Overview 9.1

#### **Summary**

This chapter contains procedures for the valuation of miscellaneous commercial buildings and structures, including stacks, incinerators, towers, drive-in theatre screens, swimming pools, water slides, grandstands, bleachers, coolers, freezers, equipment and mechanical buildings, telephone buildings, air supported/dome structures, and ATM structures.

SAMA's 2023 Cost Guide provides directions for the valuation of property by the cost approach; it does not have the force of law.

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This information is available for purchase by contacting:

Technical Standards and Policy Division Saskatchewan Assessment Management Agency 200 – 2201 – 11<sup>th</sup> Avenue Regina, Saskatchewan S4P 0J8

> Phone: (306) 924-8000 Toll Free: 1-800-667-SAMA (7262) Fax: (306) 924-8070

Email: info.request@sama.sk.ca

Website: <a href="http://www.sama.sk.ca">http://www.sama.sk.ca</a>

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# Commercial Miscellaneous

Overview 9.1

Page: 2

#### **Occupancy Description**

A tall chimney at an industrial or institutional facility used to discharge smoke or other air born waste products.

Refractory lining systems utilize an impervious corrosion resistant membrane protected by a refractory layer that is exposed to the process environment. The refractory is required to protect the membrane from high temperatures and abrasion, since the membrane materials themselves have generally poor thermal and abrasion resistance.

The rates include the stack and its foundation.

#### **Structural Components**

#### **Brick and Concrete Stacks**

Diameter	Rate (\$/ft. of height)		Diameter	Rate (\$/ft	t. of height)
(ft.)	Brick	Concrete	(ft.)	Brick	Concrete
<u>&lt;</u> 6			16		
7			18		
8			20		
9			22		
10			24		
12			28		
14			<u>&gt;</u> 32		

#### **Steel Stacks**

Date: 01/2023

Diameter	Rate (\$/	ft. of height)
(in.)	Lined	Refractory Lined
<u>&lt;</u> 18		
24		
30		
36		
42		
48		
54		
60		
66		
72		
78		
<u>&gt; 84</u>		

# **Height Factor**

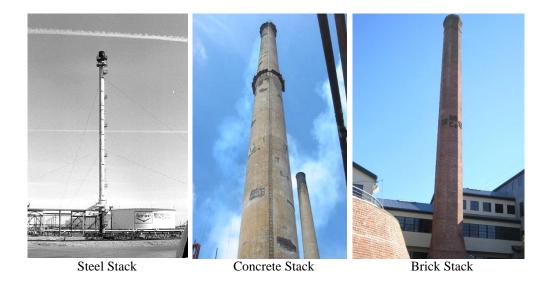
#### **Brick and Concrete Stacks**

Height (ft.)	Factor (%/ft.)
<u>&lt; 100</u>	
101 - 200	
> 200	

# **Calculation Procedure**

Description	No.	Page No.
a) Base Rate		
a <sub>1</sub> . Stack Rate	9.2	1
b) Structure Height	3.3	1-2
c) Value Subtotal = (a <sub>1</sub> x b)		
d) Height Adjustment Factor	9.2	2
e) Value Subtotal = $(c \times d)$		
f) Incomplete Construction Factor	3.6	1
g) Replacement Cost New = $e - (e \times f)$		

After the replacement cost new (RCN) has been calculated, the assessed value for commercial buildings and structures is determined using the calculation procedures in No. 3.2.



Date: 01/2023 SAMA's 2023 Cost Guide (Non-Regulated)

# **Incinerator (S853)**

### **Occupancy Description**

A large steel furnace used for the burning of refuse.

The rates include the incinerator and its foundation. The rates do not include scrubber, chimney, electrical panel, piping, or feeder.

#### **Structural Components**

#### **Steel Incinerator**

Volume (Ib /bm)	Ra	te (\$/lb./	hr.)	Rate (\$/unit)		t)
Volume (lb./hr.)	A	В	C	A	В	C
<u>&lt; 50</u>						
100						
200						
400						
600						
<u>≥</u> 1000						

#### **Calculation Procedure**

Date: 01/2023

Description	No.	Page No.
a) Base Rate		
a <sub>1</sub> . Incinerator Rate	9.3	1
b) Structure Volume	3.3	1-2
c) Value Subtotal = (a <sub>1</sub> x b)		
d) Incomplete Construction Factor	3.6	1
e) Replacement Cost New = $c - (c \times d)$		

After the replacement cost new (RCN) has been calculated, the assessed value for commercial buildings and structures is determined using the calculation procedures in No. 3.2.

