance in hours will be found on the underwriters' laboratory label carried on all models.



TYPICAL VAULT DOOR

# **5.049.110 VAULT DOORS**

Security vault door costs include framework, door, anchors, locking devices, hardware, wiring and installation.

89 mm						
fair - painted 800 x 1 950 mm average - painted 800 x 1 950 mm good - painted with stainless steel trii expensive - stainless steel 900 x 1 9			50 mm	EA EA EA	8 9	070 220 950 350
140 mm						
average - painted good - painted with stainless steel tr expensive - stainless steel	im			EA EA	10	660 640 310
178 mm						
good - painted with stainless steel trim expensive - stainless steel	l			EA EA	\$ 12 14	610 300
254 <b>mm</b>						
good - painted with stainless steel trim expensive - stainless steel	1			EA EA	\$ 14 16	780 660
Circular Vault Doors						
203 mm 254 mm 305 mm <b>Day Gates</b>				EA EA EA		100 200 700
		140 i ilt Do			& 254 ult Do	
Painted	EA	\$	580	EA	\$	700
Aluminum and Acrylic Stainless Steel	EA EA		750 1 100	EA EA		770 2 350
Time Locks						
2 movement 3 movement				EA EA	\$	470 800

#### 5.049.120 STORAGE VAULT DOORS

A storage vault door is an insulated painted steel plate door normally with a ULC fire rated label. Costs include steel framework, door, anchors, locking devices, hardware and installation. Unlabelled doors usually have one continuous hinge while labelled doors have 3 heavy hinges.

		in Floor Vault	Basen Uppe	ent/ r Vault
1 Hour Rated - unlabelled	EA	\$ 1 480	EA	\$ 1 600
2 Hour Rated - unlabelled	EA	1 850	EA	2 000
2 Hour Rated - labelled	EA	2 580	EA	2 730
4 Hour Rated - labelled	EA	2 880	EA	3 030
6 Hour Rated - labelled	EA	3 250	EA	4 240

#### 5.049.130 VAULT EMERGENCY VENTILATORS

Wall Mounted, manual activated EA \$1180

**Automatic Security Air Damper -** installed on heat supply duct and return air ducting, complete with alarm contact, fire detector, automatic closing and indicator lights

EA \$ 10 450

**Note:** Normally there are 2 Security

Air Damper systems per vault.

## 5.049.140 NIGHT DEPOSITORIES

Costs are determined by 3 major criteria:

size of interior receiving safe
standard safe 1 400 mm H x 775 mm W x 825 mm D
jumbo safe 1 525 mm H x 875 mm W x 825 mm D
location of receiving safe
main floor or basement
type of wall construction for head installation
masonry or framed wall
glass or metal panelled wall

	Standard Safe		Jumbo Safe	
Ground floor - masonry wall	EA	\$ 7 890	EA	\$ 9 000
Ground floor - glass/panel wall	EA	8 390	EA	9 500
Basement floor - masonry wall	EA	\$ 10 750	EA	\$ 11 860
Basement floor - glass/panel wall	EA	11 250	EA	12 360

Note: add alarm system costs to the above for total depository costs.

## 5.049.150 CLEARING SAFES

These are also termed as a courier and/or receipt clearing box. Costs include telescopic steel wall sleeve, stainless steel keylock door with fascia and installation.

Standard Size, 375 to 400 mm high	EA	\$ 1 250
Large Size, 500 to 610 mm high	EA	1 650

# 5.049.160 SAFETY DEPOSIT BOXES

Complete with iron base and stand, boxes are 600 mm standard depth.

Opening Size	Rate Per Opening Enamelled Stainless Steel Steel			
38 x 125 mm	EA	\$ 36	EA	\$ 49
64 x 125 mm	$\overline{\mathbf{E}}\overline{\mathbf{A}}$	43	EA	57
83 x 125 mm	EA	53	$\mathbf{E}\mathbf{A}$	72
125 x 125 mm	EA	60	EA	82
64 x 250 mm	EA	67	EA	91
125 x 250 mm	EA	106	EA	146
250 x 250 mm	EA	148	EA	205

#### 5.049.170 TELLERS LOCKERS

Interior vault steel teller compartments with double combination locks, base and installation. Units come in 1 to 5 compartment basic units. Combinations and stacking will indicate total number of compartments.

1 Compartment	EA	<b>\$ 760</b>
2 Compartment	EA	1 010
3 Compartment	EA	1 490
4 Compartment	EA	1 720
5 Compartment	EA	2 220

#### 5.049.175 TELLERS WINDOWS

These are walk-up or drive-up windows located in the side wall of **a bank.** Costs include steel framework, stainless steel and enamel finish, slide out transaction tray, radio intercom station, microphones, lights, bullet proof glass window, trim, alarm system and installation.

Single Teller Unit	EA	<b>\$ 12 000</b>
Double Teller Unit	EA	18 000
Triple Teller Unit	EA	24 000

#### 5.049.180 AUTOMATIC TELLER MACHINES

An ATM is a programmable multiple transaction computerized banking machine handling functions such as cash withdrawals, deposits, bill payments, receipts and statements.

Costs include basic machine and enclosure, currency dispensers, deposit vault, printer, screen, keyboard, computer, integrated modems, interface cable, dedicated digital communication loops and lines, hard wired conduit electrical circuit, security system, alarm system integrated with bank system, weather shields, stainless steel trim and logo panels, hook-ups and installation.

Lobby Terminal - interior vestibule partition wall mounted	$\mathbf{E}\mathbf{A}$	\$ 39 900
Wall Terminal - exterior bank wall mounted	EA	48 400

**Note:** Additions must be made for costs of "lock-up rooms" and security doors enclosing ATM vaults and machines.

#### **Drive-Up Kiosk Island Terminal**

Includes steel panelled security kiosk, access door, lighting, heat, ventilation, air conditioning, shutters, weather shields, and automated lane closure panel. Controller modems and security alarm systems are included.

Basic Island Terminal and Kiosk		EA	\$ 69 600
Security Camera and VCR Unit	add	EA	\$ 5 100
Concrete Islands, per m <sup>2</sup>	add		97
Concrete Driveway Aprons, per m <sup>2</sup>	add		40
Steel Bumper Posts	add	EA	100

# 5.049.190 AUTOMATIC CASH MACHINES

A cash machine has only one function of dispensing or withdrawing cash from a bank account. Costs include basic machine, trim and logo cabinet panels, hard wired electrical conduit circuit, modem, interface cable, dedicated digital loops and lines, and installations. Cash machines may be found in various locations such as stores, office buildings, terminals, etc.

Basic Terminal		EA	\$ 32 500
Security Alarm - store system integrated	add	EA	\$ 1 500
Security Camera and VCR unit	add	EA	5 100

#### 5.049.200 SECURITY AND ALARM SYSTEMS

A security alarm system will normally contain some or all of the following components depending on what the system is designed to protect.

Components consist of circuit control unit, zone annunciator, visual indicator panel, vault door alarm switch, circuit test panel, verify panel, central monitoring controls, contact sensors, heat sensors, audio detectors, vibration detectors, exterior alarms and hold-up buttons.

Other costs include conduit, wiring, installation, programming and testing.

#### **Bank Vault Systems**

village or small town medium town to small city large city	EA EA EA	\$ 4 700 3 550 4 600
Night Depository Systems		
village to medium town large town to city	EA EA	\$ 470 1 380
Money Safe Systems	EA	\$ 1 500
Storage Vault Systems jewelry, fur vaults or other valuables city location other location record storage vaults, non-valuables	EA EA EA	\$ 1 890 2 200 300

#### 5.049.210 TELEVISION MONITORING SYSTEMS

Commonly called a CCTV or Closed Circuit Television System. A basic system includes 4 cameras, wall or ceiling mounts, 2 monitors, switcher unit, VCR unit, cable and installation.

Average Bank, basic system		EA	\$ 12 500
Cameras, more or less than a basic system	add or deduct	EA	\$ 2 000

#### 5.049.450 BUILDING SECURITY

#### **Magnetic Card Door Access Systems**

#### **Single Access System**

An electronic locking system used for a single door operation and provides limited access for situations such as computer rooms, laboratories, apartment building front doors, etc.

Components include a card reader or a combination code lock station, electric door strike, power transformer and installation.

Total Cost, per door EA \$ 3 300

#### **Multiple Access System**

card control or combination code lock access for any number of doors through a central electronic controller

a remote computerized programmer which can control hours of operation and access to various areas

records information on time of entry and departure of personnel who have entered or left an area or building

control of multiple card reader or combination code lock stations optional information print-out

Electronic Central Controller and Remote Programmer

Base Rate: 1-4 door capacity		EA	\$ 3 300
over 4 door capacity		EA	6 100
Card Reader or Combination Code Lock Station	add	EA	\$ 900
Printer	add	EA	1 500

#### 5.052.000 FERTILIZER BLENDER EQUIPMENT

#### 5.052.050 PADDLE BLENDERS (Boby or Irican)

Horizontal drum and paddle type with electrical chain drive and controls.

