

FIXED WINDOW	3-9
SINGLE HUNG WINDOW	10-19
DOUBLE HUNG WINDOW	20-30
HORIZONTAL SLIDING WINDOW	31-45
RECEPTORS	46
ANCHORS	47
PANNING	48
WIND LOAD / DEADLOAD CHARTS	49-55
THERMAL CHARTS	56-131

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:

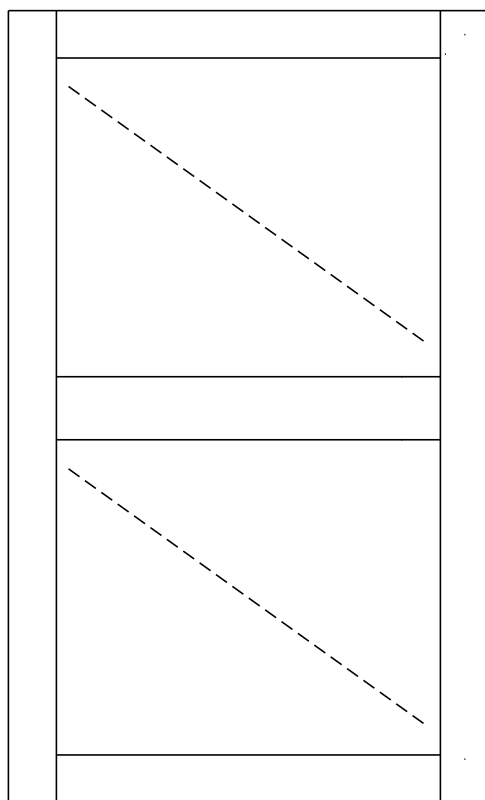
m – meter
cm – centimeter
mm – millimeter
s – second
Pa – pascal
MPa – megapascal

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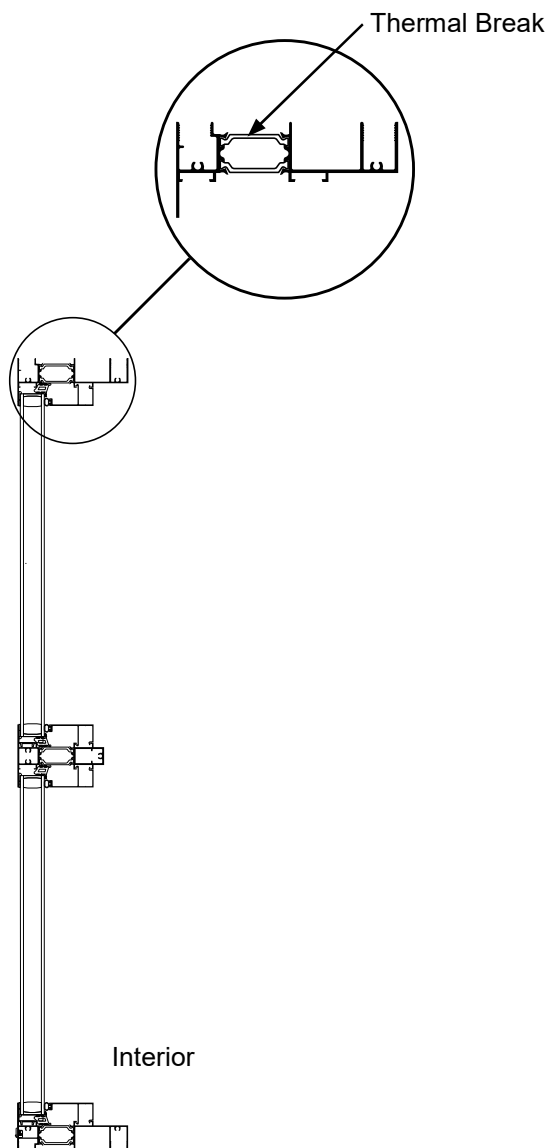
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Standard Features

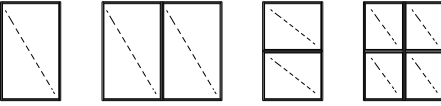
- High Performance Architectural Grade Window
- Tested to U.S. and Canadian Standards
- Polyamide Thermal Break
- Screw and Spline Frame Corner Joinery
- Factory Silicone Glazed
- Interior Applied Glazing Bead
- Architectural Anodized Finishes and Applied Coatings
- Interior and Exterior Dual Finish Options
- Two Year Manufacturer's Warranty
- Optional Bevel Face



Fixed Window



For specific product applications,
consult your Kawneer representative.

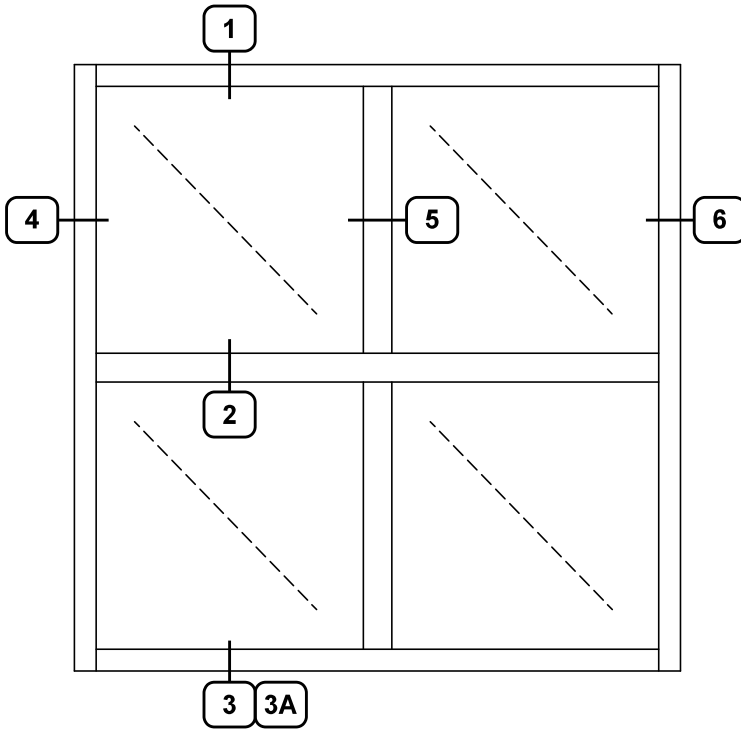
CLASS and GRADE	CLASS AW-PG70-FW
TESTING METHOD	AAMA / WDMA / CSA / 101 / I.S.2 / A440 (NAFS)
FRAME DEPTH	4-5/8" Overall Frame Depth
TYPICAL WALL THICKNESS	.070" Nominal
TYPICAL MAXIMUM WINDOW SIZE	60" x 99"
TYPICAL MINIMUM WINDOW SIZE	17" x 17"
TYPICAL CONFIGURATIONS	
STANDARD INFILL OPTIONS	1" and 1-1/2"
STANDARD HARDWARE	Not Applicable
OPTIONAL HARDWARE	Not Applicable
OTHER OPTIONS	Between the Glass Muntins Historic Beveled Exterior Glazed-in Muntins (1-1/2" max. overall thickness) Exterior and Interior Tape Applied Muntins Perimeters and Sills Exterior Pannings and Interior Trims True Intermediate Muntin Structural Mullions H-Mullion for vertical stacking Strap Anchors Male/Female horizontally stacked

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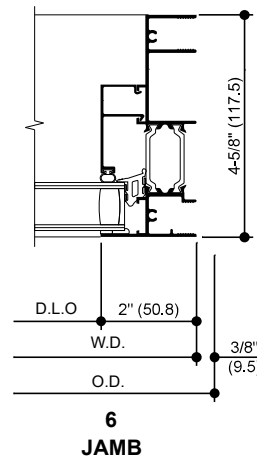
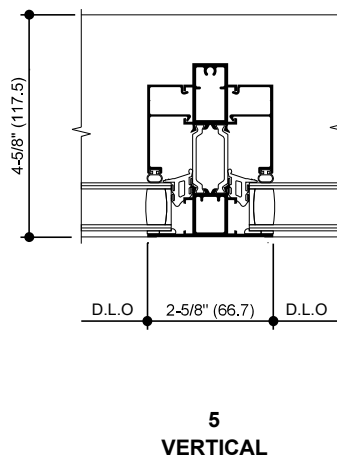
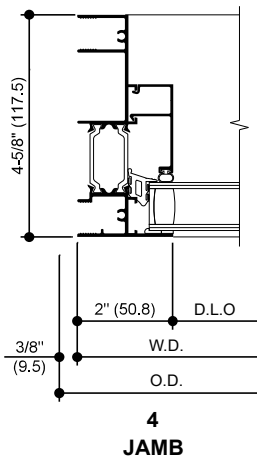
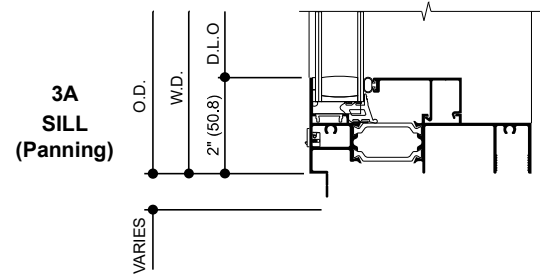
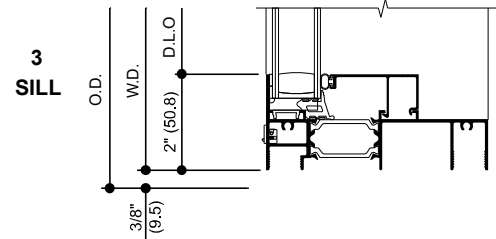
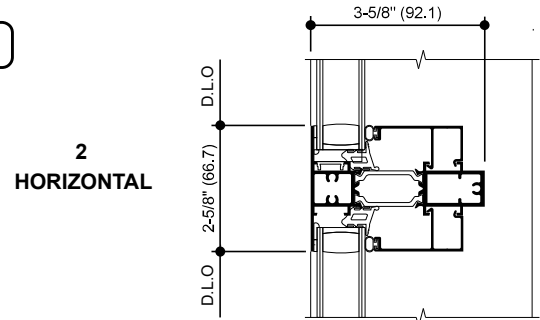
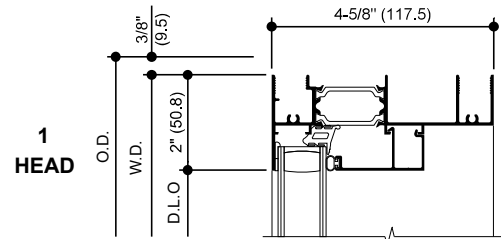
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 FIXED WINDOW (1" Double Glazed)



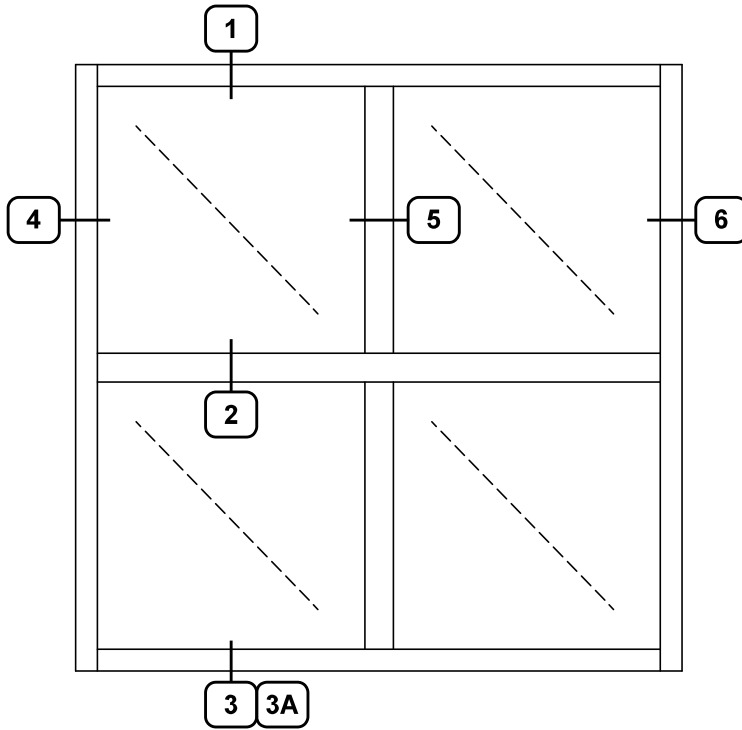
TYPICAL ELEVATION

Log onto www.kawneer.com for other configurations



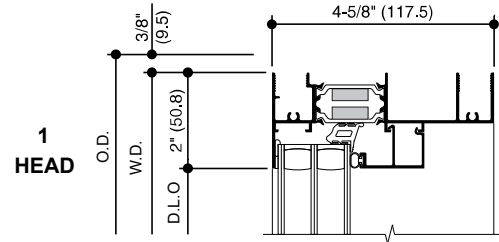
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 FIXED WINDOW (1-1/2" Triple Glazed)

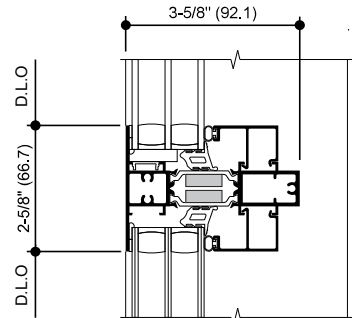


TYPICAL ELEVATION

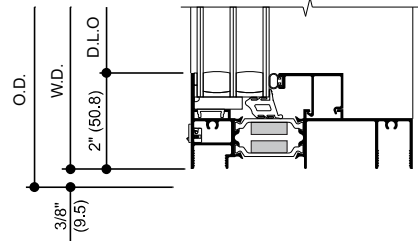
Log onto www.kawneer.com for other configurations



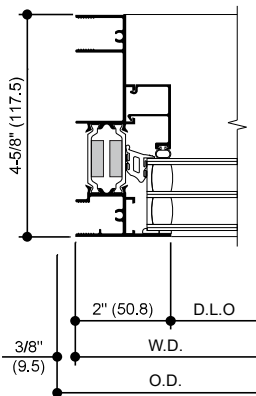
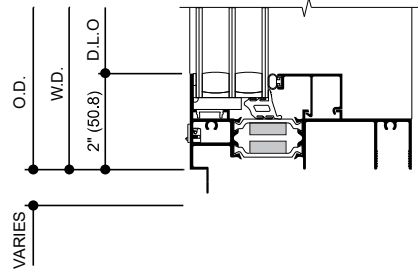
2 HORIZONTAL



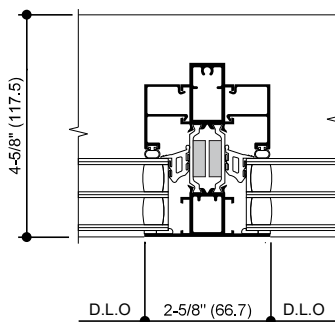
3 SILL



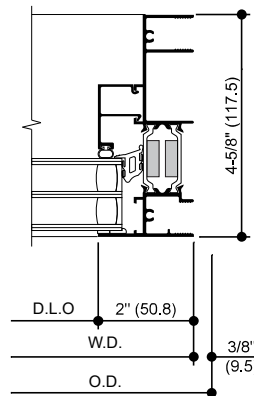
3A SILL (Panning)



4 JAMB



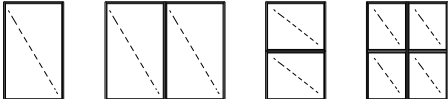
5 VERTICAL



6 JAMB

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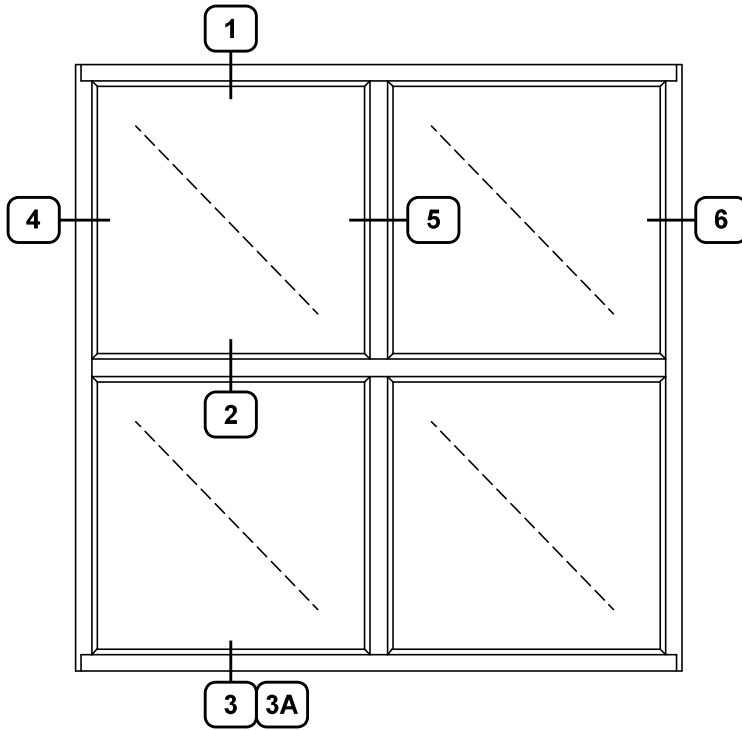
CLASS and GRADE	CLASS AW-PG70-FW
TESTING METHOD	AAMA / WDMA / CSA / 101 / I.S.2 / A440 (NAFS)
FRAME DEPTH	4-5/8" Overall Frame Depth
TYPICAL WALL THICKNESS	.070" Nominal
TYPICAL MAXIMUM WINDOW SIZE	60" x 99"
TYPICAL MINIMUM WINDOW SIZE	17" x 17"
TYPICAL CONFIGURATIONS	
STANDARD INFILL OPTIONS	1" and 1-1/2"
STANDARD HARDWARE	Not Applicable
OPTIONAL HARDWARE	Not Applicable
OTHER OPTIONS	Between the Glass Muntins Exterior and Interior Tape Applied Muntins Perimeters and Sills Exterior Pannings and Interior Trims True Intermediate Muntin Structural Mullions H-Mullion for vertical stacking Strap Anchors Male/Female horizontally stacked

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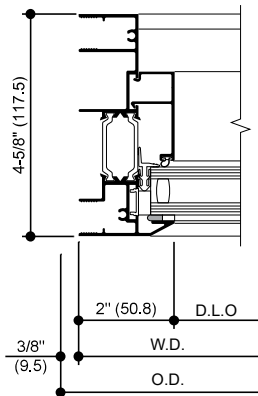
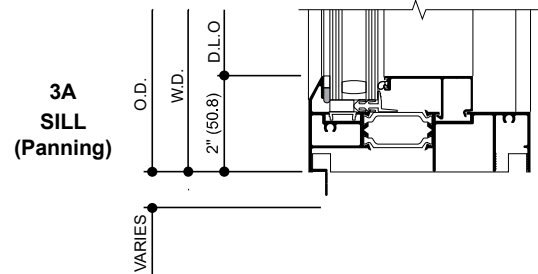
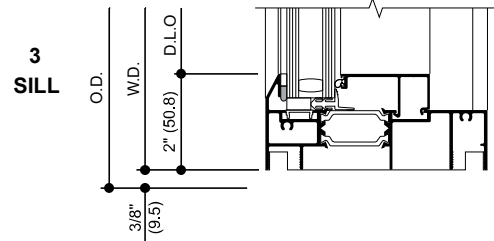
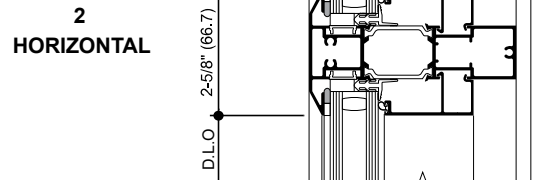
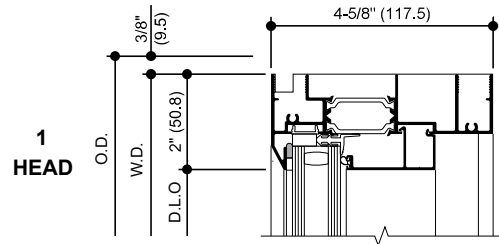
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 FIXED WINDOW (1" Double Glazed)

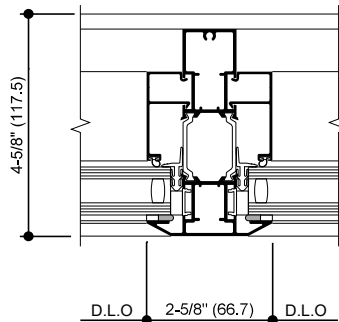


TYPICAL ELEVATION

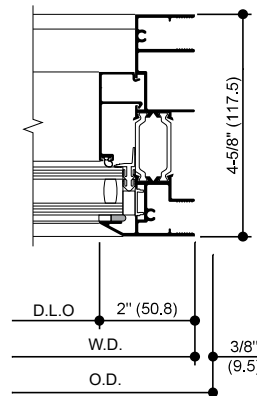
Log onto www.kawneer.com for other configurations



4
JAMB



5
VERTICAL



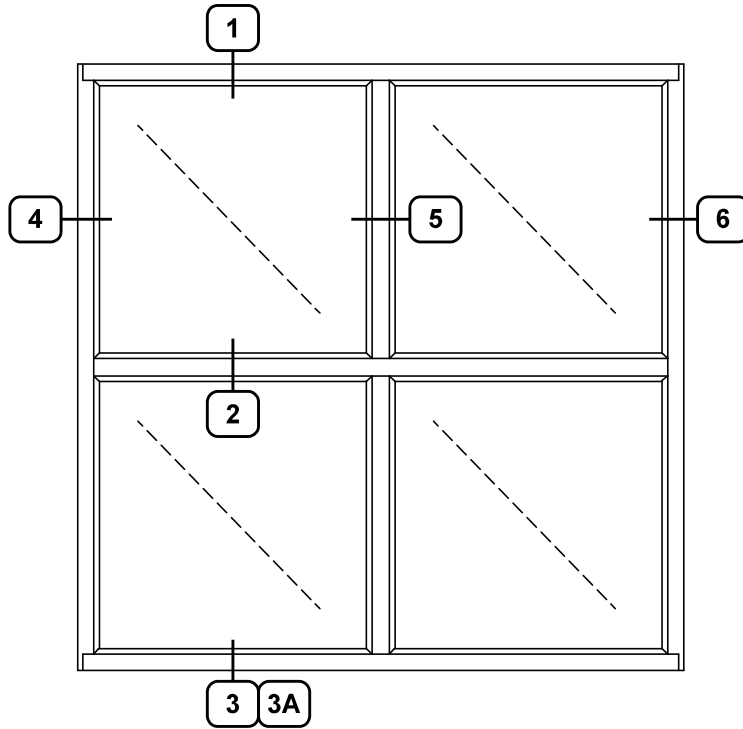
6
JAMB

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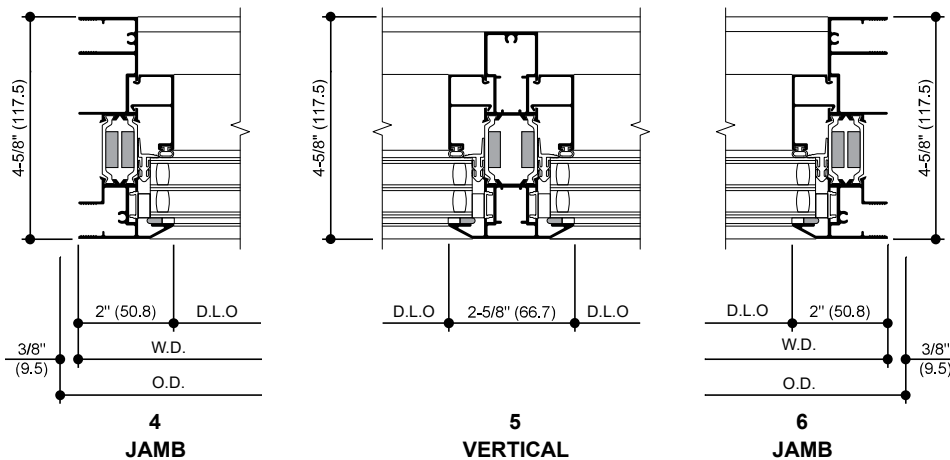
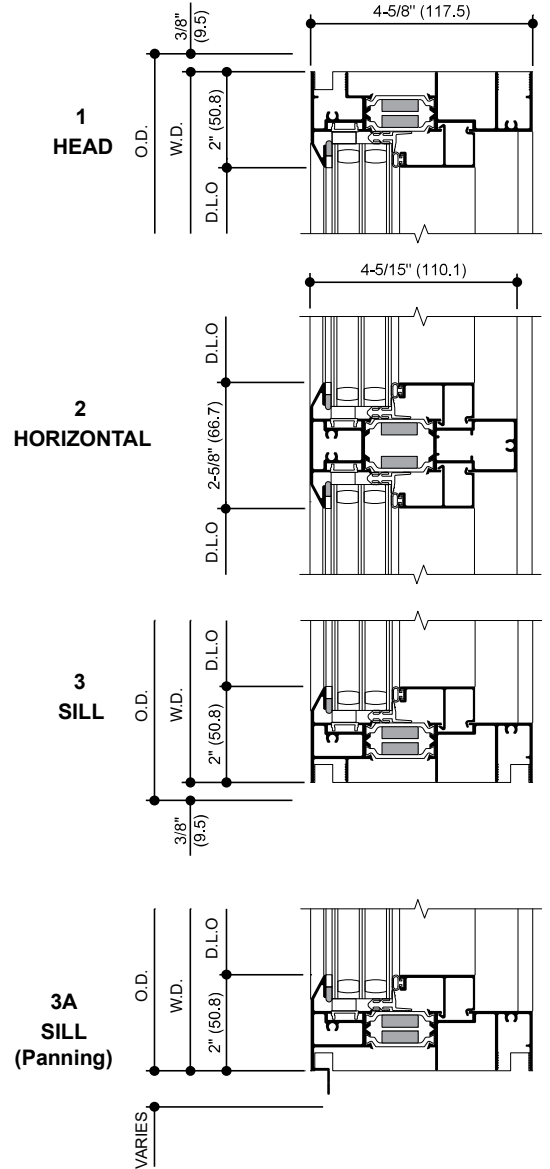
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 FIXED WINDOW (1-1/2" Triple Glazed)



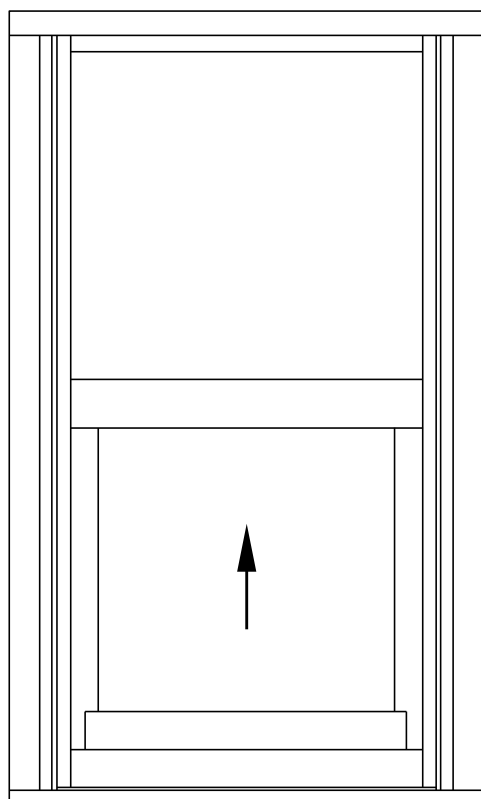
TYPICAL ELEVATION

Log onto www.kawneer.com for other configurations

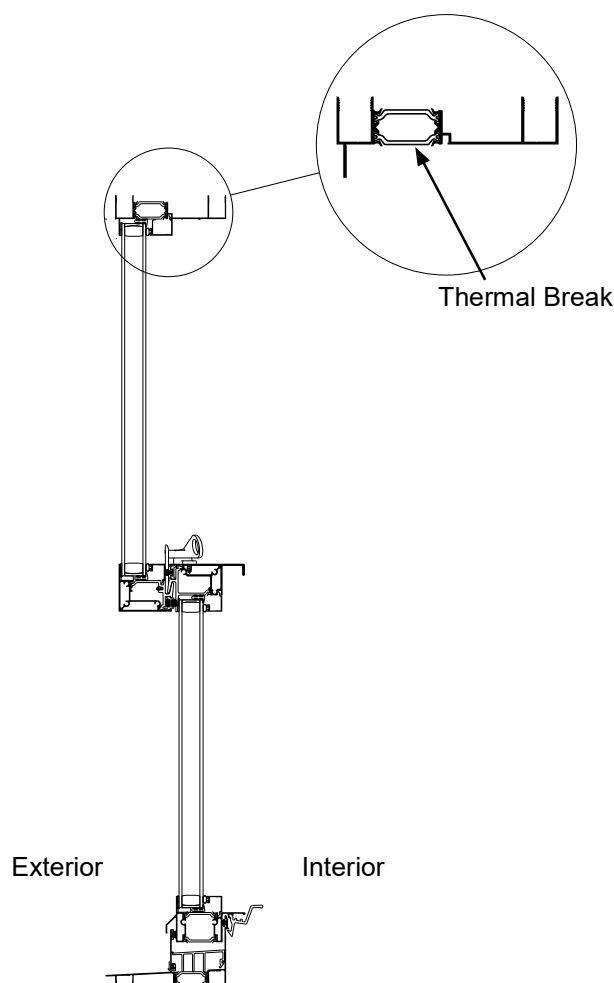


Standard Features

- High Performance Architectural Grade Window
- Tested to U.S. and Canadian Standards
- Polyamide Thermal Break
- Screw and Spline Frame Corner Joinery
- Factory Silicone Glazed
- Interior Applied Glazing Bead
- Architectural Anodized Finishes and Applied Coatings
- Interior and Exterior Dual Finish Options
- Two Year Manufacturer's Warranty
- Optional Bevel Face



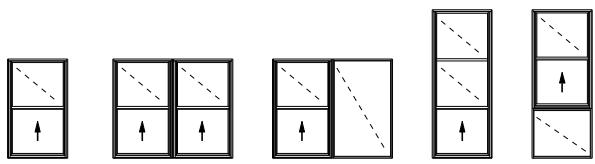
Single Hung Window



For specific product applications,
consult your Kawneer representative.

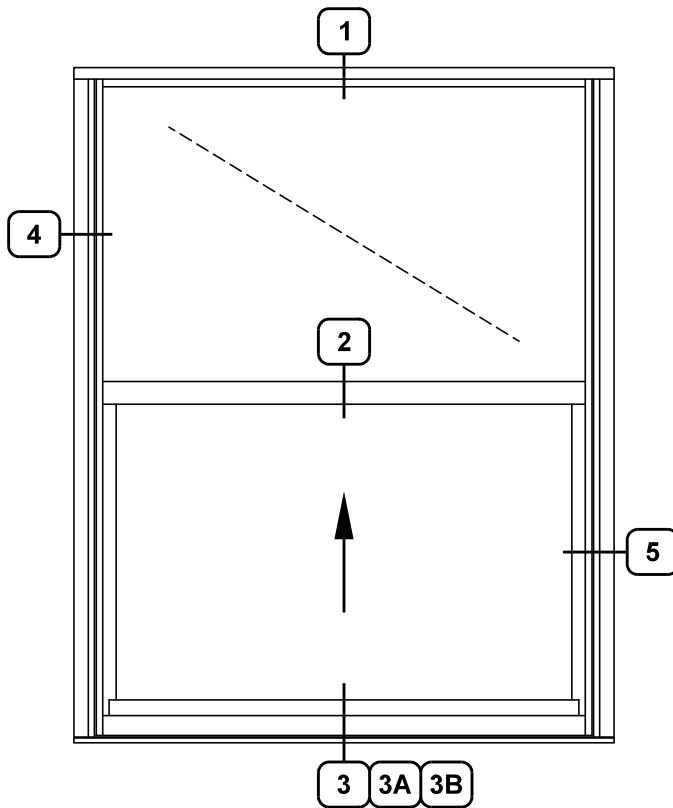
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CLASS and GRADE	CLASS AW-PG65-H
TESTING METHOD	AAMA / WDMA / CSA / 101 / I.S.2 / A440 (NAFS)
FRAME DEPTH	4-5/8" Overall Frame Depth
TYPICAL WALL THICKNESS	.070" Nominal
TYPICAL MAXIMUM WINDOW SIZE	60" x 99"
TYPICAL MINIMUM WINDOW SIZE	24" x 36"
TYPICAL CONFIGURATIONS	
STANDARD INFILL OPTIONS	1" and 1-1/2"
STANDARD HARDWARE	Heavy Duty Balances White Bronze Sweep Locks Sash Stops
OPTIONAL HARDWARE	Sill Auto Locks
OTHER OPTIONS	Between the Glass Muntins Historic Beveled Exterior Glazed-in Muntins (1-1/2" max. overall thickness) Exterior and Interior Tape Applied Muntins Perimeters and Sills Exterior Pannings and Interior Trims True Intermediate Muntin Structural Mullions Male /Female horizontally stacked H-Mullion for vertical stacking Tri-lite Configuration Strap Anchors

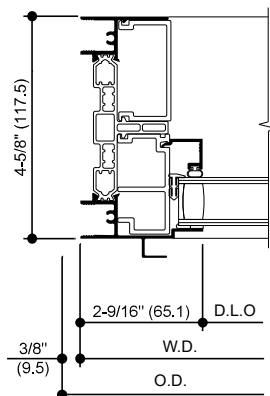
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 SINGLE HUNG WINDOW (1" Double Glazed)

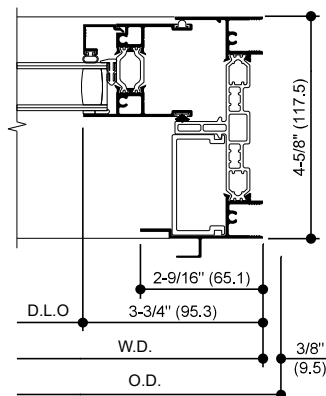


TYPICAL ELEVATION

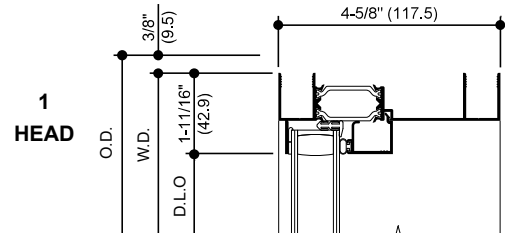
Log onto www.kawneer.com for other configurations



**4
FIXED JAMB**

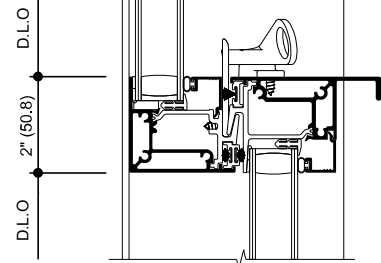


**5
OPERABLE JAMB**

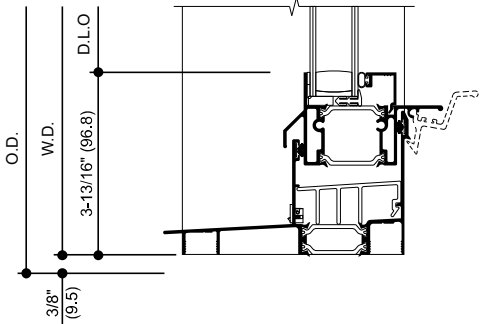


**1
HEAD**

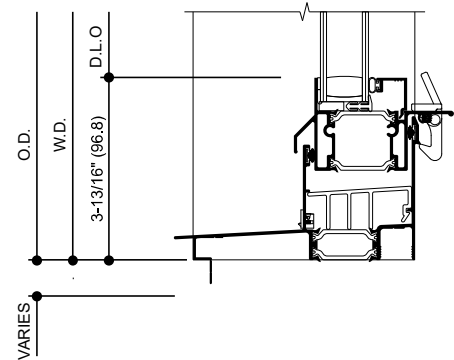
**2
HORIZONTAL**



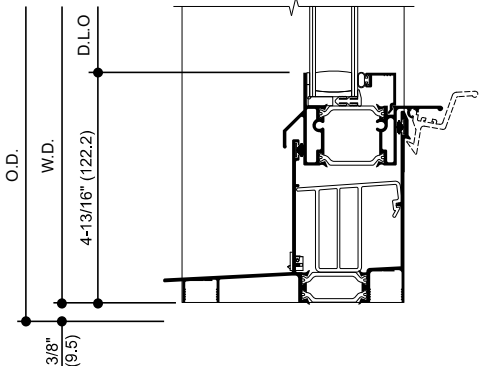
**3
SILL
10 PSF**



**3A
SILL
10 PSF
(Panning)**



**3B
SILL
15 PSF**



Note:

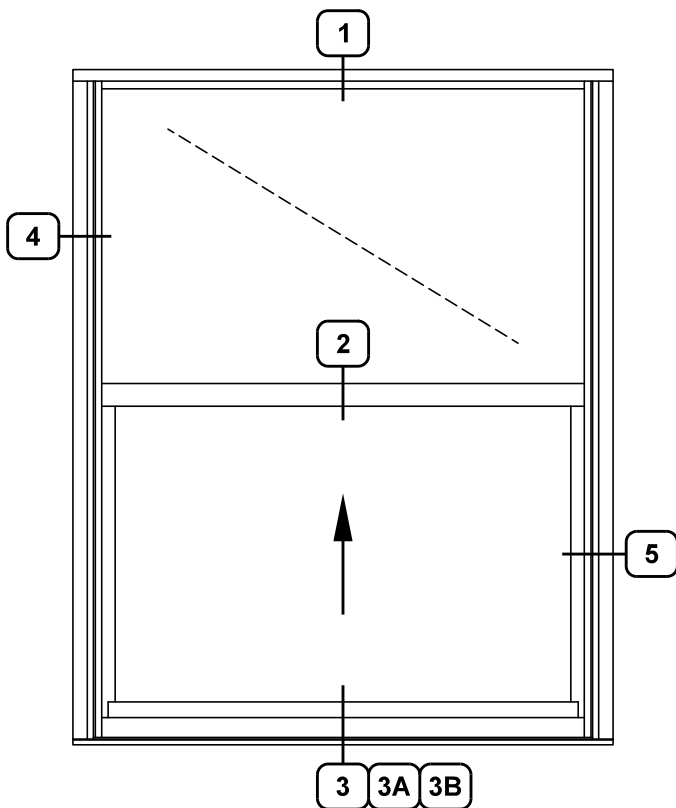
15 PSF sill also available for use with panning.

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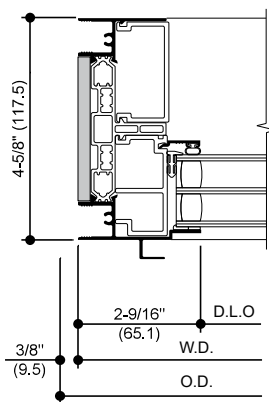
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 SINGLE HUNG WINDOW (1-1/2" Triple Glazed)

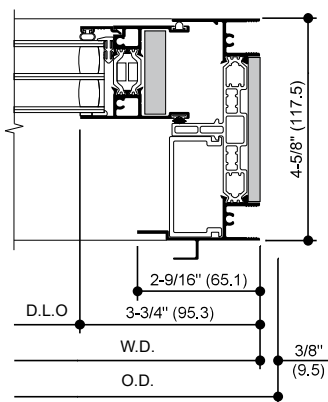


TYPICAL ELEVATION

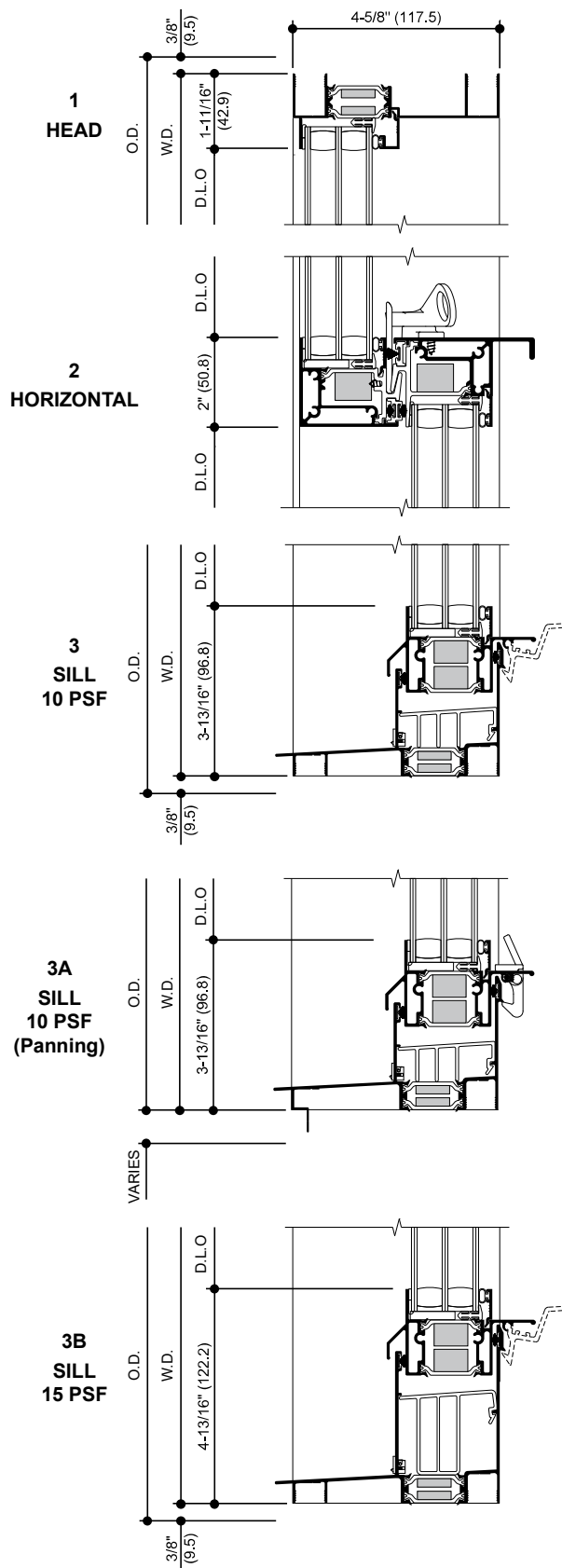
Log onto www.kawneer.com for other configurations



4
FIXED JAMB



5
OPERABLE JAMB

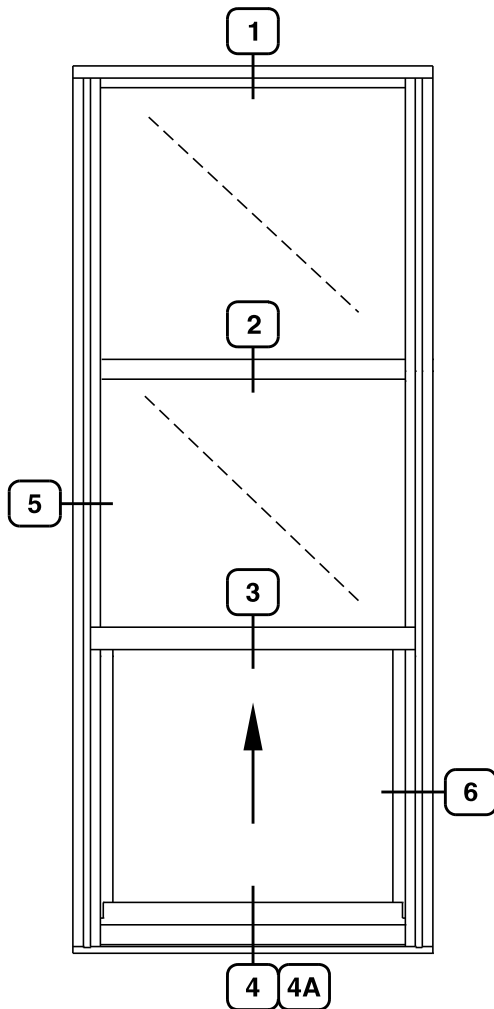


Note:

15 PSF sill also available for use with panning.

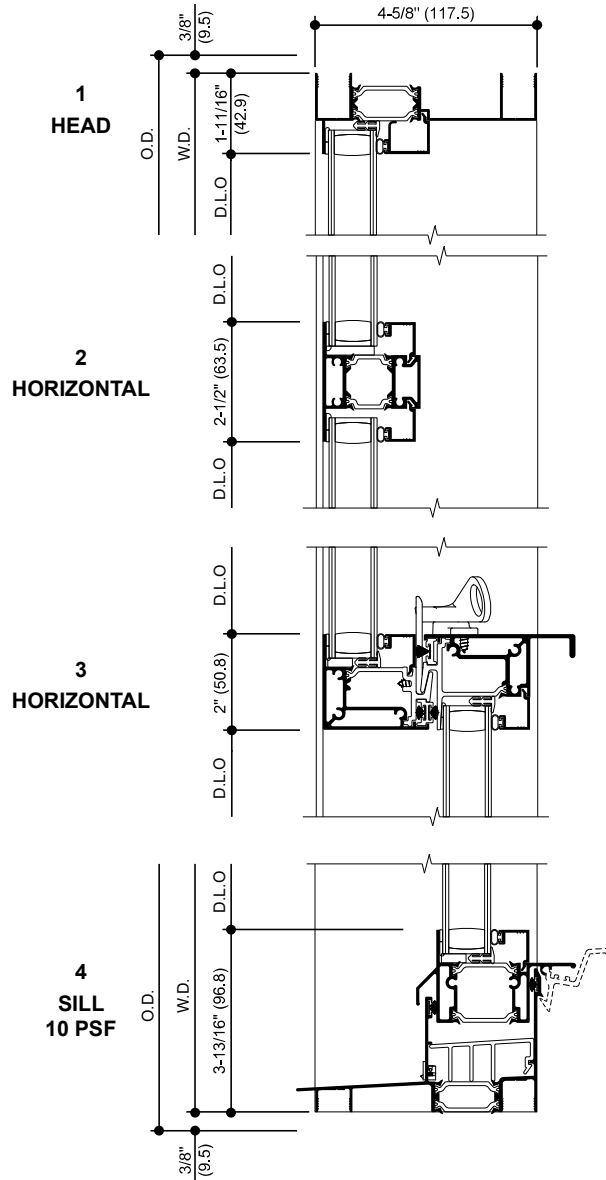
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 SINGLE HUNG WINDOW (Tri-Lite 1" Double Glazed)



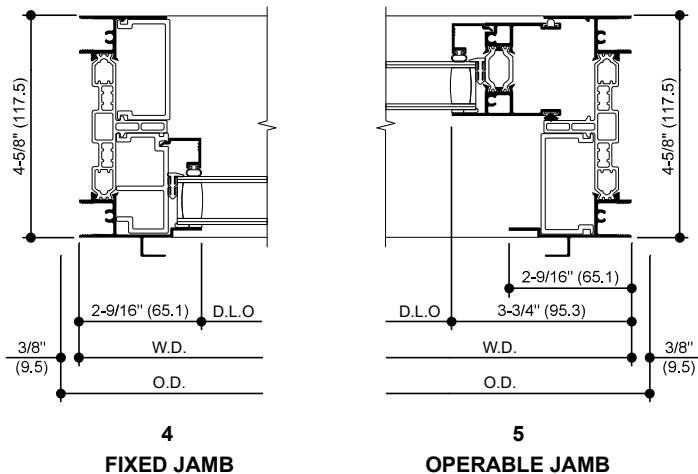
TYPICAL ELEVATION

Log onto www.kawneer.com for other configurations

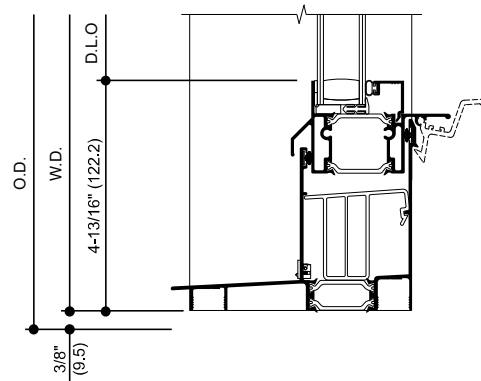


Note:

10 PSF sill also available for use with panning.



4A
SILL
15 PSF



Note:

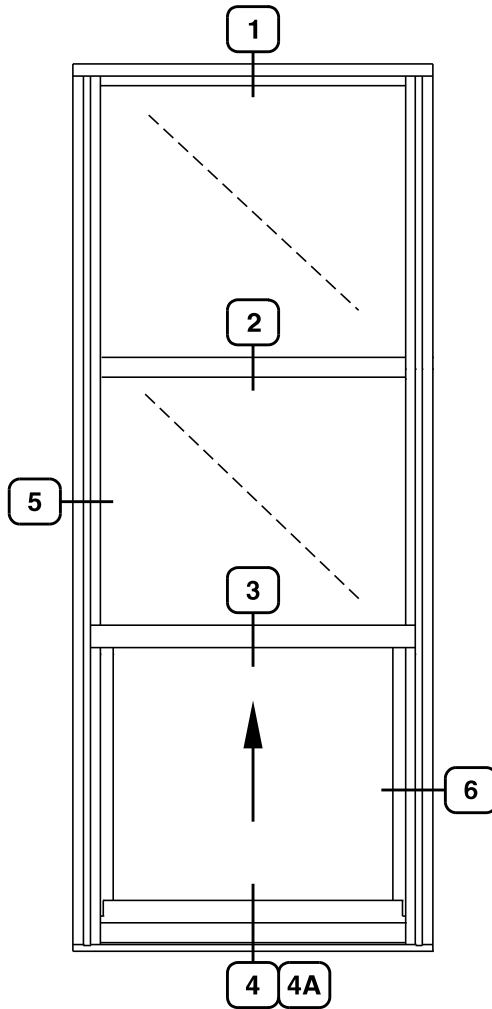
15 PSF sill also available for use with panning.

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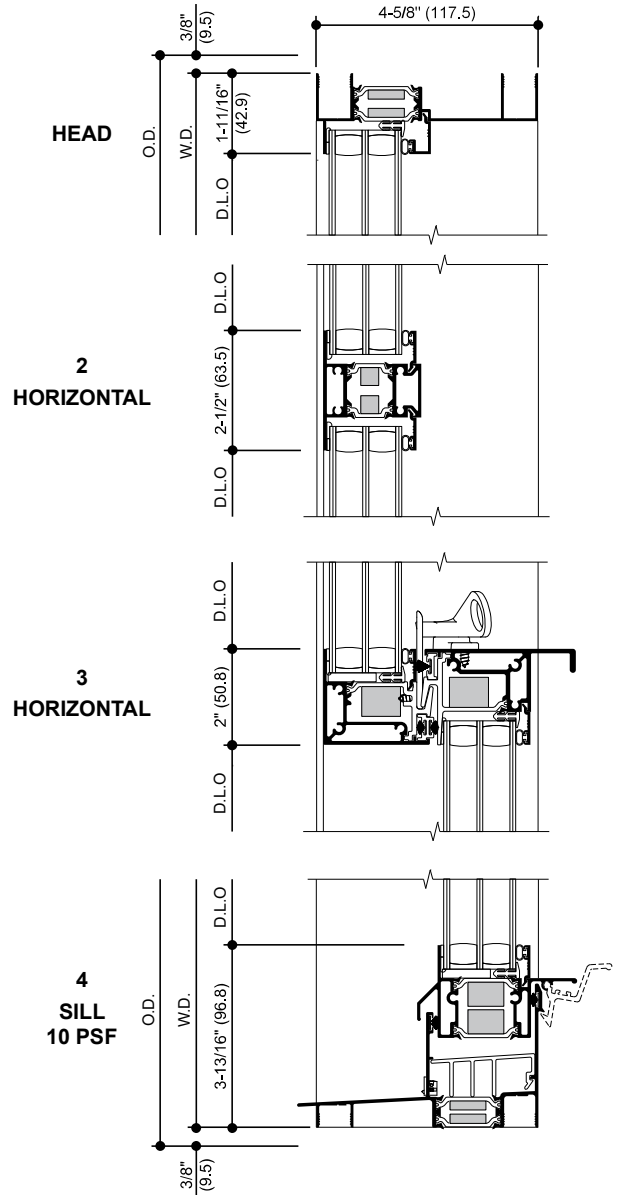
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 SINGLE HUNG WINDOW (Tri-Lite 1-1/2" Triple Glazed)

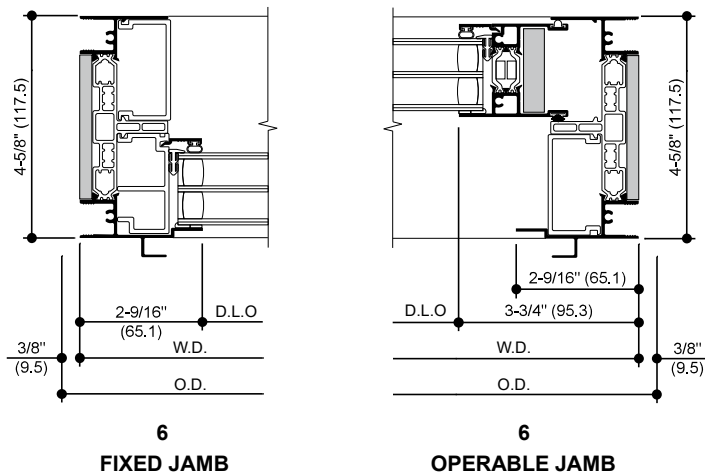


TYPICAL ELEVATION

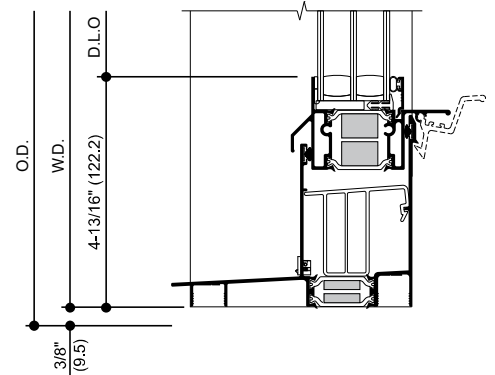
Log onto www.kawneer.com for other configurations



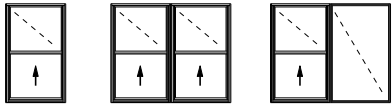
Note:
10 PSF sill also available for use with panning.



4A SILL 15 PSF



Note:
15 PSF sill also available for use with panning.

