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EC 97911-281 FEATURES

Features

- Economical
- 1-3/4" sightline with a 3-9/16", 4-1/2" or 6" depth
- Front or Center (4-1/2") glass applications
- Outside glazed
- Screw Spline, Shear Block or Type-B fabrication
- SSG option
- Infill options up to 1-1/8"
- Thermal break via. Polymer glazing clip
- Permanodic[®] anodized finishes option
- Painted finishes in standard and custom choices

Optional Features

- · Two color capability
- 1-1/4" perimeter sightline
- Project specific U-factors (See Thermal Charts)

Product Applications

- Storefront, Ribbon Window or Punched Openings
- · Low to mid-rise
- Single-span
- · Curved frames
- Integrated entrance framing allowing Kawneer entrances or other specialty entrances to be included
- Kawneer windows, or GLASSvent® Windows for Storefront Framing, or GLASSvent® UT Windows are easily incorporated

For specific product applications, consult your Kawneer representative.



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Laws and building and safety codes governing the design and use of Kawneer products, such as 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.



3

EC 97911-281 INDEX

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GLASSvent® FOR STOREFRONT FRAMING	23
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8225TL THERMAL WINDOW DETAILS	25
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DEADLOAD CHARTS	43-47
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EnCORE® Framing System

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

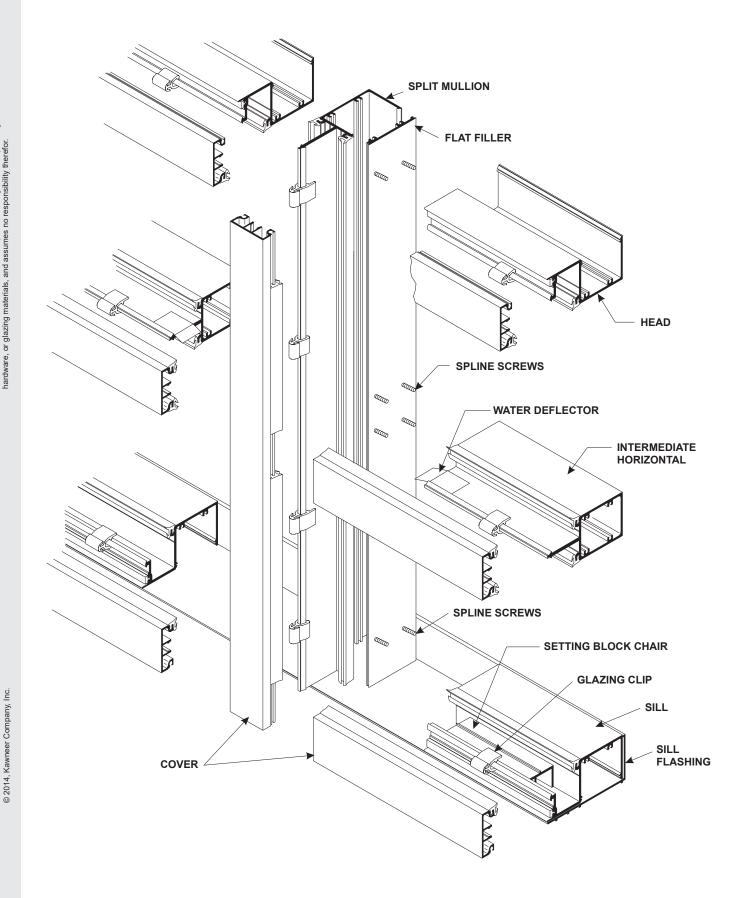


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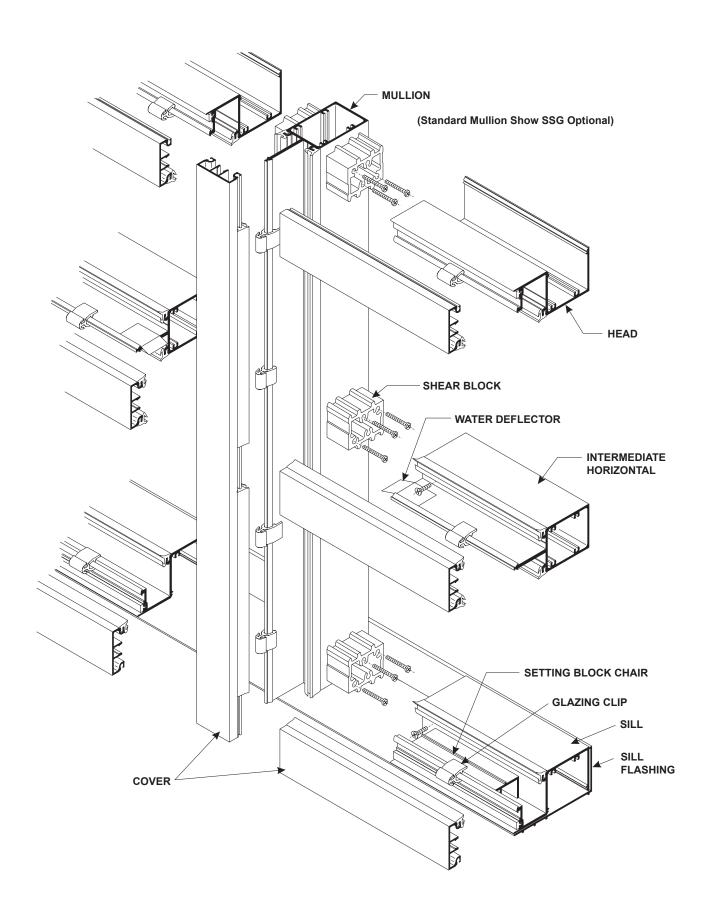
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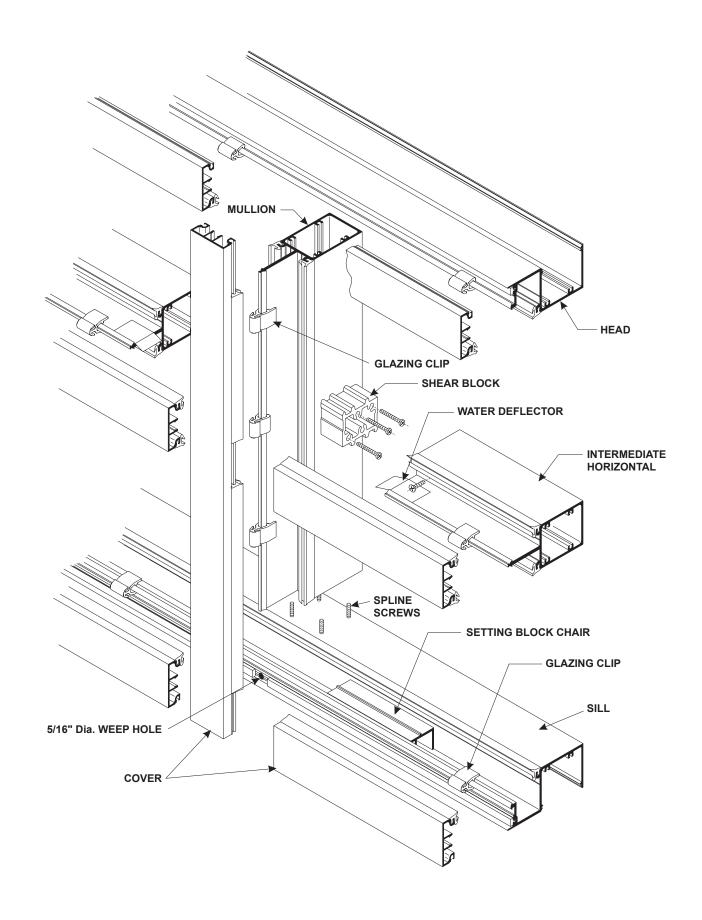








PICTORIAL VIEW (TYPE-B ASSEMBLY)



ADMC080EN

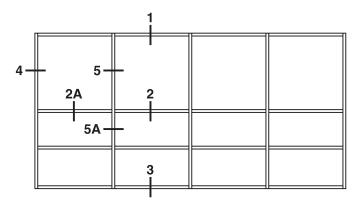


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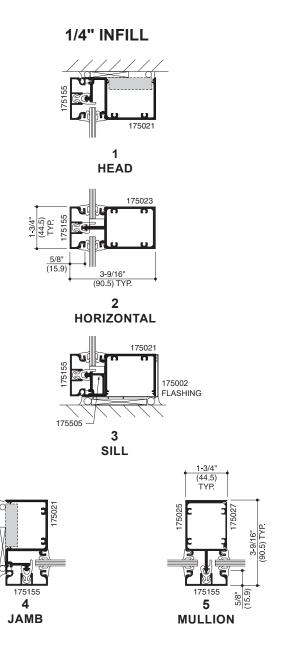


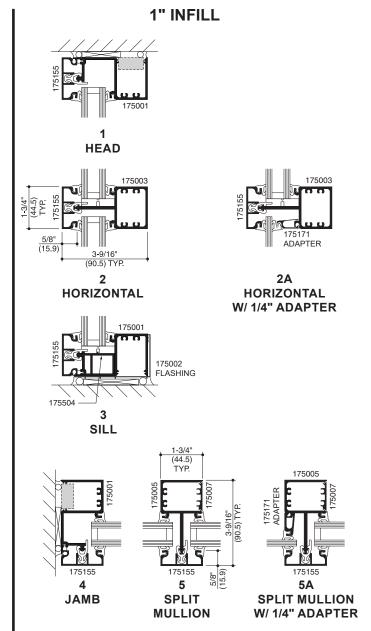
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Additional information and CAD details are available at www.kawneer.com