#### **Interior Installation**

1.8 - 2.7 tonnes

Elevator type - overhead	EA	\$ 13 500
Elevator or Warehouse - main floor	EA	18 800
Converted Grain Elevator	EA	18 800

#### **Exterior Installation**

Costs include 4.3 x 5.5 m reinforced concrete slab on grade, spouting, slide gates, load out conveyor, built-in scale and digital read-out. Installed at elevator type or warehouse locations.

1.8 - 2.7 tonnes	EA	\$ 27 550
3.6 - 5.4 tonnes	EA	33 250

Concrete Slab variation add or deduct per m<sup>2</sup> \$ 19.50

# 5.052.060 CEMENT MIXER TYPE BLENDERS (Speed King or Doyle)

Costs include a 3.0 m x 10.4 m reinforced concrete slab on grade, spouting, slide gates, hopper scale, bottom conveyor, blender, load-out conveyor and electrical controls.

Capacity	Dia	al Scale	Dig	ital Scale
3.6 - 4.5 tonnes	EA	\$ 38 000	EA	\$ 40 350
7.3 tonnes	EA	42 750	EA	45 100

Concrete Slab variation add or deduct per m<sup>2</sup> \$ 19.50

# 5.052.070 WEED SPRAY ADDITIVE UNIT

Costs include a 315 litre tank, concrete base and supports, pump, meter, piping, valves, electrical controls and hook-ups. These units may be found with any of the above blender systems.

add EA \$4750

#### 5.052.080 MULTI-BIN SCREW BLENDER (Ranco)

This is a full mechanical system for unloading, storing, blending and loading fertilizer at a bulk warehouse facility.

The standard blender has 4 open top compartments aligned horizontally, bottom screw blender auger discharge, and electronic control center for presetting ratios and weights for mixing on a continuous flow basis. Capacity of the blender is 9,1 to 10.9 tonnes.

Operation of this system is by one man and payloader with a plant blending output of 63.5 to 100 tonnes per hour.

Standard Plant System		\$ 72 600
INSTALLATIONS		
A basic blending plant includes the following: <b>Blender -</b> 4 compartment, electric drive and electronic control centre <b>Load-in Leg -</b> 11.6 m fibreglass and stainless steel legisters.	EA	\$ 31 800
distributor, spouting, head drive and electrical	EA	15 600
<ul><li>Load-out Leg - 8.5 m leg, spouting, head drive and electrical</li><li>Over-bin Conveyor - 16.8 m belt conveyor, discharg</li></ul>	EA	12 800
tripper, drive motor and electrical	EA	12 400
<b>Head Drives -</b> 5.6 to 7.5 kW motors and electrical sy	stem Inclu	ded above
PRECALCULATED ADJUSTMENTS Blender Bins more or less than standard 4 Chemical Additive Bin Weed Spray Unit Overbin Belt Conveyor more or less than 16.8 length	add or deduct EA add EA add EA	\$ 2 740
<b>Legs - Load-in</b> more or less than 11.6 m high	add or deduct per m	360
Legs - Load-out more or less than 8.5 m high	add or deduct per m	840
Twin Screw Car Unloader Transfer Belt Conveyor, 10.7 m length Transfer Belt Conveyor, 6.1 m length	add or deduct per m add EA add EA	\$ 840 \$ 2 750 \$ 8 700

**Note:** add as found for concrete piles, footings, foundations and slabs. add as found for scales and pits to the preceding plant costs.

Car Unloaders and Transfer Conveyors may be portable and may not be liable to assessment.

\$ 4 750

add EA

#### 5.052.100 HOPPER BIN ELECTRONIC BLENDING PLANT

This is a complete automated continuous flow bulk fertilizer plant facility with an integrated system of storage bins, where all functions including unloading, storing, blending, weighing and loading of fertilizer are electronically controlled.

A typical plant consists of a series of aligned welded hopper bottomed epoxy lined steel bins, a concrete receiving pit with drag conveyor, bottom screw tube blender conveyor with metering gates, bucket elevator leg and spouting, top in-load conveyor and gates, elevated surge bin and digital shipping scale with shed cover, wiring, electronic controls and control room shed.

Plant blending capacity is 54 to 100 tonnes per hour.

Basic 5 Bin Plant Equipment System		EA	\$123 000
<b>Hopper Bottom Welded Steel</b> Bins			
62 tonnes	add	EA :	\$ 4 900
88 tonnes	add	EA	6 000
116 tonnes	add	EA	7 100
132 tonnes	add	EA	7 800

**Note: Bin** Costs must be added and combined with Equipment System Costs to arrive at a complete Blending Plant Cost.

#### **INSTALLATIONS**

A basic 5 bin plant equipment system includes the following components: <b>Foundations -</b> reinforced concrete pilings, slabs and sitework required for 5 bins	\$ 11 500
<b>Receiving Pit and Inload Conveyor -</b> reinforced concrete pit with conveyor, electric drive, wiring and controls	\$ 10 240
<b>Bucket Elevator Leg -11.6</b> m high, complete with spouting, distributor valves, 5.6 kW electric drive, controls and foundation	\$ 20 200
<b>Top Distribution Conveyor -</b> 25.0 m long, complete with catwalk, access panels, micro switch discharge load-in gates, electric drive, wiring and controls	\$ 17 400
<b>Metering Screw Augers -</b> 5, complete with 5 surge hoppers, 5 variable speed controllers, 5 electric drives, wiring and controls	\$ 19 000
Spouts - top conveyor recirculation spout and under scale inventory control spout	\$ 2 900
<b>Bottom Blender and Reclaim Conveyor -</b> 24.4 m long, screw tube auger type, complete with electric drive, wiring and controls	\$ 21 000
<b>Hopper Scale -</b> 5 tonne capacity, complete with surge bin, shed cover, elevated on steel columns, reinforced concrete piling foundation, load cells and digital automatic electronic indicator system	<b>\$ 17 260</b>
Electric and Control Room Shed - complete with foundations and slab floor	\$ 3500

# 5.052.100 HOPPER BIN ELECTRONIC BLENDING PLANT - CONT'D PRECALCULATED ADJUSTMENTS

<b>Dual Purpose Loading Leg</b> more or less than 11.6 m high	add or deduct per m \$ 550	
Bottom Conveyor/Blender more or less than 24.4 m length	add or deduct per m 530	
<b>Top Conveyor</b> more or less than 25.0 m length	add or deduct per m 470	
Micro-Nutrient Additive Bin 227 kg capacity	add EA \$ 3 200	
Liquid Impregnation Pump for liquid chemical injection	add EA \$ 2 800	

add for liquid holding tanks as found

#### Plant Equipment System Expansion or Reduction Adjustment

Where a plant-site size consists of less than or more than a standard 5 bin installation, the following adjustments are required per bin:

Bin foundation Bottom blender and reclaim conveyor Top distribution conveyor Top micro switch discharge gate Metering	add or deduct per bin add or deduct per bin add or deduct per bin add or deduct per bin	\$ 2 300 \$ 2 750 \$ 2 440 \$ 440
screw auger, hopper, drive & controls	add or deduct per bin Total	\$ 3 800
	Adjustment per bin	\$11 730

#### **EXAMPLE ASSESSMENT**

#### All Sizes Assumed for this Example

Assume a blending plant has all necessary equipment components and storage bin capacity consists of 3 -116 tonne and 1 - 62 tonne welded steel hopper bottom bins.

Basic 5 Bin Plant Equipment System	\$ 123	000
Add:		
3 - 116 tonne bins @ \$ 7 100 per bin	21	300
1 - 62 tonne bin @ \$ 4 900 per bin	4	900
Size Adjustment: 4 Bin System Less equipment and foundations from 5 bin standard plant — 1		
bin less	-11	730
Total	\$ 137	470

Note: If the above example plant contained 6 bins in total, an expansion adjustment of +\$ 11 730 would occur.

# 5.075.000 AUTOMOTIVE EQUIPMENT

# 5.075.050 COMPRESSED AIR EQUIPMENT

#### 5.075.055 COMPRESSORS

Sin	gle	Th	ree
Phase		Phase	
EA \$	700	EA \$	_
EA	740	EA	
EA	1 370	EA	1 300
EA	1 400	EA	1 340
EA	1 570	EA	1 440
EA	2 500	EA	2 200
EA	3 000	EA	2 700
EA		EA	3 100
EA		EA	4 550
EA		EA	4 680
EA		EA	6 880
EA		EA	7 180
	EA \$ EA	EA \$ 700 EA 740 EA 1370 EA 1 400 EA 1 570 EA 2 500 EA 3 000 EA — EA — EA — EA —	Phase         Ph           EA \$ 700         EA \$           EA 740         EA           EA 1370         EA           EA 1400         EA           EA 1570         EA           EA 2500         EA           EA 3000         EA           EA — EA         EA           EA — EA         EA           EA — EA         EA           EA — EA         EA

#### 5.075.060 TIRE INFLATORS

	Standard Hose		Automatic Hose Reel	
Hose with indicator	EA	\$ 240	EA	\$ 460
Wall Mounted indicator	EA	850	EA	1 120
Pedestal mounted indicator	EA	1 000		

