

Features

- 1600 Wall System™1 is an outside glazed captured curtain wall
- 1600 Wall System™1 has a 2-1/2" (63.5) sight line
- Standard 6" (152.4) or 7-1/2" (190.5) depth systems
- Standard infill options 1/4" (6.4) and 1" (25.4), other infills available
- Thermally Broken by means of a continuous 1/4" (6.4) low conductance spacer
- Concealed fastener joinery creates smooth, monolithic appearance
- Open-back horizontals and perimeters are available for cost savings
- Shear block fabrication method
- Corners and splayed mullions available
- Offers integrated entrance framing systems
- Silicone compatible glazing materials for long-lasting seals
- 1600 Wall System™1 has been small and large missile impact and cycle tested
- Two color option
- Permanodic™ anodized finishes in seven choices
- Painted finishes in standard and custom choices

Optional Features

- Steel reinforcing available
- Rain screen and backpans
- Optional deep profile and bull nose covers available
- Deep and heavy-weight mullions available
- Fiberglass pressure plates available
- Veneer system available
- Integrates with standard Kawneer windows and GLASSvent™ for curtain wall
- Integrates with Versoleil™ Sunshade Outrigger System and Horizontal or Vertical Single Blade System
- Integrates with 1600 PowerShade™
- Profit\$Maker™ plus die sets available
- Hurricane impact resistant framing options: 7-1/16" (179.4), 7-13/16" (198.4), 10-1/16" (255.6) & 10-13/16" (274.6)

Product Applications

- Ideal for low to mid-rise applications where high performance is desired
- It also is the right choice for high span applications

For specific product applications,
Consult your Kawneer representative.

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Architects - Most extrusion and window types illustrated in this catalog are standard products for Kawneer. These concepts have been expanded and modified to afford you design freedom. Some miscellaneous details are non-standard and are intended to demonstrate how the system can be modified to expand design flexibility. Please contact your Kawneer representative for further assistance.

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Metric (SI) conversion figures are included throughout these details for reference. Numbers in parentheses () are millimeters unless otherwise noted.

The following metric (SI) units are found in these details:

- m – meter
- cm – centimeter
- mm – millimeter
- s – second
- Pa – pascal
- MPa – megapascal

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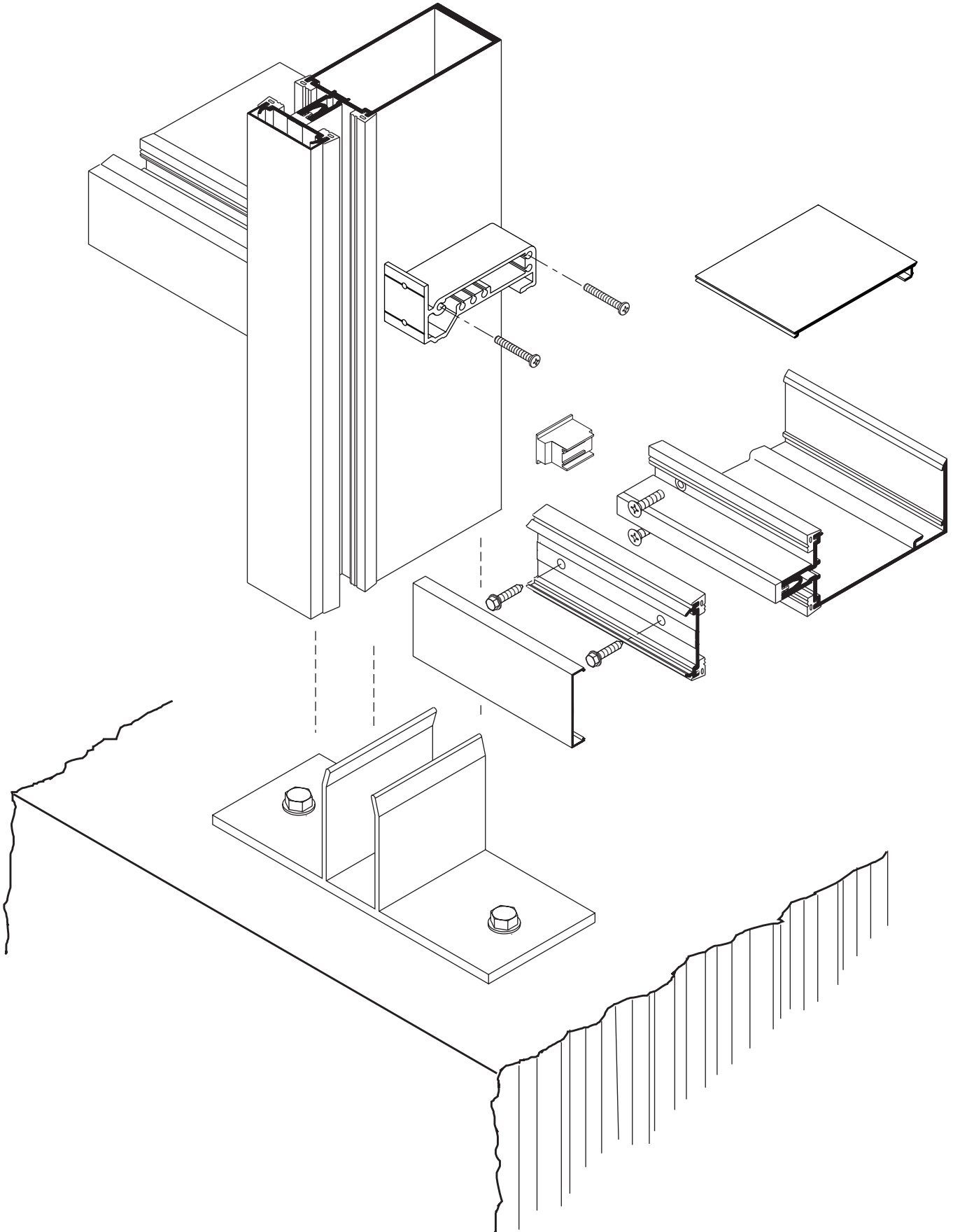
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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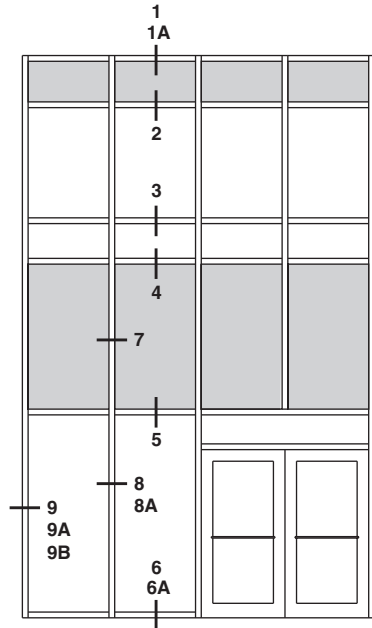
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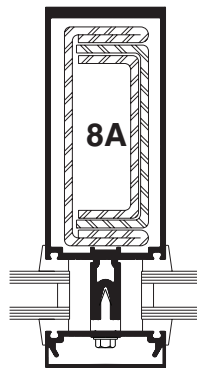
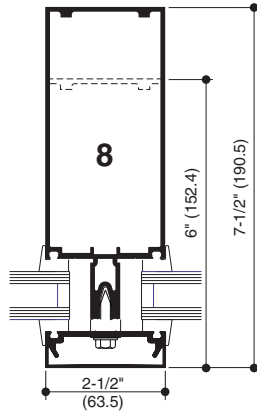
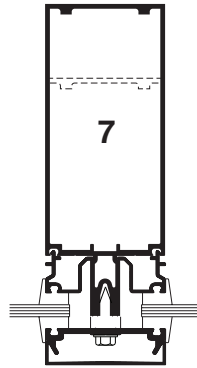
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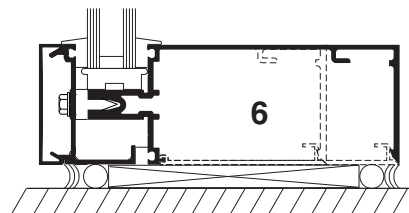
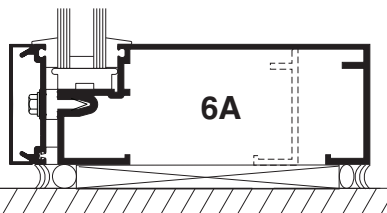
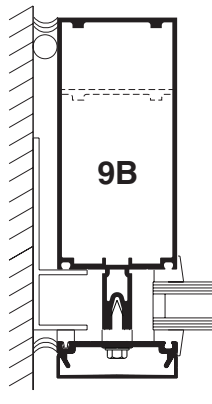
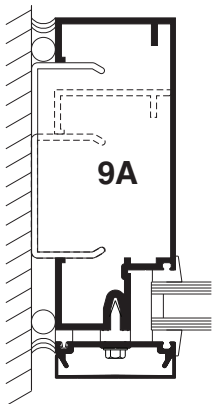
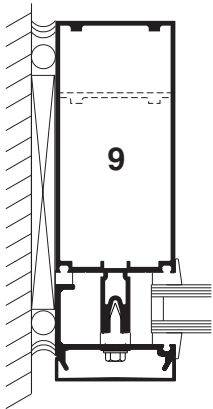
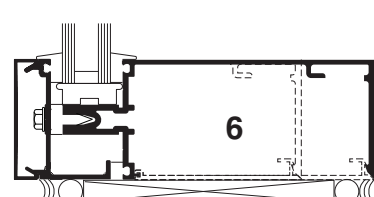
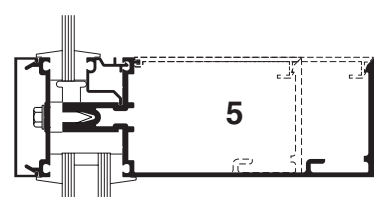
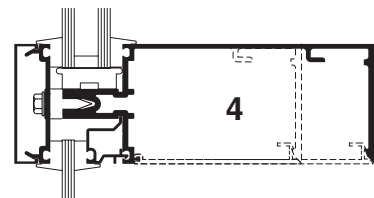
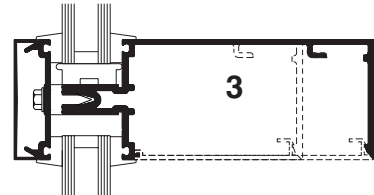
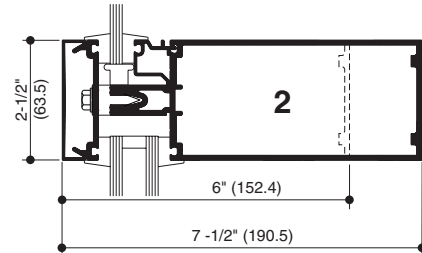
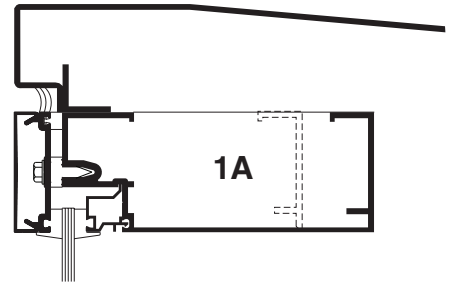
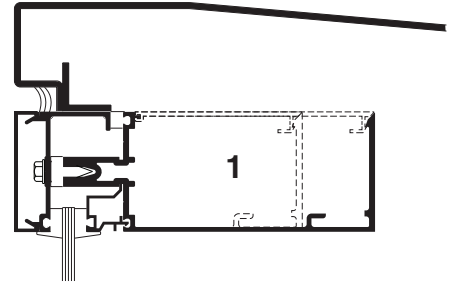
SCALE 3" = 1'-0"



ELEVATION IS NUMBER KEYED TO DETAILS



OPTIONAL STEEL REINFORCING AS REQUIRED

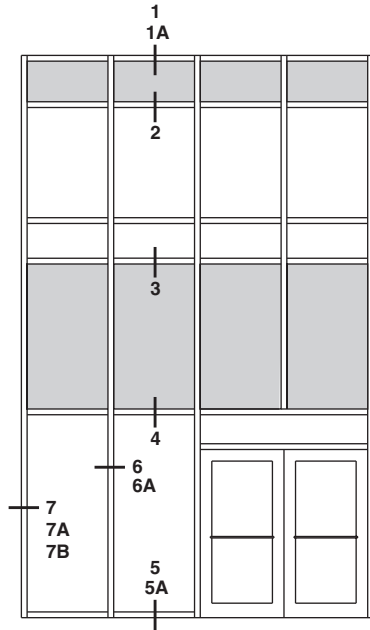


Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

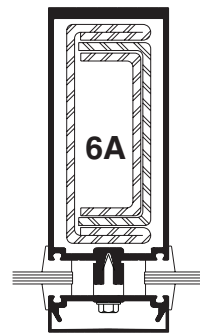
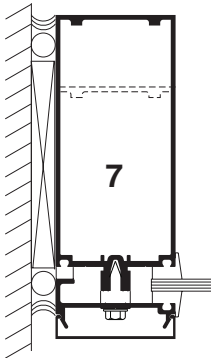
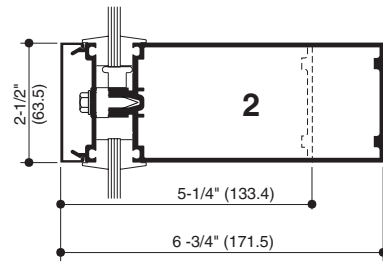
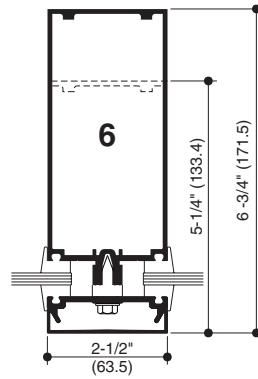
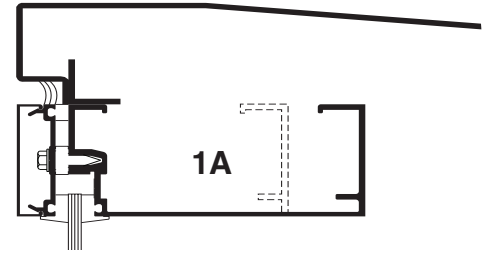
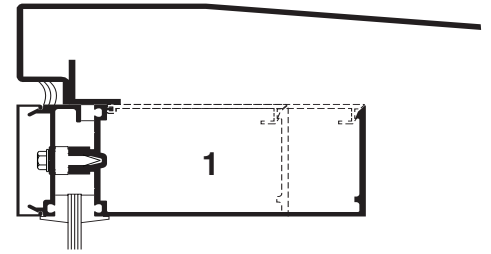
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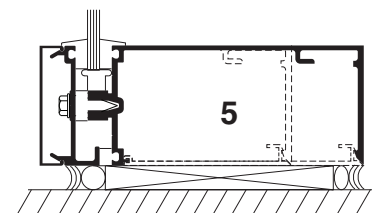
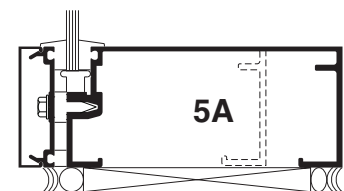
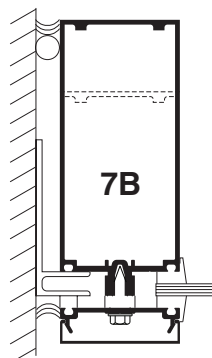
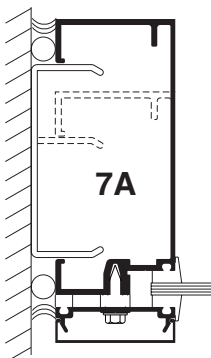
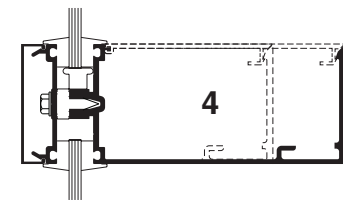
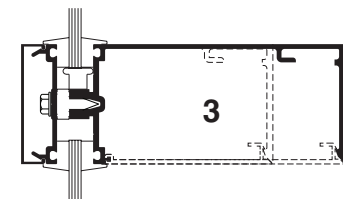
SCALE 3" = 1'-0"



ELEVATION IS NUMBER KEYED TO DETAILS



OPTIONAL STEEL REINFORCING AS REQUIRED

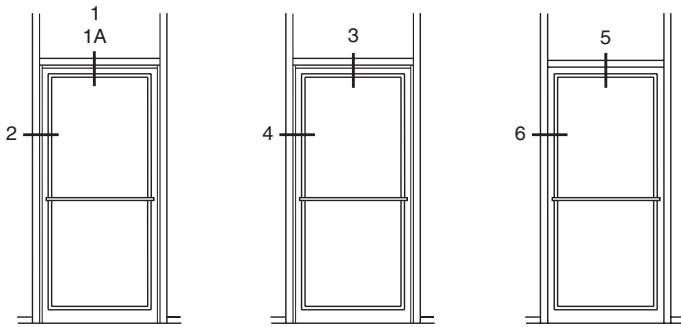


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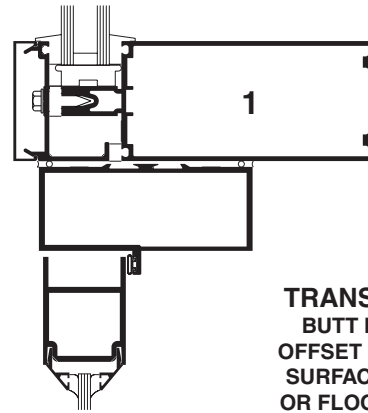


B/H OR O/P

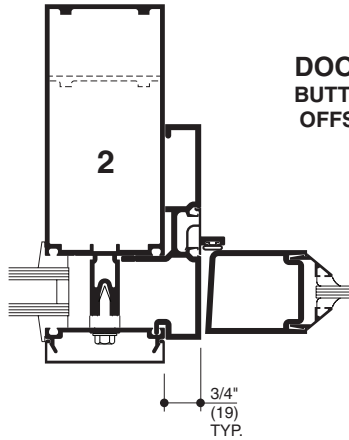
C/H

B/H OR O/P

ELEVATION IS NUMBER KEYED TO DETAILS

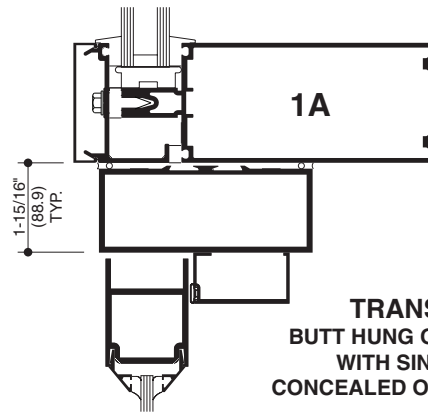


**TRANSOM BAR
BUTT HUNG OR
OFFSET PIVOT WITH
SURFACE CLOSER
OR FLOOR CLOSER**

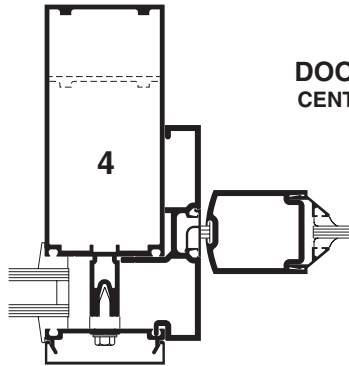


**DOOR JAMB
BUTT HUNG OR
OFFSET PIVOT**

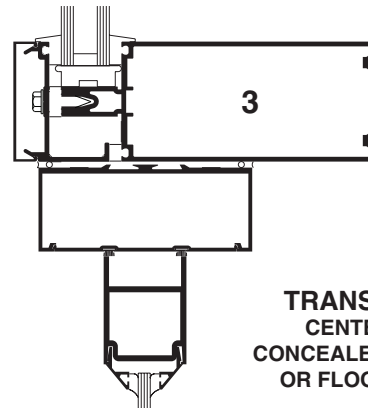
3/4"
(19)
TYP.