# **Incinerator (S853)**





Date: 01/2023

#### **Occupancy Description**

A mill incinerator is a large steel furnace used to burn sawdust and other waste products at a sawmill or planning mill.

The rates include the incinerator and its foundation. The rates do not include scrubbers, electrical panels, piping, feeder, or draft systems.

### **Structural Components**

#### **Mill Incinerator**

Base Area (sq. ft.)	Rate (\$/sq. ft.)	Rate (\$/unit)
<u>&lt; 500</u>		
1,000		
1,500		
2,000		
2,500		
3,000		
4,000		
<u>&gt; 5,000</u>		

#### **Calculation Procedure**

Description	No.	Page No.
a) Base Rate		
a <sub>1</sub> . Incinerator Rate	9.4	1
b) Structure Base Area	3.3	1-2
c) Value Subtotal = $(a_1 \times b)$		
d) Incomplete Construction Factor	3.6	1
e) Replacement Cost New = $c - (c \times d)$		

After the replacement cost new (RCN) has been calculated, the assessed value for commercial buildings and structures is determined using the calculation procedures in No. 3.2.

#### **Occupancy Description**

A large brick furnace used for the burning of refuse at hospital, institutional and commercial facilities.

The rates include brick work and foundation. The rates do not include chimney, air pollution control or refractory lining.

#### **Structural Components**

#### **Brick Incinerator**

Volume	I	Rate (\$/lb./hr	:.)	Rate (\$/unit)		)
(lb./hr.)	A	В	C	A	В	C
<u>&lt; 100</u>						
200						
400						
600						
1,000						
2,000						
3,000						
<u>≥</u> 5,000						

#### **Calculation Procedure**

Description	No.	Page No.
a) Base Rate		
a <sub>1</sub> . Incinerator Rate	9.5	1
b) Structure Volume	3.3	1-2
c) Value Subtotal = (a <sub>1</sub> x b)		
d) Incomplete Construction Factor	3.6	1
e) Replacement Cost New = $c - (c \times d)$		

After the replacement cost new (RCN) has been calculated, the assessed value for commercial buildings and structures is determined using the calculation procedures in No. 3.2.

# **Brick Incinerator (S855)**





#### **Occupancy Description**

Towers are towers that are not supported by guy wires that are used for supporting communications equipment for radio, television, cellular phone and other similar uses.

The rates include concrete footings, erection, painting, lighting, platforms and designer's fees. The rates do not include antennas and transmission cables.

# **Structural Components**

# Classifications

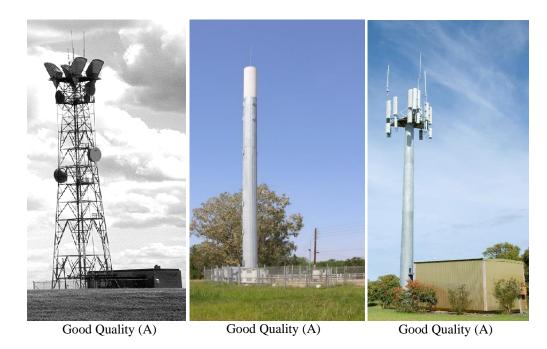
Quality	Description
A	Heavy construction to support heavy loads and/or survive extreme conditions. Monopoles are typically "A" class.
В	Moderate construction to support light to heavy loads under moderate conditions.
С	Light construction to support light loads. "C" class are typically not CSA approved and are normally found in residential or light commercial uses.