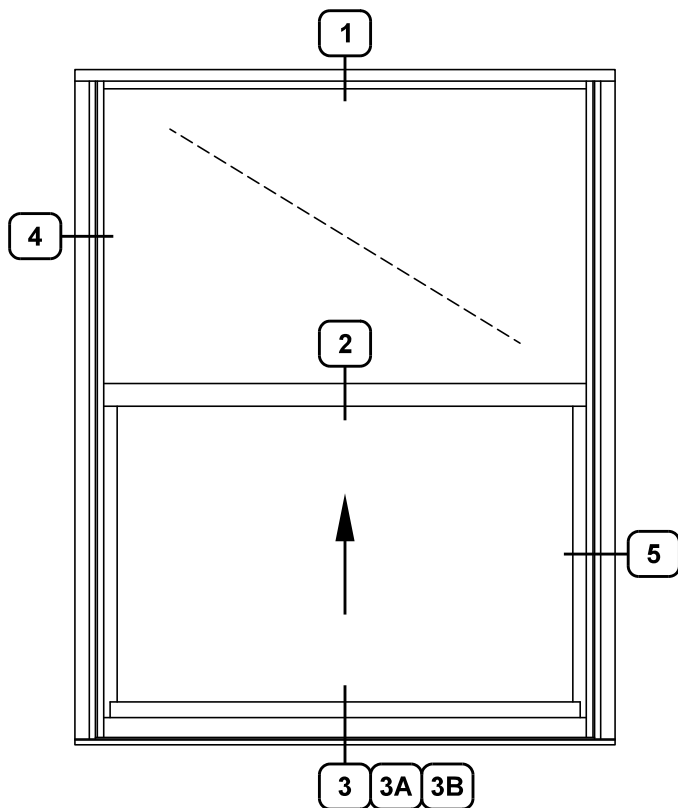
CLASS and GRADE	CLASS AW-PG65-H
TESTING METHOD	AAMA / WDMA / CSA / 101 / I.S.2 / A440 (NAFS)
FRAME DEPTH	4-5/8" Overall Frame Depth
TYPICAL WALL THICKNESS	.070" Nominal
TYPICAL MAXIMUM WINDOW SIZE	60" x 99"
TYPICAL MINIMUM WINDOW SIZE	24" x 36"
TYPICAL CONFIGURATIONS	
STANDARD INFILL OPTIONS	1" and 1-1/4"
STANDARD HARDWARE	Heavy Duty Balances White Bronze Sweep Locks Sash Stops
OPTIONAL HARDWARE	Sill Auto Locks
OTHER OPTIONS	Between the Glass Muntins Exterior and Interior Tape Applied Muntins Perimeters and Sills Exterior Pannings and Interior Trims True Intermediate Muntin Structural Mullions Male /Female horizontally stacked H-Mullion for vertical stacking Tri-lite Configuration Strap Anchors

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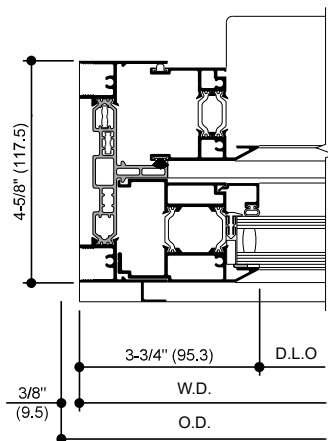
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 SINGLE HUNG WINDOW (1" Double Glazed)

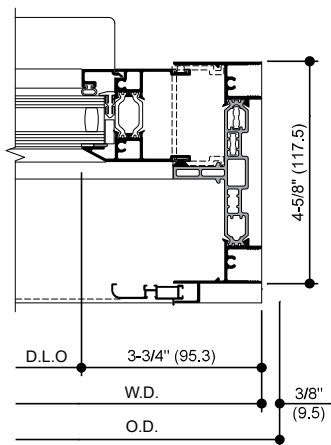


TYPICAL ELEVATION

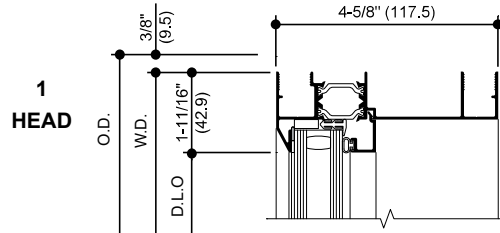
Log onto www.kawneer.com for other configurations



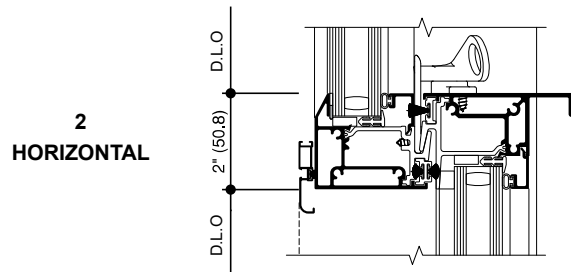
4
FIXED JAMB



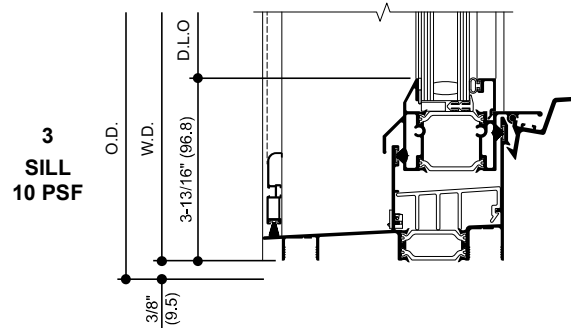
5
OPERABLE JAMB



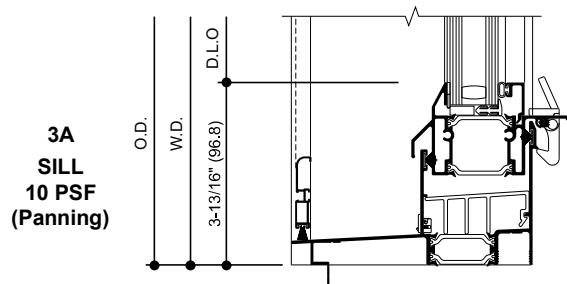
1
HEAD



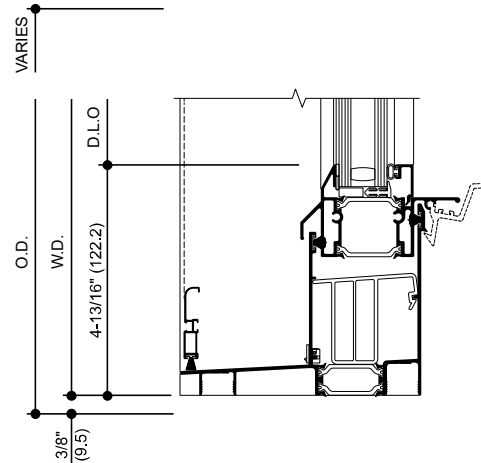
2
HORIZONTAL



3
SILL
10 PSF



3A
SILL
10 PSF
(Panning)



3B
SILL
15 PSF

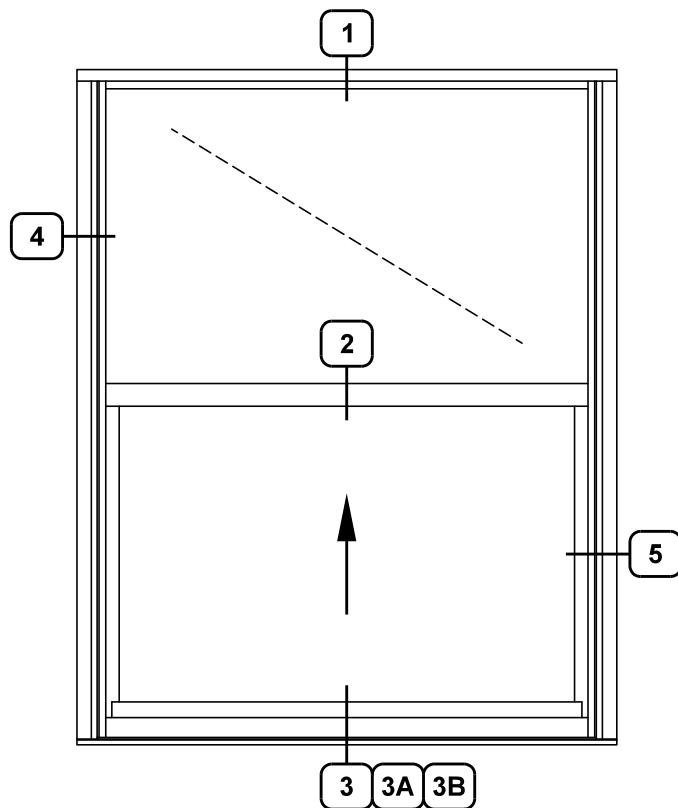
Note:
15 PSF sill also available for use with panning.

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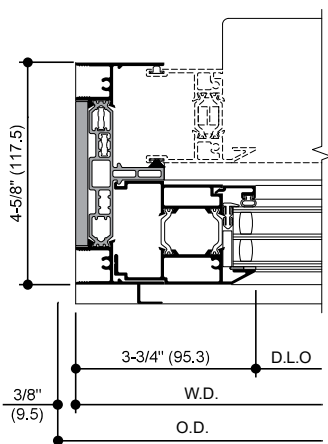
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 SINGLE HUNG WINDOW (1-1/4" Triple Glazed)

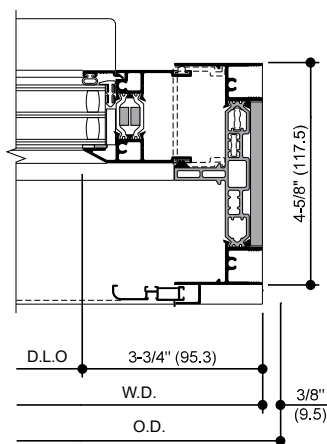


TYPICAL ELEVATION

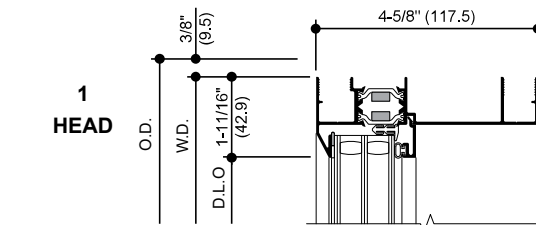
Log onto www.kawneer.com for other configurations



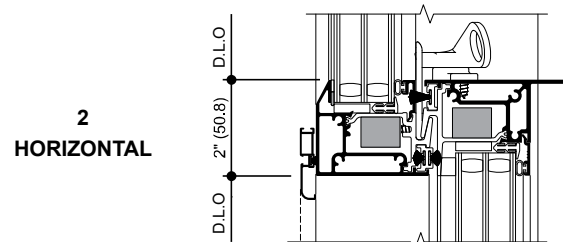
4
FIXED JAMB



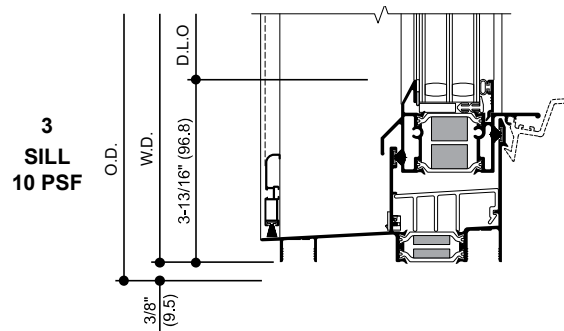
5
OPERABLE JAMB



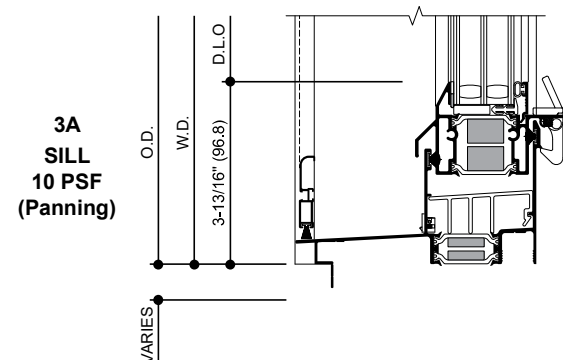
1
HEAD



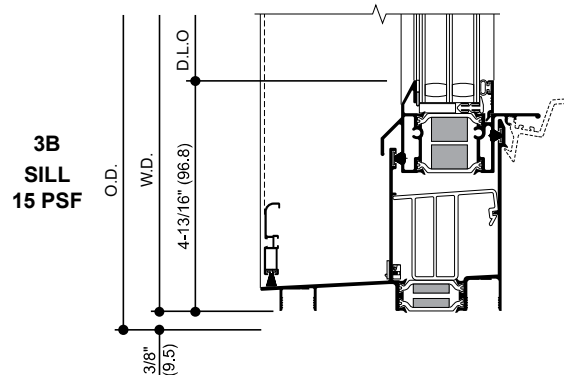
2
HORIZONTAL



3
SILL
10 PSF



3A
SILL
10 PSF
(Panning)



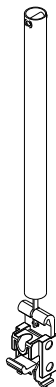
3B
SILL
15 PSF

Note:
15 PSF sill also available for use with panning.

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HEAVY DUTY BALANCES



A class 5 adjustable spiral balance with excellent operating forces capable of balancing heavier sash weights. The balance utilizes stainless steel components and is cycle tested for longevity.

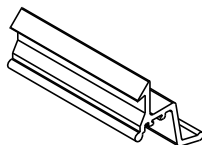
Class 6 is optional.

SWEEP LOCK AND KEEPER



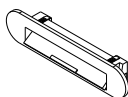
White Bronze sweep locks and keepers with a durable brushed nickel finish and cycle tested for longevity.

AUTO LOCK



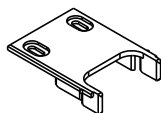
An optional spring operated auto lock conveniently located under the sash lift handle or an optional white bronze spring operated autolock located on the handle. The lock automatically engages the integral sill keeper upon closing the sash.

COVERED WEEPS



Weep with an integral hinged cover to allow maximum drainage of infiltrating water with a positive closing cover to block drafts and insects. The weep is available in black and white finishes.

SASH CAMS



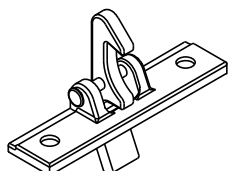
Adjustable glass filled nylon cams located left and right on the sash ensure proper alignment and smooth operation.

SASH STOPS



Black rigid vinyl sash stops are inserted into the vertical jambs without exposed fasteners to prevent excessive sash travel.

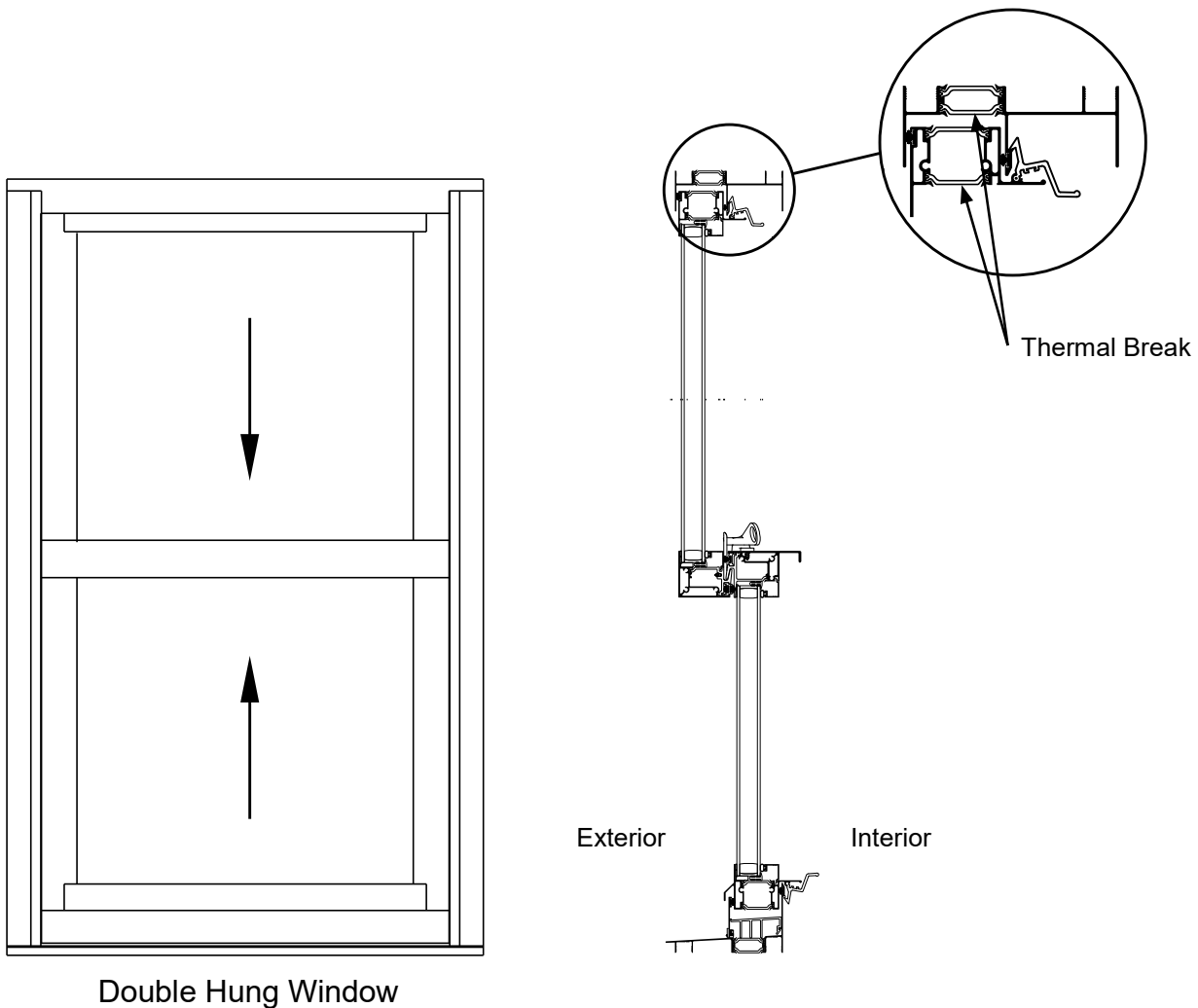
WHITE BRONZE SILL AUTO LOCK



A White Bronze spring operated auto lock located on the lower sash. The lock automatically engages the integral keeper securing the lower sash in the closed position. The auto lock is an option for the lower sash.

Standard Features

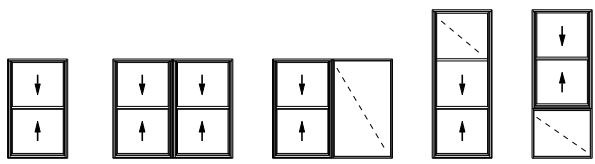
- High Performance Architectural Grade Window
- Tested to U.S. and Canadian Standards
- Polyamide Thermal Break
- Screw and Spline Frame Corner Joinery
- Factory Silicone Glazed
- Interior Applied Glazing Bead
- Architectural Anodized Finishes and Applied Coatings
- Interior and Exterior Dual Finish Options
- Two Year Manufacturer's Warranty
- Optional Bevel Face



For specific product applications,
consult your Kawneer representative.

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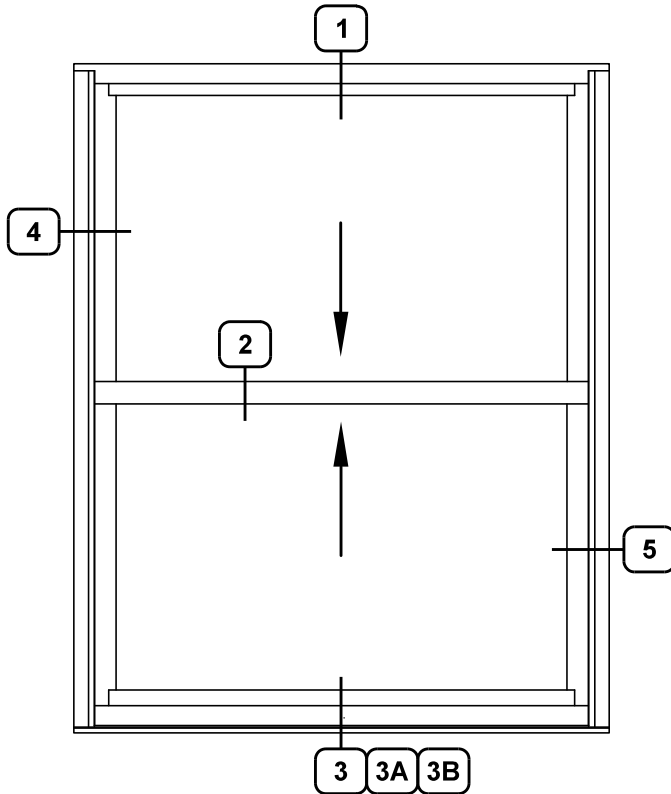
CLASS and GRADE	CLASS AW-PG65-H
TESTING METHOD	AAMA / WDMA / CSA / 101 / I.S.2 / A440 (NAFS)
FRAME DEPTH	4-5/8" Overall Frame Depth
TYPICAL WALL THICKNESS	.070" Nominal
TYPICAL MAXIMUM WINDOW SIZE	60" x 99"
TYPICAL MINIMUM WINDOW SIZE	24" x 36"
TYPICAL CONFIGURATIONS	
STANDARD INFILL OPTIONS	1" and 1-1/2"
STANDARD HARDWARE	Heavy Duty Balances Zinc Die Cast Sweep Locks Sash Stops Aluminum Upper Sash Auto Lock
OPTIONAL HARDWARE	Aluminum or White Bronze Sill Auto Locks
OTHER OPTIONS	Between the Glass Muntins Historic Beveled Exterior Glazed-in Muntins (1-1/2" max. overall thickness) Exterior and Interior Tape Applied Muntins Perimeters and Sills Exterior Pannings and Interior Trims True Intermediate Muntin Structural Mullions Male/Female horizontally stacked H-Mullion for vertical stacking Strap Anchors

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

AA™ 5450 DOUBLE HUNG WINDOW (1" Double Glazed)

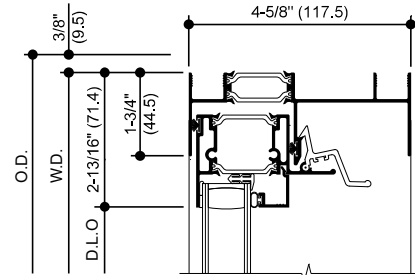


TYPICAL ELEVATION

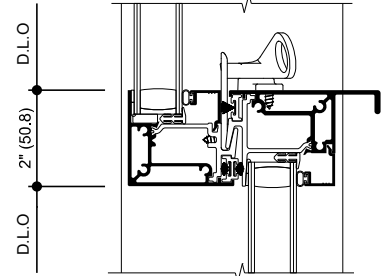
Log onto www.kawneer.com for other configurations



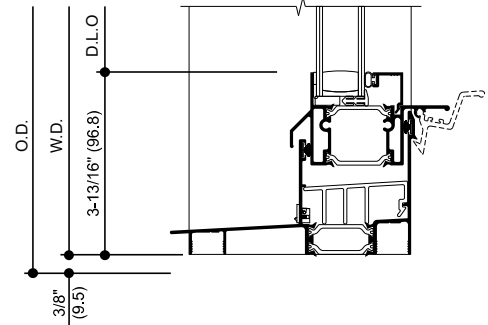
1 HEAD



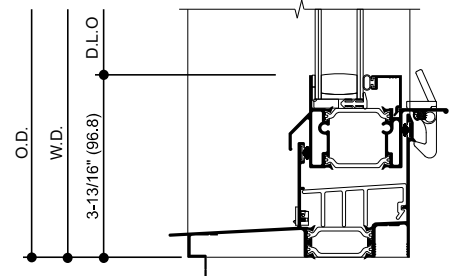
2 HORIZONTAL



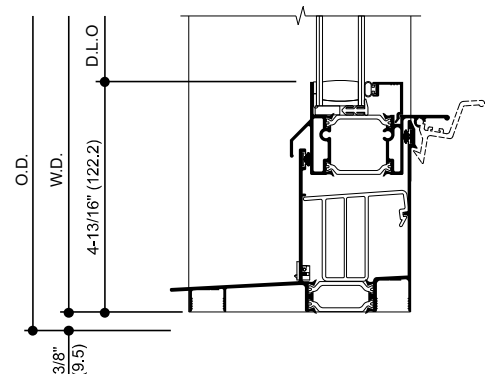
3 SILL 10 PSF



3A SILL 10 PSF (Panning)



3B SILL 15 PSF



Note:

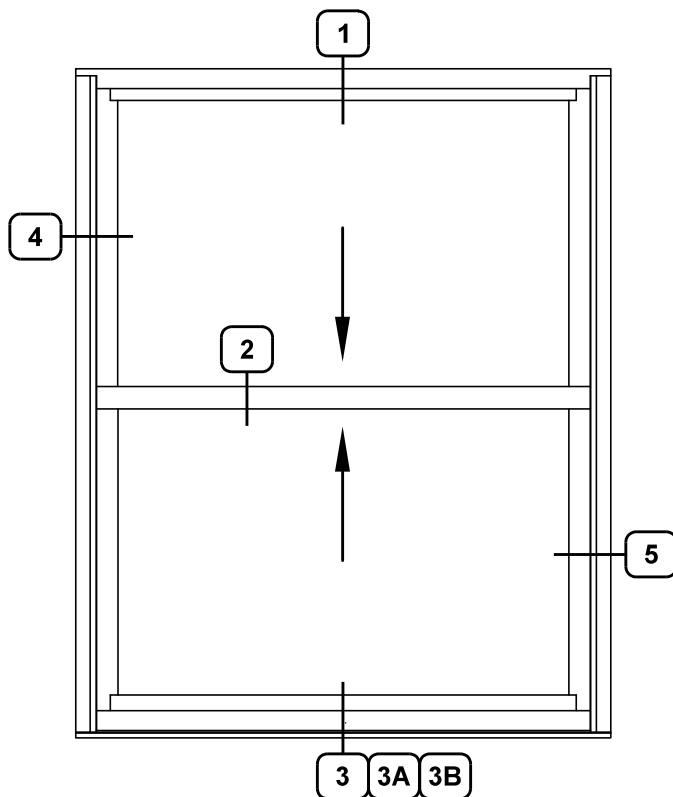
15 PSF sill also available for use with panning.

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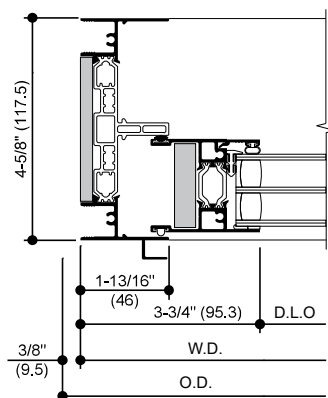
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 DOUBLE HUNG WINDOW (1-1/2" Triple Glazed)

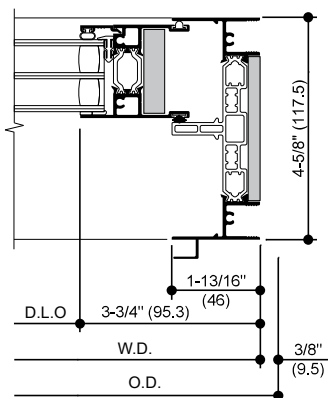


TYPICAL ELEVATION

Log onto www.kawneer.com for other configurations

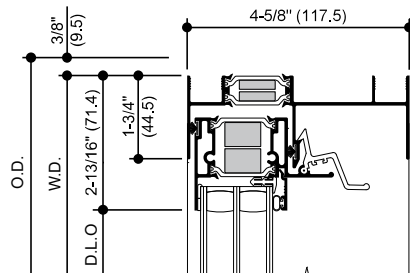


**4
FIXED JAMB**

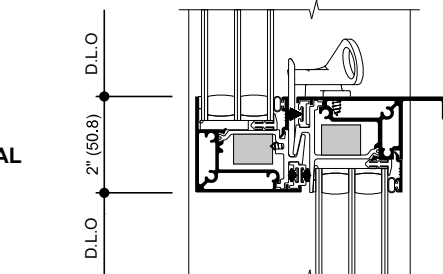


**5
OPERABLE JAMB**

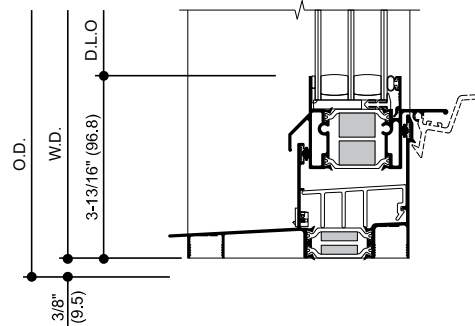
**1
HEAD**



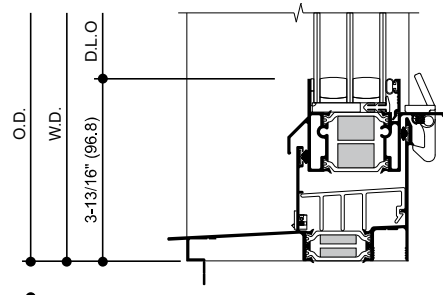
**2
HORIZONTAL**



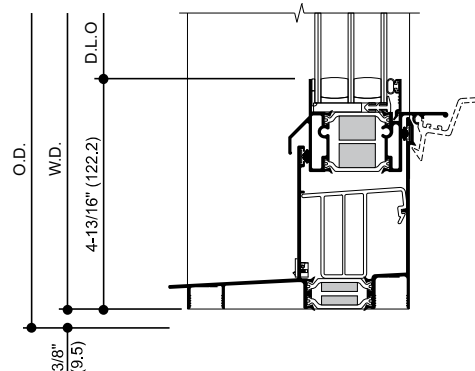
**3
SILL
10 PSF**



**3A
SILL
10 PSF
(Panning)**



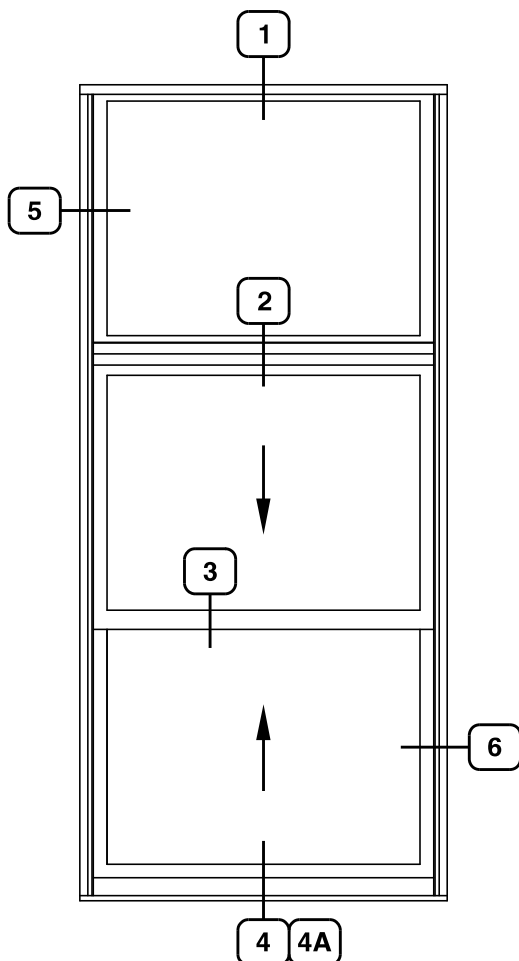
**3B
SILL
15 PSF**



Note:
15 PSF sill also available for use with panning.

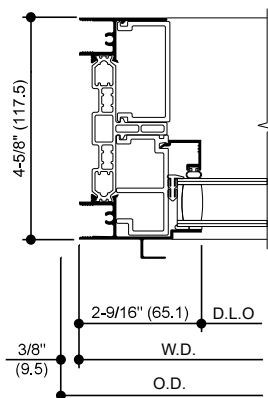
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 DOUBLE HUNG WINDOW (Tri-Lite 1" Double Glazed)

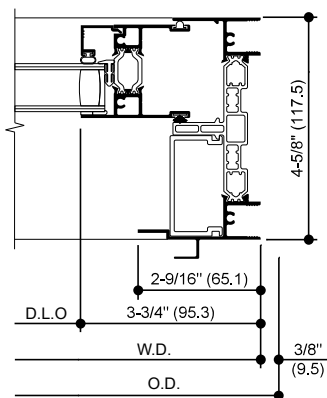


TYPICAL ELEVATION

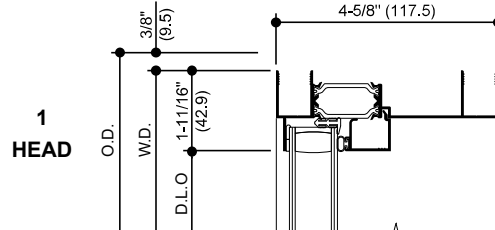
Log onto www.kawneer.com for other configurations



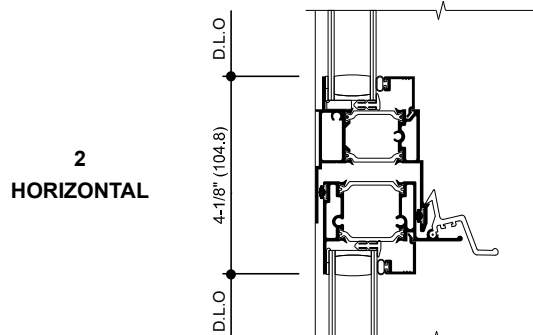
5
FIXED JAMB



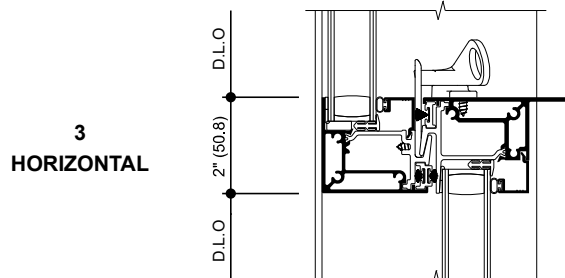
6
OPERABLE JAMB



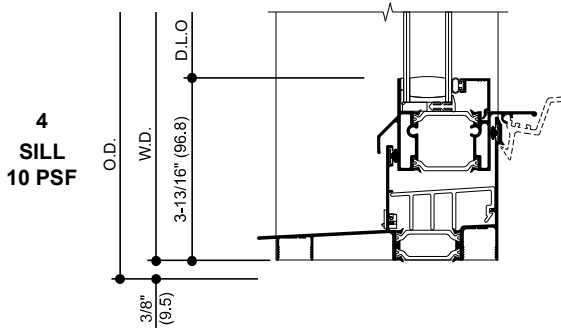
1
HEAD



2
HORIZONTAL

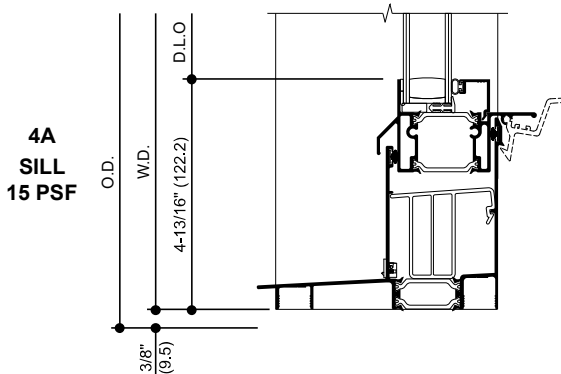


3
HORIZONTAL



4
SILL
10 PSF

Note:
10 PSF sill also available for use with panning.



4A
SILL
15 PSF

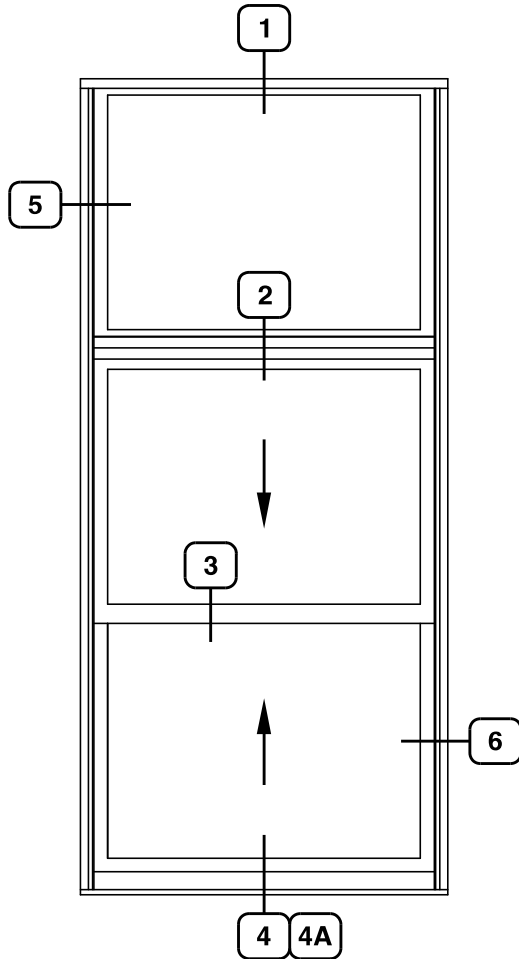
Note:
15 PSF sill also available for use with panning.

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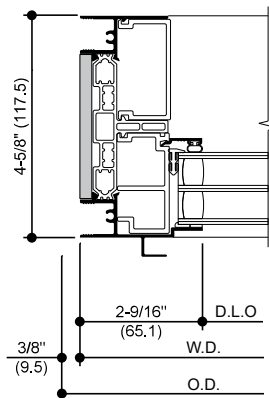
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 DOUBLE HUNG WINDOW (Tri-Lite 1-1/2" Triple Glazed)

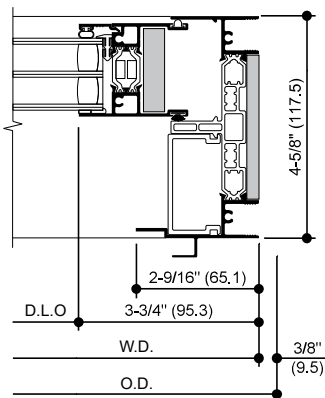


TYPICAL ELEVATION

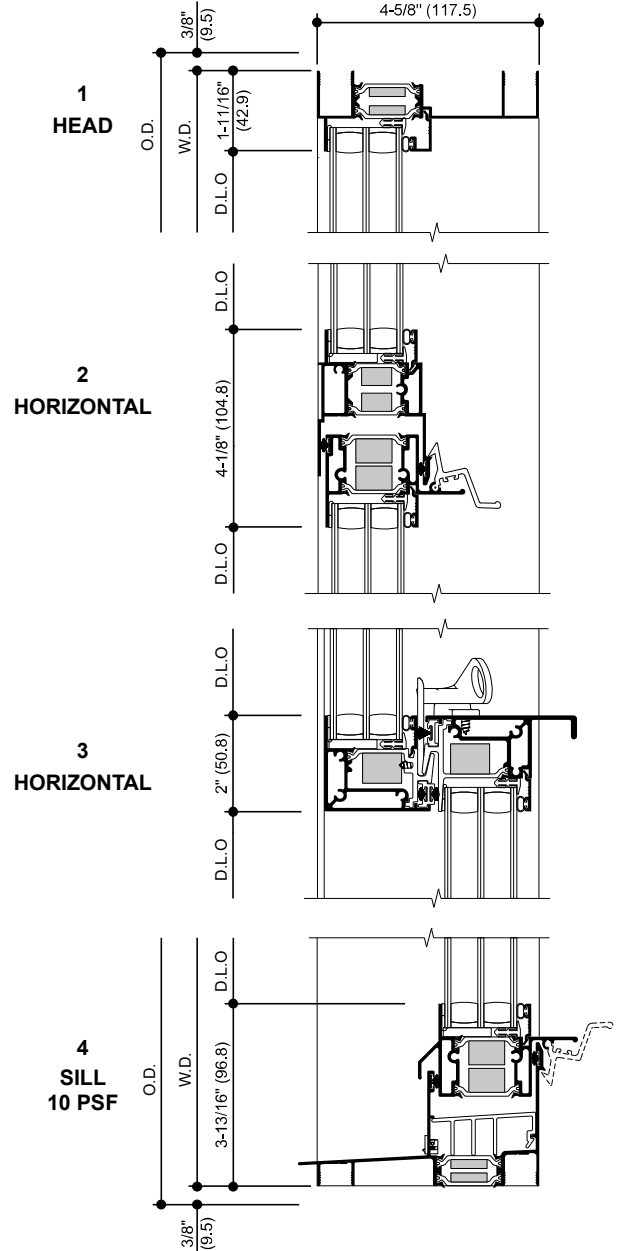
Log onto www.kawneer.com for other configurations



5
FIXED JAMB

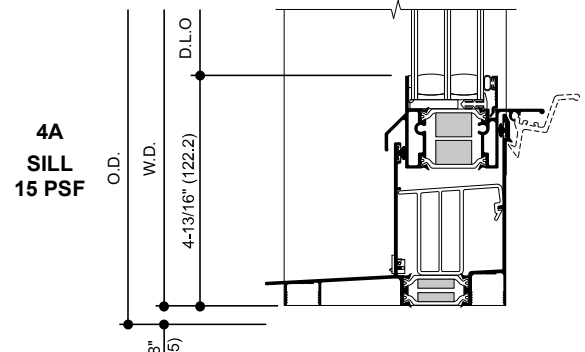


6
OPERABLE JAMB



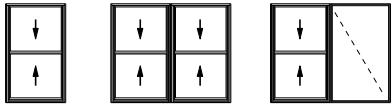
Note:

10 PSF sill also available for use with panning.



Note:

15 PSF sill also available for use with panning.

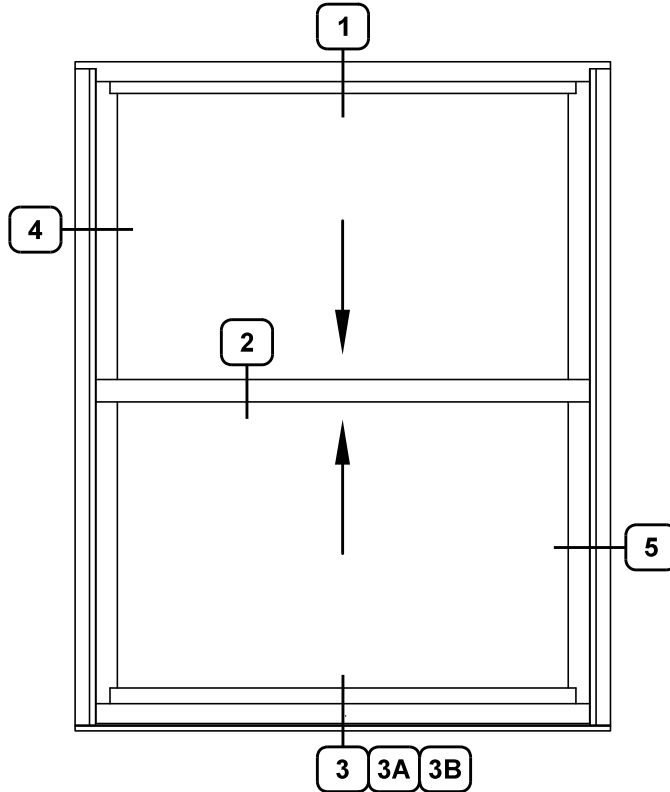
CLASS and GRADE	CLASS AW-PG65-H
TESTING METHOD	AAMA / WDMA / CSA / 101 / I.S.2 / A440 (NAFS)
FRAME DEPTH	4-5/8" Overall Frame Depth
TYPICAL WALL THICKNESS	.070" Nominal
TYPICAL MAXIMUM WINDOW SIZE	60" x 99"
TYPICAL MINIMUM WINDOW SIZE	24" x 36"
TYPICAL CONFIGURATIONS	
STANDARD INFILL OPTIONS	1" and 1-1/4"
STANDARD HARDWARE	Heavy Duty Balances Zinc Die Cast Sweep Locks Sash Stops Aluminum Upper Sash Auto Lock
OPTIONAL HARDWARE	Aluminum or White Bronze Sill Auto Locks
OTHER OPTIONS	Between the Glass Muntins Exterior and Interior Tape Applied Muntins Perimeters and Sills Exterior Pannings and Interior Trims True Intermediate Muntin Structural Mullions Male/Female horizontally stacked H-Mullion for vertical stacking Strap Anchors

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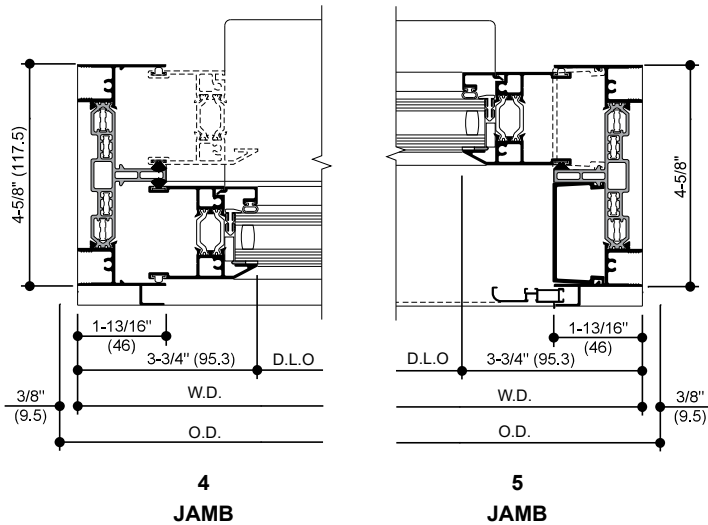
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 DOUBLE HUNG WINDOW (1" Double Glazed)

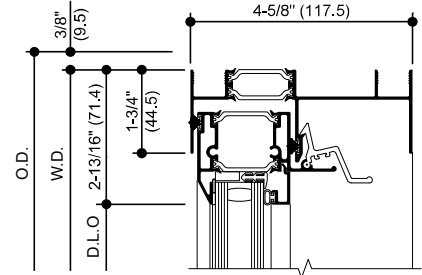


TYPICAL ELEVATION

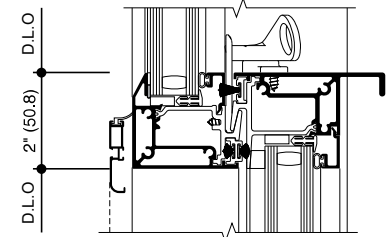
Log onto www.kawneer.com for other configurations



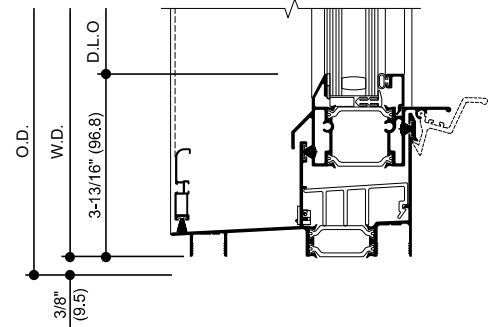
1
HEAD



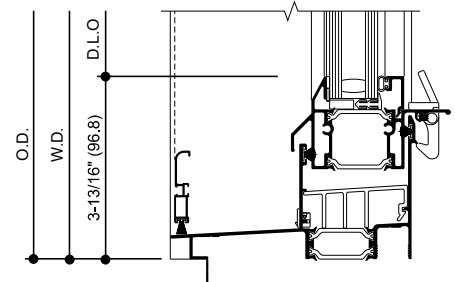
2
HORIZONTAL



3
SILL
10 PSF

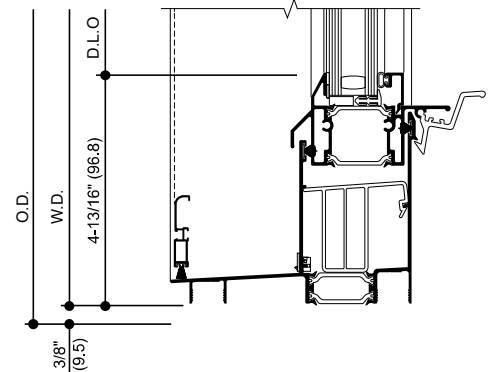


3A
SILL
10 PSF
(Panning)



VARIES

3B
SILL
15 PSF

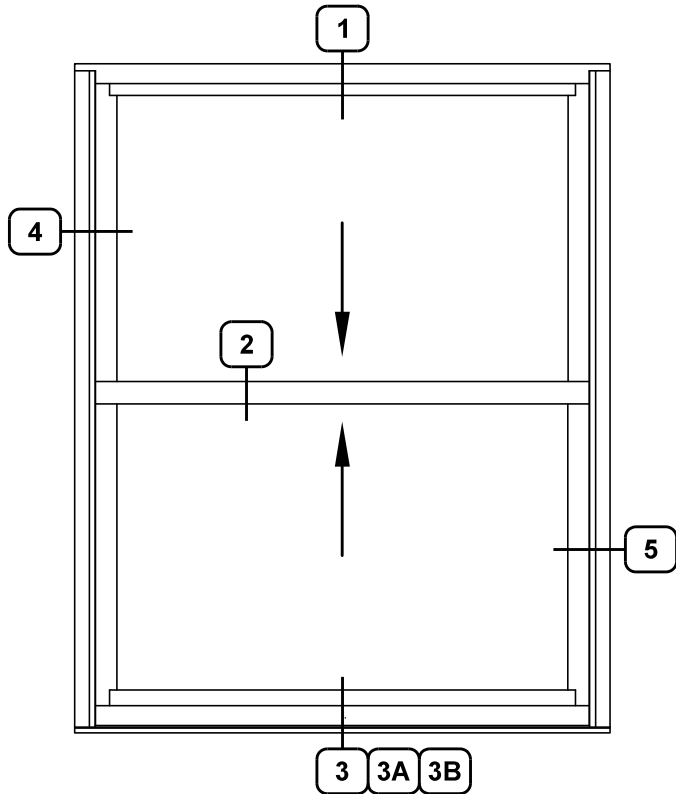


Note:

15 PSF sill also available for use with panning.

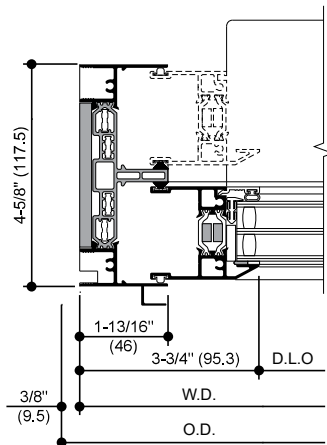
Additional information and CAD details are available at www.kawneer.com

AA™ 5450 DOUBLE HUNG WINDOW (1-1/4" Triple Glazed)

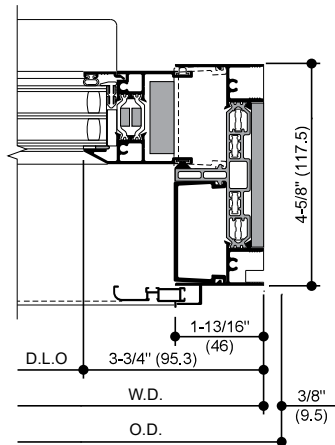


TYPICAL ELEVATION

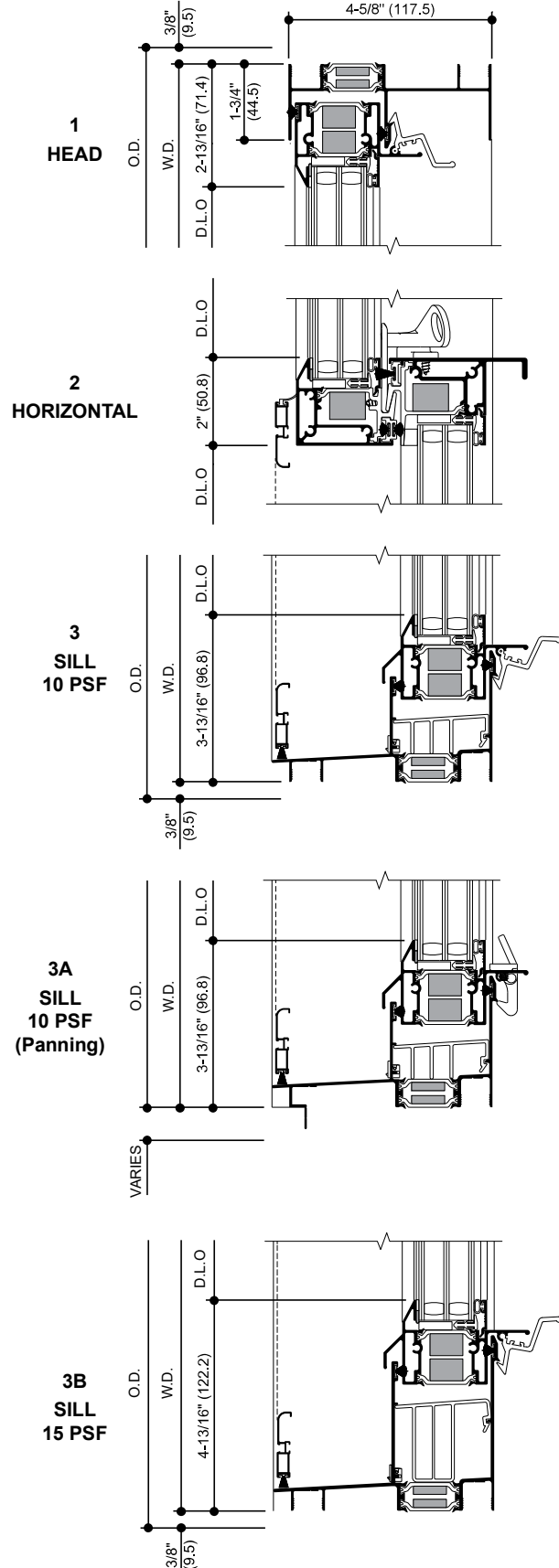
Log onto www.kawneer.com for other configurations



4
FIXED JAMB



5
OPERABLE JAMB

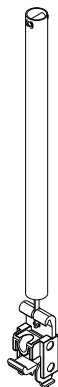


Note:

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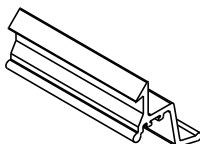
HEAVY DUTY BALANCES

A class 5 adjustable spiral balance with excellent operating forces capable of balancing heavier sash weights. The balance utilizes stainless steel components and is cycle tested for longevity.

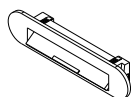
Class 6 is optional.

SWEEP LOCK AND KEEPER

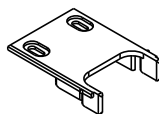
White Bronze sweep locks and keepers with a durable brushed nickel finish and cycle tested for longevity.

AUTO LOCK AND KEEPER

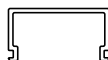
An aluminum spring operated auto lock located on the upper sash. The lock automatically engages the integral keeper securing the sash in the closed position. The auto lock is an option for the lower sash, but is standard for the upper sash.

COVERED WEEPS

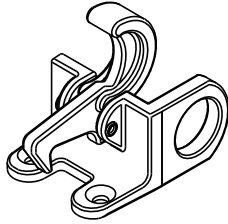
A weep with an integral hinged cover to allow maximum drainage of infiltrating water with a positive closing cover to block drafts and insects. The weep is available in black and white finishes.