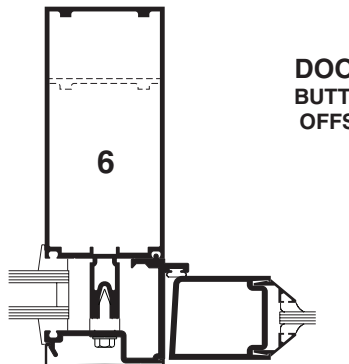
**TRANSOM BAR
BUTT HUNG OR OFFSET PIVOT
WITH SINGLE ACTING
CONCEALED OVERHEAD CLOSER**



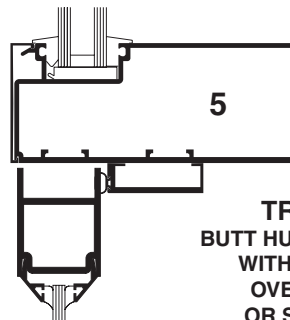
**DOOR JAMB
CENTER HUNG**



**TRANSOM BAR
CENTER HUNG
CONCEALED OVERHEAD
OR FLOOR CLOSER**



**DOOR JAMB
BUTT HUNG OR
OFFSET PIVOT**



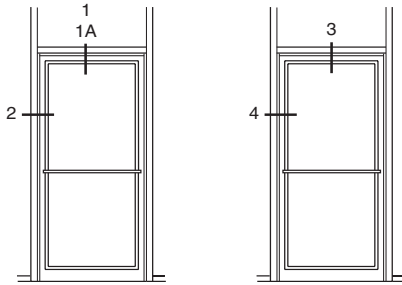
**TRANSOM BAR
BUTT HUNG OR OFFSET PIVOT
WITH LCN CONCEALED
OVER HEAD CLOSER
OR SURFACE CLOSER**

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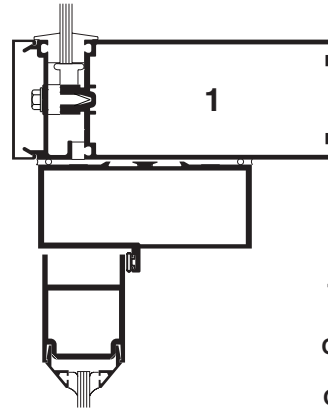
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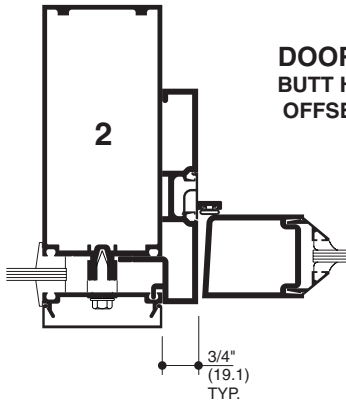
B/H OR O/P

C/H

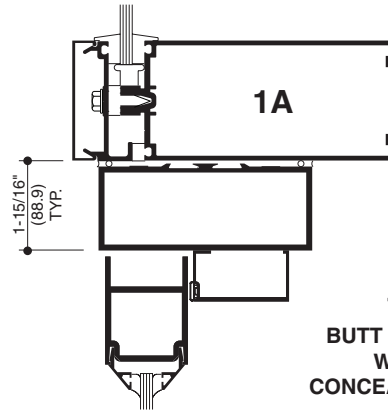
ELEVATION IS NUMBER KEYED TO DETAILS



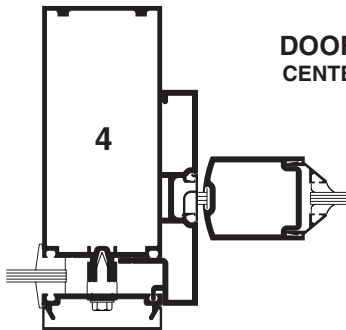
**TRANSOM BAR
BUTT HUNG OR
OFFSET PIVOT WITH
SURFACE CLOSER
OR FLOOR CLOSER**



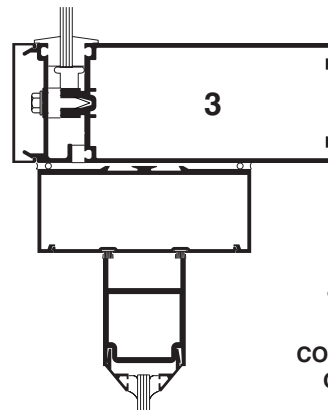
**DOOR JAMB
BUTT HUNG OR
OFFSET PIVOT**



**TRANSOM BAR
BUTT HUNG OR OFFSET PIVOT
WITH SINGLE ACTING
CONCEALED OVERHEAD CLOSER**



**DOOR JAMB
CENTER HUNG**



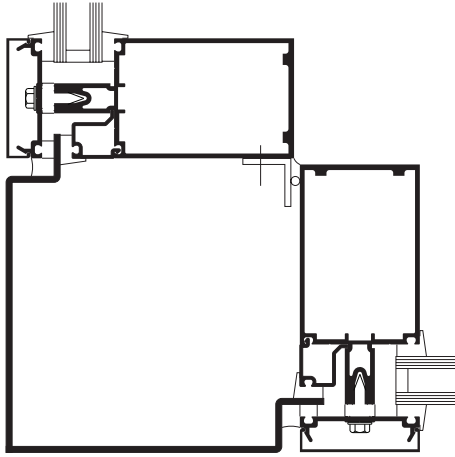
**TRANSOM BAR
CENTER HUNG
CONCEALED OVERHEAD
OR FLOOR CLOSER**

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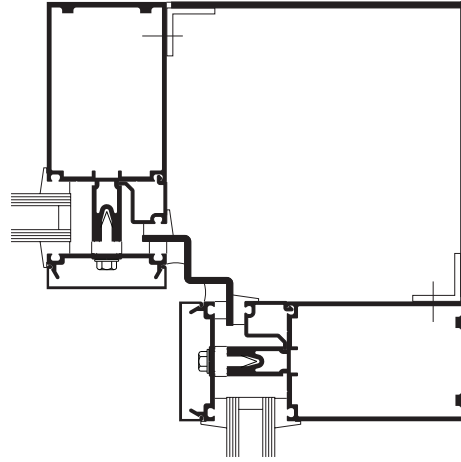
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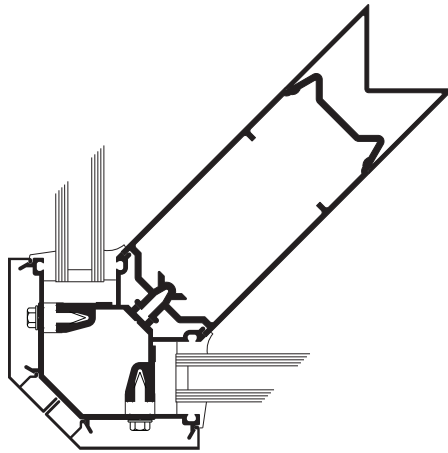
NOTE: 1" SYSTEM SHOWN, 1/4" SYSTEM SIMILAR.



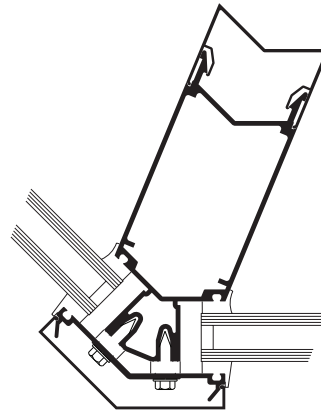
90° OUTSIDE CORNER



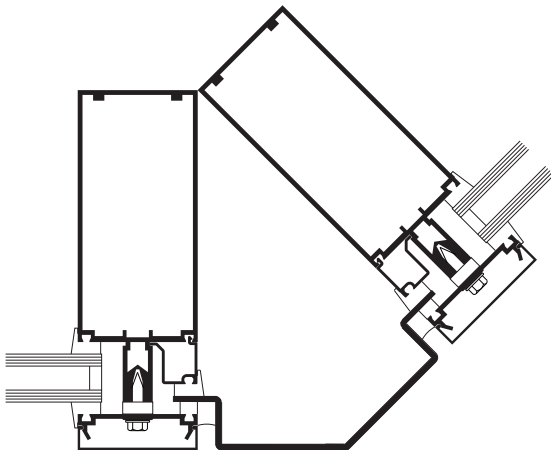
90° INSIDE CORNER



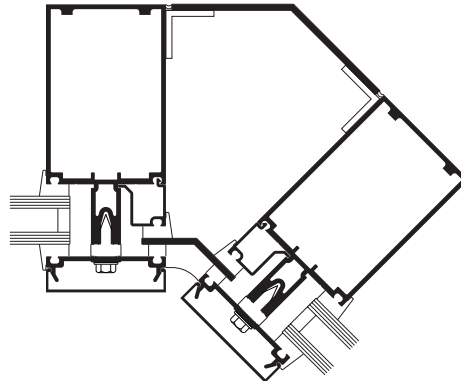
90° OUTSIDE CORNER



135° OUTSIDE CORNER



135° OUTSIDE CORNER

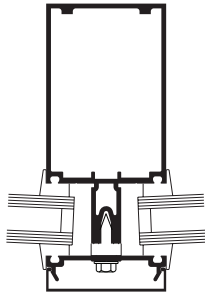


135° INSIDE CORNER

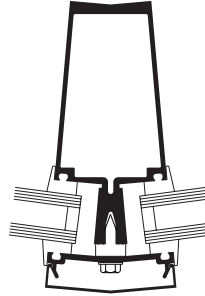
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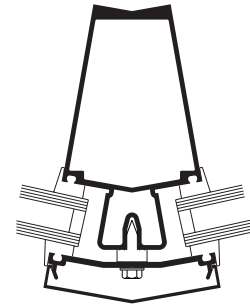
SCALE 3" = 1'-0"



0° TO 5°

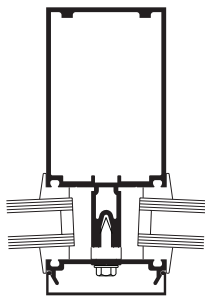


5° TO 15°

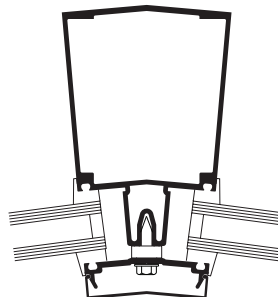


15° TO 25°

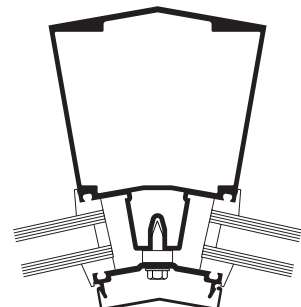
OUTSIDE SPLAYED MULLIONS



0° TO 5°



5° TO 15°



15° TO 25°

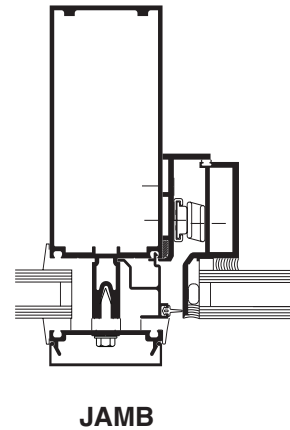
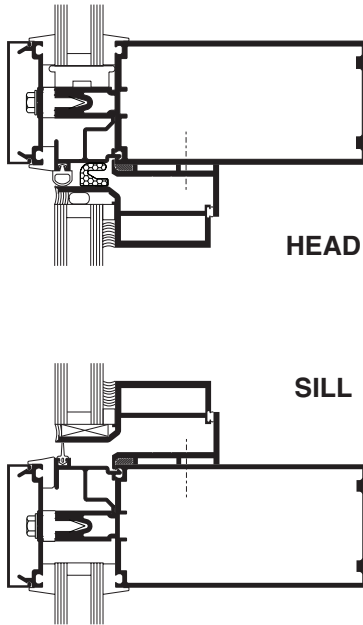
INSIDE SPLAYED MULLIONS

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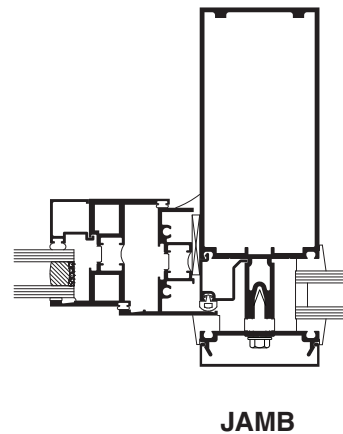
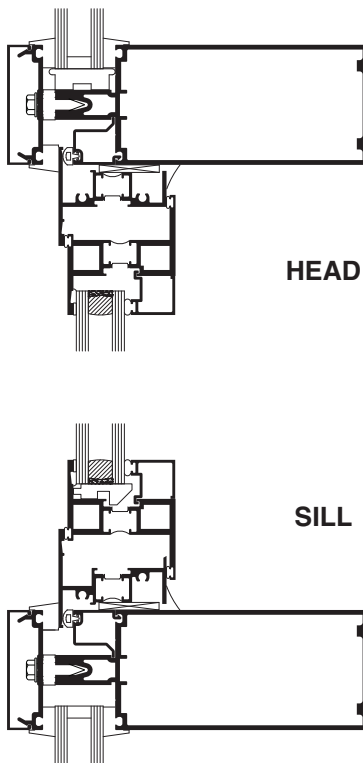
SCALE 3" = 1'-0"

GLASSvent™ FOR CURTAIN WALL



8225TL THERMAL WINDOWS

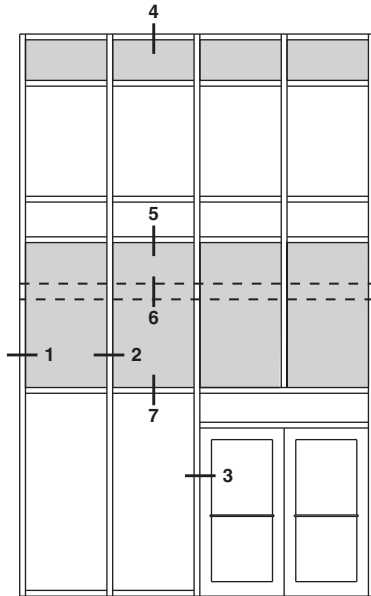
NOTE: Other vent types can be accommodated. Contact your Kawneer representative for other options.



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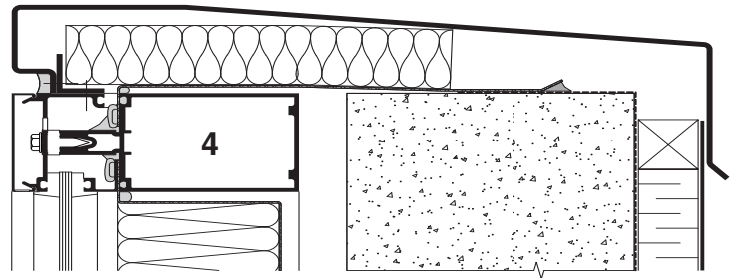
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SCALE 3" = 1'-0"

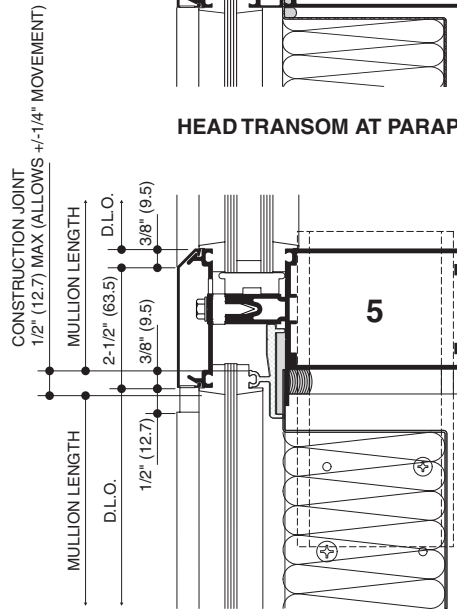


ELEVATION IS NUMBER KEYED TO DETAILS

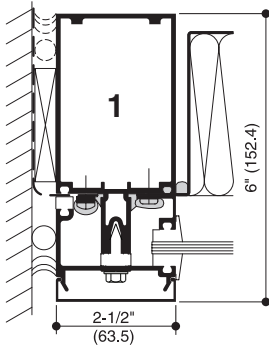
NOTE: 6" SYSTEM SHOWN, 7-1/2" SYSTEM SIMILAR



HEAD TRANSOM AT PARAPET FLASHING

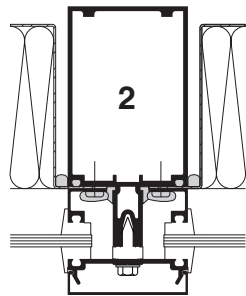


EXPANSION JOINT

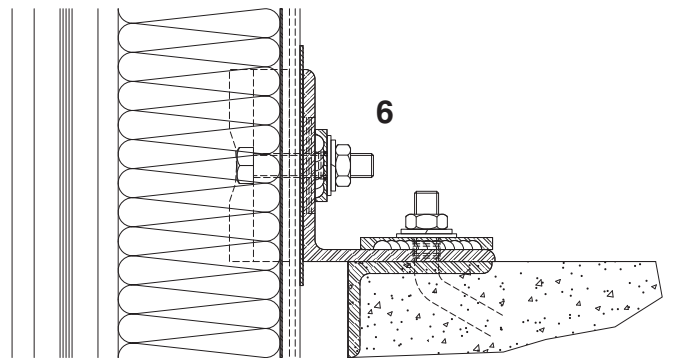


JAMB MULLION AT SPANDREL

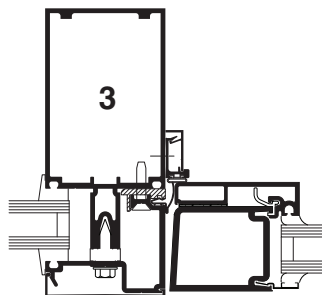
(With vapor barrier tie-in)



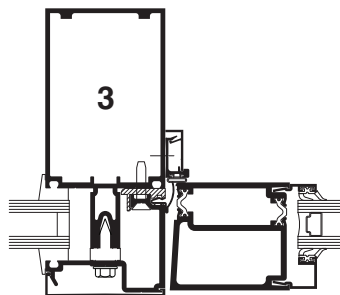
MULLION AT SPANDREL



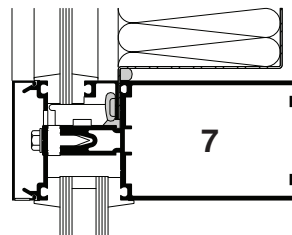
TYPICAL DEADLOAD ANCHOR



THERMALLY BROKEN DOOR ADAPTOR FOR INSULCLAD DOORS



AA™ 250 THERMAL DOOR



TRANSOM - SPANDREL OVER VISION

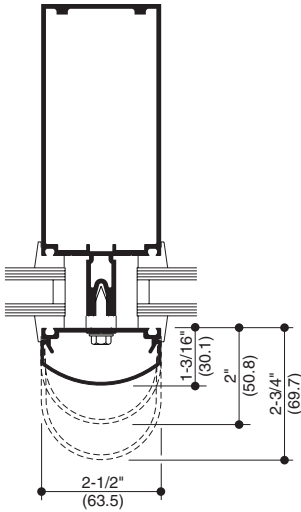
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

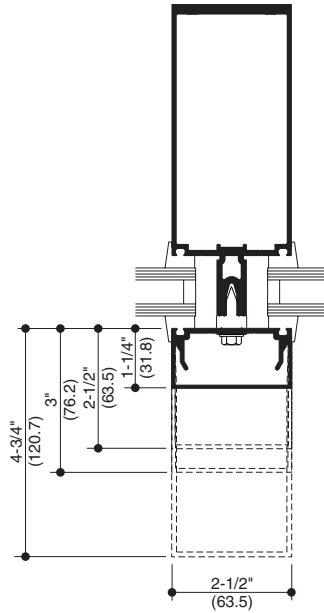
© Kawneer Company, Inc., 2014

SCALE 3" = 1'-0"

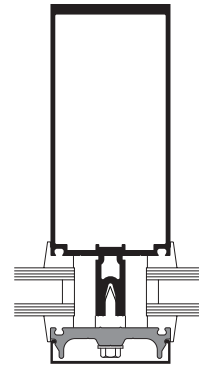
Architects – Most extrusion and window types illustrated in this catalog are standard products for Kawneer. These concepts have been expanded and modified to afford you design freedom. Some miscellaneous details are non-standard and are intended to demonstrate how the system can be modified to expand design flexibility. Please contact your Kawneer representative for further assistance.