#### **Tower**

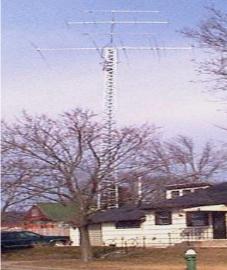
Unight (ft )	Ra	te (\$/ft. of heigh	nt)
Height (ft.)	A	В	C
<u>&lt; 50</u>			
75			
100			
150			
200			
225			
250			
300			
350			
<u>&gt; 400</u>			

# **Calculation Procedure**

Description	No.	Page No.
a) Base Rate		
a <sub>1</sub> . Tower Rate	9.6	1
b) Tower Height	3.3	1-2
c) Value Subtotal = (a <sub>1</sub> x b)		
d) Incomplete Construction Factor	3.6	1
e) Replacement Cost New = $c - (c \times d)$		







Average Quality (B)

Low Cost Quality (C)

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Date: 01/2023

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### **Occupancy Description**

Triangular guyed towers are supported by guy wires and are used for supporting communication equipment for radio, television, and other similar activities.

The rates include concrete footings, erection, painting, guy wires, lighting and platforms. The rates do not include antennas and transmission cables.

Typical uses for size range

Side Dimension (in.)	Use
10	Ham radio, police and fire bands
20	Taxi and public service bands
24	Radio, V.H.F., U.H.F. bands
30	Cellular applications
40	Microwave towers
54	Master TV systems

Side dimension is the linear length of one side measured in inches.

#### **Structural Components**

#### Classifications

Quality	Description
A	Heavy construction to support heavy loads and/or survive extreme conditions.
В	Moderate construction to support light to heavy loads under moderate conditions.
C	Light construction to support light loads.

#### Tower

Side Dimension	Rate (\$/ft. of height)		
(in.)	A	В	C
<u>&lt; 10</u>			
20			
24			
30			
40			
<u>&gt; 54</u>			

# Adjustments

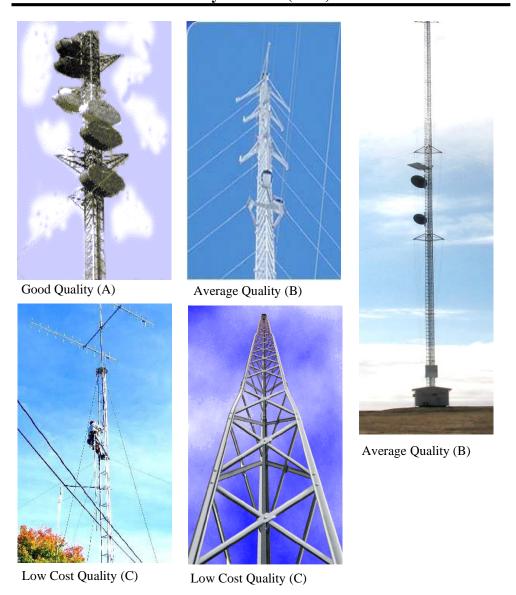
**Height Factor** 

Height (ft.)	Factor
<u>≤</u> 400	
401-500	
501-600	
601-700	
701-800	
801-900	
901-1000	

#### **Calculation Procedure**

Description	No.	Page No.
a) Base Rate = $(a_1 \times a_2)$		
a <sub>1</sub> . Tower Rate	9.7	1
a <sub>2</sub> . Height Factor	9.7	2
b) Structure Height	3.3	1-2
c) Value Subtotal = (a x b)		
d) Incomplete Construction Factor	3.6	1
e) Replacement Cost New = $c - (c \times d)$		

# Guyed Tower (S861)



# **Drive-In Theatre Screen (S865)**

#### **Occupancy Description**

A drive-in theatre screen is a large vertical surface onto which is projected motion picture films for viewing from parked automobiles.

The rates include the screen structure and its foundation. The rates do not include paving, lighting, fencing, drainage, and operation equipment.

An ornate screen is one that is decorated with complex patterns or has an intricate shape.

**Structural Components** 

Onality	Decembries	Rate (\$/sq. ft. of screen surface	
Quality	Description	Plain	Ornate
AA	Tilt-up concrete, concrete frame and steel framed screen enclosure		
A	Steel frame, concrete footings		
В	Wood frame on timbers, concrete		
С	Wood frame on poles set in concrete timber bracing		
D	Wood frame on poles with guy wires		

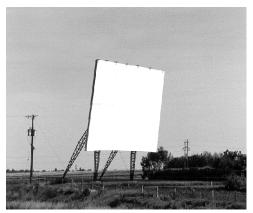
#### **Calculation Procedure**

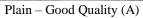
Date: 01/2023

Description	No.	Page No.
a) Base Rate		
a <sub>1</sub> . Screen Rate	9.8	1
b) Surface Area	3.3	1-2
c) Value Subtotal = (a <sub>1</sub> x b)		
d) Incomplete Construction Factor	3.6	1
e) Replacement Cost New = $c - (c \times d)$		

After the replacement cost new (RCN) has been calculated, the assessed value for commercial buildings and structures is determined using the calculation procedures in No. 3.2.

