

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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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.

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

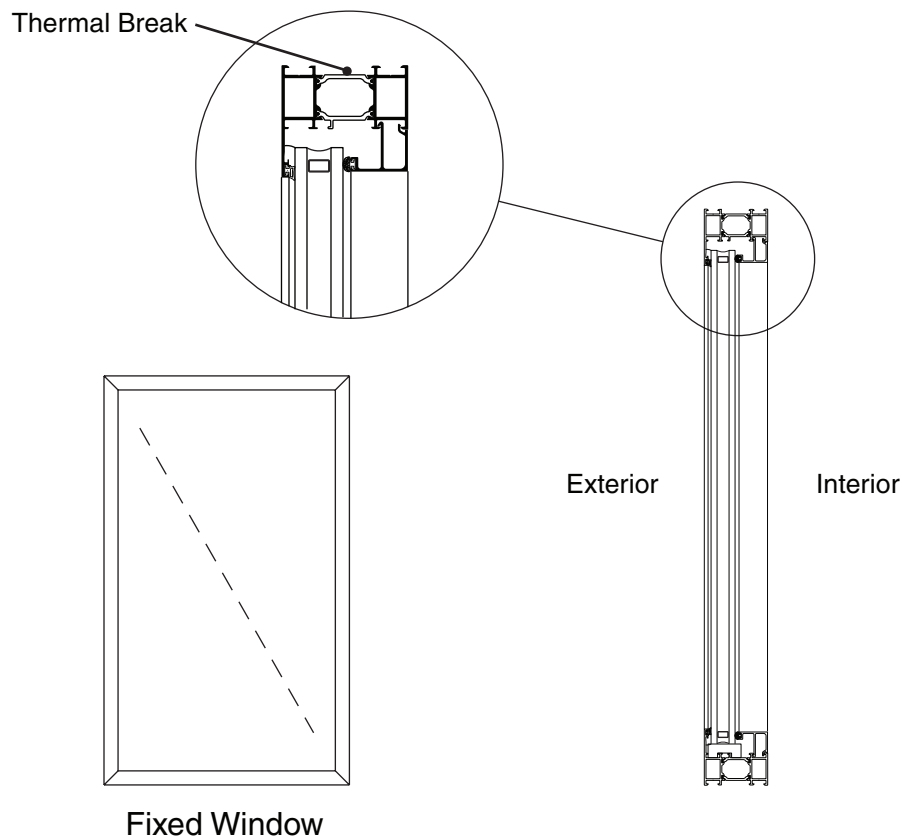
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Standard Features

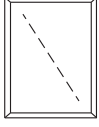
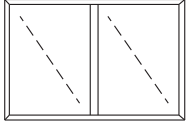
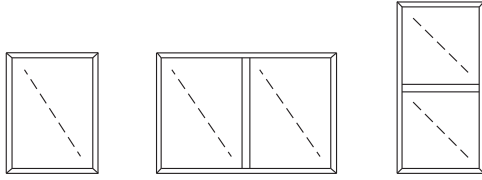
- Heavy Commercial Grade Window
- Tested to US and Canadian Standards
- IsoWeb™ Polyamide Thermal Break
- Tubular Profiles
- 45° Mitered Frame Corners
- Unique Mechanically Clipped or Staked Corner Joinery
- Factory Silicone Glazed or Field Dry Glazed
- Interior Applied Glazing Bead
- Architectural Anodized Finishes and Applied Coatings
- Interior and Exterior Dual Finish Options
- Two Year Manufacturer's Warranty
- Compatible with Storefront and Curtain Wall Systems



For specific product applications,
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CLASS and GRADE	Heavy Commercial Grade FW-HC90 / FW-AW90					
OPTIONAL CLASS and GRADE	Heavy Commercial Grade FW-HC80 / FW-AW80					
TESTING STANDARD	AAMA / WDMA / CSA 101 / I.S.2 / A440-05 / A440-08 / A440-00					
FRAME DEPTH	2-5/8" Overall Frame Depth					
TYPICAL WALL THICKNESS	.070" Nominal Frame					
TYPICAL MAX. SIZE	60" x 99"					
TYPICAL MIN. SIZE	17" x 17"					
TYPICAL CONFIGURATIONS						
INFILL OPTIONS	1" Standard (Other Infill Options Available Upon Request)					
STANDARD HARDWARE	Not Applicable					
OPTIONAL HARDWARE	Not Applicable					
OTHER OPTIONS	Structural Mullions Vertically or Horizontally Stacked					
SINGLE FIXED WINDOW						
PERFORMANCE	Air Infiltration	Water Resistance	Design Load	Thermal Transmittance AAMA 1503	Condensation Resistance AAMA 1503 CAN/CSA-A440	Sound Transmittance
US Standard	.10 Cfm/ft ² @ 6.24 psf	15 PSF	90 PSF	.34 "U" Value	67 CRF (Frame)	38 STC
Canadian Standard	0.25 (m ³ /h)/m @ 300 Pa (Fixed)	720 Pa (B7)	4320 Pa (C5)	.34 "U" Value	60.9 I (Frame)	38 STC

Note: Thermal values are based upon 1" Low-E, Argon filled insulating glass.
STC value is based upon 1" laminated insulating glass.

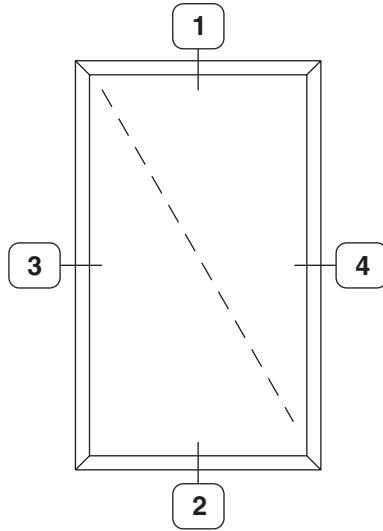
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SCALE : 3" = 1'-0"
(Nominal Dimensions Shown)

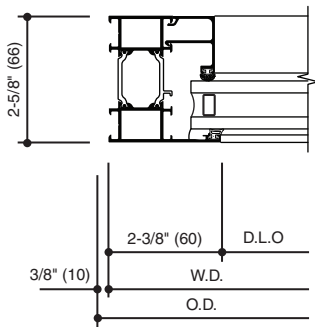
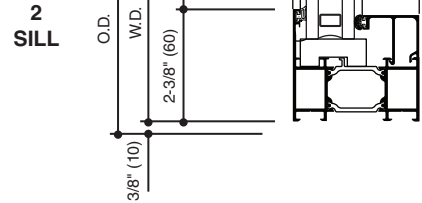
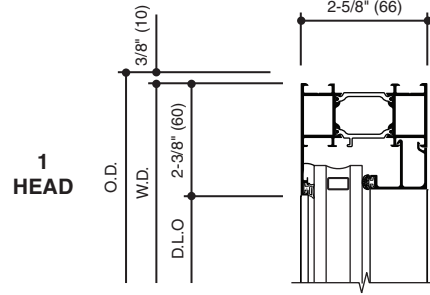
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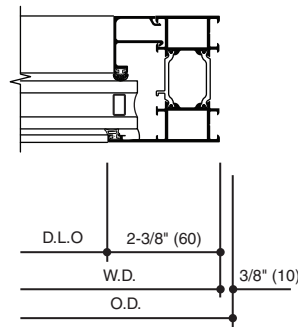


TYPICAL ELEVATION

Log onto www.kawneer.com for other configurations



3
JAMB



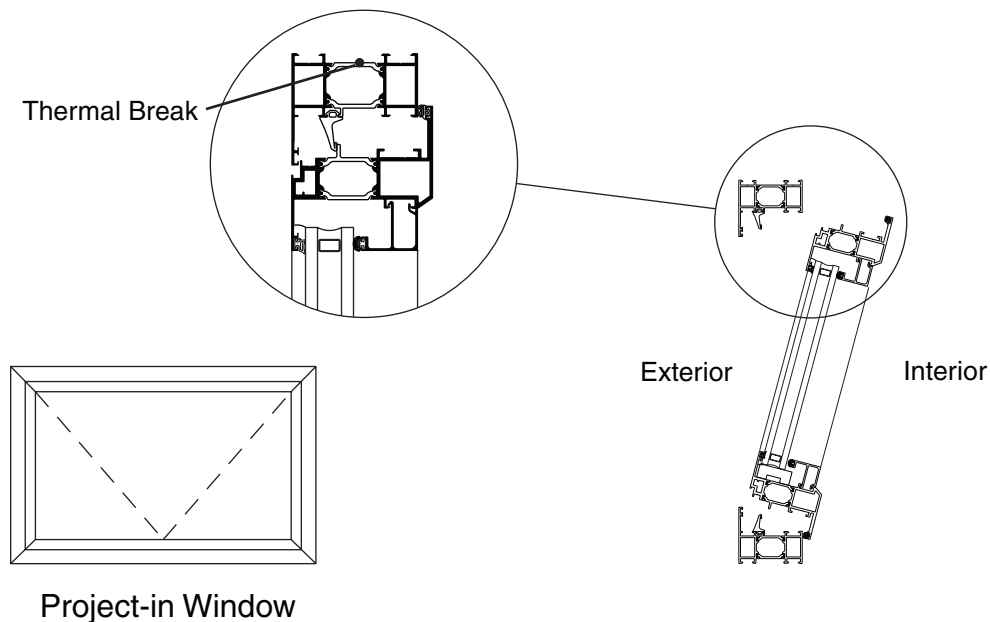
4
JAMB

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
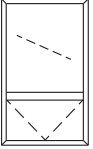
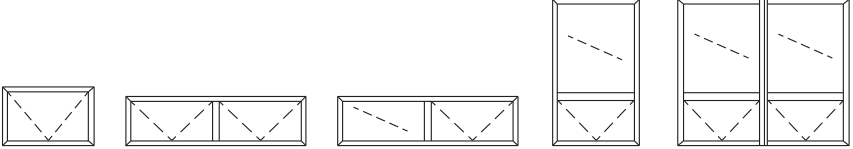
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Standard Features

- Heavy Commercial Grade Window
- Tested to US and Canadian Standards
- IsoWeb™ Polyamide Thermal Break
- Accentuated Tubular Profiles
- 45° Mitered Vent and Frame Corners
- Unique Mechanically Clipped or Staked Corner Joinery
- Factory Silicone Glazed or Field Dry Glazed
- Integral Air Seal
- Adjustable EURO-Groove Mounted Hardware
- Single Handle Multi-Point Locking
- Multiple Locking Handle Styles and Finishes
- Interior Applied Glazing Bead
- Architectural Anodized Finishes and Applied Coatings
- Interior and Exterior Dual Finish Options
- Two Year Manufacturer's Warranty
- Compatible with Storefront and Curtain Wall Systems



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CLASS and GRADE	Heavy Commercial Grade AP-HC90 / AP-AW90					
OPTIONAL CLASS and GRADE	Heavy Commercial Grade FW-HC80 / FW-AW80					
TESTING STANDARD	AAMA / WDMA / CSA 101 / I.S.2 / A440-05 / A440-00					
FRAME DEPTH	2-5/8" Overall Frame Depth					
TYPICAL WALL THICKNESS	.070" Nominal Frame / .090" Nominal Vent					
TYPICAL MAX. WINDOW SIZE	60" x 36" (72" x 48" with limitations - Consult Kawneer Engineering)					
TYPICAL MIN. WINDOW SIZE	17" x 17"					
TYPICAL CONFIGURATIONS						
INFILL OPTIONS	1" Standard (Other Infill Options Available Upon Request)					
STANDARD HARDWARE	Stainless Steel 4-Bar Hinges Single Handle Multi-Point Locking					
OPTIONAL HARDWARE	Cast White Bronze Cam Handles Access Control Locks Pole and Pole Ring Limit Stop					
OTHER OPTIONS	Structural Mullions Vertically or Horizontally Stacked Insect Screens					
SINGLE PROJECT-IN WINDOW						
PERFORMANCE	Air Infiltration	Water Resistance	Design Load	Thermal Transmittance AAMA 1503	Condensation Resistance AAMA 1503 CAN/CSA-A440	Sound Transmittance
US Standard	.10 Cfm/ft ² @ 6.24 psf	15 PSF	90 PSF	.43 "U" Value	64 CRF (Frame)	36 STC
Canadian Standard	0.55 (m ³ /h)/m @ 300 Pa (A3)	720 Pa (B7)	3840 Pa (C5)	.43 "U" Value	50.2 I (Frame)	36 STC

Note: Thermal values are based upon 1" Low E, Argon filled insulating glass.
STC value is based upon 1" laminated insulating glass.