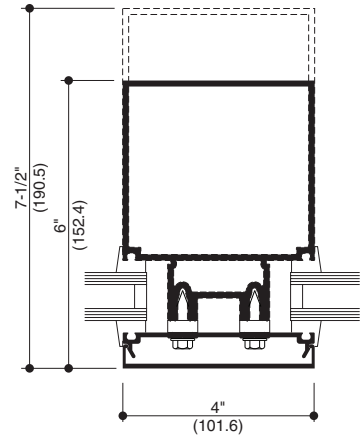
OPTIONAL COVERS



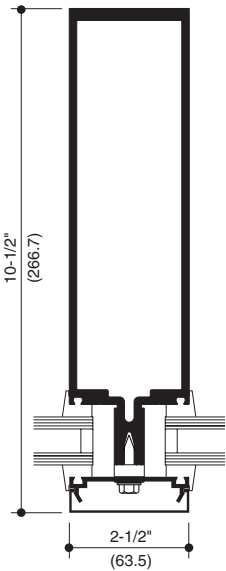
OPTIONAL COVERS



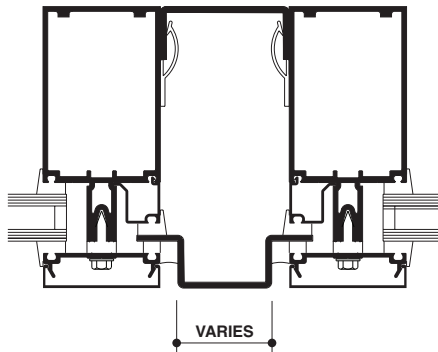
**CAPTURED MULLION (1")
OPTIONAL FIBERGLASS PRESSURE PLATE**



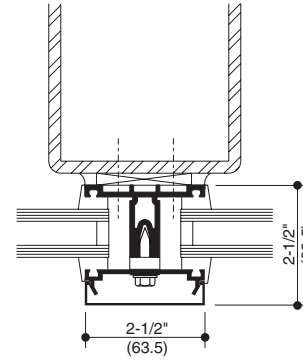
4" SIGHT LINE



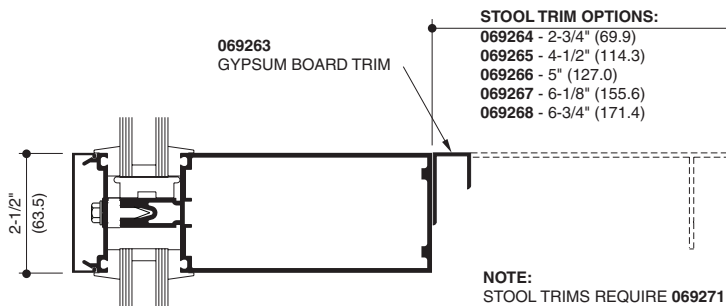
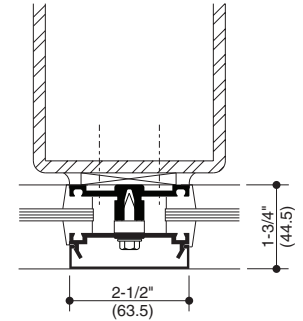
DEEP MULLION



DOUBLE MULLION



VENEER SYSTEM



069263
GYPSUM BOARD TRIM

STOOL TRIM OPTIONS:

- 069264 - 2-3/4" (69.9)
- 069265 - 4-1/2" (114.3)
- 069266 - 5" (127.0)
- 069267 - 6-1/8" (155.6)
- 069268 - 6-3/4" (171.4)

NOTE:
STOOL TRIMS REQUIRE 069271 TRIM CLIP PACKAGE

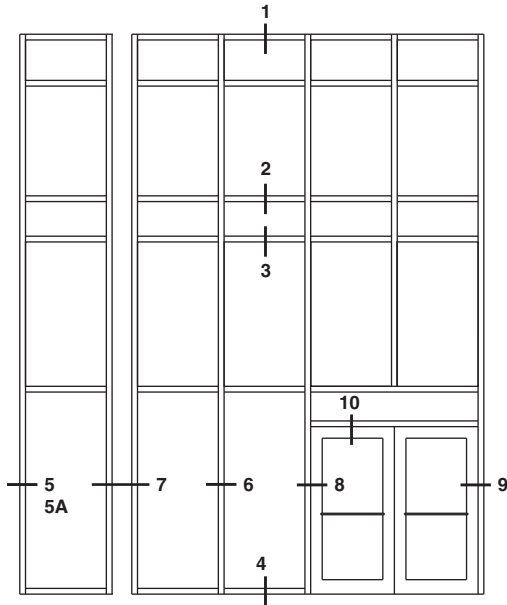
INTERIOR STOOL TRIM

Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

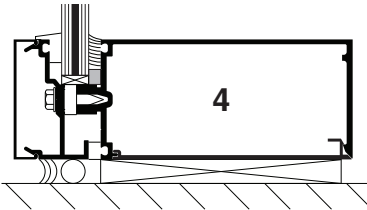
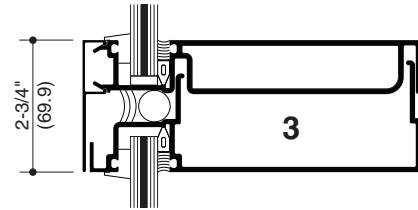
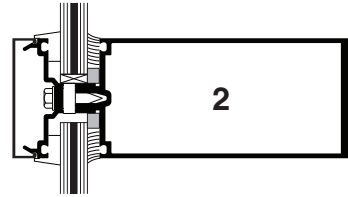
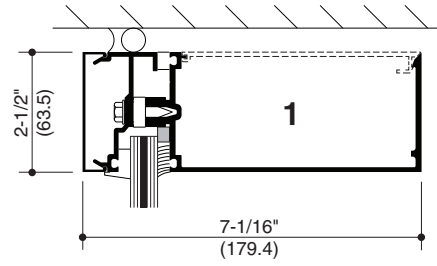
Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.
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NOTE: DETAILS SHOWN WITH 9/16" INFILL AND ARE GLAZED FOR FOR LARGE MISSILE IMPACT (LMI).
SEE NEXT PAGE FOR OTHER GLAZING OPTIONS.

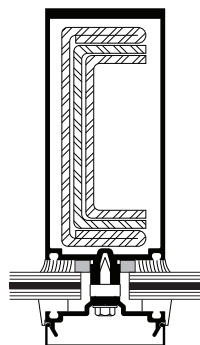
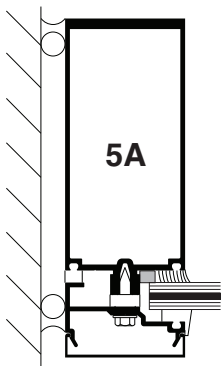
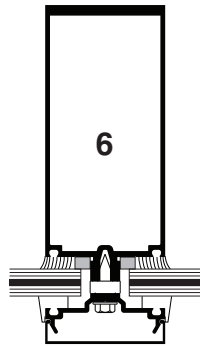
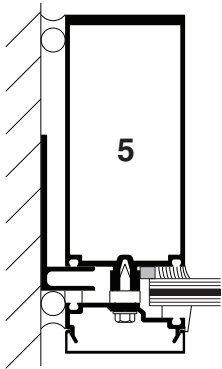
SCALE 3" = 1'-0"



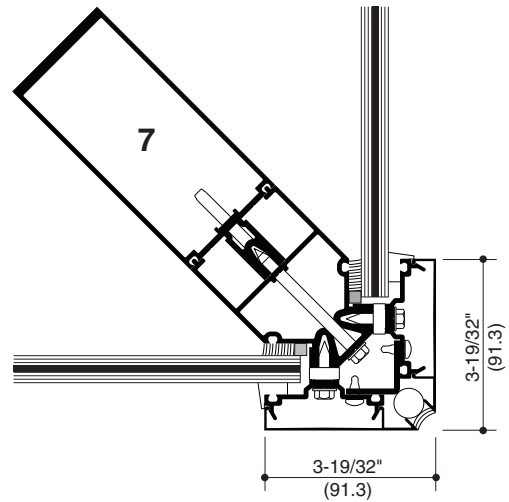
ELEVATION IS NUMBER KEYED TO DETAILS



EXPANSION HORIZONTAL



OPTIONAL STEEL REINFORCING AS REQUIRED



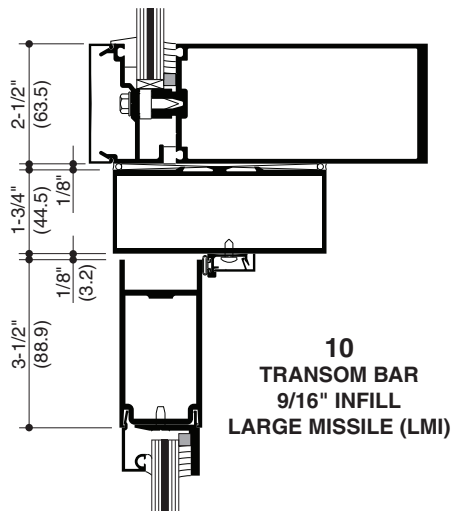
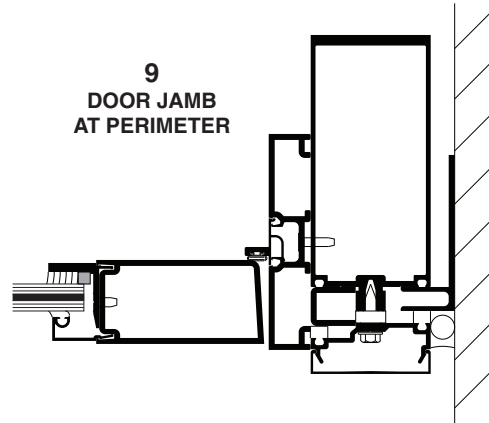
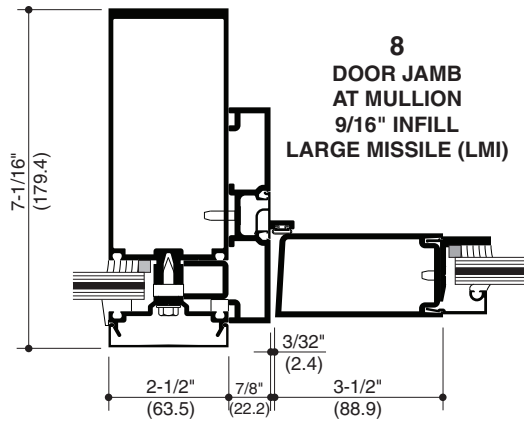
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

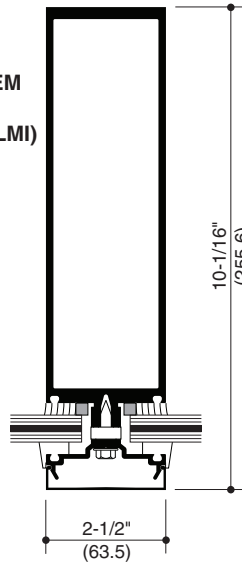
© Kawneer Company, Inc., 2014

SCALE 3" = 1'-0"

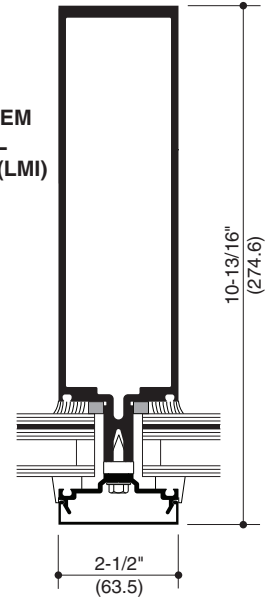
NOTE: 350 IR DOORS ARE USED WITH IMPACT FRAMING.
DOORS ARE GLAZED WITH 9/16" INFILL.



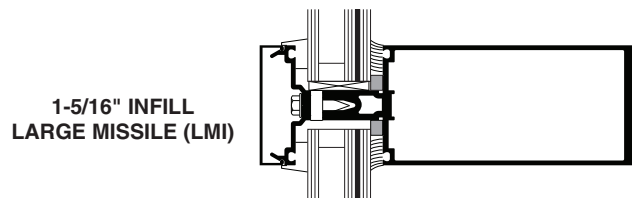
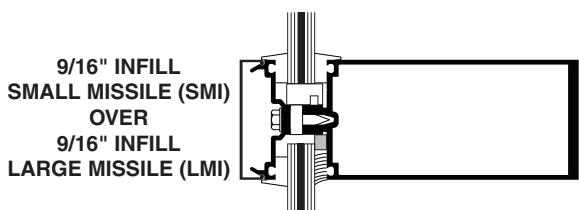
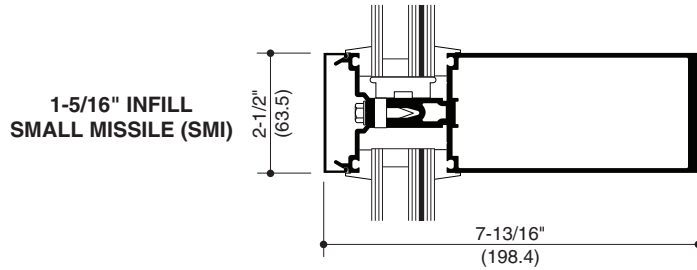
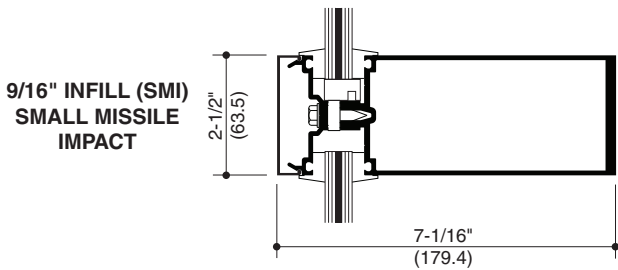
OPTIONAL
10" DEEP SYSTEM
9/16" INFILL
LARGE MISSILE (LMI)



OPTIONAL
10" DEEP SYSTEM
1-5/16" INFILL
LARGE MISSILE (LMI)



GLAZING OPTIONS

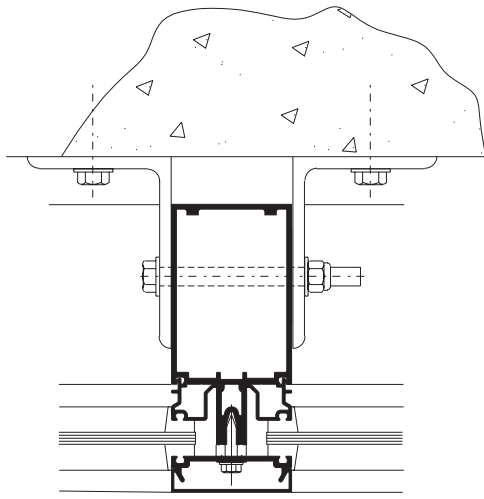


Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

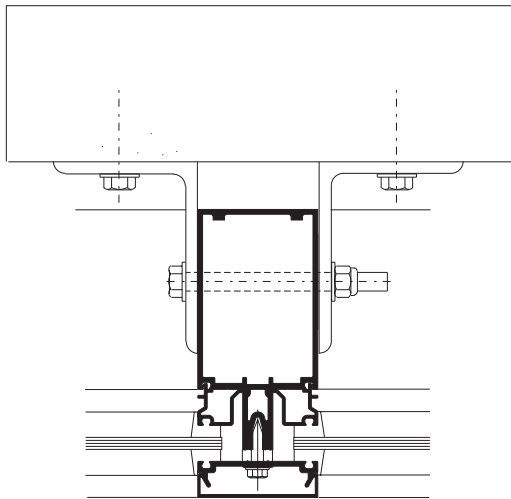
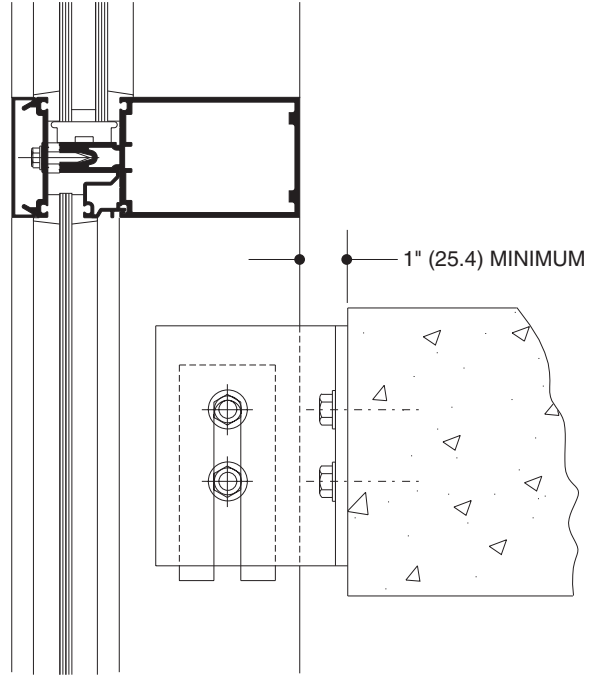
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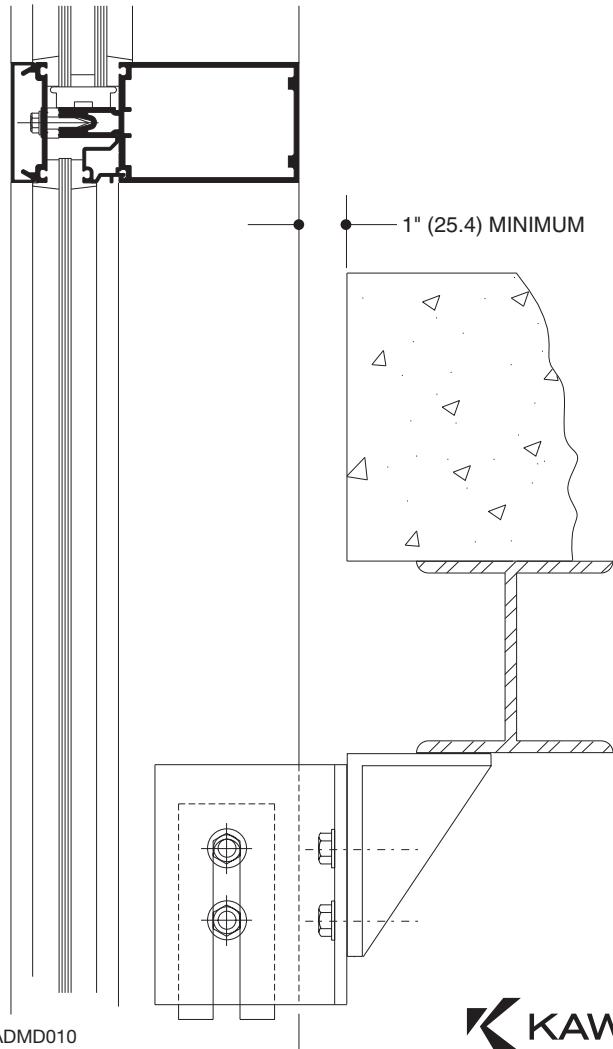
Actual project conditions will determine specific anchor design. Details on this page are for reference only.