# **Drive-In Theatre Screen (S865)**







Plain – Average Quality (B)

# **Swimming Pool (S875)**

#### **Occupancy Description**

Commercial swimming pools are large concrete pools found in parks, schools, hotels and are generally for public use.

Gunite pools use a rebar framework that is sprayed over with a concrete and sand mixture. The method is different from the traditional poured concrete pool that requires a wooden framework to hold the shape of the basin. Gunite is exceedingly durable. The versatility of gunite swimming pools allows for an unlimited array of shapes.

Rates include chlorinators, filters, heaters, boards, ladders and coping. Rates do not include decks, bathhouses, or tiled surface.

### **Structural Components**

#### Classifications

Quality	Description
A	Good quality large commercial pool.
В	Average quality commercial pool.
С	Fair quality and smaller commercial pool.

Light construction smaller pools are valued in accordance with the valuation procedures in No. 6.10.

**Swimming Pools** 

Aron (sq. ft.)	Poured Concrete (\$/sq. ft.)		Gunite (\$/sq. ft.)			
Area (sq. ft.)	A	В	C	A	В	C
< 2,000						
4,000						
6,000						
8,000						
> 8,000						
Life Expectancy						

#### Lining

Daganindian	<b>Rate</b> (\$/sq. ft.)		
Description	A	В	C
Tile Surfaces			

### **Pool Adjustment:**

For large Olympic competition pools add % to above listed costs.

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# Swimming Pool (S875)

# **Calculation Procedure**

Description	No.	Page No.
a) Base Rate = $(a_1 + a_2)$		
a <sub>1</sub> . Swimming Pool Rate	9.9	1
a <sub>2</sub> . Lining Rate	9.9	1
b) Section Area	3.3	1-2
c) Value Subtotal = (a x b)		
d) Incomplete Construction Factor	3.6	1
e) Replacement Cost New = $c - (c \times d)$		



Good Quality (A)



Good Quality (A)



Average Quality (B)



Average Quality (B)



Low Cost Quality (C)



Low Cost Quality (C)

Page: 1

#### **Occupancy Description**

Commercial water slides are in water parks and hotels. Supported water slides are elevated off the ground by a steel structure. Non-supported water slides are not elevated off the ground and use the natural terrain to provide elevation.

The rates include the flume, entry and exit structure, miscellaneous supports, foundation, designer's fees. The rates do not include landing pool and land improvements.

**Structural Components** 

Length	Rate (\$/line	ear ft. of slide)	Rate (	(\$/unit)
(ft.)	Supported	Non-Supported	Supported	Non-Supported
<u>&lt; 50</u>				
60				
90				
100				
150				
200				
250				
300				
350				
400				
500				
<u>&gt; 600</u>				

#### Water Slide Adjustments

Description	Rate
Enclosed Tubular Flumes	
Flumes > 3 ft. wide	

#### **Calculation Procedure**

Description	No.	Page No.
a) Base Rate (a <sub>1</sub> x a <sub>2</sub> x a <sub>3</sub> )		
a <sub>1</sub> . Water Slide Rate	9.10	1
a <sub>2</sub> . Enclosed Tubular Flumes	9.10	1
a <sub>3</sub> . Flumes > 3 ft. wide	9.10	1
b) Structure Length	3.3	1-2
c) Value Subtotal = (a <sub>1</sub> x b)		
d) Incomplete Construction Factor	3.6	1
e) Replacement Cost New = $c - (c \times d)$		

After the replacement cost new (RCN) has been calculated, the assessed value for commercial buildings and structures is determined using the calculation procedures in No. 3.2.

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# Water Slide (S876)



Non-Supported Water Slide



Supported Water Slide



Supported Enclosed Tubular Flume

#### **Occupancy Description**

Bleachers are vertical seating structures, which can be portable or permanently affixed, located in gymnasiums, sports complexes or located outdoors.