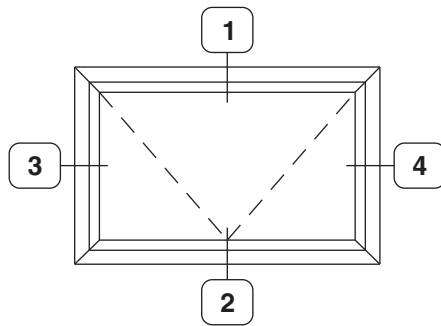
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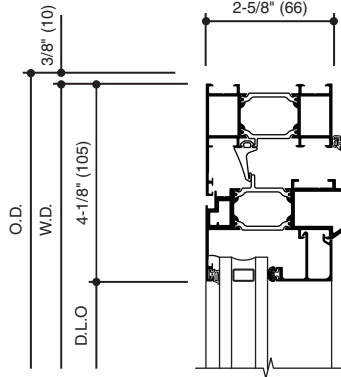
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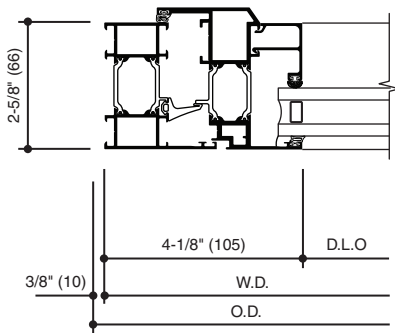
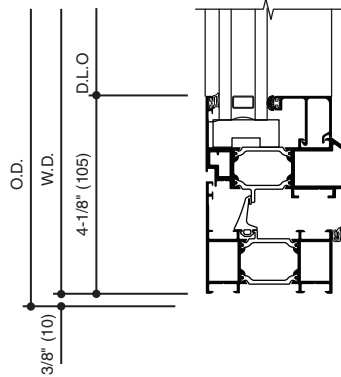


TYPICAL ELEVATION
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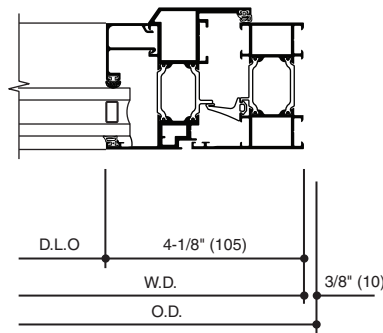
1
HEAD



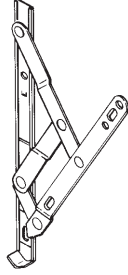
2
SILL



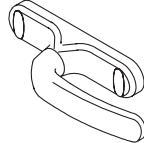
3
JAMB



4
JAMB

**STAINLESS STEEL
4 BAR HINGES**

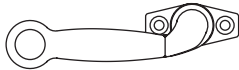
A standard hinge for ventilators providing approximately 45° to 60° openings depending on size. An optional limit stop is available to restrict hinge travel and limit vent opening.

**STANDARD
MULTI-POINT LOCKING**

Single handle multi-point locking is standard providing any number of concealed EURO-Groove mounted locking points around the ventilator perimeter. Stylish handles are available in black, white and silver painted finishes as well as chrome, satin and polished brass.

CAM HANDLE

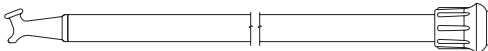
Cast white bronze cam handles are an alternative to standard multi-point locking for the operation and locking of ventilators.

**CAM HANDLE
WITH POLE RING**

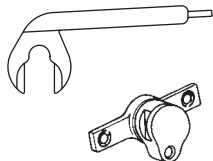
Cast white bronze cam handles with pole ring provide manual operation of ventilators located above reach. These handles are operated with a sash pole.

POLE RING

Cast white bronze pole ring is used in conjunction with locking hardware for sash pole operation of ventilators.

SASH POLE

A 3/4" diameter aluminum sash pole with a cast white bronze pull down hook and black rubber tip. Available in 6 ft. and 12 ft. lengths with optional cast white bronze Pole Hanger.

**HANGER
FOR SASH POLE****ACCESS CONTROL
LOCK**

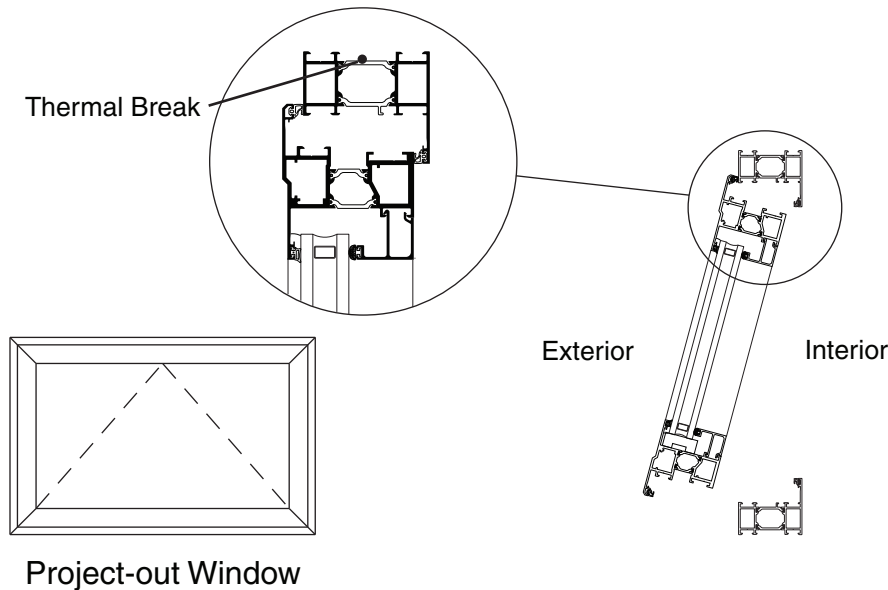
In lieu of cam handles and multi-point locking cast white bronze access control locks are offered for managed control of vent operations. Lock is operated with a manganese bronze removable handle.

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Standard Features


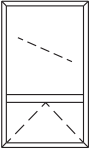
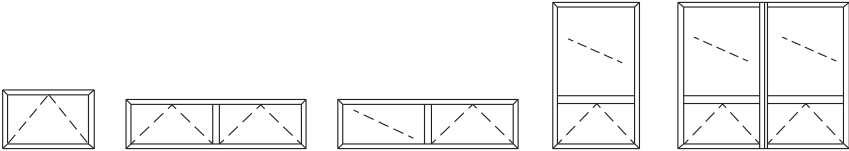
- Heavy Commercial Grade Window
- Tested to US and Canadian Standards
- IsoWeb™ Polyamide Thermal Break
- Accentuated Tubular Profiles
- 45° Mitered Vent and Frame Corners
- Unique Mechanically Clipped or Staked Corner Joinery
- Factory Silicone Glazed or Field Dry Glazed
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- Single Handle Multi-Point Locking
- Multiple Locking Handle Styles and Finishes
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- Architectural Anodized Finishes and Applied Coatings
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- Two Year Manufacturer’s Warranty
- Compatible with Storefront and Curtain Wall Systems



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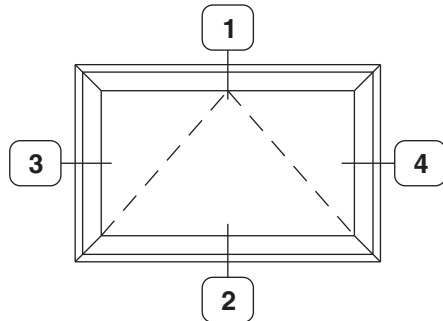
CLASS and GRADE	Heavy Commercial Grade AC-HC90 / AP-AW90					
OPTIONAL CLASS and GRADE	Heavy Commercial Grade AP-HC80 / AP-AW80					
TESTING STANDARD	AAMA / WDMA / CSA 101 / I.S.2 / A440-05 / A440-00					
FRAME DEPTH	2-5/8" Overall Frame Depth					
TYPICAL WALL THICKNESS	.070" Nominal Frame / .090" Nominal Vent					
TYPICAL MAX. VENT SIZE	60" x 36" (72" x 48" with limitations - Consult Kawneer Engineering)					
TYPICAL MIN. VENT SIZE	17" x 17"					
TYPICAL CONFIGURATIONS						
INFILL OPTIONS	1" Standard (Other Infill Options Available Upon Request)					
STANDARD HARDWARE	Stainless Steel 4-Bar Hinges Single Handle Multi-Point Locking					
OPTIONAL HARDWARE	Cast White Bronze Cam Handles Access Control Locks Pole and Pole Ring Limit Stop Pivot-Shoe Roto Operator			UCS Powered Operators		
OTHER OPTIONS	Structural Mullions Vertically or Horizontally Stacked Insect Screens					
SINGLE PROJECT-OUT WINDOW						
PERFORMANCE	Air Infiltration	Water Resistance	Design Load	Thermal Transmittance AAMA 1503	Condensation Resistance AAMA 1503 CAN/CSA-A440	Sound Transmittance
US Standard	.10 Cfm/ft ² @ 6.24 psf	15 PSF	90 PSF	.47 "U" Value	61 CRF (Frame)	36 STC
Canadian Standard	0.55 (m ³ /h)/m @ 300 Pa (A3)	720 Pa (B7)	3840 Pa (C5)	.47 "U" Value	50.2 I (Frame)	36 STC

Note: Thermal values are based upon 1" Low E, Argon filled insulating glass.
STC value is based upon 1" laminated insulating glass.

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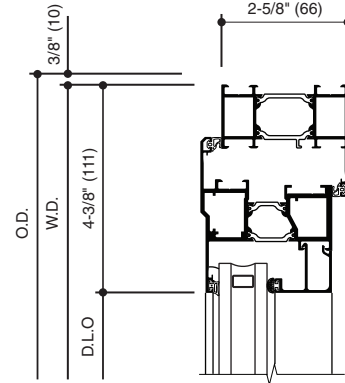
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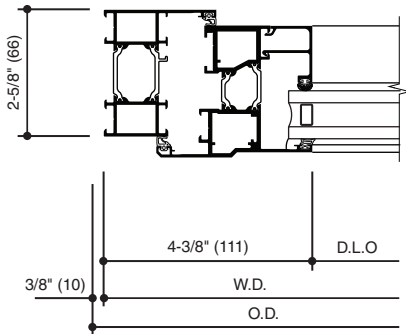
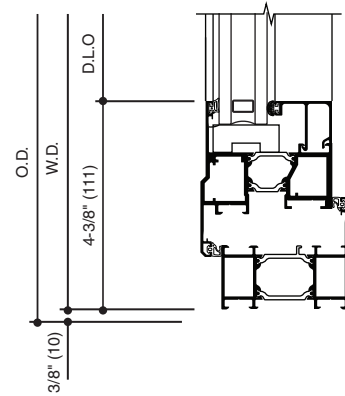
TYPICAL ELEVATION

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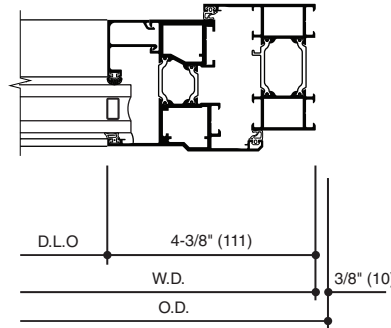
1 HEAD



2 SILL

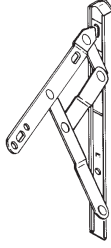


3 JAMB



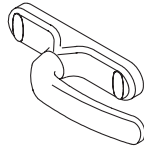
4 JAMB

STAINLESS STEEL 4 BAR HINGES



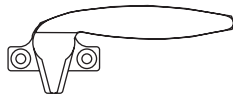
A standard hinge for ventilators providing approximately 45° to 60° openings depending on size. An optional limit stop is available to restrict hinge travel and limit vent opening.

STANDARD MULTI-POINT LOCKING



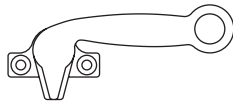
Single handle multi-point locking is standard providing any number of concealed EURO-Groove mounted locking points around the ventilator perimeter. Stylish handles are available in black, white and silver painted finishes as well as chrome, satin and polished brass.

CAM HANDLE



Cast white bronze cam handles are an alternative to standard multi-point locking for the operation and locking of ventilators.

CAM HANDLE WITH POLE RING



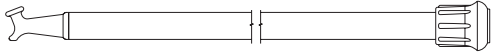
Cast white bronze cam handles with pole ring provide manual operation of ventilators located above reach. These handles are operated with a sash pole.

POLE RING



Cast white bronze pole ring is used in conjunction with locking hardware for sash pole operation of ventilators.

SASH POLE

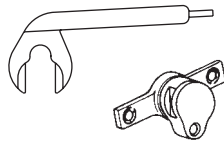


HANGER FOR SASH POLE



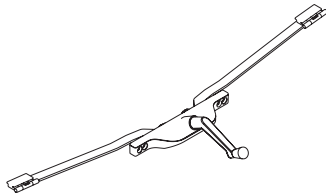
A 3/4" diameter aluminum sash pole with a cast white bronze pull down hook and black rubber tip. Available in 6 ft. and 12 ft. lengths with optional cast white bronze Pole Hanger.

ACCESS CONTROL LOCK



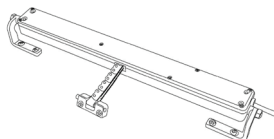
In lieu of cam handles and multi-point locking cast white bronze access control locks are offered for managed control of vent operations. Lock is operated with a manganese bronze removable handle.

PIVOT-SHOE ROTO-OPERATOR



Optional pivot shoe roto operator is located on the center line of the bottom horizontal frame. Standard finish shall be brushed copper nickel to match US-25-D.