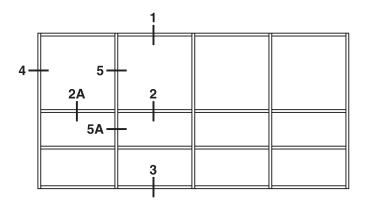
ELEVATION IS NUMBER KEYED TO DETAILS



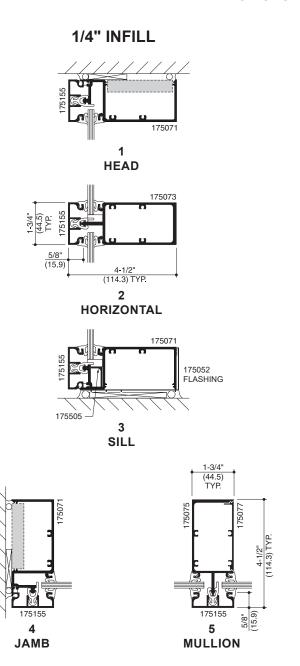


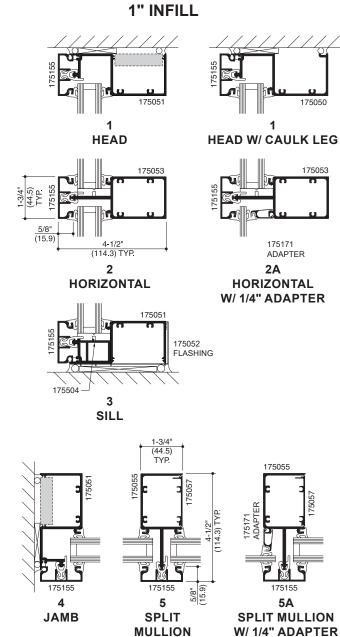
4-1/2" SYSTEM (SCREW SPLINE)

Additional information and CAD details are available at www.kawneer.com



ELEVATION IS NUMBER KEYED TO DETAILS

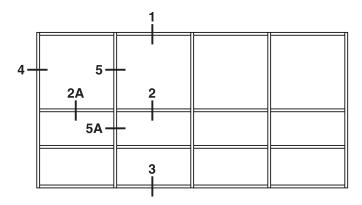




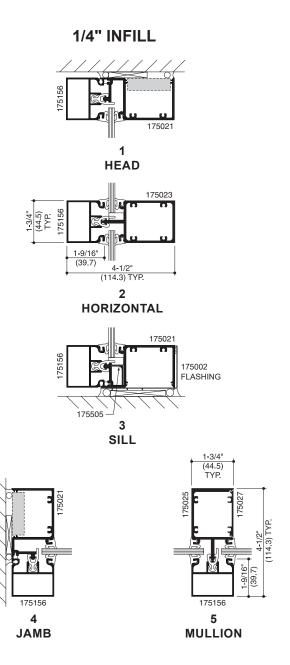


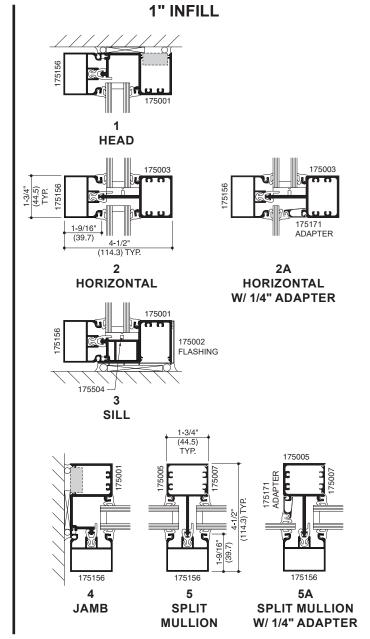
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ELEVATION IS NUMBER KEYED TO DETAILS

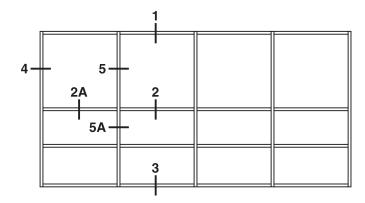




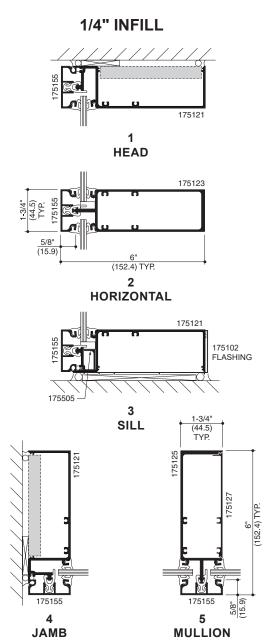


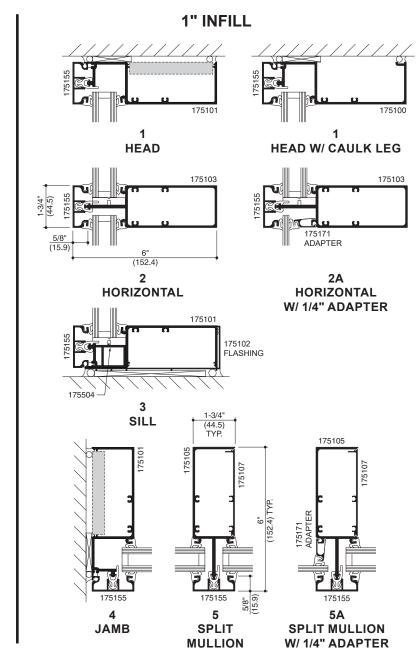
6" SYSTEM (SCREW SPLINE)

Additional information and CAD details are available at www.kawneer.com



ELEVATION IS NUMBER KEYED TO DETAILS



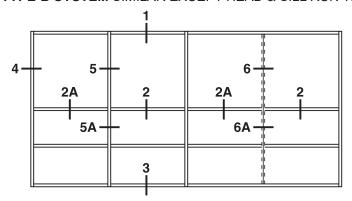


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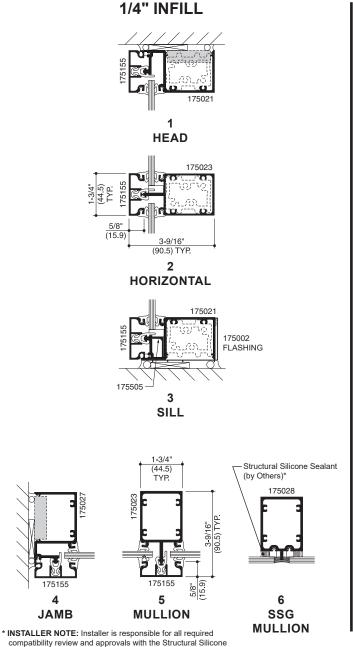
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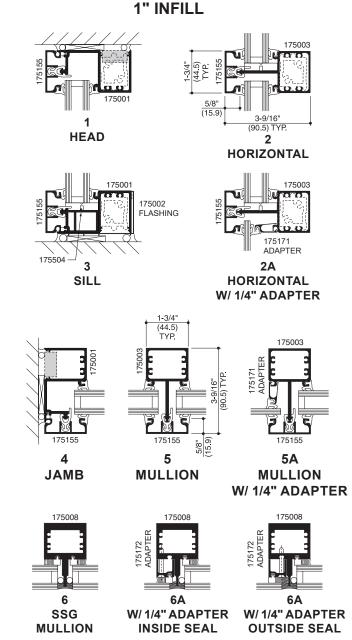
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NOTE: TYPE-B SYSTEM SIMILAR EXCEPT HEAD & SILL RUN THROUGH.



ELEVATION IS NUMBER KEYED TO DETAILS







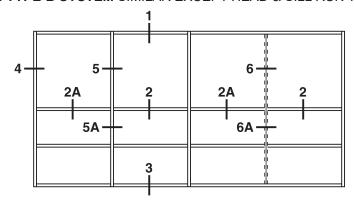
ADMC080EN kawneer.com

Manufacturer and the Insulating Glass Unit Manufacturer.

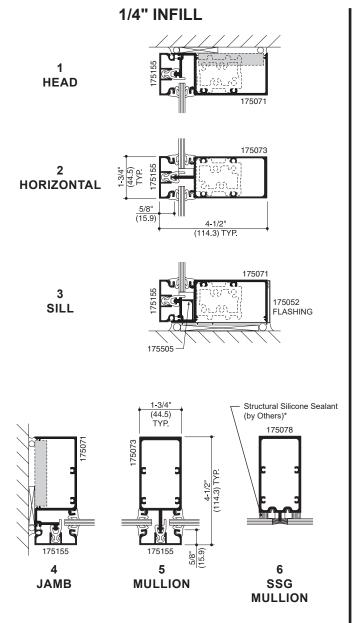
4-1/2" SYSTEM (SHEAR BLOCK)

Additional information and CAD details are available at www.kawneer.com

NOTE: TYPE-B SYSTEM SIMILAR EXCEPT HEAD & SILL RUN THROUGH.



ELEVATION IS NUMBER KEYED TO DETAILS



¹⁷⁵⁰⁵³ 5/8" (15.9) 1 (114.3) TYP. **HEAD** 2 **HORIZONTAL** 175051 175053 175052 FLASHING 175171 ADAPTER 3 2A SILL **HORIZONTAL** W/ 1/4" ADAPTER 1-3/4" (44.5) TYP 175155 175155 5/8" 175155 **5A MULLION MULLION JAMB** W/ 1/4" ADAPTER 175058 175058 6A 6 6A W/ 1/4" ADAPTER W/ 1/4" ADAPTER SSG **MULLION INSIDE SEAL OUTSIDE SEAL**

1" INFILL

with the Structural Silicone Manufacturer and the Insulating Glass Unit Manufacturer.