Grandstands are partially or fully roofed-over structures, which may have other facilities located within such as locker areas, eating facilities, or lounge and rest areas. The rates include the basic construction of the bleacher or grandstand including most items usually found in the general contract. The rates do not include furnishings, equipment or appliances.

The following are typical costs ranges of Grandstands and Bleachers. Costs include stairs, ramps, handicap platforms and press boxes commensurate with type and quality. The rates do not include furnishings, equipment or appliances.

**Gymnasium Bleachers -** steel frame, wood, metal or fibreglass benches, telescoping, manual operation.

Temo		Conta		
Туре	A	В	С	Seats
S				< 600
S				<u>&gt;</u> 600
Life Expectancy				

Portable Bleachers - steel frame, wood, metal or fibreglass benches, erected.

True		Conta		
Type	A	В	С	Seats
S				< 800
S				<u>&gt;</u> 800
Life Expectancy				

**Permanent Bleachers** – Concrete bleachers, no interior finish, stadium type with a closed deck.

Т	Qu	Contr		
Type	A	В	С	Seats
C				< 5,000
C				5,000 - 10,000
C				> 10,000
Roofed Areas				
Life Expectancy				

# Permanent Bleachers – Wood frame and benches

Т	Q	Conta		
Type	A	В	С	Seats
D				< 1,000
D				1,000 - 2,000
D				> 2,000
Roofed Areas				
Life Expectancy				

**Permanent Bleachers** - Steel Frame are open with metal, wood or fibreglass benches, school or fairground type

Tyma	Q	Seats		
Type	A	В	C	Seats
S				< 1,000
S				1,000 - 5,000
S				> 5,000
Roofed Areas				
Life Expectancy				

**Grandstands** - Concrete or steel with built-in dressing and training rooms, restrooms, press box, snack bars (stadium type).

Tymo	Qı	Seats		
Type	A	В	C	Seats
C & S				< 5,000
C & S				5,000 - 15000
C & S				> 15,000
Roofed Areas				
Life Expectancy				
Life Expectancy				
S				

 $\boldsymbol{Grandstands}$  - Wood grandstands with built-in dressing room, restrooms, press box, lighting.

Type	Qı	Seats		
Type	A	В	C	Seats
D				<u>&lt;</u> 5,000
D				> 5,000
Roofed Areas				
Life Expectancy				

# **Calculation Procedure**

Description	No.	Page No.
a) Structure Rate = $(a_{1 x} a_2)$		
a <sub>1</sub> . Base Square Foot Rate	9.11	1-2
a <sub>2</sub> . Section Area	3.3	1-2
b) Roof Rate = $(b_1 x b_2)$		
b <sub>1</sub> . Roof Area		
b <sub>2</sub> . Roof Rate	9.11	1-2
c) Value Subtotal = (a + b)		
d) Incomplete Construction Factor	3.6	1
e) Replacement Cost New = $c - (c \times d)$		



Steel Grandstand - Good Quality (A)



Steel Grandstand - Good Quality (A)



Steel Bleacher – Average Quality (B)



Wood Frame Bleacher – Average Quality (B)

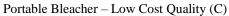




Gymnasium Bleachers – Average Quality (B)

Gymnasium Bleachers – Low Cost Quality (C)







Portable Bleacher – Low Cost Quality (C)

#### **Classification Guidelines**

#### Walk-In Cooler (S929)

A refrigerated storage unit for perishable goods that will maintain the temperature between 32 and 60 degrees Fahrenheit (0 to 15 °C). Normally white enamelled metal exterior, approximately 7 feet in height with self-contained refrigeration supply.

Quality	Description				
	Exterior: Good quality stainless steel exterior, large retail unit, one large				
A-Good	walk-in door.				
	Interior: Good metal or stainless steel interior finish, electrical, shelving.				
	<b>Life Expectancy:</b> years				
	Exterior: Average quality metal clad exterior, medium size unit, one				
B-Average	walk-in door.				
	Interior: Average metal interior finish, electrical, shelving.				
	Life Expectancy: years				
	Exterior: Low cost exterior, smaller unit, one small walk-in door.				
C-Low Cost	Interior: Low cost metal, wood or plastic interior, electrical, minimal				
	shelving.				
	Life Expectancy: years				

#### Walk-In Freezer (S930)

A refrigerated storage unit for perishable food goods that will maintain a temperature between 5 and 10 degrees Fahrenheit (-15 to -12 °C). These units may have their refrigeration supply located externally to storage room. These freezer rooms can be very large and will be well insulated and lined.