MOTORIZED ACTUATORS



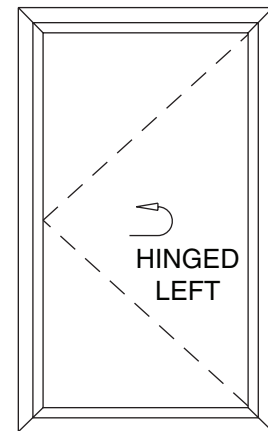
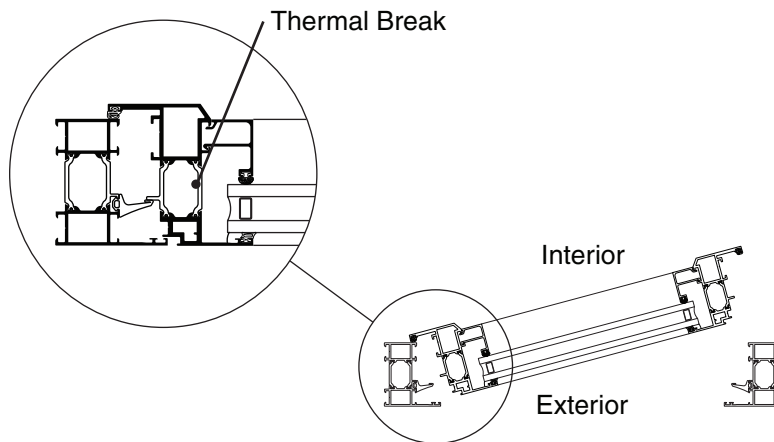
Chain operated motorized actuator. Suitable for bottom and top hinged windows. Available in white, black or gray finish.

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- Compatible with Storefront and Curtain Wall Systems

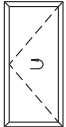
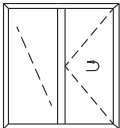
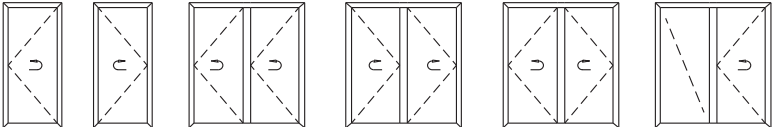


Inswing Casement Window

For specific product applications,
Consult your Kawneer representative.

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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CLASS and GRADE	Heavy Commercial Grade C-HC90 / C-AW90						
OPTIONAL CLASS and GRADE	Heavy Commercial Grade C-HC80 / C-AW80						
TESTING STANDARD	AAMA / WDMA / CSA 101 / I.S.2 / A440-05 / A440-00						
FRAME DEPTH	2-5/8" Overall Frame Depth						
TYPICAL WALL THICKNESS	.070" Nominal Frame / .090" Nominal Vent						
TYPICAL MAX. WINDOW SIZE	36" x 60" (48" x 72" with limitations - Consult Kawneer Engineering)						
TYPICAL MIN. WINDOW SIZE	17" x 17"						
TYPICAL CONFIGURATIONS							
INFILL OPTIONS	1" Standard (Other Infill Options Available Upon Request)						
STANDARD HARDWARE	Stainless Steel 4-Bar Hinges Single Handle Multi-Point Locking						
OPTIONAL HARDWARE	Cast White Bronze Cam Handles Access Control Locks Pole and Pole Ring Limit Stop Butt Hinges with Friction Adjusters						
OTHER OPTIONS	Structural Mullions Vertically or Horizontally Stacked Insect Screens						
SINGLE CASEMENT INSWING WINDOW							
PERFORMANCE	Air Infiltration	Water Resistance	Design Load	Thermal Transmittance AAMA 1503	Condensation Resistance AAMA 1503 CAN/CSA-A440	Sound Transmittance	
US Standard	.10 Cfm/ft ² @ 6.24 psf	15 PSF	90 PSF	.43 "U" Value	64 CRF (Frame)	36 STC	
Canadian Standard	0.5 (m ³ /h)/m @ 300 Pa (A3)	720 Pa (B7)	3840 Pa (C5)	.43 "U" Value	50.2 I (Frame)	36 STC	

Note: Thermal values are based upon 1" Low E, Argon filled insulating glass.
STC value is based upon 1" laminated insulating glass.

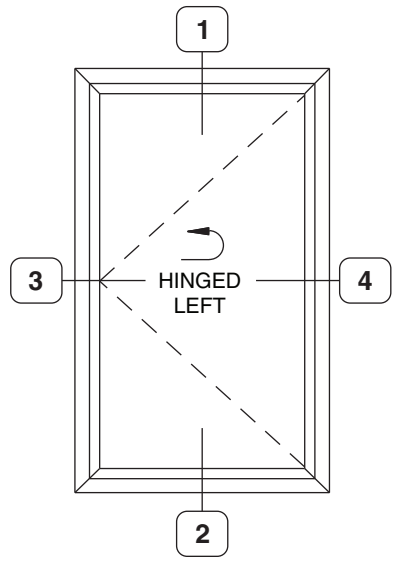
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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SCALE : 3" = 1'-0"
(Nominal Dimensions Shown)

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.

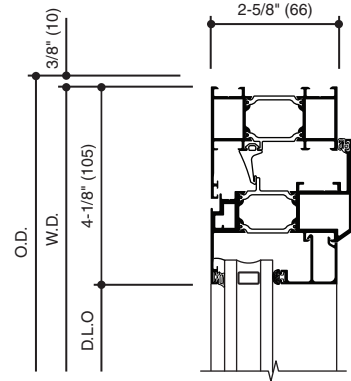
Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.
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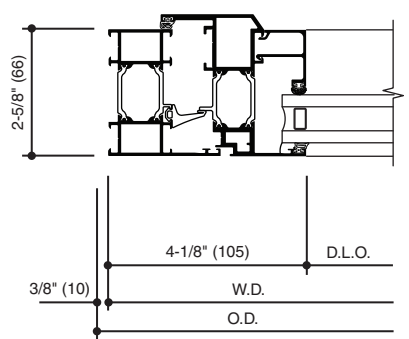
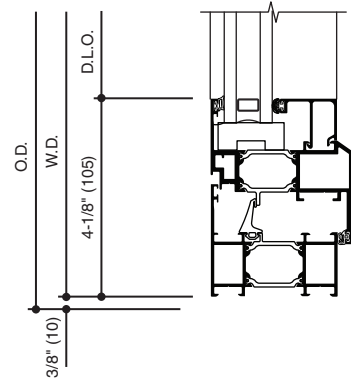
TYPICAL ELEVATION

Log onto www.kawneer.com for other configurations

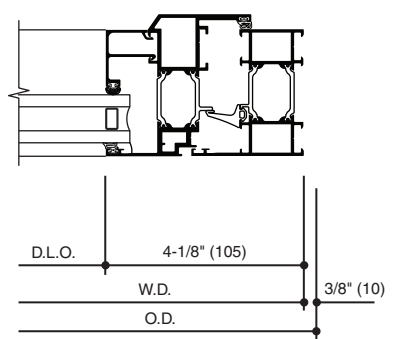
1 HEAD



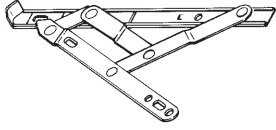
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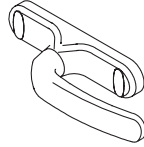
3 JAMB



4 JAMB

**STAINLESS STEEL
4 BAR HINGES**

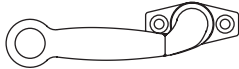
A standard hinge for ventilators providing up to 45° of open. An optional limit stop is available to restrict hinge travel and limit vent opening.

**STANDARD
MULTI-POINT LOCKING**

Single handle multi-point locking is standard providing any number of concealed EURO-Groove mounted locking points around the ventilator perimeter. Stylish handles are available in black, white and silver painted finishes as well as chrome, satin and polished brass.

CAM HANDLE

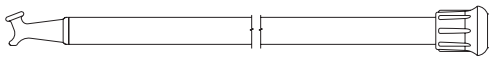
Cast white bronze cam handles are an alternative to standard multi-point locking for the operation and locking of ventilators.

**CAM HANDLE
WITH POLE RING**

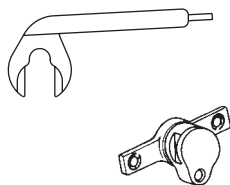
Cast white bronze cam handles with pole ring provide manual operation of ventilators located above reach. These handles are operated with a sash pole.

POLE RING

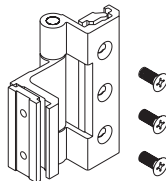
Cast white bronze pole ring is used in conjunction with locking hardware for sash pole operation of ventilators.

SASH POLE

A 3/4" diameter aluminum sash pole with a cast white bronze pull down hook and black rubber tip. Available in 6 ft. and 12 ft. lengths with optional cast white bronze Pole Hanger.

**HANGER
FOR SASH POLE****ACCESS CONTROL
LOCK**

In lieu of cam handles and multi-point locking cast white bronze access control locks are offered for managed control of vent operations. Lock is operated with a manganese bronze removable handle.

BUTT HINGE

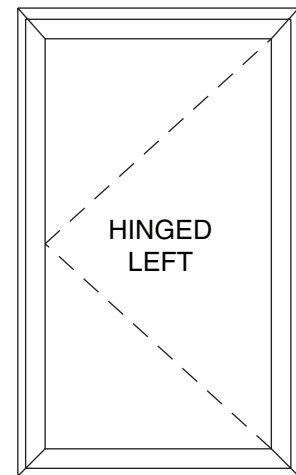
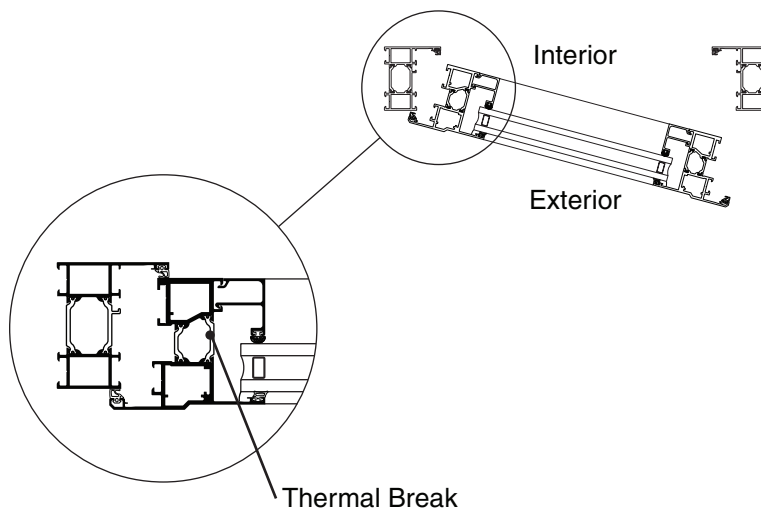
An optional hinge available in anodized finishes or painted to match window. Must be used with Friction Adjusters.

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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Standard Features

- Heavy Commercial Grade Window
- Tested to US and Canadian Standards
- IsoWeb™ Polyamide Thermal Break
- Accentuated Tubular Profiles
- 45° Mitered Vent and Frame Corners
- Unique Mechanically Clipped or Staked Corner Joinery
- Factory Silicone Glazed or Field Dry Glazed
- Adjustable EURO-Groove Mounted Hardware
- Single Handle Multi-Point Locking
- Multiple Locking Handle Styles and Finishes
- Interior Applied Glazing Bead
- Architectural Anodized Finishes and Applied Coatings
- Interior and Exterior Dual Finish Options
- Two Year Manufacturer’s Warranty
- Compatible with Storefront and Curtain Wall Systems

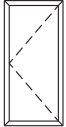
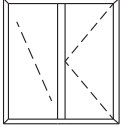
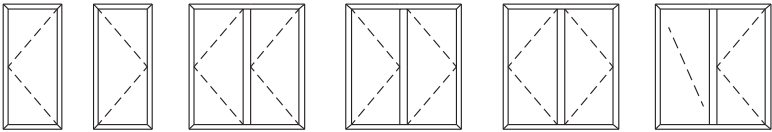


Outswing Casement Window

For specific product applications,
Consult your Kawneer representative.

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CLASS and GRADE	Heavy Commercial Grade C-HC90 / C-AW90						
OPTIONAL CLASS and GRADE	Heavy Commercial Grade C-HC70 / C-AW70						
TESTING STANDARD	AAMA / WDMA / CSA 101 / I.S.2 / A440-05 / A440-00						
FRAME DEPTH	2-5/8" Overall Frame Depth						
TYPICAL WALL THICKNESS	.070" Nominal Frame / .090" Nominal Vent						
TYPICAL MAX. WINDOW SIZE	36" x 60" (48" x 72" with limitations - (Consult Kawneer Engineering))						
TYPICAL MIN. WINDOW SIZE	17" x 17"						
TYPICAL CONFIGURATIONS							
INFILL OPTIONS	1" Standard (Other Infill Options Available Upon Request)						
STANDARD HARDWARE	Stainless Steel 4-Bar Hinges Single Handle Multi-Point Locking						
OPTIONAL HARDWARE	Cast White Bronze Cam Handles Access Control Locks Pole and Pole Ring Limit Stop Butt Hinges Roto Operator						
OTHER OPTIONS	Structural Mullions Vertically or Horizontally Stacked Insect Screens						
SINGLE CASEMENT OUTSWING WINDOW							
PERFORMANCE	Air Infiltration	Water Resistance	Design Load	Thermal Transmittance AAMA 1503	Condensation Resistance AAMA 1503 CAN/CSA-A440	Sound Transmittance	
US Standard	.10 Cfm/ft ² @ 6.24 psf	15 PSF	90 PSF	.47 "U" Value	61 CRF (Frame)	36 STC	
Canadian Standard	0.55 (m ³ /h)/m @ 300 Pa (A3)	720 Pa (B7)	3360 Pa (C5)	.47 "U" Value	53.2 I (Frame)	36 STC	

Note: Thermal values are based upon 1" Low E, Argon filled insulating glass.
STC value is based upon 1" laminated insulating glass.