* INSTALLER NOTE: Installer is responsible for all required compatibility review and approvals

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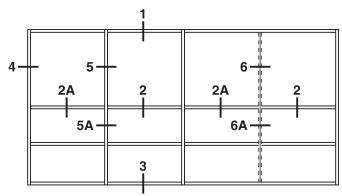
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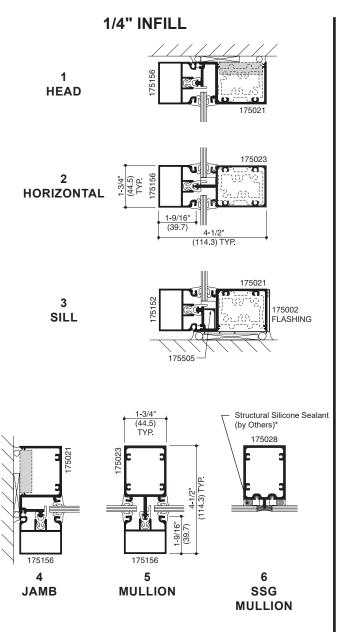
4-1/2" SYSTEM - CENTER GLAZED (SHEAR BLOCK)

Additional information and CAD details are available at www.kawneer.com

NOTE: TYPE-B SYSTEM SIMILAR EXCEPT HEAD & SILL RUN THROUGH.

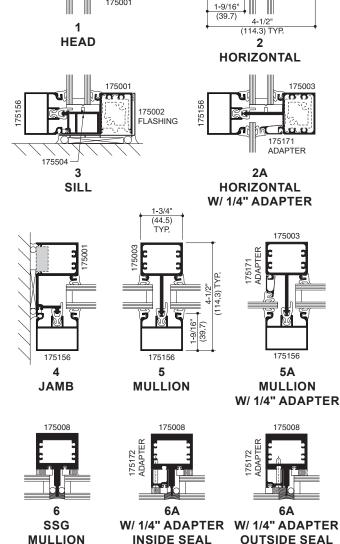


ELEVATION IS NUMBER KEYED TO DETAILS



* INSTALLER NOTE: Installer is responsible for all required compatibility review and approvals

with the Structural Silicone Manufacturer and the Insulating Glass Unit Manufacturer.



KAWNEER

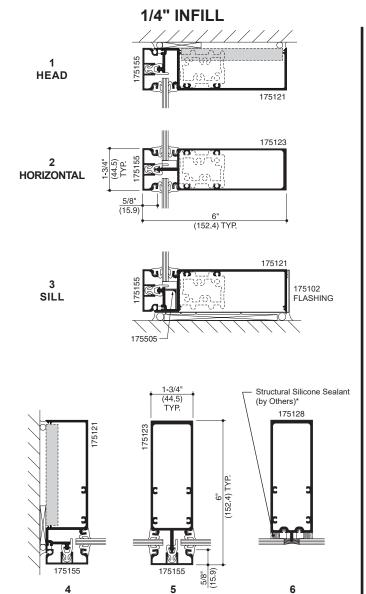
1" INFILL

75156

6" SYSTEM (SHEAR BLOCK)

NOTE: TYPE-B SYSTEM SIMILAR EXCEPT HEAD & SILL RUN THROUGH.

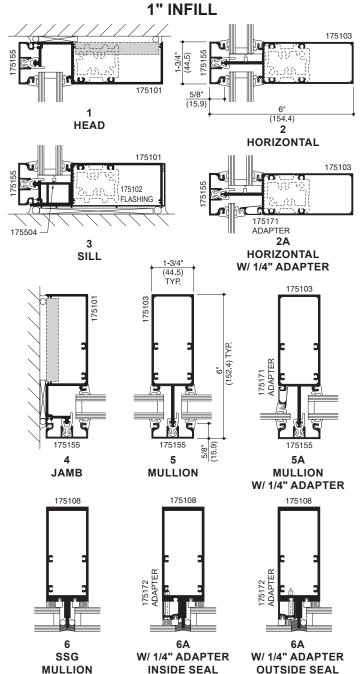
ELEVATION IS NUMBER KEYED TO DETAILS



* INSTALLER NOTE: Installer is responsible for all required compatibility review and approvals with the Structural Silicone Manufacturer and the Insulating Glass Unit

MULLION

SSG MULLION



KAWNEER

JAMB

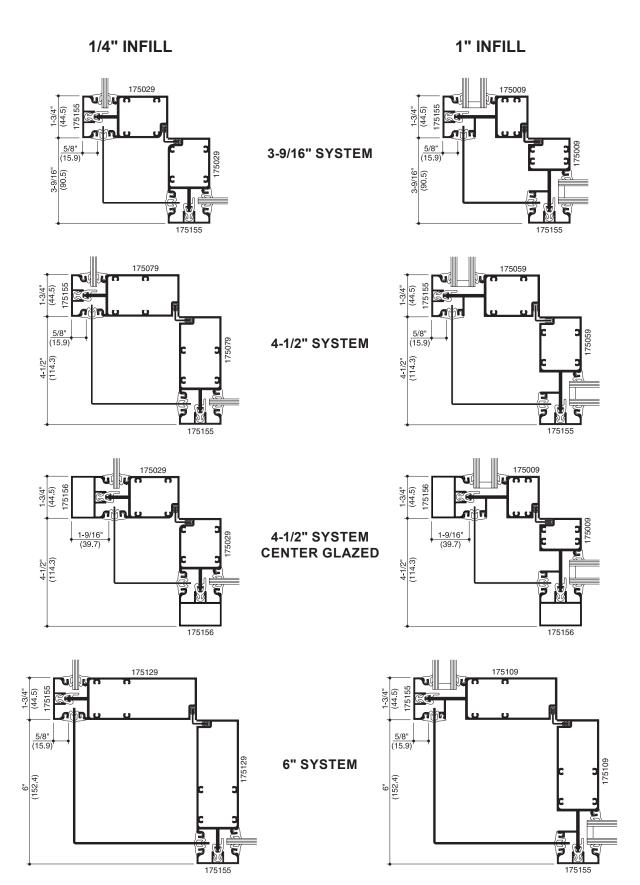
ADMC080EN kawneer.com Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

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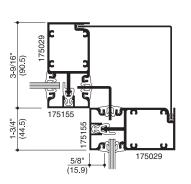
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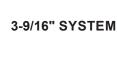


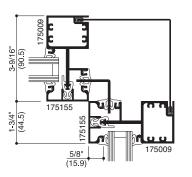
90° INSIDE CORNERS

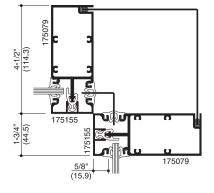
1/4" INFILL

1" INFILL

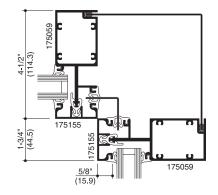


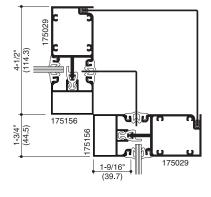




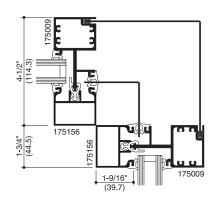


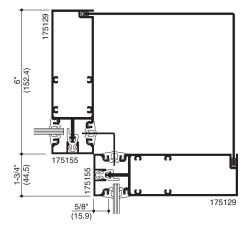
4-1/2" SYSTEM



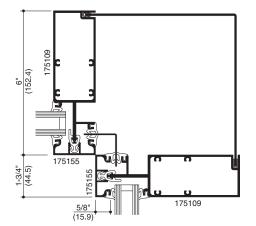


4-1/2" SYSTEM **CENTER GLAZED**





6" SYSTEM

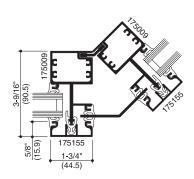


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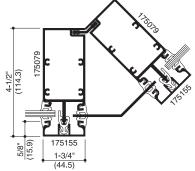
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1/4" INFILL 1/4" INFILL 1/5(06) 1/5(155) 1/5(155) 1/3/4" (44.5)