SASH CAMS

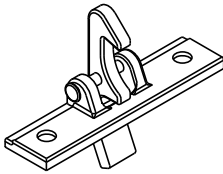
Adjustable glass filled nylon cams located left and right on the sash ensure proper alignment and smooth operation.

SASH STOPS

Black rigid vinyl sash stops are inserted into the vertical jambs without exposed fasteners to prevent excessive sash travel.

UPPER SASH SNAP LOCK

A White Bronze spring operated auto lock located on the upper sash. The lock automatically engages the integral keeper securing the upper sash in the closed position. The snap lock is an option for the upper sash.

WHITE BRONZE SILL AUTO LOCK

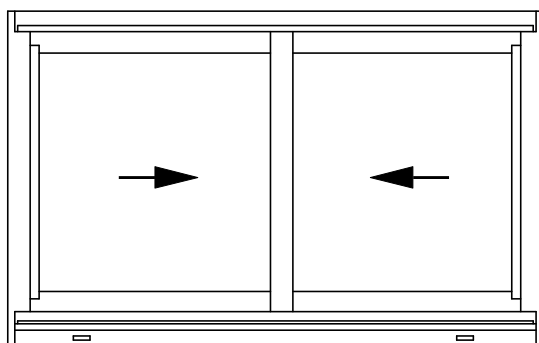
A White Bronze spring operated auto lock located on the lower sash. The lock automatically engages the integral keeper securing the lower sash in the closed position. The auto lock is an option for the lower sash.

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.

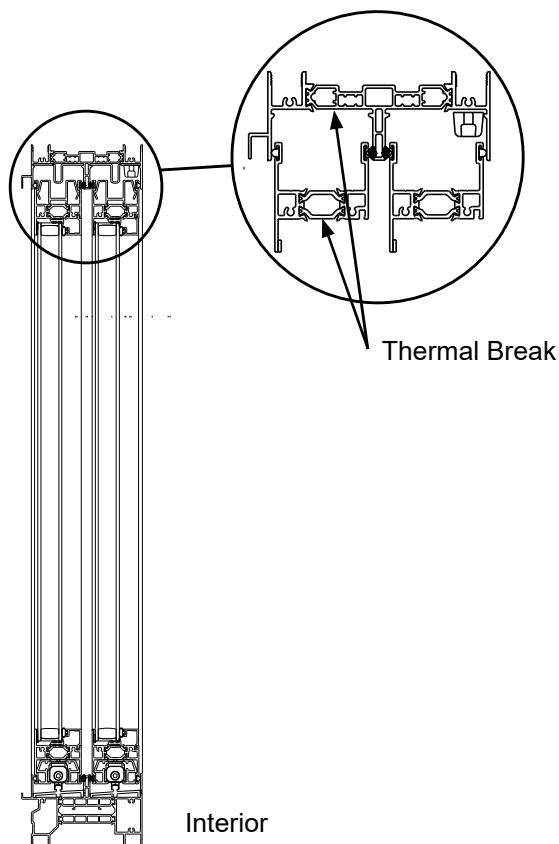
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Standard Features

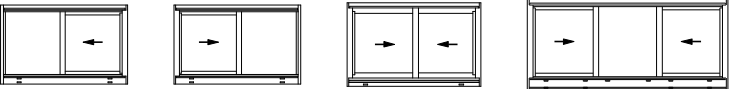
- High Performance Architectural Grade Window
- Tested to U.S. and Canadian Standards
- Polyamide Thermal Break
- Screw and Spline Frame Corner Joinery
- Factory Silicone Glazed
- Interior Applied Glazing Bead
- Architectural Anodized Finishes and Applied Coatings
- Interior and Exterior Dual Finish Options
- Two Year Manufacturer's Warranty



Horizontal Sliding Window



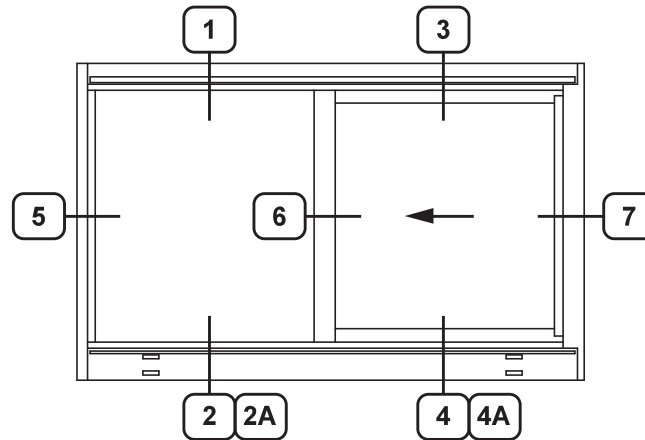
For specific product applications,
consult your Kawneer representative.

CLASS and GRADE	CLASS AW-PG40-HS (OX / XO / XOX), AW-PG50-HS (XX)
TESTING METHOD	AAMA / WDMA / CSA / 101 / I.S.2 / A440 (NAFS)
FRAME DEPTH	4-5/8" Overall Frame Depth
TYPICAL WALL THICKNESS	0.070" Nominal
TYPICAL MAXIMUM WINDOW SIZE	99" x 79" OX / XO / XX 120" x 79" XOX
TYPICAL MINIMUM WINDOW SIZE	36" x 24"
TYPICAL CONFIGURATIONS	
STANDARD INFILL OPTIONS	1" and 1-1/2"
STANDARD HARDWARE	White Bronze Sweep Locks Sash Stops Aluminum Sash Auto Lock (At XX Inactive Sash)
OPTIONAL HARDWARE	Aluminum Auto Locks
OTHER OPTIONS	Between the Glass Muntins Historic Beveled Exterior Glazed-in Muntins (1-1/2" max. overall thickness) Exterior and Interior Tape Applied Muntins Perimeters and Sills Exterior Pannings and Interior Trims 3 Piece Structural Mullions Male/Female vertically or horizontally stacked H-Mullion for vertical or horizontal stacking Strap Anchors

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**OX HORIZONTAL SLIDING WINDOW
(Keyed to details on pages 34 and 35)**



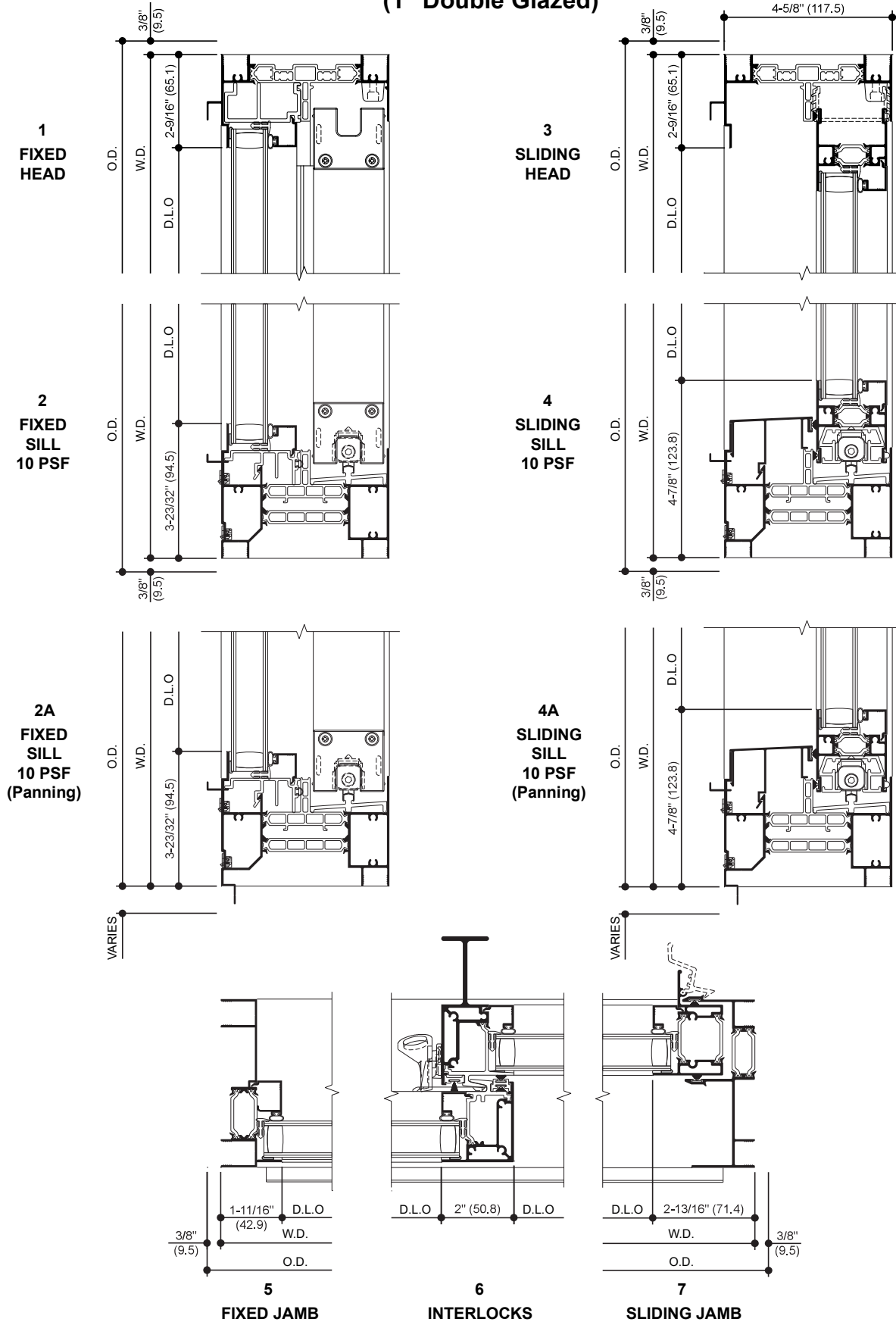
TYPICAL ELEVATION

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

OX HORIZONTAL SLIDING WINDOW (1" Double Glazed)

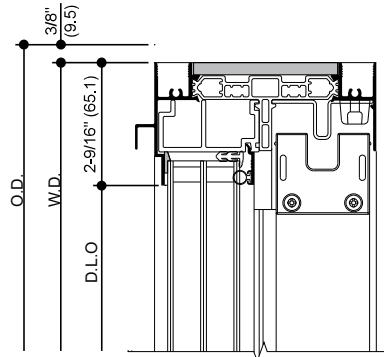


Laws and building and safety codes governing the design and use of Kawneer products, such as glazed entrance, window, and curtain wall products, vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

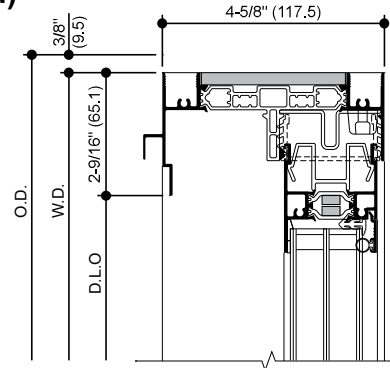
Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.
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OX HORIZONTAL SLIDING WINDOW (1-1/2" Triple Glazed)

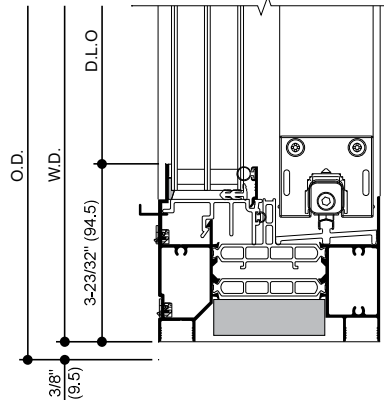
**1
FIXED
HEAD**



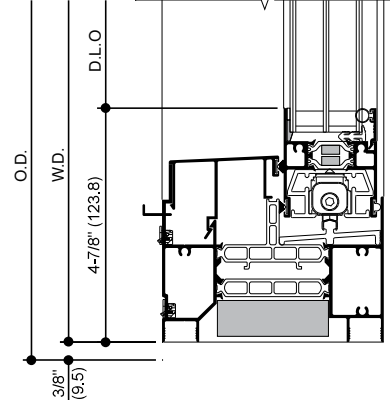
**3
SLIDING
HEAD**



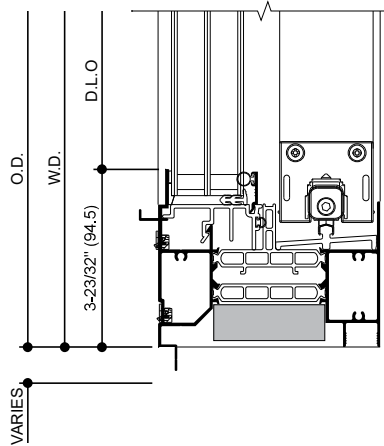
**2
FIXED
SILL
10 PSF**



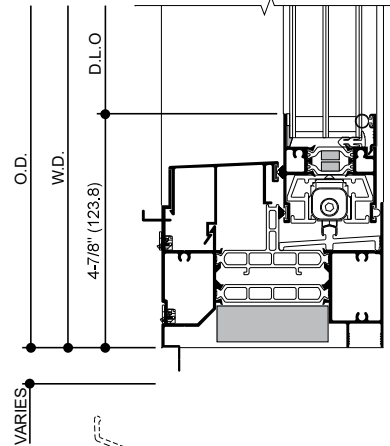
**4
SLIDING
SILL
10 PSF**



**2A
FIXED
SILL
10 PSF
(Panning)**

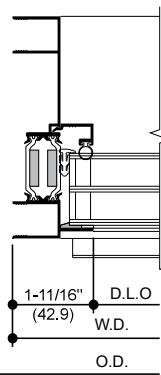


**4A
SLIDING
SILL
10 PSF
(Panning)**

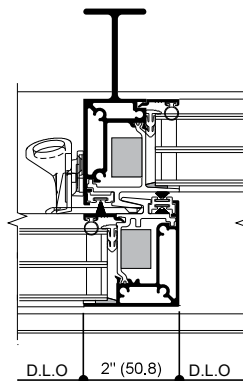


VARIES

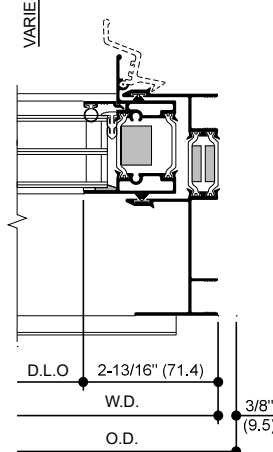
VARIES



**5
FIXED JAMB**

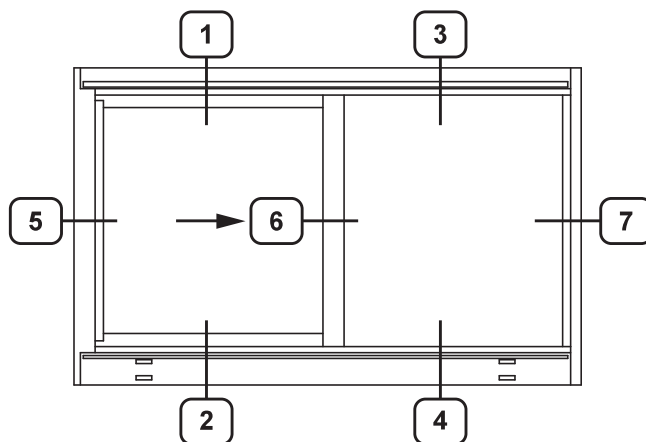


**6
INTERLOCKS**



**7
SLIDING JAMB**

XO HORIZONTAL SLIDING WINDOW
(Keyed to details on pages 37 and 38)



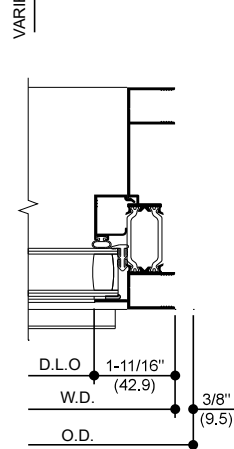
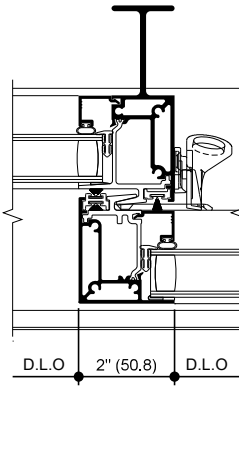
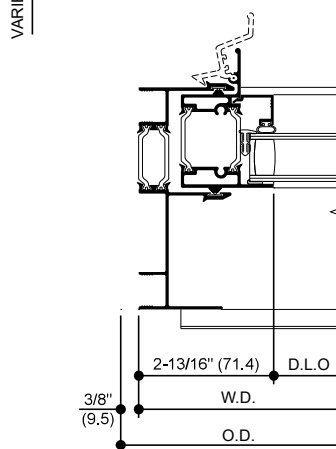
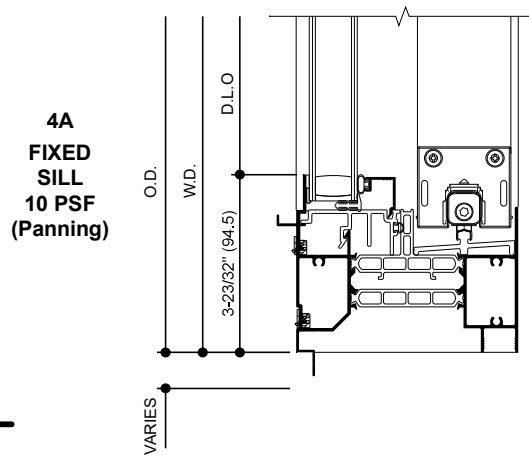
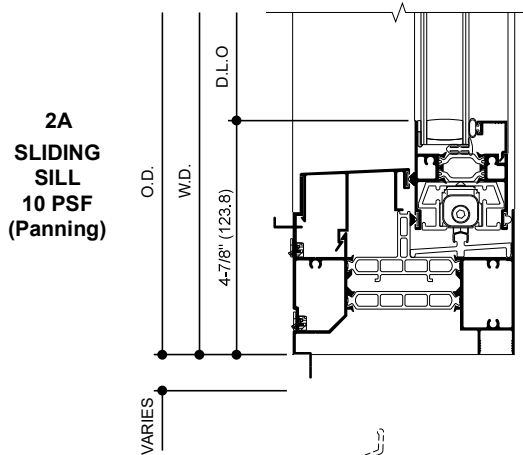
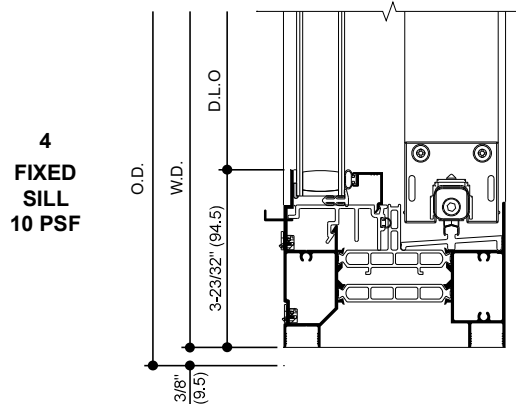
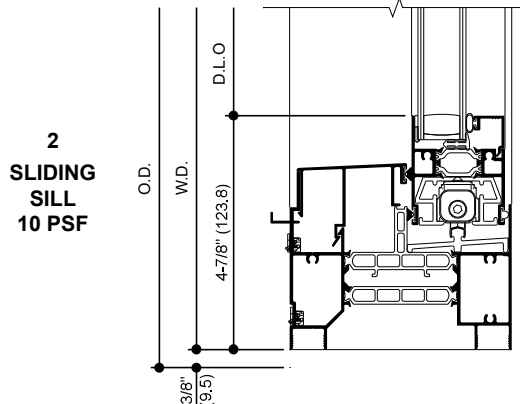
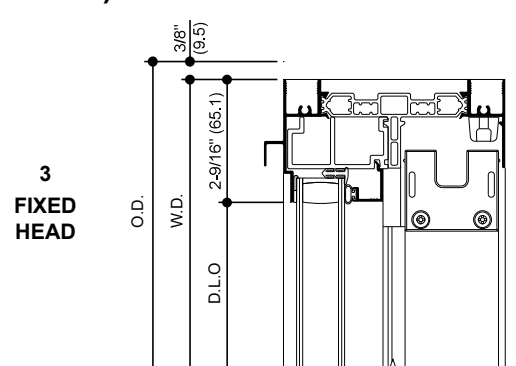
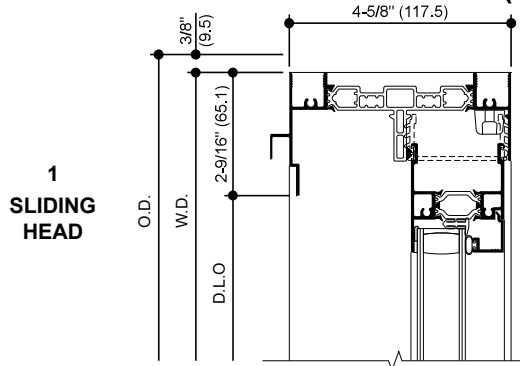
TYPICAL ELEVATION

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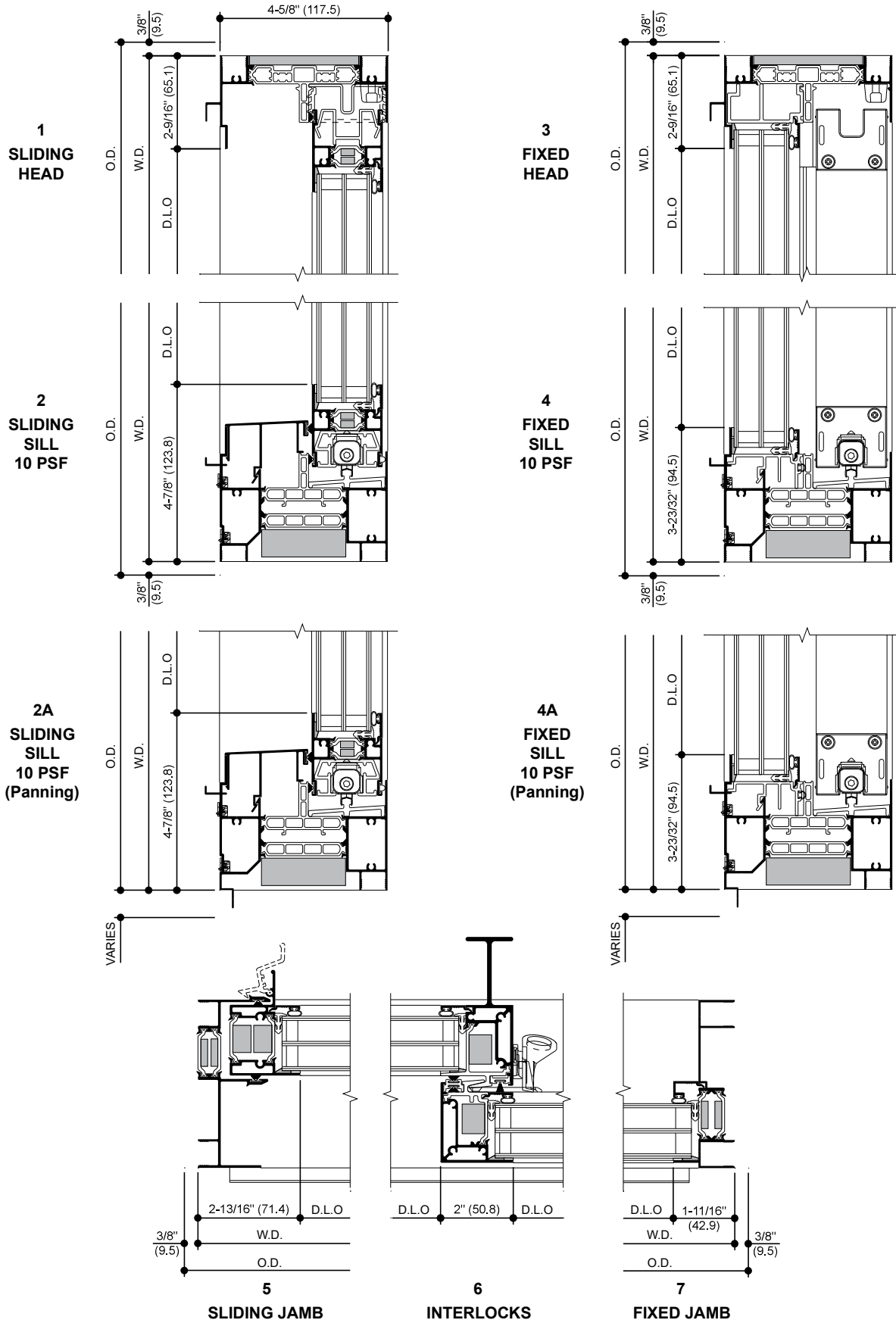
Additional information and CAD details are available at www.kawneer.com

XO HORIZONTAL SLIDING WINDOW (1" Double Glazed)



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

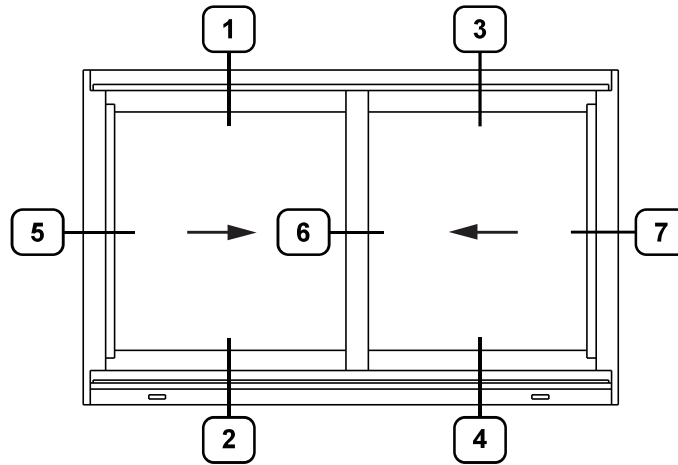
XO HORIZONTAL SLIDING WINDOW (1-1/2" Triple Glazed)



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**XX HORIZONTAL SLIDING WINDOW
(Keyed to details on pages 40 and 41)**



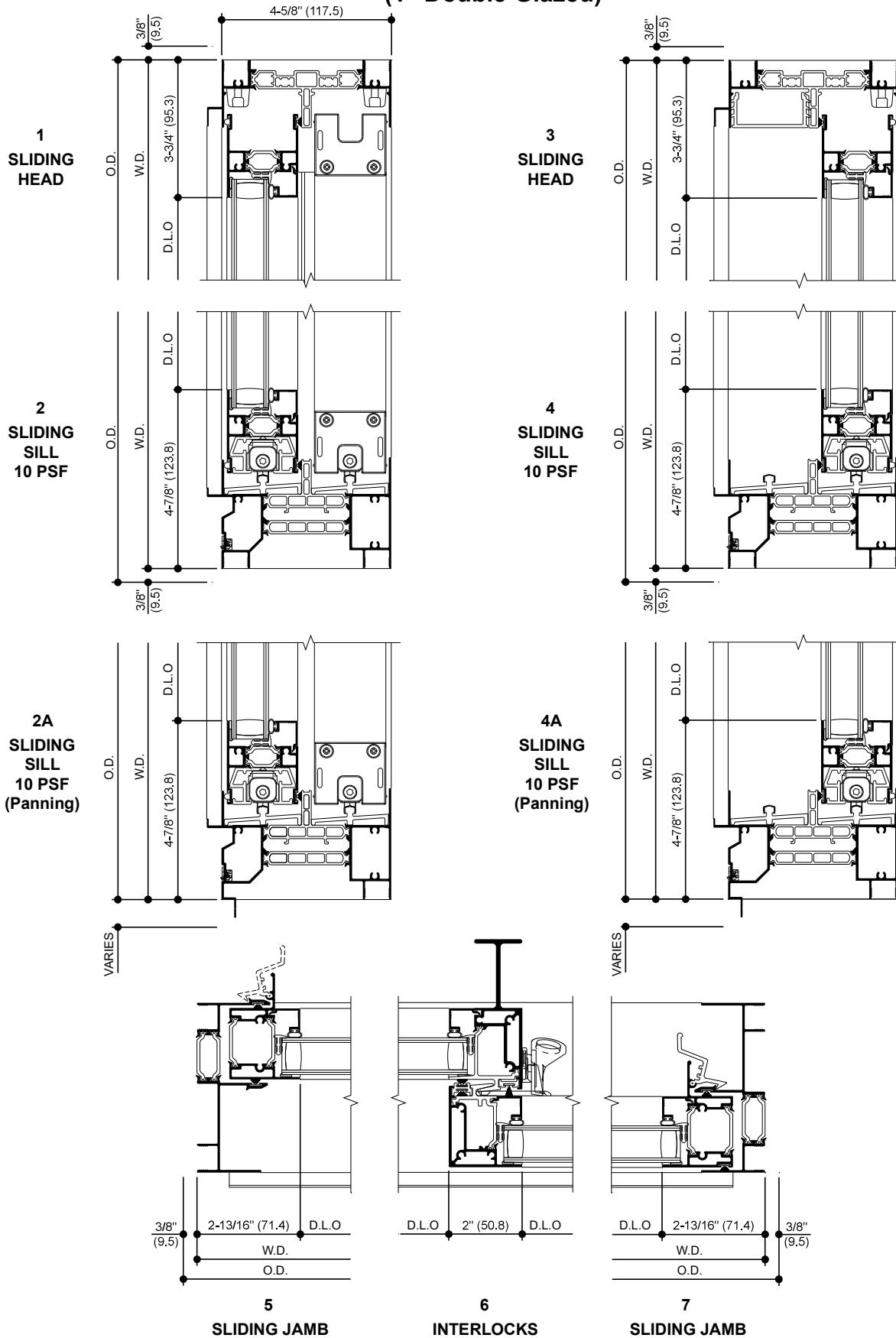
TYPICAL ELEVATION

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XX HORIZONTAL SLIDING WINDOW (1" Double Glazed)

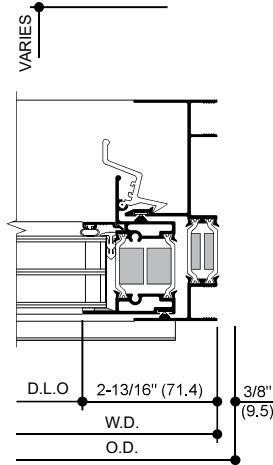
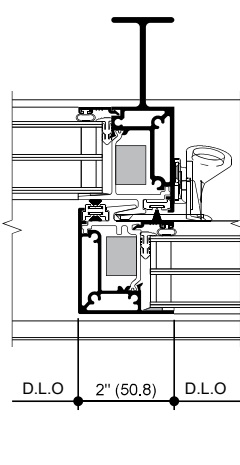
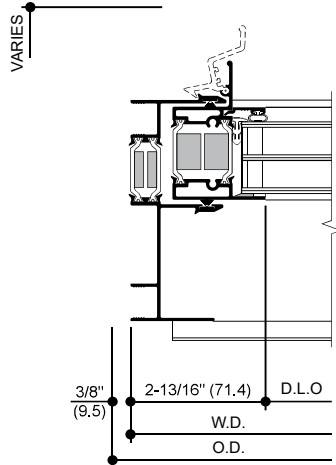
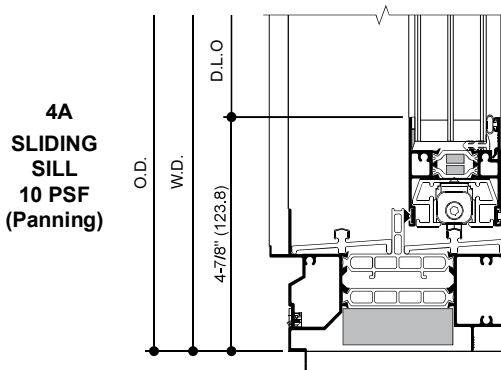
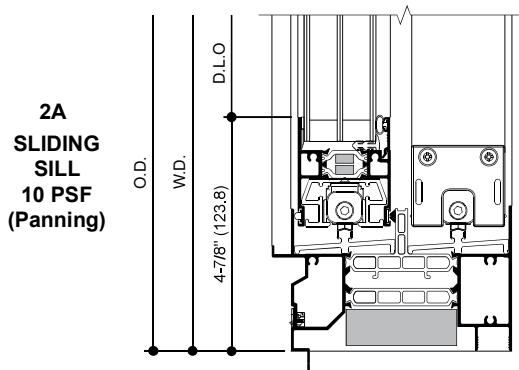
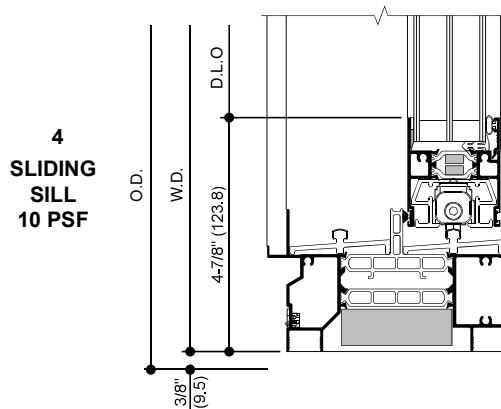
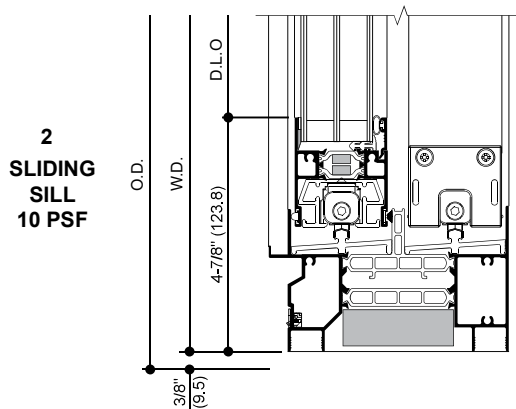
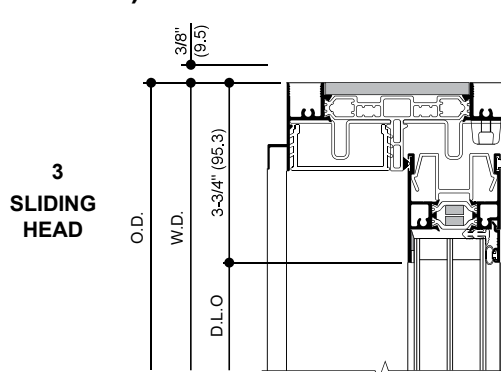
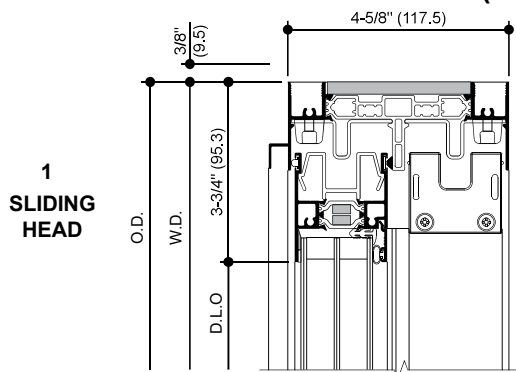


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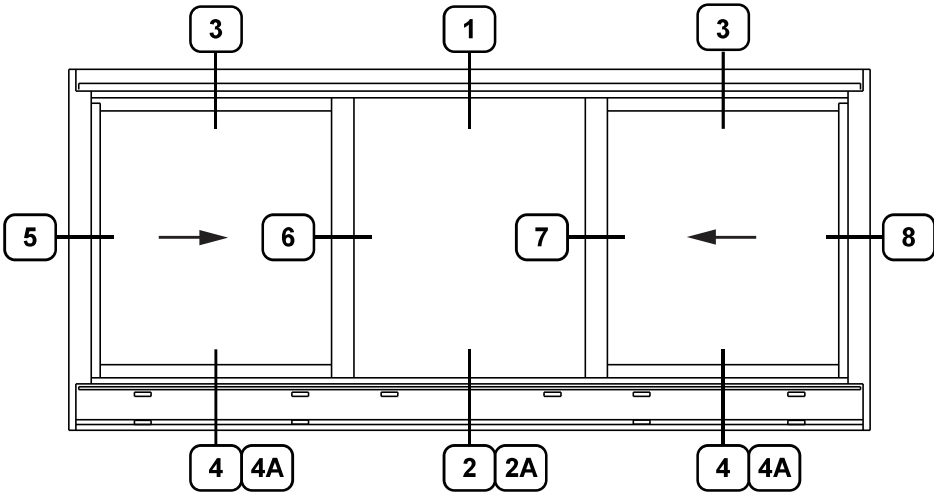
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XX HORIZONTAL SLIDING WINDOW (1-1/2" Triple Glazed)



XOX HORIZONTAL SLIDING WINDOW
(Keyed to details on pages 43 and 44)



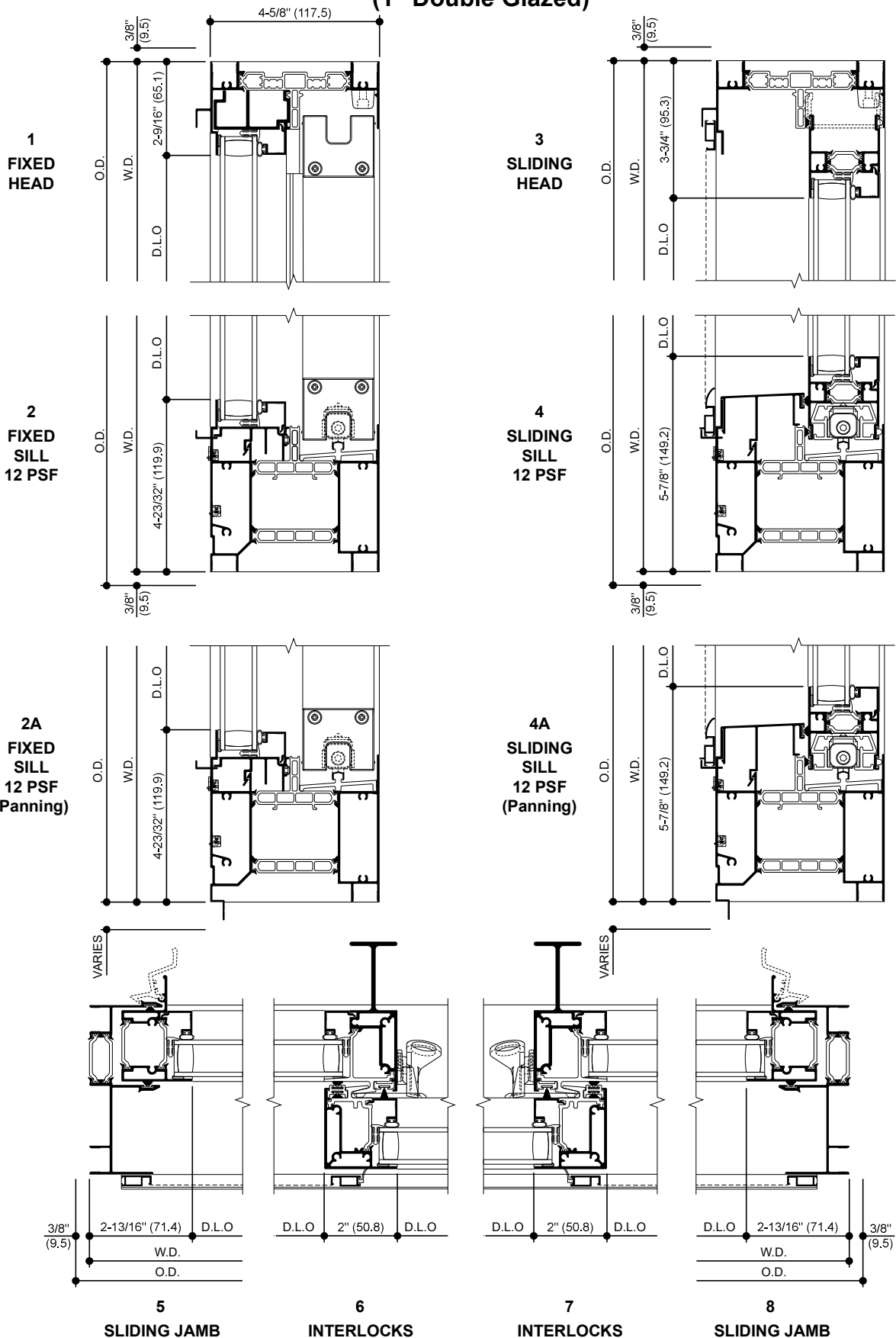
TYPICAL ELEVATION

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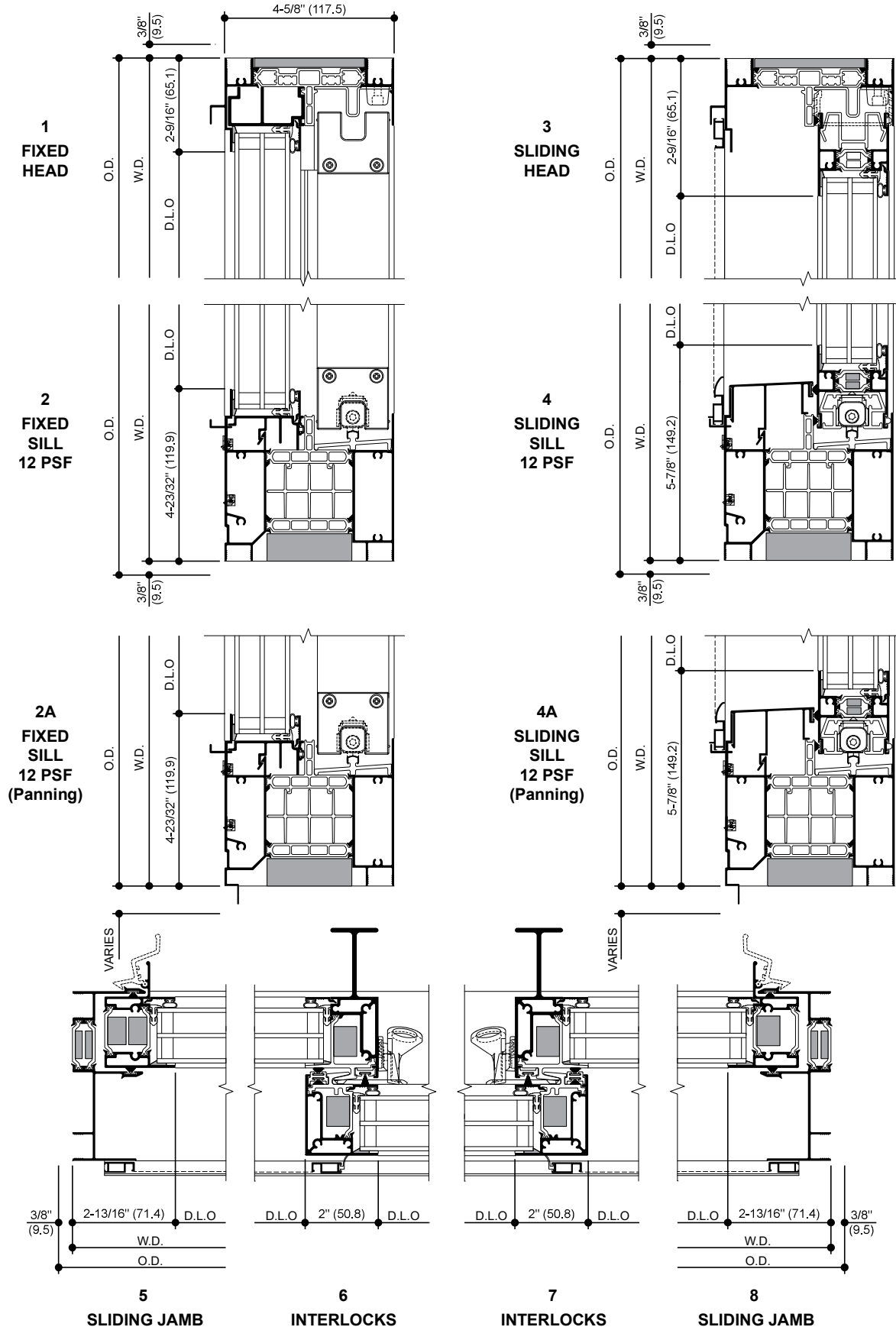
Additional information and CAD details are available at www.kawneer.com

XOX HORIZONTAL SLIDING WINDOW (1" Double Glazed)



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

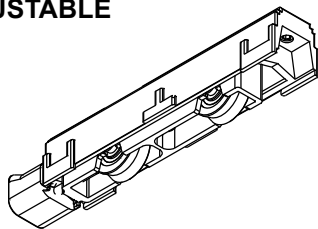
XOX HORIZONTAL SLIDING WINDOW (1-1/2" Triple Glazed)



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**COMPOSITE ADJUSTABLE
TANDEM ROLLER**



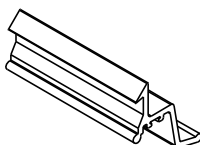
Glass filled nylon housing, die cast zamak roller support, precision sealed ball bearing rollers with nylon tires.

SWEEP LOCK AND KEEPER



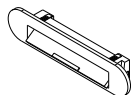
White Bronze sweep locks and keepers with a durable brushed nickel finish and cycle tested for longevity.

AUTO LOCK AND KEEPER



An aluminum spring operated auto lock. The lock automatically engages the integral keeper securing the sash in the closed position. The auto lock is an option for the jamb sash.

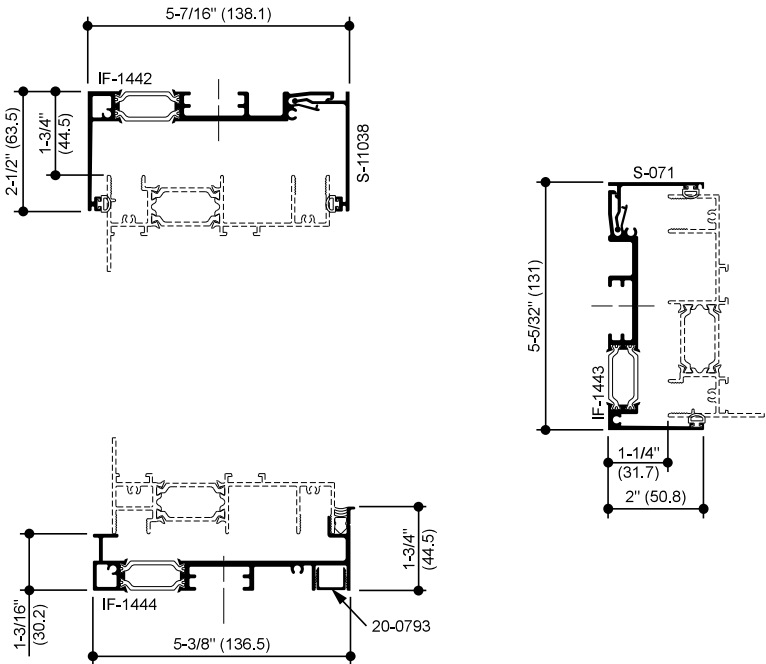
COVERED WEEPS



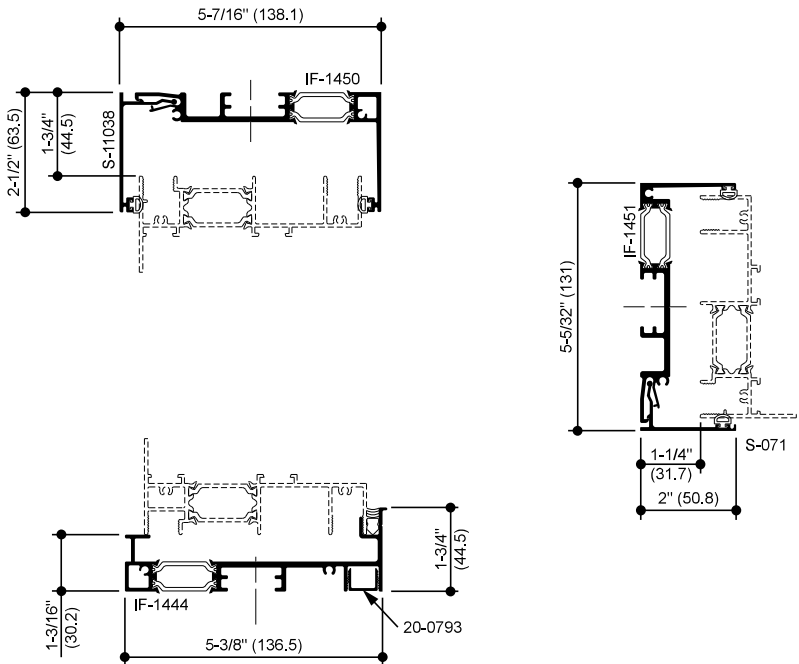
A weep with an integral hinged cover to allow maximum drainage of infiltrating water with a positive closing cover to block drafts and insects. The weep is available in black and white finishes.

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

RECEPTOR DETAILS



INTERIOR INSTALLED



EXTERIOR INSTALLED

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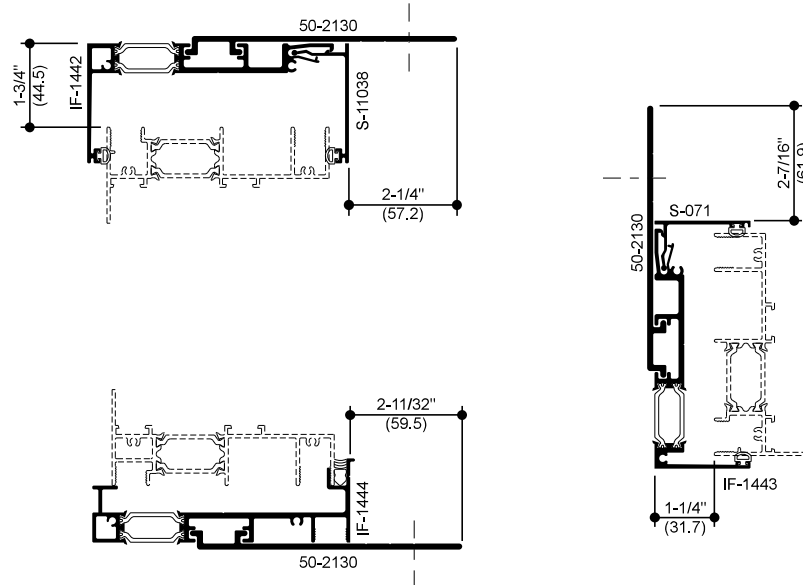
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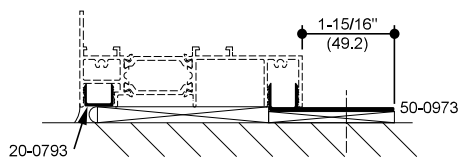
ANCHOR DETAILS

NOTE:

Interior glazed shown, exterior glazed similar.



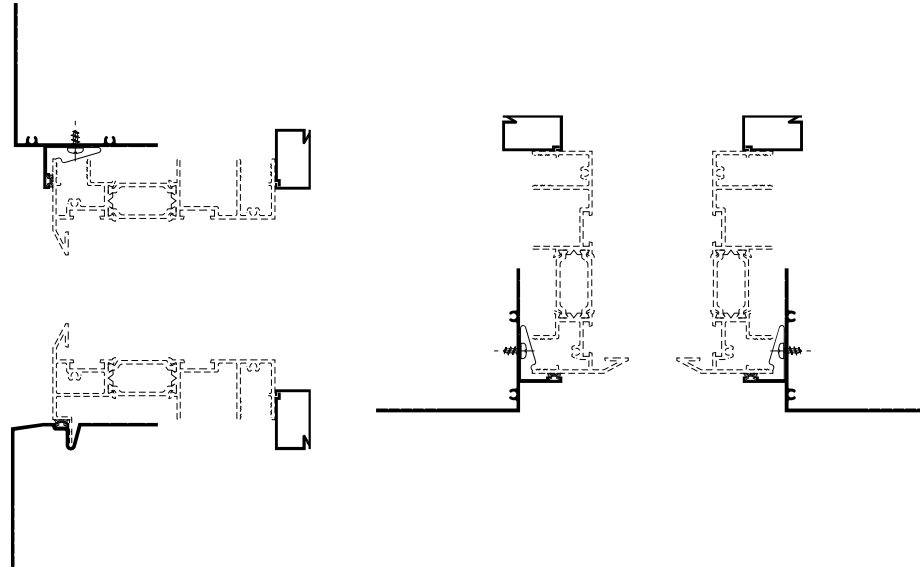
**STRAP ANCHOR WITH RECEPTOR
(INTERIOR INSTALLED)**



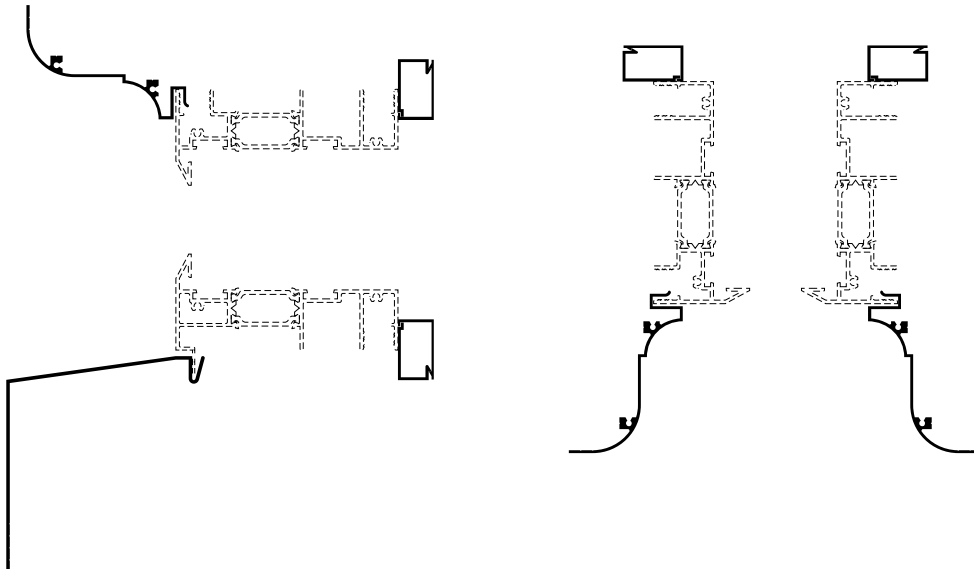
STRAP ANCHOR WITHOUT RECEPTOR

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

PRE-SET PANNING



WRAP AROUND PANNING



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WIND LOAD CHARTS

Mullions are designed for deflection limitations in accordance with AAMA TIR-A11 of L/175 up to 13'-6" and L/240 +1/4" above 13'-6". These curves are for mullions WITH HORIZONTALS and are based on engineering calculations for stress and deflection. Allowable wind load stress for ALUMINUM 15,152 psi (104MPa), STEEL 30,000 psi (207MPa). Charted curves, in all cases are for the limiting value. Wind load charts contained herein are based upon nominal wind load utilized in allowable stress design. 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.

