INDEX

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

EC 97911-075

8410TL FIXED WINDOW	3-6
8430TL SINGLE HUNG WINDOW	7-12
8450TL DOUBLE HUNG WIDOW	13-18
8470TL HORIZONTAL SLIDER	19-23
MULLIONS	24-27
RECEPTORS AND SUB SILLS	28
ANCHORING	29
THEDMAL CHAPTS	30-43

LAWS AND BUILDING AND SAFETY CODES GOVERNING THE DESIGN AND USE OF GLAZED ENTRANCE, WINDOW, AND CURTAIN WALL PRODUCTS VARY WIDELY. KAWNEER DOES NOT CONTROL THE SELECTION OF PRODUCT CONFIGURATIONS, OPERATING HARDWARE, OR GLAZING MATERIALS, AND ASSUMES NO RESPONSIBILITY THEREFOR.

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

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

m - meter

cm - centimeter

mm - millimeter

s - second

Pa – pascal

MPa - megapascal

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



BLANK PAGE

2

EC 97911-075

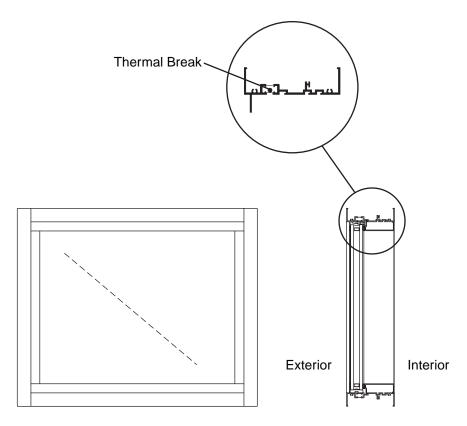
Laws and building and safety codes governing the design and use of glazed entrance, window, and cutain wail products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.



EC 97911-075 8410TL FIXED

Features

- Architectural Grade Window
- Series 8410TL Standard Design
- IsoLock[™] Thermal Break
- Screw and Spline Frame Corner Joinery
- Factory Silicone Glazed
- Interior Applied Glazing Bead with Bulb Gasket
- Architectural Anodized Finishes and Applied Coatings
- Two Year Manufacturer's Warranty



Fixed Window

For specific product applications, Consult your Kawneer representative.



8410TL FIXED

CLASS and GRAI	SS and GRADE Architectur		ıral Grade Wind	al Grade Window F-HC100 / F-AW100 / AW-PG100-FW			
TESTING STANDARD AA		AAMA / W	/DMA / CSA 101	I / I.S. 2 / A440 (I	NAFS)		
FRAME DEPTH 4" Overa		4" Overall	Frame Depth				
TYPICAL WALL THICKNESS .070 Non		.070 Nom	inal				
TYPICAL MAXIM	UM SIZE	60" x 99"					
TYPICAL MINIMU	JM SIZE	12" x 12"					
TYPICAL CONFIGURATIONS							
STANDARD INFILL OPTIONS 1/		1/4", 3/4"	1/4", 3/4" with Glazed-in Muntin Grid, 1", and 1-1/2"				
STANDARD HARDWARE Not Appli		cable					
OPTIONAL HARDWARE Not Applicable							
OTHER OPTIONS Exterior Glazed-in Muntin Grids Exterior Glazing Offset Glazing Perimeters and Sills Exterior Pannings and Interior Trims True Intermediate Mullions Structural Mullions Vertically or Horizontally Stacked							
PERFORMANCE	Air Infiltration Cfm/ft²	Water Resistance PSF	Design Load PSF	Thermal Transmittance "U" Value	Condensation Resistance CRF	Sound Transmittance STC	
	.30 @ 6.24 psf	15	100	.60	58	n/a	

Note: Thermal values are based upon 1" clear insulating glass.

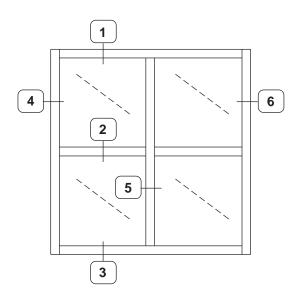


8410TL FIXED

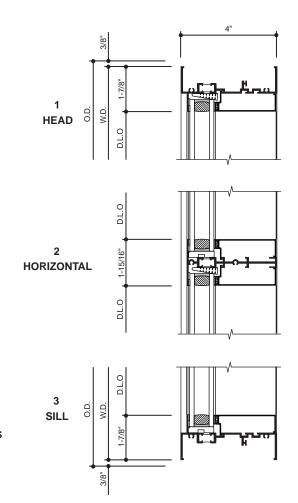
EC 97911-075

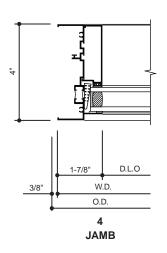
SCALE: 3" = 1'-0"