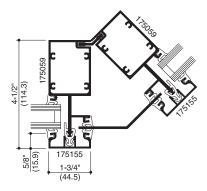
3-9/16" SYSTEM

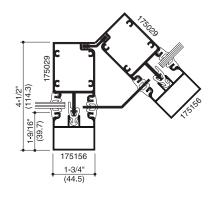


1" INFILL

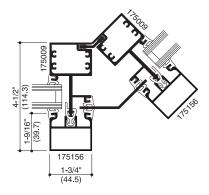


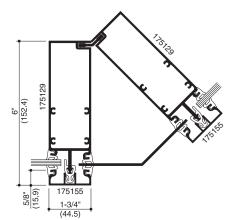
4-1/2" SYSTEM



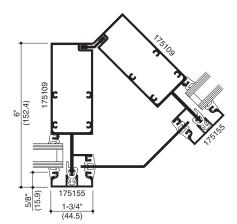


4-1/2" SYSTEM CENTER GLAZED



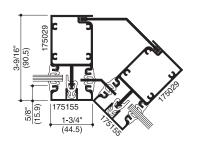


6" SYSTEM



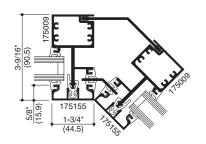


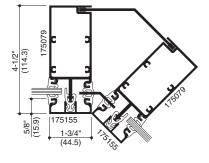
1/4" INFILL



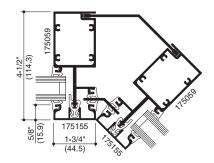
3-9/16" SYSTEM

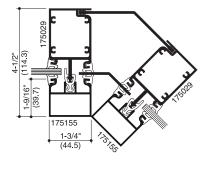
1" INFILL



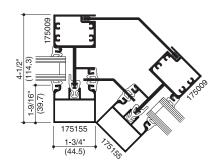


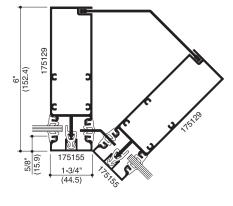
4-1/2" SYSTEM



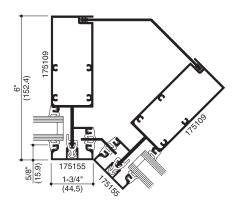


4-1/2" SYSTEM CENTER GLAZED





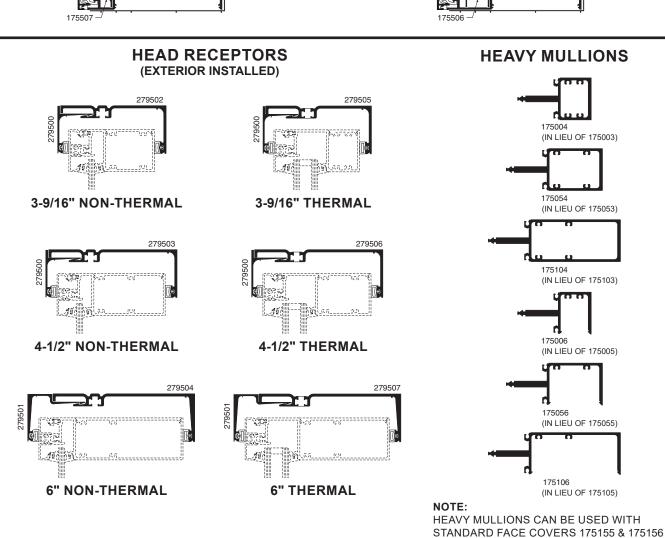
6" SYSTEM



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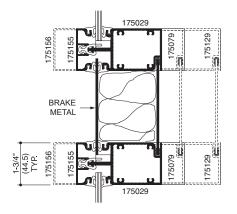
1-1/4" NARROW PERIMETER 1-1/4" NARROW PERIMETER **SCREW SPLINE SYSTEM SCREW SPLINE SYSTEM** WITH 1/4" INFILL WITH 1" INFILL 3-9/16" SYSTEM 175012 175012 175157 175507 175081 175061 4-1/2" SYSTEM 175062 175062 175157 175507 175031 175011 4-1/2" SYSTEM 175012 175158 175158 175012 **CENTER GLAZED** 175507 175131 175111 6" SYSTEM 175112 175157 175112



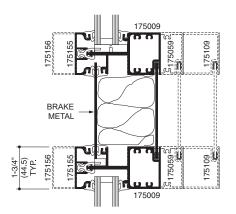


HORIZONTAL / CROSSRAIL ASSEMBLY (SCREW SPLINE SYSTEM)

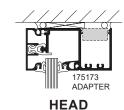
1/4" INFILL

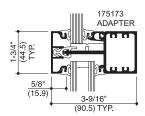


1" INFILL

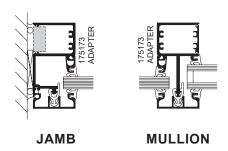


1/2" INFILL ADAPTER (SHOWN WITH 3-9/16" DEEP SYSTEM)





HORIZONTAL



Encore® GLAZING CHART

INFILL THICKNESS	ADAPTER for 1" Infill Pocket	WEATHERING (Both Sides)
1/8"	175171	027077 Heavy
1/4"	175171	027074 Standard
3/8"	175171	027076 Light
1/2"	175173	027074 Standard
5/8"	175173	027076 Light
3/4"	175175	027074 Standard
7/8"	-	027077 Heavy
1"	-	027074 Standard
1-1/8"	-	027076 Light

NOTE: For infill thicknesses in 1/16" increments or oversize glass, use a combination of the Std. (027074) with either the Light (27076) or the Heavy (027077) gaskets.

SSG GLAZING CHART

INFILL THICKNESS	SSG ADAPTER	HORIZONTAL WEATHERING	SSG WEATHERING
1/4"	175172	027074 Std.	175302
1/2"	175173	027074 Std.	175302

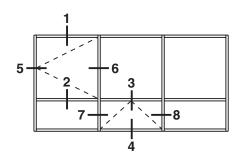


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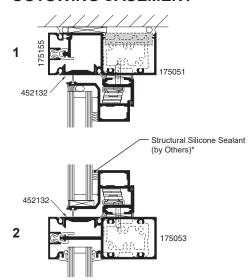
EC 97911-281

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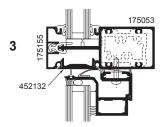
ELEVATION IS NUMBER KEYED TO DETAILS

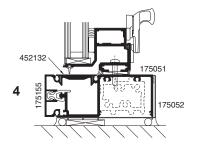
OUTSWING CASEMENT



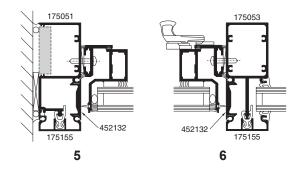
* INSTALLER NOTE: Installer is responsible for all required compatibility review and approvals with the Structural Silicone Manufacturer and the Insulating Glass Unit Manufacturer.

PROJECT-OUT

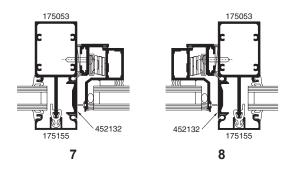




OUTSWING CASEMENT

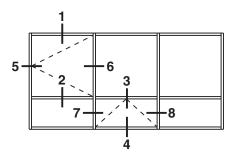


PROJECT-OUT



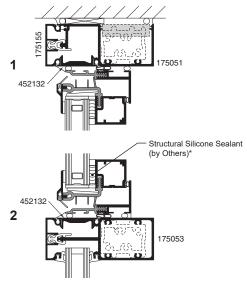
NOTE: Black spacer is recommended when 1" (25.4) insulating glass is used.





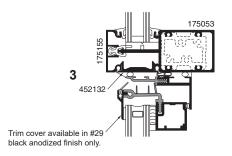
ELEVATION IS NUMBER KEYED TO DETAILS

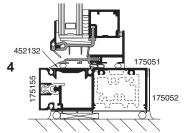
OUTSWING CASEMENT



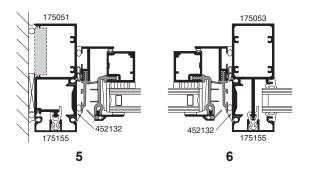
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PROJECT-OUT

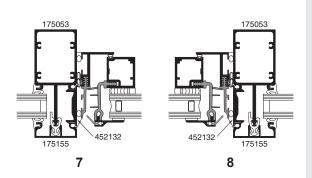




OUTSWING CASEMENT



PROJECT-OUT



NOTE: Black spacer is recommended when 1" (25.4) insulating glass is used.

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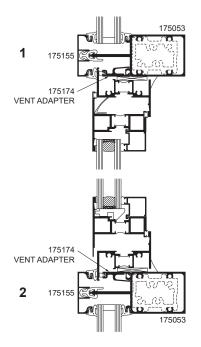
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8225TL THERMAL WINDOWS

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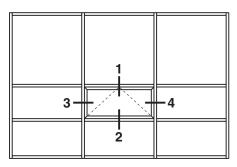
EC 97911-281

Additional information and CAD details are available at www.kawneer.com

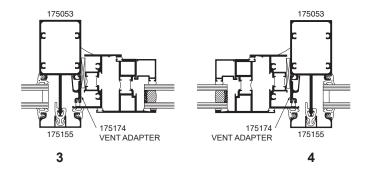


8225TL THERMAL WINDOWS SHOWN

NOTE: Other vent types can be accommodated. Consult your Kawneer Representative for other options.



ELEVATION IS NUMBER KEYED TO DETAILS

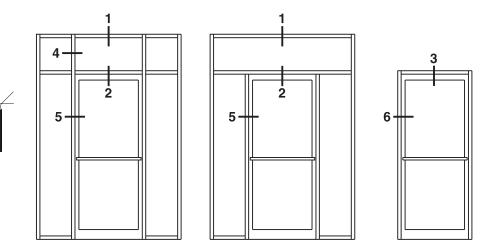




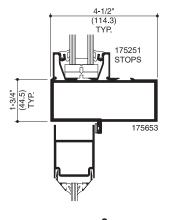
4-1/2" ENTRANCE FRAMING (FRONT GLAZED)

Encore® Framing incorporating kawneer "190" doors.

NOTE: Other types of Kawneer doors may be used with this framing. See the Entrance Section for additional information.

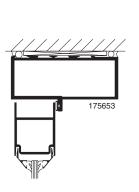


ELEVATION IS NUMBER KEYED TO DETAILS

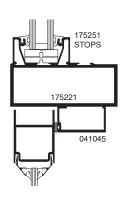


TRANSOM HEAD

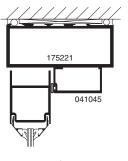
2 **OFFSET PIVOT/ BUTT HUNG TRANSOM BAR**



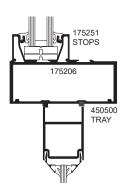
OFFSET PIVOT/ BUTT HUNG HEADER



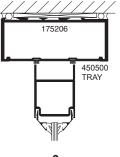
2 S/A OFFSET ARM **OFFSET PIVOT/ BUTT HUNG** TRANSOM BAR



S/A OFFSET ARM **OFFSET PIVOT/ BUTT HUNG HEADER**



C.O.C. **CENTER PIVOT TRANSOM BAR**



C.O.C. **CENTER PIVOT HEADER**



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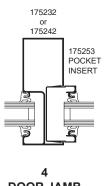
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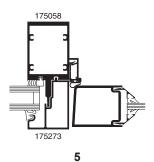
EC 97911-281

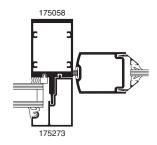
Additional information and CAD details are available at www.kawneer.com

Transom area for both double or single acting doors with glass surround. Jambs above transom area are routed out to accept pocket insert 175253.