Quality	Description
	Exterior: Good quality stainless steel exterior finish, good floor, one
A-Good	large walk-in door.
	Interior: Good quality metal or stainless steel interior finish, wall
	insulated, electrical, racks and shelving.
	<b>Life Expectancy:</b> years
	Exterior: Average quality metal clad exterior finish, adequate
B-Average	floor, one adequate walk-in door.
	Interior: Average quality metal clad interior finish, adequate
	insulation, electrical, racks and shelving.
	<b>Life Expectancy:</b> years
	Exterior: Low cost exterior finish, floor, one small walk-in door. Plain.
C-Low Cost	Interior: Low cost metal, wood or plastic interior wall finish, electrical,
	minimum insulation, minimum shelving.
	Life Expectancy: years

Structure Rate (\$/sq. ft)

	Walk-In Coolers (S929) 32° to 60° F			Walk	-In Freezers -45° to -15° I	
Area (sq. ft.)	A	В	C	A	В	C
<u>&lt; 50</u>						
60						
80						
100						
120						
140						
160						
180						
200						
220						
240						
260						
280						
300						
320						
400						
500						
Extension						

# **Door Adjustment:**

Add \$ per door for each additional insulated walk-in door unit.

# **Height Adjustment:**

Add % for each additional foot over 7.5 feet.

# **Calculation Procedure**

Description	No.	Page No.
a) Structure Rate = $(a_1 \times a_2)$		
a <sub>1</sub> . Base Square Foot Rate	9.12	2
a <sub>2</sub> . Height Adjustment	9.12	2
b) Section Area	3.3	1-2
c) Value Subtotal = (a x b)		
d) Additional Features = $(d_1)$		
d <sub>1</sub> . Doors	9.12	2
e) Replacement Cost New = $(c + d)$		



Low Cost (C) - Walk-In Freezer (S930)



Average Quality (B) - Walk-In Freezer



Low Cost (C) - Walk-In Cooler



Average Quality (B) - Walk-In Cooler

# **Commercial Miscellaneous**

# **Equipment and Mechanical Building (S936)**

#### **Occupancy Description**

These structures are designed for central utilities, telecommunications data storage or boiler room buildings. Most facilities will have a rather plain exterior appearance with little fenestration. The costs include all the power leads to the building, but exclude all equipment, chimneys and stacks.

# **Structural Components**

Date: 01/2023

Construction Class	Construction Quality	Exterior Wall	Interior Finish	Mechanical	Life Expectancy	Rate (\$/sq. ft.)
CHISS	A-Good	Fully welded construction (FWC), metal clad exterior or textured concrete block wall, wood frame with stucco siding	Structural steel base or concrete floor, lined insulated	Good electrical & lighting, Minimal plumbing, some extras	Expectancy	(ψ'3 <b>q. 1ι.</b> )
CDS	B-Average	Light Frame, concrete block or	Steel skid, treated wood or concrete floor, lined and insulated interior	Adequate electrical & lighting, Minimal plumbing, few extras		
	C-Low Cost	Single skin metal panels, wood frame with siding or concrete block	Concrete slab or wood floor, unfinished interior	Minimal electrical & lighting, no plumbing		

#### **Calculation Procedure**

Description	No.	Page No.
a) Structure Rate = $(a_1 + a_2 + a_3 + a_4 + a_5)$		
a <sub>1</sub> . Base Square Foot Rate	9.13	1
a <sub>2</sub> . Heating Rate	Section 14*	36
a <sub>3</sub> . Ventilation Rate	Section 14*	36
a4. Air Conditioning Rate	Section 14*	36
a <sub>5</sub> . Sprinkler Rate	Section 14*	37
b) Section Area	3.3	1-2
c) Area perimeter Factor	Section 14*	38-39
d) Adjusted Building Height Factor = $(d_1 x d_2 x d_3)$		
d <sub>1</sub> . Storey height factor	Section 14*	39
d <sub>2</sub> . Total Number of stories factor	Section 14*	14
d <sub>3</sub> . Number of stories		
e) Value Subtotal = $(a \times b \times c \times d)$		
f) Incomplete Construction Factor	3.6	1
g) Replacement Cost New = e - (e x f)		

<sup>\*</sup> Note: See Section 14. Use extreme climate for heating, ventilation and air conditions rates of the Marshall & Swift Valuation Service.