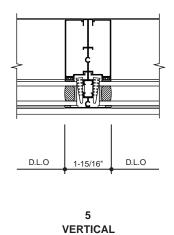
8410TL FIXED WINDOW Standard Design

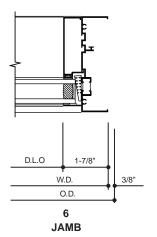


TYPICAL ELEVATION Log onto www.kawneer.com for other configurations





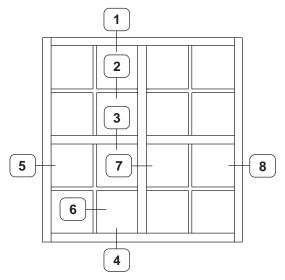




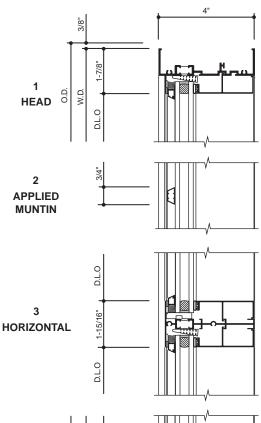


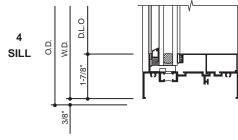
8410TL FIXED WITH GLAZED-IN MUNTIN GRID

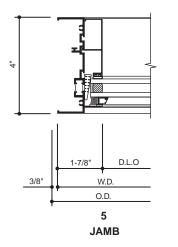
8410TL FIXED WINDOW with Glazed-in Muntin Grid

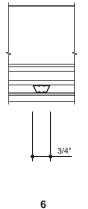


TYPICAL ELEVATION
Log onto www.kawneer.com for other configurations



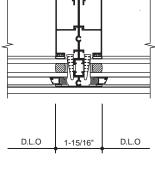


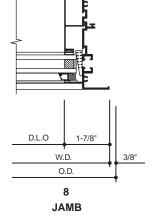




APPLIED

MUNTIN





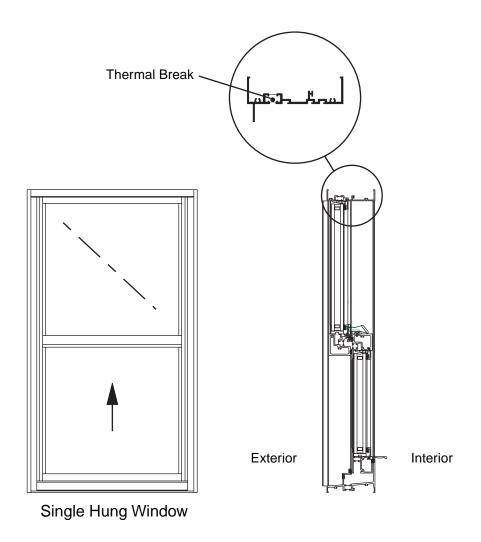
kawneer.com

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

EC 97911-075 8430TL SINGLE HUNG

Features

- Architectural Grade Window
- Series 8430TL Standard Design
- IsoLock[™] Thermal Break
- Screw and Spline Frame and Sash Corner Joinery
- Factory Silicone Glazed
- Interior Applied Glazing Bead with Bulb Gasket
- Architectural Anodized Finishes and Applied Coatings
- Two Year Manufacturer's Warranty



For specific product applications, Consult your Kawneer representative.



8430TL SINGLE HUNG	EC 97911-075

CLASS and GRAI	DE	Architectur	Architectural Grade Window H-HC70 / H-AW70 / AW-PG70-H)-H
TESTING STAND	ARD	AAMA / WI	AAMA / WDMA / CSA 101 / I.S. 2 / A440 (NAFS)			
FRAME DEPTH		4" Overall	4" Overall Frame Depth			
TYPICAL WALL 1	THICKNESS	.070 Nomii	nal			
TYPICAL MAXIM	UM SIZE	60" x 99"	60" x 99"			
TYPICAL MINIMU	JM SIZE	20" x 33"	20" x 33"			
TYPICAL CONFIG	GURATIONS					
STANDARD INFIL	L OPTIONS	1/4", 3/4" with Glazed-in Muntin Grid, and 1"				
STANDARD HAR	DWARE	Heavy Duty Balances Cast White Bronze Sweep Locks				
OPTIONAL HARDWARE Aluminum Auto Lock						
OTHER OPTIONS Exterior Glazed-in Muntin Grids Perimeters and Sills Exterior Pannings and Interior Trims True Intermediate Mullions Structural Mullions Vertically or Horizontally Stacked Sill for 10 PSF or 15 PSF Water Performance Insect Screens						
PERFORMANCE	Air Infiltration Cfm/ft²	Water Resistance PSF	Design Load PSF	Thermal Transmittance "U" Value	Condensation Resistance CRF	Sound Transmittance STC
	.30 @ 6.24 psf	10 / 15	70	.70	49	34