1-3/4" (44.5) TYP. 4



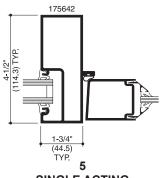


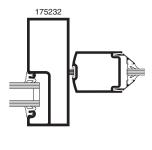
DOOR JAMB AT TRANSOM

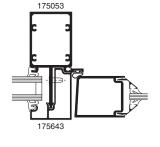
DOOR JAMB AT TRANSOM (OPTIONAL)

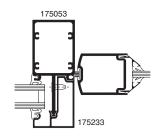
SINGLE ACTING SSG DOOR JAMB W/ DOOR ADAPTER

5 **DOUBLE ACTING** SSG DOOR JAMB W/ DOOR ADAPTER







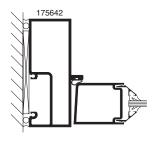


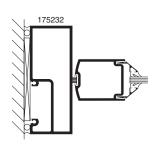
SINGLE ACTING **DOOR JAMB**

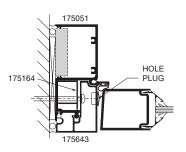
5 **DOUBLE ACTING DOOR JAMB**

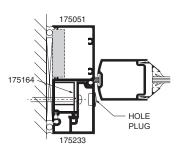
5 SINGLE ACTING **DOOR JAMB** W/ DOOR ADAPTER

5 **DOUBLE ACTING DOOR JAMB** W/ DOOR ADAPTER









6 SINGLE ACTING **DOOR JAMB**

6 **DOUBLE ACTING DOOR JAMB**

6 SINGLE ACTING **DOOR JAMB** W/ DOOR ADAPTER

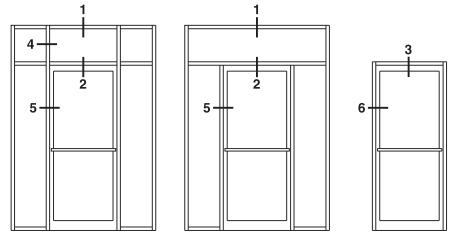
6 **DOUBLE ACTING DOOR JAMB** W/ DOOR ADAPTER



4-1/2" ENTRANCE FRAMING (CENTER GLAZED)

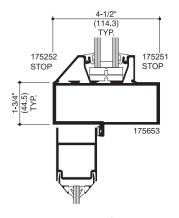
Encore® Framing incorporating kawneer "190" doors.

NOTE: Other types of Kawneer doors may be used with this framing. See the Entrance Section for additional information.

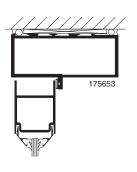


1 TRANSOM HEAD

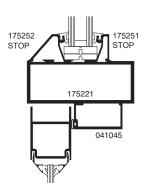
ELEVATION IS NUMBER KEYED TO DETAILS



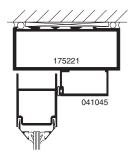
2 OFFSET PIVOT/ BUTT HUNG TRANSOM BAR



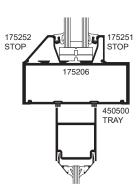
OFFSET PIVOT/ BUTT HUNG HEADER



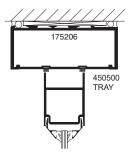
2 S/A OFFSET ARM OFFSET PIVOT/ BUTT HUNG TRANSOM BAR



3 S/A OFFSET ARM OFFSET PIVOT/ BUTT HUNG HEADER



C.O.C. CENTER PIVOT TRANSOM BAR



3 C.O.C. CENTER PIVOT HEADER



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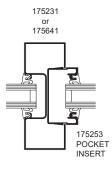
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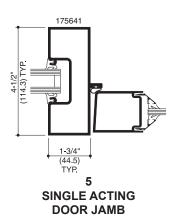
4-1/2" ENTRANCE FRAMING (CENTER GLAZED)

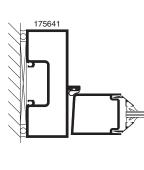
Additional information and CAD details are available at www.kawneer.com

Transom area for both double or single acting doors with glass surround. Jambs above transom area are routed out to accept pocket insert 175253.

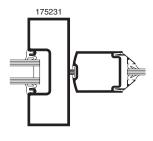


DOOR JAMB AT TRANSOM

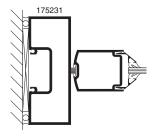








DOUBLE ACTING DOOR JAMB

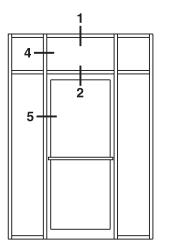


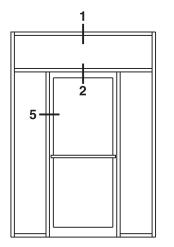
DOUBLE ACTING DOOR JAMB

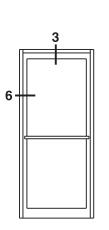


Encore® Framing incorporating kawneer "190" doors.

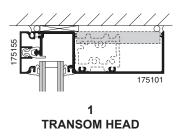
NOTE: Other types of Kawneer doors may be used with this framing. See the Entrance Section for additional information.

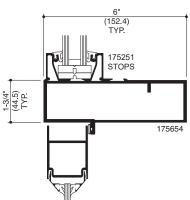




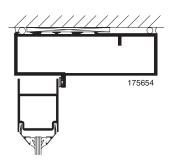


ELEVATION IS NUMBER KEYED TO DETAILS

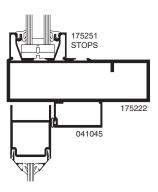




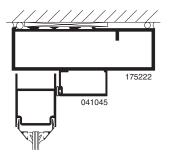
OFFSET PIVOT/ BUTT HUNG TRANSOM BAR



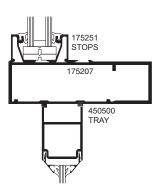
OFFSET PIVOT/ BUTT HUNG HEADER



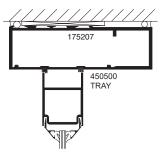
S/A OFFSET ARM **OFFSET PIVOT/ BUTT HUNG TRANSOM BAR**



S/A OFFSET ARM **OFFSET PIVOT/ BUTT HUNG HEADER**



C.O.C. **CENTER PIVOT TRANSOM BAR**



C.O.C. **CENTER PIVOT**



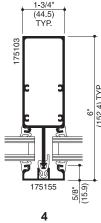
HEADER

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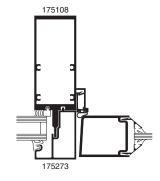
EC 97911-281

6" ENTRANCE FRAMING (FRONT GLAZED)

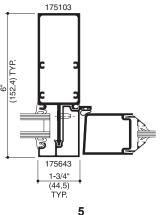
Additional information and CAD details are available at www.kawneer.com



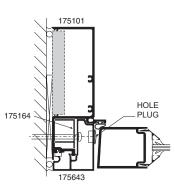
DOOR JAMB AT TRANSOM



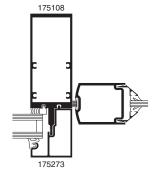
5 **SINGLE ACTING SSG DOOR JAMB** W/ DOOR ADAPTER



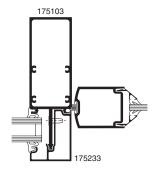
SINGLE ACTING DOOR JAMB W/ DOOR ADAPTER



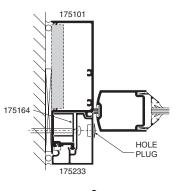
6 **SINGLE ACTING DOOR JAMB** W/ DOOR ADAPTER



5 **DOUBLE ACTING SSG DOOR JAMB** W/ DOOR ADAPTER



DOUBLE ACTING DOOR JAMB W/ DOOR ADAPTER



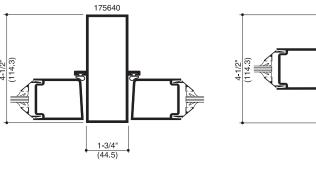
DOUBLE ACTING DOOR JAMB W/ DOOR ADAPTER



ENTRANCE FRAMING OPTIONS

Additional information and CAD details are available at www.kawneer.com

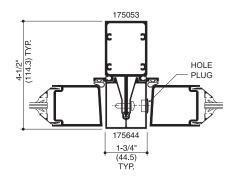
COMMON DOOR JAMBS



SINGLE ACTING DOOR JAMB

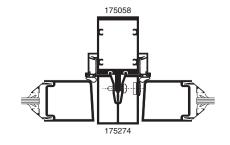
DOUBLE ACTING DOOR JAMB

(44.5)



PLUG

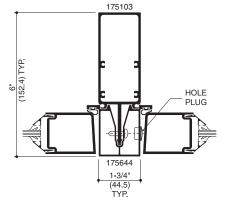
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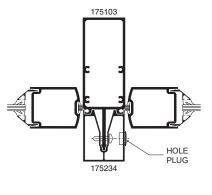
SINGLE ACTING **DOOR JAMB** W/ DOOR ADAPTER

DOUBLE ACTING DOOR JAMB W/ DOOR ADAPTER

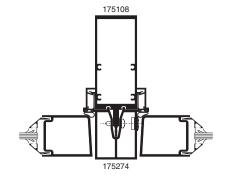
SINGLE ACTING **SSG DOOR JAMB** W/ DOOR ADAPTER



SINGLE ACTING **DOOR JAMB** W/ DOOR ADAPTER



DOUBLE ACTING DOOR JAMB W/ DOOR ADAPTER



SINGLE ACTING **SSG DOOR JAMB**



W/ DOOR ADAPTER

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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 (104 MPa), STEEL 30,000 psi (207 MPa). 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. A conversion from Load Resistance Factor Design (LRFD) is provided. 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.

If the end reaction of the mullion [mullion spacing (ft.) times height (ft.) times specified wind load (psf) divided by two] is more than 500 lbs., the optional Mullion Anchors must be used. Consult Application Engineering. (Mullion Anchor not used with Lightweight Receptor.)

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" (6.35) thick glass supported on two setting blocks placed at the loading points shown.