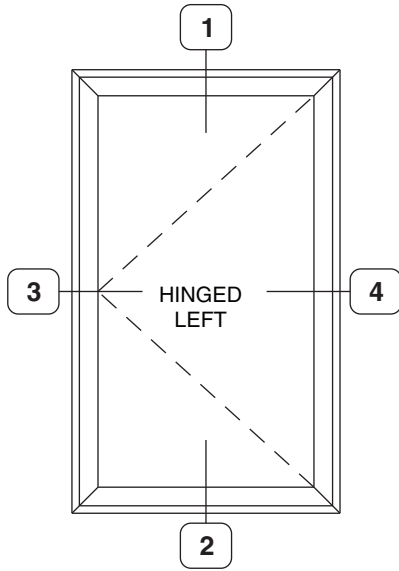
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SCALE : 3" = 1'-0"
(Nominal Dimensions Shown)

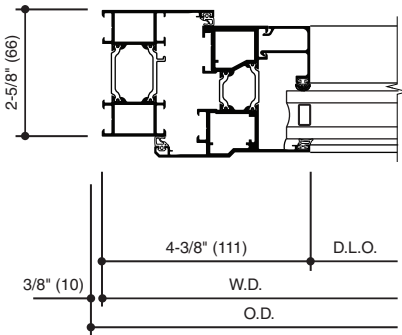
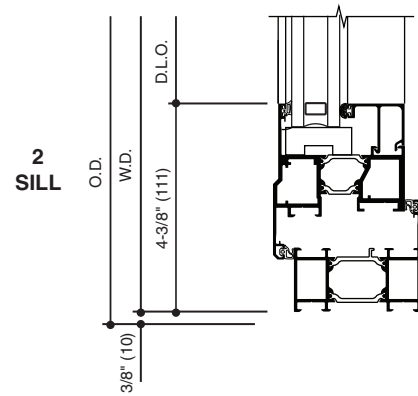
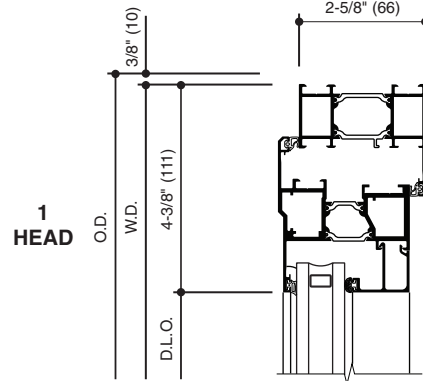
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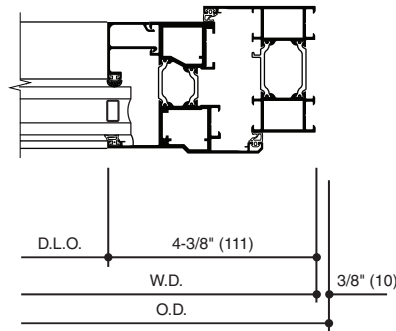


TYPICAL ELEVATION

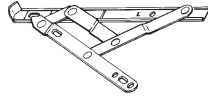
Log onto www.kawneer.com for other configurations



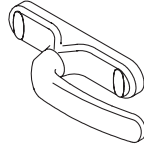
3 JAMB



4 JAMB

**STAINLESS STEEL
4 BAR HINGES**

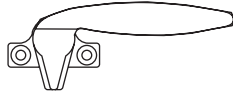
A standard hinge for ventilators providing up to 45° of open. An optional limit stop is available to restrict hinge travel and limit vent opening.

**STANDARD
MULTI-POINT LOCKING**

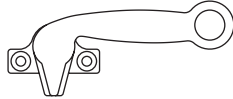
Single handle multi-point locking is standard providing any number of concealed EURO-Groove mounted locking points around the ventilator perimeter. Stylish handles are available in black, white and silver painted finishes as well as chrome, satin and polished brass.

MULTI-POINT LOCK

Optional single locking handle for concealed multi-point locks located on the vertical frame. Standard finish shall be US-25-D clear white bronze.

CAM HANDLE

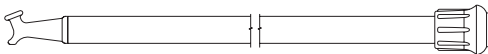
Cast white bronze cam handles are an alternative to standard multi-point locking for the operation and locking of ventilators.

**CAM HANDLE
WITH POLE RING**

Cast white bronze cam handles with pole ring provide manual operation of ventilators located above reach. These handles are operated with a sash pole.

POLE RING

Cast white bronze pole ring is used in conjunction with locking hardware for sash pole operation of ventilators.

SASH POLE

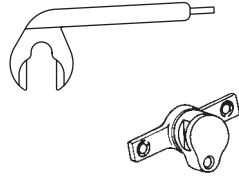
A 3/4" diameter aluminum sash pole with a cast white bronze pull down hook and black rubber tip. Available in 6 ft. and 12 ft. lengths with optional cast white bronze Pole Hanger.

**HANGER
FOR SASH POLE**

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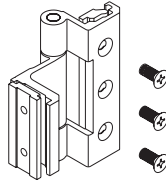
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ACCESS CONTROL LOCK



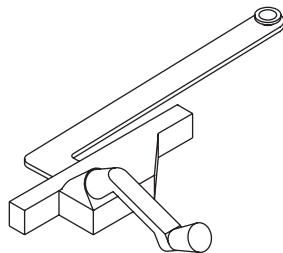
In lieu of cam handles and multi-point locking cast white bronze access control locks are offered for managed control of vent operations. Lock is operated with a manganese bronze removable handle.

BUTT HINGE



An optional hinge available in anodized finishes or painted to match window. Must be used with Friction Adjusters.

ROTO-OPERATOR



Roto operators are used with butt hinges only and located at the bottom horizontal frame. Standard finish shall be brushed copper nickel to match US-25-D.

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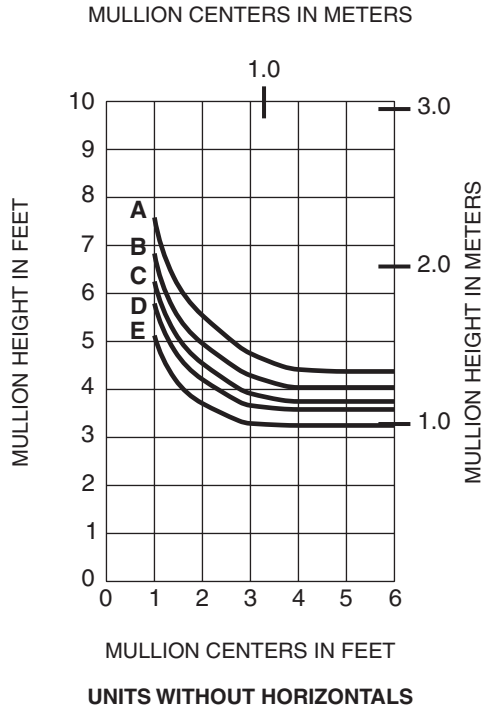
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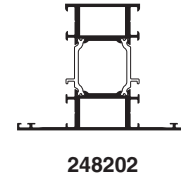
WIND LOAD CHARTS:

THESE CHARTS ARE BASED ON A MAXIMUM DEFLECTION OF $L/175$ AND/OR A MAXIMUM STRESS OF 15,152 psi (104 MPa). If the design wind load is determined through the analytical procedures of ASCE/SEI 7-10 or earlier editions, the load shall be based on the nominal loads used in allowable stress design. A 4/3 increase in allowable stress has not been used to develop these curves.

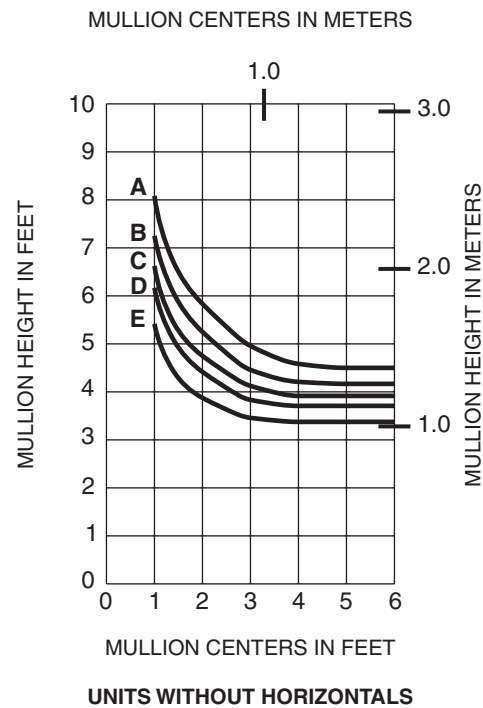
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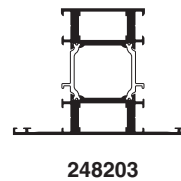
- A = 40 PSF (1915)
- B = 50 PSF (2394)
- C = 60 PSF (2873)
- D = 70 PSF (3352)
- E = 90 PSF (4309)



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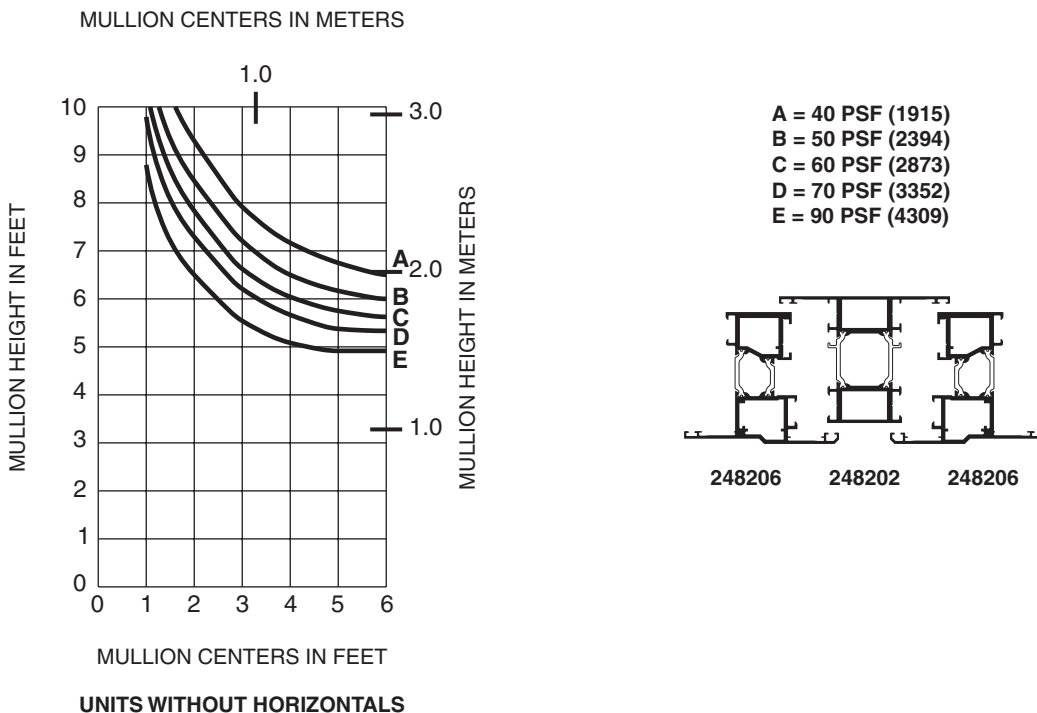
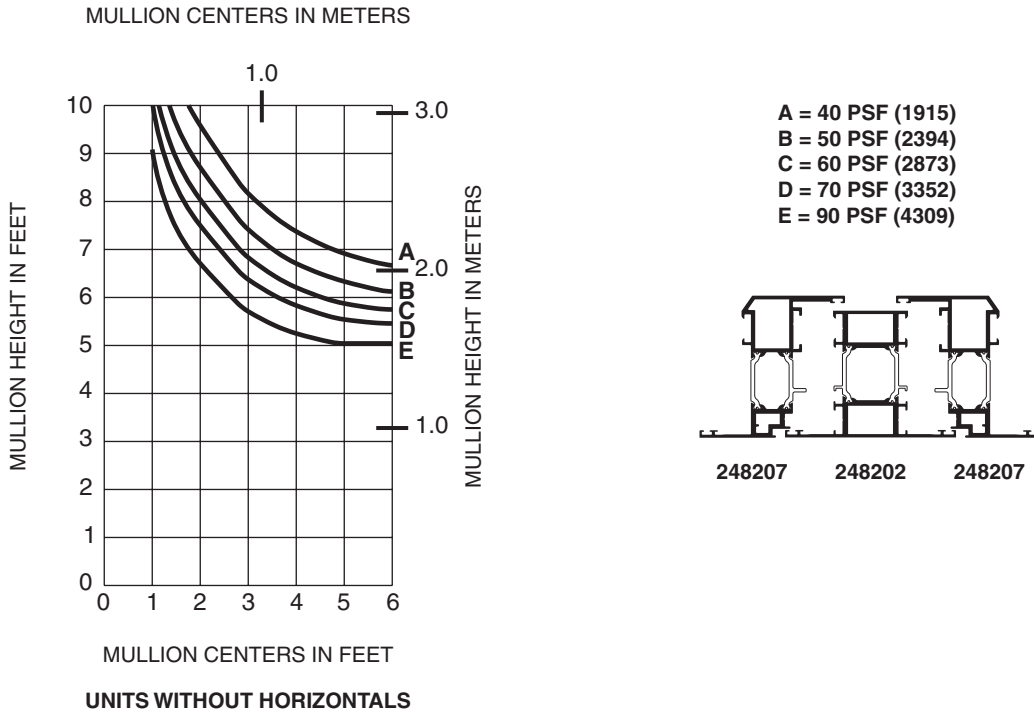