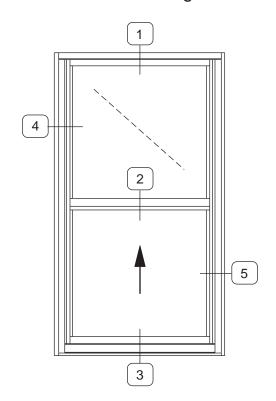
Note: Thermal and STC values are based upon 1" clear insulating glass.



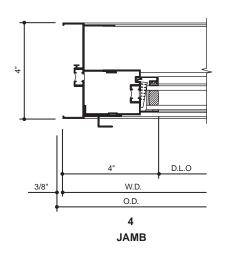
EC 97911-075 8430TL SINGLE HUNG

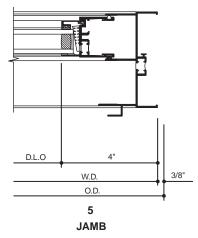
SCALE: 3" = 1'-0"

8430TL SINGLE HUNG WINDOW Standard Design



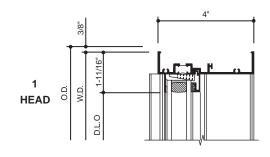
TYPICAL ELEVATION Log onto www.kawneer.com for other configurations

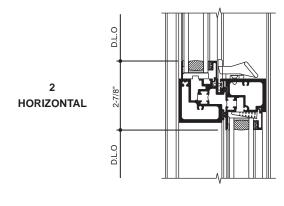


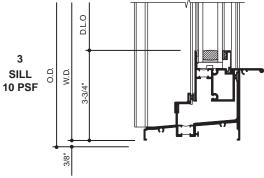


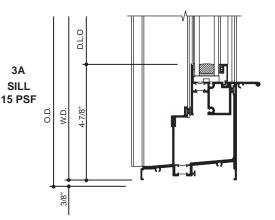
3A

SILL





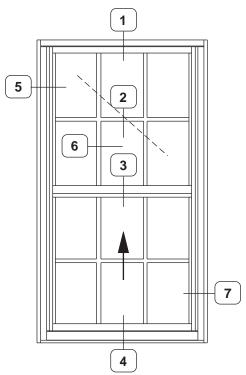




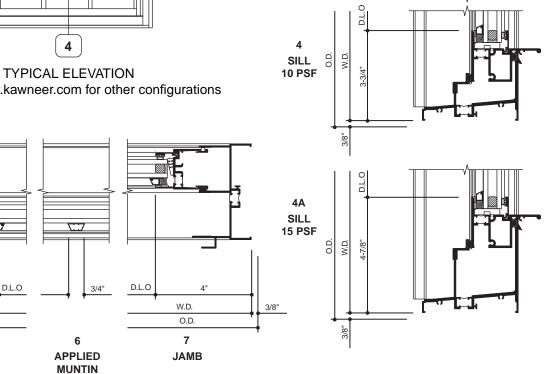


SCALE: 3" = 1'-0"

8430TL SINGLE HUNG WINDOW with Glazed-in Muntin Grid



TYPICAL ELEVATION Log onto www.kawneer.com for other configurations



O.D. W.D.

D.L.O

D.L.O

D.L.O.

HEAD

2 APPLIED **MUNTIN**

3 **HORIZONTAL** Laws and building and safety codes governing the design and use of glazed entrance, window, and cutain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor. Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

KAWNEER

3/8"

W.D.

O.D.

5

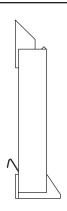
JAMB

BALANCES

EC 97911-075

HEAVY DUTY

BLOCK AND TACKLE

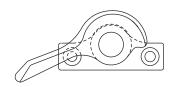


Heavy duty balances are concealed in the left and right jambs. Balances are sized according to sash dimensions and sash weight.

8430TL SINGLE HUNG

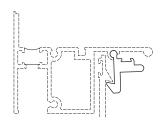
STANDARD SWEEP LOCK

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



Cast white bronze sweep locks and keepers secure the operating sash at the center meeting rails.

ALUMINUM AUTO LOCK



Aluminum auto locks are integral to the sash lift rail and used in lieu of cast white bronze auto locks. These locks are used in conjunction with sweep locks for additional security.