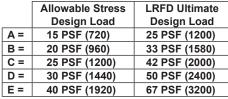


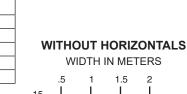
HEIGHT IN FEET

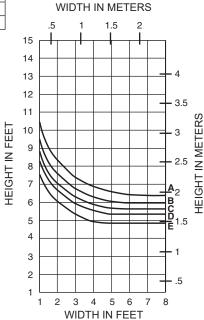
WIND LOAD CHARTS

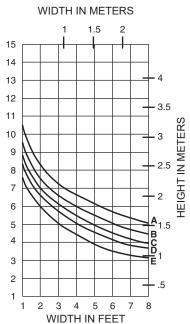
EC 97911-281

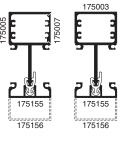
A = 15 PSF (720) 25 PSF (1200) B = 20 PSF (960) 33 PSF (1580) WITH HORIZONTALS C = 25 PSF (1200) 42 PSF (2000) WIDTH IN METERS D = 30 PSF (1440) 50 PSF (2400)









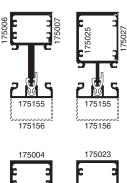


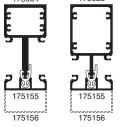
 $I = 0.564 (23.48 \times 10^4)$ $S = 0.326 (5.34 \times 10^3)$

WITH HORIZONTALS

WIDTH IN METERS 5 15 14 13 12 3.5 11 HEIGHT IN METERS HEIGHT IN FEET 10 9 8 7 6 В 5 4 Ε 3 2 4 5 6

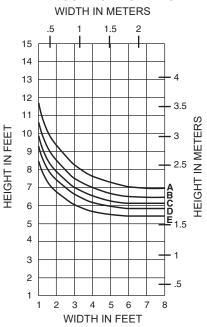
WIDTH IN FEET





I = 0.792 (32.96 x 104) $S = 0.465 (7.62 \times 10^3)$

WITHOUT HORIZONTALS





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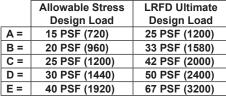
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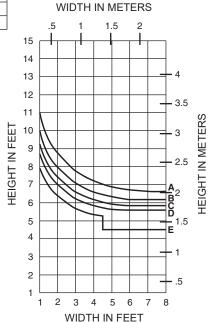
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Allowable Stress LRFD Ultimate **Design Load Design Load** A = 15 PSF (720) 25 PSF (1200) B = 20 PSF (960) 33 PSF (1580) WITH HORIZONTALS 25 PSF (1200) C = 42 PSF (2000)

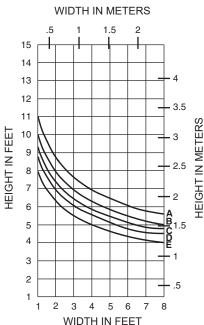
30 PSF (1440) 50 PSF (2400) D =

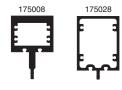




WIND LOAD CHARTS

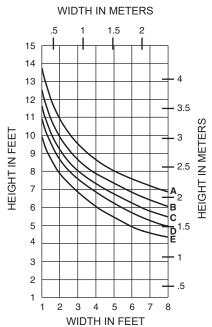
WITHOUT HORIZONTALS

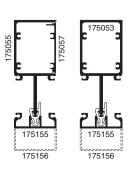




 $I = 0.654 (27.22 \times 10^4)$ $S = 0.466 (7.64 \times 10^3)$

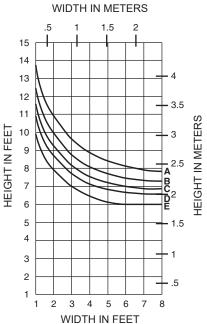
WITH HORIZONTALS





 $I = 1.277 (53.15 \times 10^4)$ $S = 0.639 (10.47 \times 10^3)$

WITHOUT HORIZONTALS





15

14

13

12

11

10

9

8

7

6

5

4

3

2

3 4 5 6

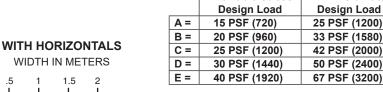
HEIGHT IN FEET

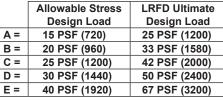
3.5

HEIGHT IN METERS

WIND LOAD CHARTS

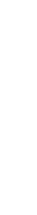
EC 97911-281



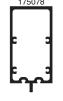


WITHOUT HORIZONTALS WIDTH IN METERS 15 14 13 12 3.5 11 HEIGHT IN METERS 10 9 8 7 6 5

2



175058



HEIGHT IN FEET

4

3

2

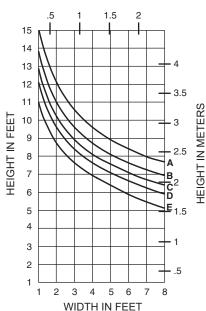
2 3 4 5

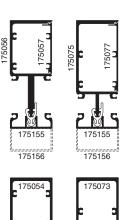
 $I = 1.511 (62.89 \times 10^4)$ $S = 0.745 (12.21 \times 10^3)$

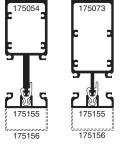
WITH HORIZONTALS

WIDTH IN FEET

WIDTH IN METERS







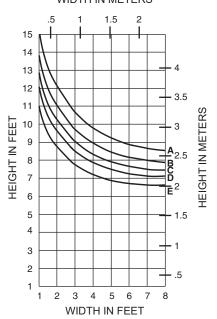
 $I = 1.747 (72.72 \times 10^4)$

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WITHOUT HORIZONTALS

WIDTH IN FEET

WIDTH IN METERS





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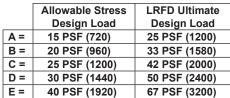
Laws and building and safety codes governing the design and use of Kawneer products, such as glazade afratneroe, window, and ourtain wall products, vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

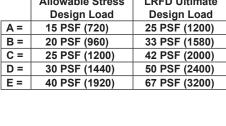
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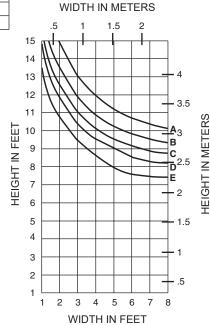
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LRFD Ultimate Allowable Stress **Design Load Design Load** A = 15 PSF (720) 25 PSF (1200) B = 20 PSF (960) 33 PSF (1580) WITH HORIZONTALS C =

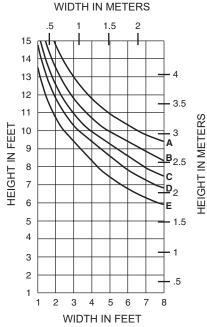


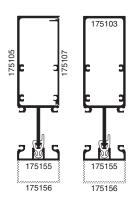




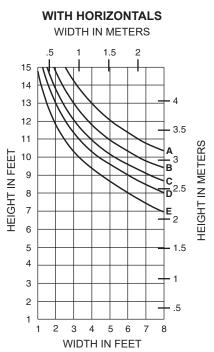
WIND LOAD CHARTS

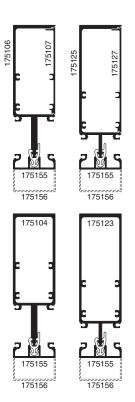
WITHOUT HORIZONTALS



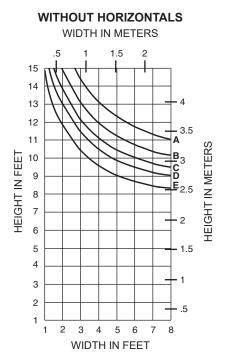


 $I = 3.229 (134.40 \times 10^4)$ $S = 1.094 (17.93 \times 10^3)$





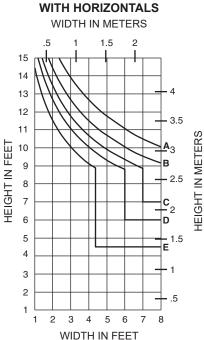
I = 4.325 (180.02 x 104) $S = 1.626 (26.65 \times 10^3)$



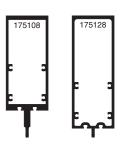


EC 97911-281

WIND LOAD CHARTS

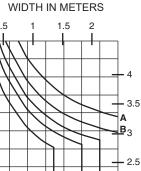


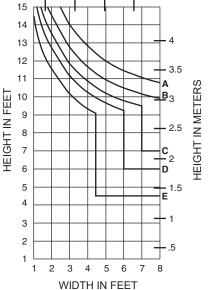
Allowable Stress	LRFD Ultimate
Design Load	Design Load
15 PSF (720)	25 PSF (1200)
20 PSF (960)	33 PSF (1580)
25 PSF (1200)	42 PSF (2000)
30 PSF (1440)	50 PSF (2400)
40 PSF (1920)	67 PSF (3200)
	Design Load 15 PSF (720) 20 PSF (960) 25 PSF (1200) 30 PSF (1440)



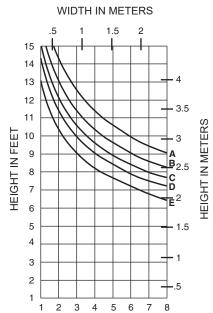
I = 4.005 (166.70 x 10⁴) $S = 1.533 (25.12 \times 10^3)$

WITHOUT HORIZONTALS

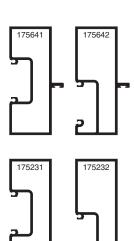




WITH HORIZONTALS

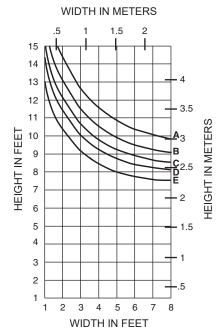


WIDTH IN FEET



I = 2.919 (121.50 x 10⁴) $S = 1.297 (21.25 \times 10^3)$

WITHOUT HORIZONTALS





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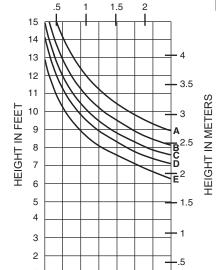
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Allowable Stress LRFD Ultimate **Design Load Design Load** A = 15 PSF (720) 25 PSF (1200) B = 20 PSF (960) 33 PSF (1580) WITH HORIZONTALS C = 25 PSF (1200) 42 PSF (2000) WIDTH IN METERS D = 30 PSF (1440) 50 PSF (2400)