ANCHORING TO FLOOR SLAB



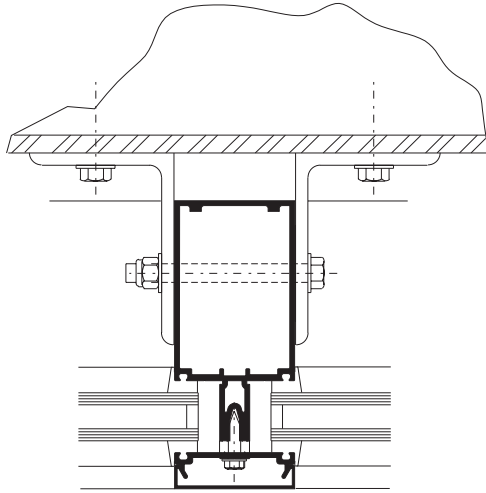
ANCHORING TO SUPPORT STEEL



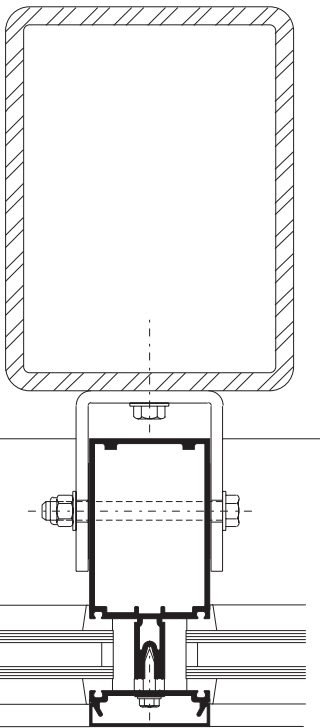
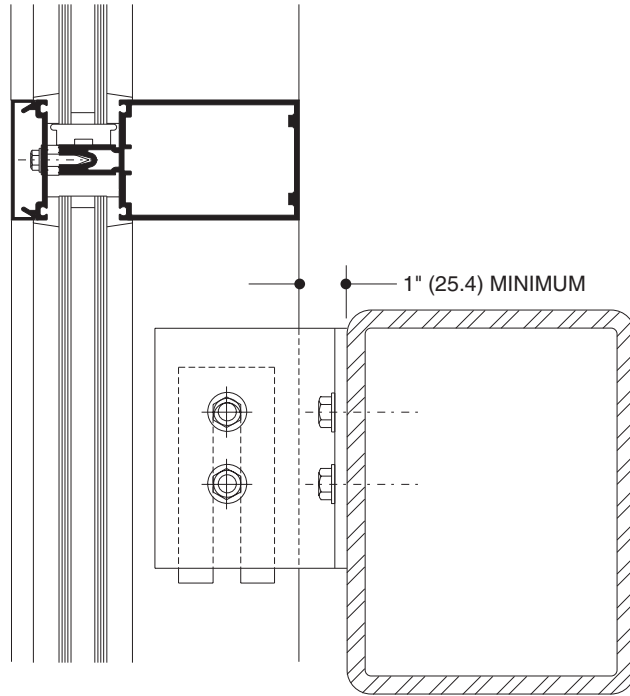
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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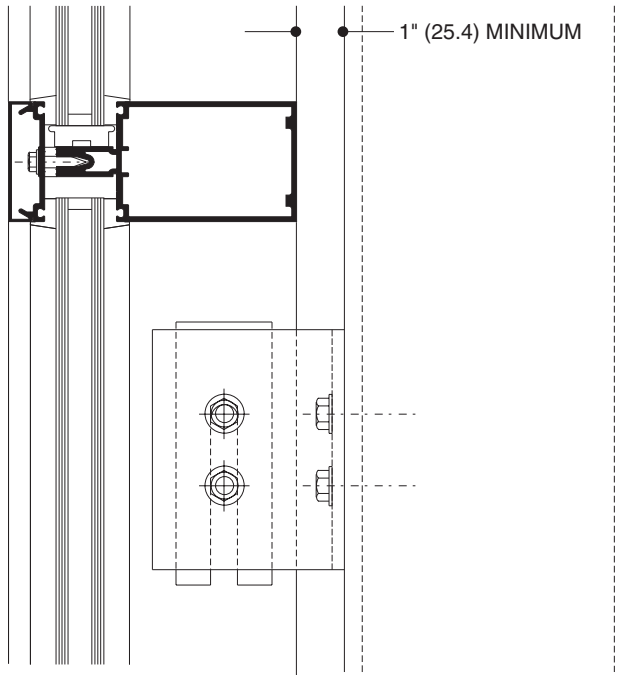
Actual project conditions will determine specific anchor design. Details on this page are for reference only.



ANCHORING TO HORIZONTAL STRUCTURAL STEEL



ANCHORING TO VERTICAL STRUCTURAL STEEL



Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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WIND LOAD CHARTS

Mullions are designed for deflection limitations in accordance with AAMA TIR-A11 of L/175 up to 13'-6" and L/240 +1/4" above 13'-6". These curves are for mullions WITH HORIZONTALS and are based on engineering calculations for stress and deflection. Allowable wind load stress for ALUMINUM 15,152 psi (104MPa), STEEL 30,000 psi (207MPa.). Charted curves, in all cases are for the limiting value. Wind load charts contained herein are based upon nominal wind load utilized in allowable stress design. To convert ultimate wind loads to nominal loads, multiply ultimate wind loads by a factor of 0.6 per ASCE/SEI 7. A 4/3 increase in allowable stress has not been used to develop these curves. For special situations not covered by these curves, contact your Kawneer representative for additional information.

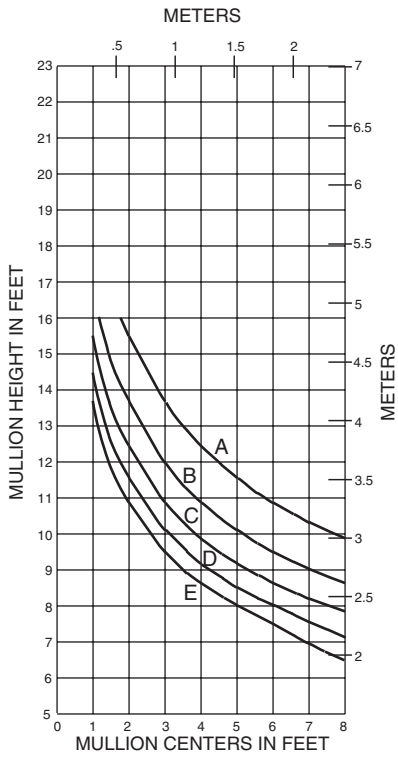
DEADLOAD CHARTS

Horizontal or deadload limitations are based upon 1/8" (3.2), maximum allowable deflection at the center of an intermediate horizontal member. The accompanying charts are calculated for 1" (25.4) thick insulating glass or 1/4" (6.4) thick glass supported on two setting blocks placed at the loading points shown.

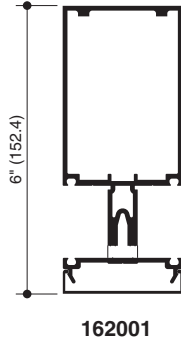
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SINGLE SPAN



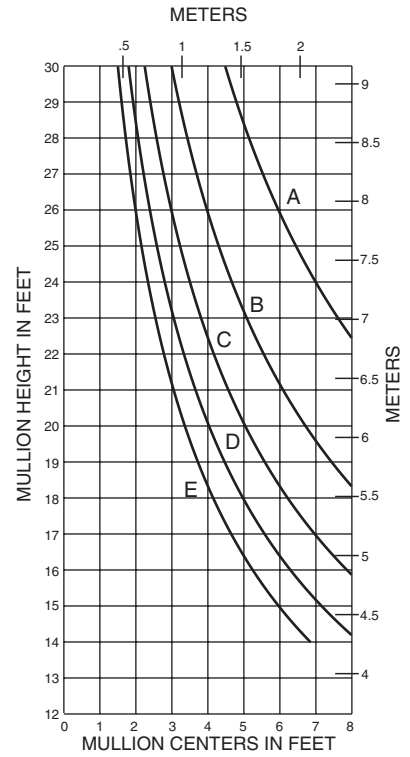
- A = 20 PSF (960)
- B = 30 PSF (1440)
- C = 40 PSF (1920)
- D = 50 PSF (2400)
- E = 60 PSF (2880)



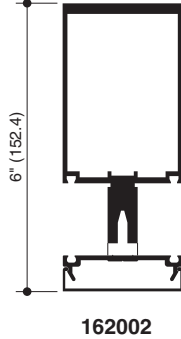
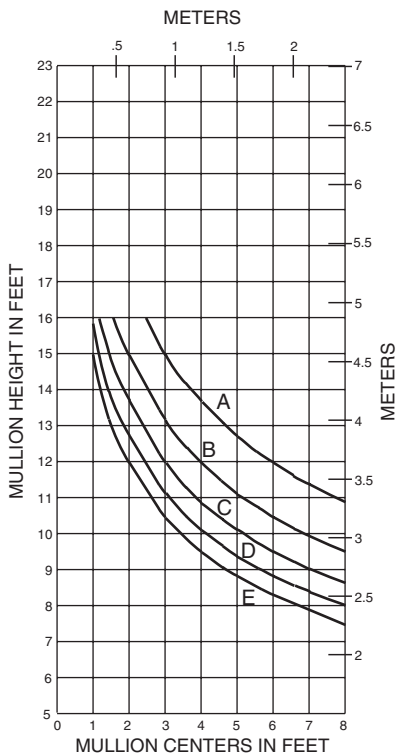
162001

I = 5.035(209.57 x 10⁴)
S = 1.993(32.66 x 10³)

TWIN SPAN



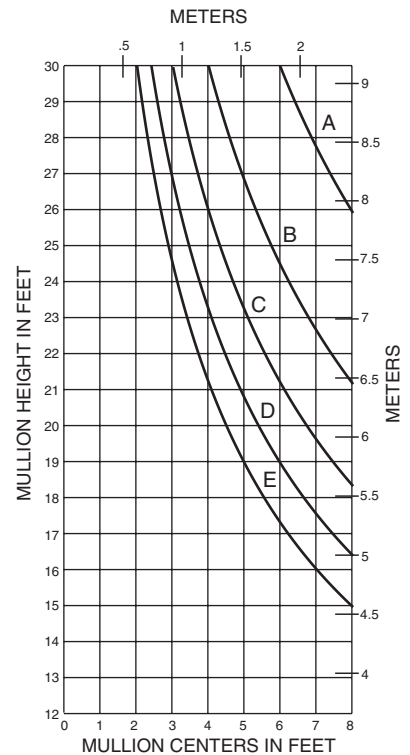
SINGLE SPAN



162002

I = 6.779(282.16 x 10⁴)
S = 2.652(43.46 x 10³)

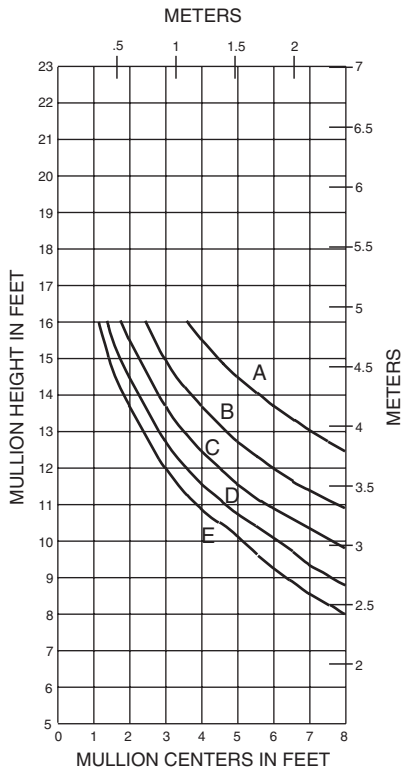
TWIN SPAN



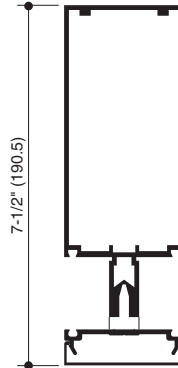
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SINGLE SPAN



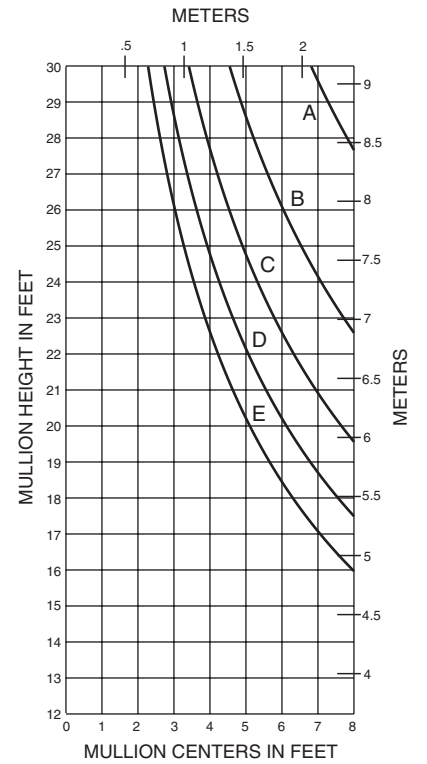
- A = 20 PSF (960)
- B = 30 PSF (1440)
- C = 40 PSF (1920)
- D = 50 PSF (2400)
- E = 60 PSF (2880)



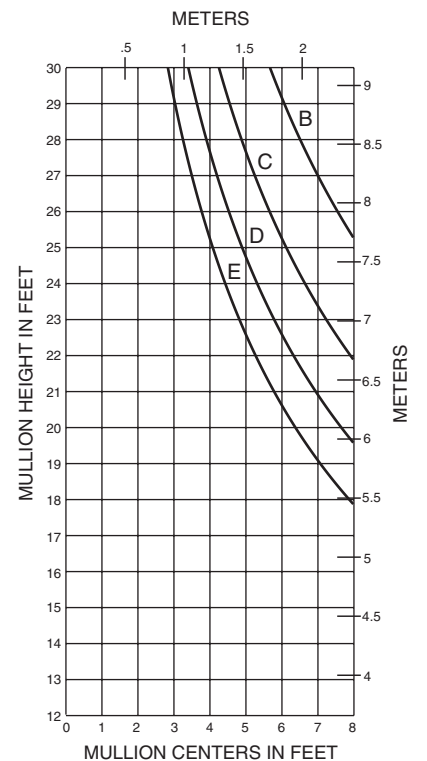
162003

$I = 10.135(421.85 \times 10^4)$
 $S = 3.027(49.60 \times 10^3)$

TWIN SPAN



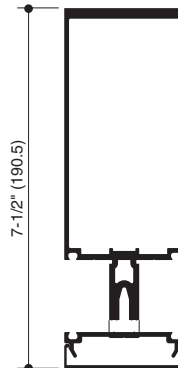
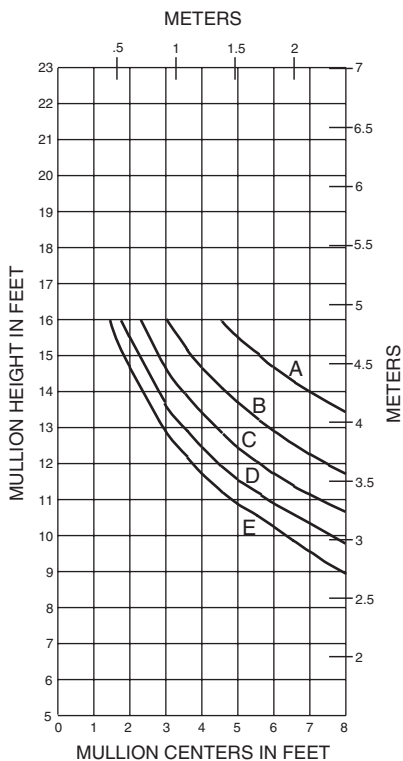
TWIN SPAN



162004

$I = 12.736(530.11 \times 10^4)$
 $S = 3.791(62.12 \times 10^3)$

SINGLE SPAN



162004

$I = 12.736(530.11 \times 10^4)$
 $S = 3.791(62.12 \times 10^3)$

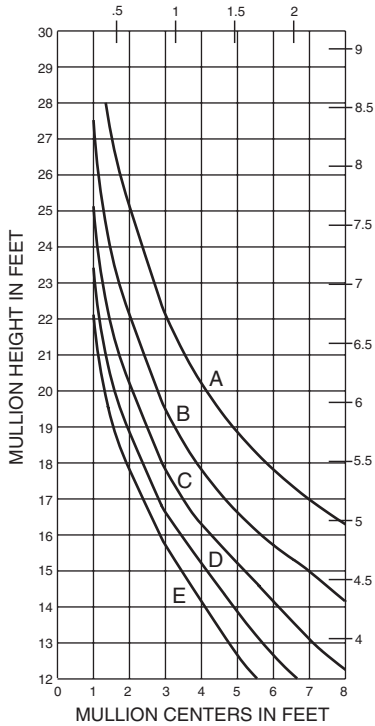
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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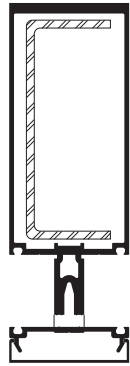
SINGLE SPAN

162004 W/162300

METERS

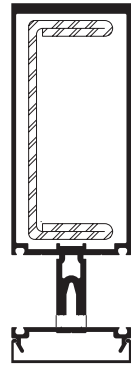


- A = 20 PSF (960)
- B = 30 PSF (1440)
- C = 40 PSF (1920)
- D = 50 PSF (2400)
- E = 60 PSF (2880)



162004 W/162300

la = 12.736(530.11 x 10⁴)
 Sa = 3.791(62.12 x 10³)
 Is = 3.805(158.37 x 10⁴)
 Ss = 1.669(27.35 x 10³)



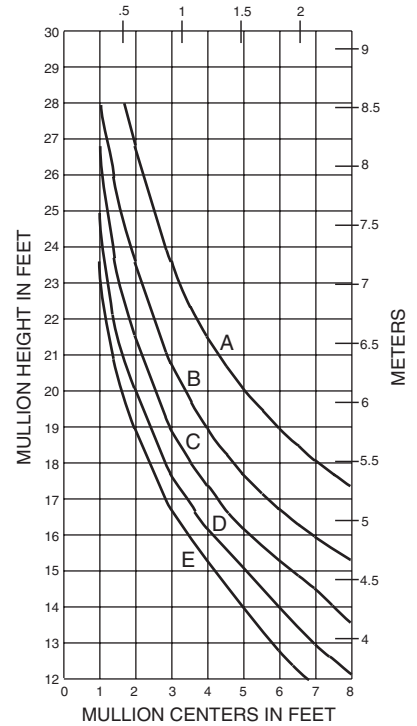
162004 W/162301

la = 12.736(530.11 x 10⁴)
 Sa = 3.791(62.12 x 10³)
 Is = 5.684(236.59 x 10⁴)
 Ss = 2.493(40.85 x 10³)

SINGLE SPAN

162004 W/162301

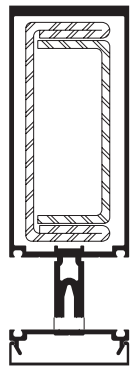
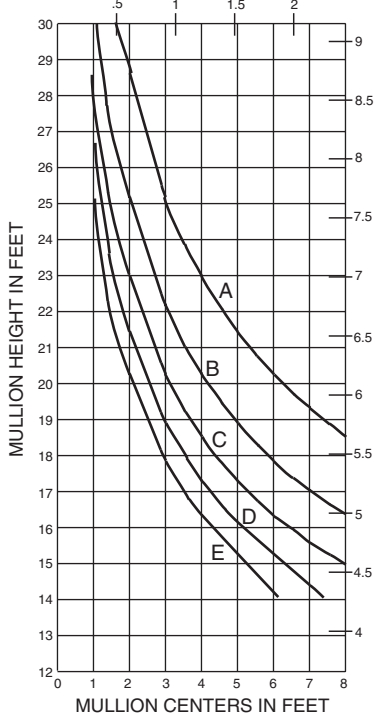
METERS



SINGLE SPAN

162004 W/162301/302

METERS

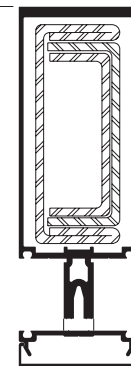


162004 W/162301/302

la = 12.736(530.11 x 10⁴)
 Sa = 3.791(62.12 x 10³)
 Is = 7.893(328.53 x 10⁴)
 Ss = 3.462(56.73 x 10³)



7-1/2" (190.5)



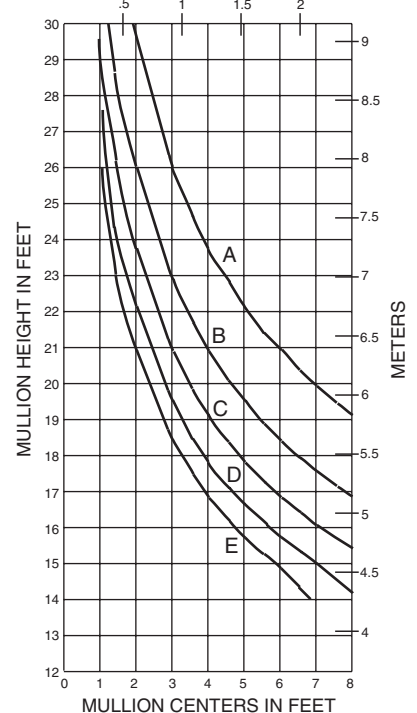
162004 W/162301/302/303

la = 12.736(530.11 x 10⁴)
 Sa = 3.791(62.12 x 10³)
 Is = 9.347(389.05 x 10⁴)
 Ss = 4.100(67.19 x 10³)