- A = 40 PSF (1915)
- B = 50 PSF (2394)
- C = 60 PSF (2873)
- D = 70 PSF (3352)
- E = 90 PSF (4309)



WIND LOAD CHARTS:

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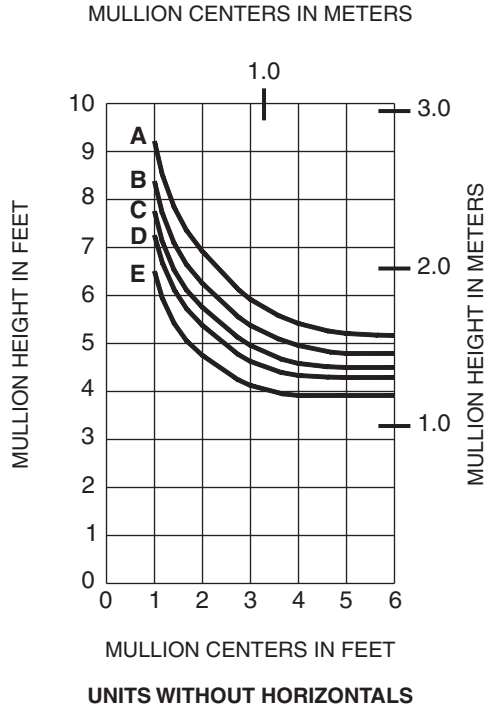
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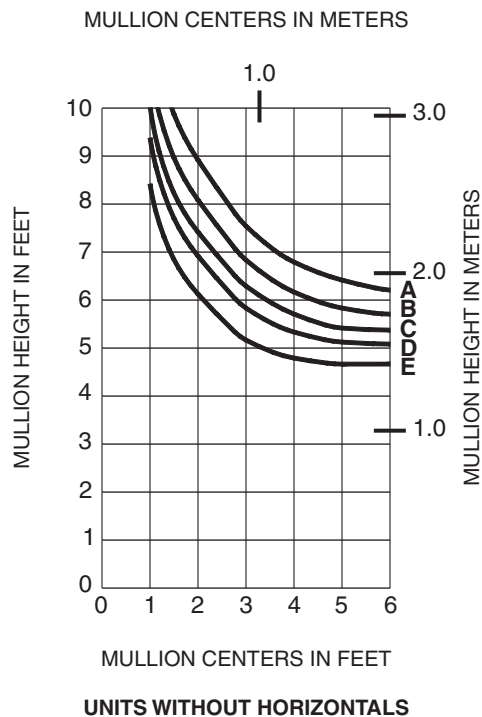
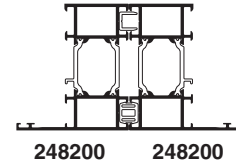
WIND LOAD CHARTS:

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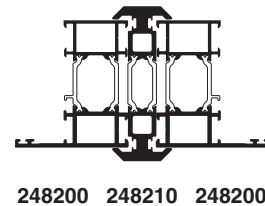
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- B = 50 PSF (2394)
- C = 60 PSF (2873)
- D = 70 PSF (3352)
- E = 90 PSF (4309)



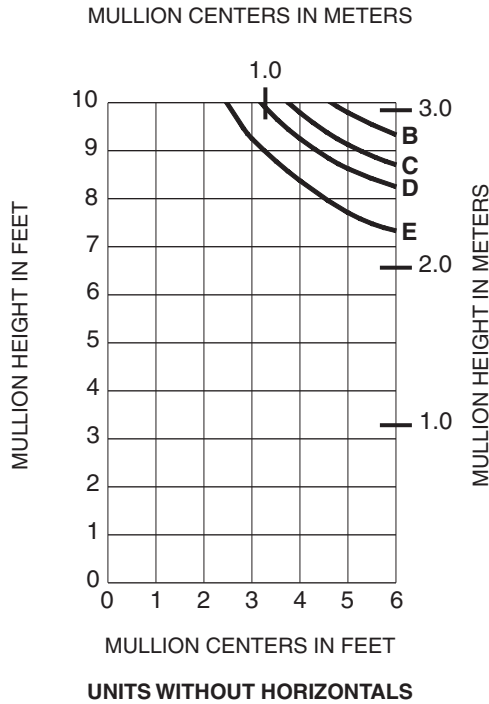
- A = 40 PSF (1915)
- B = 50 PSF (2394)
- C = 60 PSF (2873)
- D = 70 PSF (3352)
- E = 90 PSF (4309)



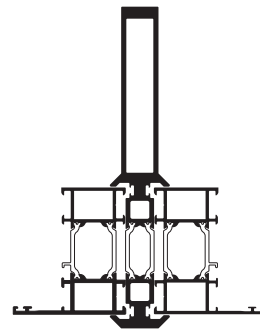
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WIND LOAD CHARTS:

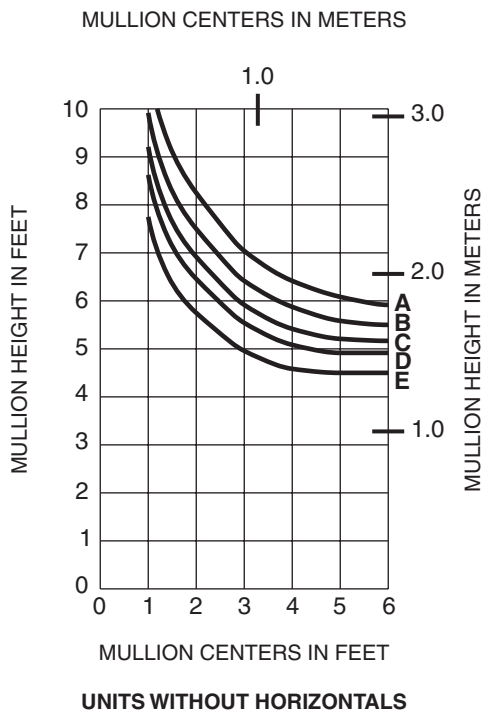
THESE CHARTS ARE BASED ON A MAXIMUM DEFLECTION OF L\175 AND\OR A MAXIMUM STRESS OF 15,152 psi (104 MPa). If the design wind load is determined through the analytical procedures of ASCE/SEI 7-10 or earlier editions, the load shall be based on the nominal loads used in allowable stress design. A 4/3 increase in allowable stress has not been used to develop these curves.



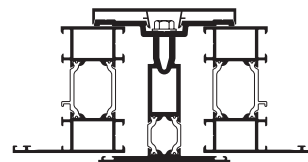
- A = 40 PSF (1915)
- B = 50 PSF (2394)
- C = 60 PSF (2873)
- D = 70 PSF (3352)
- E = 90 PSF (4309)



248200 248208 248200



- A = 40 PSF (1915)
- B = 50 PSF (2394)
- C = 60 PSF (2873)
- D = 70 PSF (3352)
- E = 90 PSF (4309)



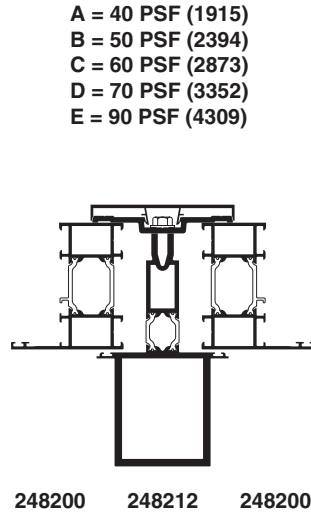
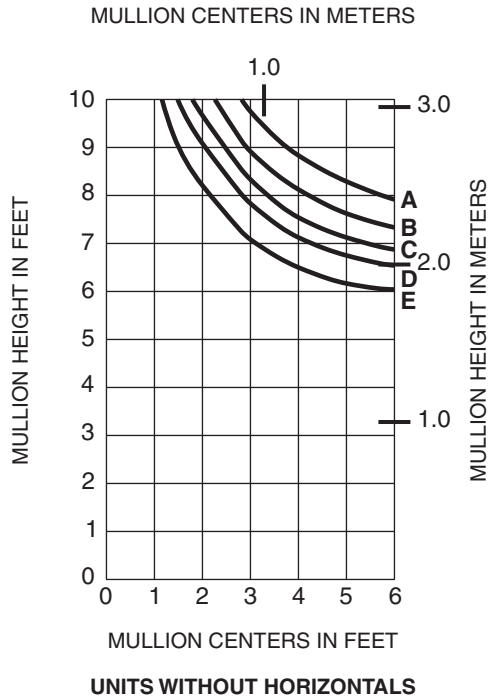
248200 248211 248200

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:

THESE CHARTS ARE BASED ON A MAXIMUM DEFLECTION OF L\175 AND/OR A MAXIMUM STRESS OF 15,152 psi (104 MPa). If the design wind load is determined through the analytical procedures of ASCE/SEI 7-10 or earlier editions, the load shall be based on the nominal loads used in allowable stress design. A 4/3 increase in allowable stress has not been used to develop these curves.

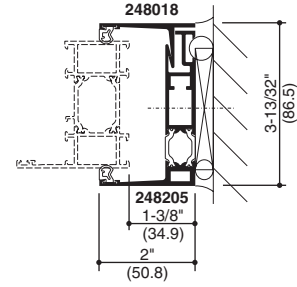
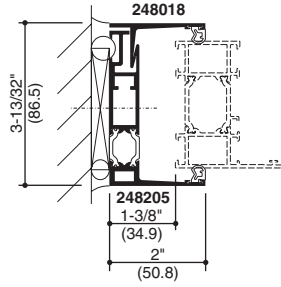
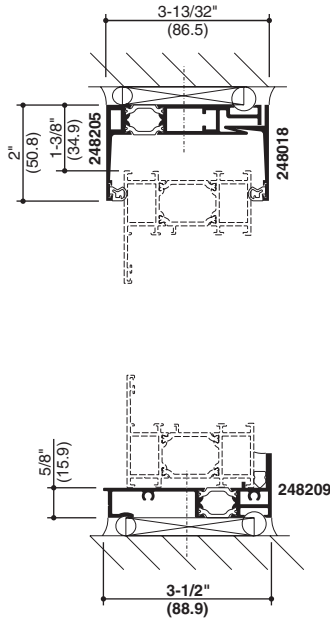


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SCALE : 3" = 1'-0"

TYPICAL RECEPTOR SYSTEM

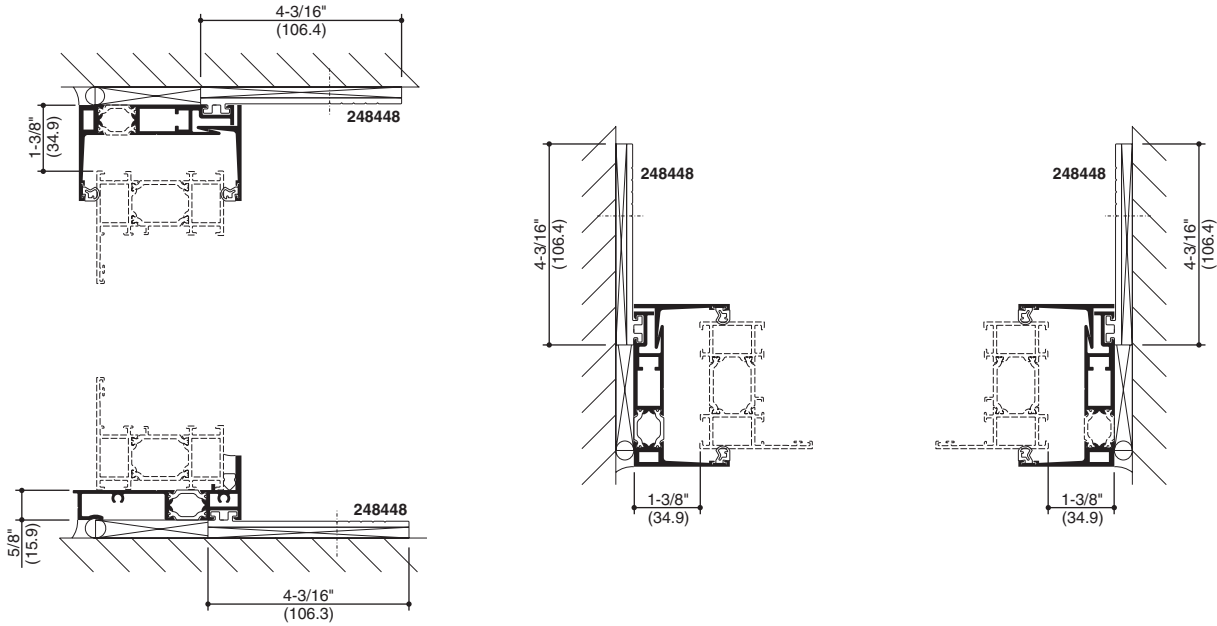


Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

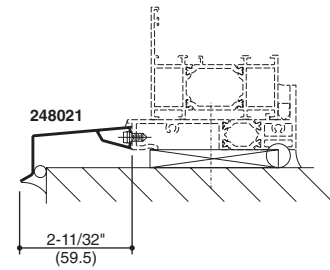
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SCALE : 3" = 1'-0"
(Nominal Dimensions Shown)