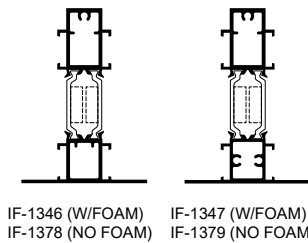
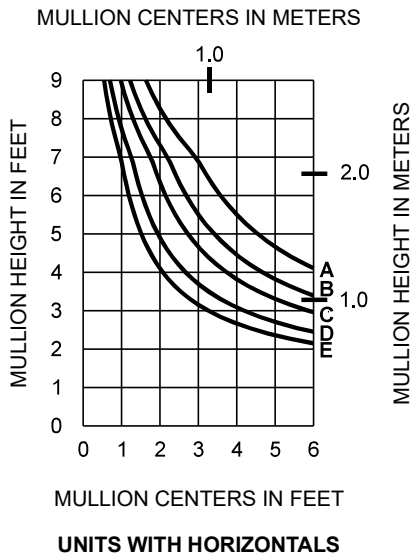
DEADLOAD CHARTS

Horizontal or deadload limitations are based upon 1/16" (1.6) at operable vents or 1/8" (3.2) at fixed openings, maximum allowable deflection at the center of an intermediate horizontal member. The accompanying charts are calculated for 1" (25.4) thick insulating glass supported on two setting blocks placed at the loading points shown.

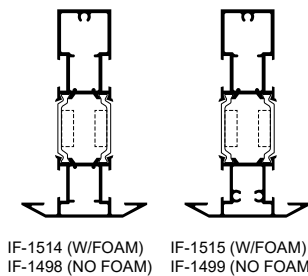
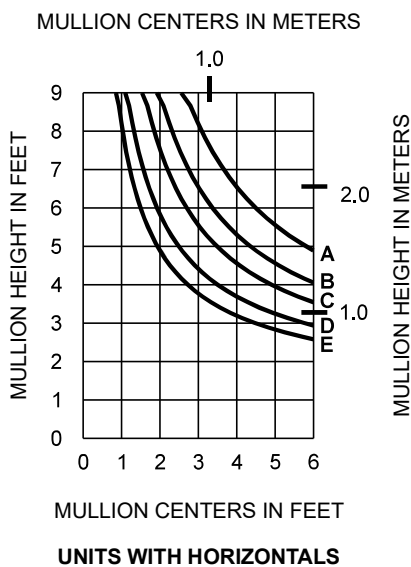
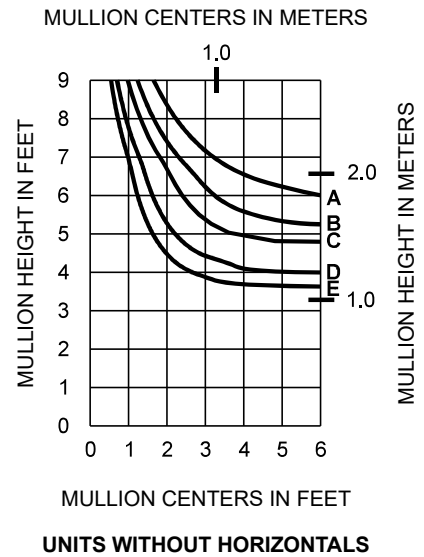
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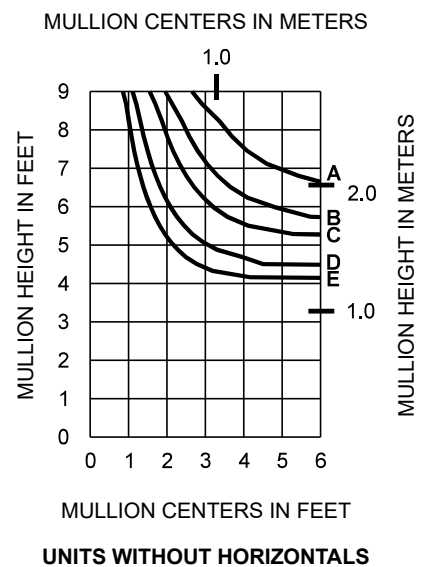
	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	30 PSF (1440)	50 PSF (2400)
B =	40 PSF (1920)	67 PSF (3200)
C =	50 PSF (2400)	83 PSF (4000)
D =	70 PSF (3360)	117 PSF (5600)
E =	90 PSF (4310)	150 PSF (7200)



WIND LOAD CHARTS ARE BASED ON
COMPOSITE PROPERTIES WHICH
ARE CALCULATED IN ACCORDANCE
WITH AAMA TIR-8 AND AAMA 505



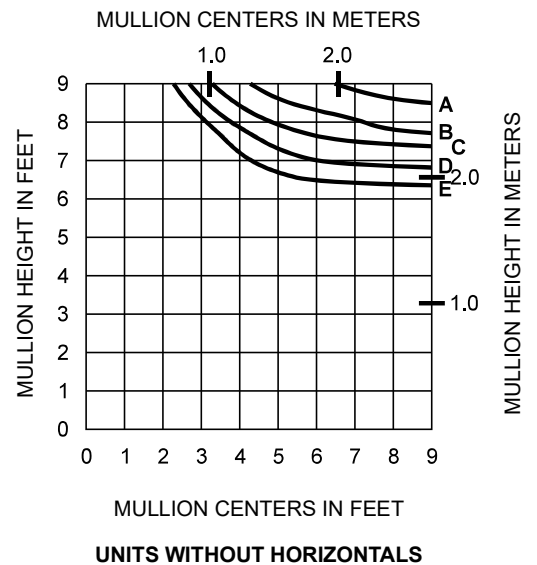
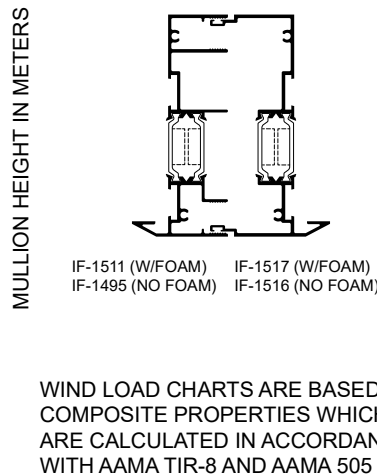
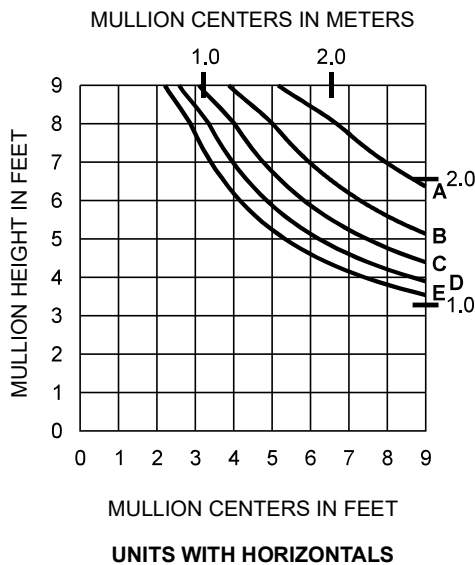
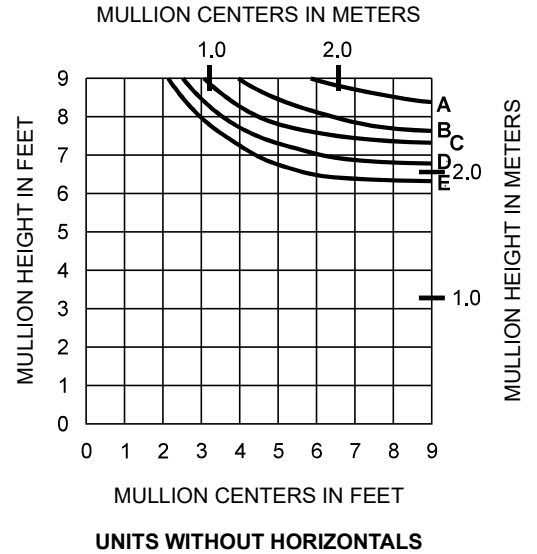
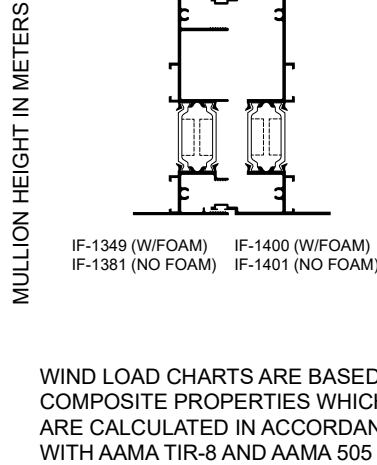
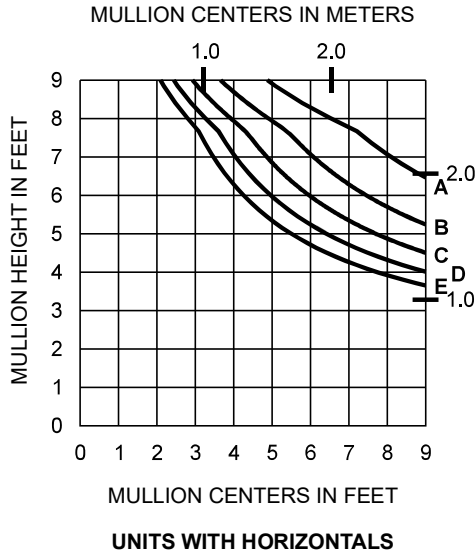
WIND LOAD CHARTS ARE BASED ON
COMPOSITE PROPERTIES WHICH
ARE CALCULATED IN ACCORDANCE
WITH AAMA TIR-8 AND AAMA 505



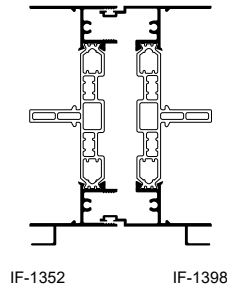
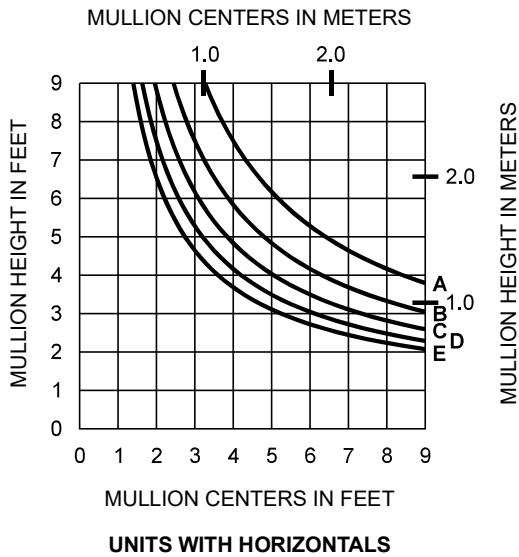
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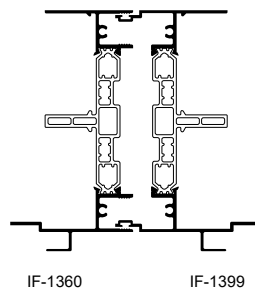
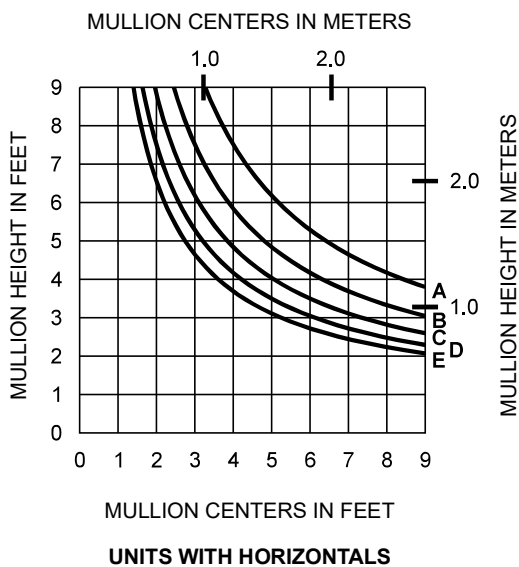
	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	30 PSF (1440)	50 PSF (2400)
B =	40 PSF (1920)	67 PSF (3200)
C =	50 PSF (2400)	83 PSF (4000)
D =	60 PSF (2880)	100 PSF (4790)
E =	70 PSF (3360)	117 PSF (5600)



	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	30 PSF (1440)	50 PSF (2400)
B =	40 PSF (1920)	67 PSF (3200)
C =	50 PSF (2400)	83 PSF (4000)
D =	60 PSF (2880)	100 PSF (4790)
E =	70 PSF (3360)	117 PSF (5600)



WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

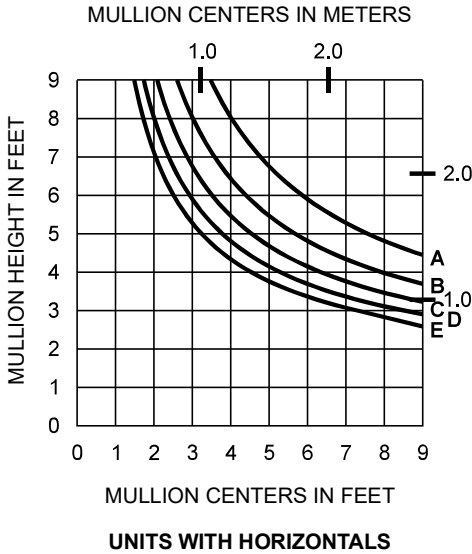


WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

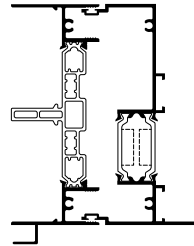
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	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	30 PSF (1440)	50 PSF (2400)
B =	40 PSF (1920)	67 PSF (3200)
C =	50 PSF (2400)	83 PSF (4000)
D =	60 PSF (2880)	100 PSF (4790)
E =	70 PSF (3360)	117 PSF (5600)

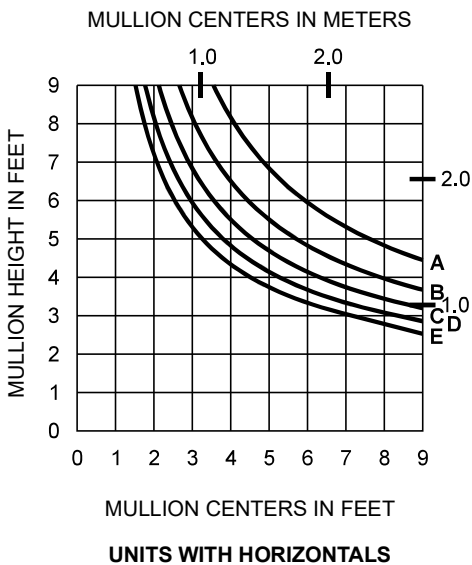


MULLION HEIGHT IN METERS

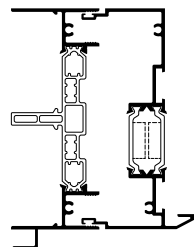


IF-1352 (DH) IF-1360 (SH) IF-1400 (W/FOAM) IF-1401 (NO FOAM)

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505



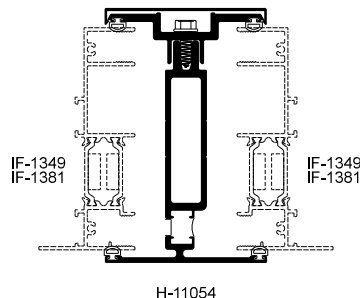
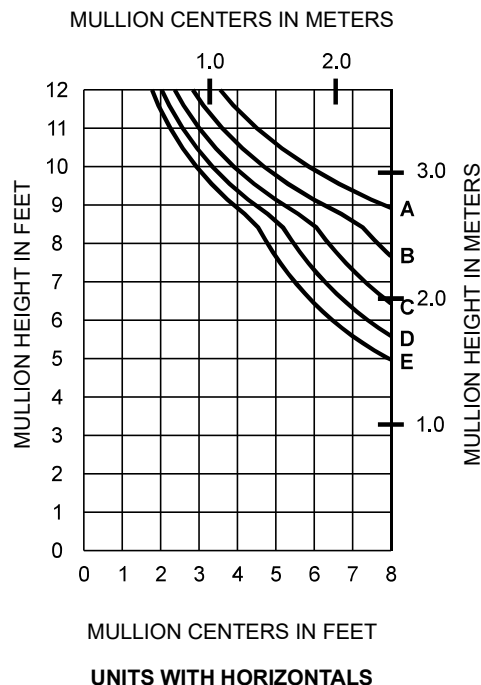
MULLION HEIGHT IN METERS



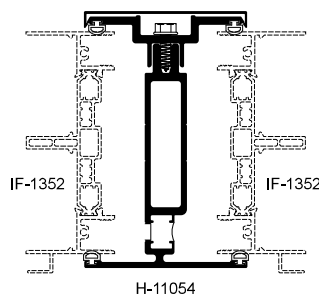
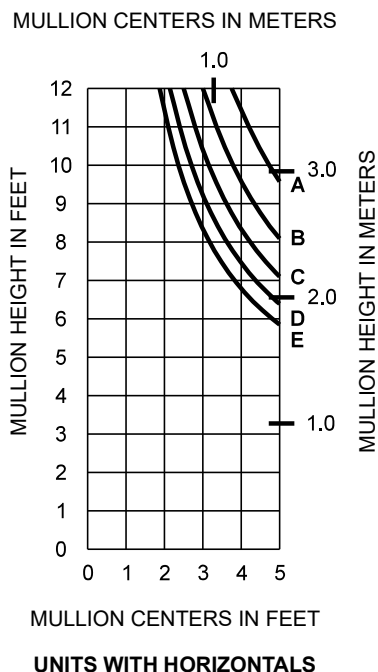
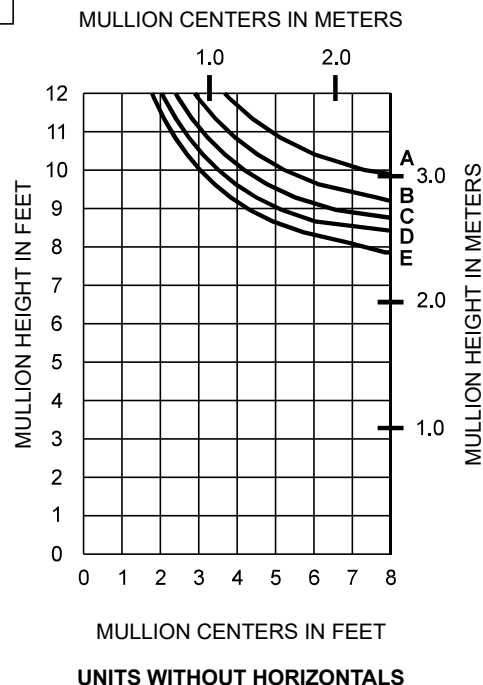
IF-1352 IF-1517 (W/FOAM) IF-1516 (NO FOAM)

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

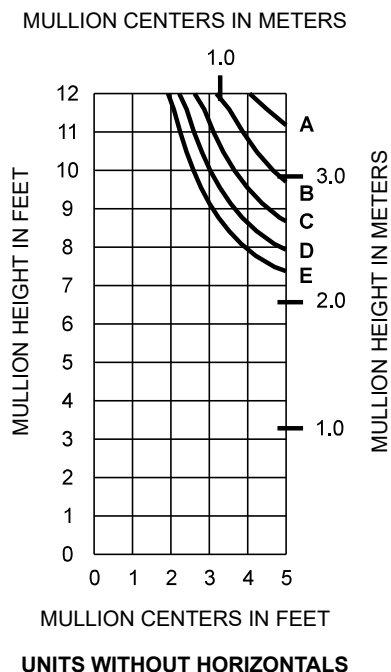
	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	15 PSF (720)	25 PSF (1200)
B =	20 PSF (960)	33 PSF (1580)
C =	25 PSF (1200)	42 PSF (2000)
D =	30 PSF (1440)	50 PSF (2400)
E =	35 PSF (1680)	58 PSF (2780)



WIND LOAD CHARTS ARE BASED ON
COMPOSITE PROPERTIES WHICH
ARE CALCULATED IN ACCORDANCE
WITH AAMA TIR-8 AND AAMA 505



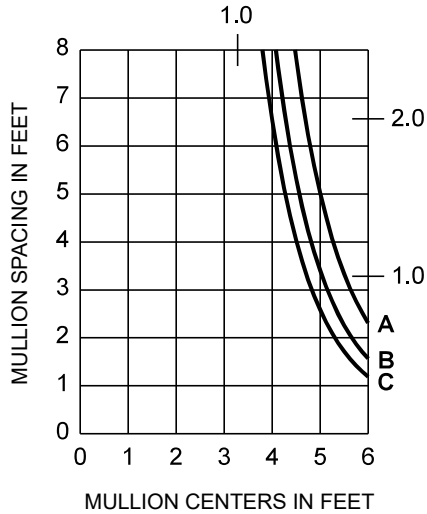
WIND LOAD CHARTS ARE BASED ON
COMPOSITE PROPERTIES WHICH
ARE CALCULATED IN ACCORDANCE
WITH AAMA TIR-8 AND AAMA 505



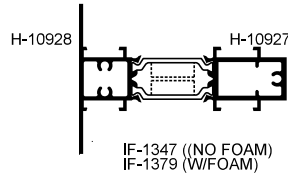
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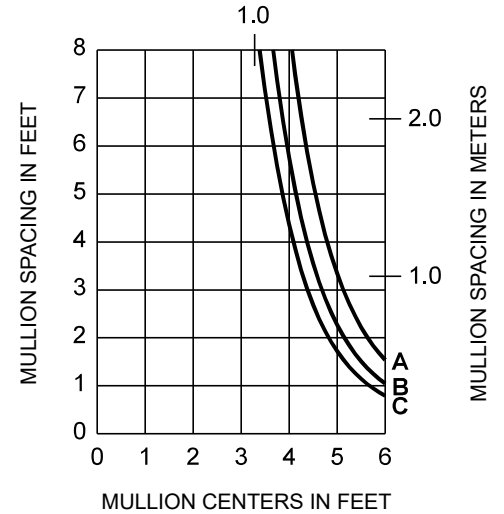
MULLION CENTERS IN METERS



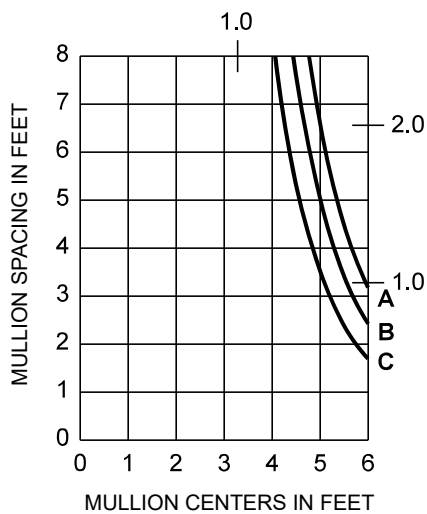
A = 1/8 POINT LOADING
B = 3/16 POINT LOADING
C = 1/4 POINT LOADING



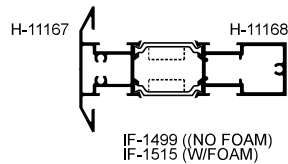
MULLION CENTERS IN METERS



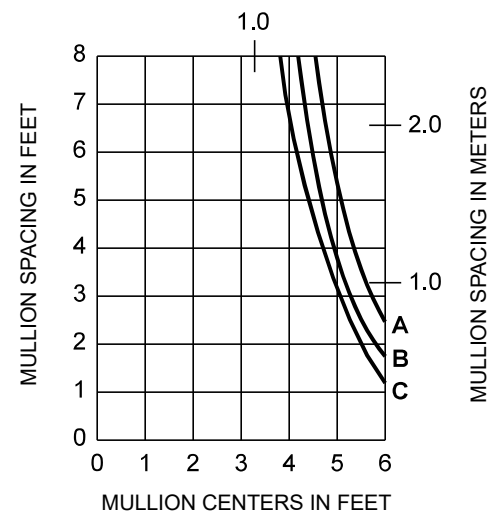
MULLION CENTERS IN METERS



A = 1/8 POINT LOADING
B = 3/16 POINT LOADING
C = 1/4 POINT LOADING



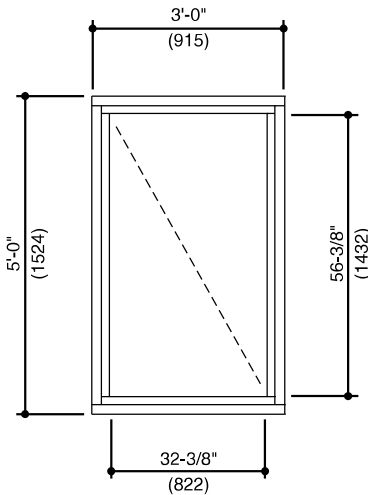
MULLION CENTERS IN METERS



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



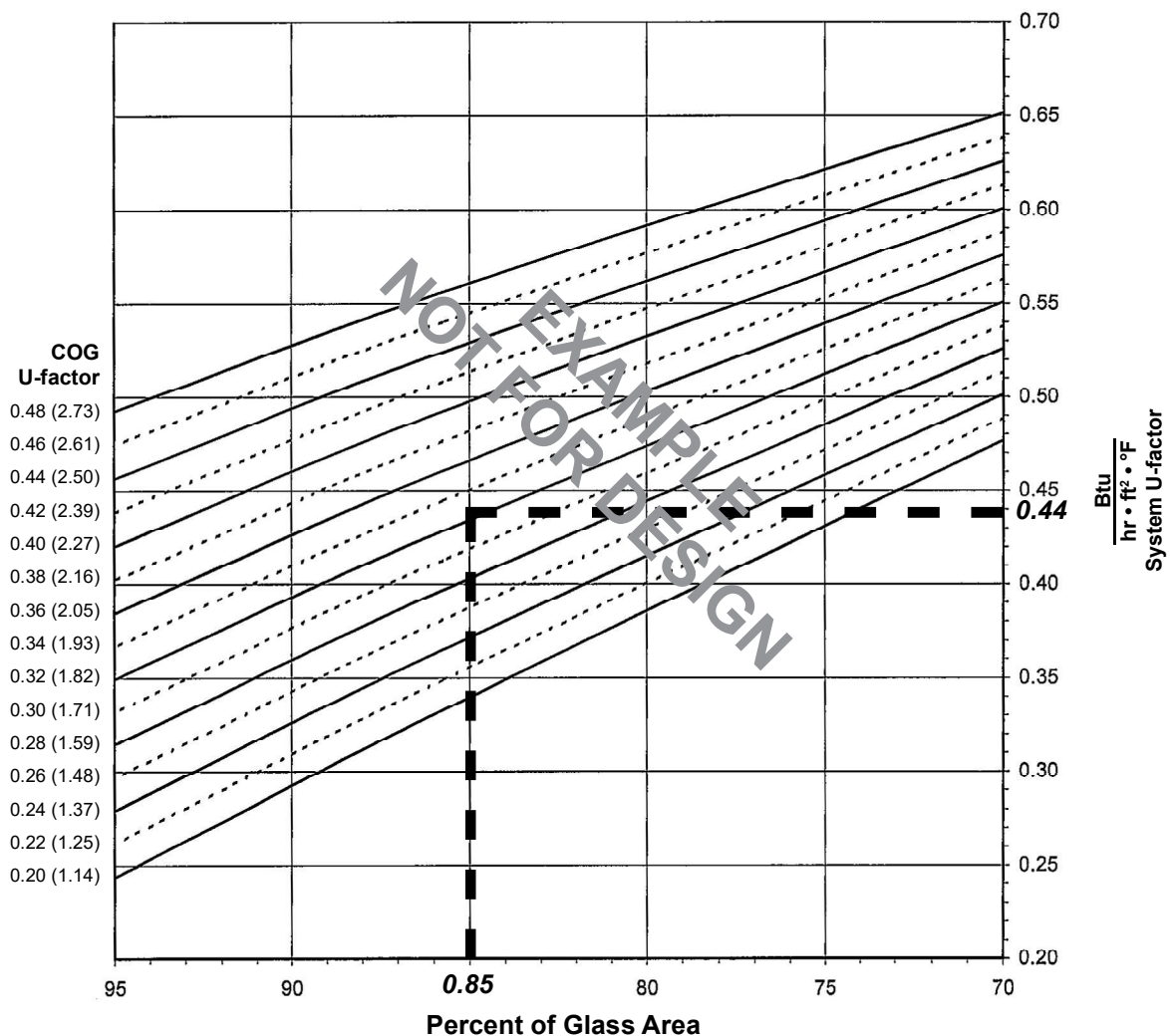
Example Glass U-Factor = 0.42 Btu/hr • ft² • °F

Total Daylight Opening = 32-3/8" • 56-3/8" = 12.67ft²

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

Percent of Glass = (Total Daylight Opening ÷ Total Projected Area)100
 = (12.67 ÷ 15)100 = 85%

System U-factor vs Percent of Glass Area



Based on 85% glass and center of glass (COG) U-factor of 0.42
 System U-factor is equal to 0.44 Btu/hr • ft² • °F

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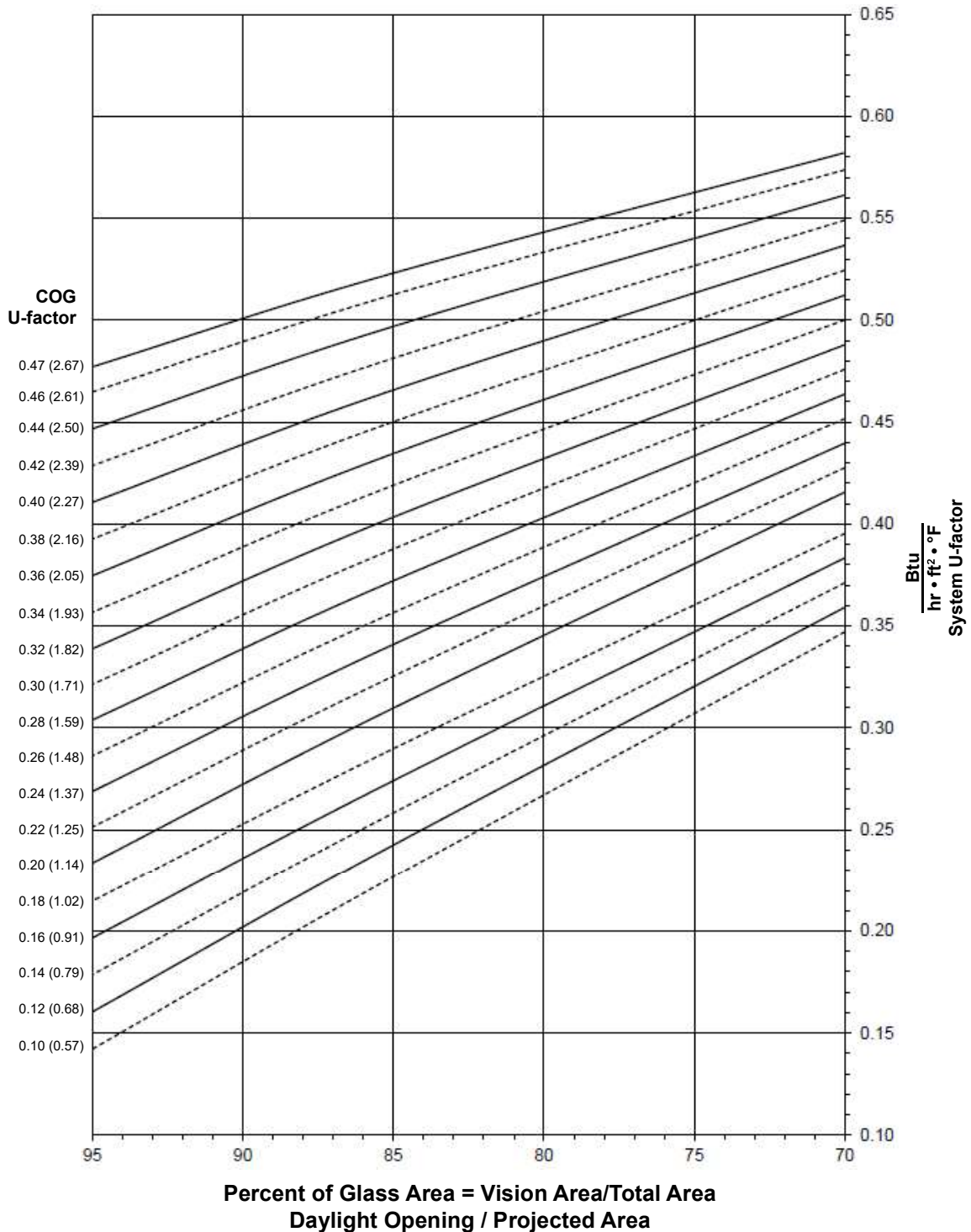
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**AA™ 5450 FIXED WINDOW
(1" Double Glazed)**

Note:

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

System U-factor vs Percent of Glass Area

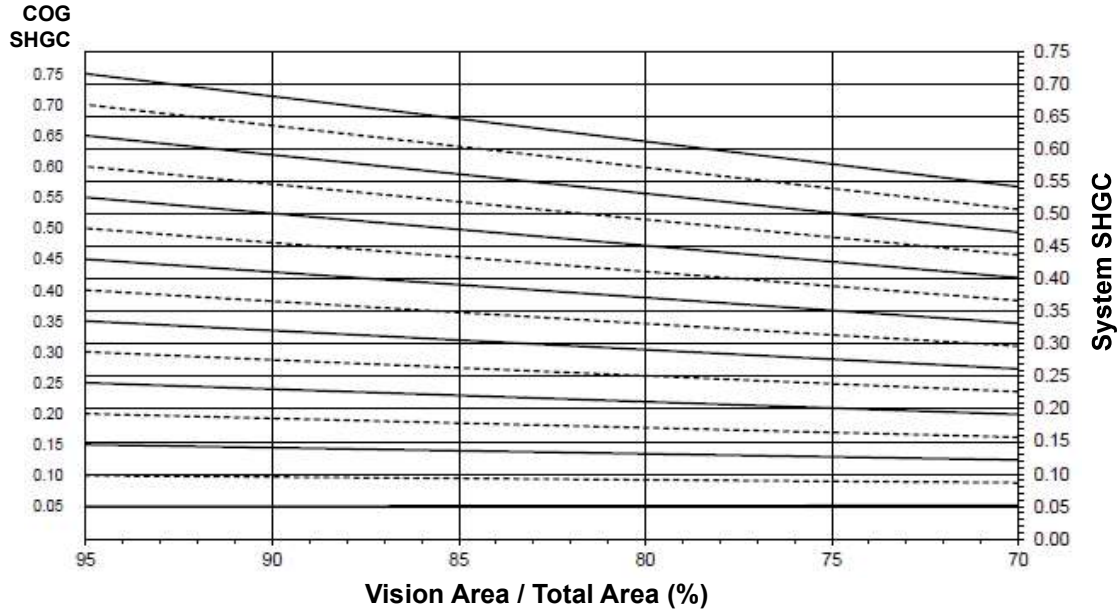


Notes for System U-factor, SHGC and VT charts:

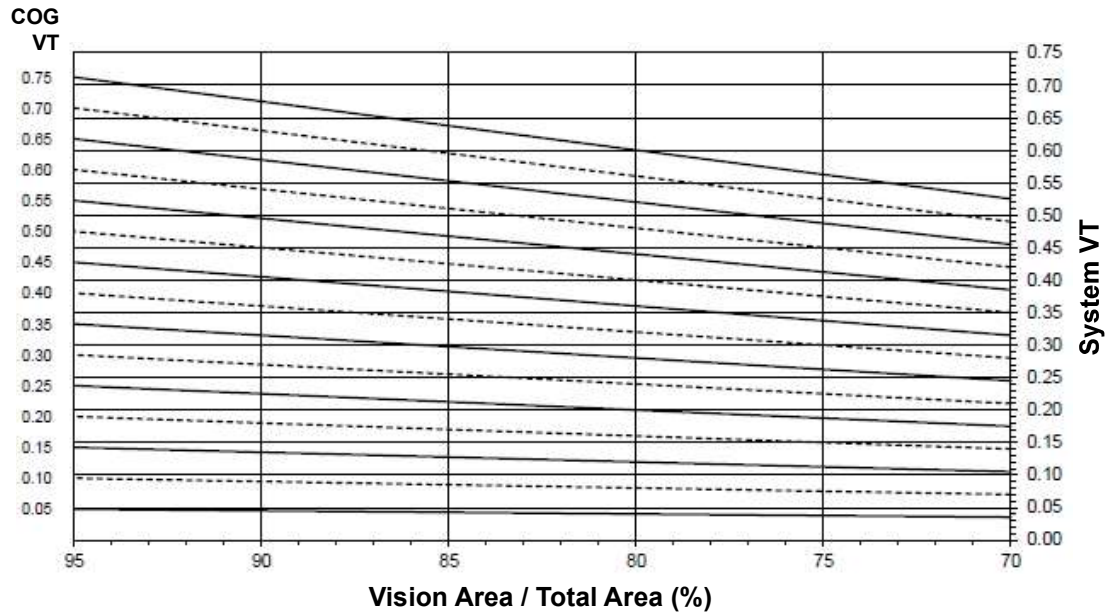
For glass values that are not listed, linear interpolation is permitted.
Glass properties are based on center of glass values and are obtained from your glass supplier.

AA™ 5450 FIXED WINDOW (1" Double Glazed)

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



System Visible Transmittance (VT) vs Percent of Vision Area



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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Thermal Transmittance ¹ (BTU/hr • ft² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.52
0.46	0.51
0.44	0.50
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	0.39
0.28	0.37
0.26	0.35
0.24	0.34
0.22	0.32
0.20	0.31
0.18	0.29
0.16	0.27
0.14	0.26
0.12	0.24
0.10	0.22

AA™ 5450 FIXED WINDOW
(1" Double Glazed)

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 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.65
0.70	0.61
0.65	0.56
0.60	0.52
0.55	0.48
0.50	0.43
0.45	0.39
0.40	0.35
0.35	0.31
0.30	0.26
0.25	0.22
0.20	0.18
0.15	0.14
0.10	0.09
0.05	0.05

Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.64
0.70	0.60
0.65	0.55
0.60	0.51
0.55	0.47
0.50	0.43
0.45	0.38
0.40	0.34
0.35	0.30
0.30	0.26
0.25	0.21
0.20	0.17
0.15	0.13
0.10	0.09
0.05	0.04

AA™ 5450 FIXED WINDOW - BEVEL FACE (1" Double Glazed)

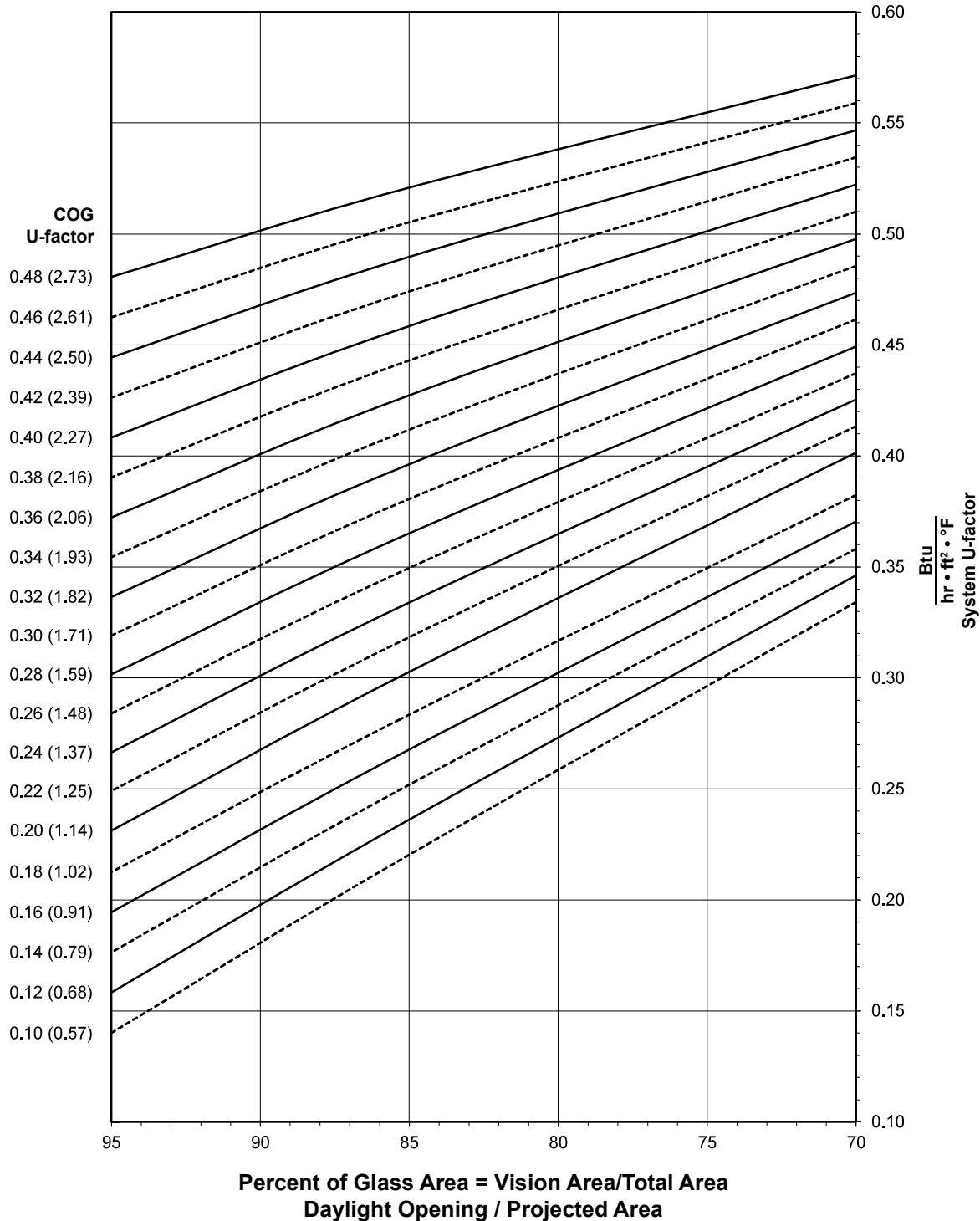
Note:

Values in parentheses are metric.

COG = Center of Glass.

Charts are generated per AAMA 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.

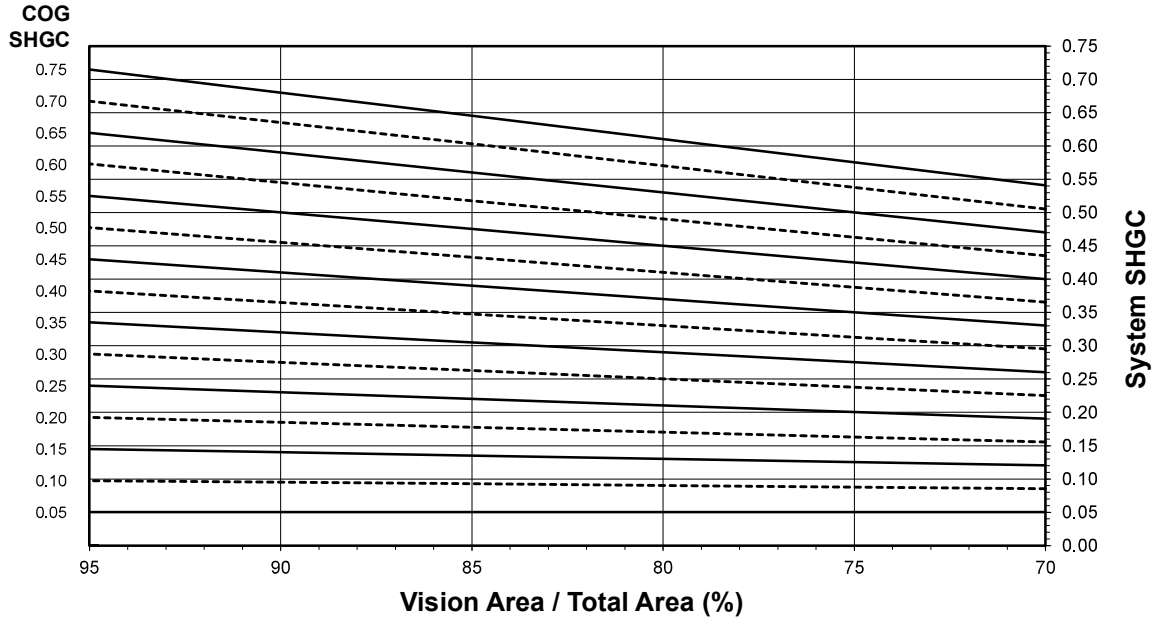
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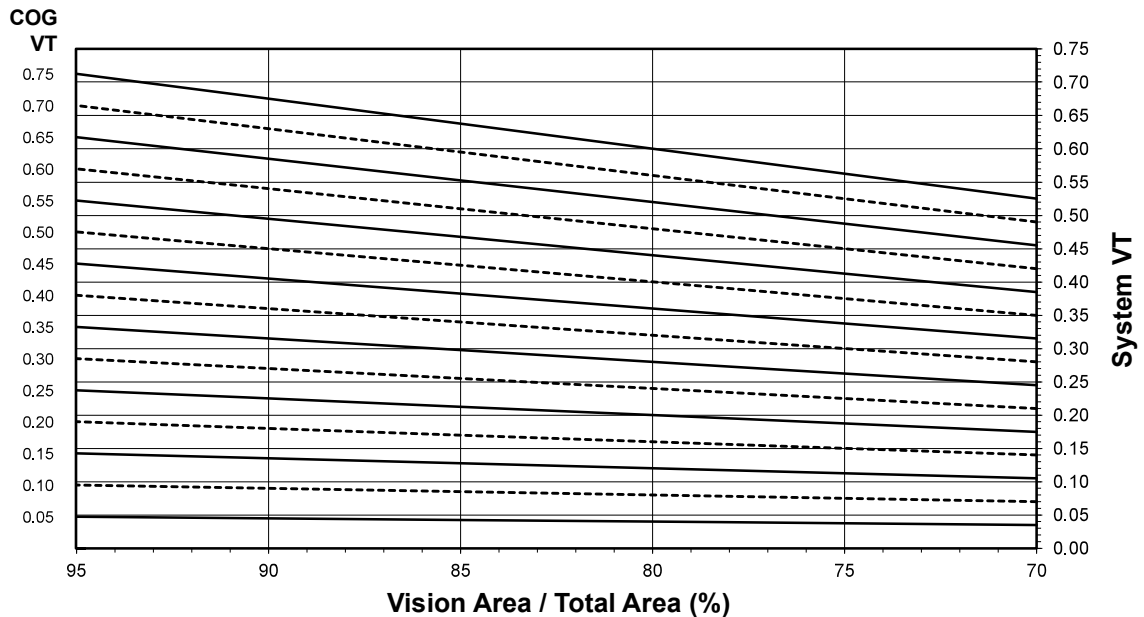
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AA™ 5450 FIXED WINDOW - BEVEL FACE
(1" Double Glazed)

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



System Visible Transmittance (VT) vs Percent of Vision Area



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

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.52
0.46	0.50
0.44	0.49
0.42	0.47
0.40	0.46
0.38	0.44
0.36	0.43
0.34	0.41
0.32	0.39
0.30	0.38
0.28	0.36
0.26	0.36
0.24	0.33
0.22	0.32
0.20	0.30
0.18	0.28
0.16	0.27
0.14	0.25
0.12	0.23
0.10	0.22

**AA™ 5450 FIXED WINDOW - BEVEL FACE
(1" Double Glazed)**

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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SHGC Matrix²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.65
0.70	0.60
0.65	0.56
0.60	0.52
0.55	0.48
0.50	0.43
0.45	0.39
0.40	0.35
0.35	0.31
0.30	0.26
0.25	0.22
0.20	0.18
0.15	0.14
0.10	0.09
0.05	0.05

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.64
0.70	0.60
0.65	0.55
0.60	0.51
0.55	0.47
0.50	0.43
0.45	0.38
0.40	0.34
0.35	0.30
0.30	0.26
0.25	0.21
0.20	0.17
0.15	0.13
0.10	0.09
0.05	0.04

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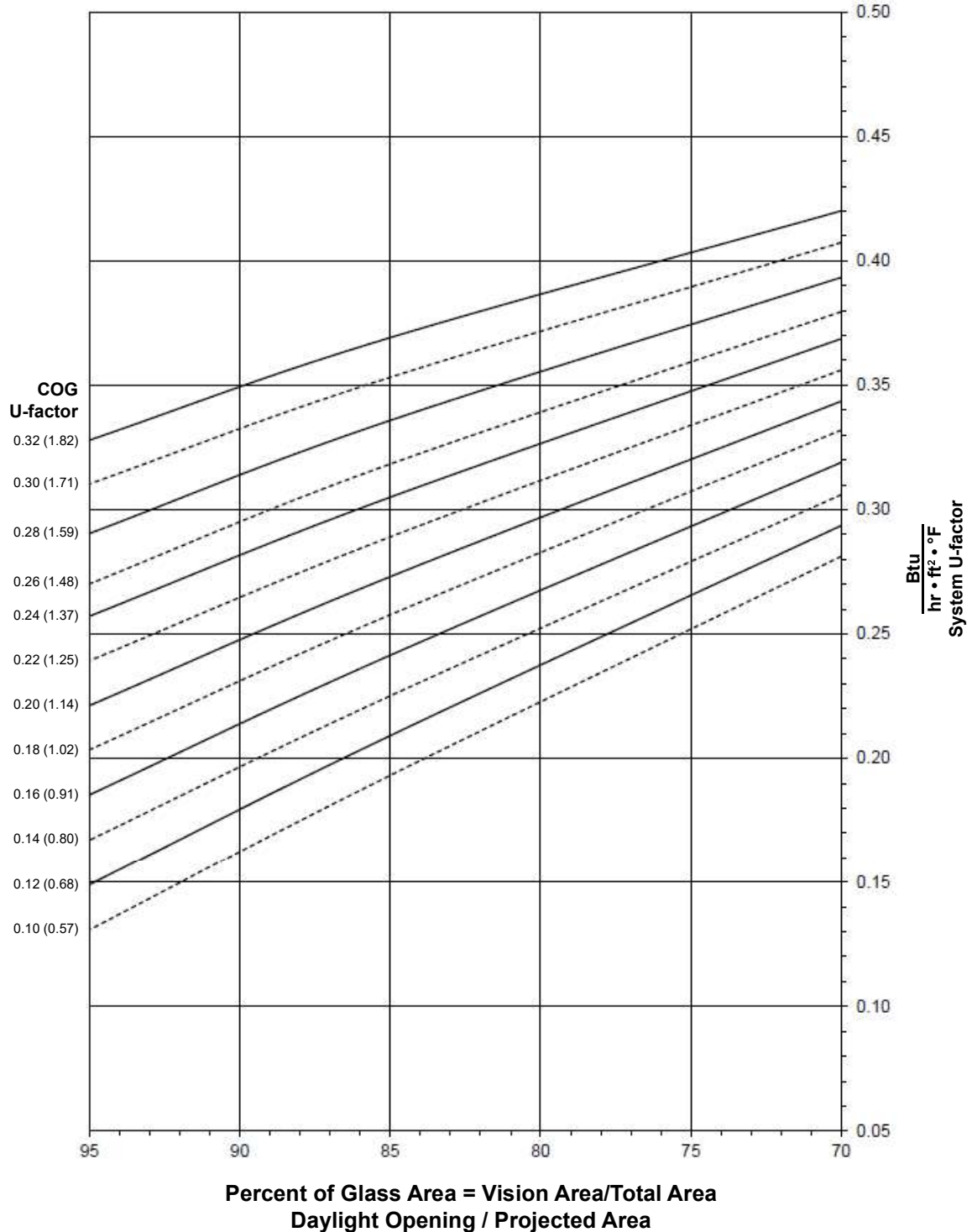
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**AA™ 5450 FIXED WINDOW
(1-1/2" Triple Glazed)**

Note:

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

System U-factor vs Percent of Glass Area

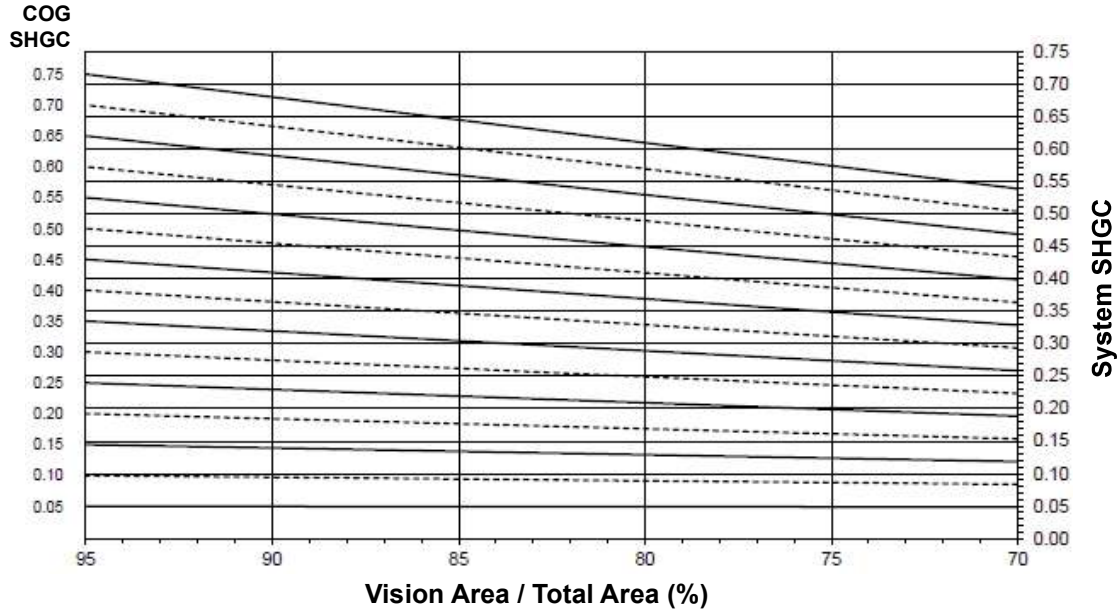


Notes for System U-factor, SHGC and VT charts:

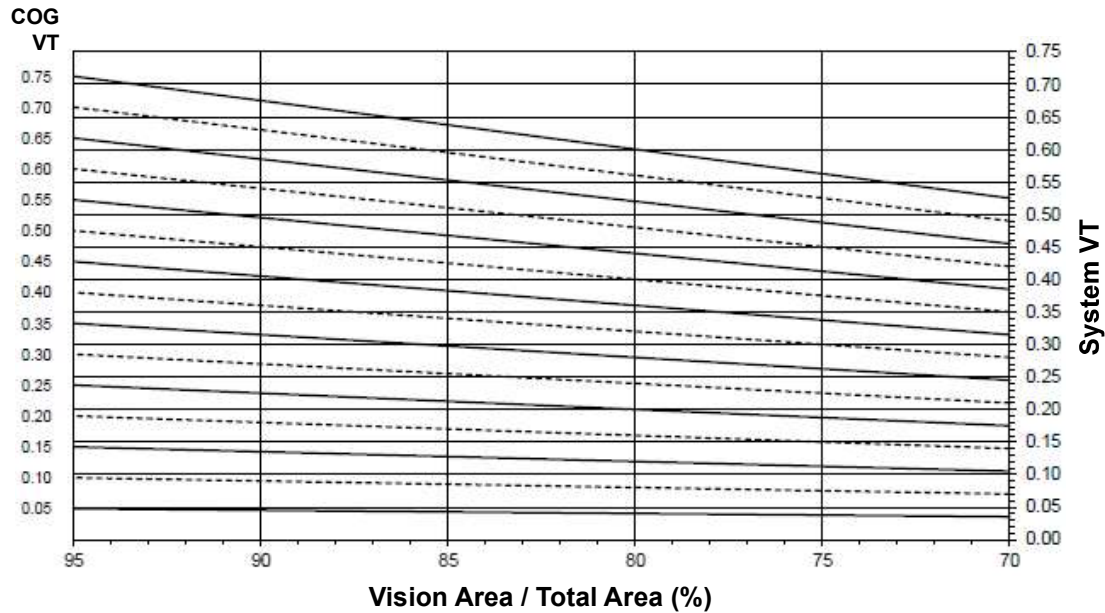
For glass values that are not listed, linear interpolation is permitted.
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**AA™ 5450 FIXED WINDOW
(1-1/2" Triple Glazed)**

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™ 5450 FIXED WINDOW (1-1/2" Triple Glazed)

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

Glass U-Factor ³	Overall U-Factor ⁴
0.32	0.37
0.30	0.35
0.28	0.33
0.26	0.32
0.24	0.30
0.22	0.29
0.20	0.27
0.18	0.26
0.16	0.24
0.14	0.22
0.12	0.21
0.10	0.19

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.
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4. Overall U-Factor, SHGC, and VT Matrices are based on the standard NFRC specimen size of 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

SHGC Matrix²

Glass SHGC ³	Overall Glass U-Factor ⁴
0.75	0.65
0.70	0.60
0.65	0.56
0.60	0.52
0.55	0.48
0.50	0.43
0.45	0.39
0.40	0.35
0.35	0.31
0.30	0.26
0.25	0.22
0.20	0.18
0.15	0.13
0.10	0.09
0.05	0.05

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.64
0.70	0.60
0.65	0.55
0.60	0.51
0.55	0.47
0.50	0.43
0.45	0.38
0.40	0.34
0.35	0.30
0.30	0.26
0.25	0.21
0.20	0.17
0.15	0.13
0.10	0.09
0.05	0.04

AA™ 5450 FIXED WINDOW - BEVEL FACE (1-1/2" Triple Glazed)

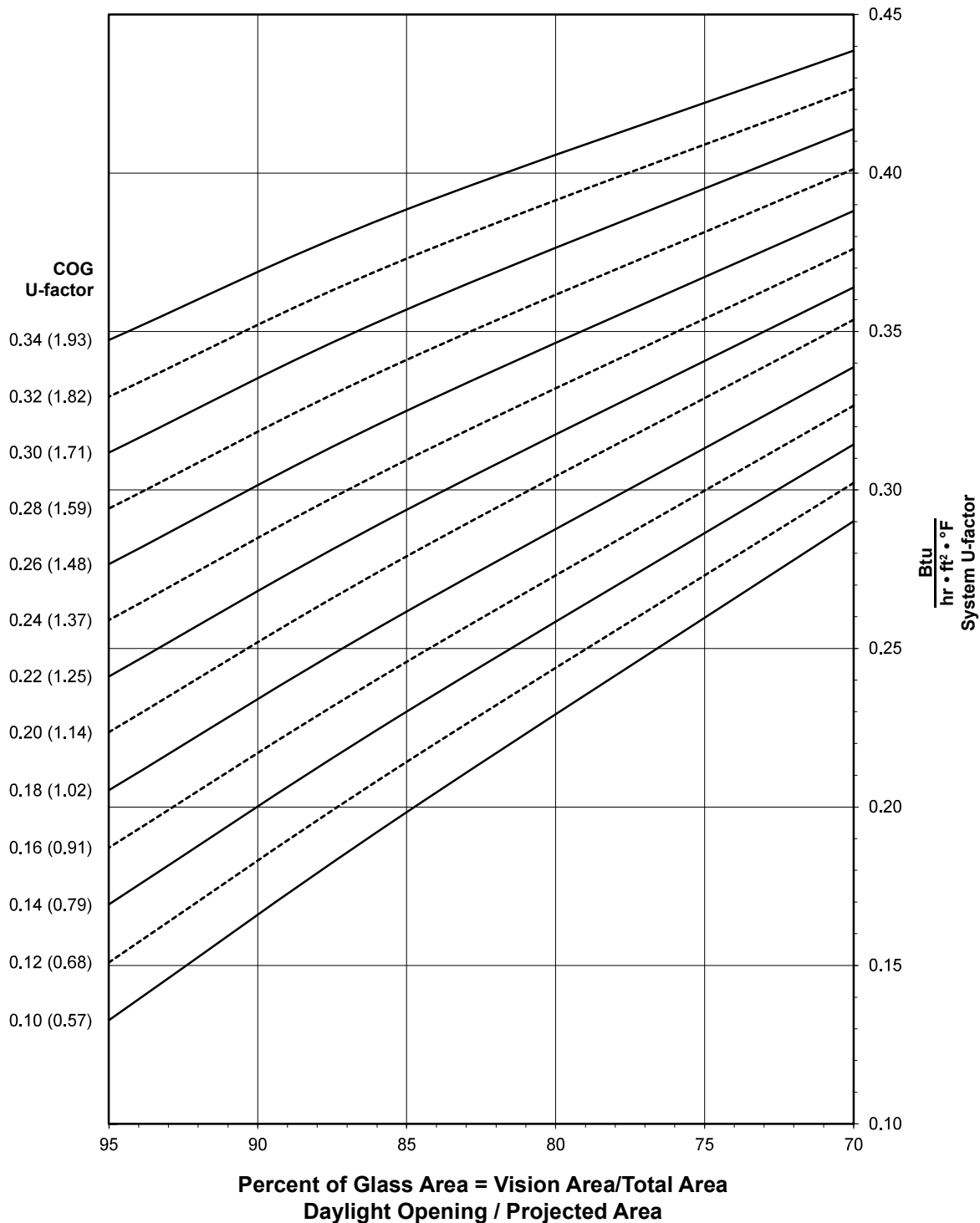
Note:

Values in parentheses are metric.