#### 5.075.065 TIRE FITTING AND REMOVING EQUIPMENT

Universal service station type with inflator EA \$1980

#### 5.075.100 WATER & LUBRICATION DISPENSERS

#### 5.075.105 WATER DISPENSER

Automatic Reel EA \$ 220

# 5.075.110 WATER/AIR ISLAND CALCOMETERS

Same shape as gasoline calcometers, 1 air hose, 1 water hose, calibration gauges and self-contained air compressor

0.56 kW compressor, manual calibration	EA	\$ 3 600
1.12 kW compressor, manual calibration	EA	\$ 4 900
1.12 kW compressor, electronic calibrating, SS cabinet	EA	\$ 5 500

Note: Add as found for concrete islands, paving and guard posts

#### 5.075.115 LUBRICATION DISPENSERS

	2 Reel	3 Reel	4 Reel	5 Reel
Floor Cabinet	EA \$ 3 200 EA	\$ —	EA \$ 6 000 EA	<b>\$</b> —
Overhead	EA 3500 E	A 5 300	EA 7 050	EA 8 800

# 5.075.150 GASOLINE DISPENSERS

# 5.075.155 STANDARD CONSUMER

# **Self-Contained** with pumping unit

	Mechanical		Electronic	
Single — 1 hose	EA	\$ 3 400	EA	\$ 4 800
Dual — 2 hose, 1 product	$\mathbf{E}\mathbf{A}$	5 350	EA	7 100
Dual — 2 hose, 2 product	EA	5 600	EA	7 300
Blending — 1 hose	EA	4 350	EA	_
Blending — 2 hose	EA	6 600	EA	_
4 Hose - 2 product (low profile, no canopy)	EA	_	EA	13 900
4 Hose - 2 product (high hose & canopy)	EA		EA	14 800
Multi-Product - 6 Hose	EA	_	EA	18 000
Remote without pumping unit				
Single — 1 hose	EA	\$ 3 000	EA	\$ 4 300
<b>Dual</b> — 2 hose, 1 product	$\mathbf{E}\mathbf{A}$	4 800	EA	6 650
<b>Dual</b> — <b>2</b> hose, 2 product	EA	4 850	EA	6 700
<b>Blending</b> — 1 hose	$\mathbf{E}\mathbf{A}$	3 800	EA	
<b>Blending</b> — 2 hose	EA	6 150	EA	_

**Note:** Remote Dispensers — **add** submersible **pumps** as found.

## 5.075.160 COMMERCIAL-HIGH GALLONAGE

Suction		
0.25 kW Motor 45 — 55 1/M	EA	\$ 2 500
0.56 kW Motor 55 — 90 1/M	EA	2 930
0.75 kW Motor 90 — 180 1/M	EA	3 850
1.12 kW Motor 230 — 270 1/M	EA	4 870
Remote		
For use with 0.25 kW Submersible Pump	EA	\$ 1 950
For use with 0.56 kW Submersible Pump	EA	2 150
For use with 1.12 kW Submersible Pump	EA	2 500

Note: Remote Dispensers — add submersible pumps as found

Key Lock Units — add to above dispensers

1.12 kW

	Mechanical Direct Mounted		Electrical Direct or Remote		
10 Key Bank	EA	\$ 900	EA	\$ 1 550	
Each additional 10 Key Bank	EA	900	EA	650	
5.075.165 SUBMERSIBLE PUMPS					
0.25 kW			EA	\$ 1 750	
$0.56 \mathrm{kW}$			EA	1 900	

EA

2 270

# 5.075.170 SELF-SERVE REMOTE CONTROL CONSOLES

	Mechanical		Electronic	
	Dis	penser	Dispenser	
2 hose	EA	<b>\$5 700</b>	EA	\$5 400
3 hose	EA	5 700	EA	5 400
4 hose	EA	5 700	EA	5 550
5 hose	EA	6 700	EA	5 550
6 hose	EA	6 700	EA	5 550
7 hose	EA	6 700	EA	5 550
8 hose	EA	6 700	EA	5 550
9 hose	EA	9 250	EA	5 670
10 hose	EA	9 250	EA	5 670
11 hose	EA	9 250	EA	5 670
12 hose	EA	9 250	EA	5 670
16 hose	EA	10 150	EA	5 720
Cash register/Control Console (TRC14)		add EA	\$ 8 300	
Ticket Printer		EA	2 200	

#### **5.075.175 INTERCOM**

Intercom master control EA \$ 740 Speaker reply and receive EA 100

#### 5.075.200 TANKS

# **5.075.205 UNDERGROUND TANKS** with normal fittings, piping and venting.

Litres Ste		Steel	Fil	breglass
2 273	EA	\$ 4 300	EA	\$ 4 900
4 546	EA	4 950	EA	5 800
9 092	EA	6 300	EA	7 000
13 638	EA	7 300	EA	8 350
18 184	EA	9 200	EA	9 600
22 730	EA	9 700	EA	10 800
27 277	EA	10 850	EA	12 050
31 823	EA	11 750	EA	13 450
36 369	EA	12 650	EA	14 500
45 461	EA	13 750	EA	16 550

# 5.075.210 WASTE OIL TANKS no fittings or piping

Litres		Steel		
1 137	EA	\$ 380	EA	\$ -
2 273	EA	700	EA	1 600
4 546	EA	1 380	EA	2 100

# 5.075.220 GARAGE AND CAR WASH MUD SUMPS

Reinforced concrete pit complete with steel grating cover 1 m depth  $$m^2$$  \$ 510 1.5 m depth  $$m^2$$  \$ 610

#### 5.075.225 DRAIN TRENCHES concrete

	Constant	m <sup>2</sup>
150 mm wide	\$ 320	\$ 28.50
300 mm wide	320	32.00
450 mm wide	320	35.50

Note: add for trench grating from 5.005.320

# 5.075.230 AUTOMATED DIGITAL TANK GAUGING SYSTEMS

#### Underground System for service stations

Basic 3 tank sensing probe system

EA \$11 200

**Options:** Additional sensing probes, per tank Additional controller Digital record printer

add EA \$ 1 000 add EA 4 000 add EA 550

Each basic system includes: 3 sensing probes, 1 per tank steel conduit, tubing and trenching wiring and electrical hook-ups system controller digital display read-out console commissioning

**Note:** The controller forming part of the basic system will monitor a maximum of 8 tanks. Where more than 8 tanks are found in a system, an additional controller must be added.

# 5.075.250 VEHICLE HOISTS

#### 5.075.255 LIGHT DUTY HOISTS

	Single Post 3 629 kg		\$ 4 000
	<b>Double Post</b> side by side, 3 629 kg		\$ 5 860
	Double Post 4 536 kg	EA	\$ 5 250
	5 897 kg	EA	5 950
	6 350 kg	EA	6 100
	7 257 kg	EA	6 500
	8 165 kg	EA	7 050
	Double Post one moveable		
	4 990 kg	EA	\$ 5 600
	7 484 kg	EA	6 900
5.075.260	HEAVY DUTY HOISTS		
	Double Post one moveable		
	10 886 kg	EA	\$ 8 050
	11 839 kg	EA	9 200
	16 330 kg	EA	9 450
	19 505 kg	EA	11 450
	22 680 kg	EA	15 150
	<b>Double Post</b> with dual rear posts		
	24 494 kg	EA	\$ 12 550
	27 670 kg	EA	15 950
	30 845 kg	EA	16 100
	34 020 kg	EA	18 850
	Triple Post two moveable		
	24 494 kg	EA	\$ 14 250
	with dual rear and front posts		
	27 670 kg	EA	\$ 16 350

# 5.075.265 SURFACE MOUNTED LIFT HOISTS

H Frame, scissor folding	2 722 kg	EA	\$ 2 850
Two Post, twin folding side arms	3 175 kg 4 082 kg	EA EA	\$ 6 250 6 950
Four Post, roll on ramp lift	3 175 kg 4 082 kg 5 443 kg 9 979 kg 13 608 kg	EA EA EA EA	5 800 7 650 8 400 11 450 17 750
Four Post, alignment ramp hoist	5 443 kg	EA	\$ 10 650

#### 5.075.270 VEHICLE EXHAUST SYSTEMS

# **Port Opening Size**

<b>Under Floor</b>		75	mm 100	mm 125 ı	<u>nm</u>
Single bay		EA	\$ 2 900	\$ 3 050	\$ 3 350
Additional bay	add	EA	290	360	450
Dual bay		EA	3 200	_	-
Additional dual bay	add	EA	500	=	-
Overhead Suspended					
Single bay		EA	_	_	2 550
Additional bay	add	EA	_		320

# **5.075.300 VEHICLE WASH SYSTEMS** excluding buildings & hot water tank

# 5.075.305 SELF WASH PRESSURE SYSTEM including soap & waxing units

Standard Wash Unit	per bay	EA	\$ 2 460
Coin Operated Wash Unit	per bay	EA	3 000
Foaming Brush Wash Unit	per bay add	EA	1 000