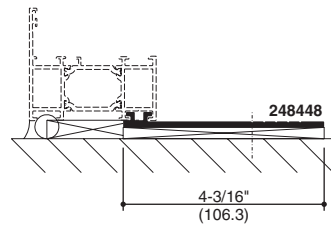
RECEPTOR SYSTEM WITH HEAVY DUTY SLIP-ON ANCHOR



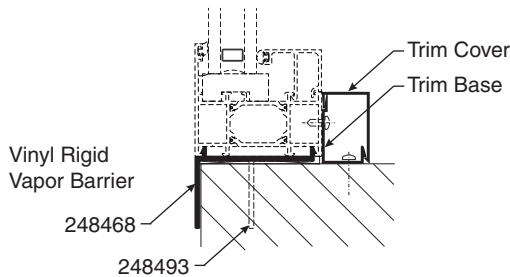
ANCHORS



TYPICAL SILL EXTENSION



HEAVY DUTY
SLIP-ON ANCHOR



Note: Refer to the "Window Panning and Trims" section for more typical trim details.

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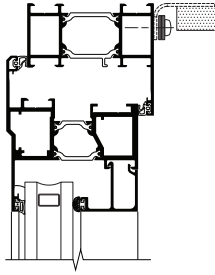
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SCALE : 3" = 1'-0"

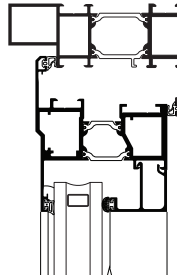
VAPOR BARRIER

TOP HAT EXTENSION

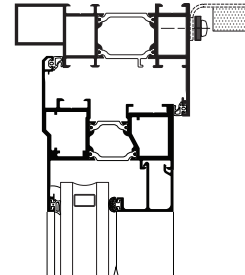
TOP HAT EXTENSION
AND
VAPOR BARRIER



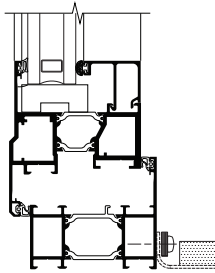
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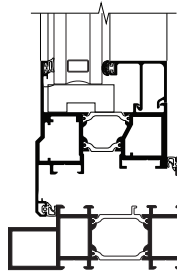
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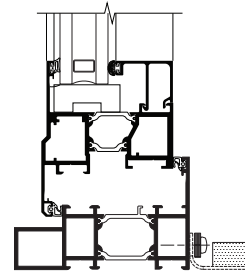
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SILL

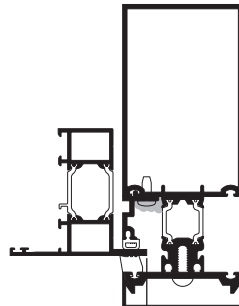


SILL



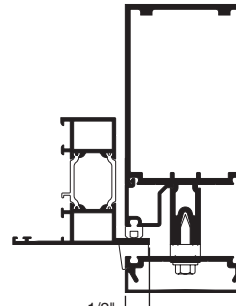
SILL

CURTAIN WALL ADAPTERS



1/2"
(12.7)

7500 WALL



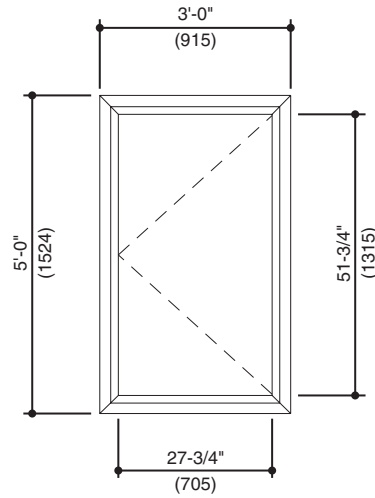
1/2"
(12.7)

1600 WALL

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



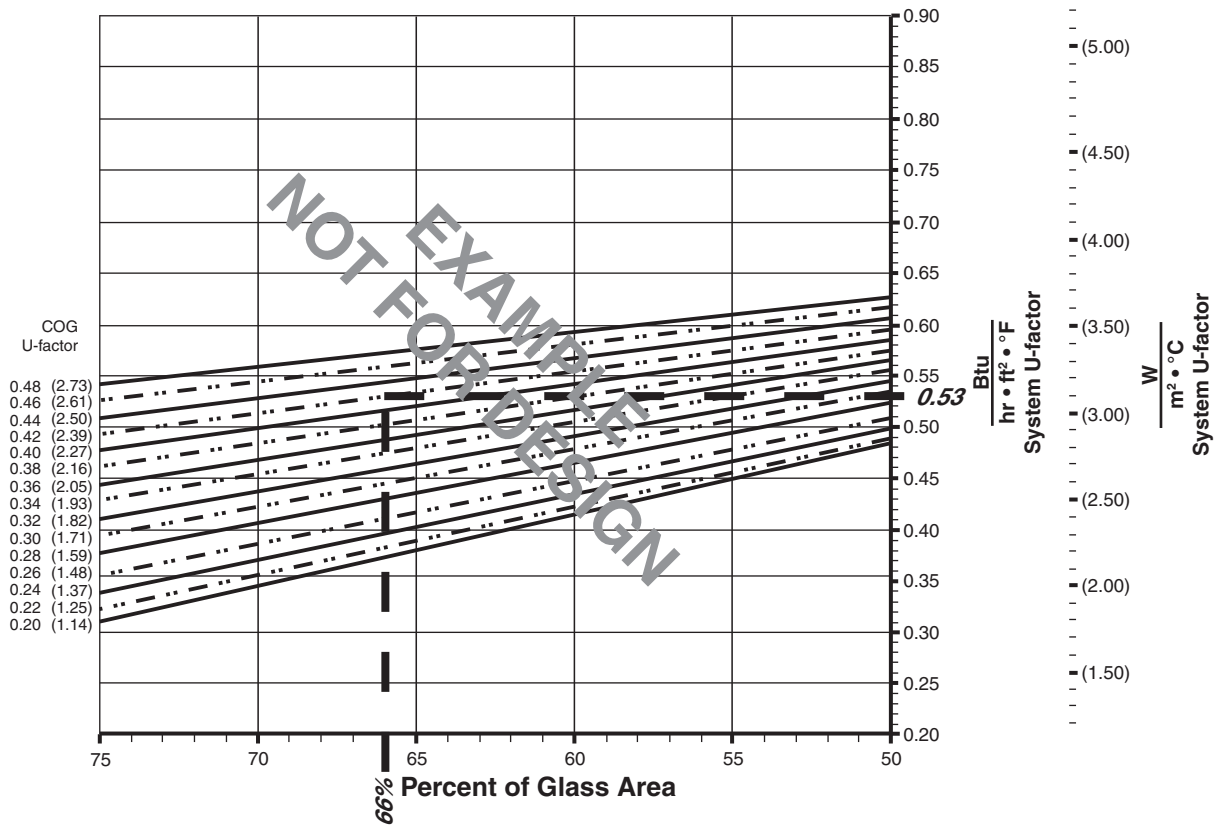
Example Glass U-Factor = 0.42 Btu/hr • ft² • °F

Total Daylight Opening = 27-3/4" • 51-3/4" = 9.97ft²

Total Projected Area = 3'-0" • 5'-0" = 15 ft²

Percent of Glass = (Total Daylight Opening ÷ Total Projected Area)100
 = (9.97 ÷ 15)100 = 66%

System U-factor vs Percent of Glass Area



Based on 66% glass and center of glass (COG) U-factor of 0.42
 System U-factor is equal to 0.53 Btu/hr • ft² • °F

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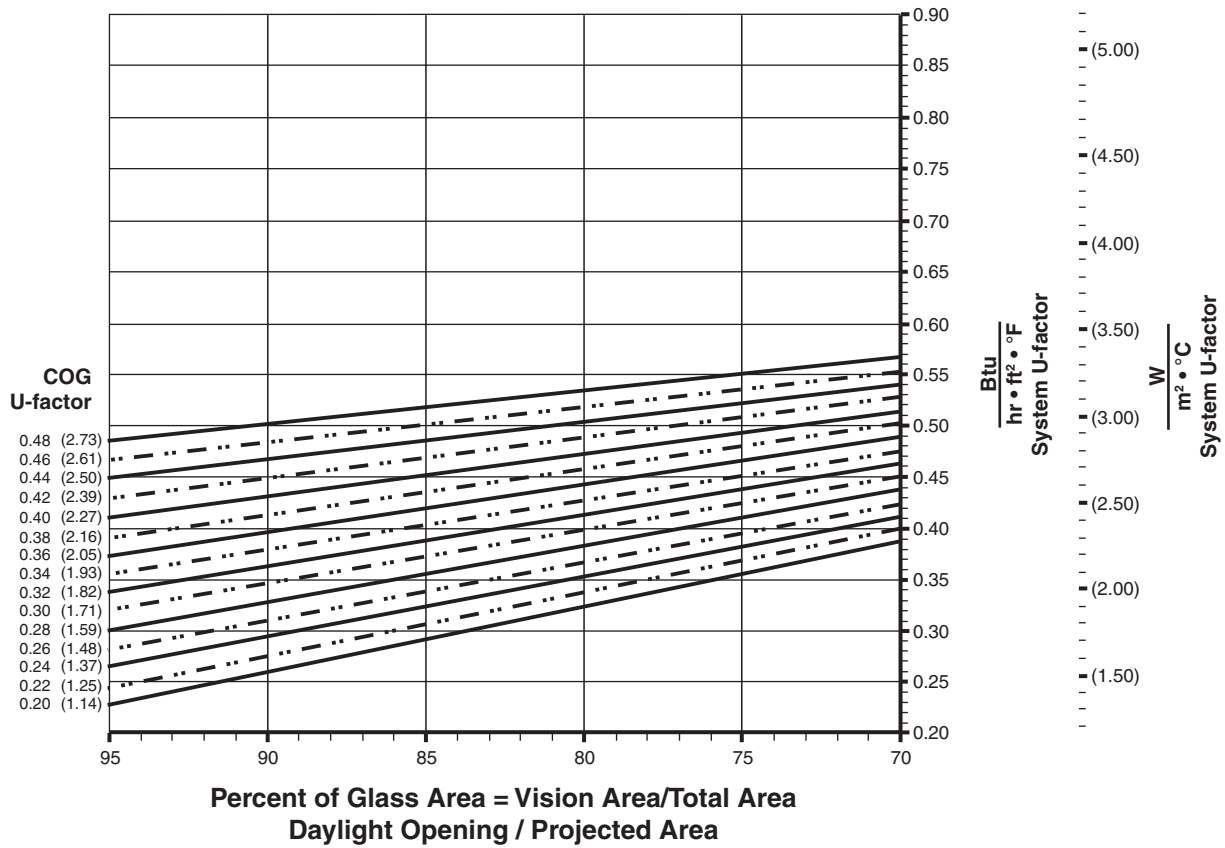
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AA™ 900 FIXED WINDOW

Note:

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

System U-factor vs Percent of Glass Area



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

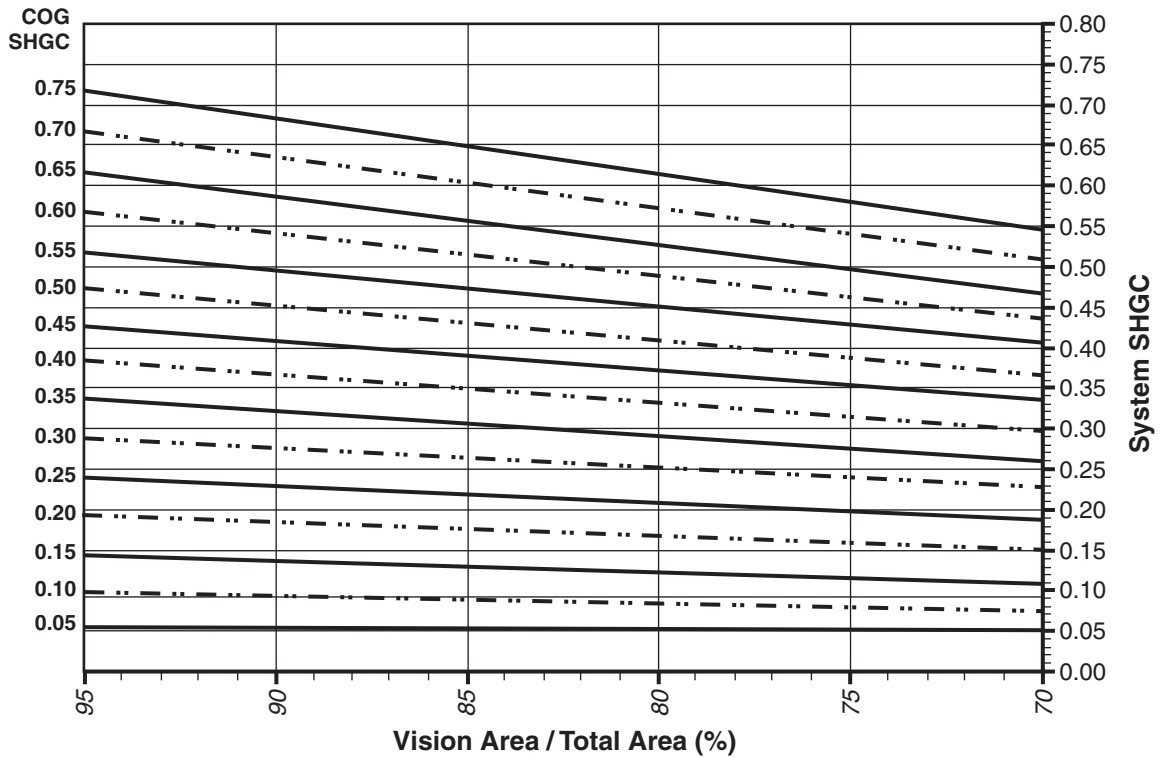
For glass values that are not listed, linear interpolation is permitted.
 Glass properties are based on center of glass values and are obtained from your glass supplier.