COG = Center of Glass.

Charts are generated per AAMA 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.

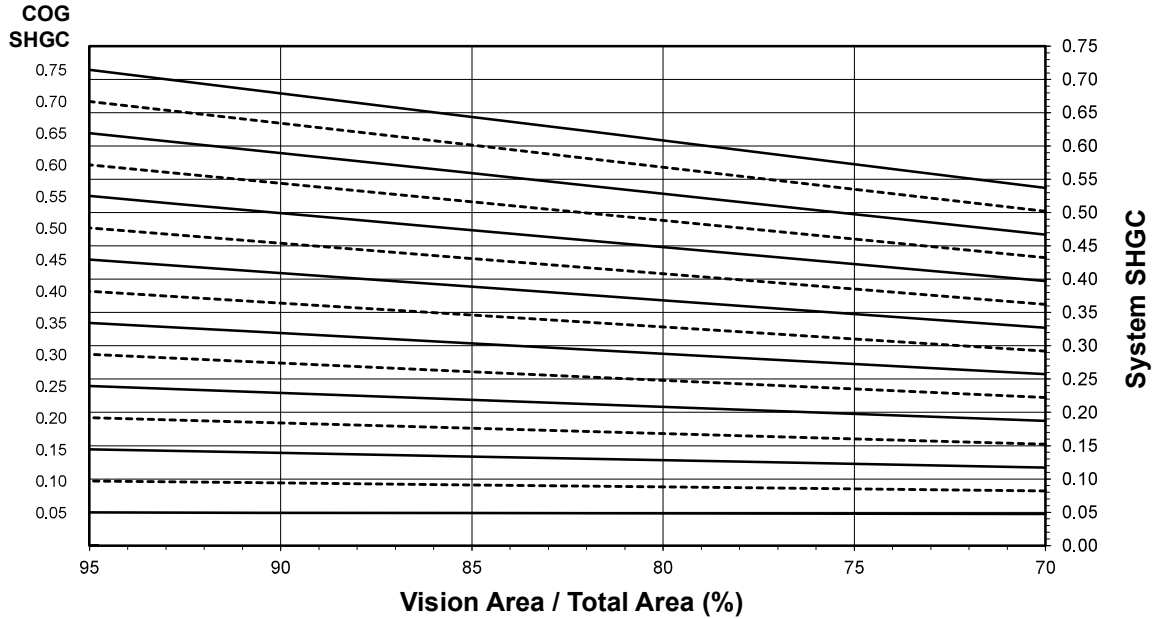
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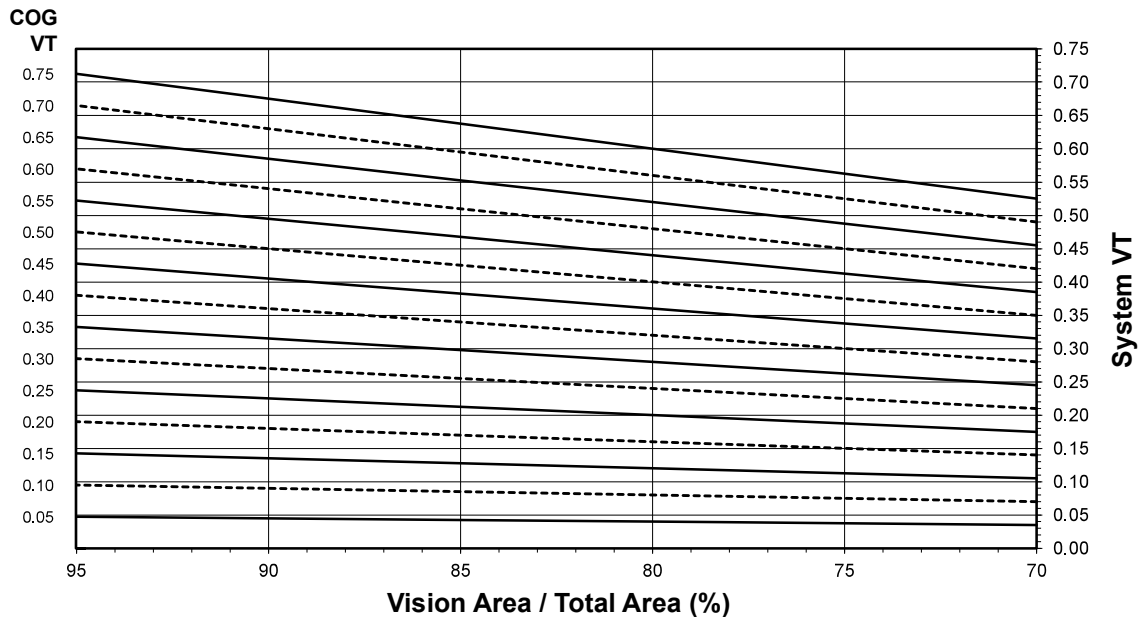
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AA™ 5450 FIXED WINDOW - BEVEL FACE
(1-1/2" Triple Glazed)

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



System Visible Transmittance (VT) vs Percent of Vision Area



**AA™ 5450 FIXED WINDOW - BEVEL FACE
(1-1/2" Triple Glazed)****Thermal Transmittance ¹ (BTU/hr • ft² • °F)**

Glass U-Factor ³	Overall U-Factor ⁴
0.34	0.39
0.32	0.37
0.30	0.36
0.28	0.34
0.26	0.32
0.24	0.31
0.22	0.29
0.20	0.28
0.18	0.26
0.16	0.24
0.14	0.23
0.12	0.21
0.10	0.20

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.
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4. Overall U-Factor, SHGC, and VT Matrices are based on the standard NFRC specimen size of 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.65
0.70	0.60
0.65	0.56
0.60	0.52
0.55	0.48
0.50	0.43
0.45	0.39
0.40	0.35
0.35	0.30
0.30	0.26
0.25	0.22
0.20	0.18
0.15	0.13
0.10	0.09
0.05	0.05

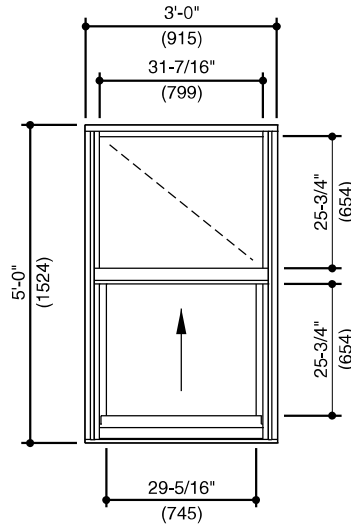
Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.64
0.70	0.60
0.65	0.55
0.60	0.51
0.55	0.47
0.50	0.43
0.45	0.38
0.40	0.34
0.35	0.30
0.30	0.26
0.25	0.21
0.20	0.17
0.15	0.13
0.10	0.09
0.05	0.04

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



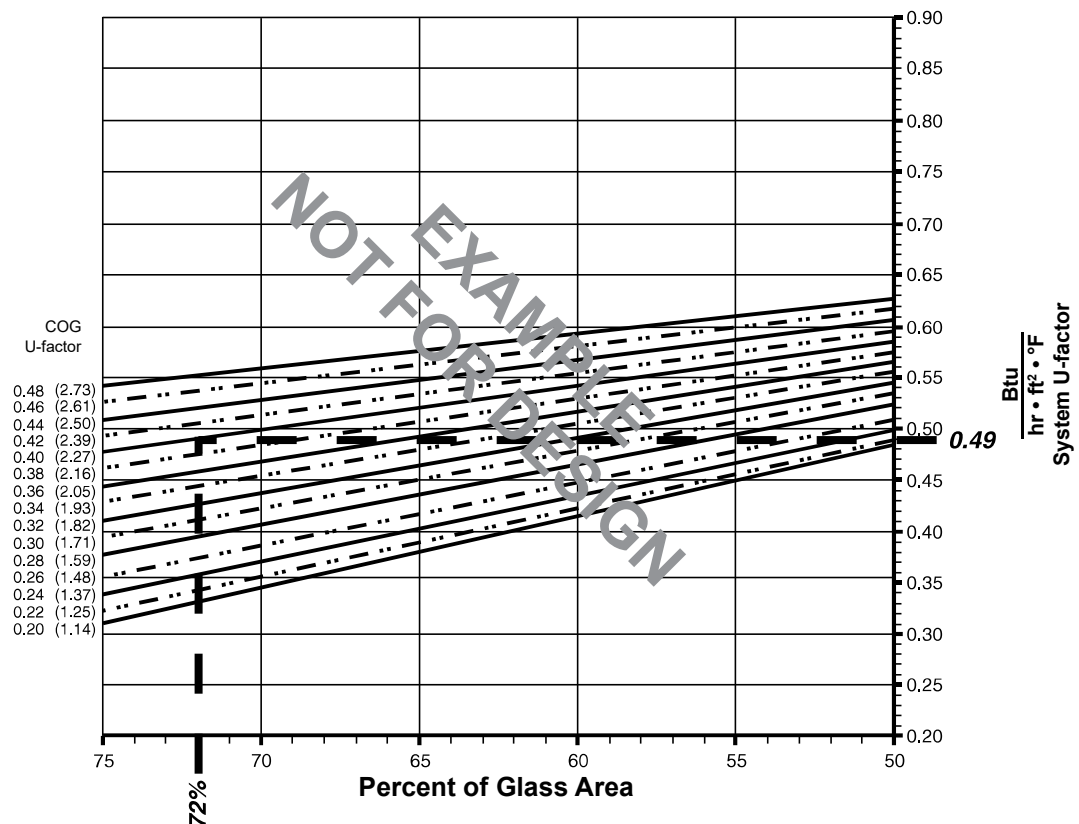
Example Glass U-Factor = 0.42 Btu/hr • ft² • °F

Total Daylight Opening = (31-7/16" • 25-3/4") + (29-5/16" • 25-3/4") = 10.86 ft²

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

Percent of Glass = (Total Daylight Opening ÷ Total Projected Area)100
= (10.86 ÷ 15)100 = 72%

System U-factor vs Percent of Glass Area



Based on 72% glass and center of glass (COG) U-factor of 0.42
System U-factor is equal to 0.49 Btu/hr • ft² • °F

AA™ 5450 SINGLE HUNG WINDOW (1" Double Glazed - 10lb. Sill)

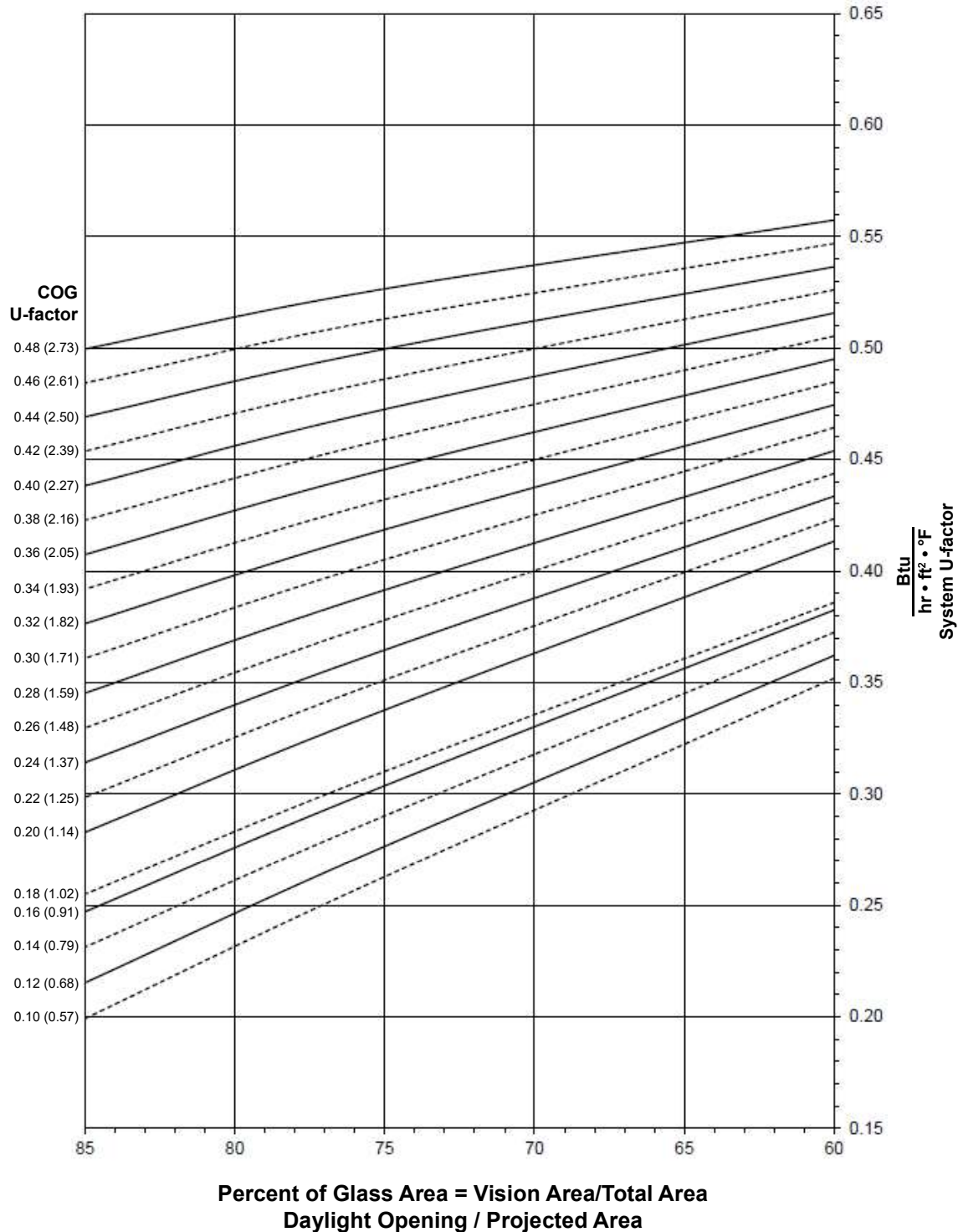
Note:

Values in parentheses are metric.

COG = Center of Glass.

Charts are generated per AAMA 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.

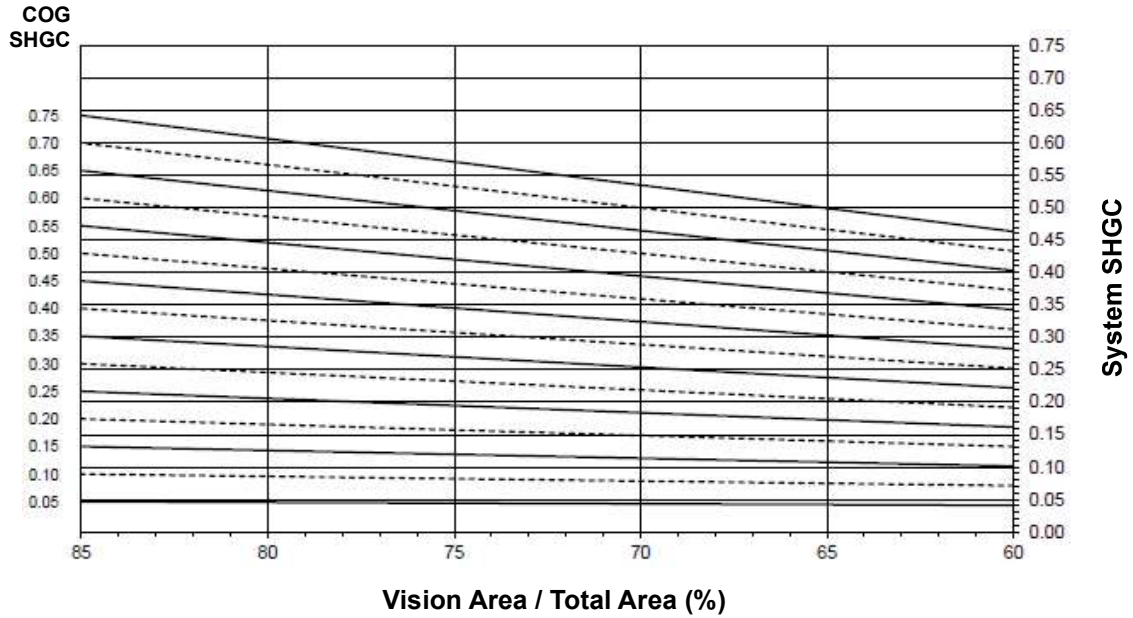
Glass properties are based on center of glass values and are obtained from your glass supplier.

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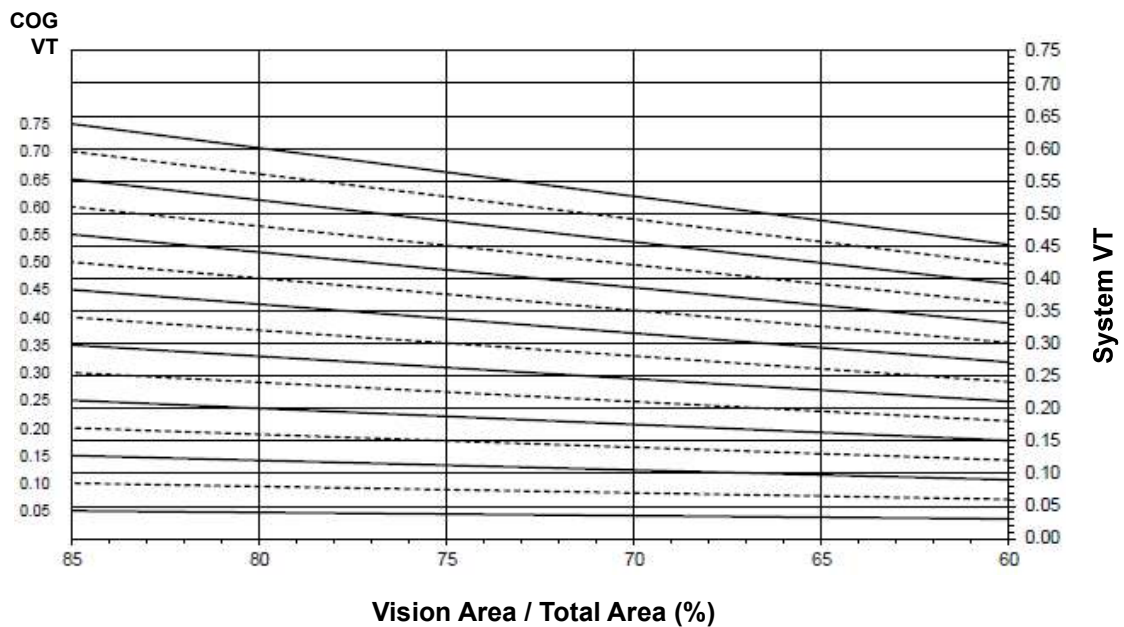
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**AA™ 5450 SINGLE HUNG WINDOW
(1" Double Glazed - 10lb Sill)**

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



System Visible Transmittance (VT) vs Percent of Vision Area



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

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.53
0.46	0.51
0.44	0.50
0.42	0.48
0.40	0.47
0.38	0.46
0.36	0.44
0.34	0.43
0.32	0.42
0.30	0.40
0.28	0.39
0.26	0.38
0.24	0.36
0.22	0.35
0.20	0.33
0.18	0.31
0.16	0.30
0.14	0.29
0.12	0.27
0.10	0.26

**AA™ 5450 SINGLE HUNG WINDOW
(1" Double Glazed - 10lb. Sill)**

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 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.57
0.70	0.54
0.65	0.50
0.60	0.46
0.55	0.42
0.50	0.39
0.45	0.35
0.40	0.31
0.35	0.27
0.30	0.23
0.25	0.20
0.20	0.16
0.15	0.12
0.10	0.08
0.05	0.04

Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.57
0.70	0.53
0.65	0.49
0.60	0.45
0.55	0.42
0.50	0.38
0.45	0.34
0.40	0.30
0.35	0.27
0.30	0.23
0.25	0.19
0.20	0.15
0.15	0.11
0.10	0.08
0.05	0.04

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.

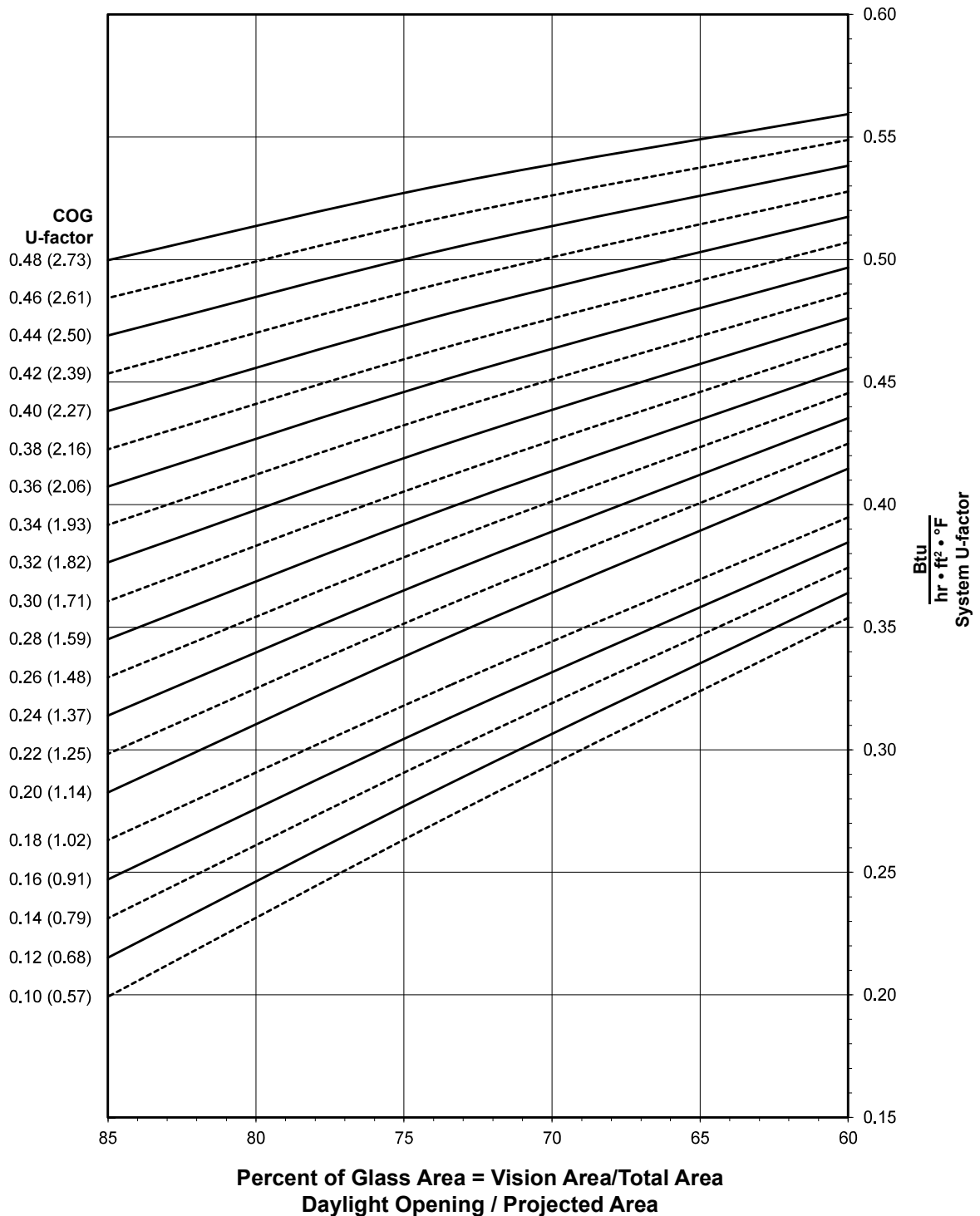
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**AA™ 5450 SINGLE HUNG WINDOW - BEVEL FACE
(1" Double Glazed - 10lb. Sill)**

Note:

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

System U-factor vs Percent of Glass Area

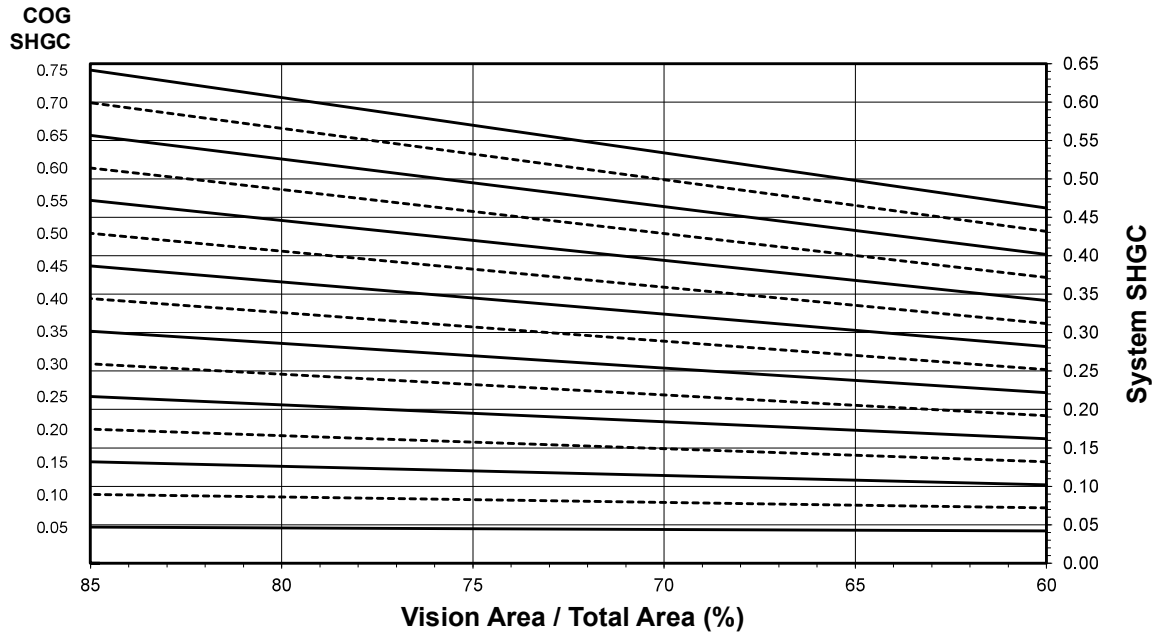


Notes for System U-factor, SHGC and VT charts:

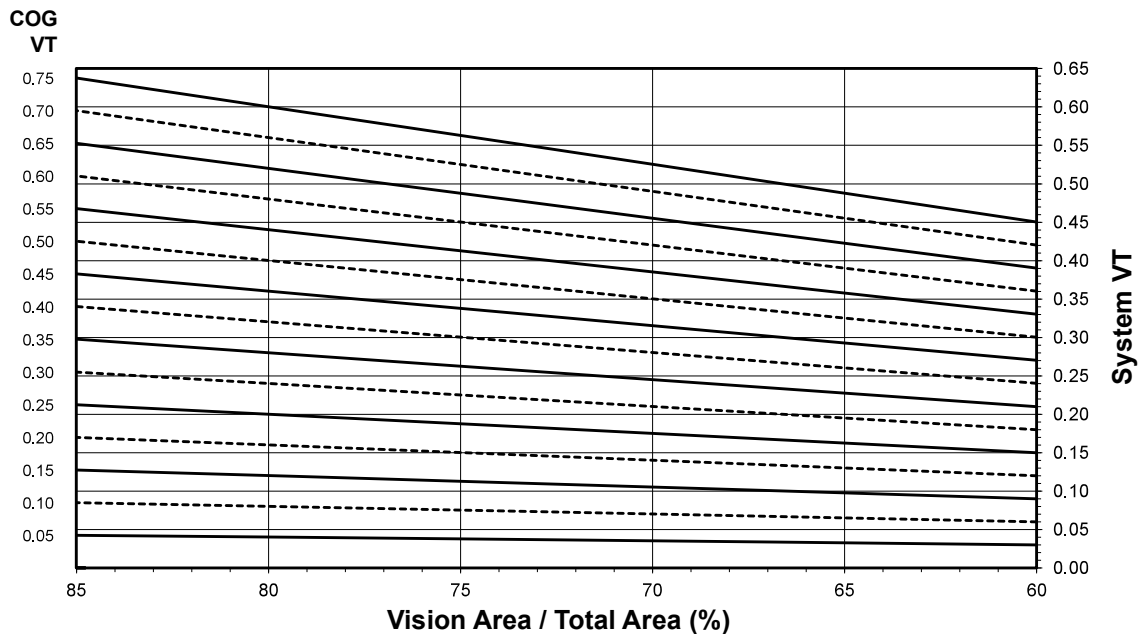
For glass values that are not listed, linear interpolation is permitted.
Glass properties are based on center of glass values and are obtained from your glass supplier.

AA™ 5450 SINGLE HUNG WINDOW - BEVEL FACE
(1" Double Glazed - 10lb Sill)

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



System Visible Transmittance (VT) vs Percent of Vision Area



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

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.53
0.46	0.52
0.44	0.50
0.42	0.49
0.40	0.48
0.38	0.46
0.36	0.45
0.34	0.44
0.32	0.43
0.30	0.41
0.28	0.40
0.26	0.39
0.24	0.37
0.22	0.36
0.20	0.35
0.18	0.33
0.16	0.31
0.14	0.30
0.12	0.29
0.10	0.27

AA™ 5450 SINGLE HUNG WINDOW
- BEVEL FACE
(1" Double Glazed - 10lb Sill)

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 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

SHGC Matrix²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.56
0.70	0.52
0.65	0.49
0.60	0.45
0.55	0.41
0.50	0.38
0.45	0.34
0.40	0.30
0.35	0.26
0.30	0.23
0.25	0.19
0.20	0.15
0.15	0.12
0.10	0.08
0.05	0.04

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.55
0.70	0.51
0.65	0.48
0.60	0.44
0.55	0.40
0.50	0.37
0.45	0.33
0.40	0.29
0.35	0.26
0.30	0.22
0.25	0.18
0.20	0.15
0.15	0.11
0.10	0.07
0.05	0.04

AA™ 5450 SINGLE HUNG WINDOW (1-1/2" Triple Glazed - 10lb. Sill)

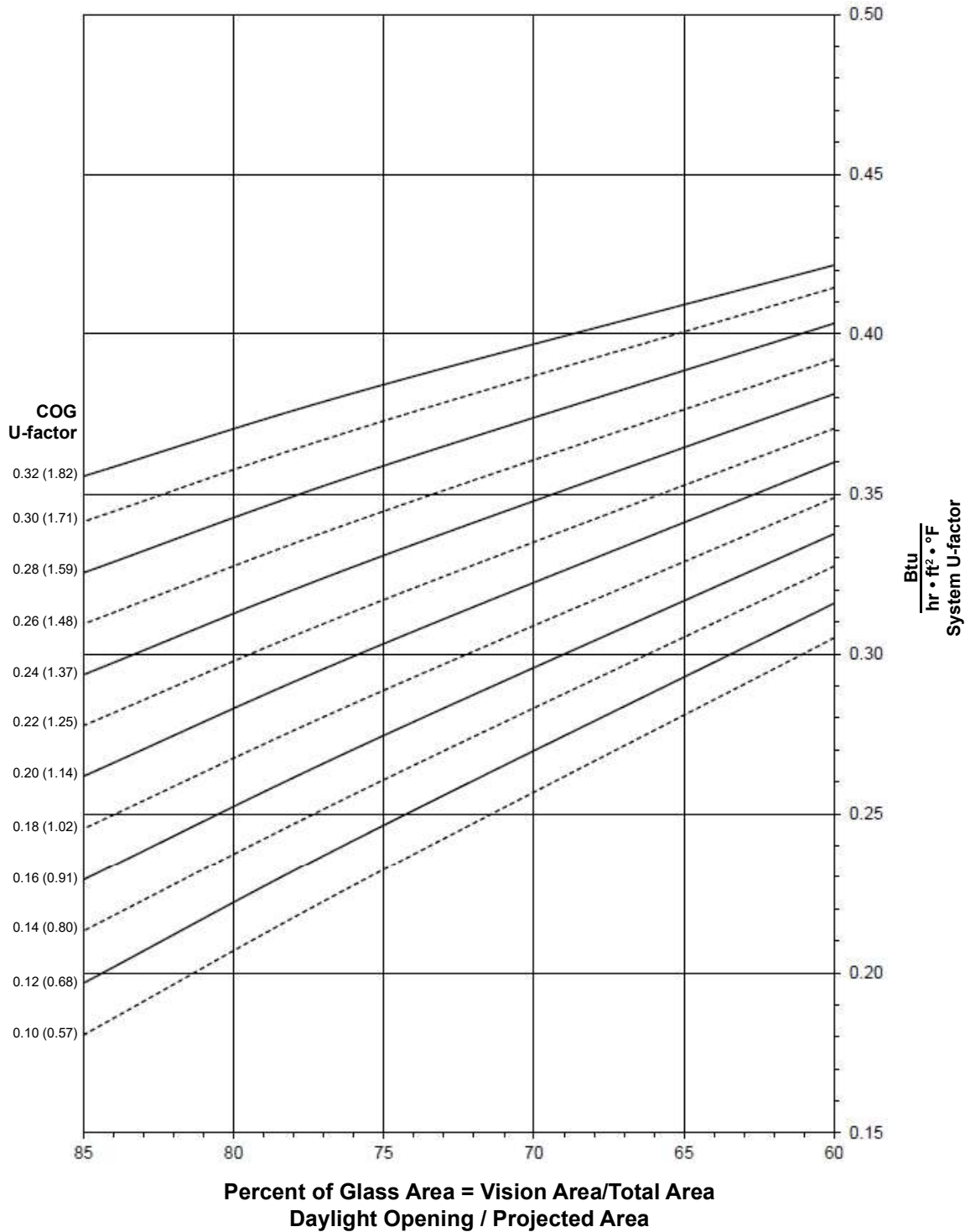
Note:

Values in parentheses are metric.

COG = Center of Glass.

Charts are generated per AAMA 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.

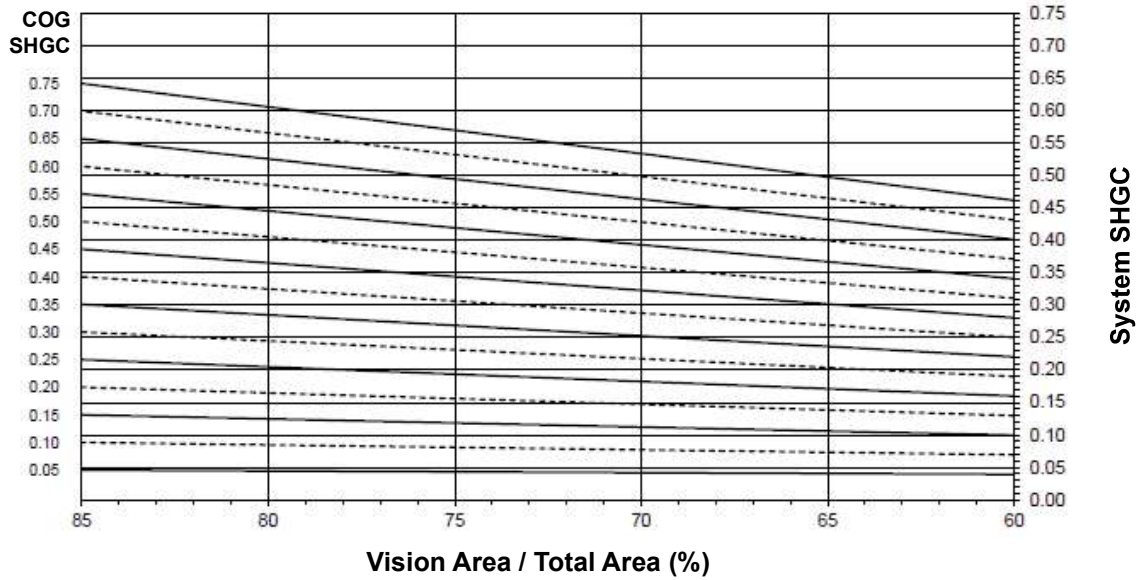
Glass properties are based on center of glass values and are obtained from your glass supplier.

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.

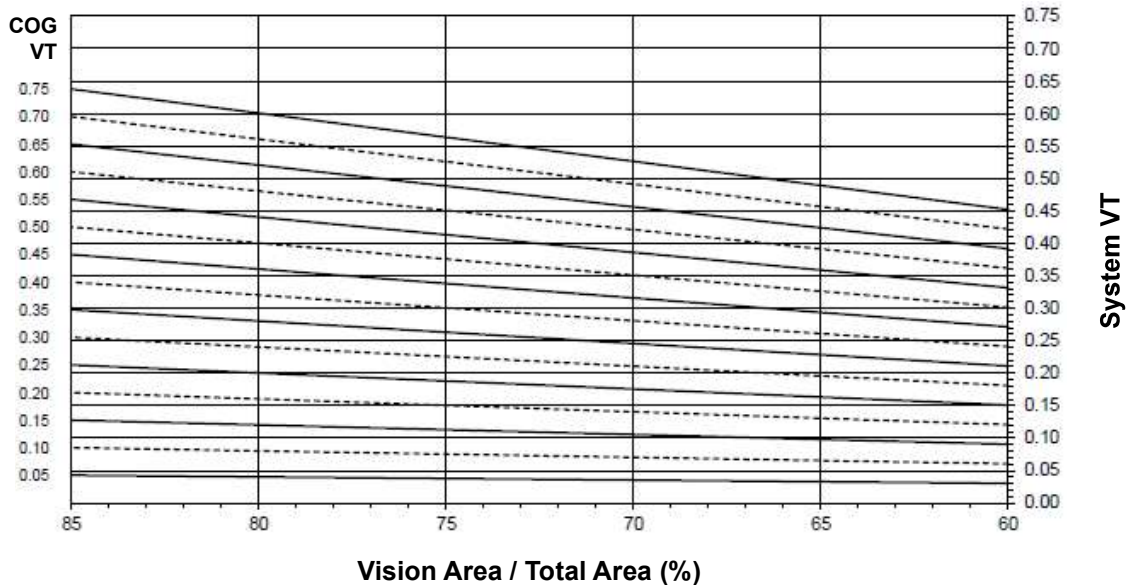
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**AA™ 5450 SINGLE HUNG WINDOW
(1-1/2" Triple Glazed - 10lb Sill)**

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



System Visible Transmittance (VT) vs Percent of Vision Area



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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AA™ 5450 SINGLE HUNG WINDOW (1-1/2" Triple Glazed - 10lb. Sill)

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

Glass U-Factor ³	Overall U-Factor ⁴
0.32	0.38
0.30	0.37
0.28	0.36
0.26	0.34
0.24	0.33
0.22	0.31
0.20	0.30
0.18	0.29
0.16	0.27
0.14	0.26
0.12	0.24
0.10	0.23

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 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

SHGC Matrix²

Glass SHGC ³	Overall Glass U-Factor ⁴
0.75	0.65
0.70	0.60
0.65	0.56
0.60	0.52
0.55	0.48
0.50	0.43
0.45	0.39
0.40	0.35
0.35	0.31
0.30	0.26
0.25	0.22
0.20	0.18
0.15	0.13
0.10	0.09
0.05	0.05

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.64
0.70	0.60
0.65	0.55
0.60	0.51
0.55	0.47
0.50	0.43
0.45	0.38
0.40	0.34
0.35	0.30
0.30	0.26
0.25	0.21
0.20	0.17
0.15	0.13
0.10	0.09
0.05	0.04

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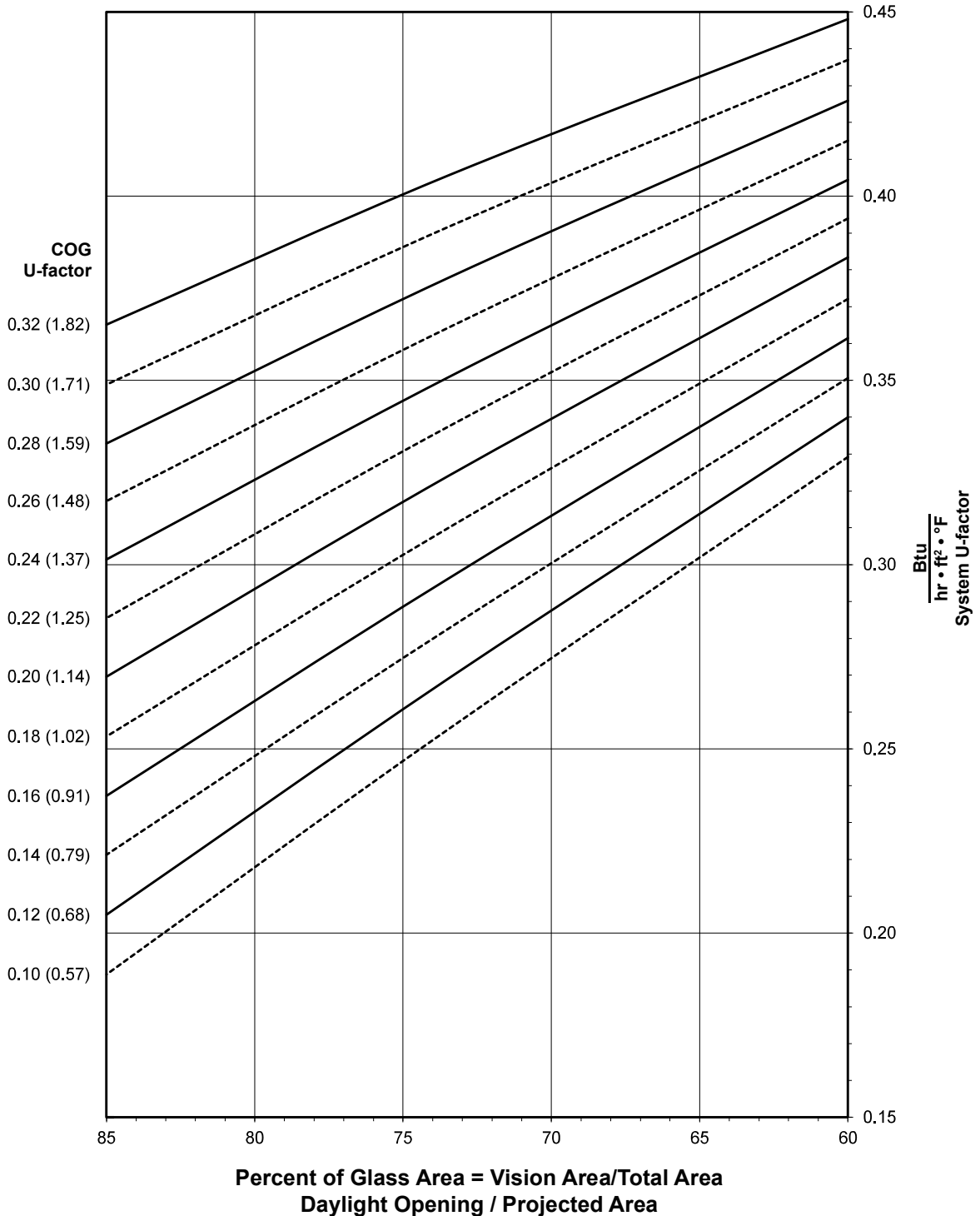
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AA™ 5450 SINGLE HUNG WINDOW - BEVEL FACE
(1-1/2" Triple Glazed - 10lb. Sill)

Note:

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

System U-factor vs Percent of Glass Area

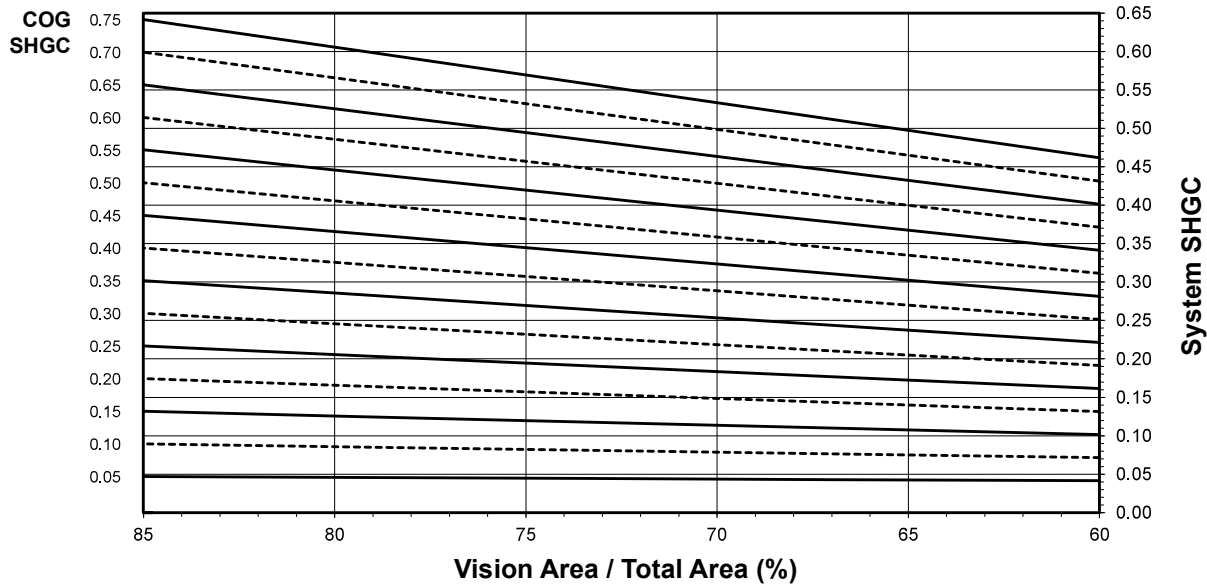


Notes for System U-factor, SHGC and VT charts:

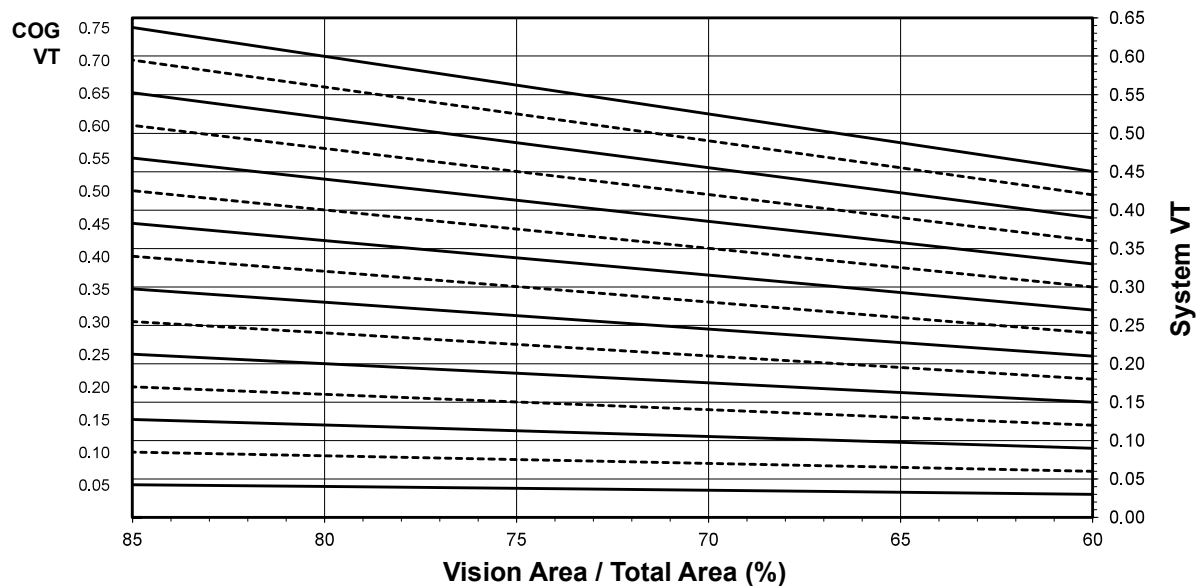
For glass values that are not listed, linear interpolation is permitted.
Glass properties are based on center of glass values and are obtained from your glass supplier.