# 5.075.310 AUTOMATIC WASH SYSTEMS

	Roll Over	•		Orive nrough	(8	onveyor Surface ounted)
Cars						
1.8 m high, 5 brushes	EA	\$ 24 000	EA	\$ 31 000	EA	\$ 89 600
Leisure Vehicles						
3.1 m high, 7 brushes	EA	\$ 24 200	EA	\$ 49 500	EA	\$ 89 600
Large Buses, Trucks, etc.						
4.1 m high, 2-3 Brushes	EA	\$ 46 200	EA	\$ 53 700	EA	\$ 82 600
Note: add \$12 700 for blow add 10% for conveye.				ems		
Vacuum Cleaner					<b>T</b>	<b>0.1.150</b>
1.12 kW 5.60 kW					EA EA	\$ 1 150 \$ 3 630

# 5.075.350 OUTDOOR LIGHTING

# 5.075.355 GROUND LEVEL LIGHTING FIXTURES including concrete base

Type	Watts		
Incandescent	500	EA	\$ 710
	1 000	EA	770
Mercury Vapour	400	EA	770
	1 000	EA	970
Quartz-Iodine	500	EA	750
	1 500	EA	830
High-Pressure Sodium	100	EA	870
-	150	EA	880

# 5.075.360 MALL & GARDEN LIGHTING FIXTURES, including pole

	Pole		
Type	Length		
Incandescent 60-200 Watts	1.8 m	EA	\$ 420
	3.0 m	EA	450
Mercury Vapor 100-250 Watts	1.8 m	EA	500
	3.0 m	EA	530
High-Pressure Sodium 70-250 Watts	1.8 m	EA	530
-	3.0 m	EA	560

# 5.075.365 FIXTURES

Туре	Watts		
Incandescent	250	EA	\$ 120
	500	EA	130
	1 000	EA	180
Quartz (Tungsten Halogen)	500	EA	180
	1 500	EA	190
Mercury Vapor	250	EA	350
	400	EA	360
	1 000	EA	580
Metal Halide	175	EA	430
	400	EA	520
	1 000	EA	650
	1 500	EA	690
High Pressure	100	EA	420
Sodium (Slightly	150	EA	450
Yellow)	250	EA	500
	400	EA	510
	450	EA	570
	1 000	EA	700
Low Pressure	35	EA	370
Sodium (Dark	90	EA	510
Yellow)	180	EA	600
Fluorescent			
2 Tube	120 (1.2 m)	EA	290
4 Tube	240 (1.2 m)	EA	320
4 Tube	340 (1.8 m)	EA	340
6 Tube	510 (1.8 m)	EA	400
4 Tube	420 (2.4 m)	EA	420

Note: add for poles

**5.075.370 POLES** including base and electrical hook-up

			Ste	eel	Ste	eel	St	eel
Height	W	ood	Pip	pe	Da	vit	Archite	ctural
4.3 m	EA	<b>\$</b> —	EA\$	610	EA\$	740	EA \$	660
4.9 m	EA		EA	630	EA	770	EA	700
5.5 m	EA	_	EA	740	EA	880	EA	740
6.1 m	EA	410	EA	780	EA	920	EA	800
7.6 m	EA	420	EA	880	EA	1 030	EA	900
9.1 m	EA	440	EA	900	EA	1 050	EA	920
10.7 m	EA	470	EA	940	EA	1 100	EA	960
12.2 m	EA	500	EA	1 020	EA	1 170	EA	1 040
13.7 m	EA	520	EA	_	EA	_	EA	_

**Note:** Concrete poles **add** 10% to Architectural Rate Aluminum poles **add** 20% to Architectural Rate

#### 5.075.400 MICRO-COMPUTER CONTROLLED FUEL DISPENSING SYSTEM

#### **5.075.405 PEDESTAL SELF-CONTAINED** for fleet non-resale

Basic 2 hose System	add	EA	\$ 11 640
Options: Additional hose	add	EA	\$ 660
Odometer and/or unit number entry	add	EA	\$ 340
Vehicle authorization expansion (to increase from 500 to 1000 units)	add	EA	\$ 540
Transaction memory expansion	add	EA	\$ 340

#### Each basic system includes:

self-contained computer and card reader station on pedestal at pump island controls up to two hoses authorization control up to 500 vehicles transaction memory up to 500 files trenching, cable, pulsers and hookups

This system is mostly used by large companies such as taxi-cab or government agencies.

Note: Gasoline dispensers must be added to above costs.

#### 5.075.410 PEDESTAL SELF-CONTAINED for resale

Basic System	EA		\$ 17 500
Options: Receipt printer (plug-in module on head of			
card reader and computer)	add	EA	\$ 1 890

#### Each basic system includes:

self-contained 16 K micro-computer or card reader station on pedestal at pump island housing and weathershields normally controls only four hoses program and memory power backup pump controls and interface trenching, cable, pulser and hookups communication terminal only power source and return data lines

This system is mainly found at service stations and bulk oil facilities. The computer is located in the card reader station on pedestal. The System requires **no in-house modules** and is accessed by home office main computer. Large facilities may have 2 or 3 pedestals which must be **added** for individually.

**Note:** Gasoline dispensers must be **added** to above costs.

# 5.075.415 COMPLETE IN-HOUSE computer control system

Basic 4 hose system		EA	\$ 25 400
Basic 8 hose system		EA	27 290
Basic 12 hose system		EA	29 630
Basic 16 hose system		EA	31 530
Options: Ticket receipt printer	add	EA	\$ 2 960
Additional card reader station	add	EA	\$ 12 250

#### Each basic system includes:

one card reader station — island micro-computer and cabinet — office pump control cabinets — office low voltage power junction terminal — office computer keyboard access console — office computer printer terminal — office transcorder data terminal — office modem connection — office trenching, cable, electronic pulser units, pump controls, card station data lines and receipt printer lines

These systems are mainly found at large service stations and truck service centers.

Note: Gasoline dispensers must be added to above costs.

#### 5.075.450 SOLID STATE MODULAR ELECTRONIC CONTROL FUEL DISPENSING SYSTEM

# 5.075.455 CODE LOCK SYSTEM no cards and no keys

24 positions	EA	\$ 3 240
132 positions	EA	\$ 4 710
148 positions	EA	\$ 5 970

Note: Gasoline dispensers must be added to above costs

# 5.075.500 MOTOR VEHICLE PROPANE FUELING OUTLETS5.075.505 PROPANE FUELING SYSTEMS

#### Each system includes:

- -tanks, fittings and paint
- steel skids and saddle or concrete base
- steel equipment platform and cabinets
- explosion proof motor and pump
- —high pressure piping, hoses and fittings
- —bottle filling station, controls and scale
- trenching, backfilling, conduit and electrical lines
- installation and hook-ups

## Systems do not include:

- meters or calcometer dispensers
- steel bumper posts
- key lock and micro-computer systems
- concrete aprons and islands

Type	Cype Capacity		Horizontal Capacity Tank System		Vertical Tank System	
Single	3 800 litres	EA	\$ 7500	<b>\$</b> —		
Single	5 700 litres	EA	8 180	10 820		
Single	7 500 litres	EA	11 750	14 680		
Single	19 000 litres	EA	22 160	25 460		
Twin	2 @ 3 800 litres	EA	9 870	_		
Twin	2 @ 7 500 litres	EA	15 900	_		

Tank Capacity Expansion, where additional tanks are added to and hooked into a basic twin tank system.

3800 litres 7600 litres	per tank per tank	add add	EA EA	\$ 3 750 \$ 5 650
Options: Bumper, 1.2 m concrete	e filled pipe	add	EA	<b>\$ 100</b>
Guardrails, metal		add	per m	\$ 49.00

#### 5.075.510 PROPANE FUELING SYSTEM METERS

Mechanical T-head Neptune type with automatic temperature compensator controls and normally mounted inside cabinet at LPOG tanks.

Add as found to vehicle fueling system costs

		Fleet and Non-Retail		
17 mm	EA	\$ 2 020	\$ 3 050	
25 mm	EA	2 400	3 440	

**Note:** Fleet and non-retail systems do not contain an automatic temperature compensator and normally have a less expensive meter.

#### 5.075.515 PROPANE FUELING SYSTEM DISPENSERS

These calcometer dispensers include electronic computing heads, stainless steel high pressure fittings, high pressure hoses and nozzles, automatic temperature compensators, dead-man switches, and are located either on the equipment platform at the tanks or remotely on a regular concrete pump island.

Add as found to vehicle fueling system costs

Single Hose Dispenser EA \$ 15 050

Double Hose Dispenser EA 27 700

**Note:** Meters and dispensers may be controlled by key-lock or micro-computer control systems which must be added as found from Sec. 5.075.160 and Sec. 5.075.400.

#### 5.075.550 PAINT SPRAY BOOTHS

Structural elements for walls and roof are prefabricated painted metal panels. Units contain lights, wiring, overhead exhaust and venting system, observation windows, man door and vehicle doors.

In conjunction with a paint booth, a make-up air system must be installed, either in the ceiling or on the roof of the building housing the paint booth. The costs of these units, complete with all piping and duct work, are included in the following rates.