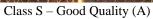


Class C (3) Good Quality (A)



Class D (4) Good Quality (A)







Class S – Good Quality (A)



Class S – Good Quality (A) (Exterior)



Class S – Good Quality (A) (Interior)



 $Class \ S-Average \ Quality \ (B)$ 



Class C – Average Quality (B)



Class D – Average Quality (B)



Class S – Low Cost Quality (C)



Class S – Low Cost Quality (C)

# **Occupancy Description**

These structures are small central offices including conduit and cable vaults but excluding all equipment and telephone wiring.

# **Structural Components**

Date: 01/2023

Construction	Construction	Exterior Wall	Interior	Mechanical	Life	Rate
Class	Quality	Exterior wan	Finish	Michanicai	Expectancy	(\$/sq. ft.)
	A-Good	Heavy steel frame, concrete block or good brick facade or heavy wood frame	Adequate office area, finished interior, structural steel base or concrete floor	Good electrical and lighting and minimal plumbing		
CDS	B-Average	Brick, block, rigid steel frame or wood frame with brick veneer or stucco	area finished, adequate	Adequate electrical Minimal plumbing		
	C-Low Cost	Low cost block, light construction, stucco or manufactured siding on wood or metal frame	Utility type finish, concrete or wood floor	Minimal or no electrical		

#### **Calculation Procedure**

Description	No.	Page No.
a) Structure Rate = $(a_1 + a_2 + a_3 + a_4 + a_5)$		
a <sub>1</sub> . Base Square Foot Rate	9.14	1
a <sub>2</sub> . Heating Rate	Section 14*	36
a <sub>3</sub> . Ventilation Rate	Section 14*	36
a4. Air Conditioning Rate	Section 14*	36
as. Sprinkler Rate	Section 14*	37
b) Section Area	3.3	1-2
c) Area perimeter Factor	Section 14*	38-39
d) Adjusted Building Height Factor = $(d_1 x d_2 x d_3)$		
d <sub>1</sub> . Storey height factor	Section 14*	39
d <sub>2</sub> . Total Number of stories factor	Section 14*	14
d <sub>3</sub> . Number of stories		
e) Value Subtotal = $(a \times b \times c \times d)$		
f) Incomplete Construction Factor	3.6	1
g) Replacement Cost New = e - (e x f)		

<sup>\*</sup> Note: See Section 14. Use extreme climate for heating, ventilation and air conditions rates of the Marshall & Swift Valuation Service.



 $Class \ C-Low \ Cost \ (C)$ 



Class D – Low Cost (C)



Class S – Average (B)

Page: 1

#### **Occupancy Description**

#### **Air Supported**

These are specialty-designed storage buildings where the dome forms both the roof and walls. These are airtight structures with special equipment designed to ensure the building is filled with a constant air pressure. The windows and doors of the structures must be specially designed for the continuous positive pressure environment.

#### **Steel Frame Fabric Covered**

These are large pre-engineered open interior structures that can range in size to accommodate commercial, agriculture and recreational uses. These buildings are typically column-free and have high-clearance interiors. The foundations can be concrete, pre-cast blocks, steel I-beams or anchors. The cost includes minimum door openings and anchoring supports.

Add for heating, flooring, plumbing, electrical and thermal liners.

# **Structural Components**

#### Classifications

Class	Quality	Quality and Type	Life Expectancy
	A-Good	Good vinyl-polyester or Tedlar fabric	
AIR	B-Average	Average reinforced vinyl fabric	
	C-Poor	Low cost, woven polyethylene	
	A-Good	Good vinyl-polyester or Tedlar fabric	
S	B-Average	Average reinforced vinyl fabric	
	C-Poor	Low cost, woven polyethylene	

# Structure Rate (\$/sq. ft)

	Class		Area (sq. ft.)						
	Class	≤ 3,000	5,000	10,000	15,000	20,000	30,000	50,000	≥ <b>70,000</b>
	A-Good								
AIR	B-Average								
	C-Poor								
	A-Good								
S	B-Average								
	C-Poor								

Adjustments (\$/sq. ft)

Component	Low Cost	Average	Good
Asphalt Floor			
Reinforced - Concrete Floor			
Gravel Floor			
Electrical			
Plumbing			

**Interior Thermal Liners Adjustment** 

Low Cost	Average	Good

# **Height Adjustments**

The base height is 30 feet. A % adjustment for each foot will be done between 30 to 60 feet. Over 60 feet a % adjustment will be done for each additional foot.