SINGLE SPAN

162004 W/162301/302/303

METERS

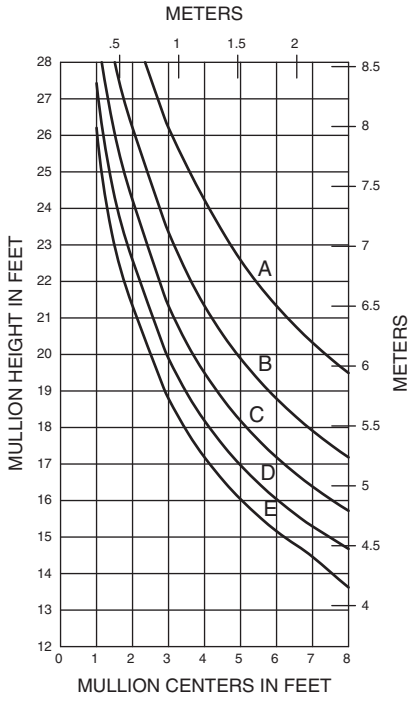


Vertical text on the right side of the page: Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Vertical text on the right side of the page: Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

Vertical text on the right side of the page: © Kawneer Company, Inc., 2014

SINGLE SPAN



- A = 20 PSF (960)
- B = 30 PSF (1440)
- C = 40 PSF (1920)
- D = 50 PSF (2400)
- E = 60 PSF (2880)



162064

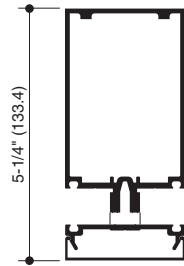
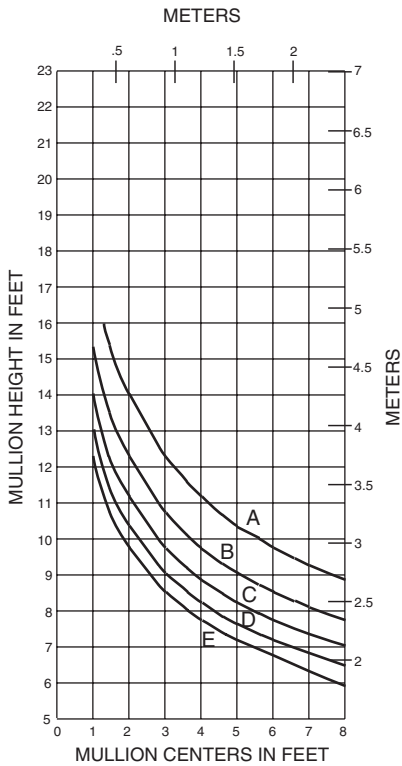
I = 42.441(1766.52 x 10⁴)
 S = 8.816(144.74 x 10³)

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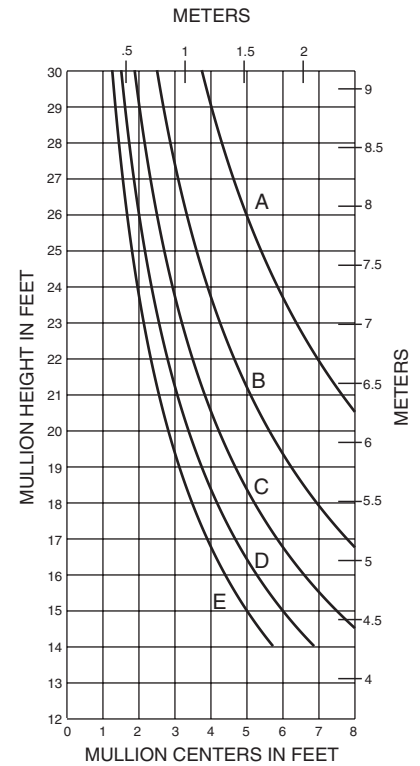
- A = 20 PSF (960)
- B = 30 PSF (1440)
- C = 40 PSF (1920)
- D = 50 PSF (2400)
- E = 60 PSF (2880)

SINGLE SPAN

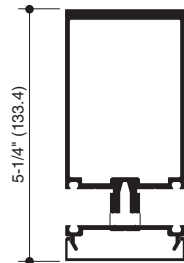
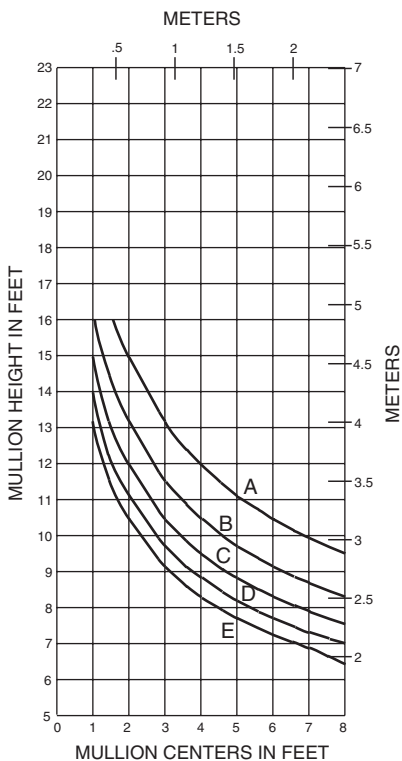


162013
 $I = 3.662(152.42 \times 10^4)$
 $S = 1.662(27.24 \times 10^3)$

TWIN SPAN

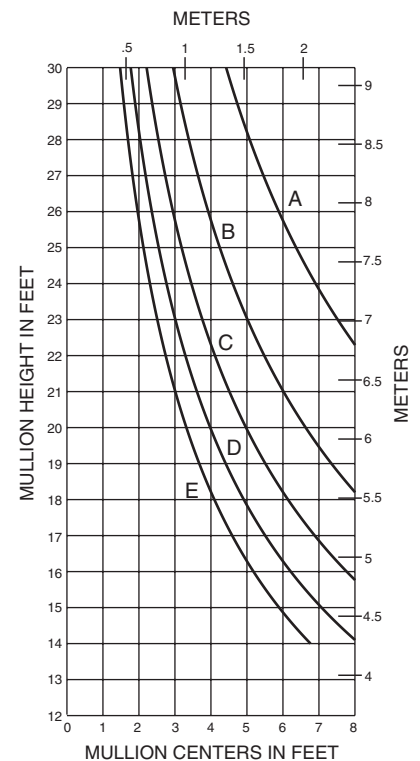


SINGLE SPAN



162014
 $I = 4.5071(87.60 \times 10^4)$
 $S = 1.968(32.25 \times 10^3)$

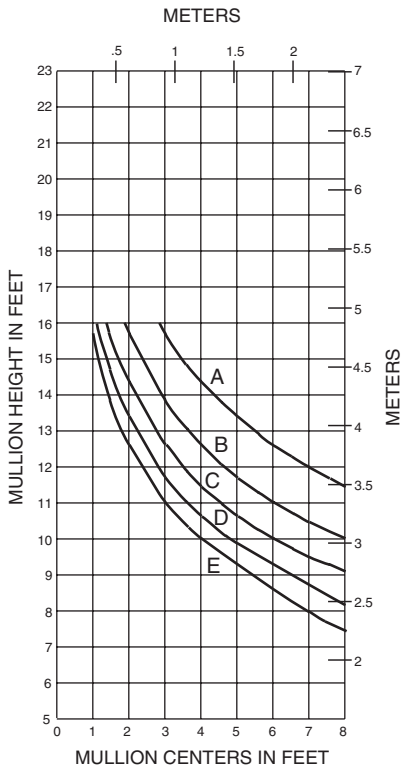
TWIN SPAN



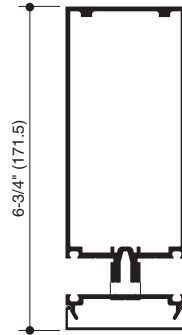
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SINGLE SPAN

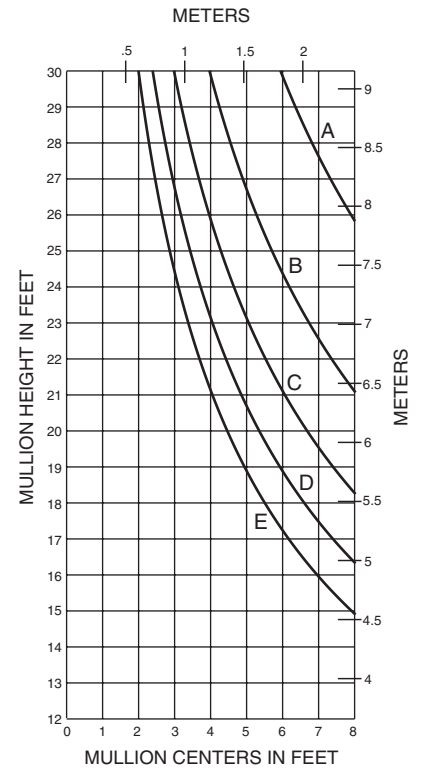


- A = 20 PSF (960)
- B = 30 PSF (1440)
- C = 40 PSF (1920)
- D = 50 PSF (2400)
- E = 60 PSF (2880)

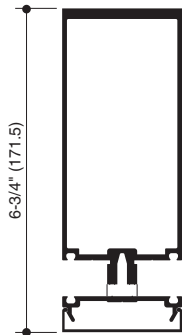
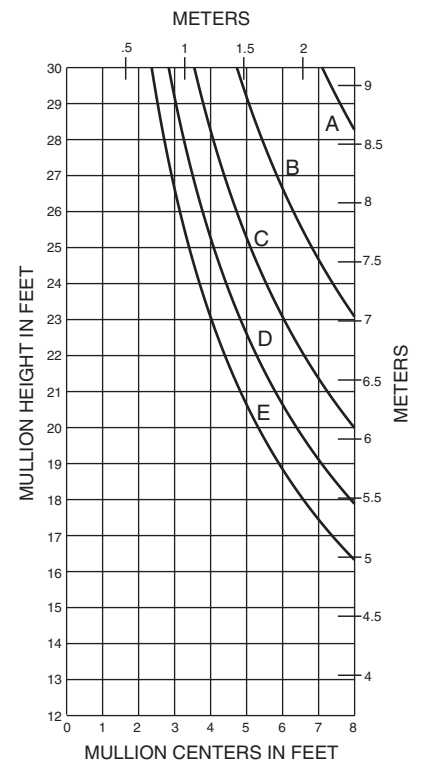


162015
I = 7.915(329.45 x 10⁴)
S = 2.635(43.18 x 10³)

TWIN SPAN

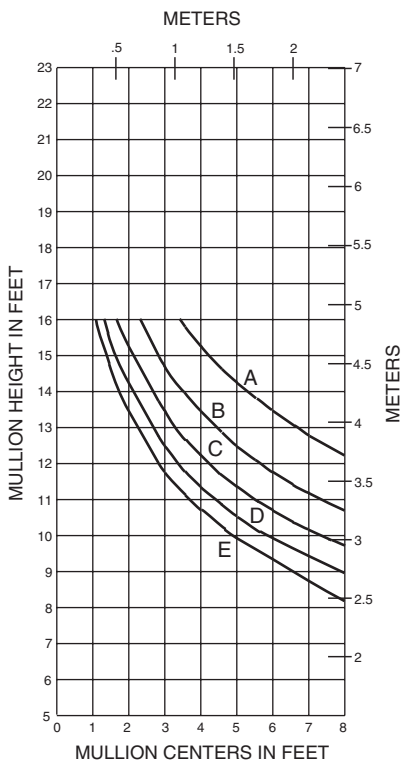


TWIN SPAN



162016
I = 9.594(399.33 x 10⁴)
S = 3.163(51.83 x 10³)

SINGLE SPAN



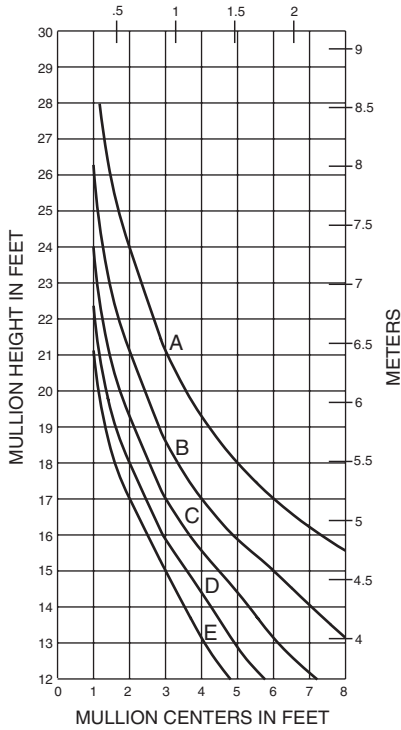
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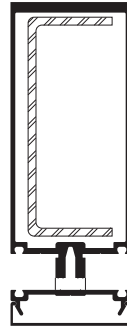
SINGLE SPAN

162016 W/162300

METERS

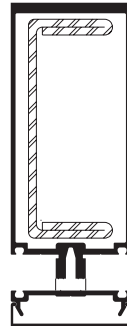


- A = 20 PSF (960)
- B = 30 PSF (1440)
- C = 40 PSF (1920)
- D = 50 PSF (2400)
- E = 60 PSF (2880)



162016 W/162300

la = 9.594(399.33 x 10⁴)
 Sa = 3.163(51.83 x 10³)
 ls = 3.805(158.37 x 10⁴)
 Ss = 1.669(27.35 x 10³)



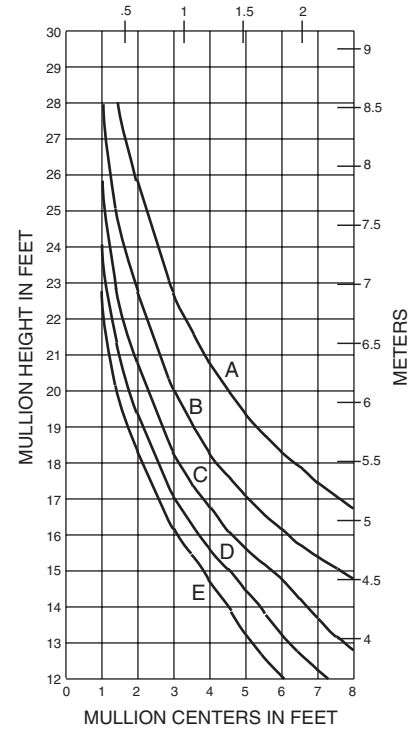
162016 W/162301

la = 9.594(399.33 x 10⁴)
 Sa = 3.163(51.83 x 10³)
 ls = 5.684(236.59 x 10⁴)
 Ss = 2.493(40.85 x 10³)

SINGLE SPAN

162016 W/162301

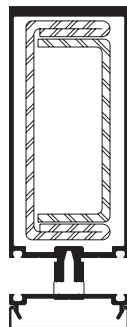
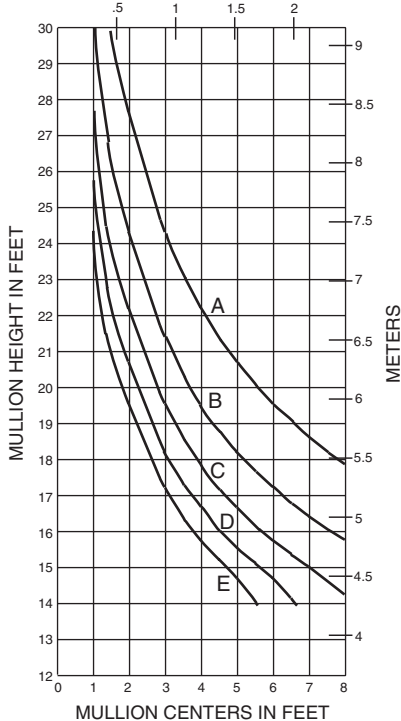
METERS



SINGLE SPAN

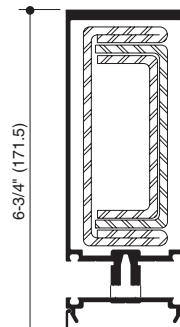
162016 W/162301/302

METERS



162016 W/162301/302

la = 9.594(399.33 x 10⁴)
 Sa = 3.163(51.83 x 10³)
 ls = 7.893(328.53 x 10⁴)
 Ss = 3.462(56.73 x 10³)



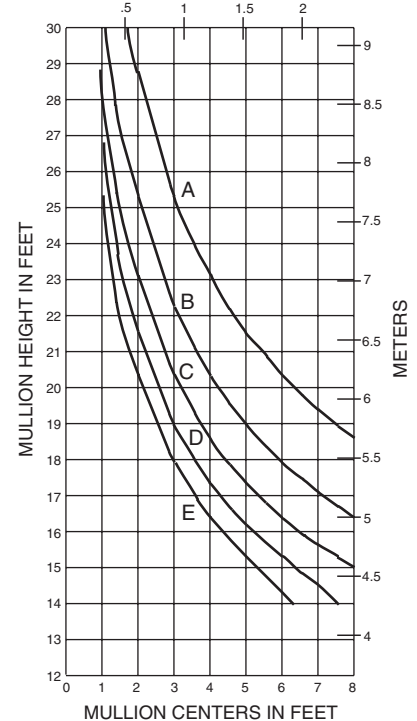
162016 W/162301/302/303

la = 9.594(399.33 x 10⁴)
 Sa = 3.163(51.83 x 10³)
 ls = 9.347(389.05 x 10⁴)
 Ss = 4.100(67.19 x 10³)

SINGLE SPAN

162016 W/162301/302/303

METERS

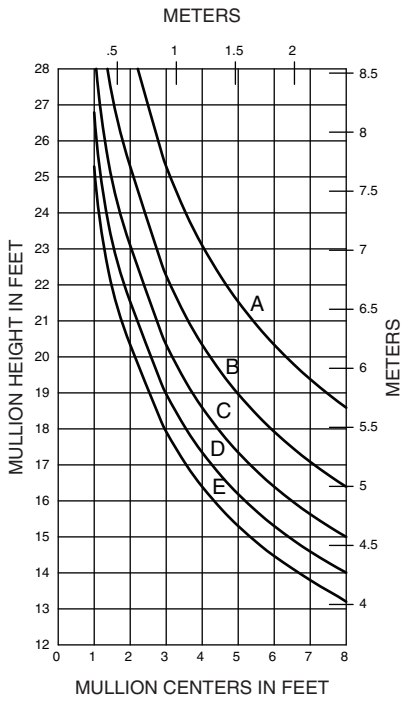


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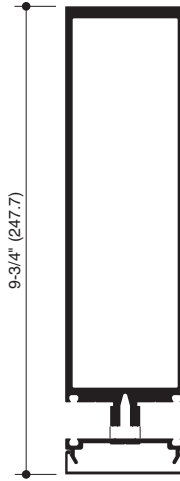
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SINGLE SPAN



- A = 20 PSF (960)
- B = 30 PSF (1440)
- C = 40 PSF (1920)
- D = 50 PSF (2400)
- E = 60 PSF (2880)