#### **5.075.555 CAR BOOTHS** 4.3 m wide x 2.7 m high

Length	Sol	id Back	<b>Drive Thru</b>		
7.9 m	EA	\$ 20 350	EA	\$ 21 060	
8.5 m	EA	20 770	EA	21 500	
Without Make Up Air System			deduct	\$ 10 600	

#### **5.075.560 COMBINATION BOOTHS** 4.3 m wide x 3.7 m high

Length	Solid Back		Solid Back		Dr	ive Thru
8.5 m	EA	\$ 28 400	EA	\$ 29 600		
Length Variation add or deduct per 30	0 mm			\$ 310		
Lights add per 1.5 m of additional lengt	h			\$ 1 060		
Without Make-Up Air System			deduct	\$ 12 740		

These units will accommodate cars, vans and trucks

# 5.075.565 DOWN DRAFT BOOTH

Similar specifications to the combination drive thru booth except exhaust system has 4.3 m grated and filtered concrete floor pit with concrete under slab ducting.

Drive Thru 8.5 m x 4.3 m x 4.9 m **EA** \$ **34 900** 

# **5.075.570 TRUCK BOOTHS** 4.9 m wide x 4.9 m high

<b>Length</b>	Sol	id Back	Drive Thru		
10.4 m	EA	\$ 37 780	EA	\$ 39 550	
11.9 m	EA	39 350	EA	41 100	
13.4 m	EA	40 880	EA	42 570	
Length Variation add or deduct per	r 300 mm			\$ 370	
Lights add per 1.5 m of additional	length			\$ 1 060	
Without make-up Air System			deduct	\$ 16 275	

# 5.075.575 AUTOMATIC MOBILE OVEN

Roll-over dryer, rail mounted, motorized, infra-red electrical heat units, including rails and 1.8 m end oven storage booth extension.

Car or Combination Booth EA \$ 9 060

Truck Booth EA \$ 24 450

# 5.075.580 DRYING BOOTH EXTENSION

Attached three wall booth with chamber that allows drying of first vehicle while second is painted in main booth.

Add only to drive thru booths.

Car or Combination Booth EA \$ 6 150

# 5.077.000 BULK OIL PLANT EQUIPMENT

# 5.077.050 TANKS

#### **5.077.055 ABOVE GROUND**

# Capacity

Litres		lorizontal <u>Gravity)</u>		orizontal onnected)	V	ertical
2 2 7 3	EA	\$ 800	EA	<b>\$</b> -	EA	\$ 2 000
4 5 4 6	EA	1 200	EA	-	EA	2 300
9 0 9 2	EA	1 850	EA	-	EA	3 000
13 638	EA	2 350	EA	2 350	EA	3 700
18184	EA	-	EA	3 650	EA	4 400
22730	EA	-	EA	3 750	EA	5 900
36368	EA	-	EA	-	EA	7 450
45 461	EA	-	EA	-	EA	8 900
54552	EA	-	EA	-	EA	10 000
59020	EA	-	EA	-	EA	10 550
68 190	EA	-	EA	-	EA	10 950
72736	EA	-	EA	-	EA	11 350
90920	EA	-	EA	-	EA	12 750
113650	EA	-	EA	-	EA	16 650
136380	EA	-	EA	-	EA	20 900

**5.077.060 PIPING** average per tank; includes fittings, valves and supports.

		Pi	pe Size		
	48.3 mm	60.3 mm 73	.0 mm	88.9 mm	114.3 mm
Per Tank	\$ 3 750	\$ 4 300	\$ 4 850	\$ 5 400	\$ 6 150
Over 30.0 m					
add per m	\$ 11.20	\$ 12.80	\$ 14.4	0 \$ 16.0	00 \$ 18.40

# 5.077.065 PUMP MANIFOLDS

			Pipe Size		
	48.3 mm	60.3 mm	73.0 mm	88.9 mm	114.3 mm
Per Pump	\$ 800	\$ 900	\$ 1 00	00 \$110	0 \$1300

#### 5.077.070 TANK MANIFOLDS

	48.3 mm 6		pe Size 5.0 mm = 88.9	) mm 114	3 mm	
Per Tank	\$ 400	\$ 450	\$ 500	\$ 600	\$ 700	

#### 5.077.075 TANK CATWALKS

	m
Steel Ladder	\$ 106.00
Steel Stairway	160.00
Steel Catwalk	180.00
Wood Stairway	160.00
Wood Catwalk	80.00

#### 5.077.080 TANK FARM BERMS

		m
Earth Berm		\$ 130
Concrete Berm 1.2 m high		153
Steel Berm Walkover	EA	\$ 1 000
Wooden Berm Walkover	EA	650
Berm Sump & Drain	EA	700
Sump & Drain with Hand Pump	EA	1 200
Sump & Drain with Hand Pump	EA	1 2

#### 5.077.085 AUTOMATED DIGITAL TANK GAUGING SYSTEMS

Above-Ground System for bulk oil plants

Basic 5 tank sensing probe system EA \$ 14 700

Options: Tank Variation - less than or more than basic system

	per tank, add or deduct EA \$ 1 300	)
Additional controller	add EA	4 000
Digital record printer	add EA	550
Additional read-out console	add	1 200

Each basic system includes:
5 sensing probes, 1 per tank
armoured steel cable and tubing
wiring and electrical hook-ups
system controller
digital display read-out console
commissioning

**Note:** The controller forming part of the basic system will monitor a maximum of 8 tanks. Where more than 8 tanks are found in a system, an additional controller must be added.

Read-out consoles may be located in an office structure or externally in a bulk plant yard.

# 5.077.100 LOADING & UNLOADING EQUIPMENT

5.077.105 PUMPS includes base, motor and electrical hook-up

kW	Pipe Size		
0.75	60.3 mm	EA	\$ 2 450
1.12	60.3 mm	EA	2 500
1.49	60.3 mm	EA	2 650
2.24	88.9 mm	EA	3 600
3.73	88.9 mm	EA	3 700
5.60	88.9 mm	EA	5 100
5.60	114.3 mm	EA	5 700
7.46	114.3 mm	EA	6 250
Twin Bla	ckmer	EA	\$ 3 300
Quad Bla	ckmer	EA	7 200
Six Gang	Blackmer	EA	8 800

# **5.077.110** TRUCK LOADERS includes loading arm

Pipe Size		
60.3 mm	EA	\$ 1 300
73.0 mm	EA	1 500
88.9 mm	EA	1 700
114.3 mm	EA	2 100

EA

EA

EA

EA

EA

\$ 1 600

1 700

2 000

3 050

5 450

EA

EA

EA

EA

EA

3 300

5 700

#### 5.077.115 BOTTOM TRUCK UNLOADERS

74 G	** •			Spill
Pipe Size	Unlo	aders	Pro	<u>eventors</u>
60.3 mm	EA	\$ 550	EA	\$ 230
73.0 mm	EA	600	EA	240
88.9 mm	EA	700	$\mathbf{E}\mathbf{A}$	250
114.3 mm	EA	800	EA	260
5.077.120 BULK PLANT METERS				
Di Gi	Dir			With
Pipe Size	Read	ıng		Printer

# 88.9 mm 114.3 mm 5.077.125 BARREL FILLERS

42.2 mm

48.3 mm

60.3 mm

Hose and nozzle 42.2 - 48.3 mm **EA** \$ **460** 

# 5.077.130 RAILWAY TANK CAR UNLOADERS

Overhead Unloader Steel stand post, concrete base, 88.9 mm line and fittings concrete base and fittings. EA \$ 2 250

#### **Unloading Pivot Arm Assembly**

Size			
60.3 mm	add	EA	\$ 500
73.0 mm	add	EA	800
88.9 mm	add	EA	1 000

#### **Bottom Unloader** includes lines, pipe and fittings

Size		
60.3 mm	EA	\$ 440
73.0 mm	EA	800
88.9 mm	EA	1 080
114.3 mm	EA	1 300

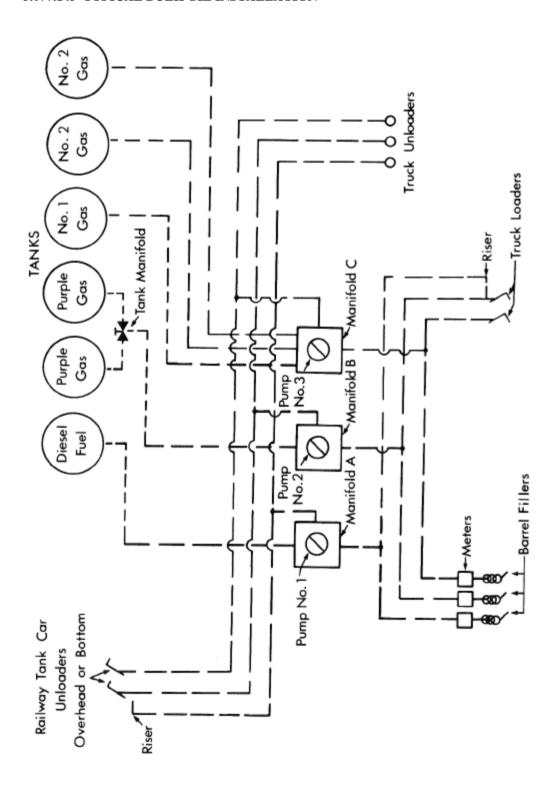
#### 5.077.135 STEEL FILLSTAND WITH STAIRS

Loading Platform	Constant S Area Rate m <sup>2</sup>	800 354.00
Swing Platform	add per m <sup>2</sup>	215.00

#### 5.077.140 CONCRETE SPILL SLAB

			<b>m</b> 2
150 mm Reinforced Concrete	add	EA	\$ 24.40
Catch Basin Interceptor	add	EA	\$ 1 400

# 5.077.145 TYPICAL BULK OIL INSTALLATION



The previous illustration depicts the layout of a small bulk oil plant showing the general arrangement of tanks, piping, and equipment. Different combinations of equipment, may be found but the general hook up will be similar to the illustration.