40 PSF (1920)

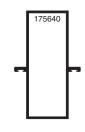
67 PSF (3200)

E =

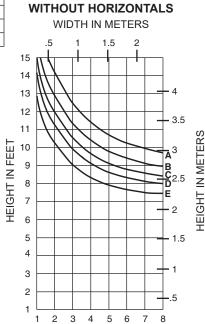


3 4 5 6

WIDTH IN FEET



 $I = 2.799 (116.50 \times 10^4)$ $S = 1.233 (20.21 \times 10^3)$

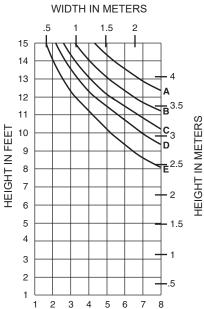


WIDTH IN FEET

WIND LOAD CHARTS

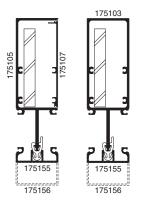


WITH HORIZONTALS



WIDTH IN FEET

	Allowable Stress	LRFD Ultimate
	Design Load	Design Load
A =	15 PSF (720)	25 PSF (1200)
B =	20 PSF (960)	33 PSF (1580)
C =	25 PSF (1200)	42 PSF (2000)
D =	30 PSF (1440)	50 PSF (2400)
E =	40 PSF (1920)	67 PSF (3200)



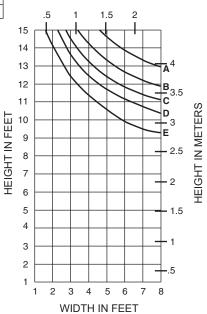
I = 4.005 (166.70 x 10⁴) S = 1.533 (25.12 x 10³)

WITH 1/2" x 3-1/4" STEEL BAR

I = 1.430 (59.49 x 10⁴) S = 0.880 (14.43 x 10³)

WITHOUT HORIZONTALS





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4 5 6

WIDTH IN FEET

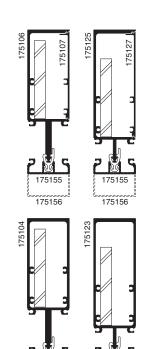
HEIGHT IN FEET

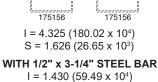
EC 97911-281 WIND LOAD CHARTS

		Desi
	A =	15 PS
	B =	20 PS
WITH HORIZONTALS	C =	25 PS
WIDTH IN METERS	D =	30 PS
		40 DC

HEIGHT IN METERS

	Allowable Stress	LRFD Ultimate
	Design Load	Design Load
A =	15 PSF (720)	25 PSF (1200)
B =	20 PSF (960)	33 PSF (1580)
C =	25 PSF (1200)	42 PSF (2000)
D =	30 PSF (1440)	50 PSF (2400)
E =	40 PSF (1920)	67 PSF (3200)





 $S = 0.880 (14.43 \times 10^3)$

WITHOUT HORIZONTALS WIDTH IN METERS

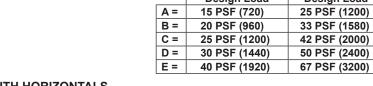


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WIND LOAD CHARTS

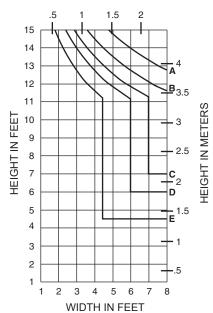
EC 97911-281

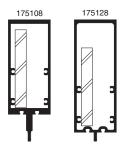
	Allowable Stress	LRFD Ultimate
	Design Load	Design Load
A =	15 PSF (720)	25 PSF (1200)
B =	20 PSF (960)	33 PSF (1580)
C =	25 PSF (1200)	42 PSF (2000)
D =	30 PSF (1440)	50 PSF (2400)
E=	40 PSF (1920)	67 PSF (3200)





WIDTH IN METERS



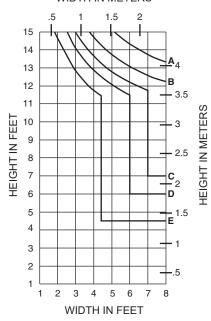


 $I = 4.005 (166.70 \times 10^4)$ $S = 1.533 (25.12 \times 10^3)$

WITH 1/2" x 3-1/4" STEEL BAR $I = 1.430 (59.49 \times 10^4)$ $S = 0.880 (14.43 \times 10^3)$

WITHOUT HORIZONTALS

WIDTH IN METERS



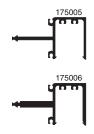
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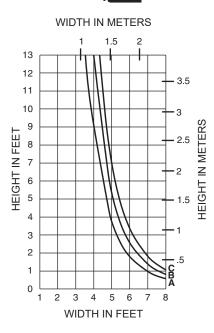
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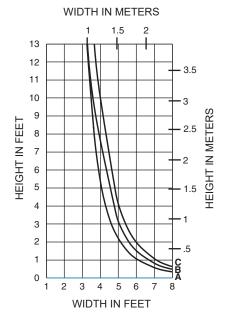
DEADLOAD CHARTS

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 1/4" (6.4) and 1" (25.4) thick glass supported on two setting blocks placed at the loading points shown.

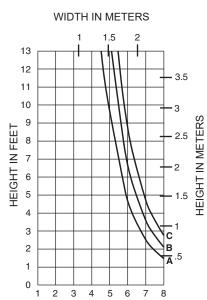
A = 1/4 POINT LOADING B = 1/6 POINT LOADING C = 1/8 POINT LOADING





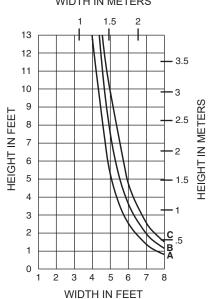






WIDTH IN FEET

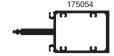




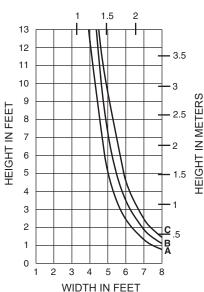


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DEADLOAD CHARTS



WIDTH IN METERS

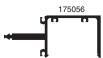


A = 1/4 POINT LOADING

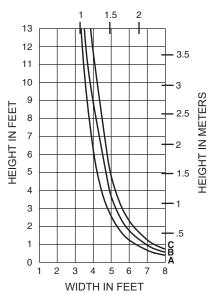
B = 1/6 POINT LOADING

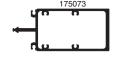
C = 1/8 POINT LOADING



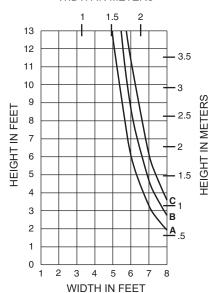


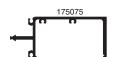
WIDTH IN METERS



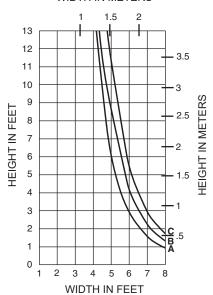


WIDTH IN METERS





WIDTH IN METERS





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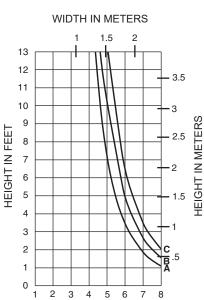
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DEADLOAD CHARTS

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 1/4" (6.4) and 1" (25.4) thick glass supported on two setting blocks placed at the loading points shown.

175103

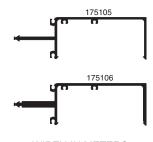


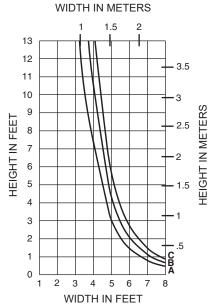
WIDTH IN FEET

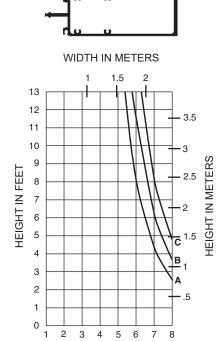
175123

A = 1/4 POINT LOADING B = 1/6 POINT LOADING

C = 1/8 POINT LOADING

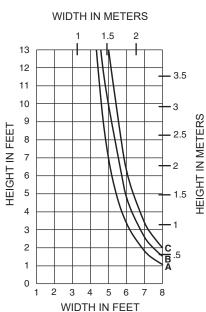






WIDTH IN FEET







EC 97911-281

DEADLOADS ON ENTRANCE TRANSOM BARS

DEADLOAD CHARTS

Height limitations for transom glass over a doorway are based on a maximum 1/16" (1.6) mid-point deflection of a transom bar supporting glass bearing on two setting blocks placed at the loading points shown.

175221 WITH 1" GLASS 175653

13

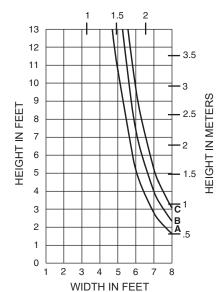
A = 1/4 POINT LOADING

B = 1/6 POINT LOADING

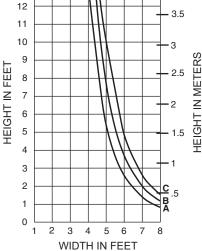
C = 1/8 POINT LOADING

175221 WITH 1/4" GLASS 175653

WIDTH IN METERS



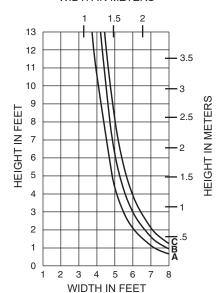
WIDTH IN METERS 1.5



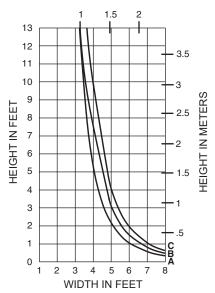
WITH 1" GLASS 175206 175206

WITH 1/4" GLASS

WIDTH IN METERS









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DEADLOAD CHARTS

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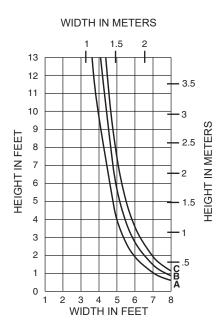
EC 97911-281

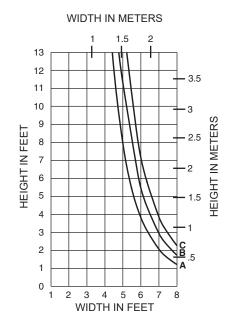
DEADLOADS ON ENTRANCE TRANSOM BARS

Height limitations for transom glass over a doorway are based on a maximum 1/16" (1.6) mid-point deflection of a transom bar supporting glass bearing on two setting blocks placed at the loading points shown.