AA™ 5450 SINGLE HUNG WINDOW - BEVEL FACE (1-1/2" Triple Glazed - 10lb. Sill)

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™ 5450 SINGLE HUNG WINDOW
- BEVEL FACE
(1-1/2" Triple Glazed - 10lb. Sill)**

Thermal Transmittance ¹ (BTU/hr • ft² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.32	0.41
0.30	0.39
0.28	0.38
0.26	0.36
0.24	0.35
0.22	0.34
0.20	0.32
0.18	0.31
0.16	0.30
0.14	0.28
0.12	0.27
0.10	0.26

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 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.56
0.70	0.52
0.65	0.48
0.60	0.45
0.55	0.41
0.50	0.37
0.45	0.34
0.40	0.30
0.35	0.26
0.30	0.23
0.25	0.19
0.20	0.15
0.15	0.12
0.10	0.08
0.05	0.04

Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.55
0.70	0.51
0.65	0.48
0.60	0.44
0.55	0.40
0.50	0.37
0.45	0.33
0.40	0.29
0.35	0.26
0.30	0.22
0.25	0.18
0.20	0.15
0.15	0.11
0.10	0.07
0.05	0.04

AA™ 5450 SINGLE HUNG WINDOW (1" Double Glazed - 15lb. Sill)

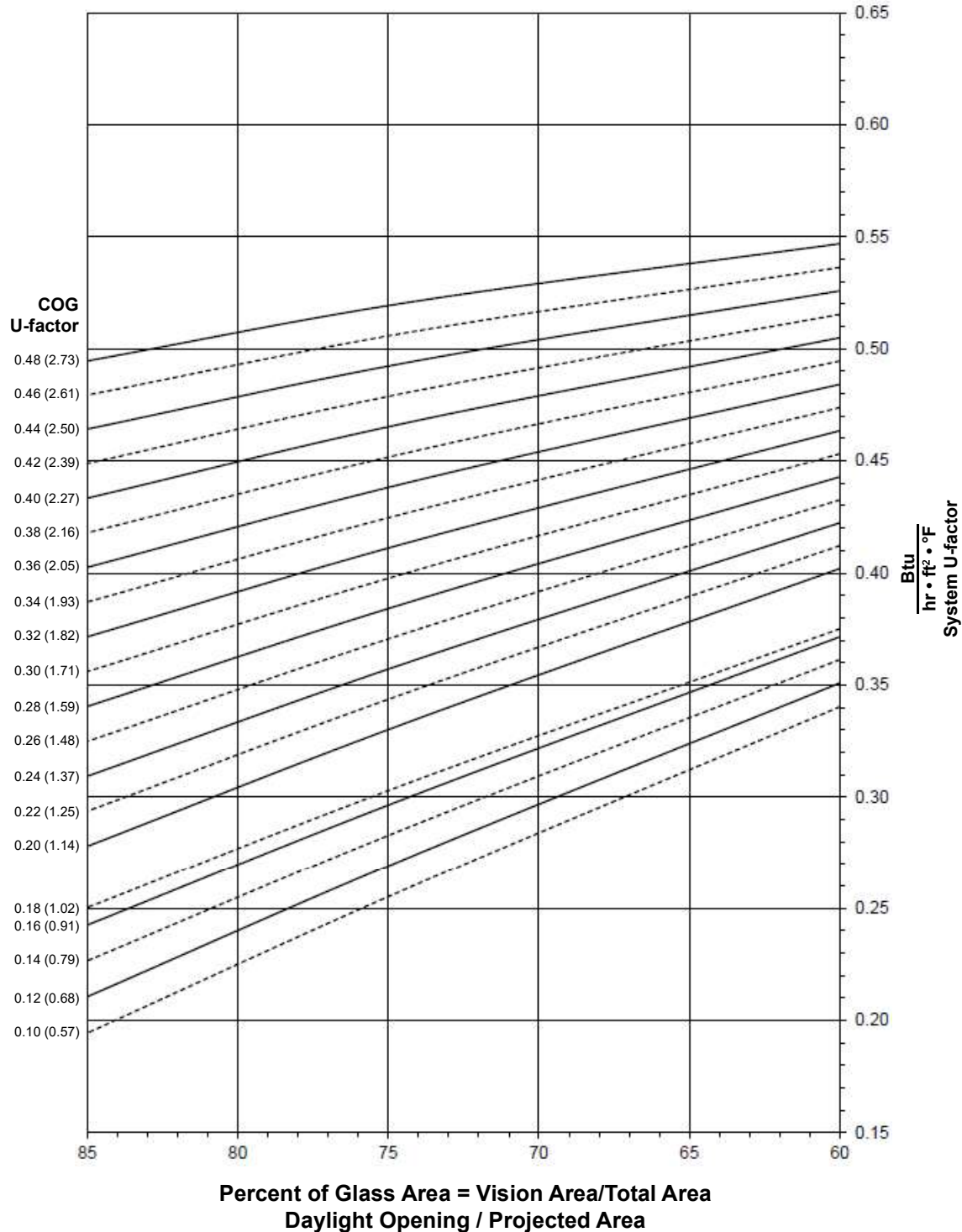
Note:

Values in parentheses are metric.

COG = Center of Glass.

Charts are generated per AAMA 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.

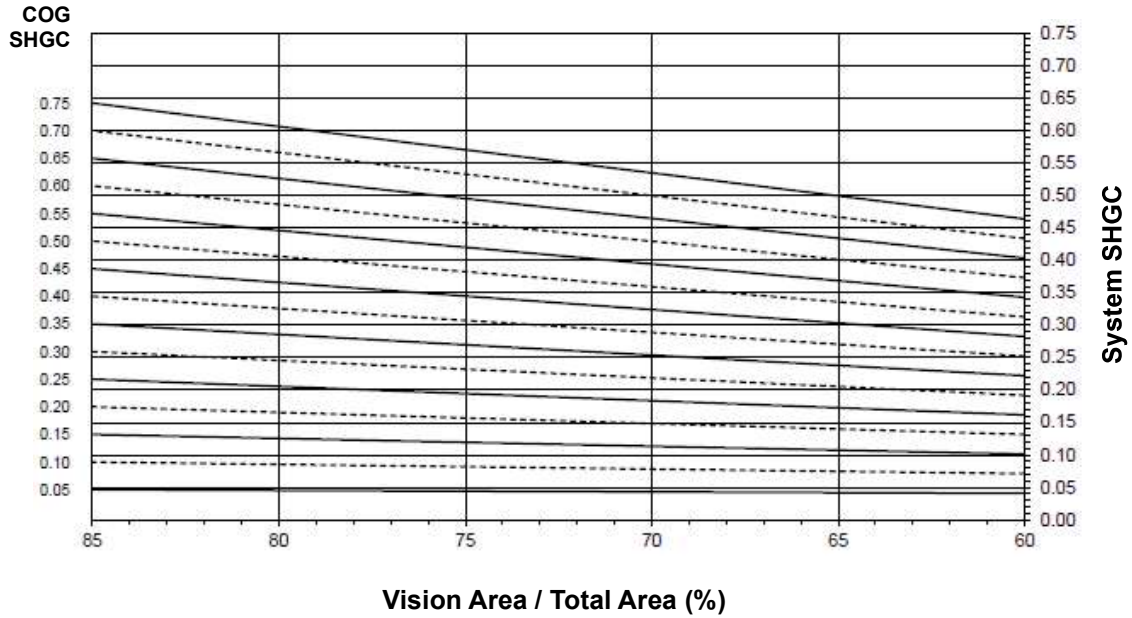
Glass properties are based on center of glass values and are obtained from your glass supplier.

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.

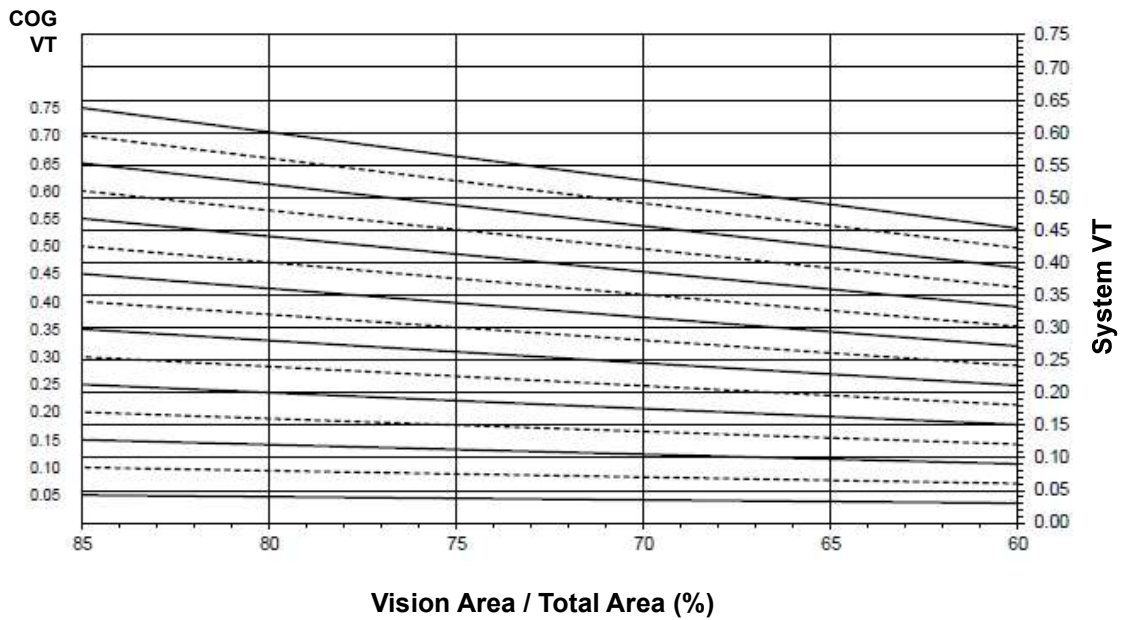
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**AA™ 5450 SINGLE HUNG WINDOW
(1" Double Glazed - 15lb Sill)**

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



System Visible Transmittance (VT) vs Percent of Vision Area



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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Thermal Transmittance ¹ (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	0.47
0.38	0.45
0.36	0.44
0.34	0.43
0.32	0.41
0.30	0.40
0.28	0.39
0.26	0.37
0.24	0.36
0.22	0.35
0.20	0.33
0.18	0.31
0.16	0.30
0.14	0.29
0.12	0.27
0.10	0.26

**AA™ 5450 SINGLE HUNG WINDOW
(1" Double Glazed - 15lb Sill)**

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 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.56
0.70	0.53
0.65	0.49
0.60	0.45
0.55	0.42
0.50	0.38
0.45	0.34
0.40	0.30
0.35	0.27
0.30	0.23
0.25	0.19
0.20	0.16
0.15	0.12
0.10	0.08
0.05	0.04

Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.56
0.70	0.52
0.65	0.48
0.60	0.45
0.55	0.41
0.50	0.37
0.45	0.33
0.40	0.30
0.35	0.26
0.30	0.22
0.25	0.19
0.20	0.15
0.15	0.11
0.10	0.07
0.05	0.04

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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AA™ 5450 SINGLE HUNG WINDOW - BEVEL FACE (1" Double Glazed - 15lb Sill)

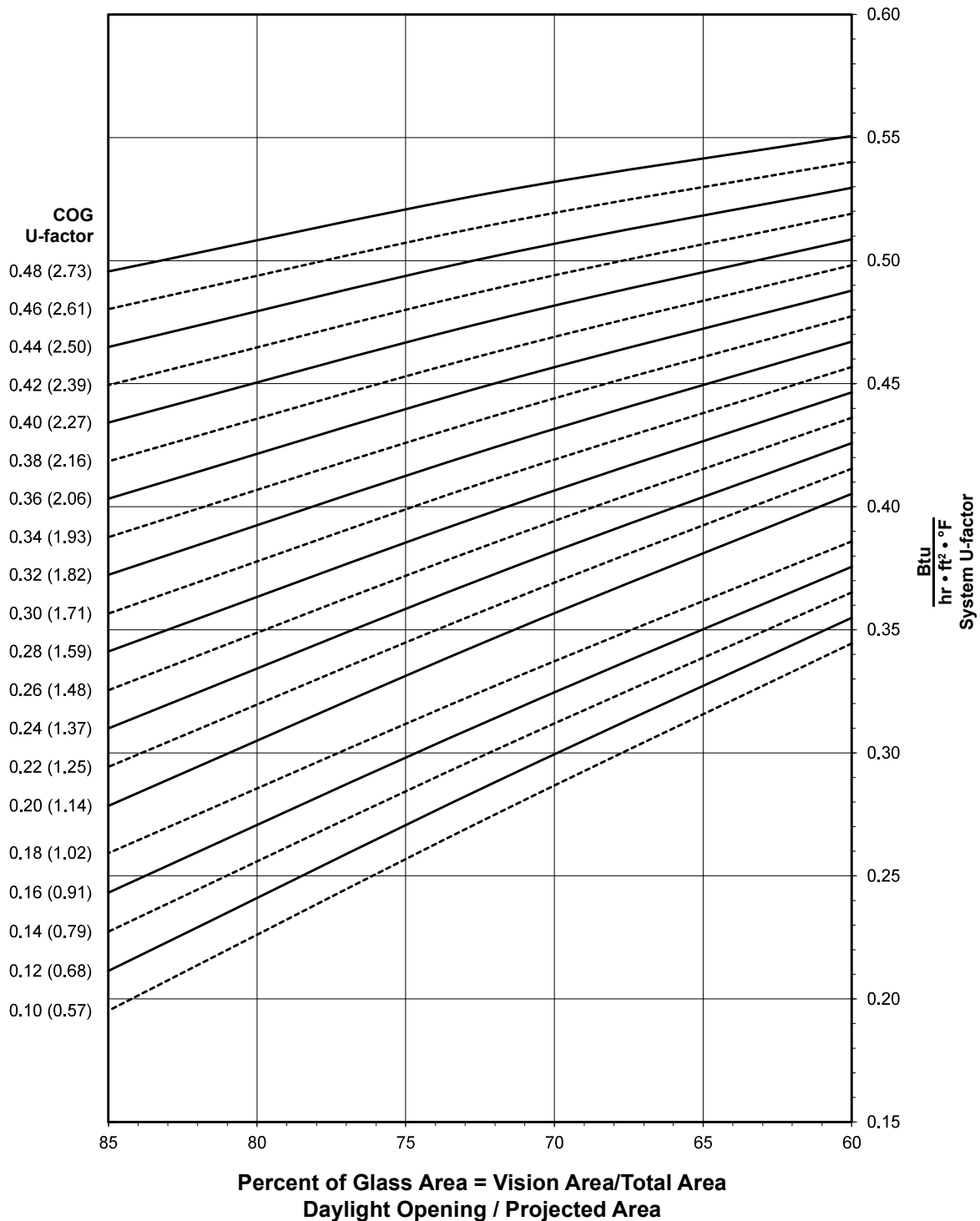
Note:

Values in parentheses are metric.

COG = Center of Glass.

Charts are generated per AAMA 507

System U-factor vs Percent of Glass Area

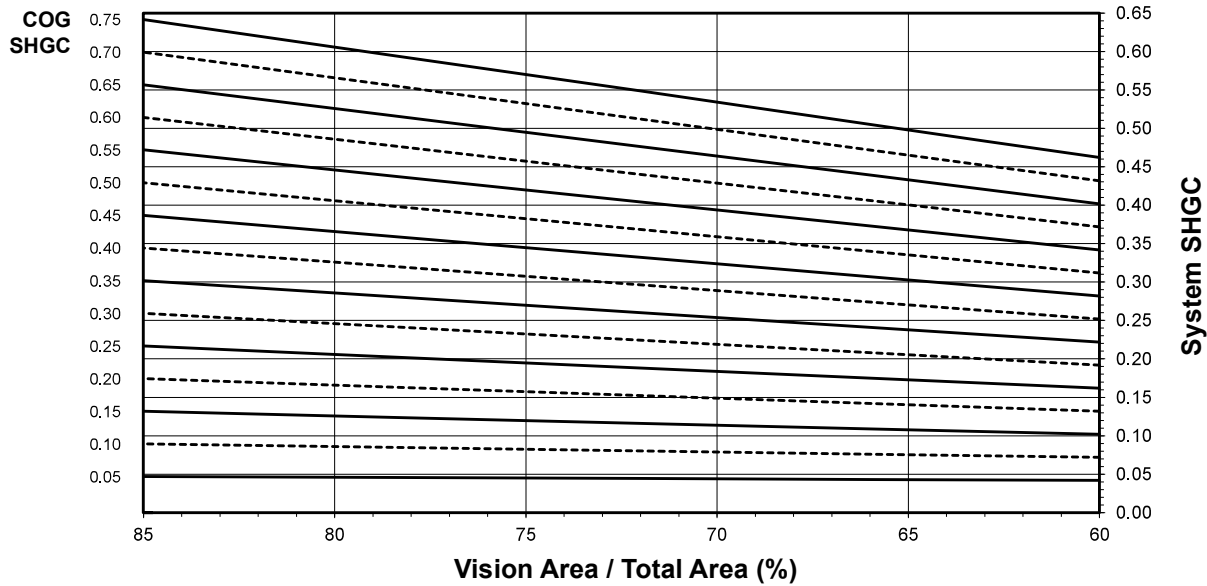
**Notes for System U-factor, SHGC and VT charts:**

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

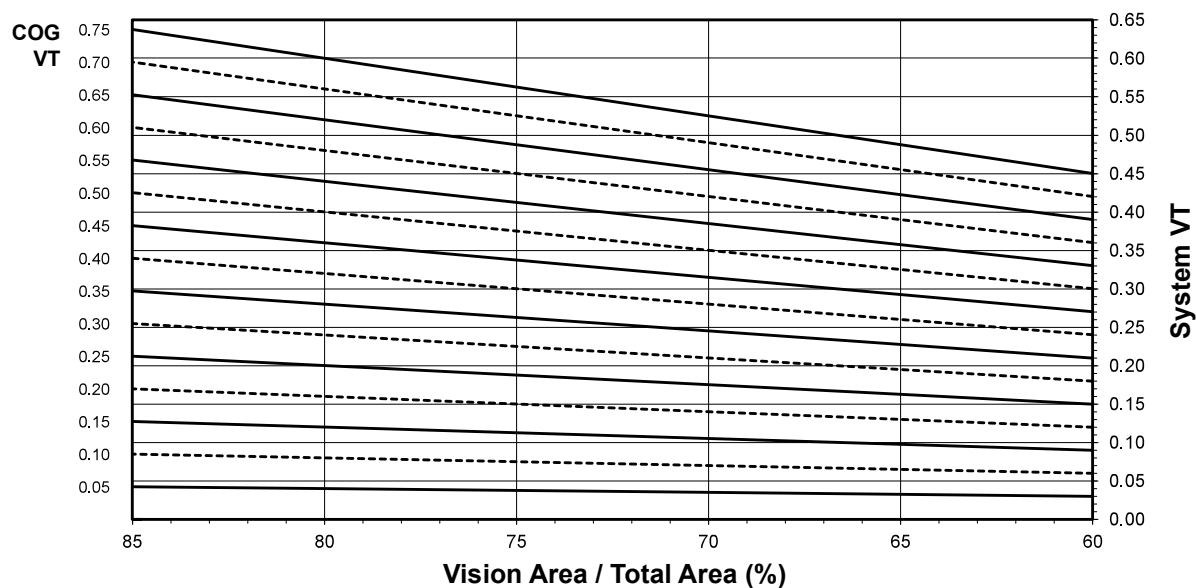
Glass properties are based on center of glass values and are obtained from your glass supplier.

AA™ 5450 SINGLE HUNG WINDOW - BEVEL FACE (1" Double Glazed - 15lb Sill)

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



System Visible Transmittance (VT) vs Percent of Vision Area



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

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.53
0.46	0.51
0.44	0.50
0.42	0.49
0.40	0.48
0.38	0.46
0.36	0.45
0.34	0.44
0.32	0.42
0.30	0.41
0.28	0.40
0.26	0.39
0.24	0.37
0.22	0.36
0.20	0.35
0.18	0.33
0.16	0.31
0.14	0.30
0.12	0.29
0.10	0.27

AA™ 5450 SINGLE HUNG WINDOW
- BEVEL FACE
(1" Double Glazed - 15lb Sill)

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 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

SHGC Matrix²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.55
0.70	0.51
0.65	0.48
0.60	0.44
0.55	0.40
0.50	0.37
0.45	0.33
0.40	0.30
0.35	0.26
0.30	0.22
0.25	0.19
0.20	0.15
0.15	0.12
0.10	0.08
0.05	0.04

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.54
0.70	0.50
0.65	0.47
0.60	0.43
0.55	0.40
0.50	0.36
0.45	0.32
0.40	0.29
0.35	0.25
0.30	0.22
0.25	0.18
0.20	0.14
0.15	0.11
0.10	0.07
0.05	0.04

AA™ 5450 SINGLE HUNG WINDOW (1-1/2" Triple Glazed - 15lb. Sill)

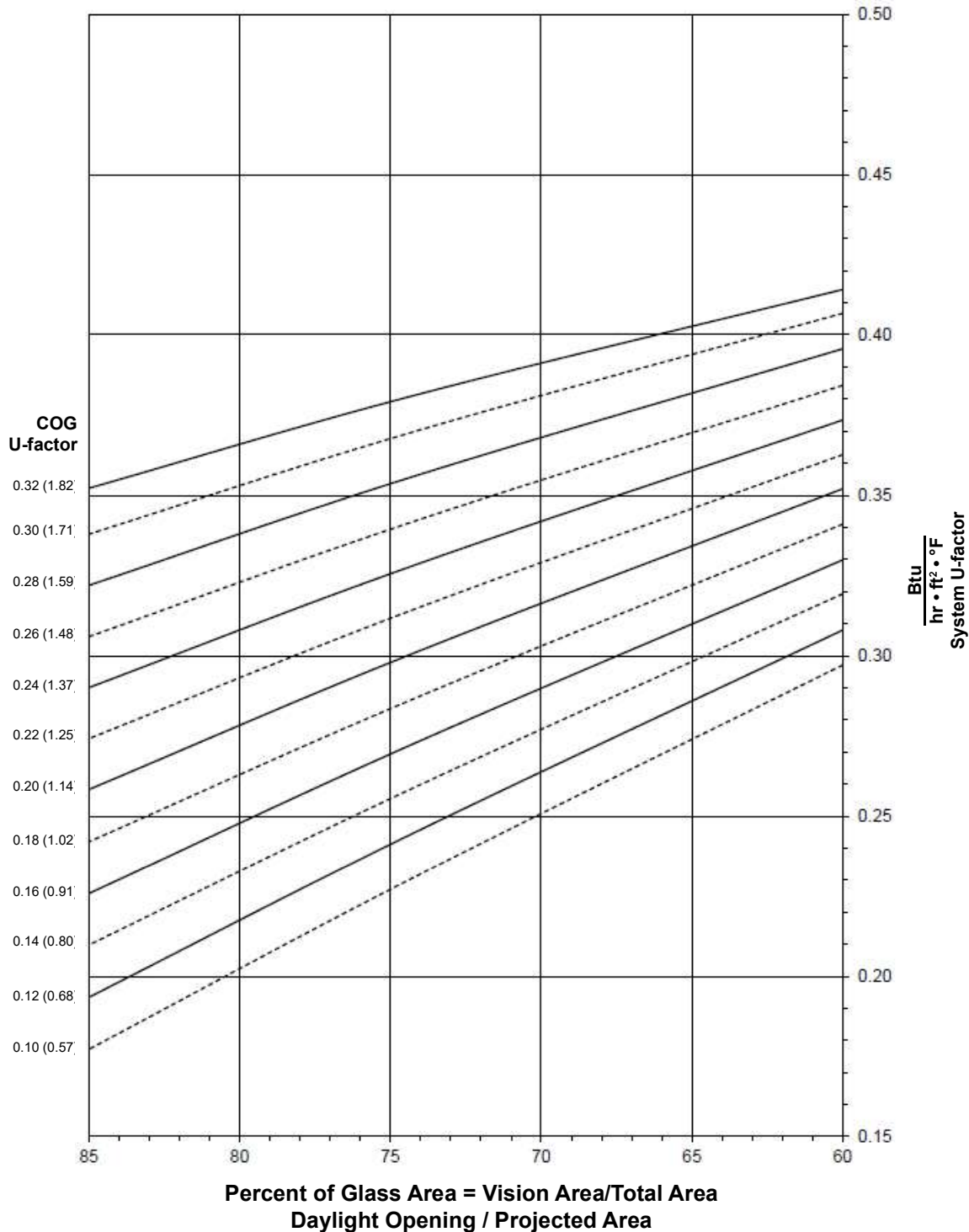
Note:

Values in parentheses are metric.

COG = Center of Glass.

Charts are generated per AAMA 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.

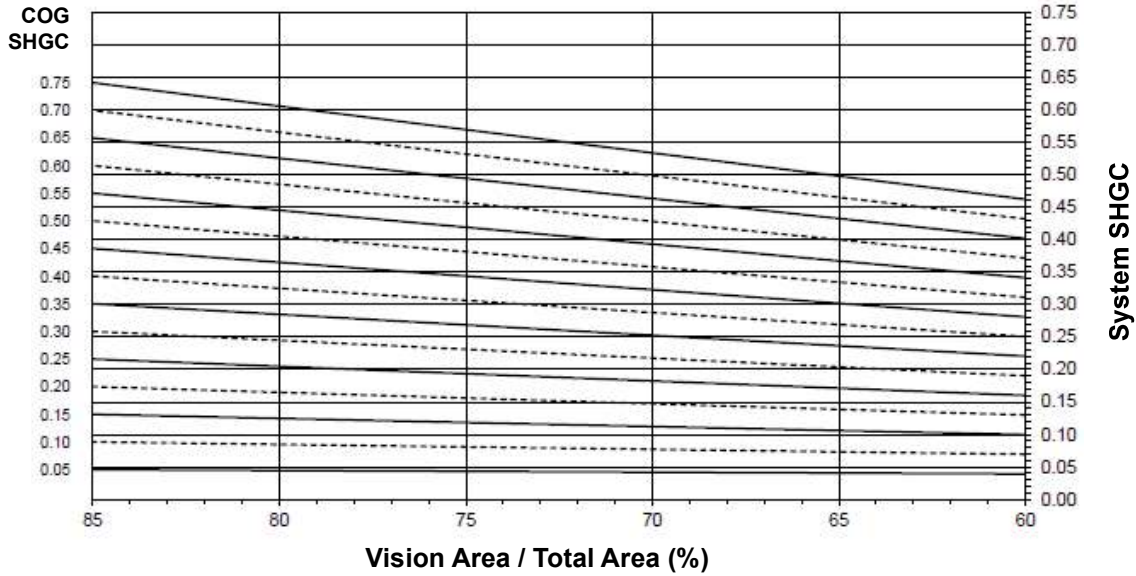
Glass properties are based on center of glass values and are obtained from your glass supplier.

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.

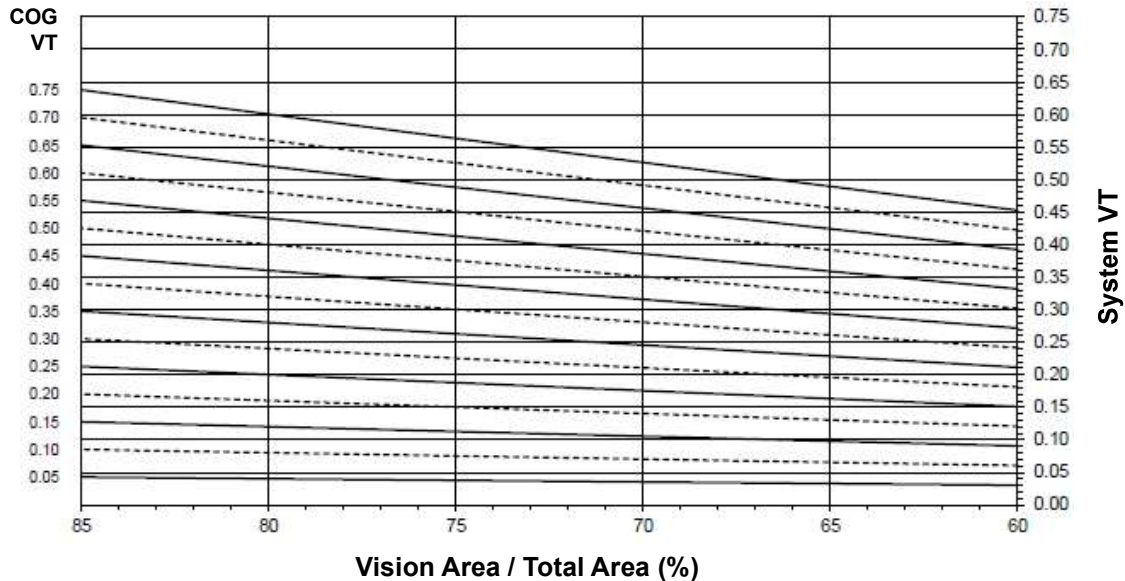
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AA™ 5450 SINGLE HUNG WINDOW
(1-1/2" Triple Glazed - 15lb Sill)

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



System Visible Transmittance (VT) vs Percent of Vision Area



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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**AA™ 5450 SINGLE HUNG WINDOW
(1-1/2" Triple Glazed - 15lb. Sill)****Thermal Transmittance¹ (BTU/hr • ft² • °F)**

Glass U-Factor³	Overall U-Factor⁴
0.32	0.38
0.30	0.37
0.28	0.36
0.26	0.34
0.24	0.33
0.22	0.31
0.20	0.30
0.18	0.29
0.16	0.27
0.14	0.26
0.12	0.24
0.10	0.23

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 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

SHGC Matrix²

Glass SHGC³	Overall Glass U-Factor⁴
0.75	0.56
0.70	0.53
0.65	0.49
0.60	0.45
0.55	0.41
0.50	0.38
0.45	0.34
0.40	0.30
0.35	0.27
0.30	0.23
0.25	0.19
0.20	0.15
0.15	0.12
0.10	0.08
0.05	0.04

Visible Transmittance²

Glass VT³	Overall VT⁴
0.75	0.59
0.70	0.52
0.65	0.48
0.60	0.45
0.55	0.41
0.50	0.37
0.45	0.33
0.40	0.30
0.35	0.26
0.30	0.22
0.25	0.19
0.20	0.15
0.15	0.11
0.10	0.07
0.05	0.04

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.

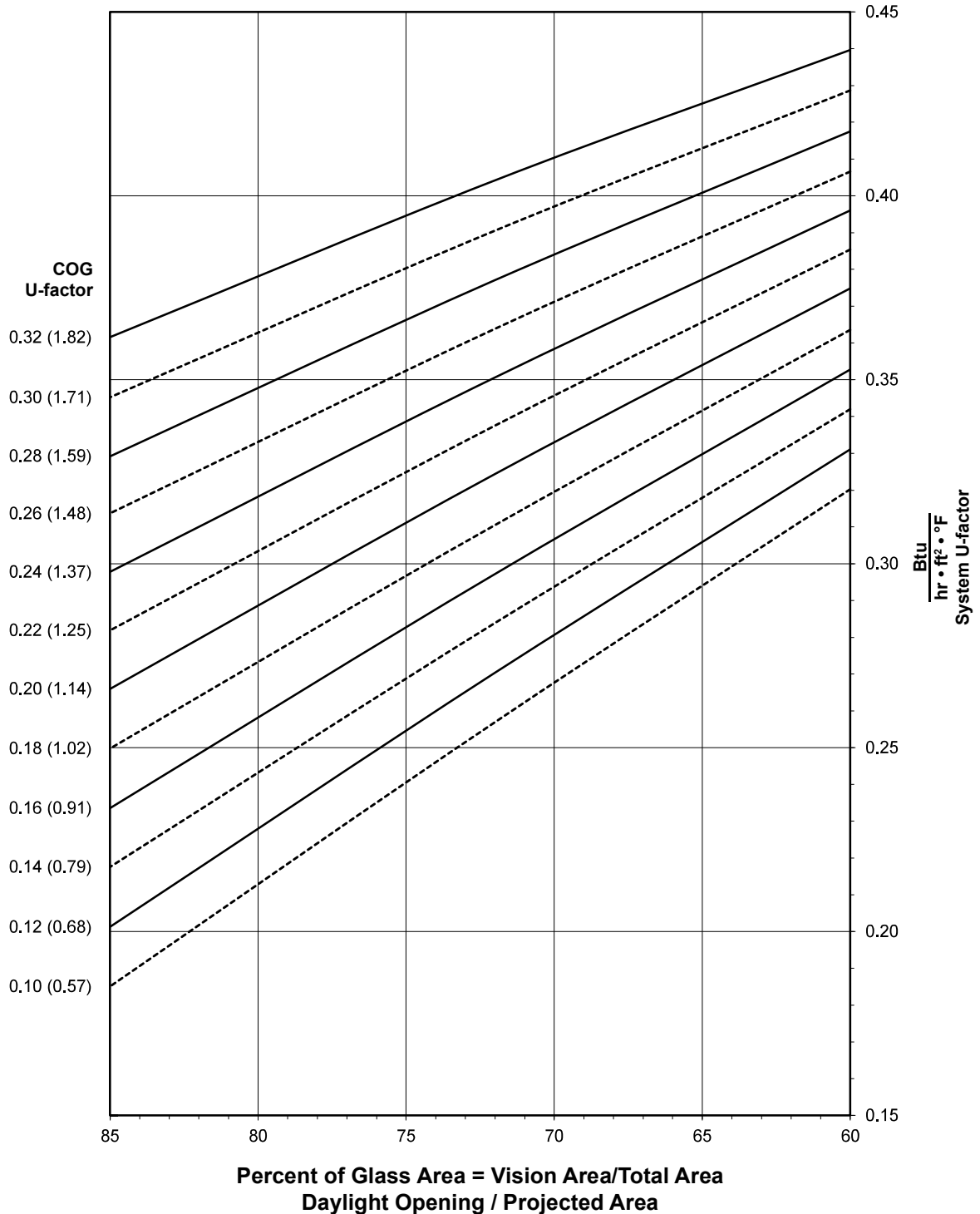
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AA™ 5450 SINGLE HUNG WINDOW - BEVEL FACE
(1-1/2" Triple Glazed - 15lb. Sill)

Note:

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

System U-factor vs Percent of Glass Area

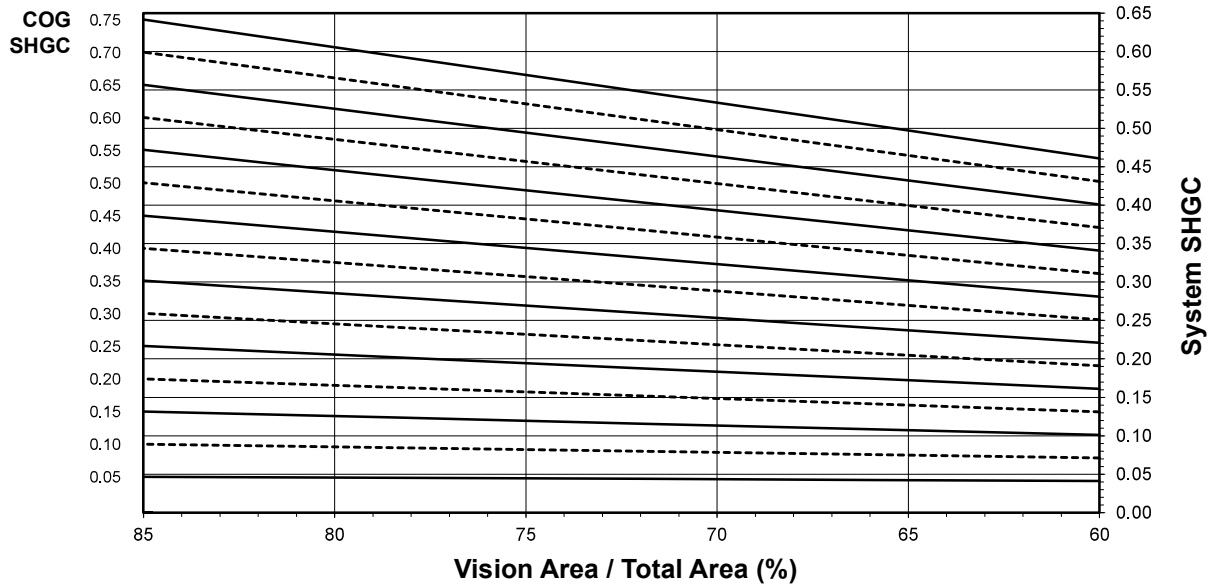


Notes for System U-factor, SHGC and VT charts:

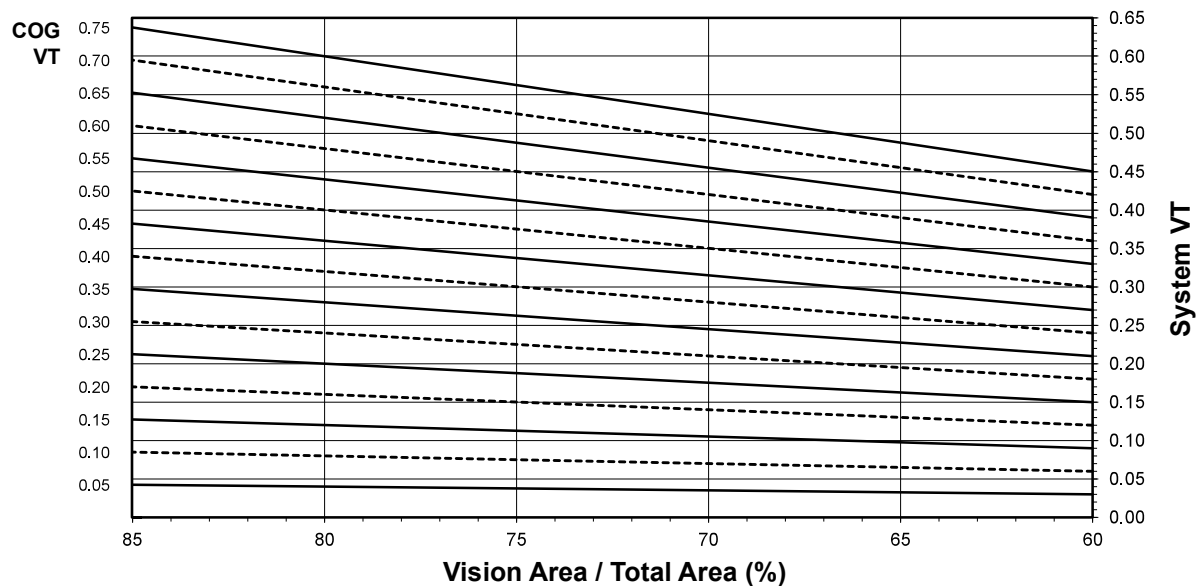
For glass values that are not listed, linear interpolation is permitted.
Glass properties are based on center of glass values and are obtained from your glass supplier.

AA™ 5450 SINGLE HUNG WINDOW - BEVEL FACE
(1-1/2" Triple Glazed - 15lb. Sill)

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



System Visible Transmittance (VT) vs Percent of Vision Area



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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**AA™ 5450 SINGLE HUNG WINDOW
- BEVEL FACE
(1-1/2" Triple Glazed - 15lb. Sill)**

Thermal Transmittance ¹ (BTU/hr • ft² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.32	0.40
0.30	0.39
0.28	0.38
0.26	0.36
0.24	0.35
0.22	0.34
0.20	0.32
0.18	0.31
0.16	0.30
0.14	0.28
0.12	0.27
0.10	0.26

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 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

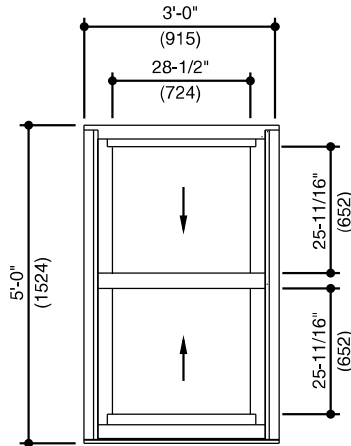
SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.55
0.70	0.51
0.65	0.48
0.60	0.44
0.55	0.40
0.50	0.37
0.45	0.33
0.40	0.30
0.35	0.26
0.30	0.22
0.25	0.19
0.20	0.15
0.15	0.12
0.10	0.08
0.05	0.04

Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.54
0.70	0.50
0.65	0.47
0.60	0.43
0.55	0.40
0.50	0.36
0.45	0.32
0.40	0.29
0.35	0.25
0.30	0.22
0.25	0.18
0.20	0.14
0.15	0.11
0.10	0.07
0.05	0.04

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



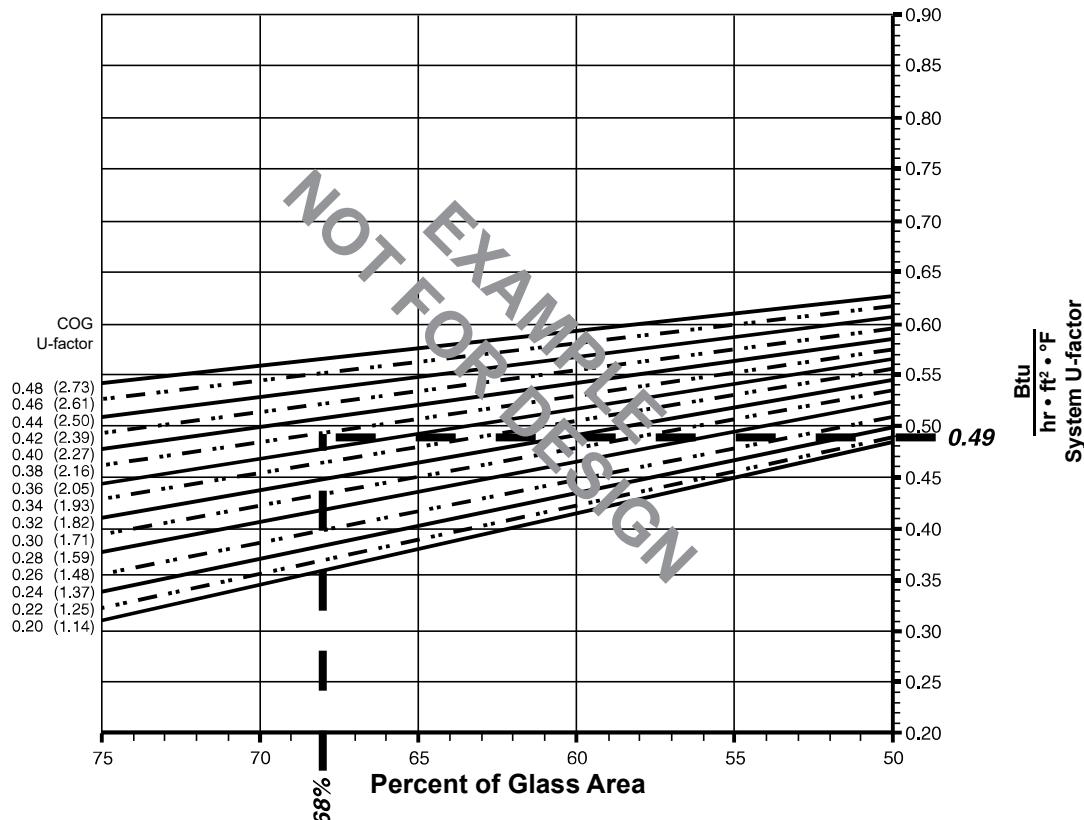
Example Glass U-Factor = $0.42 \text{ Btu/hr} \cdot \text{ft}^2 \cdot ^\circ\text{F}$

Total Daylight Opening = $(28\text{-}1/2" \cdot 25\text{-}11/16") + (28\text{-}1/2" \cdot 25\text{-}11/16") = 10.17 \text{ ft}^2$

Total Projected Area = $3\text{'-}0" \cdot 5\text{'-}0" = 15 \text{ ft}^2$

Percent of Glass = $(\text{Total Daylight Opening} \div \text{Total Projected Area})100$
 $= (10.17 \div 15)100 = 68\%$

System U-factor vs Percent of Glass Area



Based on 68% glass and center of glass (COG) U-factor of 0.42
 System U-factor is equal to $0.49 \text{ Btu/hr} \cdot \text{ft}^2 \cdot ^\circ\text{F}$

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.

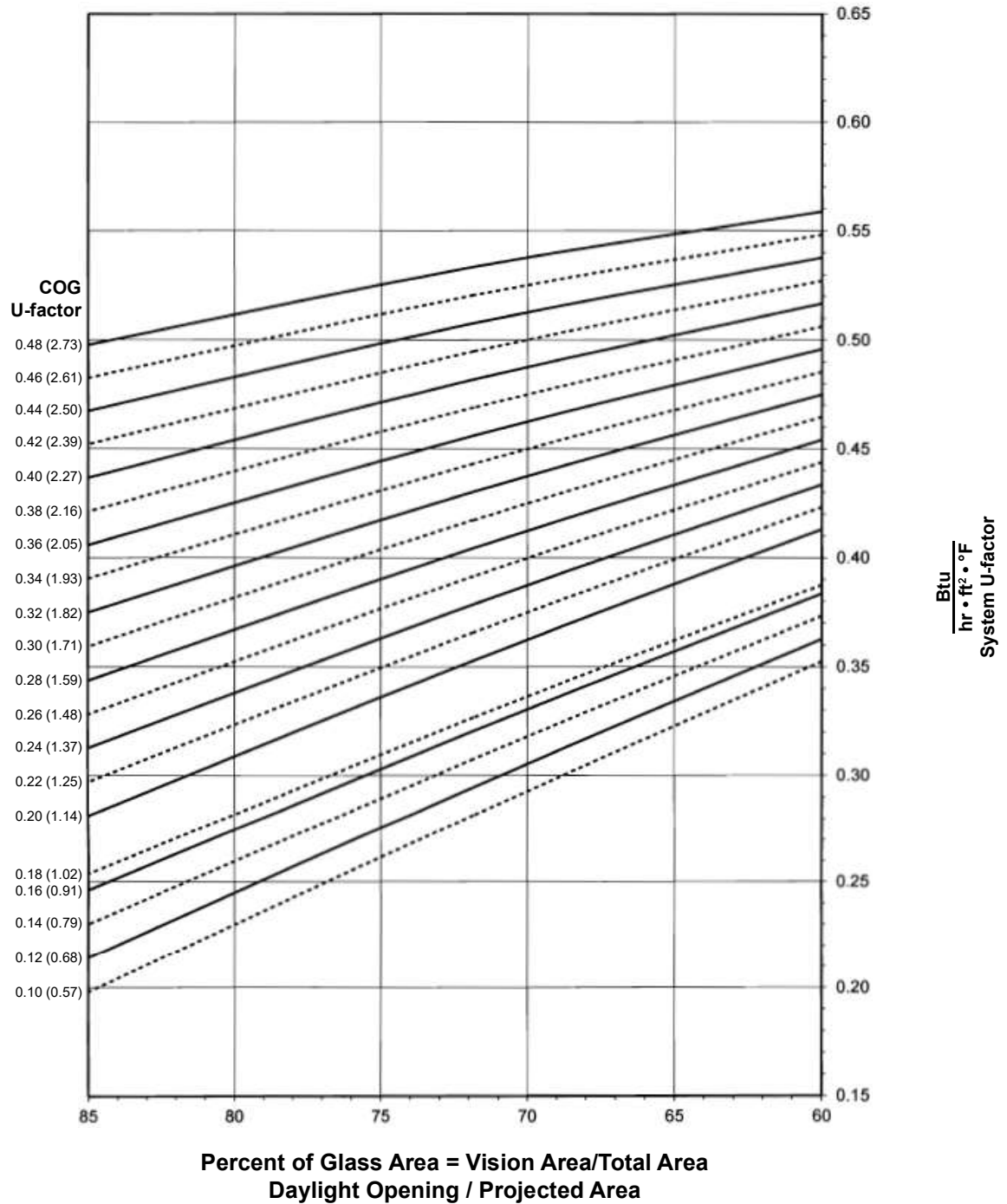
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**AA™ 5450 DOUBLE HUNG WINDOW
(1" Double Glazed - 10lb. Sill)**

Note:

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

System U-factor vs Percent of Glass Area

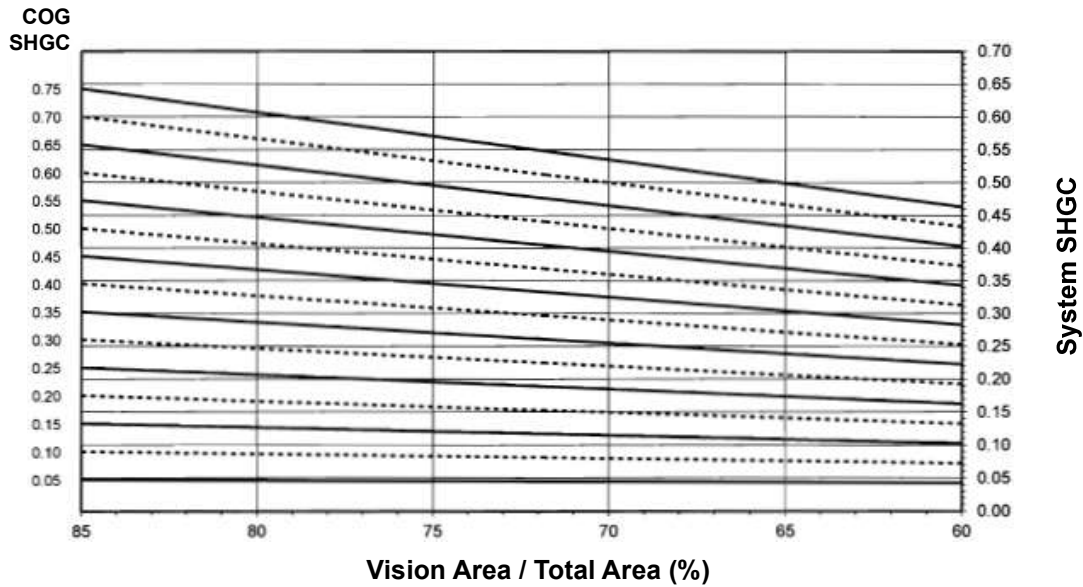


Notes for System U-factor, SHGC and VT charts:

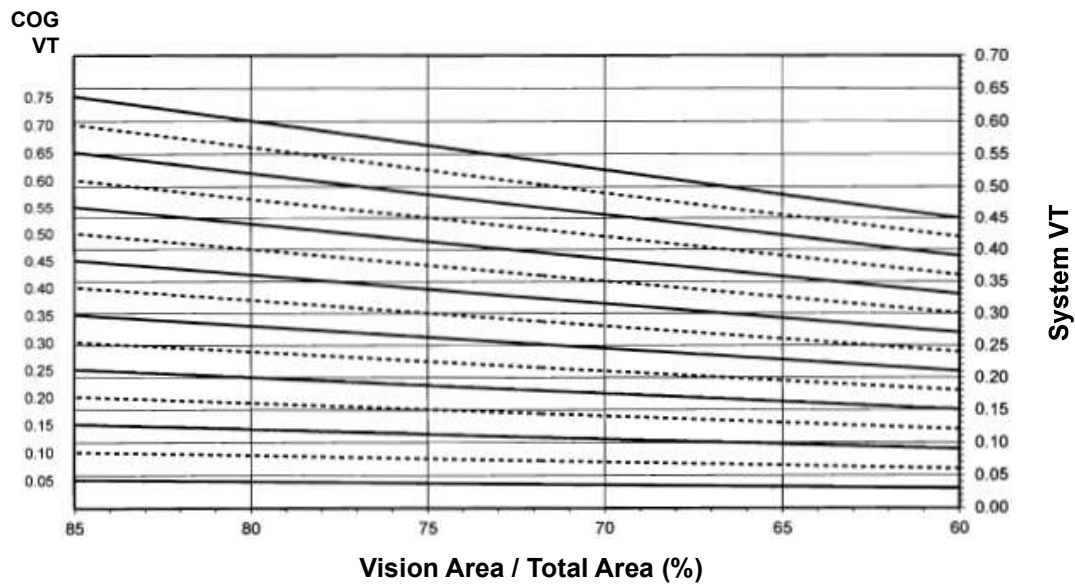
For glass values that are not listed, linear interpolation is permitted.
Glass properties are based on center of glass values and are obtained from your glass supplier.

AA™ 5450 DOUBLE HUNG WINDOW (1" Double Glazed - 10lb. Sill)

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



System Visible Transmittance (VT) vs Percent of Vision Area



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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Thermal Transmittance ¹ (BTU/hr • ft² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.53
0.46	0.52
0.44	0.52
0.42	0.49
0.40	0.48
0.38	0.47
0.36	0.46
0.34	0.44
0.32	0.43
0.30	0.42
0.28	0.40
0.26	0.39
0.24	0.38
0.22	0.37
0.20	0.35
0.18	0.33
0.16	0.32
0.14	0.31
0.12	0.29
0.10	0.28

AA™ 5450 DOUBLE HUNG WINDOW
(1" Double Glazed - 10lb. Sill)

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 960 mm wide by 2,090 mm high (37-3/4" by 82-3/8").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.55
0.70	0.51
0.65	0.48
0.60	0.44
0.55	0.40
0.50	0.37
0.45	0.33
0.40	0.30
0.35	0.26
0.30	0.22
0.25	0.19
0.20	0.15
0.15	0.12
0.10	0.08
0.05	0.04

Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.54
0.70	0.50
0.65	0.47
0.60	0.43
0.55	0.40
0.50	0.36
0.45	0.32
0.40	0.29
0.35	0.25
0.30	0.22
0.25	0.18
0.20	0.14
0.15	0.11
0.10	0.07
0.05	0.04

AA™ 5450 DOUBLE HUNG WINDOW - BEVEL FACE (1" Double Glazed - 10lb. Sill)

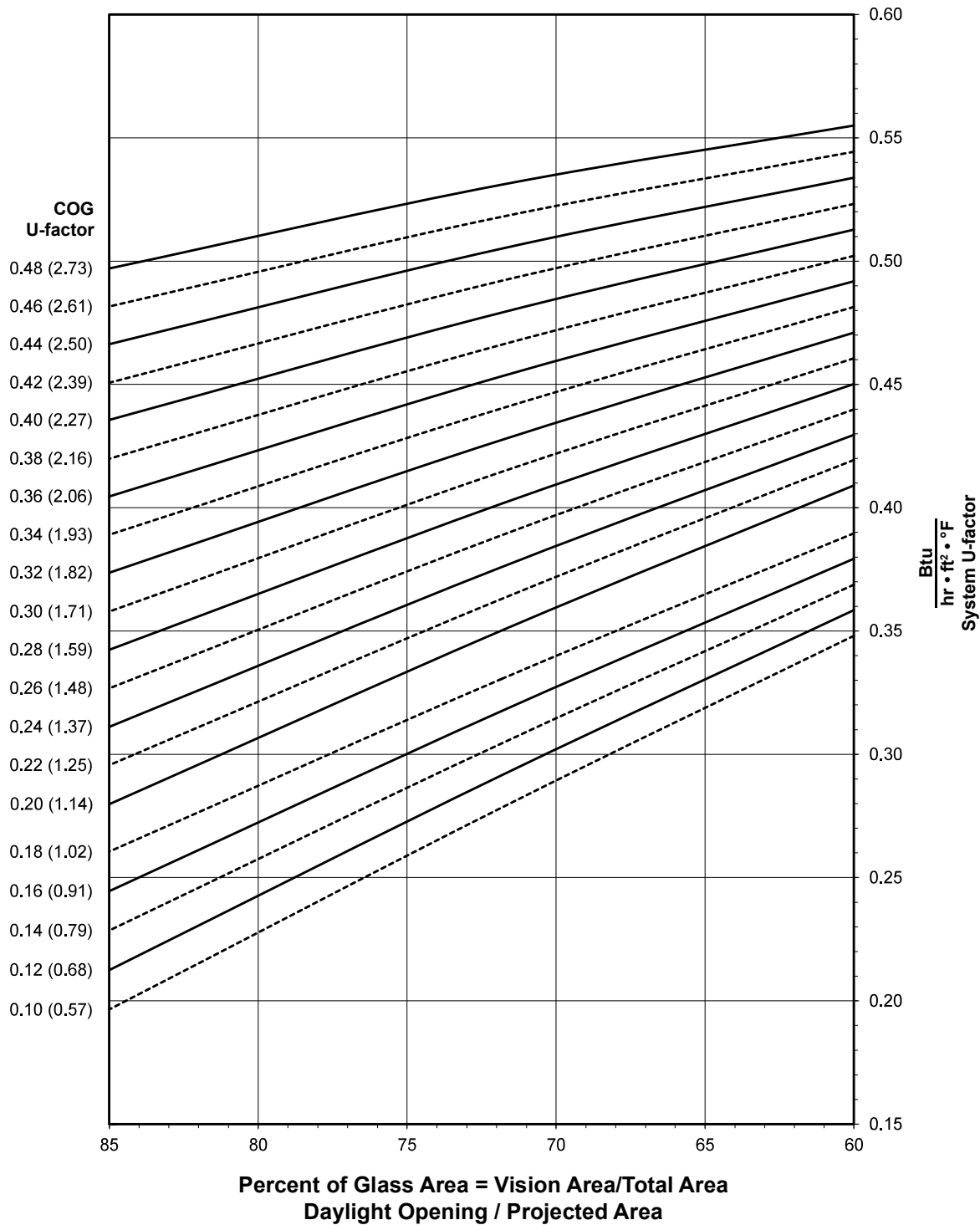
Note:

Values in parentheses are metric.