When large tank farms are encountered the yard piping is added on a per metre basis.

#### EXAMPLE ASSESSMENT BASED ON PREVIOUS ILLUSTRATION All Sizes

#### **Assumed for this Illustration**

TANKS: 6, each 54 552 litres @ \$ 10 000 per tank x 6	\$ 60 000
PIPING: All yard piping 60.3 mm, @ \$4 300 per tank x 5 tank	ks <b>25 800</b>
PUMP MANIFOLDS: Each manifold 60.3 mm piping, @ \$ 9 plus \$ 450 for each additional tank	900
Manifold "A" \$ 900 (1 tank only) Manifold "B" \$ 900 (treat as 1 tank only and add	900
\$ 450 for the "Tank Manifold")	1 350
Manifold "C" \$ 900 for the first tank plus \$ 450 for each of the other two tanks	1 800
PUMPS: 1 x 0.75 kW @ \$ 2 450 1 x 1.12 kW @ \$ 2 500 1 x 1.49 kW @ \$ 2 650	2 450 2 500 2 650
TANK CAR UNLOADERS: Overhead Unloader \$ 2 250 plus \$ 500 for one unloading arm assembly	2 750
·	
BOTTOM TRUCK UNLOADERS: 60.3 mm — 3 @ \$ 550	1 650
TRUCK LOADERS: 60.3 mm — 2 @ \$ 1 300	2 600
BARREL FILLERS: 3 @ \$ 460	1 380
METERS: 60.3 mm — 3 @ \$2 000 (Direct Reading)	6 000
	Total \$ 111 830

Note: add for Steel Fillstands, Concrete Spill Slabs, Tank Catwalks and Tank Farm Berms as found.

# 5.077.150 PROPANE (LPG) AND ANHYDROUS AMMONIA (NH<sub>3</sub>) EQUIPMENT

#### 5.077.155 DUAL PURPOSE HORIZONTAL TANKS

Rates include sitework, concrete piers, tanks, saddles, painting, gauges, regulators, valves, vents, set up and installation.

Rates **do not** include piping, hoses, pumps, motors, compressors; mounting pads; electrical service, hook ups and controls.

#### Capacity Litres

1 900	EA	<b>\$ 1790</b>
3 800	EA	2 940
5 700	EA	8 960
7 600	EA	10 750
19 000	EA	23 530
23 940	EA	30 300
34 580	EA	34 930
45 600	EA	40 450
68 400	EA	44 390
79 800	EA	49 260
96 140	EA	55 800
114 000	EA	56 200
135 280	EA	82 140
159 600	EA	87 340
171 000	EA	91 140
186 000	EA	97 000

**Note:** tanks are rated in U.S. gallons one U.S. gallon equals 3.8 litres

Steel Skids Under Tanks — add to above tank costs

# Tank sizes

0 to 15 200 litres	EA	\$ 1 070
19 000 to 45 600 litres	EA	6 110
57 000 to 96 140 litres	EA	9 200
over 96 140 litres	EA	11 490

#### 5.077.160 PROPANE PUMPING SYSTEMS

Pumping System Rates include concrete pad, pump, motor, controls, piping, hoses, valves, fittings scales and installation hook-ups necessary for bottle filling and tank truck loading.

#### **Bottle Fill and Tank Truck Loading**

\$ 4 460
5 300
5 720
5 920
6 070
8 090
8 750
9 120
1 130

#### 5.077.165 ANHYDROUS AMMONIA (NH3) PUMPING SYSTEMS

Pumping Systems are usually high carbon or stainless steel due to the high corrosive qualities of NH<sub>3</sub>, therefore these systems are more expensive than propane pumping systems.

Rates include pump, motor, concrete pad, piping (two — 51 mm vapor lines, one —76 mm liquid line), hoses (truck loading and unloading, vapor) valves, fittings, bleed lines, cabinets, controls and installation hook ups.

#### Standard System — Single Load In and Single Load Out

$\mathbf{kW}$		
3.73	51 mm pump and lines	\$ 16 350
5.60	51 mm pump and lines	16 570
7.46	51 mm pump and lines	16 940
7.46	76 mm pump and lines	17 820
11.19	76 mm pump and lines	18 630
14.92	102 mm pump and lines	21 060
18.65	102 mm pump and lines	22 100

#### Dual System — Single Load In and Double Load Out

**Add** to standard system (includes hoses, controls, hook ups and bypass piping)

\$ 10 300

Note: add to standard or dual systems for extra pumps, compressors, and meters as found.

#### 5.077.170 COMPRESSORS — PROPANE AND ANHYDROUS AMMONIA

Compressor rates include compressor, lines, valves, fittings, guards, base plates, cabinets, controls, motors and installation.

Motors are totally enclosed, fan cooled, 3 phase, explosion proof

#### KW

_3.73	51 mm lines	EA	\$ 8 130
5.60	51 mm lines	EA	8 360
7.46	51 mm lines	EA	9 570
7.46	76 mm lines	EA	13 490
11.19	76 mm lines	EA	15 620
18.65	76 mm lines	EA	16 440

Concrete bases or pads — add as found

#### 5.077.175 METERS

Meter Rates include stainless steel fittings, temperature compensators, strainer, valves, air eliminator and totalizer

Size	P	ropane		$NH_3$
17 mm	EA	\$ 2 820	EA \$	
25 mm	EA	3 260	EA	
32 mm	EA	5 280	$\mathbf{E}\mathbf{A}$	_
38 mm	EA	5 610	$\mathbf{E}\mathbf{A}$	6 430
51 mm	EA	6 640	$\mathbf{E}\mathbf{A}$	7 800
76 mm	EA	7 780	EA	9 550
102 mm	EA	8 640	EA	_

# 5.077.180 RAILWAY TANK CAR UNLOADING LINES

Transfers propane and or anhydorus ammonia from rail tank car to storage vessel and includes piping, valves, fittings, one vapor line and hose, two liquid lines and hose

51 mm vapor and liquid lines

EA \$ 6 550

Note: add for compressors and pumping units as found

add for unloading towers, stairs, catwalks as found

Various combinations of equipment will be found at propane or anhydrous ammonia bulk stations

The following example is based on a typical anhydrous ammonia systems. All sizes are assumed.

TANK: with piers — 114 000 litres	\$ 56 200
STEEL SKIDS: in addition to concrete piers	11 490
PUMPING SYSTEM: single load in and single load out 7.46 kw — 51 mm pump and lines	16 940
DUAL SYSTEM: additional load out	10 300
COMPRESSOR: 7.46 kW — 51 mm	9 570
METER: one 38 mm	6 430

Total \$\frac{110 930}{}

Note: add as found for yard lighting and steel fences

Suggested age life: 25 years

# 5.085.000 GRAIN & FEED STORAGE EQUIPMENT

# 5.085.050 STEEL GRAIN BINS

# **General Purpose - Flat Bottom**

Corrugated galvanized steel bolted bin including top fill cap, roof manhole and ladder, door and auger chute, hardware, concrete slab or wood skid and floor system, installation.

Capac	eity		
Tonnes	Bush	els	
			Each Bin
33.4	1	175	\$ 1 620
38.3	1	350	1710
41.2	1	450	1 770
42.6	1	500	1 810
46.8	1	650	1 950
54.0	1	900	2 120
56.8	2	000	2 230
65.3	2	300	2 530
71.0	2	500	2 650
73.8	2	600	2 800
76.7	2	700	2 810
79.5	2	800	2 830
89.5	3	150	3 070
93.7	3	300	3 170
96.5	3	400	3 240
109.3	3	850	3 660
113.6	4	000	3 710
119.3	4	200	3 820
125.0	4	400	4 060
130.6	4	600	4 110
133.5	4	700	4 160
142.0	5	000	4 430
167.7	5	905	5 700
185.0	6	517	5 960
197.8	6	966	6 650
220.0	7	816	6 850
234.9	8	270	7 770
261.3	9	202	8 560
284.6	10	023	8 770

Steel Ladder, exterior wall

add per m \$ 26.50

#### 5.085.060 STEEL GRAIN BINS

#### General Purpose - Hopper Bottom - Bolted

Corrugated galvanized steel bolted tank including hopper cone and legs, bracing and anchors, slide gate discharge, auger boot, roof and wall ladders and manhole, reinforced concrete foundation and slab, installation.

Capa	city	
Tonnes	Bushels	Each Bin
36.9	1 300	\$ 3 990
46.8	1 650	4 350
50.4	1 775	4 480
56.8	2 000	4 540
62.5	2 200	5 310
73.8	2 600	5 600
76.7	2 700	5 800

#### 5.085.070 STEEL BULK FEED TANKS

# **Hopper Bottom - Bolted**

Corrugated galvanized steel bolted tank including hopper cone and legs, bracing, anchors, slide gate discharge, auger boot, roof and wall ladders, roof manhole, setup and reinforced concrete foundation and slab, installation.