A = 1/4 POINT LOADING B = 1/6 POINT LOADING 175222 175222 C = 1/8 POINT LOADING WITH 1" GLASS WITH 1/4" GLASS 175654 WIDTH IN METERS WIDTH IN METERS 13 13 12 12 11 11 10 10 HEIGHT IN METERS HEIGHT IN METERS 9 9 HEIGHT IN FEET HEIGHT IN FEET 8 8 7 7 6 6 5 5 4 3 3 2 2 1 0 5 2 3 4 5 6 3 4 6 WIDTH IN FEET WIDTH IN FEET

WITH 1" GLASS 175207





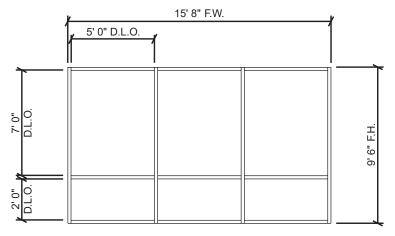
175207



WITH 1/4" GLASS

THERMAL CHARTS EC 97911-281

Generic Project Specific U-factor Example Calculation (Percent of Glass will vary on specific products depending on sitelines)



Example Glass U-value = 0.42 Btu/hr·ft2·°F

Total Daylight Opening = $3(5' \times 7') + 3(5' \times 2') = 135 \text{ ft}^2$

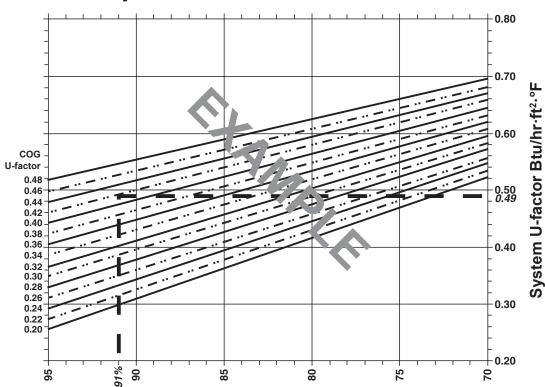
Total Projected Area = (Total Daylight Opening + Total Area of Framing System)

= 15' 8" x 9' 6" = 148.83 ft²

Percent of Glass = (Total Daylight Opening ÷ Total Projected Area)

 $= (135 \div 148.83)100 = 91\%$

System U-factor vs Percent of Glass Area



Percent of Glass

Based on 91% glass and center of glass U-factor of 0.42, System U-factor is equal to 0.49 Btu/hr-ft2.°F



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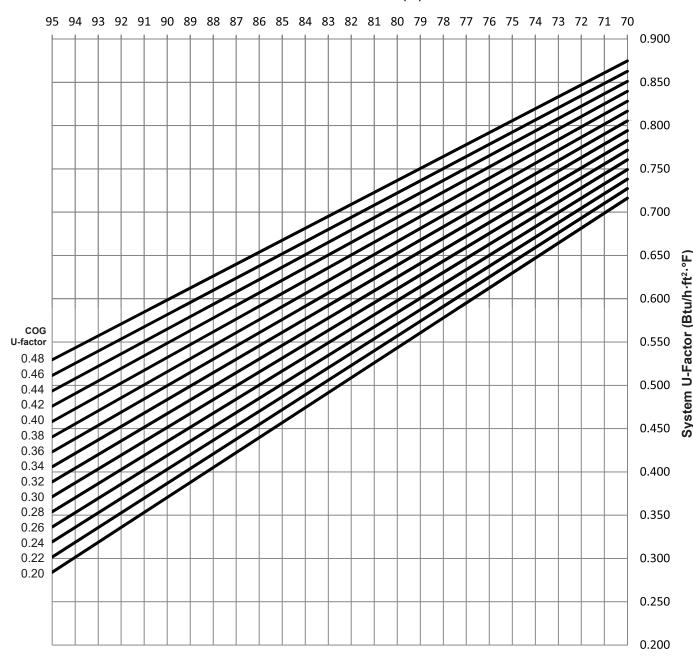
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THERMAL CHARTS

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

System U-factor vs Percent of Glass Area

Vision Area / Total Area (%)



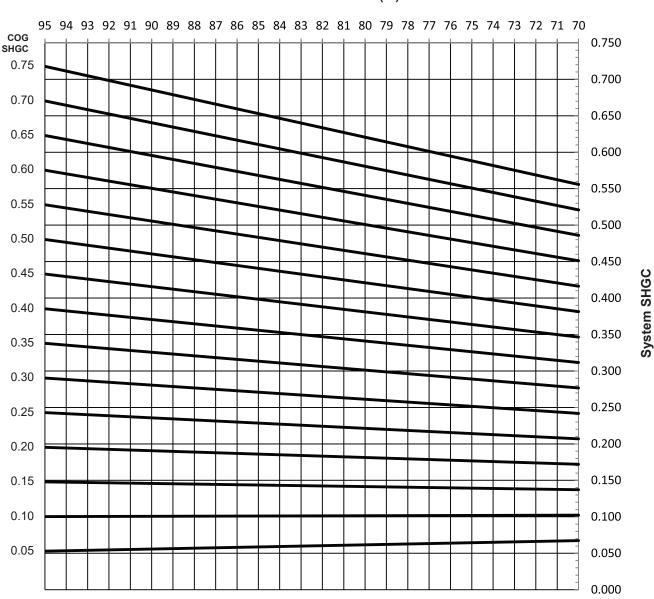


EnCORE® Framing System

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

Vision Area / Total Area (%)



Charts are generated per AAMA 507.



THERMAL CHARTS

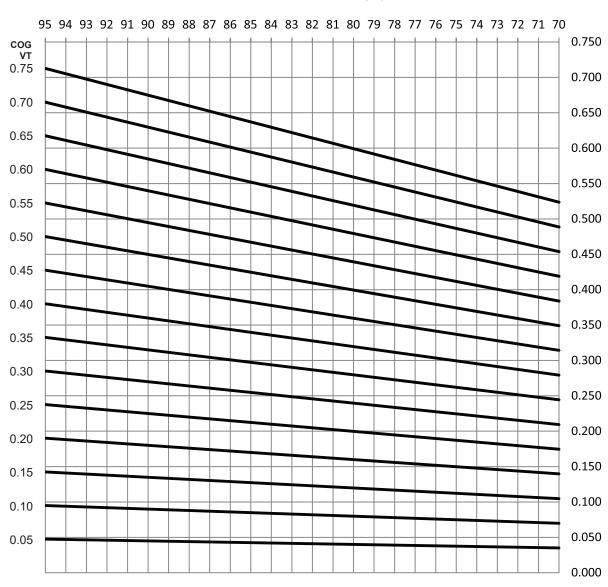
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System Visible Transmittance (VT) vs Percent of Vision Area

Vision Ares / Total Area (%)



Charts are generated per AAMA 507.



THERMAL PERFORMANCE MATRIX (NFRC SIZE)

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

Glass U-Factor ³	Overall U-Factor 4
0.48	0.61
0.46	0.59
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	0.46
0.28	0.45
0.26	0.43
0.24	0.42
0.22	0.40
0.20	0.38

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 2,000 mm wide by 2,000 mm 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	0.33
0.30	0.28
0.25	0.24
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



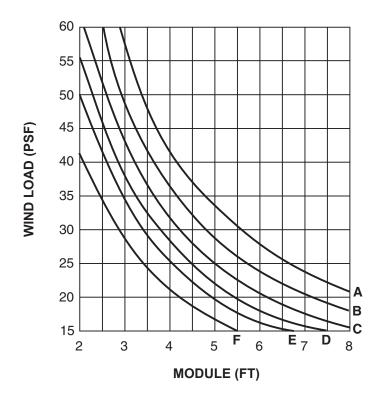
Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

GLAZING CLIP CHART

Clip spacing of each elevation must be checked to meet wind load requirements.

Glazing clips should be located 3" from each end of member and subsequently spaced per formula below:

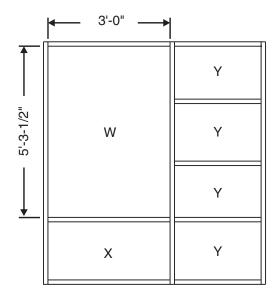
SAMPLE CALCULATION Lite "W" STEP 1: Locate the largest lite of glass on each ELEVATION. -3' 0" x 5' 3-1/2" Determine the width and height for the largest glass lite. -STEP 2: 3' 0" STEP 3: Use the smallest of the two dimensions for the MODULE (FT) spacing. 12" O.C. for 30 PSF STEP 4: Match that Module (ft) spacing with the required wind load on the chart below. 10" O.C. for 35 PSF



A = 6" O.C. B = 7" O.C.**C** = 8" O.C.

D= 9" O.C.

E = 10" O.C. **F** = 12" O.C.



SAMPLE ELEVATION



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EC 97911-281

Laws and building and safety codes governing the design and use of Kawneer products, such as 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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