COG = Center of Glass.

Charts are generated per AAMA 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.

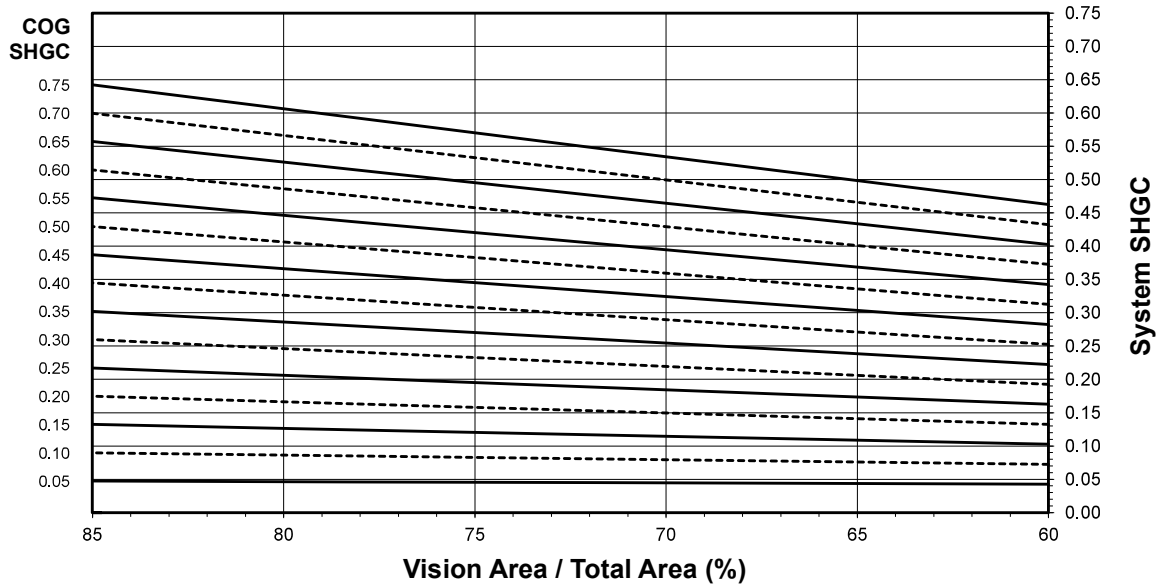
Glass properties are based on center of glass values and are obtained from your glass supplier.

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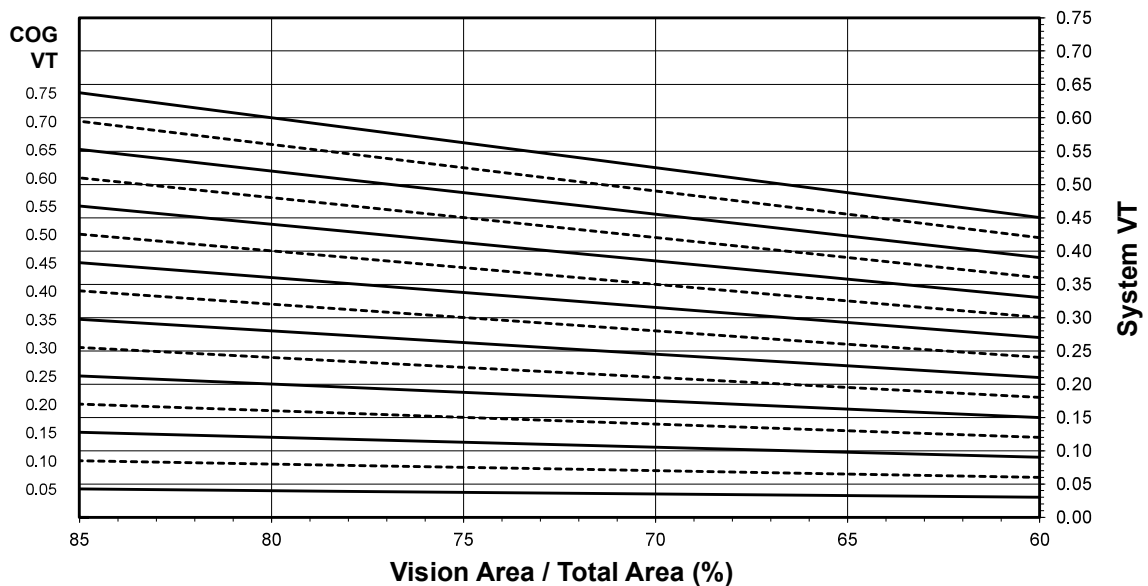
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**AA™ 5450 DOUBLE HUNG WINDOW - BEVEL FACE
(1" Double Glazed - 10lb. Sill)**

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



System Visible Transmittance (VT) vs Percent of Vision Area



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

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.53
0.46	0.52
0.44	0.51
0.42	0.49
0.40	0.48
0.38	0.47
0.36	0.45
0.34	0.44
0.32	0.43
0.30	0.41
0.28	0.40
0.26	0.39
0.24	0.38
0.22	0.36
0.20	0.35
0.18	0.33
0.16	0.32
0.14	0.30
0.12	0.29
0.10	0.28

AA™ 5450 DOUBLE HUNG WINDOW
- BEVEL FACE
(1" Double Glazed - 10lb. Sill)

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 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

SHGC Matrix²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.55
0.70	0.51
0.65	0.48
0.60	0.44
0.55	0.40
0.50	0.37
0.45	0.33
0.40	0.30
0.35	0.26
0.30	0.22
0.25	0.19
0.20	0.15
0.15	0.12
0.10	0.08
0.05	0.04

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.54
0.70	0.50
0.65	0.47
0.60	0.43
0.55	0.40
0.50	0.36
0.45	0.32
0.40	0.29
0.35	0.25
0.30	0.22
0.25	0.18
0.20	0.14
0.15	0.11
0.10	0.07
0.05	0.04

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.

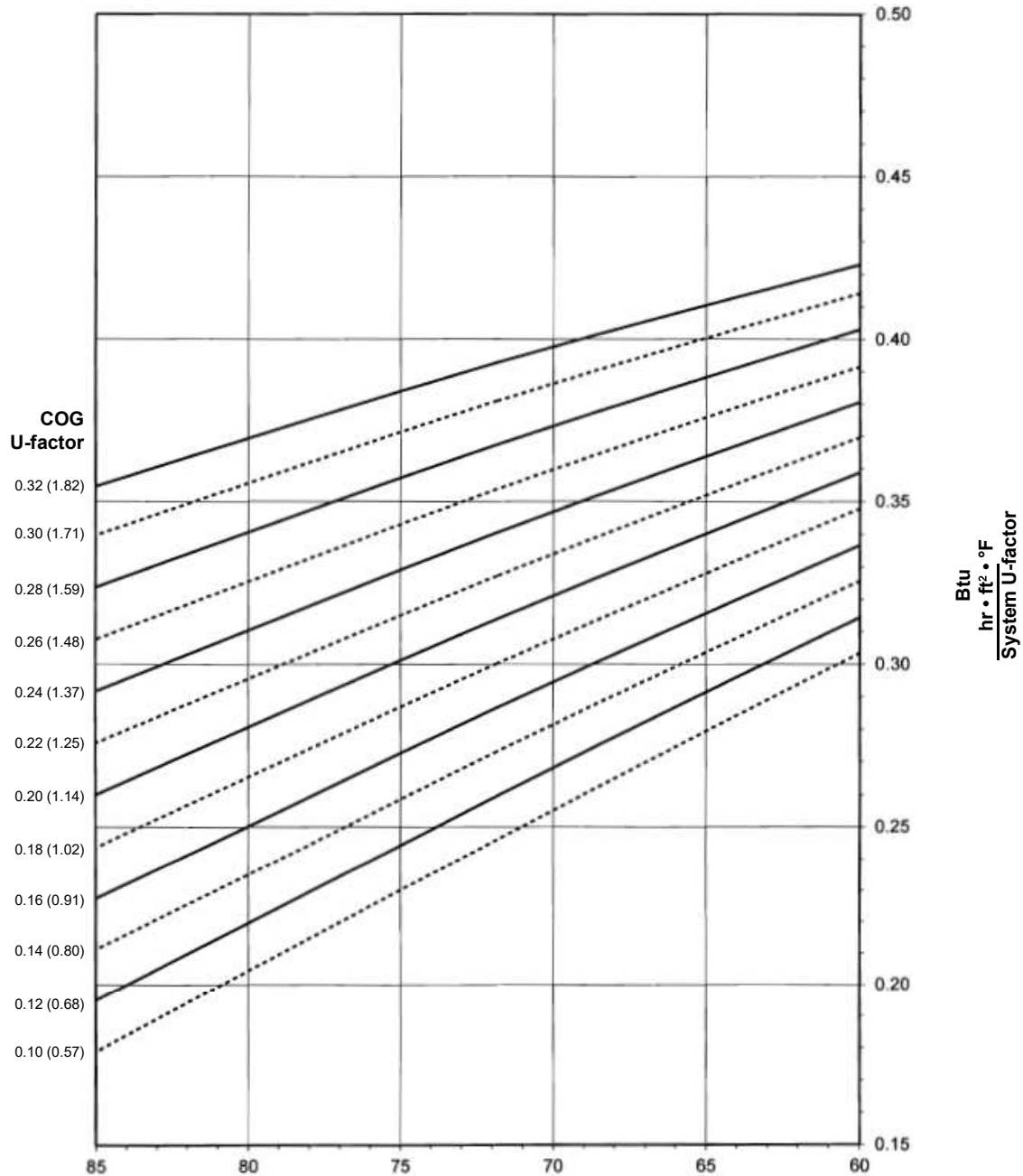
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**AA™ 5450 DOUBLE HUNG WINDOW
(1-1/2" Triple Glazed - 10lb. Sill)**

Note:

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

System U-factor vs Percent of Glass Area



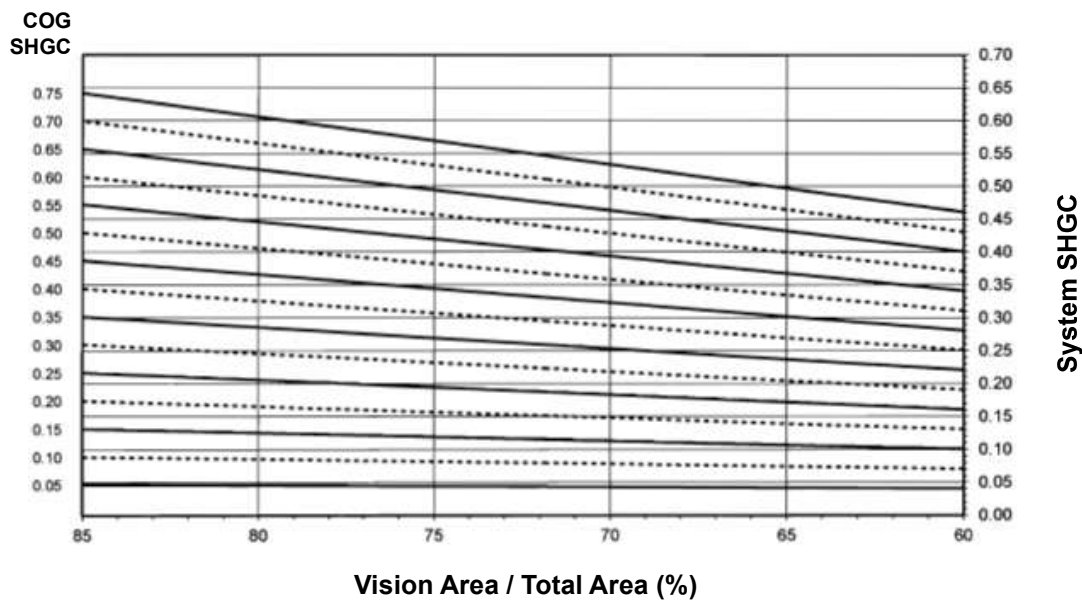
**Percent of Glass Area = Vision Area/Total Area
Daylight Opening / Projected Area**

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

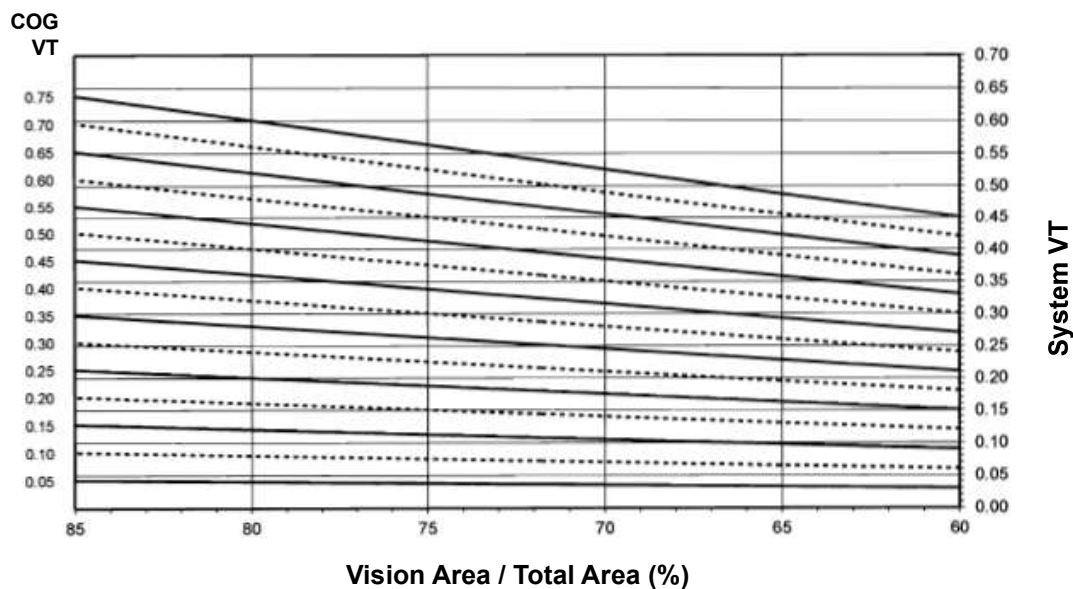
For glass values that are not listed, linear interpolation is permitted.
Glass properties are based on center of glass values and are obtained from your glass supplier.

AA™ 5450 DOUBLE HUNG WINDOW (1-1/2" Triple Glazed - 10lb Sill)

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



System Visible Transmittance (VT) vs Percent of Vision Area



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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AA™ 5450 DOUBLE HUNG WINDOW (1-1/2" Triple Glazed - 10lb. Sill)

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

Glass U-Factor ³	Overall U-Factor ⁴
0.32	0.39
0.30	0.38
0.28	0.37
0.26	0.35
0.24	0.34
0.22	0.33
0.20	0.31
0.18	0.30
0.16	0.29
0.14	0.27
0.12	0.26
0.10	0.25

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 960 mm wide by 2,090 mm high (37-3/4" by 82-3/8").

SHGC Matrix²

Glass SHGC ³	Overall Glass U-Factor ⁴
0.75	0.55
0.70	0.51
0.65	0.47
0.60	0.44
0.55	0.40
0.50	0.37
0.45	0.33
0.40	0.29
0.35	0.26
0.30	0.22
0.25	0.19
0.20	0.15
0.15	0.12
0.10	0.08
0.05	0.04

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.54
0.70	0.50
0.65	0.47
0.60	0.43
0.55	0.40
0.50	0.36
0.45	0.32
0.40	0.29
0.35	0.25
0.30	0.22
0.25	0.18
0.20	0.14
0.15	0.11
0.10	0.07
0.05	0.04

AA™ 5450 DOUBLE HUNG WINDOW - BEVEL FACE (1-1/2" Triple Glazed - 10lb. Sill)

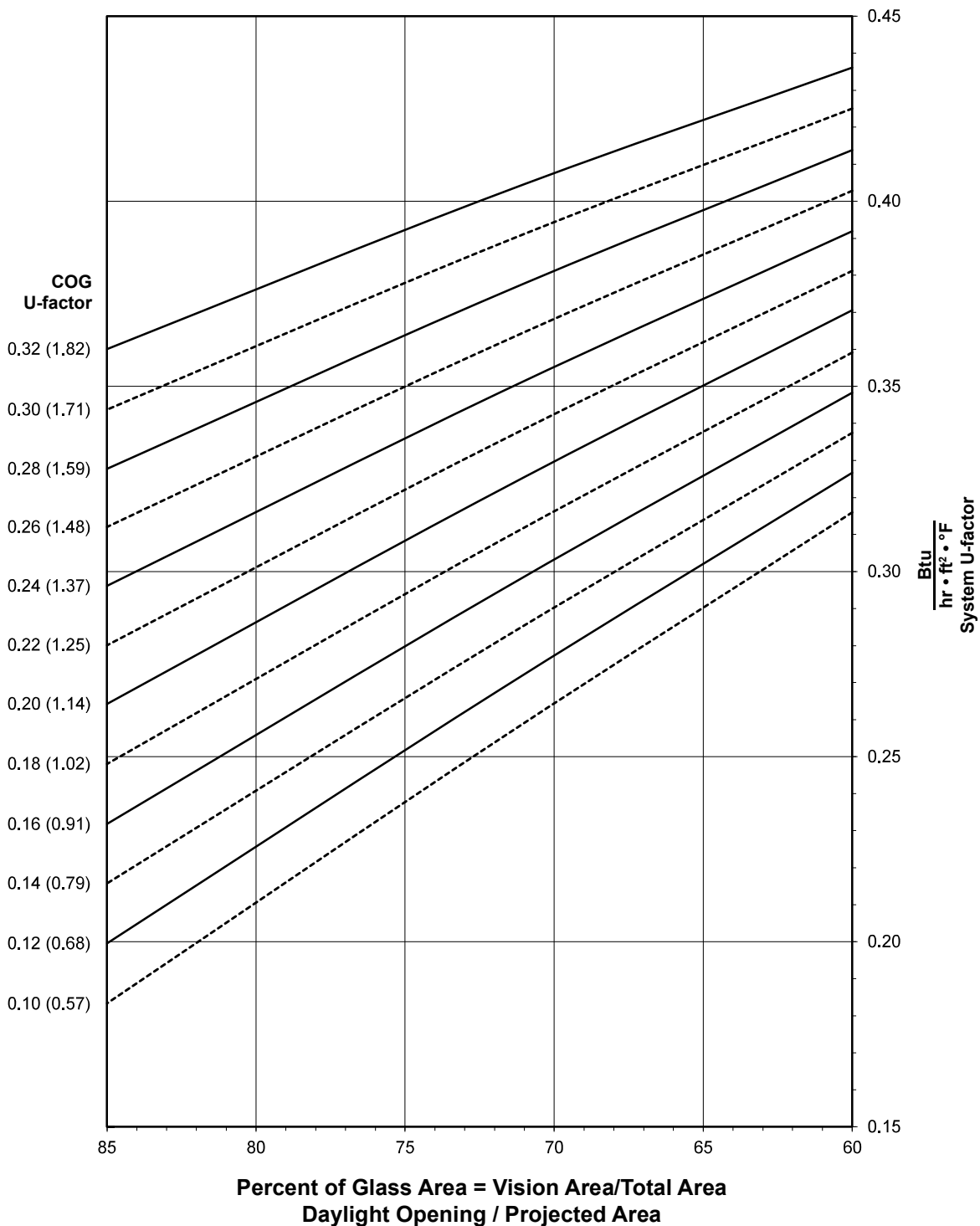
Note:

Values in parentheses are metric.

COG = Center of Glass.

Charts are generated per AAMA 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.

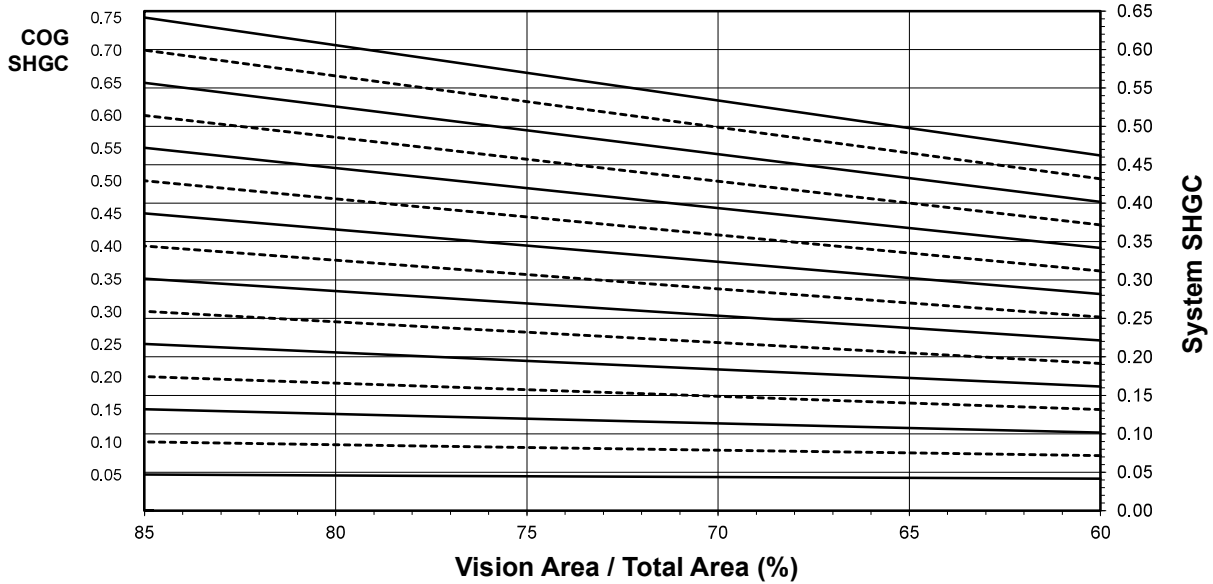
Glass properties are based on center of glass values and are obtained from your glass supplier.

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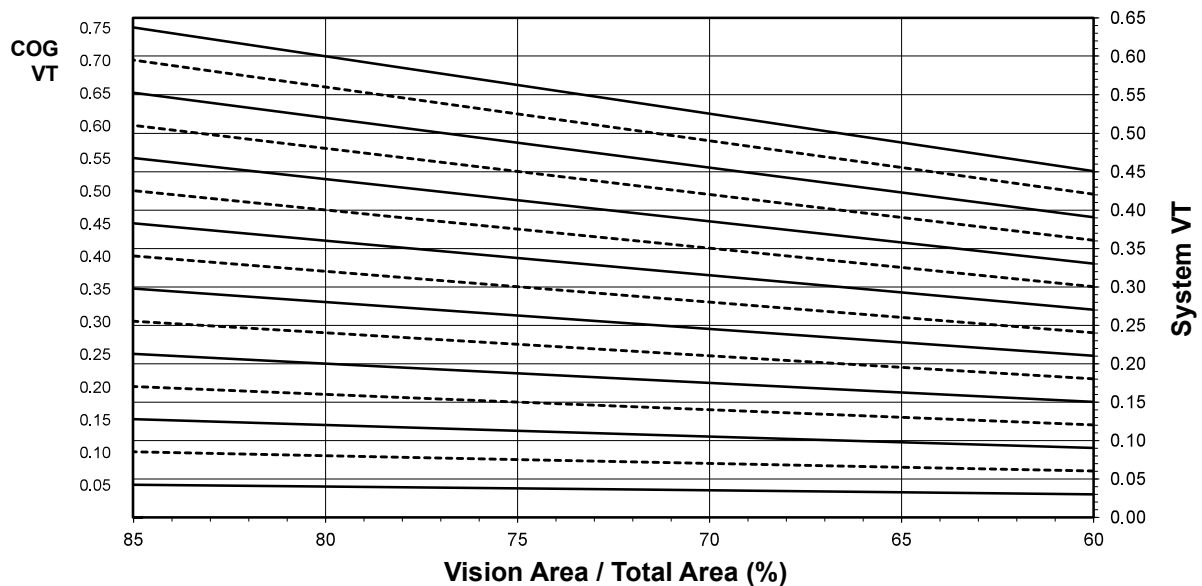
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AA™ 5450 DOUBLE HUNG WINDOW - BEVEL FACE
(1-1/2" Triple Glazed - 10lb. Sill)

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



System Visible Transmittance (VT) vs Percent of Vision Area



**AA™ 5450 DOUBLE HUNG WINDOW
- BEVEL FACE
(1-1/2" Triple Glazed - 10lb. Sill)**

Thermal Transmittance ¹ (BTU/hr • ft² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.32	0.40
0.30	0.39
0.28	0.38
0.26	0.36
0.24	0.35
0.22	0.34
0.20	0.32
0.18	0.31
0.16	0.30
0.14	0.28
0.12	0.27
0.10	0.25

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 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.55
0.70	0.51
0.65	0.47
0.60	0.44
0.55	0.40
0.50	0.37
0.45	0.33
0.40	0.30
0.35	0.26
0.30	0.22
0.25	0.19
0.20	0.15
0.15	0.12
0.10	0.08
0.05	0.04

Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.54
0.70	0.50
0.65	0.47
0.60	0.43
0.55	0.40
0.50	0.36
0.45	0.32
0.40	0.29
0.35	0.25
0.30	0.22
0.25	0.18
0.20	0.14
0.15	0.11
0.10	0.07
0.05	0.04

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.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.
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**AA™ 5450 DOUBLE HUNG WINDOW
(1" Double Glazed - 15lb. Sill)**

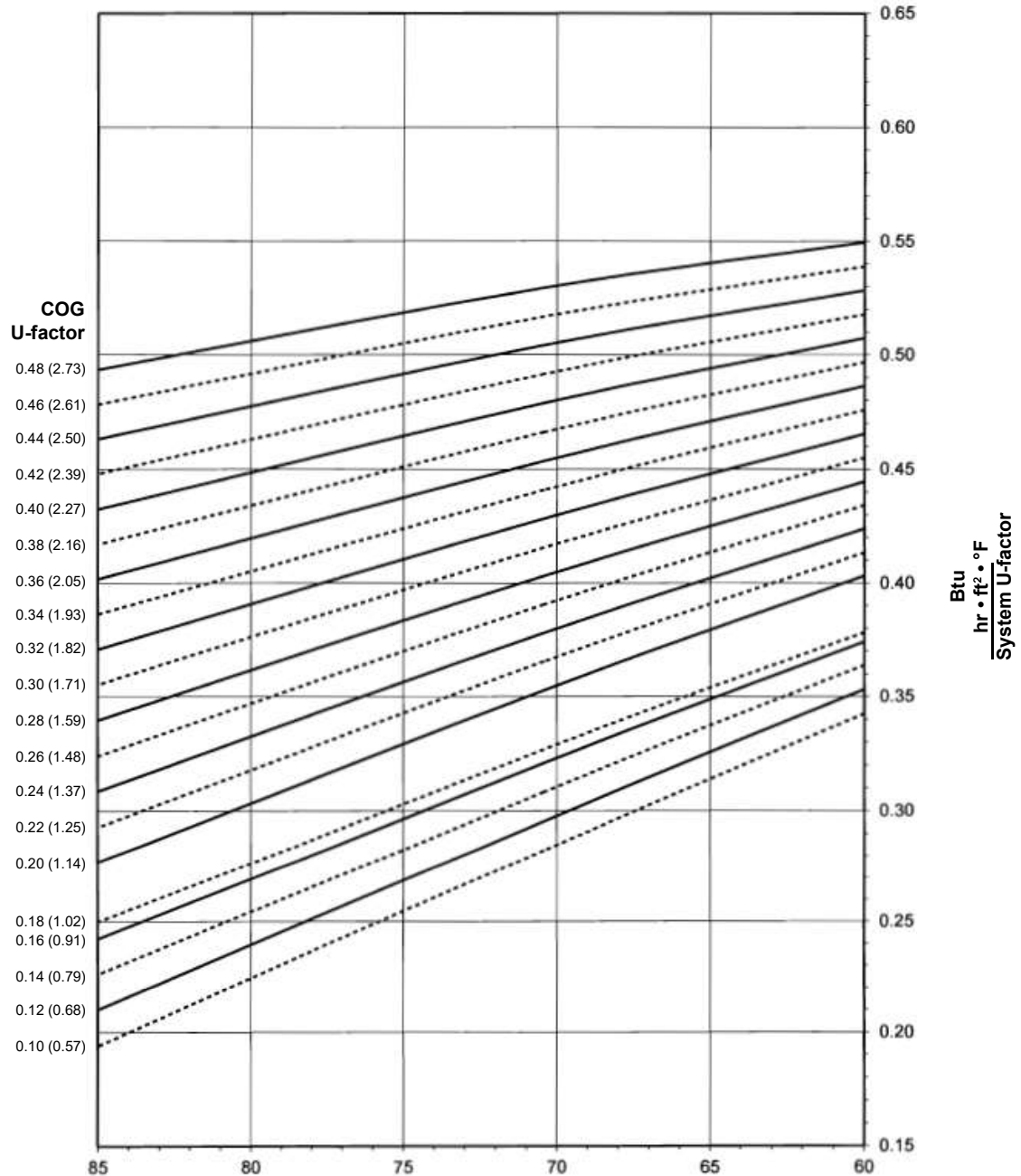
Note:

Values in parentheses are metric.

COG = Center of Glass.

Charts are generated per AAMA 507

System U-factor vs Percent of Glass Area



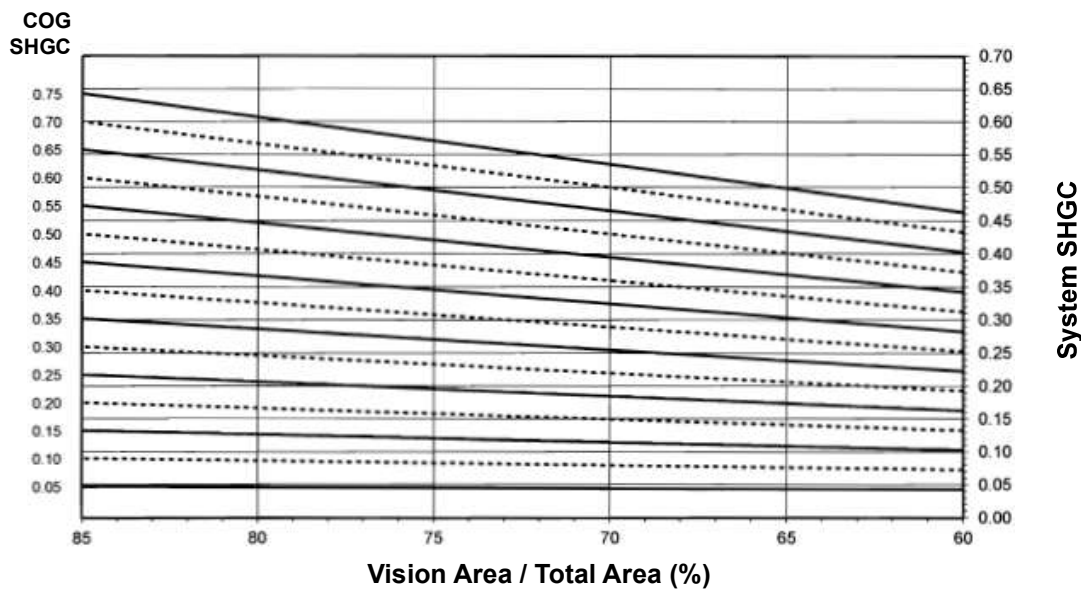
Notes for System U-factor, SHGC and VT charts:

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

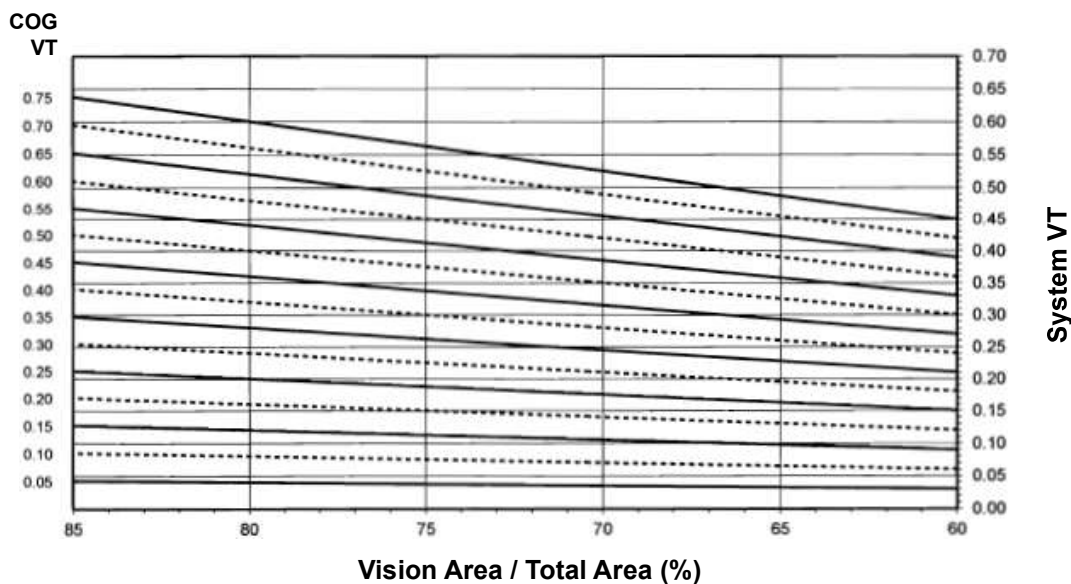
Glass properties are based on center of glass values and are obtained from your glass supplier.

AA™ 5450 DOUBLE HUNG WINDOW (1" Double Glazed - 15lb. Sill)

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



System Visible Transmittance (VT) vs Percent of Vision Area



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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Thermal Transmittance ¹ (BTU/hr • ft² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.53
0.46	0.52
0.44	0.50
0.42	0.49
0.40	0.48
0.38	0.47
0.36	0.45
0.34	0.44
0.32	0.43
0.30	0.42
0.28	0.40
0.26	0.39
0.24	0.38
0.22	0.37
0.20	0.35
0.18	0.33
0.16	0.32
0.14	0.31
0.12	0.30
0.10	0.28

AA™ 5450 DOUBLE HUNG WINDOW
(1" Double Glazed - 15lb. Sill)

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 960 mm wide by 2,090 mm high (37-3/4" by 82-3/8").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.54
0.70	0.50
0.65	0.47
0.60	0.43
0.55	0.40
0.50	0.36
0.45	0.33
0.40	0.29
0.35	0.26
0.30	0.22
0.25	0.19
0.20	0.15
0.15	0.11
0.10	0.08
0.05	0.04

Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.53
0.70	0.49
0.65	0.46
0.60	0.42
0.55	0.39
0.50	0.35
0.45	0.32
0.40	0.28
0.35	0.25
0.30	0.21
0.25	0.18
0.20	0.14
0.15	0.11
0.10	0.07
0.05	0.04

AA™ 5450 DOUBLE HUNG WINDOW - BEVEL FACE (1" Double Glazed - 15lb. Sill)

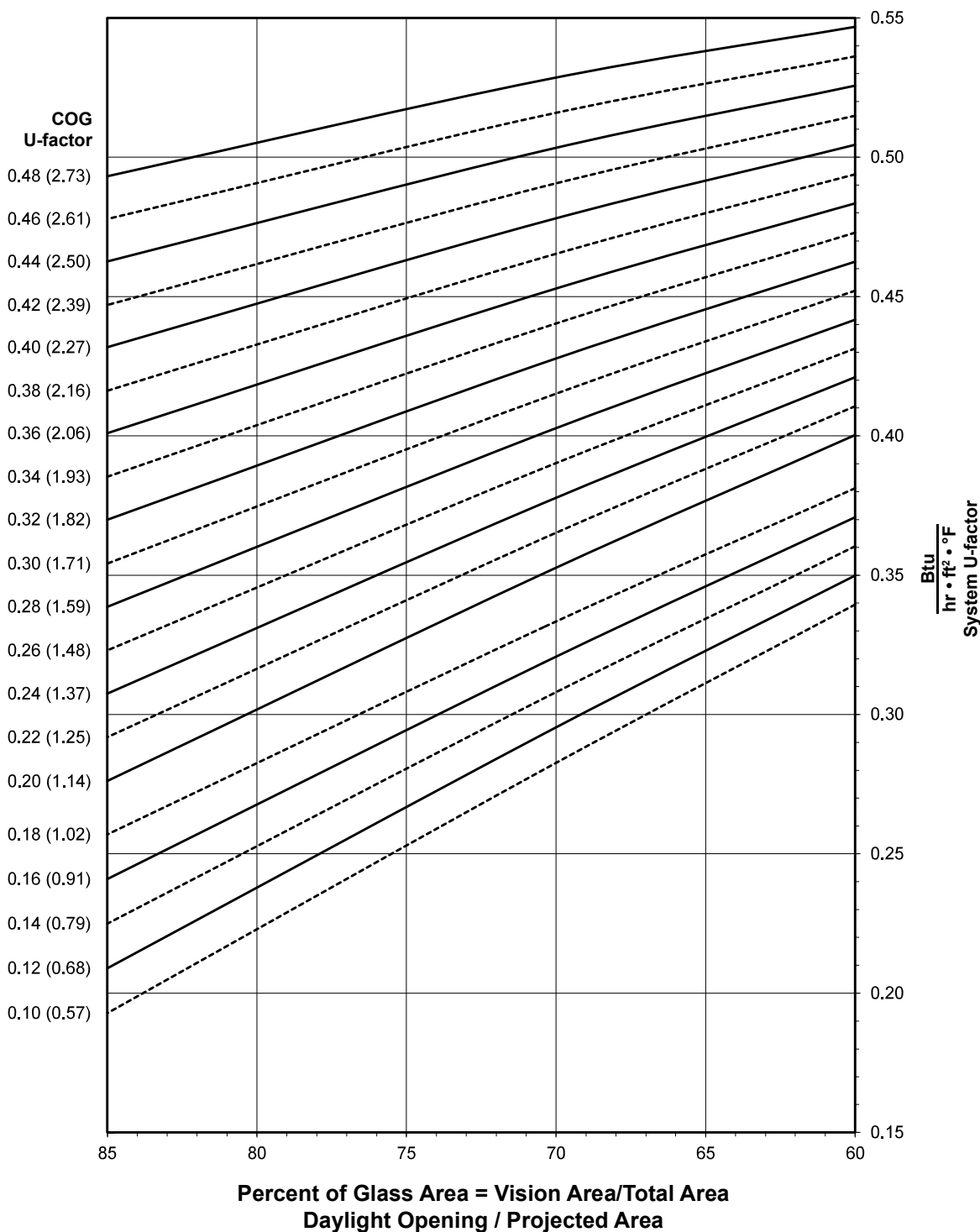
Note:

Values in parentheses are metric.

COG = Center of Glass.

Charts are generated per AAMA 507

System U-factor vs Percent of Glass Area

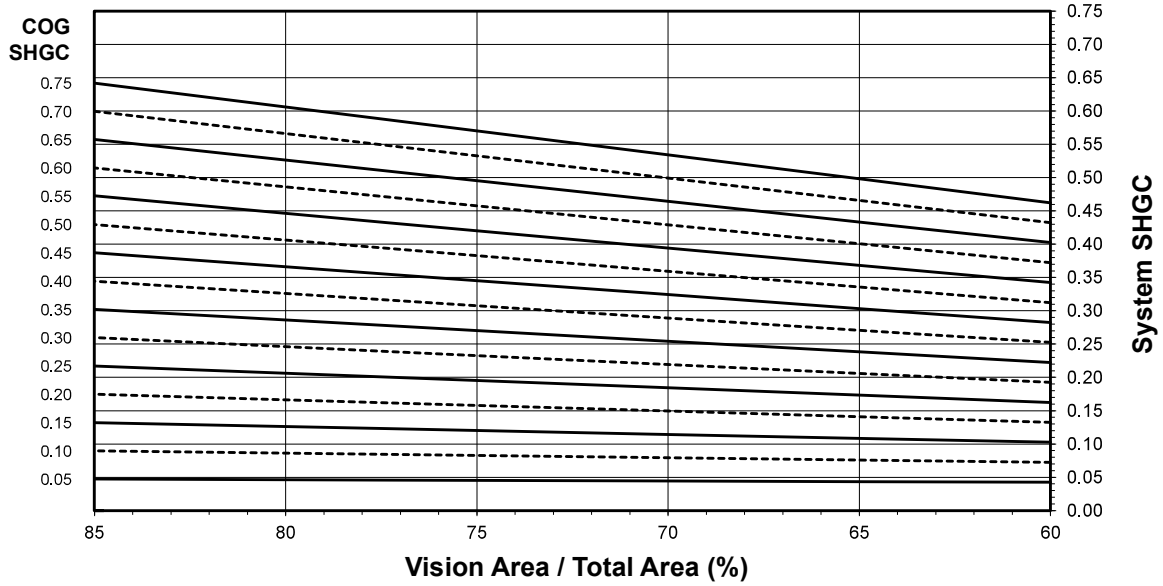
**Notes for System U-factor, SHGC and VT charts:**

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

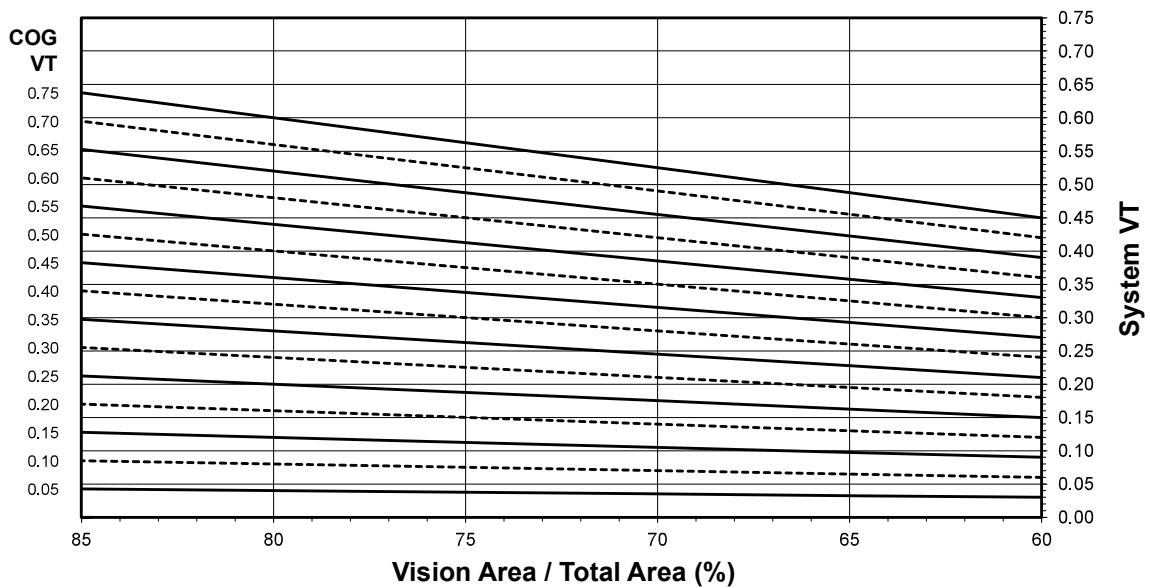
Glass properties are based on center of glass values and are obtained from your glass supplier.

**AA™ 5450 DOUBLE HUNG WINDOW - BEVEL FACE
(1" Double Glazed - 15lb. Sill)**

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



System Visible Transmittance (VT) vs Percent of Vision Area



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

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.53
0.46	0.51
0.44	0.50
0.42	0.49
0.40	0.48
0.38	0.46
0.36	0.45
0.34	0.44
0.32	0.43
0.30	0.41
0.28	0.40
0.26	0.39
0.24	0.39
0.22	0.36
0.20	0.35
0.18	0.33
0.16	0.32
0.14	0.31
0.12	0.29
0.10	0.28

AA™ 5450 DOUBLE HUNG WINDOW
- BEVEL FACE
(1" Double Glazed - 15lb. Sill)

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 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

SHGC Matrix²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.54
0.70	0.50
0.65	0.47
0.60	0.43
0.55	0.40
0.50	0.36
0.45	0.33
0.40	0.29
0.35	0.26
0.30	0.22
0.25	0.19
0.20	0.15
0.15	0.11
0.10	0.08
0.05	0.04

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.53
0.70	0.49
0.65	0.46
0.60	0.42
0.55	0.39
0.50	0.35
0.45	0.32
0.40	0.28
0.35	0.25
0.30	0.21
0.25	0.18
0.20	0.14
0.15	0.11
0.10	0.07
0.05	0.04

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.

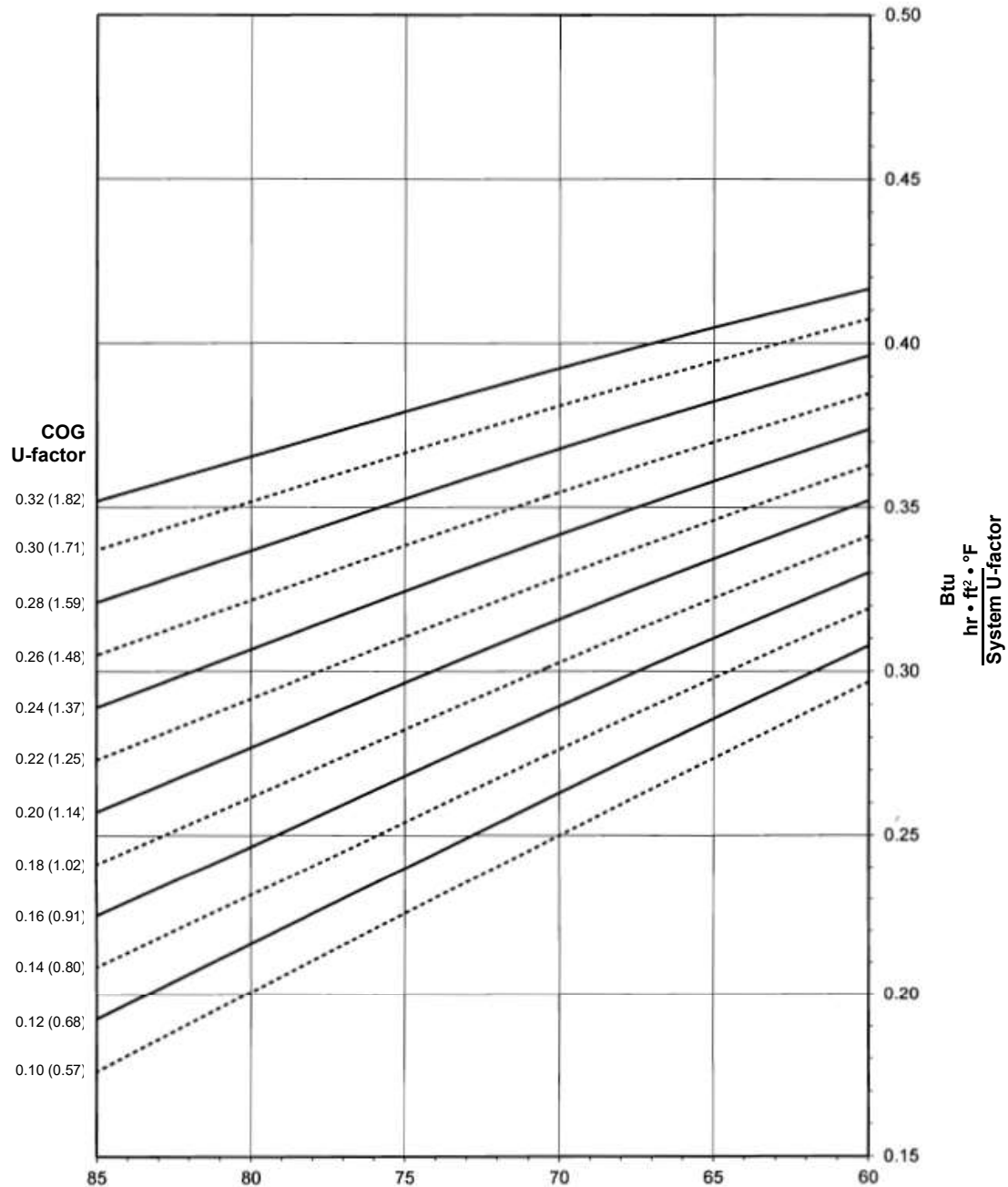
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**AA™ 5450 DOUBLE HUNG WINDOW
(1-1/2" Triple Glazed - 15lb. Sill)**

Note:

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

System U-factor vs Percent of Glass Area



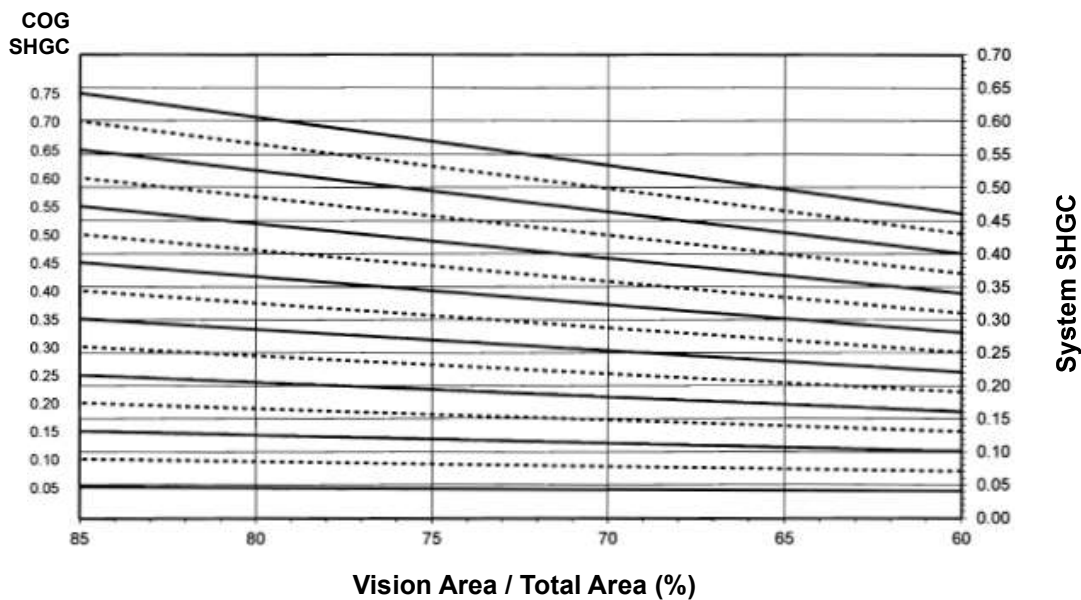
**Percent of Glass Area = Vision Area/Total Area
Daylight Opening / Projected Area**

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

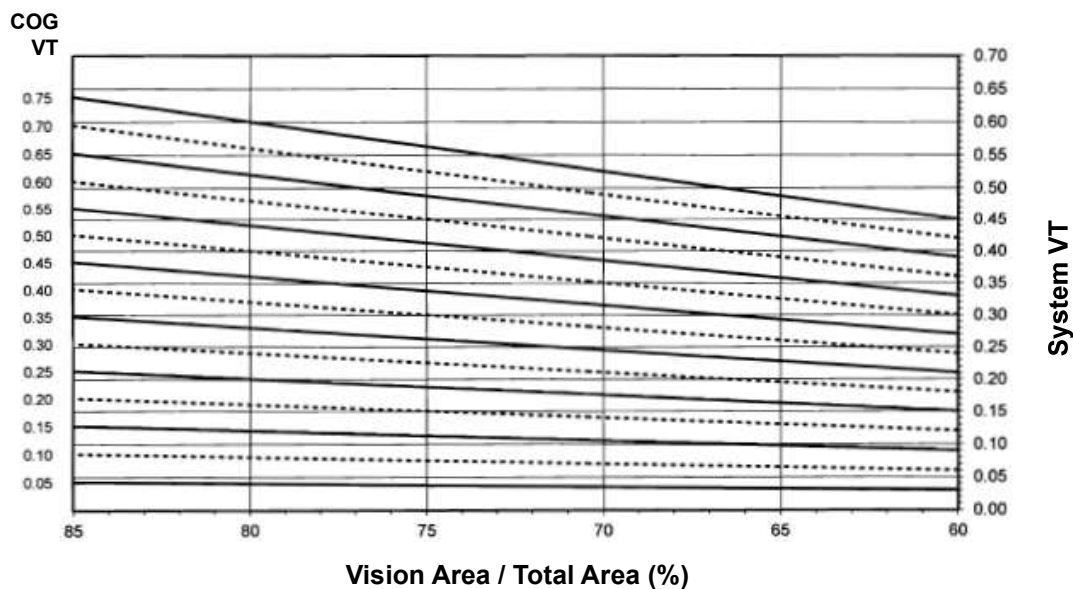
For glass values that are not listed, linear interpolation is permitted.
Glass properties are based on center of glass values and are obtained from your glass supplier.