Capa	city	
Tonnes	Bushels	Each Bin
5.4	190	\$ 1 670
7.8	275	1 800
10.2	360	1 930
12.8	450	2 070
14.2	500	2 430
18.2	640	2 680
22,3	785	2 830
26.4	930	2 970
30.5	1 075	3 130
34.8	1 225	3 560

#### PRECALCULATED ADJUSTMENTS

Pneumatic top cap and filling tube add EA \$330

# 5.085.080 STEEL GRAIN OR FERTILIZER BINS

#### General Purpose - Hopper Bottom - Welded

Includes hopper cone and slide gate, auger boot, roof and wall ladder, roof manhole, steel legs, enamel paint finish; epoxy coated interior on fertilizer storage bins; reinforced concrete foundation and slab, installation.

GRAIN STO	RAGE	FERTILIZER STO	RAGE
Grain Capacity Bushels	Grain Bin Each	Fertilizer Capacity/Tonnes	Fertilizer Bin Each
250	\$ 1 990	5.4	\$ 2 030
425 700 780 975 1 260 1 450 1 725 1 940 2 225 2 650 2 765 3 275 3 620	2 630 2 810 3 260 3 400 3 530 3 830 4 180 4 500 4 830 5 470 6 770 7 710 8 020	9.1 14.5 25.4 31.7 40.8 46.3 56.2 61.7 70.8 84.4 88.9 105.3 116.2	2 720 2 910 3 360 3 500 3 620 3 920 4 280 4 640 4 970 5 610 7 000 7 950 8 260
4 130	8 730	132.5	8 990

#### PRECALCULATED ADJUSTMENTS

Reinforced Concrete Foundation and Slab - nil			
0 to 700 bushel capacity	dedu	ct	\$ 430
780 to 1260 bushel capacity	dedu	ct	500
1450 to 2650 bushel capacity	dedu	ct	590
2700 to 5000 bushel capacity	dedu	et	1 020
Steel Skids			
3.7 m diam. bins	add		\$ 450
4.3 m diam. bins	add		550
5.8 m diam. bins	add		750
Pneumatic Filler Tube	add	EA	250
Inspection Windows	add	EA	30
Extra Manhole	add	EA	35

**Note:** Foundations located at most commercial installations where larger capacity bins are found normally incorporate reinforced concrete piles and heavy reinforced concrete perimeter footings in addition to the concrete slab foundations included as part of the above Base Costs. A further adjustment is therefore required to add for these items.

#### 5.085.090 WOOD GRAIN OR FERTILIZER BINS

Used for grain or fertilizer storage and includes wood skids, wood plank floor with plywood overlay, plywood walls and roof, man door, exterior paint, roof ladder and manhole, installation. Interior plywood cone and bracing with auger boot on hopper models.

Cap	acity	Flat Bottom	Hopper Bottom
Tonnes	Bushels	Each	Each
24.5	875	_	\$ 1 620
28.1	990		1 650
28.4	1 000	980	_
34.1	1 200	1 150	1 980
46.1	1 625	1 380	2 570
63.9	2 250	1 600	

# 5.085.100 BIN UNLOADING EQUIPMENT

Installed in horizontal bin well in the concrete floor of a standard grain bin and includes double hopper tube, flanges, screw auger, exterior power drive head, motor, electrical, installation.

#### **Horizontal Bin Unloaders**

Bin Diameter		150 mm Tube		200 mm Tube	
5.8 m	EA	\$ 1 610	EA	\$ 2 160	
6.4 m	EA	1 610	EA	2 190	
7.3 m	EA	1 820	EA	2 600	
8.2 m	EA	1 850	EA	2 640	
9.1 m	EA	_	EA	2 670	
10.1 m	EA		EA	2 740	

Bin Sweeps - add as found to the above unloader costs

Bin Diameter		150 mm Sweep				
5.8 m	EA	\$ 530	EA	\$ 570		
6.4 m	EA	540	$\mathbf{E}\mathbf{A}$	580		
7.3 m	EA	560	$\mathbf{E}\mathbf{A}$	620		
8.2 m	EA	600	$\mathbf{E}\mathbf{A}$	650		
9.1 m	EA		$\mathbf{E}\mathbf{A}$	680		
10.1 m	EA		EA	740		

# 5.085.110 GRAIN BIN AERATION EQUIPMENT

Several types of aeration systems may be found. The costs of the interior bin floor system must be combined with the appropriate fan cost to produce a total system cost.

Interior bin floor systems include corrugated galvanized perforated duct panels or planks, polyethylene wall transition cone duct, installation.

# **Above Floor Tube Aeration Systems**

Bin Diameter	Half	0 mm Round Line	Half	5 mm Round Line	Half	5 mm Round Line		mm Round
4.3 m	EA	\$ 270	EA	\$ 360	EA	\$ 470	EA\$	550
5.8 m	$\mathbf{E}\mathbf{A}$	300	$\mathbf{E}\mathbf{A}$	390	$\mathbf{E}\mathbf{A}$	560	$\mathbf{E}\mathbf{A}$	610
6.4 m	$\mathbf{E}\mathbf{A}$	320	$\mathbf{E}\mathbf{A}$	420	$\mathbf{E}\mathbf{A}$	620	$\mathbf{E}\mathbf{A}$	670
7.3 m	EA	350	$\mathbf{E}\mathbf{A}$	450	$\mathbf{E}\mathbf{A}$	680	EA	790
8.2 m	EA	370	$\mathbf{E}\mathbf{A}$	480	$\mathbf{E}\mathbf{A}$	740	EA	910
9.1 m	EA	390	$\mathbf{E}\mathbf{A}$	510	$\mathbf{E}\mathbf{A}$	800	$\mathbf{E}\mathbf{A}$	1 030
10.1 m	EA	410	$\mathbf{E}\mathbf{A}$	540	EA	860	EA	1 150

#### Flush Plank Floor and Pit System

Includes perforated steel planks, steel supports, recessed duct and 325 mm recessed concrete bin well.

#### Bin Diameter

4 3 m	EA \$	640
5.8 m	EA	1 010
6.4 m	EA	1 200
7.3 m	EA	1 660
8.2 m	EA	2 140
9.1 m	EA	2 610
10.1 m	EA	3 170
11.0 m	EA	3 610

# 5.085.110 GRAIN BIN AERATION EQUIPMENT CONT'D

Fan costs include base and wall mounting, air cone, collars, electrical and installation.

Fan costs must be added to the cost of the appropriate interior bin aeration floor system to produce cost of total system.

#### **Aeration System Fans**

			n-Line ntrifugal	High Cent	Speed rifugal
1 Phase	0.75 Kw	EA	\$ 1 010	EA	<b>\$</b> —
	2.24 Kw	EA	1 250	EA	1570
	3.73 Kw	EA	1 510	EA	1840
	5.60 Kw	EA	1 740	$\mathbf{E}\mathbf{A}$	2250
	7.46 Kw	EA		EA	2670
3 Phase	0.75 Kw	EA	1 270	EA	_
	2.24 Kw	EA	1 600	EA	1410
	3.73 Kw	EA	1 760	EA	1570
	5.60 Kw	EA	2 060	EA	1730
	7.46 Kw	EA	_	EA	2080

Note: In-line Centrifugal – has a round cylindrical steel housing with motor internally mounted.

High Speed Centrifugal – has a square or rectangular slim-line compact steel housing with motor externally mounted.

Suggested Age Life: Wood Bins – 15 years

Steel Bins – grain storage, wood floor system
concrete slab
- fertilizer storage

40 years
50 years
20 years

## 5.089.500 RAILWAY TRACKAGE & EQUIPMENT

#### 5.089.525 ROADWAY & SUPERSTRUCTURE

Roadway and superstructure of the roadway

\$ 14 080 per kilometre

Note: Rates for roadway and superstructure of the roadway reflect depreciated base costs.

#### 5.089.550 TRACKAGE AND APPURTENANCES

<b>5.089.555 TRACKAGE</b> outside the limits of a	"roadway"	\$ 148 550 per kilometre
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**5.089.560 APPURTENANCES** outside the limits of a "roadway"

Turnout, 42.16 — 49.39 kg/m	EA	<b>\$ 9 400</b>
Turnout, 56.89 — 65.52 kg/m	EA	9 900
Wheel Stop	EA	500
Car Bumper	EA	1 250
Derailer (hand throw)	EA	380

Note: Rates for trackage and appurtenances reflect depreciated base costs.