162213

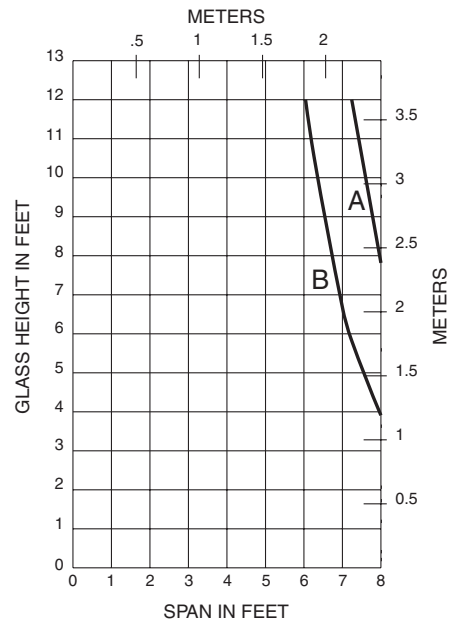
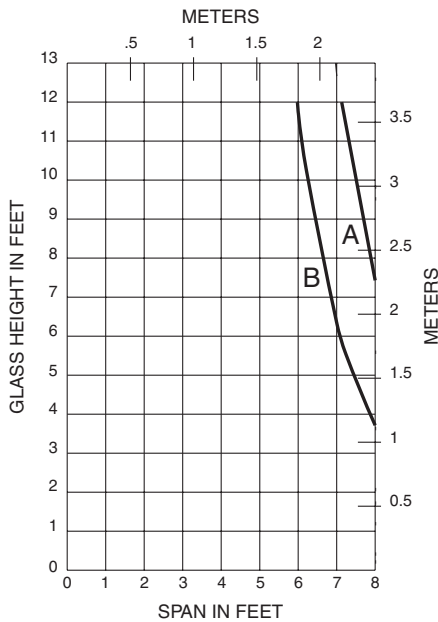
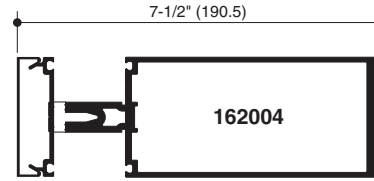
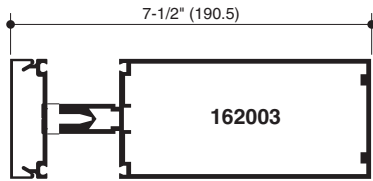
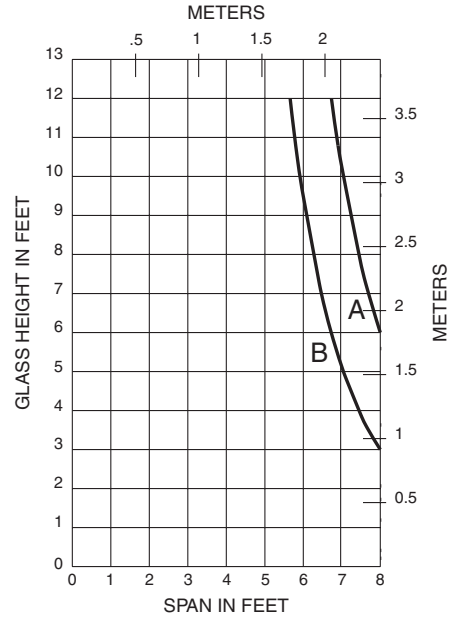
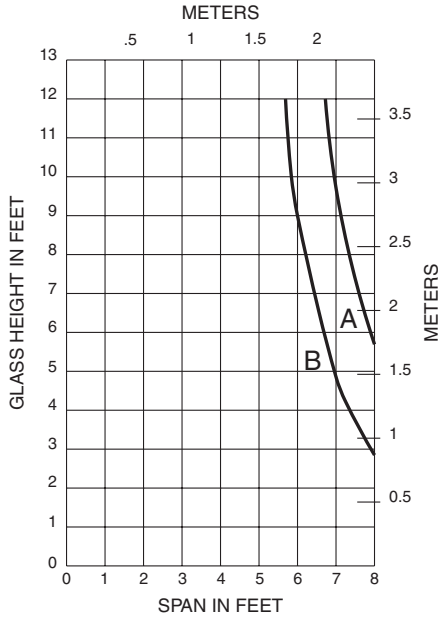
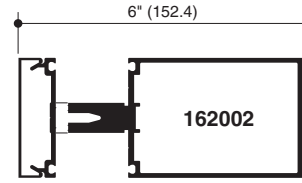
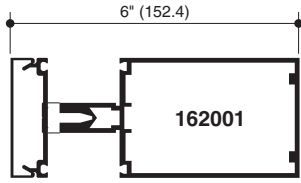
I = 36.451(1517.20 x 10⁴)
S = 8.279(135.67 x 10³)

Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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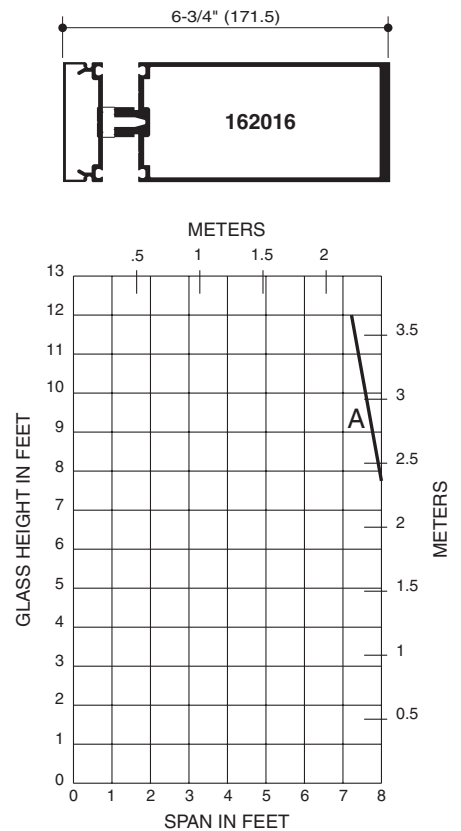
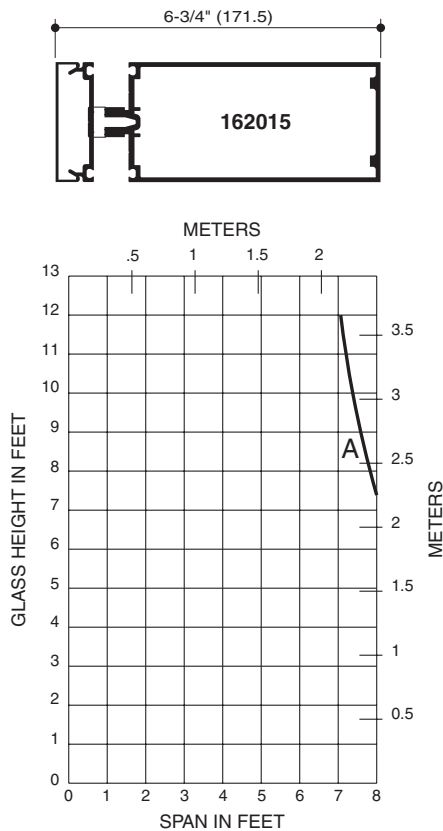
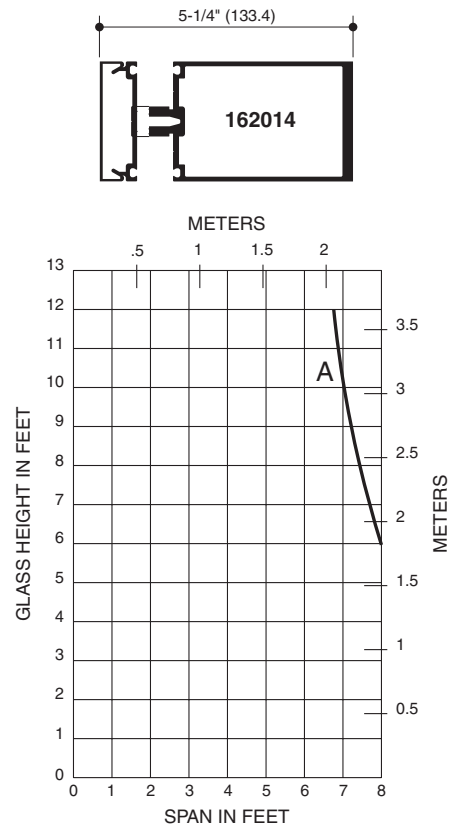
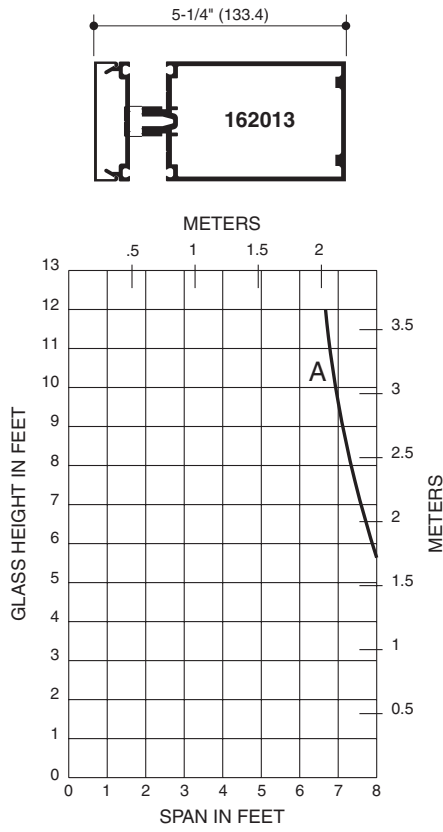
A - 1/4" GLASS (1/4 POINT LOADING)
 B - 1" GLASS (1/4 POINT LOADING)



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A - 1/4" GLASS (1/4 POINT LOADING)



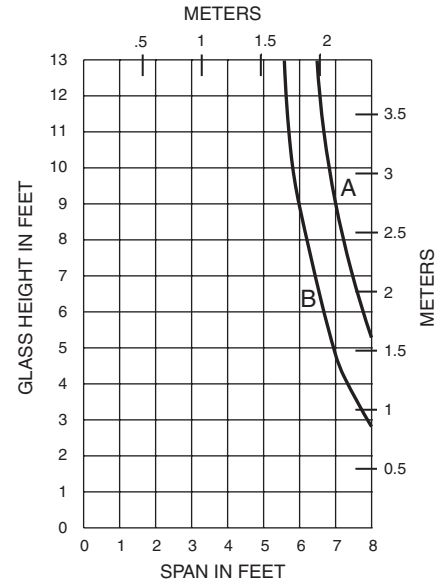
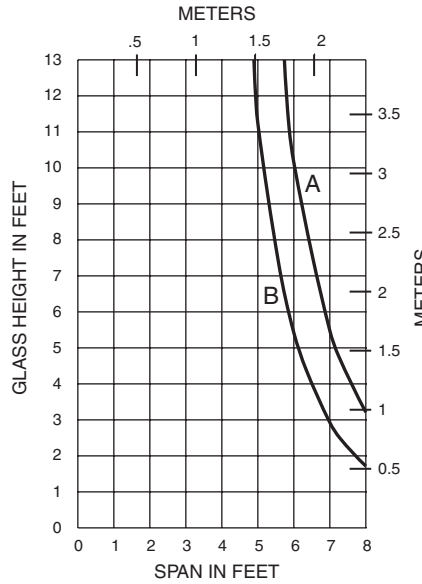
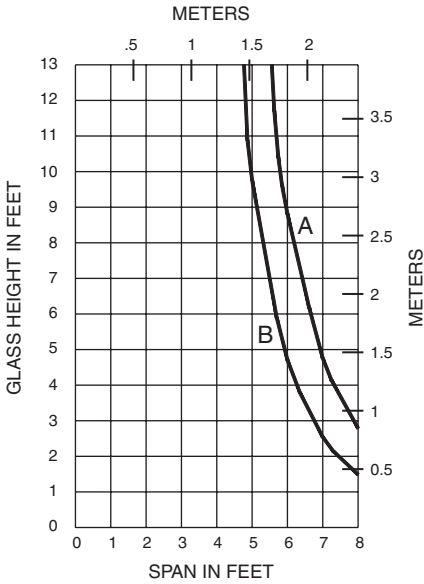
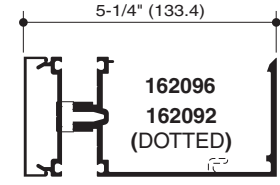
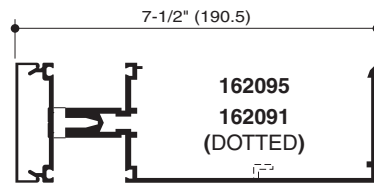
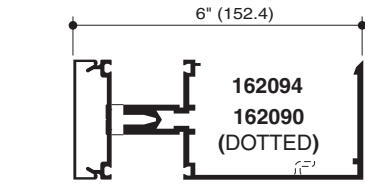
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A - 1" GLASS (1/8 POINT LOADING)
B - 1" GLASS (1/4 POINT LOADING)

A - 1" GLASS (1/8 POINT LOADING)
B - 1" GLASS (1/4 POINT LOADING)

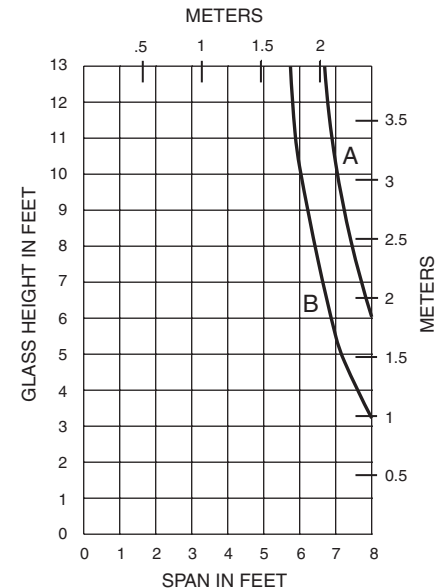
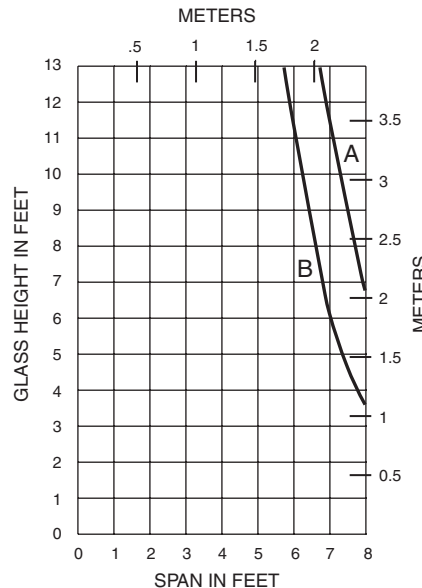
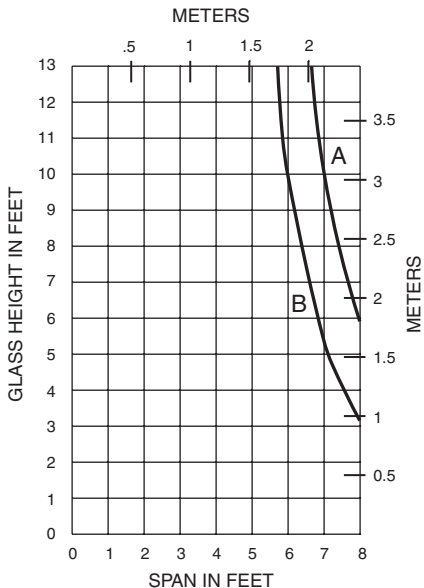
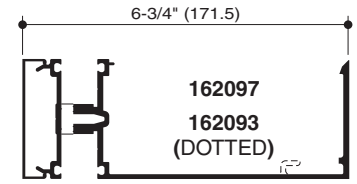
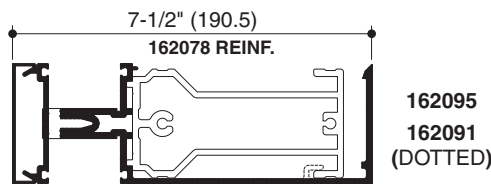
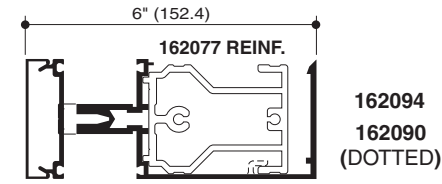
A - 1/4" GLASS (1/8 POINT LOADING)
B - 1/4" GLASS (1/4 POINT LOADING)



A - 1" GLASS (1/8 POINT LOADING)
B - 1" GLASS (1/4 POINT LOADING)

A - 1" GLASS (1/8 POINT LOADING)
B - 1" GLASS (1/4 POINT LOADING)

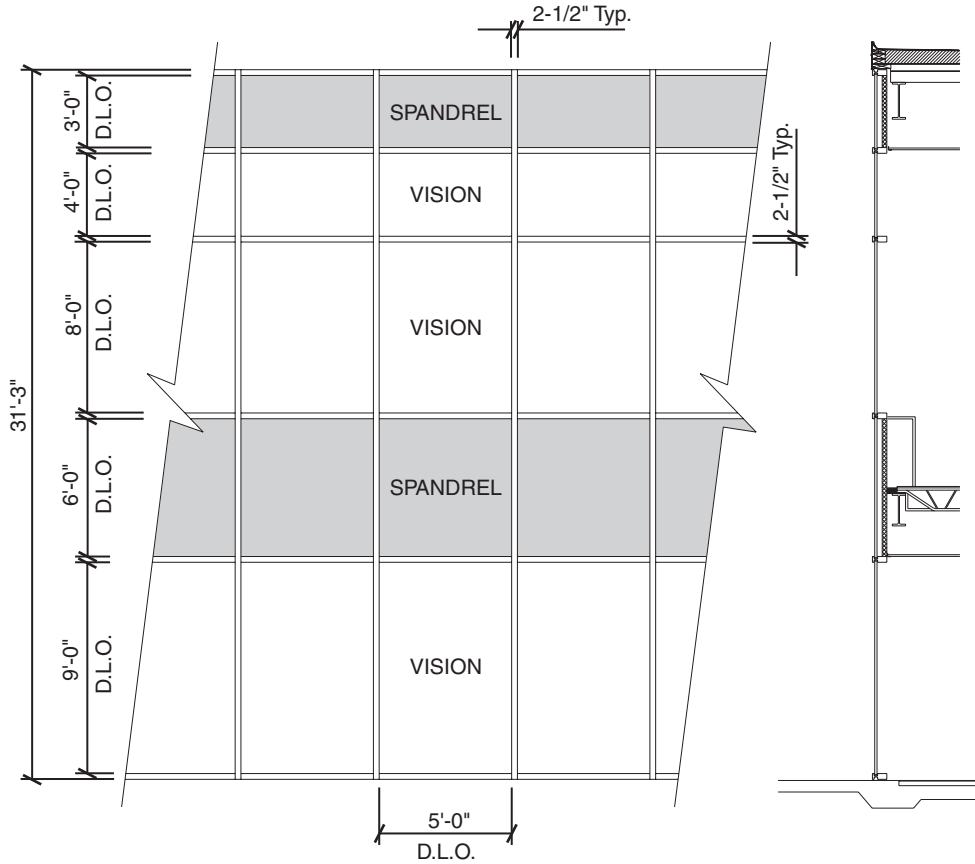
A - 1/4" GLASS (1/8 POINT LOADING)
B - 1/4" GLASS (1/4 POINT LOADING)



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Generic Project Specific U-factor Example Calculation
(Percent of Glass will vary on specific products depending on sitelines)
(Based on single bay of Curtain Wall/Window Wall)



Vision Area

- Example Glass U-factor = 0.48 Btu/(ft² · h · °F)
- Vision Area = 5(9 + 8 + 4) = 105.0 ft²
- Total Area (Vision) = 5' 2-1/2" (9' 3-3/4" + 8' 2-1/2" + 4' 2-1/2") = 113.2 ft²
- Percentage of Vision Glass = (Vision Area ÷ Total Area)100
= (105.0 ÷ 113.2)100 = 93%

Spandrel Area

- Example Spandrel R-value = 15 (ft² · h · °F)/Btu
- Spandrel Area = 5(6 + 3) = 45.0 ft²
- Total Area (Spandrel) = 5' 2-1/2" (6' 2-1/2" + 3' 3-3/4") = 49.6 ft²
- Percent of Spandrel = (Spandrel Area ÷ Total Area)100
= (45.0 ÷ 49.6)100 = 91%