**AA™ 5450 DOUBLE HUNG WINDOW
(1-1/2" Triple Glazed - 15lb Sill)**

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



System Visible Transmittance (VT) vs Percent of Vision Area



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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AA™ 5450 DOUBLE HUNG WINDOW (1-1/2" Triple Glazed - 15lb. Sill)

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

Glass U-Factor ³	Overall U-Factor ⁴
0.32	0.39
0.30	0.38
0.28	0.37
0.26	0.35
0.24	0.34
0.22	0.33
0.20	0.31
0.18	0.30
0.16	0.29
0.14	0.27
0.12	0.26
0.10	0.25

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 960 mm wide by 2,090 mm high (37-3/4" by 82-3/8").

SHGC Matrix²

Glass SHGC ³	Overall Glass U-Factor ⁴
0.75	0.54
0.70	0.50
0.65	0.47
0.60	0.43
0.55	0.39
0.50	0.36
0.45	0.32
0.40	0.29
0.35	0.25
0.30	0.22
0.25	0.18
0.20	0.15
0.15	0.11
0.10	0.08
0.05	0.04

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.53
0.70	0.49
0.65	0.46
0.60	0.42
0.55	0.39
0.50	0.35
0.45	0.32
0.40	0.28
0.35	0.25
0.30	0.21
0.25	0.18
0.20	0.14
0.15	0.11
0.10	0.07
0.05	0.04

AA™ 5450 DOUBLE HUNG WINDOW - BEVEL FACE (1-1/2" Triple Glazed - 15lb Sill)

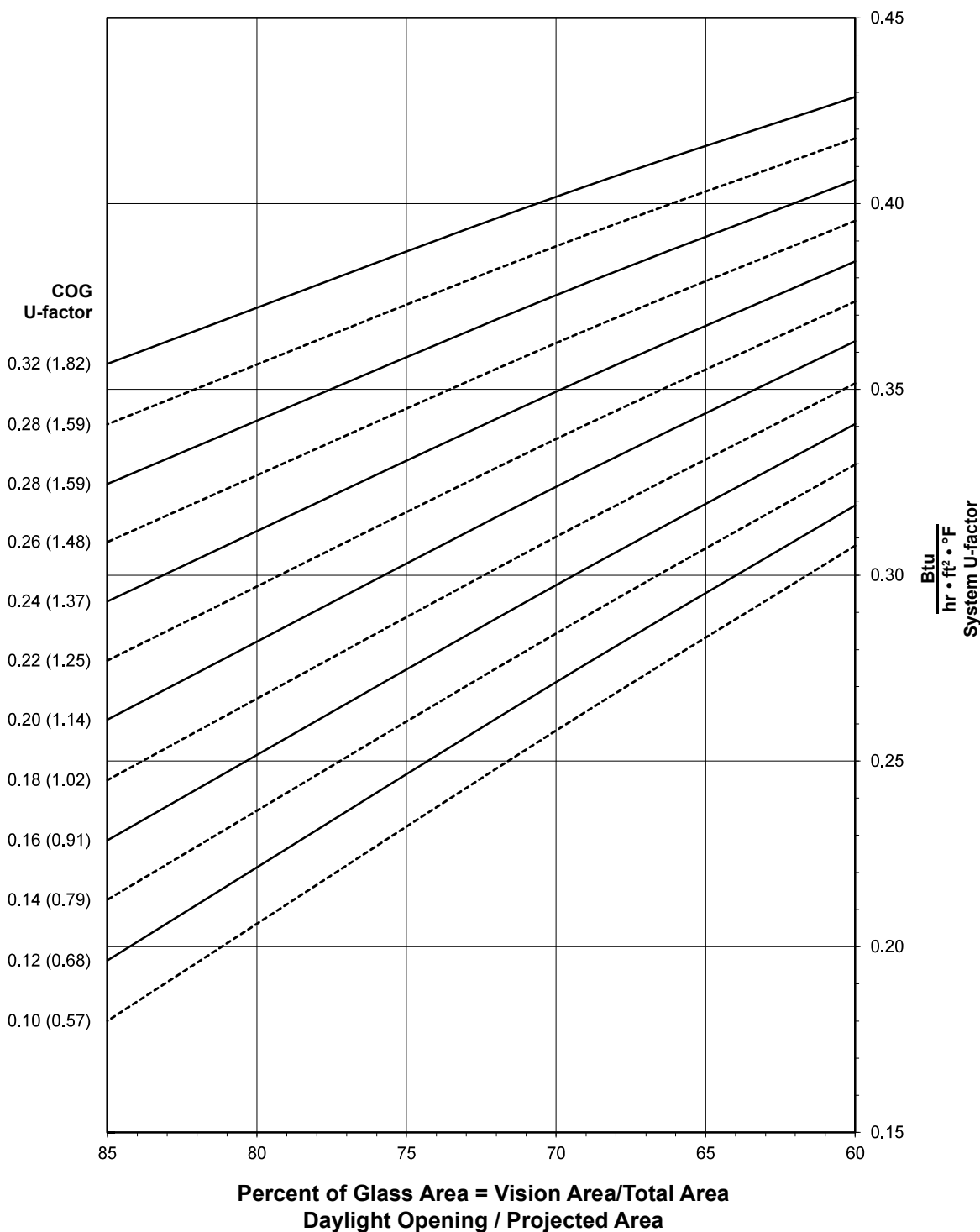
Note:

Values in parentheses are metric.

COG = Center of Glass.

Charts are generated per AAMA 507

System U-factor vs Percent of Glass Area

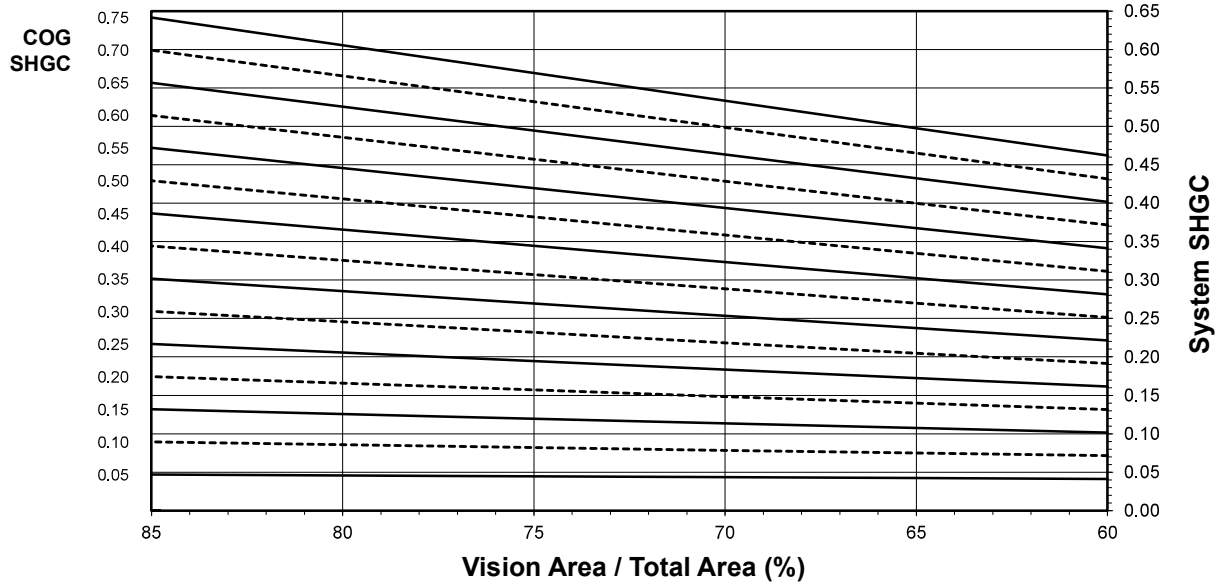
**Notes for System U-factor, SHGC and VT charts:**

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

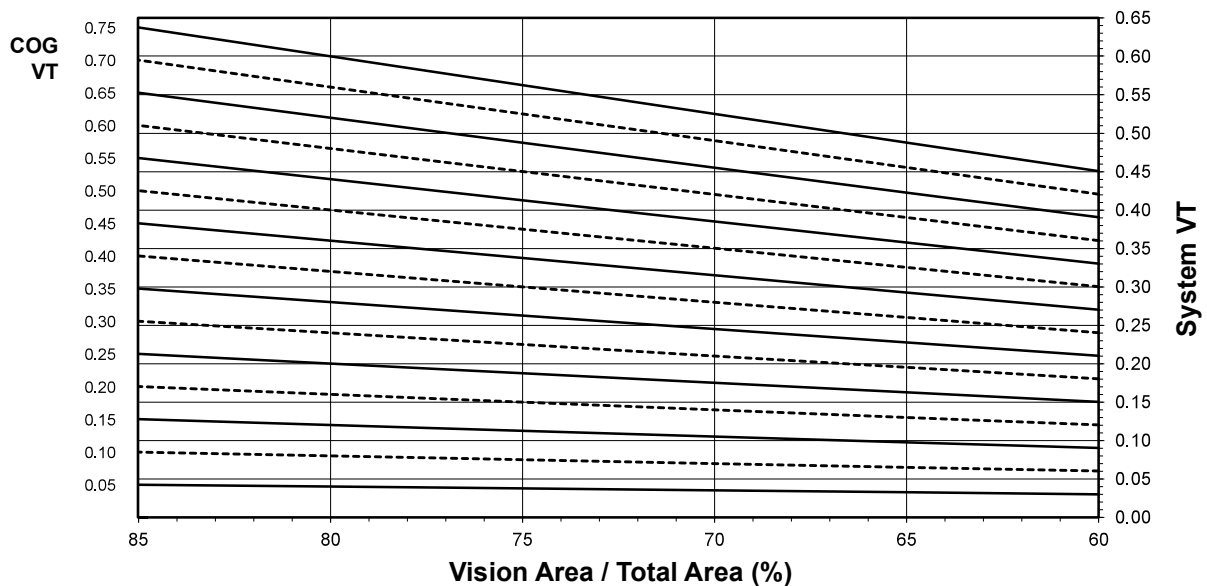
Glass properties are based on center of glass values and are obtained from your glass supplier.

**AA™ 5450 DOUBLE HUNG WINDOW - BEVEL FACE
(1-1/2" Triple Glazed - 15lb Sill)**

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



System Visible Transmittance (VT) vs Percent of Vision Area



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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AA™ 5450 BEVELED DOUBLE HUNG WINDOW - BEVEL FACE (1-1/2" Triple Glazed - 15lb Sill)

Thermal Transmittance ¹ (BTU/hr • ft² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.32	0.40
0.30	0.39
0.28	0.37
0.26	0.36
0.24	0.35
0.22	0.34
0.20	0.32
0.18	0.31
0.16	0.30
0.14	0.28
0.12	0.27
0.10	0.26

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 1,200 mm wide by 1,500 mm high (47-1/4" by 59-1/16").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.54
0.70	0.50
0.65	0.47
0.60	0.43
0.55	0.40
0.50	0.36
0.45	0.33
0.40	0.29
0.35	0.25
0.30	0.22
0.25	0.18
0.20	0.15
0.15	0.11
0.10	0.08
0.05	0.04

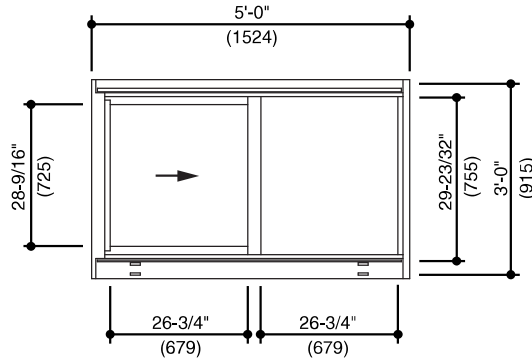
Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.53
0.70	0.49
0.65	0.46
0.60	0.42
0.55	0.39
0.50	0.35
0.45	0.32
0.40	0.28
0.35	0.25
0.30	0.21
0.25	0.18
0.20	0.14
0.15	0.11
0.10	0.07
0.05	0.04

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



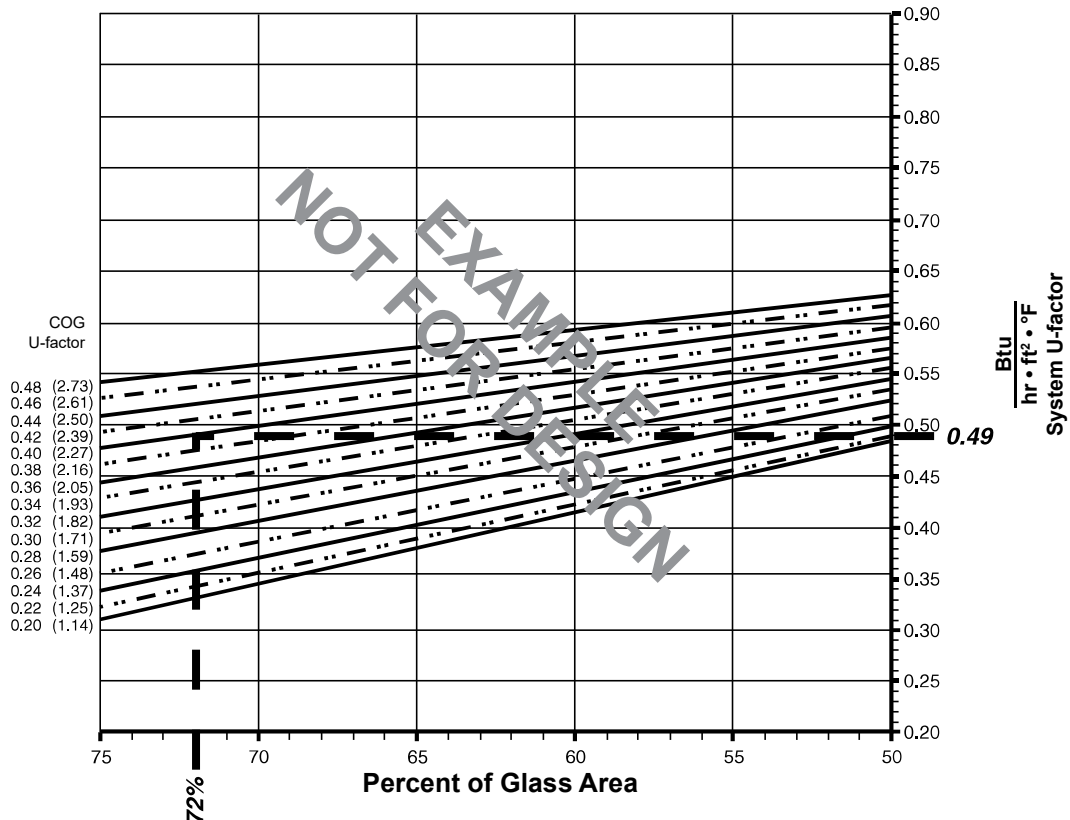
Example Glass U-Factor = 0.42 Btu/hr • ft² • °F

Total Daylight Opening = (28-9/16" • 26-3/4") + (29-23/32" • 26-3/4") = 10.83 ft²

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

Percent of Glass = (Total Daylight Opening ÷ Total Projected Area)100
= (10.83 ÷ 15)100 = 72%

System U-factor vs Percent of Glass Area



Based on 72% glass and center of glass (COG) U-factor of 0.42
System U-factor is equal to 0.49 Btu/hr • ft² • °F

AA™ 5450 OX / XO HORIZONTAL SLIDING WINDOW (1" Double Glazed - 10lb. Sill)

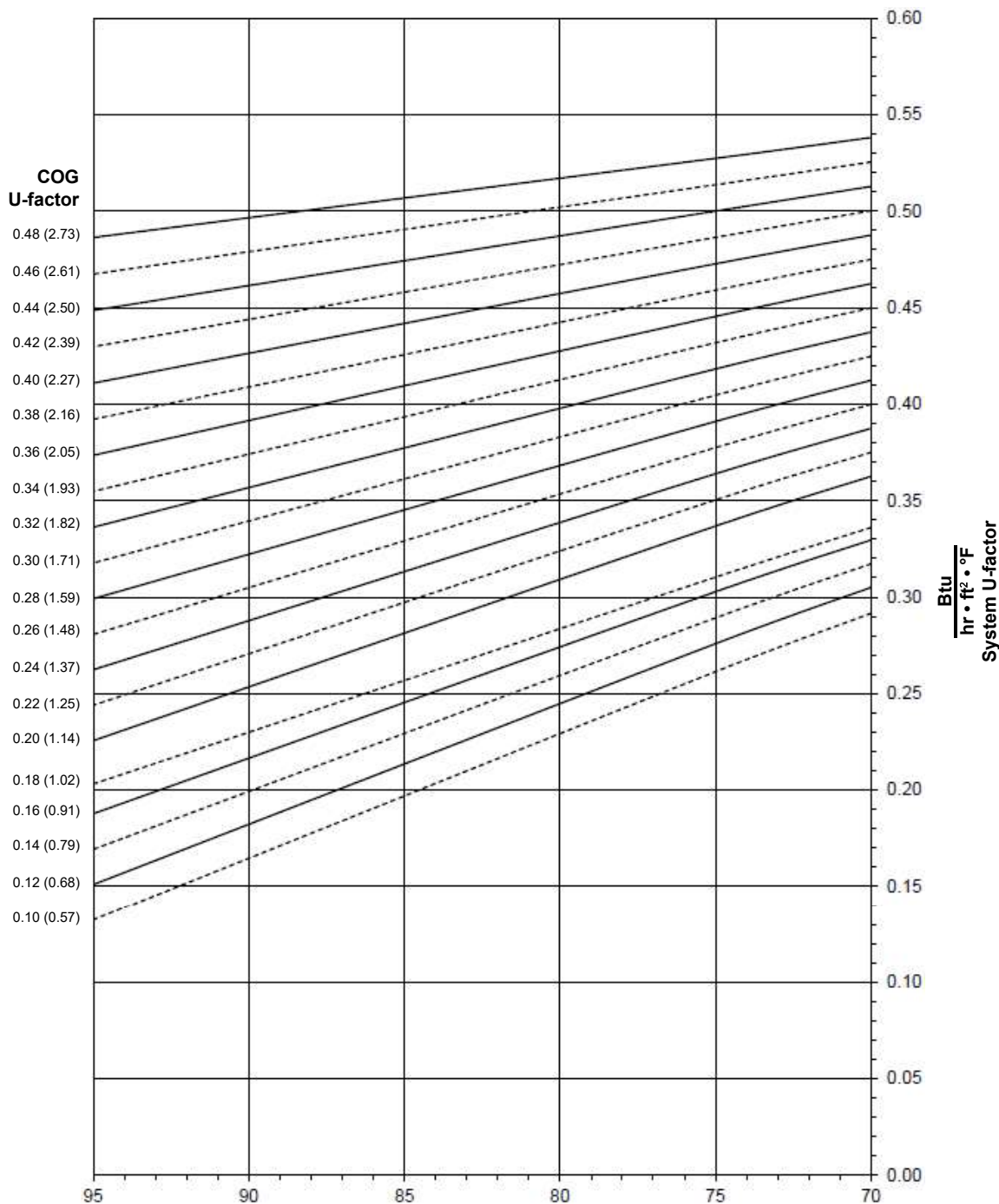
Note:

Values in parentheses are metric.

COG = Center of Glass.

Charts are generated per AAMA 507

System U-factor vs Percent of Glass Area



Percent of Glass Area = Vision Area/Total Area
Daylight Opening / Projected Area

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

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

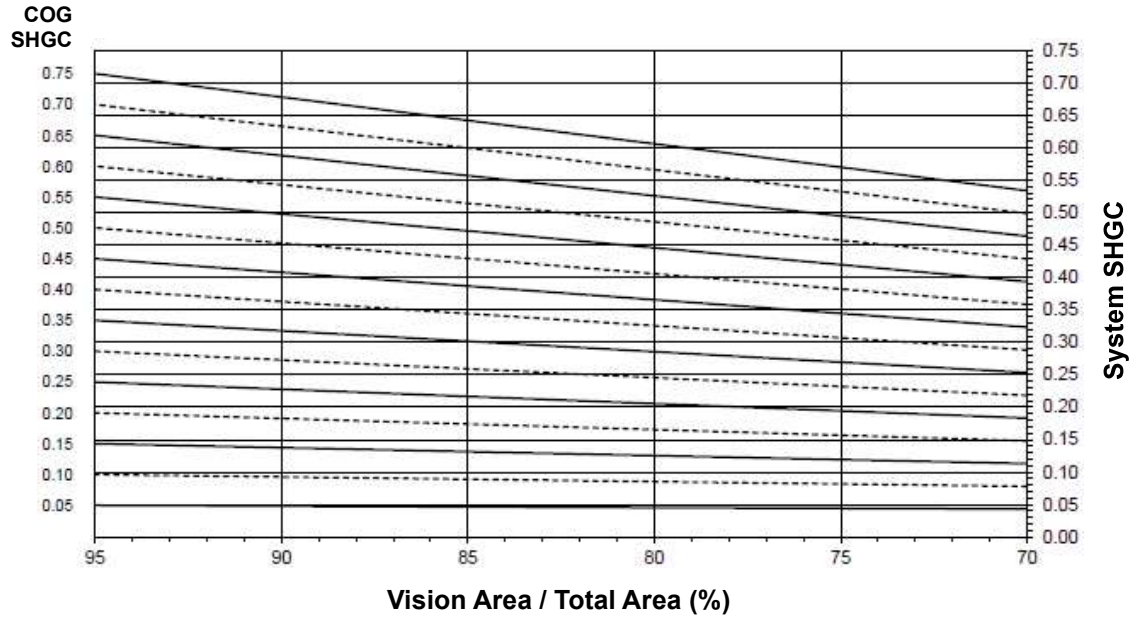
Glass properties are based on center of glass values and are obtained from your glass supplier.

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.

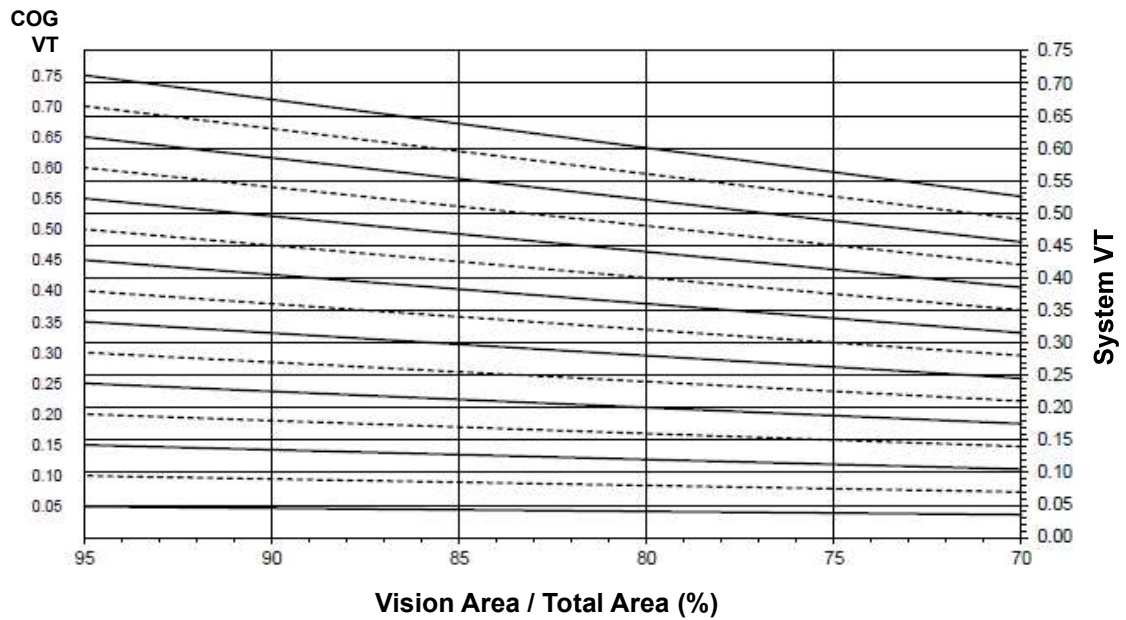
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**AA™ 5450 OX / XO HORIZONTAL SLIDING WINDOW
(1" Double Glazed - 10lb Sill)**

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



System Visible Transmittance (VT) vs Percent of Vision Area



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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Thermal Transmittance ¹ (BTU/hr • ft² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.53
0.46	0.51
0.44	0.50
0.42	0.49
0.40	0.47
0.38	0.46
0.36	0.45
0.34	0.43
0.32	0.42
0.30	0.40
0.28	0.39
0.26	0.38
0.24	0.36
0.22	0.35
0.20	0.34
0.18	0.31
0.16	0.30
0.14	0.29
0.12	0.28
0.10	0.26

**AA™ 5450 OX / XO HORIZONTAL
SLIDING WINDOW
(1" Double Glazed - 10lb Sill)**

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 1,500 mm wide by 1,200 mm high (59-1/16" by 47-1/4").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.57
0.70	0.53
0.65	0.49
0.60	0.46
0.55	0.42
0.50	0.38
0.45	0.34
0.40	0.31
0.35	0.27
0.30	0.23
0.25	0.19
0.20	0.16
0.15	0.12
0.10	0.08
0.05	0.04

Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.56
0.70	0.53
0.65	0.49
0.60	0.45
0.55	0.41
0.50	0.38
0.45	0.34
0.40	0.30
0.35	0.26
0.30	0.23
0.25	0.19
0.20	0.15
0.15	0.11
0.10	0.08
0.05	0.04

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.

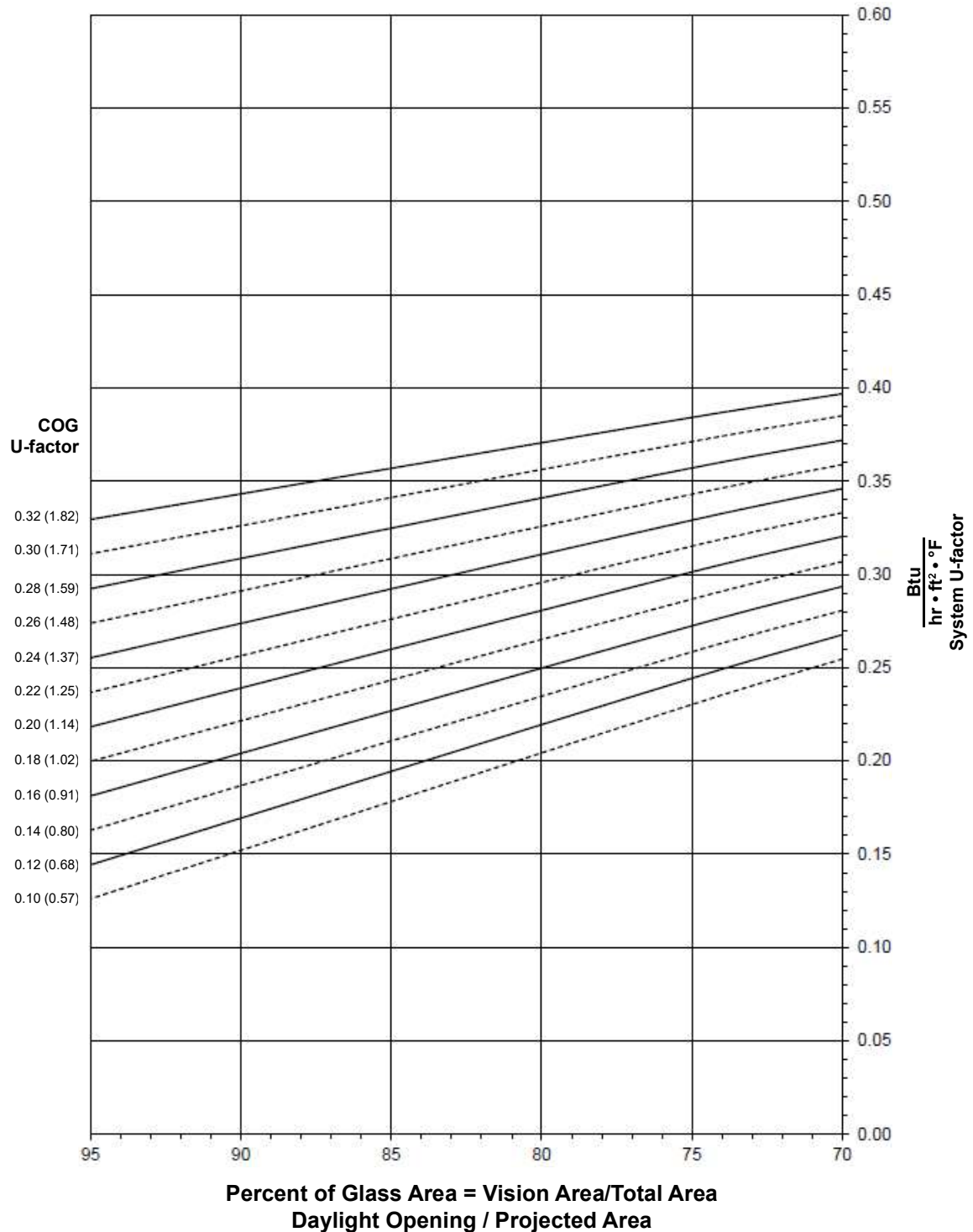
Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.
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**AA™ 5450 OX / XO HORIZONTAL SLIDING WINDOW
(1-1/2" Triple Glazed - 10lb. Sill)**

Note:

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

System U-factor vs Percent of Glass Area

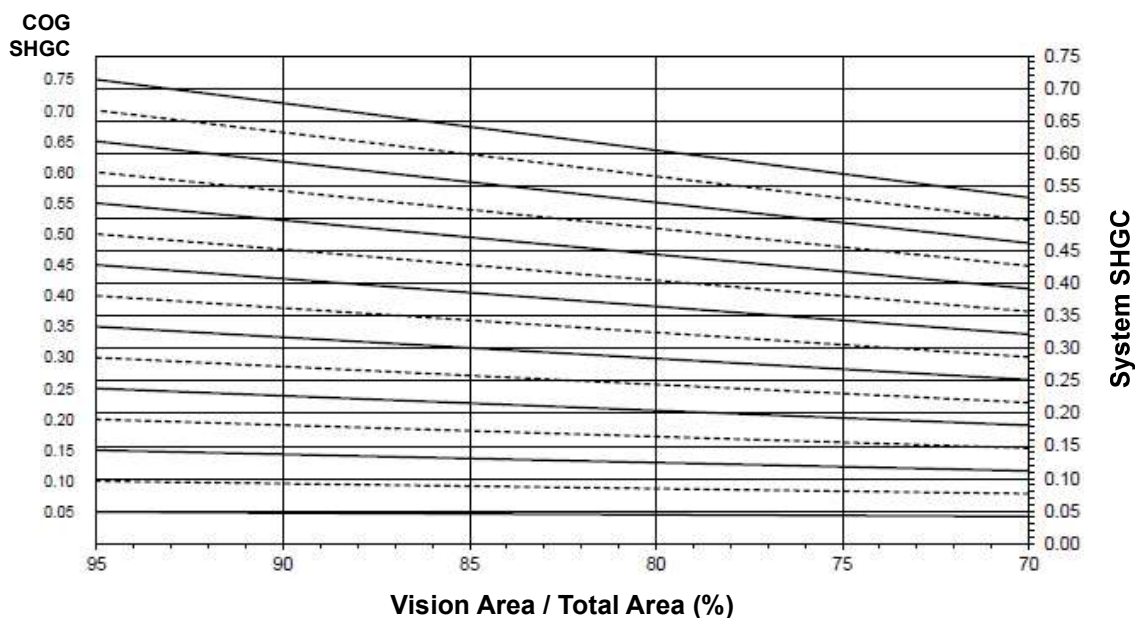


Notes for System U-factor, SHGC and VT charts:

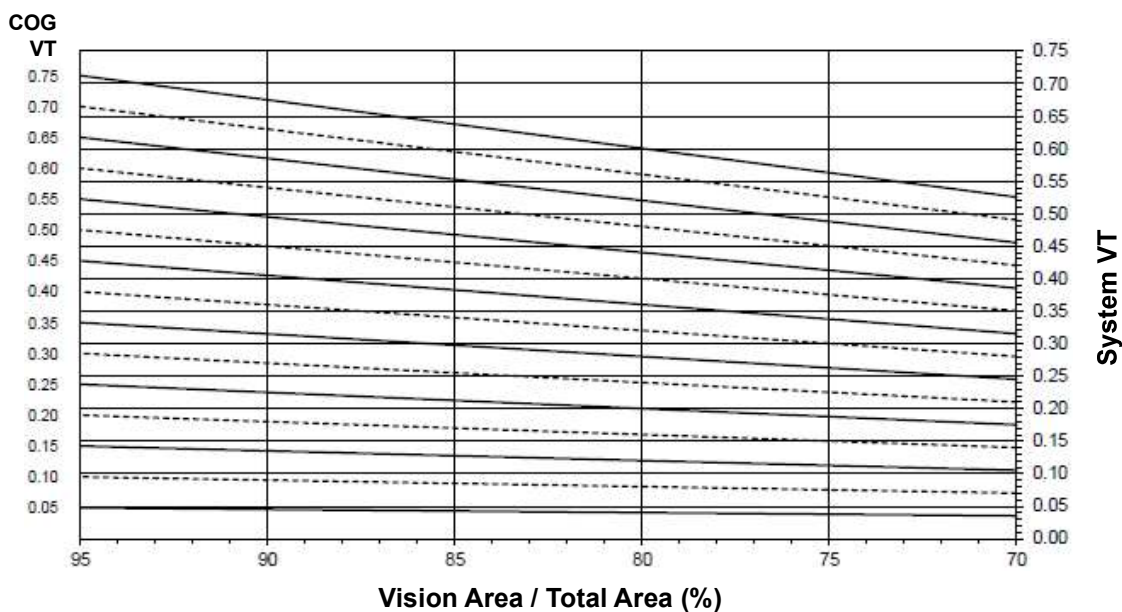
For glass values that are not listed, linear interpolation is permitted.
Glass properties are based on center of glass values and are obtained from your glass supplier.

AA™ 5450 OX / XO HORIZONTAL SLIDING WINDOW (1-1/2" Triple Glazed - 10lb Sill)

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



System Visible Transmittance (VT) vs Percent of Vision Area



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

Glass U-Factor ³	Overall U-Factor ⁴
0.32	0.38
0.30	0.37
0.28	0.36
0.26	0.34
0.24	0.33
0.22	0.31
0.20	0.30
0.18	0.29
0.16	0.27
0.14	0.26
0.12	0.24
0.10	0.23

AA™ 5450 OX / XO HORIZONTAL
SLIDING WINDOW
(1-1/2" Triple Glazed - 10lb. Sill)

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 1,500 mm wide by 1,200 mm high (59-1/16" by 47-1/4").

SHGC Matrix²

Glass SHGC ³	Overall Glass U-Factor ⁴
0.75	0.57
0.70	0.53
0.65	0.49
0.60	0.46
0.55	0.42
0.50	0.38
0.45	0.34
0.40	0.31
0.35	0.27
0.30	0.23
0.25	0.19
0.20	0.16
0.15	0.12
0.10	0.08
0.05	0.04

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.56
0.70	0.53
0.65	0.49
0.60	0.45
0.55	0.41
0.50	0.38
0.45	0.34
0.40	0.30
0.35	0.26
0.30	0.23
0.25	0.19
0.20	0.15
0.15	0.11
0.10	0.08
0.05	0.04

AA™ 5450 XX HORIZONTAL SLIDING WINDOW (1" Double Glazed - 10lb. Sill)

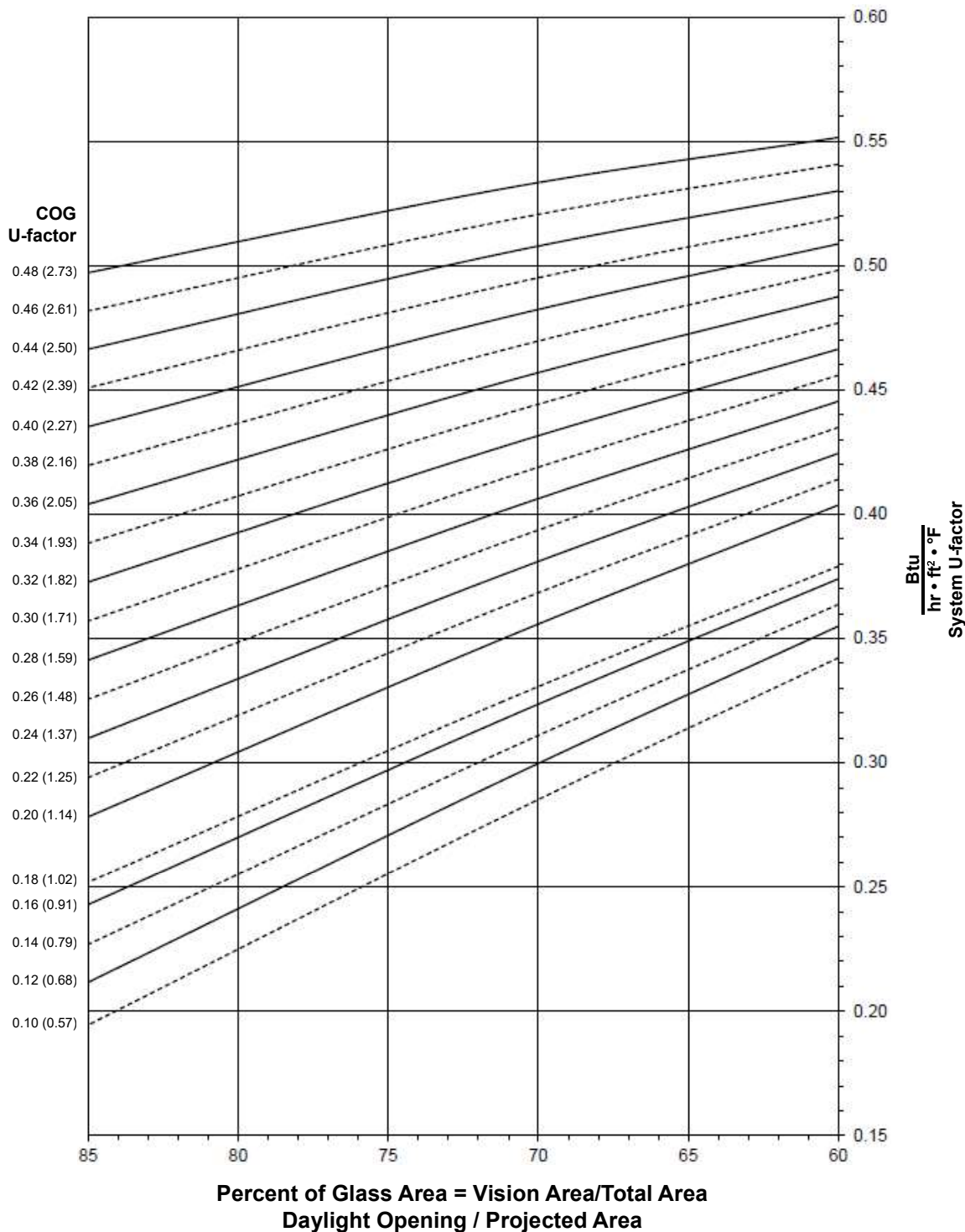
Note:

Values in parentheses are metric.

COG = Center of Glass.

Charts are generated per AAMA 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.

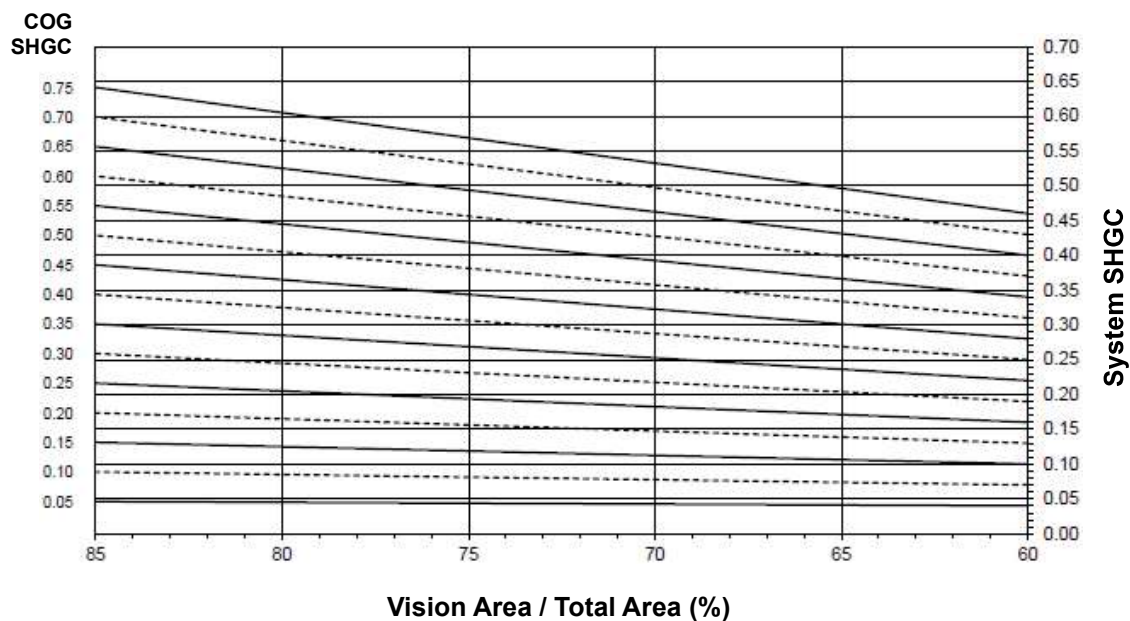
Glass properties are based on center of glass values and are obtained from your glass supplier.

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.

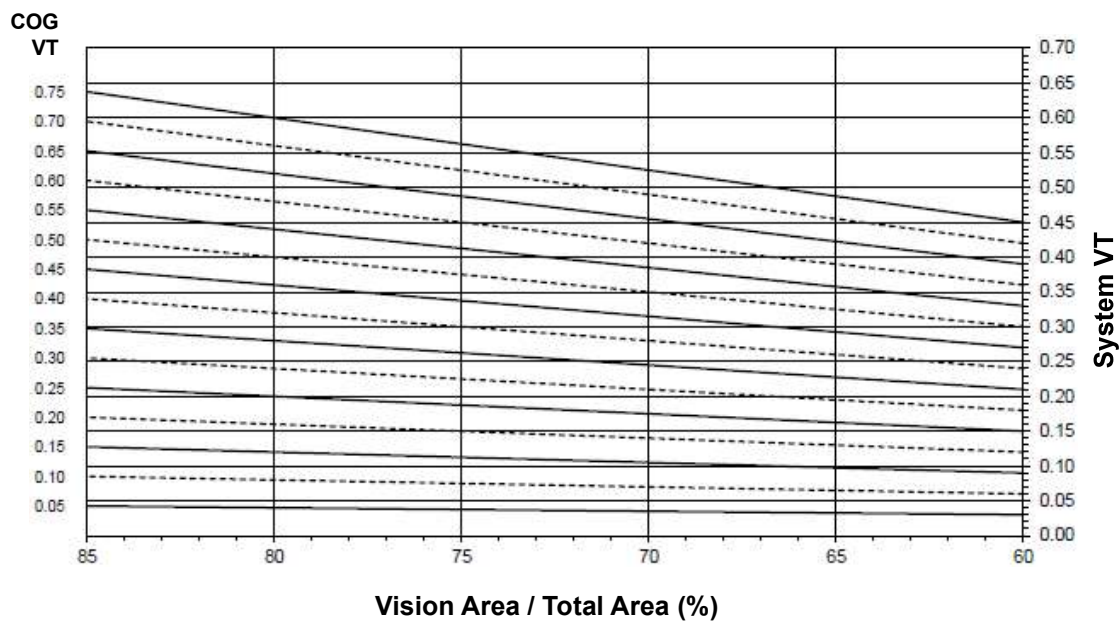
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**AA™ 5450 XX HORIZONTAL SLIDING WINDOW
(1" Double Glazed - 10lb Sill)**

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



System Visible Transmittance (VT) vs Percent of Vision Area



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Thermal Transmittance ¹ (BTU/hr • ft² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.53
0.46	0.52
0.44	0.50
0.42	0.49
0.40	0.48
0.38	0.47
0.36	0.45
0.34	0.44
0.32	0.43
0.30	0.41
0.28	0.40
0.26	0.39
0.24	0.38
0.22	0.36
0.20	0.35
0.18	0.32
0.16	0.32
0.14	0.30
0.12	0.29
0.10	0.28

**AA™ 5450 XX HORIZONTAL
SLIDING WINDOW
(1" Double Glazed - 10lb Sill)**

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 1,500 mm wide by 1,200 mm high (59-1/16" by 47-1/4").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.54
0.70	0.51
0.65	0.47
0.60	0.43
0.55	0.40
0.50	0.36
0.45	0.33
0.40	0.29
0.35	0.26
0.30	0.22
0.25	0.19
0.20	0.15
0.15	0.11
0.10	0.08
0.05	0.04

Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.53
0.70	0.50
0.65	0.46
0.60	0.43
0.55	0.39
0.50	0.36
0.45	0.32
0.40	0.28
0.35	0.25
0.30	0.21
0.25	0.18
0.20	0.14
0.15	0.11
0.10	0.07
0.05	0.04

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.

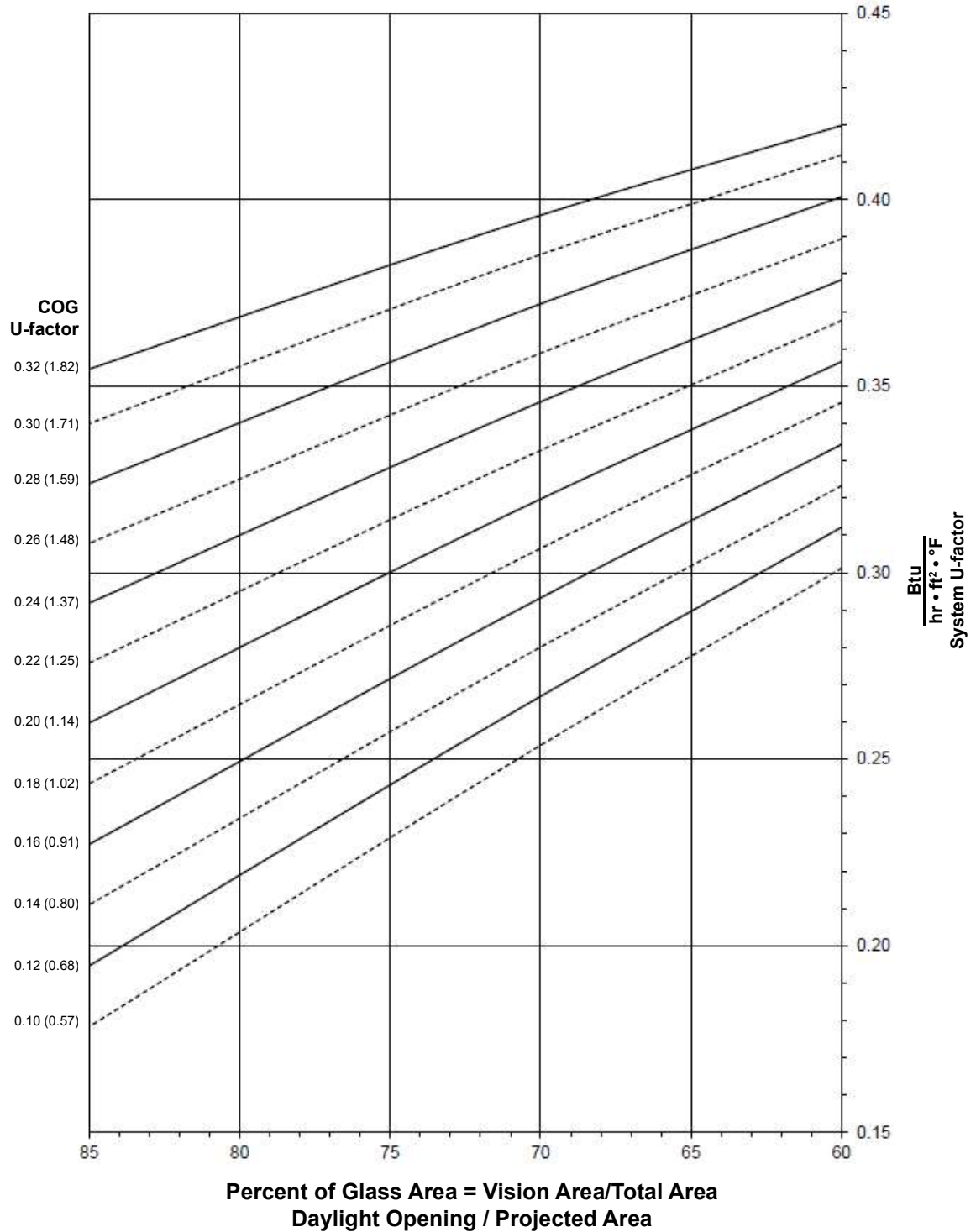
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**AA™ 5450 XX HORIZONTAL SLIDING WINDOW
(1-1/2" Triple Glazed - 10lb. Sill)**

Note:

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

System U-factor vs Percent of Glass Area

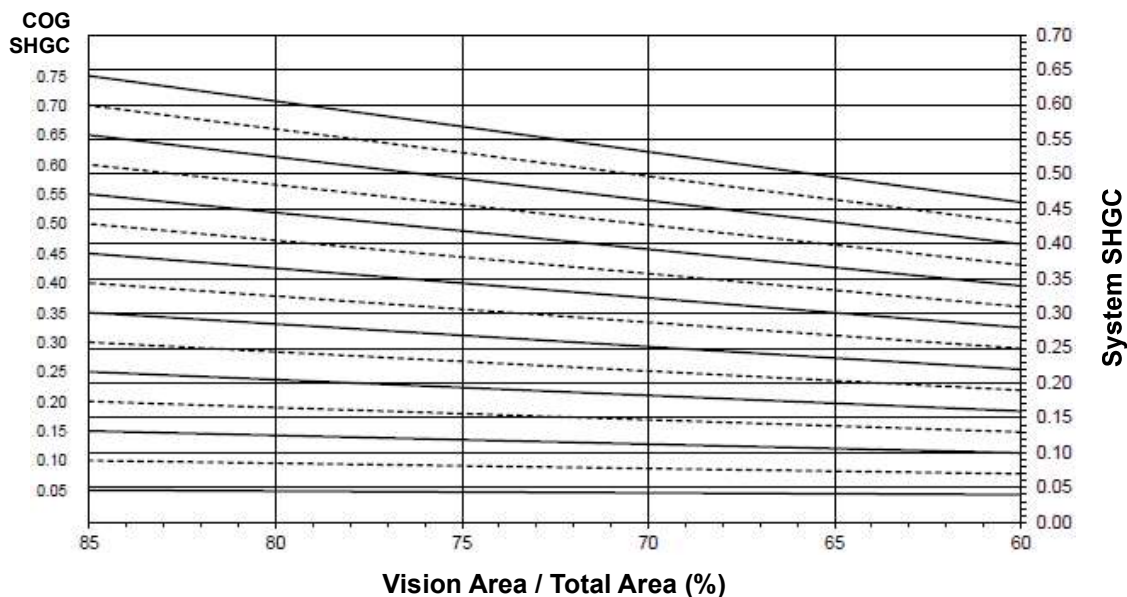


Notes for System U-factor, SHGC and VT charts:

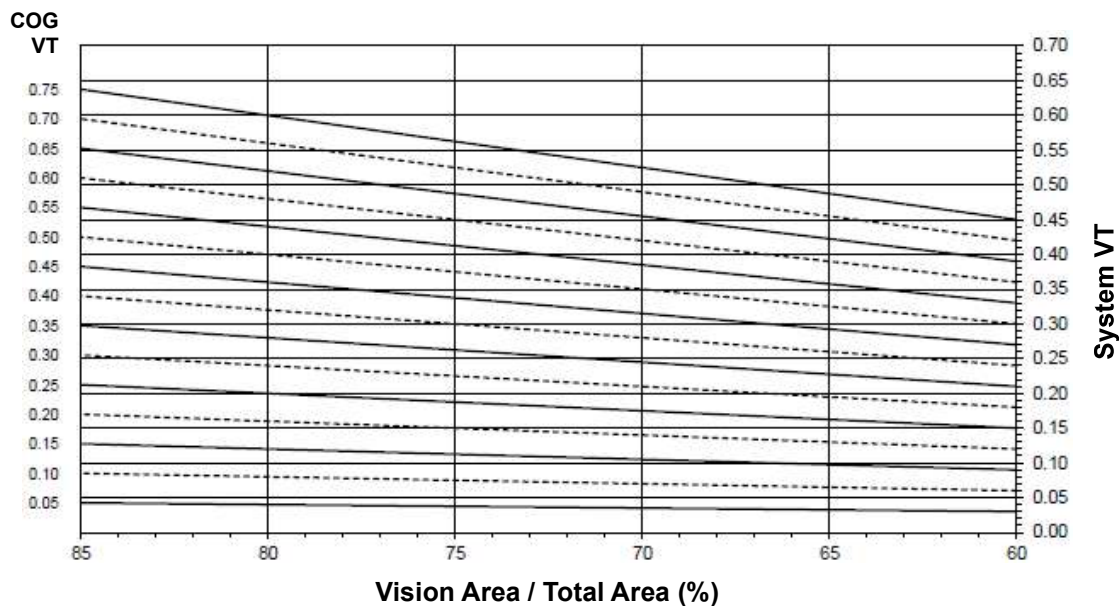
For glass values that are not listed, linear interpolation is permitted.
Glass properties are based on center of glass values and are obtained from your glass supplier.

**AA™ 5450 XX HORIZONTAL SLIDING WINDOW
(1-1/2" Triple Glazed - 10lb Sill)**

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



System Visible Transmittance (VT) vs Percent of Vision Area



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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**AA™ 5450 XX HORIZONTAL
SLIDING WINDOW
(1-1/2" Triple Glazed - 10lb. Sill)**

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

Glass U-Factor ³	Overall U-Factor ⁴
0.32	0.39
0.30	0.38
0.28	0.37
0.26	0.35
0.24	0.34
0.22	0.33
0.20	0.32
0.18	0.30
0.16	0.29
0.14	0.27
0.12	0.26
0.10	0.25

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 1,500 mm wide by 1,200 mm high (59-1/16" by 47-1/4").

SHGC Matrix²

Glass SHGC ³	Overall Glass U-Factor ⁴
0.75	0.54
0.70	0.51
0.65	0.47
0.60	0.43
0.55	0.40
0.50	0.36
0.45	0.33
0.40	0.29
0.35	0.26
0.30	0.22
0.25	0.18
0.20	0.15
0.15	0.11
0.10	0.08
0.05	0.04

Visible Transmittance²

Glass VT ³	Overall VT ⁴
0.75	0.53
0.70	0.50
0.65	0.46
0.60	0.43
0.55	0.39
0.50	0.36
0.45	0.32
0.40	0.28
0.35	0.25
0.30	0.21
0.25	0.18
0.20	0.14
0.15	0.11
0.10	0.07
0.05	0.04

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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