# Air Supported / Dome Structures (S608)

# **Calculation Procedure**

Date: 01/2023

Description	No.	Page No.
a) Structure Rate = $(a_1 + a_2 + a_3 + a_4 + a_5 + a_6 + a_7 + a_8)$ x a9		
a <sub>1</sub> . Base Square Foot Rate	9.15	2
a <sub>2</sub> . Floor Structure Rate	9.15	2
a <sub>3</sub> . Electrical Rate	9.15	2
a4. Plumbing Rate	9.15	2
as. Heating Rate	Section 14*	36
a <sub>6</sub> . Ventilation Rate	Section 14*	36
a <sub>7</sub> . Air Conditioning Rate	Section 14*	36
a <sub>8</sub> . Sprinkler Rate	Section 14*	37
a9. Interior Thermal Liners	9.15	2
b) Section Area	3.3	1-2
c) Adjusted Building Height Factor = (c <sub>1</sub> )		
c <sub>1</sub> . Storey height factor	9.15	2
d) Value Subtotal = (a x b x c)		
e) Incomplete Construction Factor	3.6	1
f) Replacement Cost New = $d - (d \times e)$		

<sup>\*</sup> Note: See Section 14. Use extreme climate for heating, ventilation and air conditions rates of the Marshall & Swift Valuation Service.

# Air Supported



Class AIR – Good Quality (A)



Class AIR – Average Quality (B)

# **Steel Frame Fabric Covered**



Class S – Good Quality (A) (Interior)



Class S – Good Quality (A) (Exterior)



Class S – Good Quality (A)



Class S – Average Quality (B)

#### **Occupancy Description**

These buildings are enclosed freestanding structures (approximately 100 to 240 sq. ft.) for sheltering ATM machines. They are typically steel frame construction, concrete foundation, membrane roof, welded glass and appropriate floor and ceiling finishes. ATM machines are not included in the rate.

**Structural Components** 

Class	Туре	Quality	Life Expectancy	Rate (\$/sq. ft.)
		Good		
S	Enclosed with Lobby	Average		
		Low Cost		
		Good		
S	Walk-up / Drive-up	Average		
		Low Cost		

#### **Calculation Procedure**

Date: 01/2023

Description	No.	Page No.
a) Structure Rate = $(a_1 + a_2 + a_3 + a_4 + a_5)$		
a <sub>1</sub> . Base Square Foot Rate	9.16	1
a <sub>2</sub> . Heating Rate	Section 14*	36
a <sub>3</sub> . Ventilation Rate	Section 14*	36
a4. Air Conditioning Rate	Section 14*	36
a <sub>5</sub> . Sprinkler Rate	Section 14*	37
b) Section Area	3.3	1-2
c) Adjusted Building Height Factor = $(c_1 \times c_2 \times c_3)$		
c <sub>1</sub> . Storey height factor	Section 14*	39
c2. Total Number of stories factor	Section 14*	14
c <sub>3</sub> . Number of stories		
d) Value Subtotal = $(a \times b \times c)$		
e) Incomplete Construction Factor	3.6	1
f) Replacement Cost New = $d - (d \times e)$		

<sup>\*</sup> Note: See Section 14. Use extreme climate for heating, ventilation and air conditions rates of the Marshall & Swift Valuation Service.

After the replacement cost new (RCN) has been calculated, the assessed value for commercial buildings and structures is determined using the calculation procedures in No. 3.2.



Drive-up - Low Cost (C)



Drive-up - Low Cost (C)



Drive-up - Average Quality (B)



Enclosed - Low Cost (C)



Enclosed - Average Quality (B)



Enclosed - Good Quality (A)