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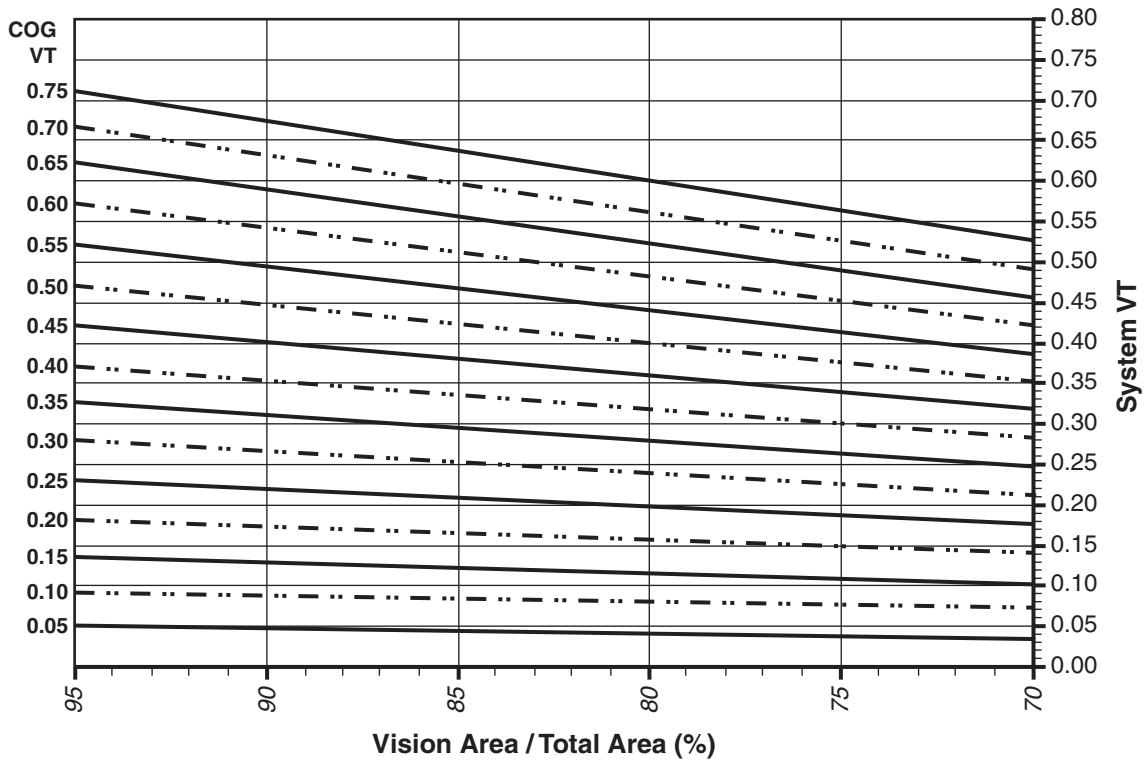
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AA™ 900 FIXED WINDOW

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



System Visible Transmittance (VT) vs Percent of Vision Area



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AA™ 900 FIXED WINDOW

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

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.52
0.46	0.51
0.44	0.49
0.42	0.48
0.40	0.46
0.38	0.45
0.36	0.43
0.34	0.42
0.32	0.40
0.30	0.38
0.28	0.37
0.26	0.35
0.24	0.34
0.22	0.32
0.20	0.31

SHGC Matrix²

Glass SHGC ³	Overall Glass U-Factor ⁴
0.75	0.63
0.70	0.59
0.65	0.55
0.60	0.51
0.55	0.47
0.50	0.42
0.45	0.38
0.40	0.34
0.35	0.30
0.30	0.26
0.25	0.22
0.20	0.17
0.15	0.13
0.10	0.09
0.05	0.05

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.62
0.70	0.58
0.65	0.54
0.60	0.50
0.55	0.46
0.50	0.42
0.45	0.37
0.40	0.33
0.35	0.29
0.30	0.25
0.25	0.21
0.20	0.17
0.15	0.12
0.10	0.08
0.05	0.04

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 Matrices are based on the standard NFRC specimen size of 1200mm wide by 1500mm high (47-1/4" by 59-1/16").

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.

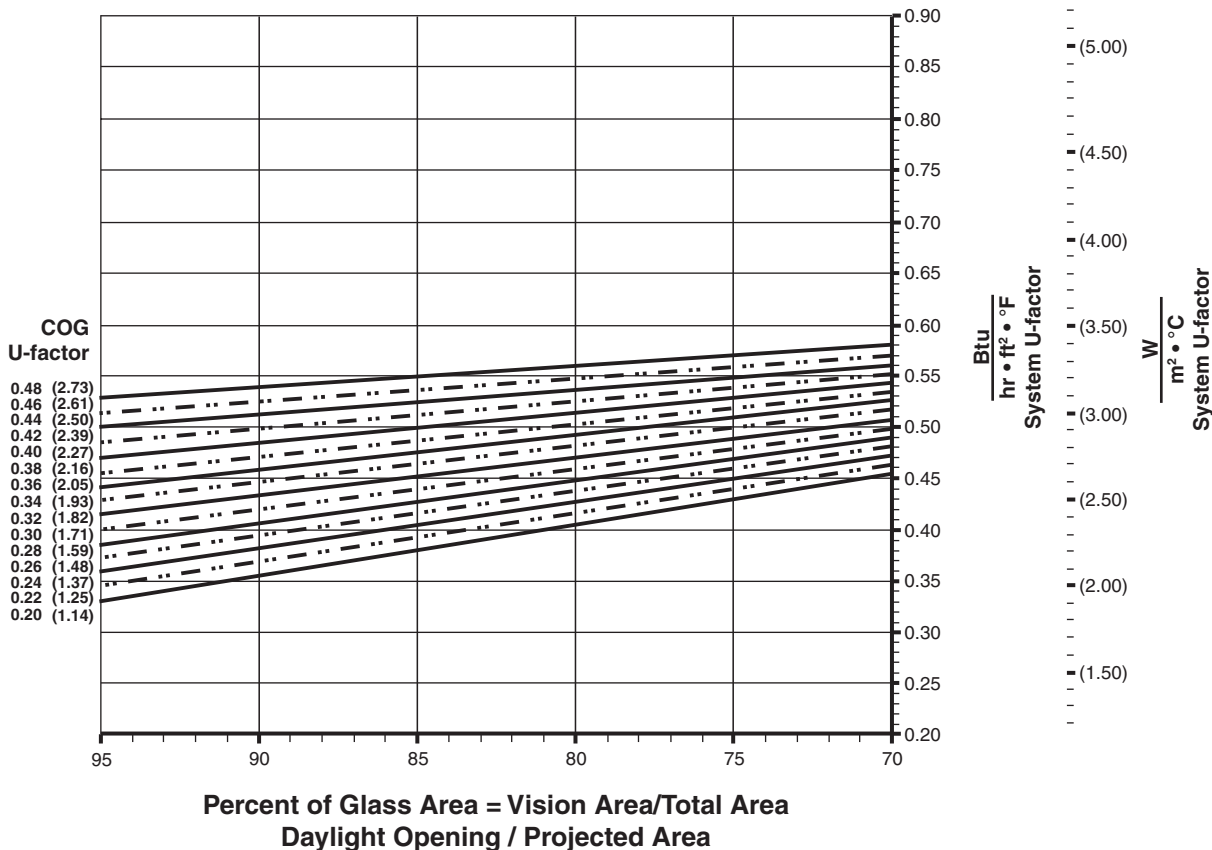
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AA™ 900 CASEMENT/PROJECT-IN WINDOW

Note:

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

System U-factor vs Percent of Glass Area



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

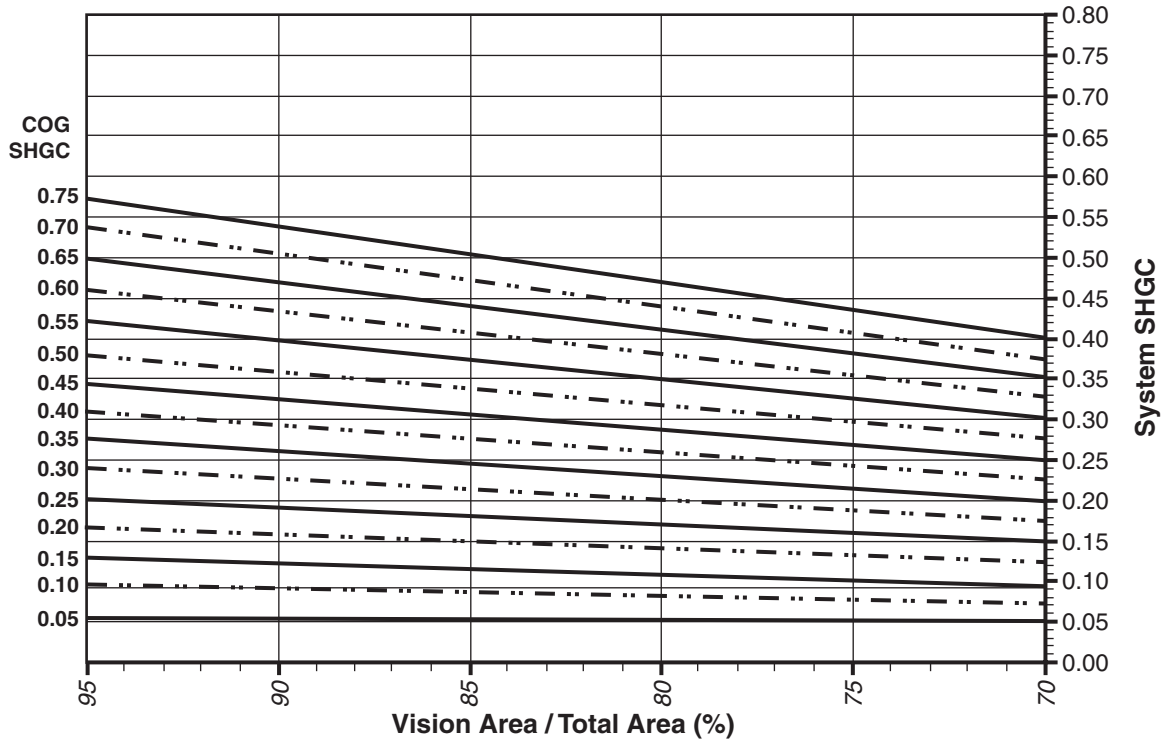
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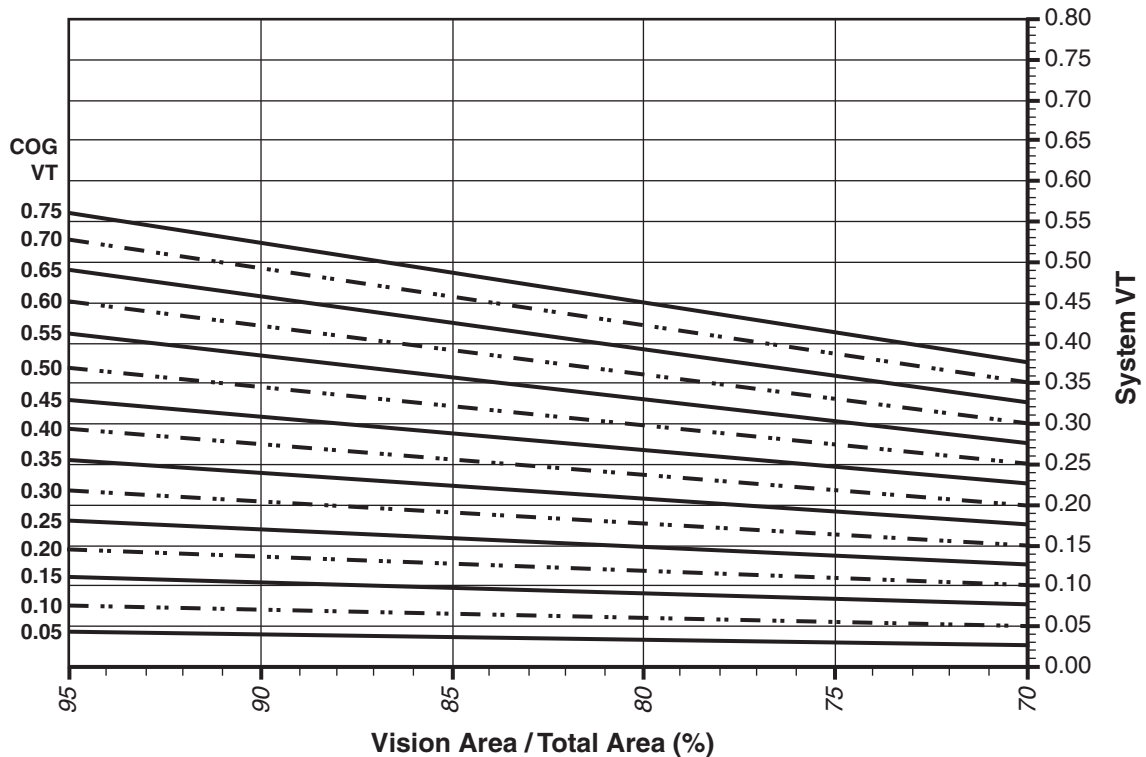
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AA™ 900 CASEMENT/PROJECT-IN WINDOW