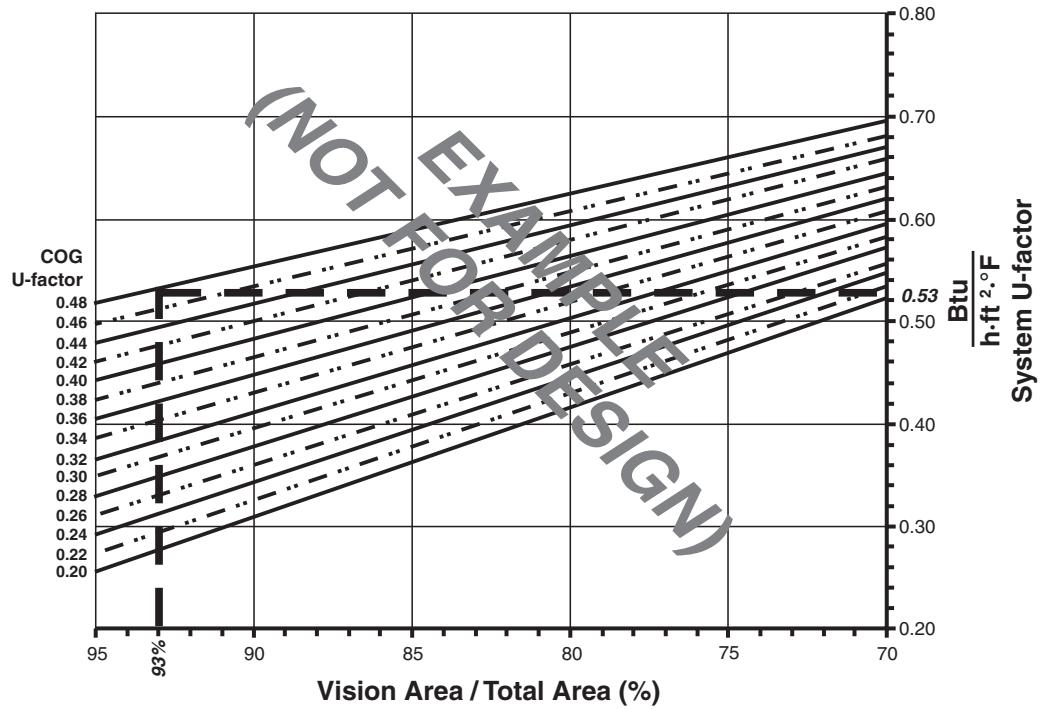
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Vision Area Chart

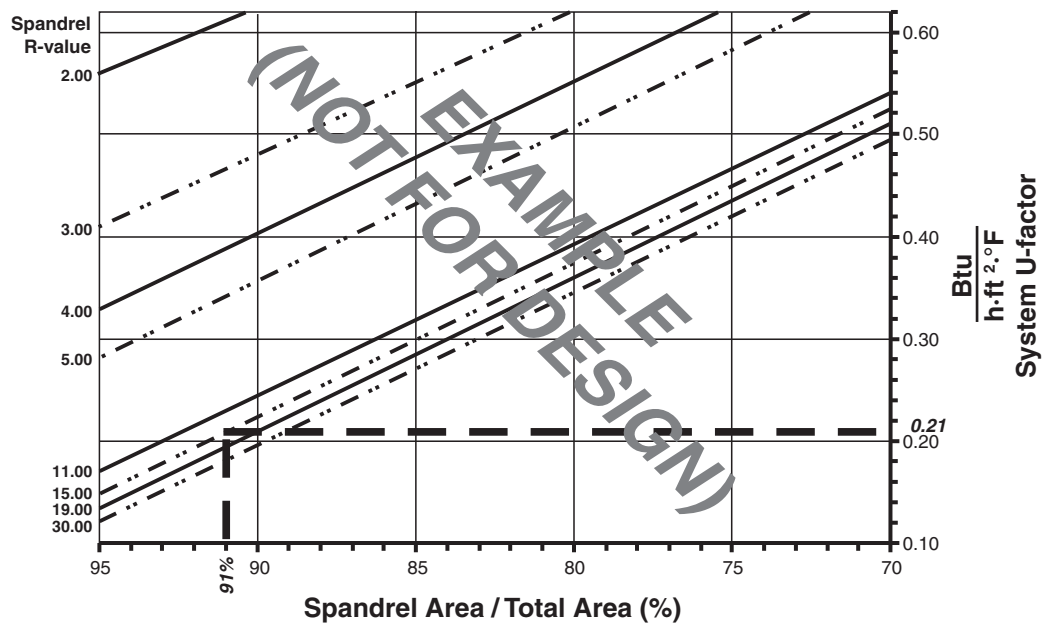
System U-factor vs Percent of Vision Area



Based on a single curtain wall bay of 93% vision glass and center of glass U-factor of 0.48, System U-factor is equal to 0.53 Btu/(h-ft²·°F)

Spandrel Area Chart

System U-factor vs Percent of Spandrel Area



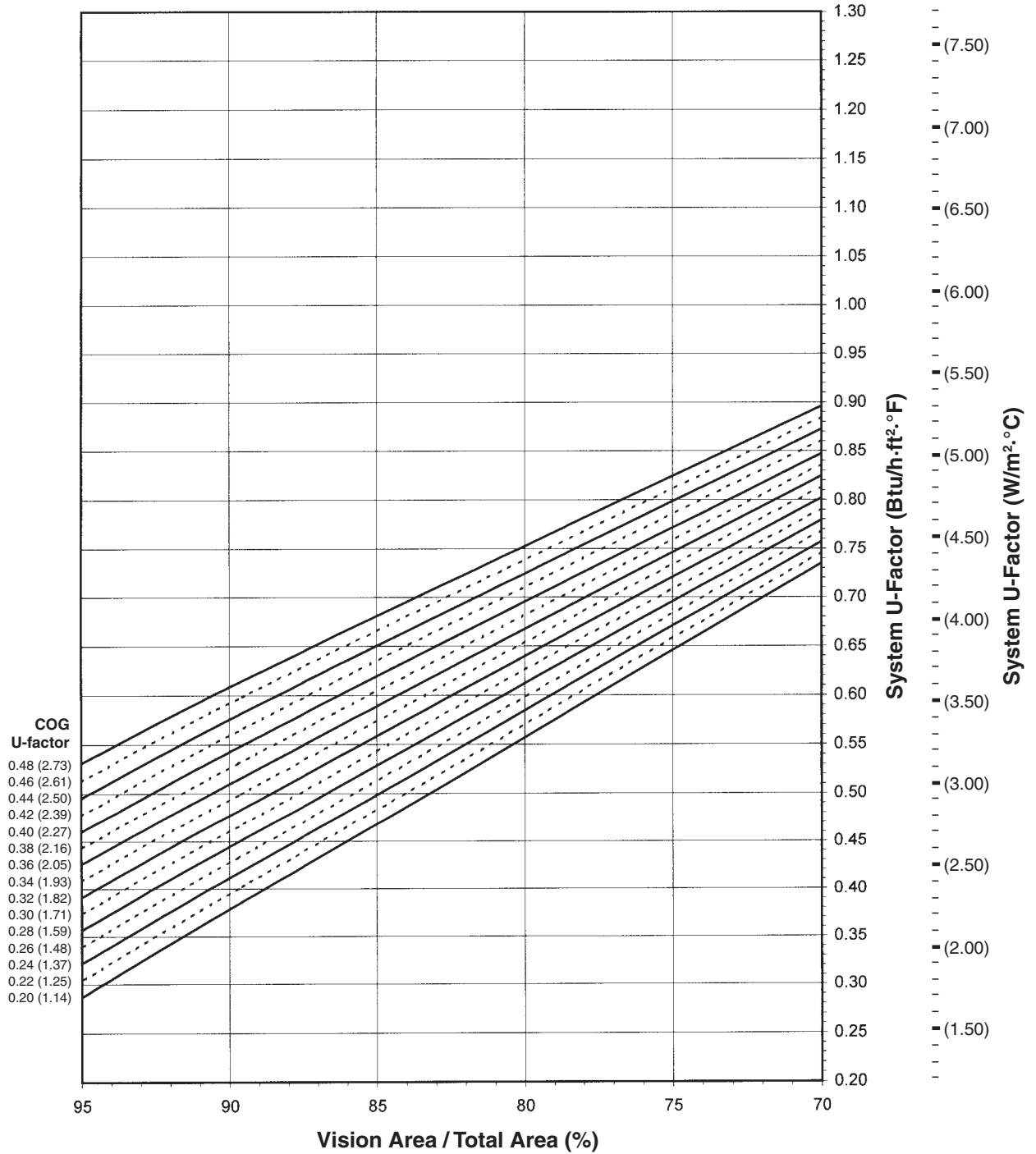
Based on a single curtain wall bay of 91% spandrel and center of spandrel R-value of 15, system U-factor is equal to 0.21 Btu/(h-ft²·°F)

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Note:
Values in parentheses are metric.
COG=Center of Glass.
Charts are generated per AAMA 507.

System U-Factor for Vision Glass

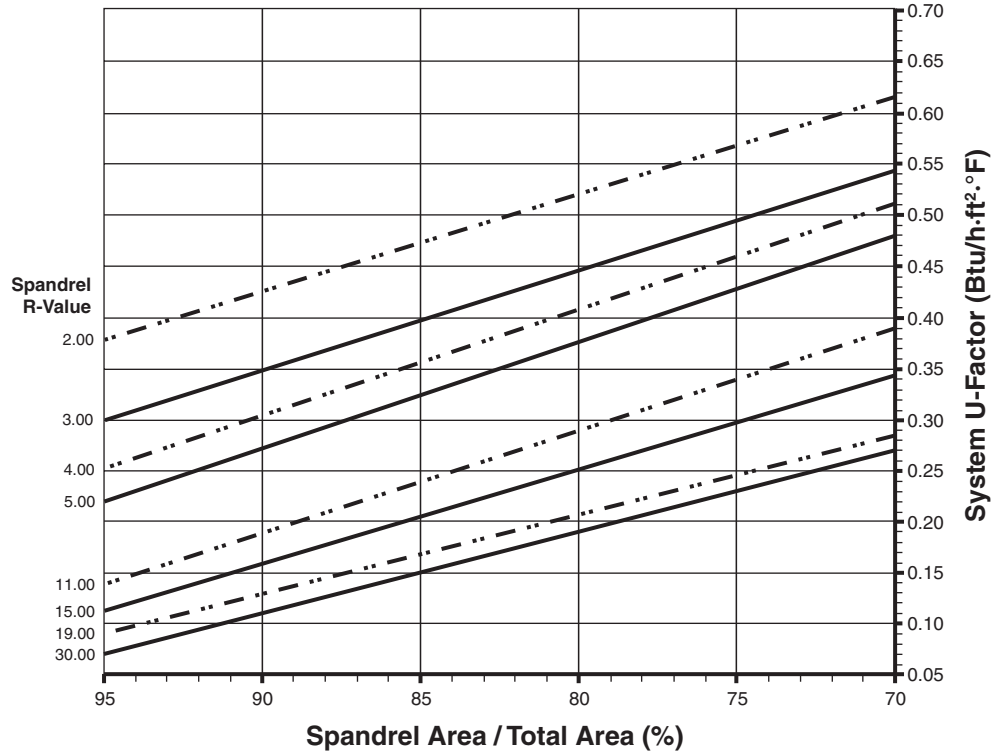


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Note:
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 COG=Center of Glass.
 Charts are generated per AAMA 507.

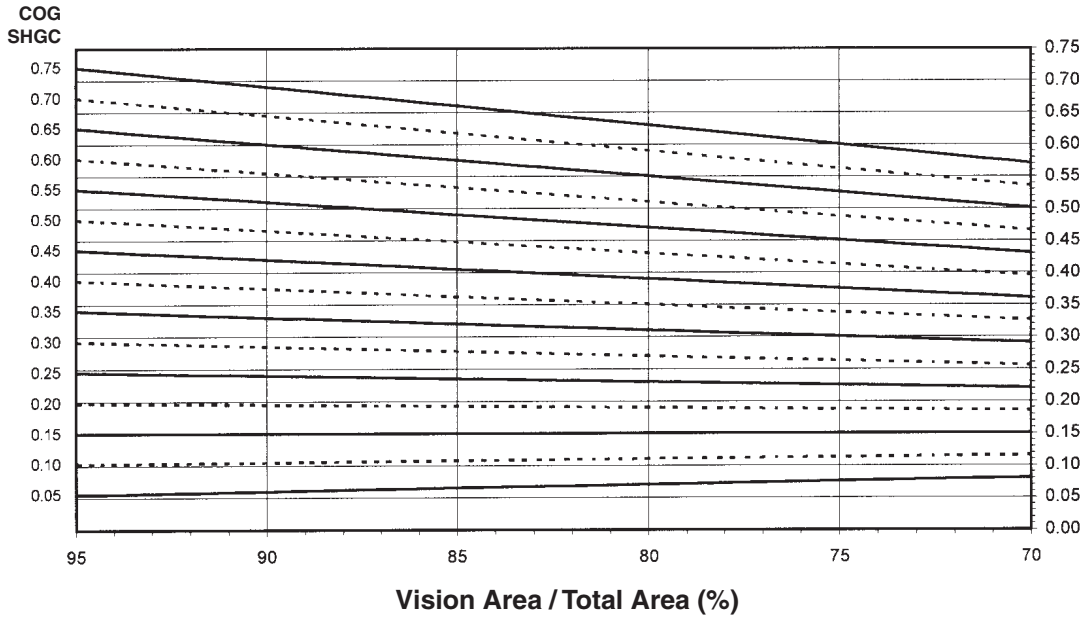
System U-Factors for Spandrel Glass



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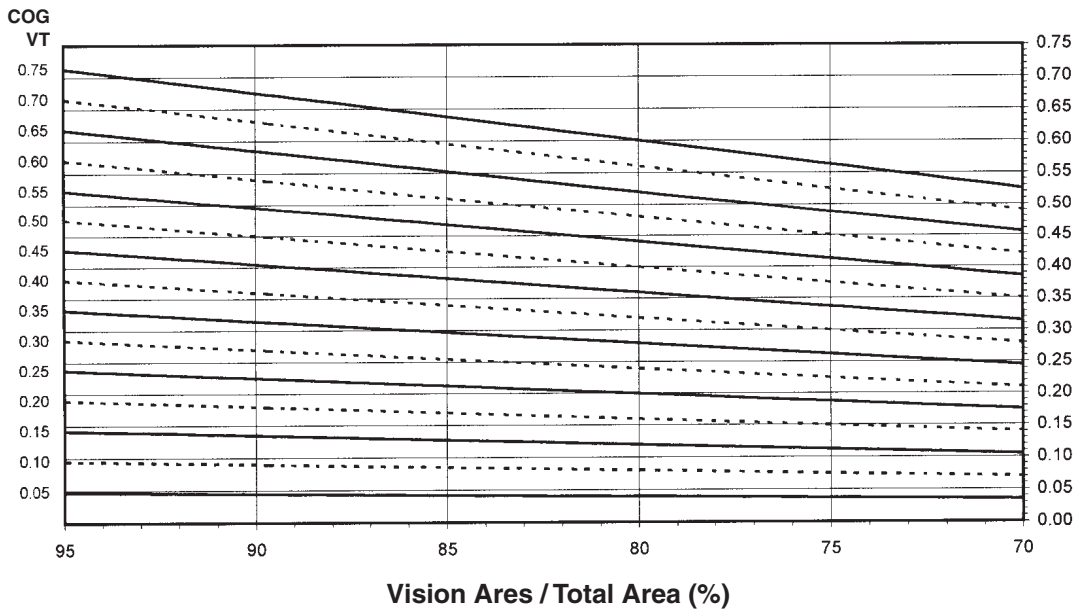
System Solar Heat Gain Coefficient (SHGC) vs Percent of Vision Area



System SHGC

Charts are generated per AAMA 507.

System Visible Transmittance (VT) vs Percent of Vision Area



System VT

Charts are generated per AAMA 507.

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Thermal Transmittance¹ (BTU/hr • ft² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.61
0.46	0.60
0.44	0.58
0.42	0.56
0.40	0.55
0.38	0.53
0.36	0.51
0.34	0.50
0.32	0.48
0.30	0.47
0.28	0.45
0.26	0.43
0.24	0.42
0.22	0.40
0.20	0.38

**1" GLAZING WITH
ALUMINUM PRESSURE PLATE**

NOTE: For glass values that are not listed, linear interpolation is permitted.

1. U-Factors are determined in accordance with NFRC 100.
2. SHGC and VT values are determined in accordance with NFRC 200.
3. Glass properties are based on center of glass values and are obtained from your glass supplier.
4. Overall U-Factor, SHGC, and VT Matricies are based on the standard NFRC specimen size of 2000mm wide by 2000mm high (78-3/4" by 78-3/4").

SHGC Matrix²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.69
0.70	0.64
0.65	0.60
0.60	0.55
0.55	0.51
0.50	0.46
0.45	0.42
0.40	0.37
0.35	0.33
0.30	0.28
0.25	0.24
0.20	0.20
0.15	0.15
0.10	0.11
0.05	0.06

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.67
0.70	0.63
0.65	0.58
0.60	0.54
0.55	0.49
0.50	0.45
0.45	0.40
0.40	0.36
0.35	0.31
0.30	0.27
0.25	0.22
0.20	0.18
0.15	0.13
0.10	0.09
0.05	0.04

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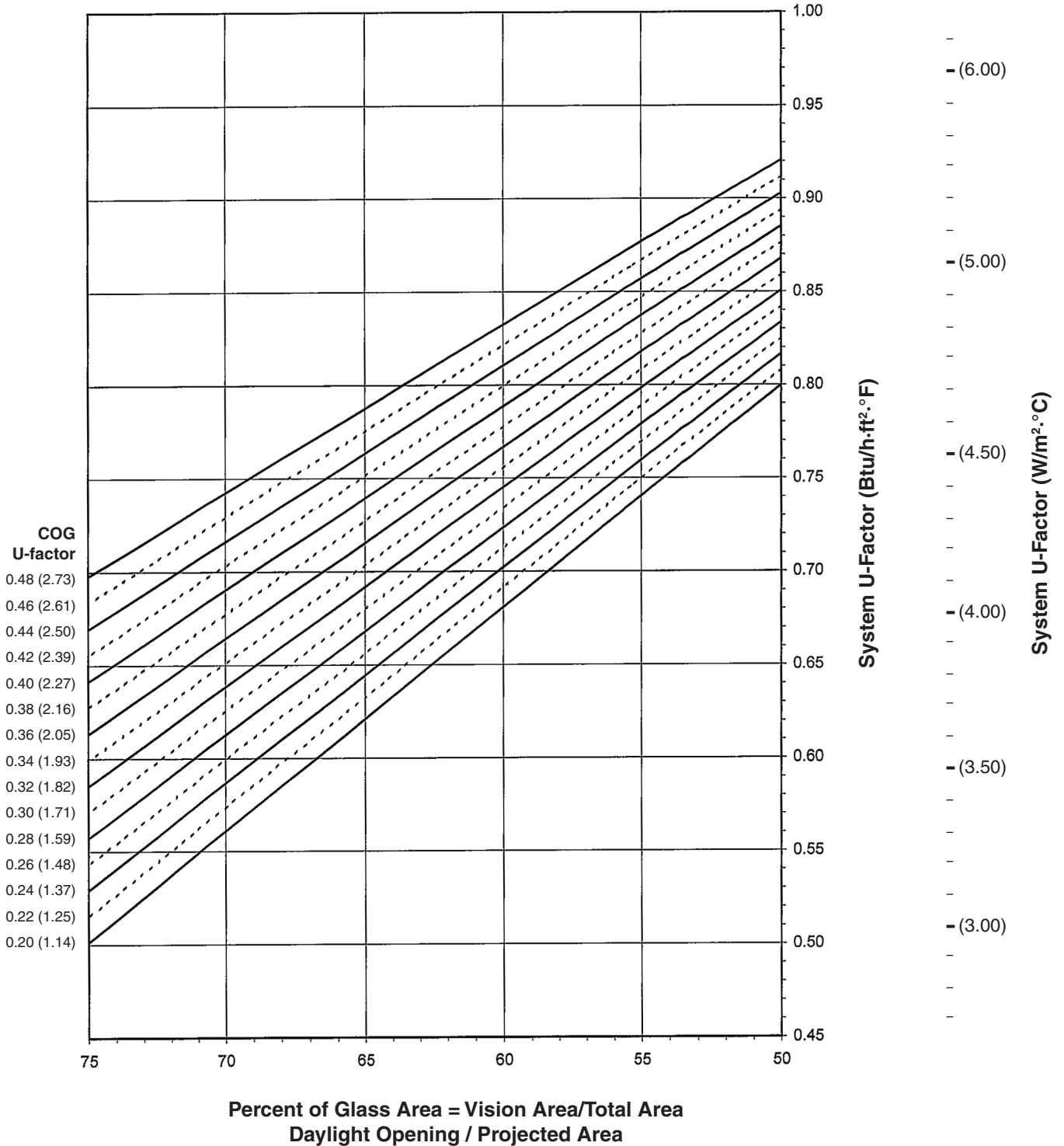
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1600 System™1 with GLASSvent™ - Projecting (Awning - Single)

Note:

Values in parentheses are metric.
COG = Center of Glass.
Charts are generated per AMMA 507

System U-Factor for Vision Glass



Notes for System U-factor, SHGC and VT charts:

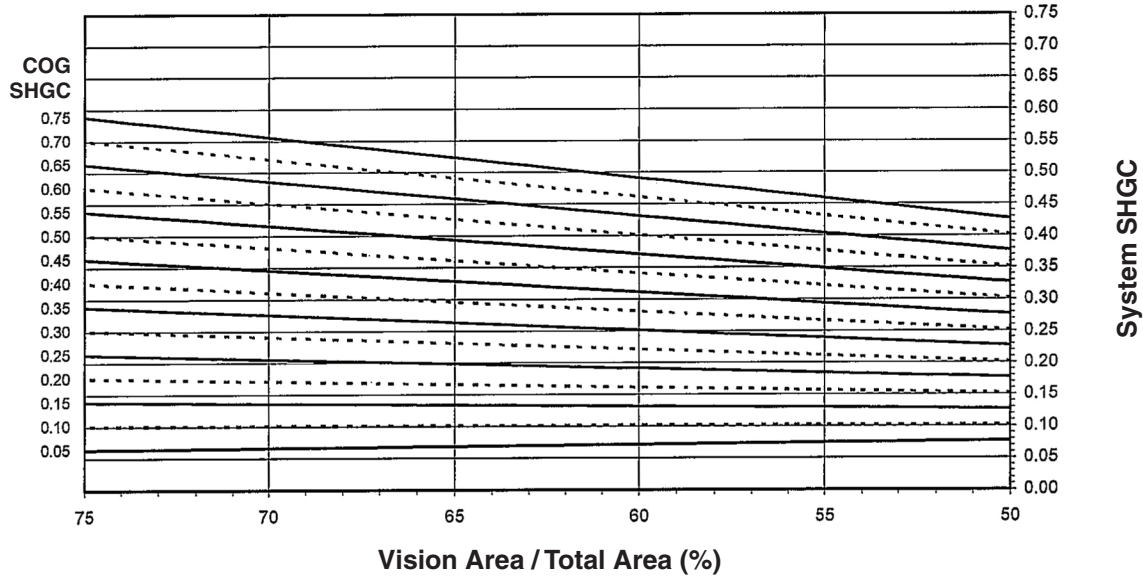
For glass values that are not listed, linear interpolation is permitted.
Glass properties are based on center of glass values and are obtained from your glass supplier.

Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

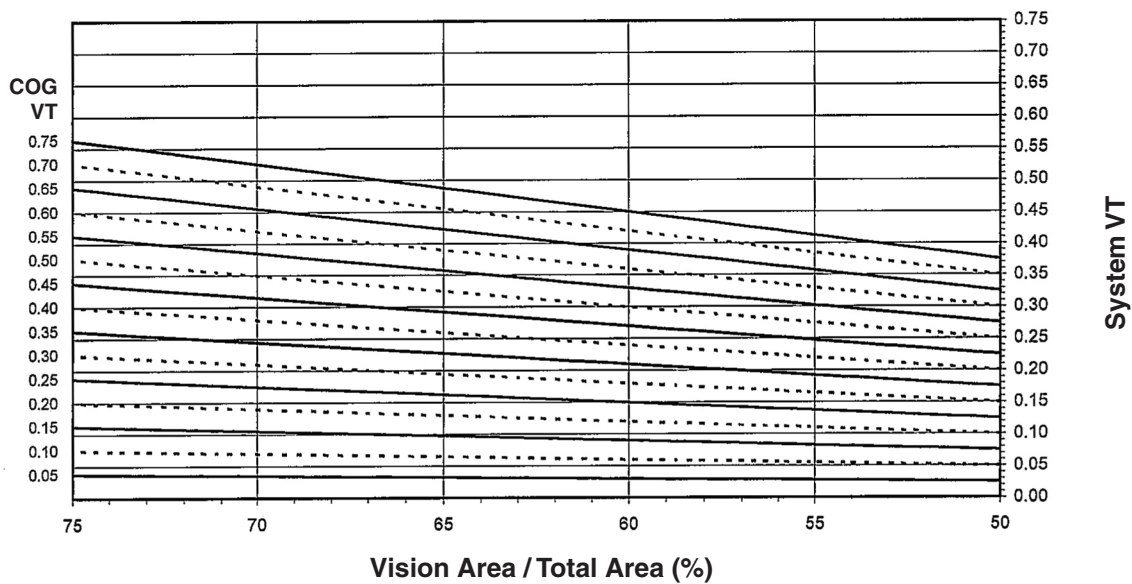
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1600 System™1 with GLASSvent™ - Projecting (Awning - Single)

System Solar Heat Gain Coefficient (SHGC) vs Percent of Vision Area



System Visible Transmittance (VT) vs Percent of Vision Area



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Thermal Transmittance ¹ (BTU/hr • ft ² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.87
0.46	0.86
0.44	0.85
0.42	0.84
0.40	0.83
0.38	0.82
0.36	0.81
0.34	0.80
0.32	0.79
0.30	0.78
0.28	0.77
0.26	0.76
0.24	0.76
0.22	0.75
0.20	0.74

1" GLAZING WITH ALUMINUM PRESSURE PLATE

1600 System™1 with GLASSvent™ - Projecting (Awning - Single)

NOTE: For glass values that are not listed, linear interpolation is permitted.

1. U-Factors are determined in accordance with NFRC 100.
2. SHGC and VT values are determined in accordance with NFRC 200.
3. Glass properties are based on center of glass values and are obtained from your glass supplier.
4. Overall U-Factor, SHGC, and VT Matricies are based on the standard NFRC specimen size of 1500mm wide by 600mm high (59-1/16" by 23-5/8").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.46
0.70	0.43
0.65	0.41
0.60	0.38
0.55	0.35
0.50	0.32
0.45	0.30
0.40	0.27
0.35	0.24
0.30	0.21
0.25	0.18
0.20	0.16
0.15	0.13
0.10	0.10
0.05	0.07

Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.42
0.70	0.39
0.65	0.36
0.60	0.33
0.55	0.30
0.50	0.28
0.45	0.25
0.40	0.22
0.35	0.19
0.30	0.17
0.25	0.14
0.20	0.11
0.15	0.08
0.10	0.06
0.05	0.03

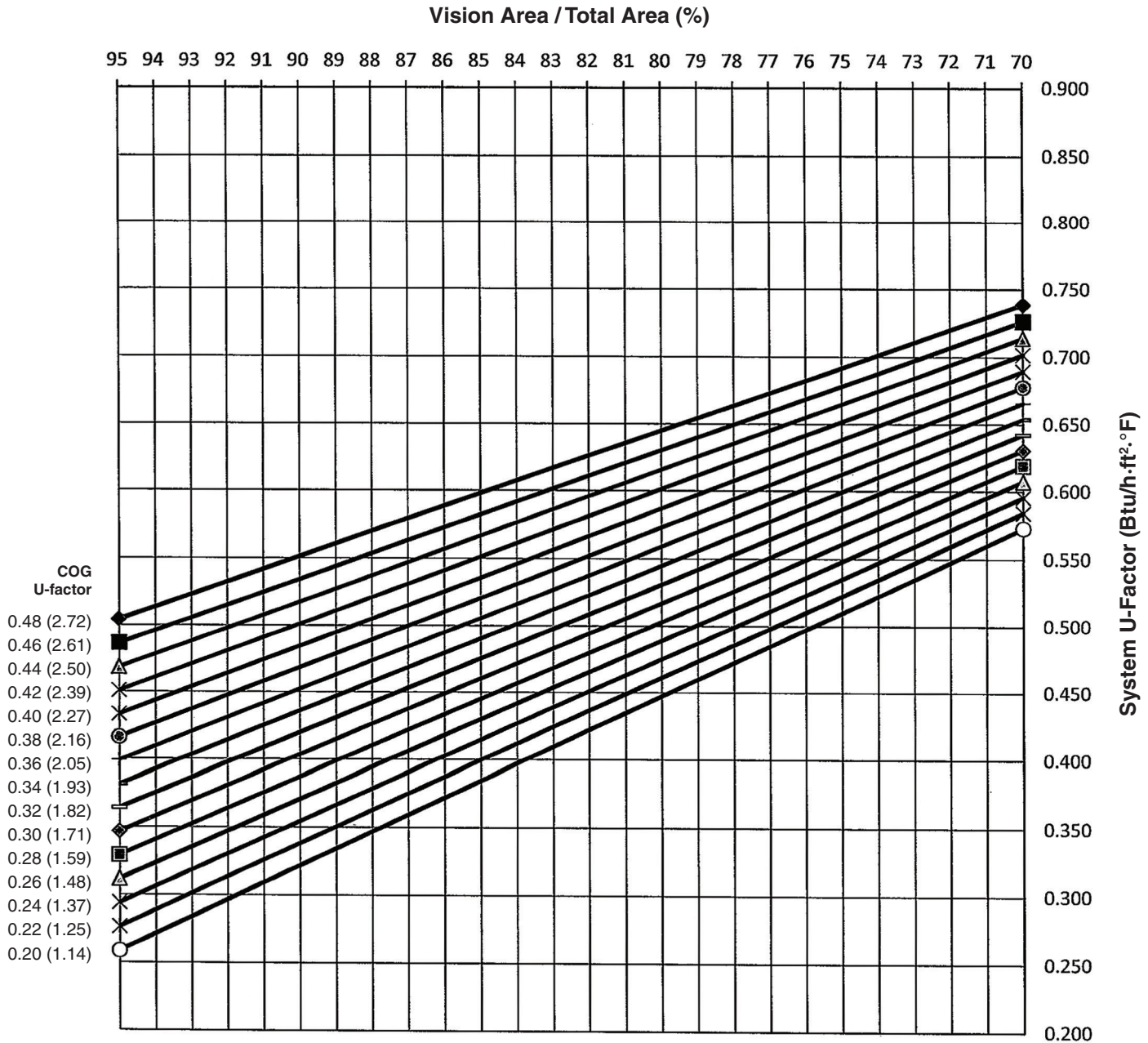
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Note:
 Values in parentheses are metric.
 COG=Center of Glass.
 Charts are generated per AAMA 507.

1" GLAZING WITH FIBERGLASS PRESSURE PLATE

System U-Factor for Vision Glass



Notes for System U-Factor, SHGC and VT charts:

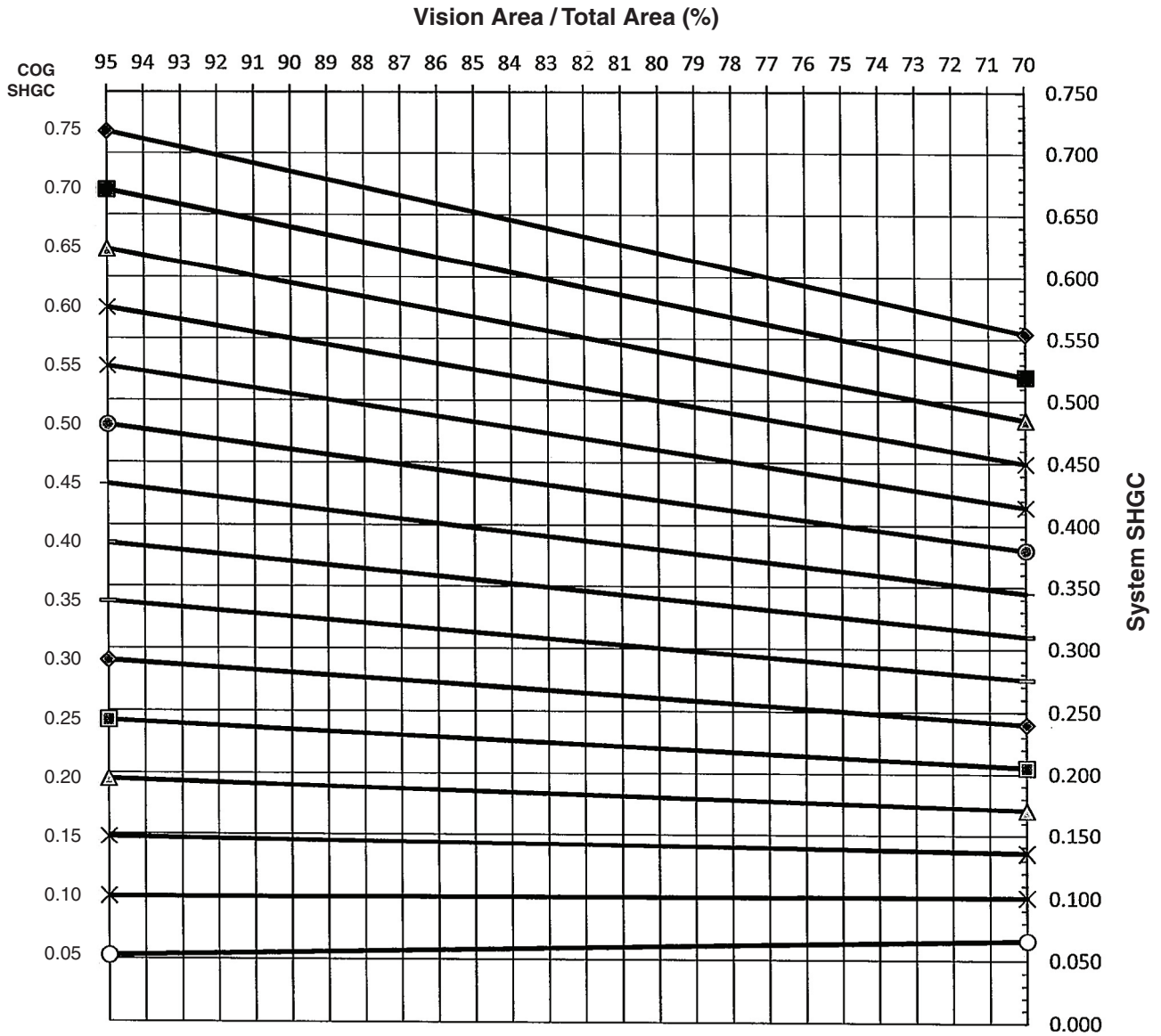
For glass values that are not listed, linear interpolation is permitted.
 Glass properties are based on center of glass values (winter conditions) and are obtained from your glass supplier.

Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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1" GLAZING WITH FIBERGLASS PRESSURE PLATE

System Solar Heat Gain Coefficient (SHGC) vs Percent of Vision Area



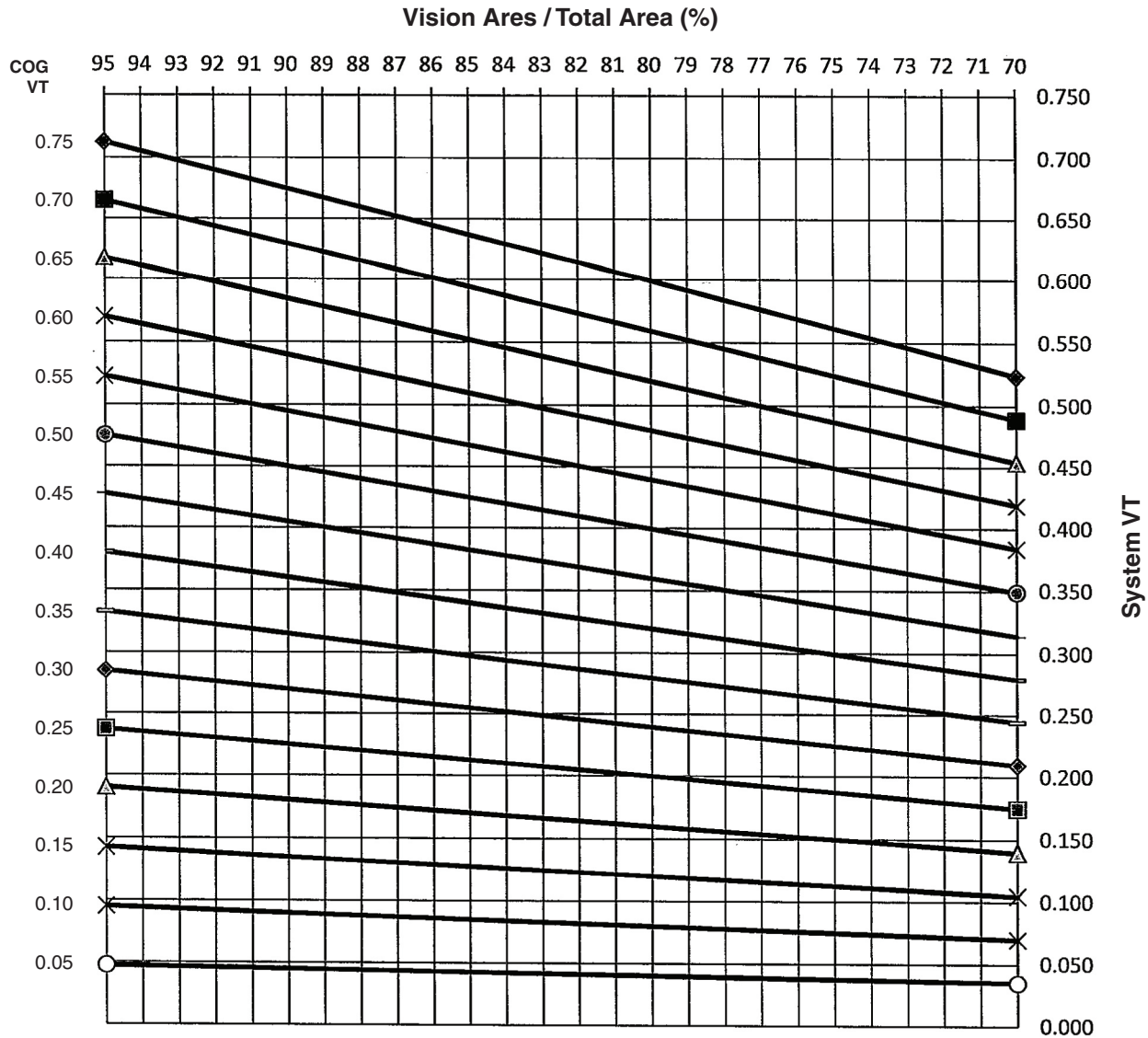
Charts are generated per AAMA 507.

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1" GLAZING WITH FIBERGLASS PRESSURE PLATE

System Visible Transmittance (VT) vs Percent of Vision Area



Charts are generated per AAMA 507.

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Thermal Transmittance ¹ (BTU/hr • ft ² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.56
0.46	0.54
0.44	0.52
0.42	0.51
0.40	0.49
0.38	0.48
0.36	0.46
0.34	0.44
0.32	0.43
0.30	0.41
0.28	0.39
0.26	0.38
0.24	0.36
0.22	0.34
0.20	0.33

1" GLAZING WITH FIBERGLASS PRESSURE PLATE

NOTE: For glass values that are not listed, linear interpolation is permitted.

1. U-Factors are determined in accordance with NFRC 100.
2. SHGC and VT values are determined in accordance with NFRC 200.
3. Glass properties are based on center of glass values and are obtained from your glass supplier.
4. Overall U-Factor, SHGC, and VT Matricies are based on the standard NFRC specimen size of 2000mm wide by 2000mm high (78-3/4" by 78-3/4").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.68
0.70	0.64
0.65	0.59
0.60	0.55
0.55	0.50
0.50	0.46
0.45	0.41
0.40	0.37
0.35	0.32
0.30	0.28
0.25	0.23
0.20	0.19
0.15	0.15
0.10	0.10
0.05	0.06

Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.67
0.70	0.63
0.65	0.58
0.60	0.54
0.55	0.49
0.50	0.45
0.45	0.40
0.40	0.36
0.35	0.31
0.30	0.27
0.25	0.22
0.20	0.18
0.15	0.13
0.10	0.09
0.05	0.04

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