#### **5.089.575 EQUIPMENT**

#### 5.089.580 STORAGE TANKS

Size		
53.0 m <sup>3</sup>	EA	\$ 10 530
$189.3 \text{ m}^3$	EA	23 900
$378.5 \text{ m}^3$	EA	40 270
1 324.9 m <sup>3</sup>	EA	162 220
$2.649.8 \text{ m}^3$	EA	302 080

**Note:** Gallon (US) =  $0.003 785 \text{ m}^3$ Gallon (Imperial) =  $0.004 546 \text{ m}^3$ Barrel (42 US Gallons) =  $0.158 987 \text{ m}^3$ 

# 5.089.585 TANK PUMPING UNITS

Size		
378 LPM Complete Unit	EA	\$ 3 900
1 136 LPM Complete Unit	EA	5 850

#### 5.089.590 LOADING PLATFORMS

		$\mathbf{m}^2$
Earth and Timber		\$ 88.00
Concrete		129.00
Asphalt Surfacing	add	11.00

#### **5.089.595 STOCKYARDS**

	$\mathbf{m}^2$
Pen Fencing (fence area)	\$ 33.30

# 5.145.000 AVIATION EQUIPMENT

#### 5.145.050 AIRCRAFT REFUELING CABINETS

Costs include firbreglass cabinet, pump, motor, filter, separator, meter, valves, piping, starters, junction boxes, underground wiring, explosion proof fittings, aviation hose, overwing nozzle and electric rewind hose reel.

Costs also include a  $1.8 \times 2.4$  m reinforced concrete slab for mounting of the cabinet and equipment.

114 litres per minute, cabinet type	EA	\$ 14 950
114 litres per minute, overhead T-bar, rack mounted	EA	13 700
227 litres per minute, cabinet type	EA	18 450
455 Litres per minute, cabinet type	EA	28 600

#### PRECALCULATED ADJUSTMENTS

Under-wing loading nozzle	ad	d EA	1 000
Red marker lights, explosion and weatherproof	add per cabinet		600
Interior cabinets lights, explosion and weatherproof	add per cabinet		500
Hand crank rewind hose reel	deduct EA	985	
Concrete slab size variation	add or deduct per m <sup>2</sup>		15.00

# 5.900.000 COMPONENT COST SECTION

# COMMERCIAL COMPONENT KEY

CODE	COMPONENT	CODE	COMPONENT
0100	Sitework	3500	Windows
0300	Excavation	3700	Exterior Doors
0500	Concrete Footings	3900	Shafts/Stairwells
0700	Piles	4100	Interior Wall Finish
0900	Concrete Pads	4300	Partitions
1100	Grade Beams	4500	Ceiling Finish
1300	Foundation Walls	4700	Interior Doors
1500	Concrete Slabs	4900	Baseboards
1700	Columns	5100	Floor Finish
1900	Beams	5700	Balconies
2100	Base Floor Construction	6100	Plumbing
2300	Stairs	6300	Plumbing Fixtures
2500	Base Wall Construction	6500	Heating
2700	Exterior Wall Finish	6700	Electrical
2900	Base Roof Construction	6900	Electrical Fixtures
3300	Roof Finish		

# **5.900.030 EXCAVATION**

Code	Component	$^{\mathrm{m}^3}$
0300	Bulk Excavation and Disposal	\$ 9.90

# 5.900.050 CONCRETE STRIP FOOTINGS

Code	Component	m
0500	150 x 300 mm Unreinforced	\$ 12.00
0501	150 x 350 mm Unreinforced	12.50
0502	150 x 400 mm Unreinforced	13.50
0503	150 x 450 mm Unreinforced	14.00
0504	150 x 500 mm Unreinforced	14.50
0505	150 x 550 mm Unreinforced	15.00
0506	150 x 600 mm Unreinforced	16.00
0507	200 x 300 mm Unreinforced	16.00
0508	200 x 350 mm Unreinforced	17.00
0509	200 x 400 mm Unreinforced	17.50
0510	200 x 450 mm Unreinforced	18.50
0511	200 x 500 mm Unreinforced	19.50
0512	200 x 550 mm Unreinforced	20.50
0513	200 x 600 mm Unreinforced	21.00
0514	250 x 300 mm Unreinforced	20.00
0515	250 x 350 mm Unreinforced	21.00
0516	250 x 400 mm Unreinforced	22.00
0517	250 x 450 mm Unreinforced	23.00
0518	250 x 500 mm Unreinforced	24.50
0519	250 x 550 mm Unreinforced	25.50
0520	250 x 600 mm Unreinforced	26.50
0521	300 x 300 mm Unreinforced	24.00
0522	300 x 350 mm Unreinforced	25.50
0523	300 x 400 mm Unreinforced	26.50
0524	300 x 450 mm Unreinforced	28.00
0525	300 x 500 mm Unreinforced	29.00
0526	300 x 550 mm Unreinforced	30.50
0527	300 x 600 mm Unreinforced	32.00

# 5.900.050 CONCRETE STRIP FOOTINGS - CONT'D

Code	Component	m
0528	150 x 300 mm Medium Reinforcing Total Cost	\$ 12.00 <u>3.00</u> <b>15.00</b>
0529	150 x 350 mm Medium Reinforcing Total Cost	12.50 <u>3.00</u> <b>15.50</b>
0530	150 x 400 mm Medium Reinforcing Total Cost	13.50 3.00 <b>16.50</b>
0531	150 x 450 mm Medium Reinforcing Total Cost	14.00 3.00 <b>17.00</b>
0532	150 x 500 mm Medium Reinforcing Total Cost	14.50 3.00 17.50
0533	150 x 550 mm Medium Reinforcing Total Cost	15.00 3.00 <b>18.00</b>
0534	150 x 600 mm Medium Reinforcing Total Cost	16.00 <u>3.00</u> <b>19.00</b>
0535	200 x 300 mm Medium Reinforcing Total Cost	16.00 <u>3.00</u> <b>19.00</b>
0536	200 x 350 mm Medium Reinforcing Total Cost	17.00 3.00 <b>20.00</b>
0537	200 x 400 mm Medium Reinforcing Total Cost	17.50 3.00 <b>20.50</b>
0538	200 x 450 mm Medium Reinforcing Total Cost	18.50 3.00 <b>21.50</b>
0539	200 x 500 mm Medium Reinforcing Total Cost	19.50 <u>3.00</u> <b>22.50</b>
0540	200 x 550 mm Medium Reinforcing Total Cost	20.50 3.00 23.50

# 5.900.050 CONCRETE STRIP FOOTINGS - CONT'D

Code	Component	m
0541	200 x 600 mm Medium Reinforcing Total Cost	\$ 21.00 <u>3.00</u> <b>24.00</b>
0542	250 x 300 mm Medium Reinforcing Total Cost	20.00 3.00 23.00
0543	250 x 350 mm Medium Reinforcing Total Cost	21.00 3.00 24.00
0544	250 x 400 mm Medium Reinforcing Total Cost	22.00 3.00 <b>25.00</b>
0545	250 x 450 mm Medium Reinforcing Total Cost	23.00 3.00 <b>26.00</b>
0546	250 x 500 mm Medium Reinforcing Total Cost	24.50 3.00 27.50
0547	250 x 550 mm Medium Reinforcing Total Cost	25.50 3.00 28.50
0548	250 x 600 mm Medium Reinforcing Total Cost	26.50 3.00 <b>29.50</b>
0549	300 x 300 mm Medium Reinforcing Total Cost	24.00 <u>3.00</u> <b>27.00</b>
0550	300 x 350 mm Medium Reinforcing Total Cost	25.50 3.00 28.50
0551	300 x 400 mm Medium Reinforcing Total Cost	26.50 <u>3.00</u> <b>29.50</b>
0552	300 x 450 mm Medium Reinforcing Total Cost	28.00 <u>3.00</u> <b>31.00</b>
0553	300 x 500 mm Medium Reinforcing Total Cost	29.00 <u>3.00</u> <b>32.00</b>

# 5.900.050 CONCRETE STRIP FOOTINGS - CONT'D

Code	Component	m
0554	300 x 550 mm Medium Reinforcing	\$ 30.50 3.00
	Total Cost	33.50
0555	300 x 600 mm	32.00
	Medium Reinforcing Total Cost	3 <u>.00</u> 3 <b>5.00</b>
0556	250 x 300 mm	20.00
	Heavy Reinforcing Total Cost	5.90 <b>25.90</b>
0557	250 x 350 mm	21.00
	Heavy Reinforcing Total Cost	<u>5.90</u> <b>26.90</b>
	Total Cost	
0558	250 x 400 mm Heavy Reinforcing	22.00 <u>5.90</u>
	Total Cost	<u>3.90</u> 27.90
0559	250 x 450 mm	23.00
	Heavy Reinforcing Total Cost	<u>5.90</u> <b>28.90</b>
0560	250 x 500 mm	24.50
	Heavy Reinforcing Total Cost	<u>5.90</u> <b>30.40</b>
0561	250 x 550 mm	25.50
	Heavy Reinforcing Total Cost	<u>5.90</u> <b>31.4</b> 0
	Total Cost	31.40
0562	250 x 600 mm	26.50
	Heavy Reinforcing Total Cost	5.90 <b>32.40</b>
0563	300 x 300 mm	24.00
	Heavy Reinforcing Total Cost	<u>5.90</u> <b>29.90</b>
	Total Cost	29.90
0564	300 x 350 mm	25.50
	Heavy Reinforcing Total Cost	5.90 <b>31.40</b>
0565	300 x 400 mm	26.50
	Heavy Reinforcing Total Cost	<u>5.90</u> <b>32.40</b>
0=		
0566	300 x 450 mm Heavy Reinforcing	28.00 <u>5.90</u>
	Total Cost	33.90