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



System Visible Transmittance (VT) vs Percent of Vision Area



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AA™ 900 CASEMENT/PROJECT-IN WINDOW

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

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.57
0.46	0.56
0.44	0.55
0.42	0.54
0.40	0.53
0.38	0.52
0.36	0.51
0.34	0.50
0.32	0.49
0.30	0.48
0.28	0.47
0.26	0.46
0.24	0.45
0.22	0.44
0.20	0.43

SHGC Matrix²

Glass SHGC ³	Overall Glass U-Factor ⁴
0.75	0.43
0.70	0.41
0.65	0.38
0.60	0.35
0.55	0.33
0.50	0.30
0.45	0.27
0.40	0.24
0.35	0.22
0.30	0.19
0.25	0.16
0.20	0.13
0.15	0.11
0.10	0.08
0.05	0.05

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.41
0.70	0.38
0.65	0.36
0.60	0.33
0.55	0.30
0.50	0.27
0.45	0.25
0.40	0.22
0.35	0.19
0.30	0.16
0.25	0.14
0.20	0.11
0.15	0.08
0.10	0.05
0.05	0.03

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 Matrices are based on the standard NFRC specimen size of 1200mm wide by 1500mm high (47-1/4" by 59-1/16").

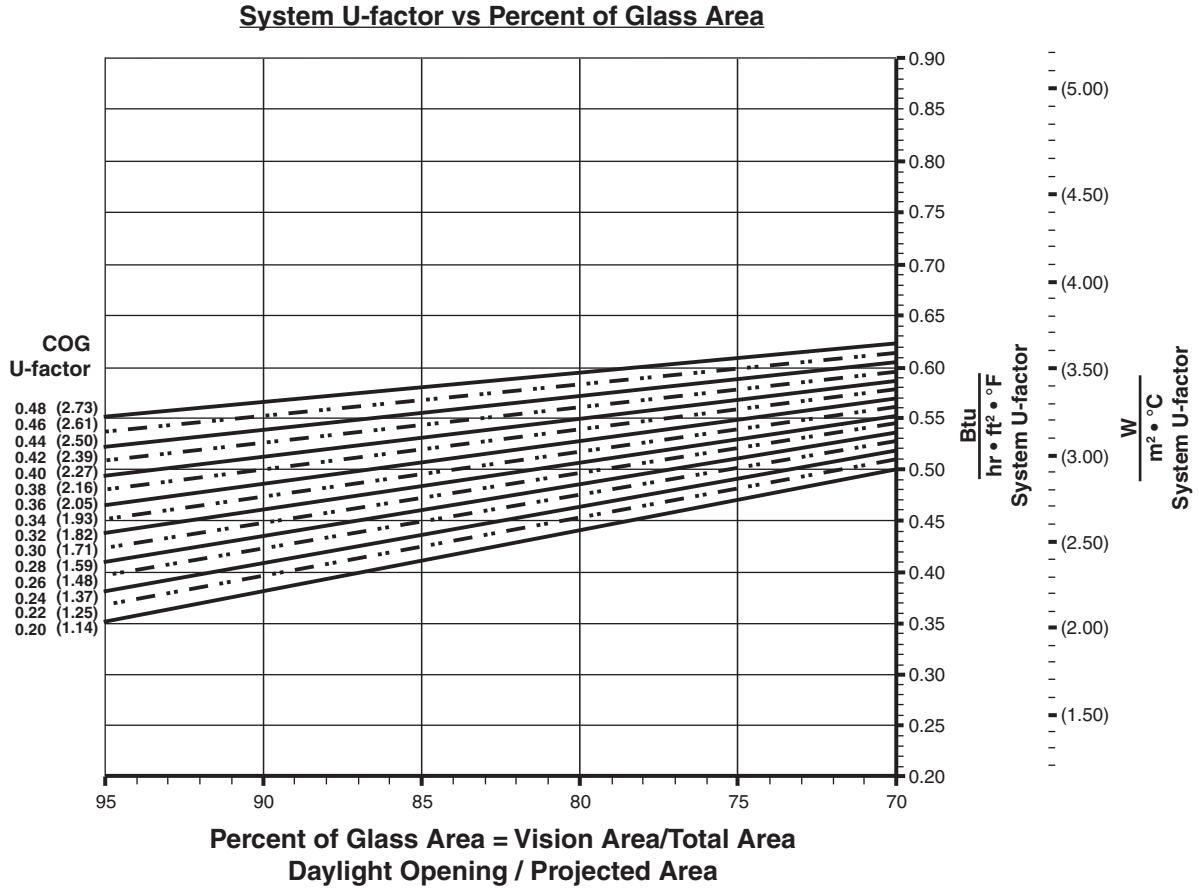
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AA™ 900 CASEMENT/PROJECT-OUT WINDOW

Note:

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



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

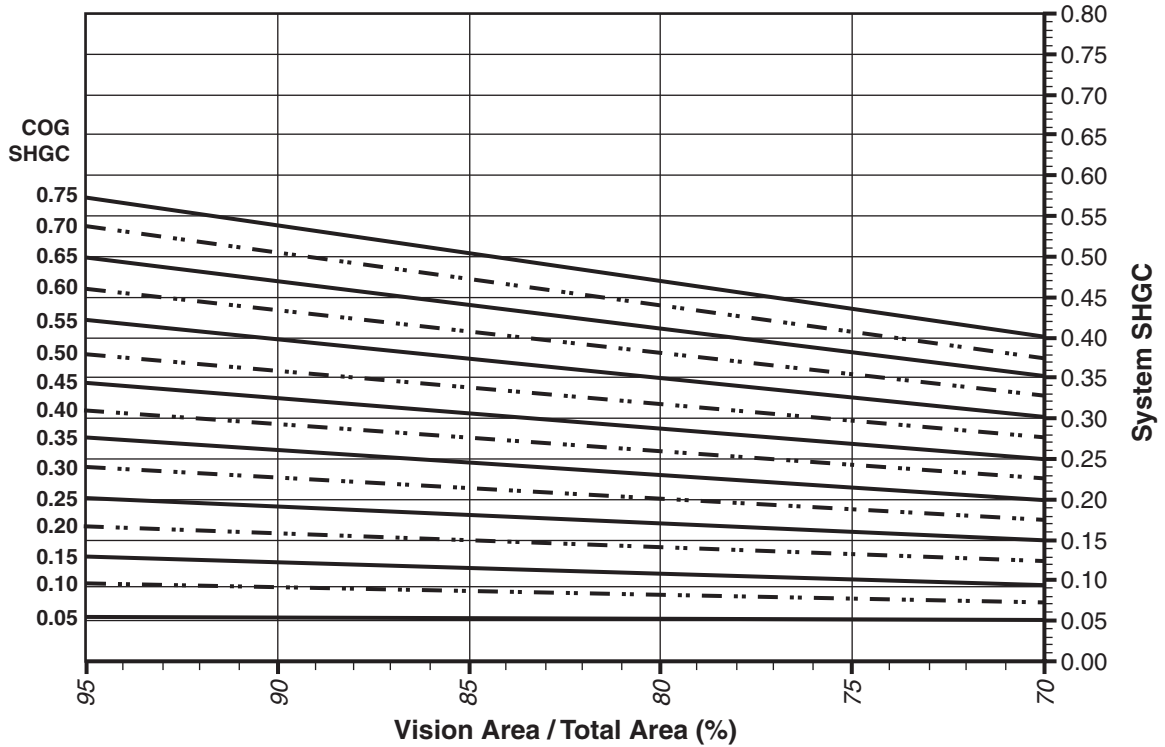
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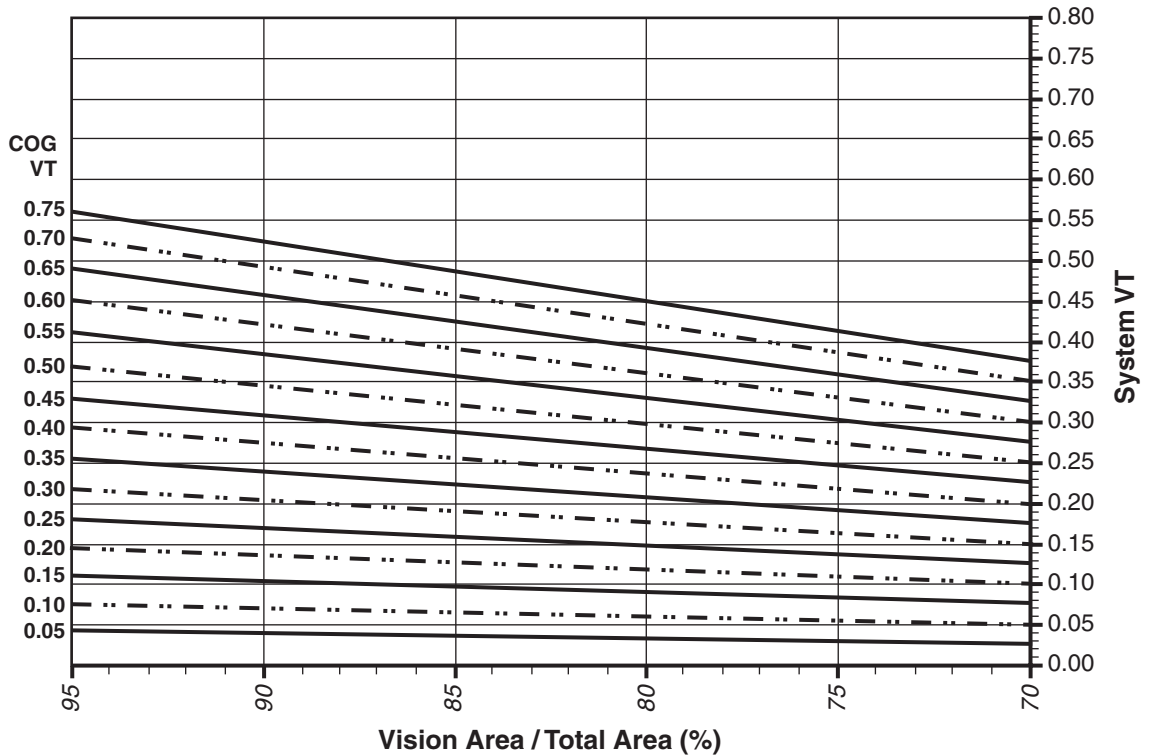
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AA™ 900 CASEMENT/PROJECT-OUT WINDOW

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



System Visible Transmittance (VT) vs Percent of Vision Area



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AA™ 900 CASEMENT/PROJECT-OUT WINDOW

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

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.61
0.46	0.60
0.44	0.59
0.42	0.59
0.40	0.58
0.38	0.57
0.36	0.56
0.34	0.55
0.32	0.54
0.30	0.53
0.28	0.52
0.26	0.51
0.24	0.50
0.22	0.49
0.20	0.48

SHGC Matrix²

Glass SHGC ³	Overall Glass U-Factor ⁴
0.75	0.42
0.70	0.39
0.65	0.37
0.60	0.34
0.55	0.32
0.50	0.29
0.45	0.26
0.40	0.24
0.35	0.21
0.30	0.18
0.25	0.16
0.20	0.13
0.15	0.10
0.10	0.08
0.05	0.05

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.40
0.70	0.37
0.65	0.34
0.60	0.32
0.55	0.29
0.50	0.26
0.45	0.24
0.40	0.21
0.35	0.19
0.30	0.16
0.25	0.13
0.20	0.11
0.15	0.08
0.10	0.05
0.05	0.03

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.
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