BLANK PAGE

12

EC 97911-075

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

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

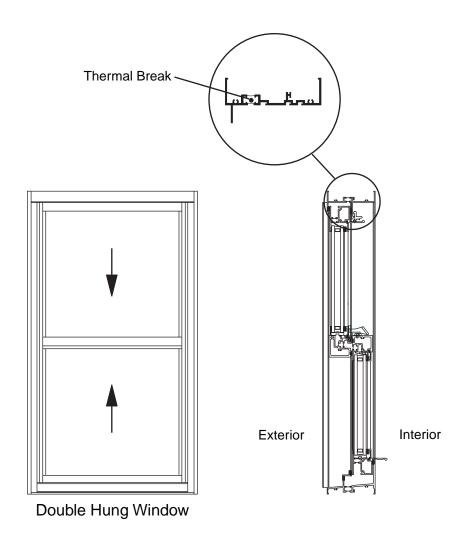


Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

8450TL DOUBLE HUNG

Features

- Architectural Grade Window
- Series 8450TL Standard Design
- IsoLock[™] Thermal Break
- Screw and Spline Frame and Sash Corner Joinery
- Factory Silicone Glazed
- Interior Applied Glazing Bead with Bulb Gasket
- Architectural Anodized Finishes and Applied Coatings
- Two Year Manufacturer's Warranty



For specific product applications, Consult your Kawneer representative.



8450TL DOUBLE HUNG

CLASS and GRAI	DE	Architectu	ural Grade Windo	ow H-HC70 / H-	AW70 / AW-PG7	70-H
TESTING STANDA	ARD	AAMA / W	VDMA / CSA 101	/ I.S. 2 / A440 (NAFS)	
FRAME DEPTH		4" Overal				
TYPICAL WALL T	HICKNESS	.070 Nom	inal			
TYPICAL MAXIM	UM SIZE	60" x 99"	60" x 99"			
TYPICAL MINIMU	AL MINIMUM SIZE 20" x 33"					
TYPICAL CONFIGURATIONS						
STANDARD INFILL OPTIONS 1/4", 3/4" with Glazed-in Muntin Grid, and 1"						
STANDARD HARI	Cast Whit	Heavy Duty Balances Cast White Bronze Sweep Locks Aluminum Auto Lock (Upper Sash Only)				
OPTIONAL HARD	OWARE	Aluminum	Aluminum Auto Lock at Sill			
OTHER OPTIONS	3	Perimeter Exterior P True Inter Structural Vertically Sill for 10	Exterior Glazed-in Muntin Grids Perimeters and Sills Exterior Pannings and Interior Trims True Intermediate Mullions Structural Mullions Vertically or Horizontally Stacked Sill for 10 PSF or 15 PSF Water Performance Insect Screens			
PERFORMANCE	Air Infiltration Cfm/ft²	Water Resistance PSF	Design Load PSF	Thermal Transmittance "U" Value	Condensation Resistance CRF	Sound Transmittance STC

Note: Thermal and STC values are based upon 1" clear insulating glass.

10 / 15

.30 @ 6.24 psf



70

.74

50

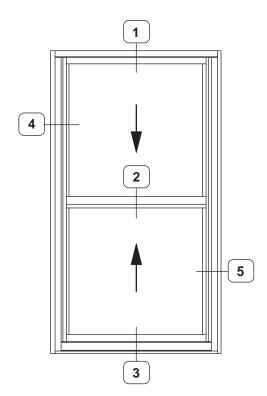
33

EC 97911-075

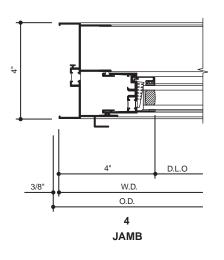
8450TL DOUBLE HUNG

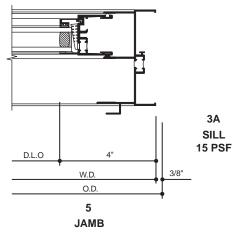
SCALE: 3" = 1'-0"

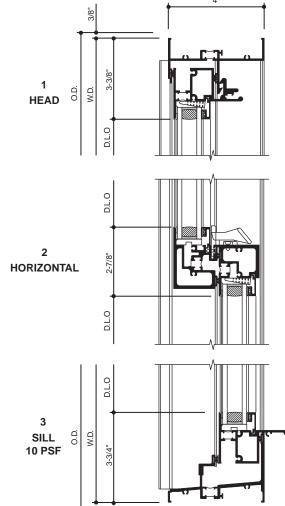
8450TL DOUBLE HUNG WINDOW Standard Design

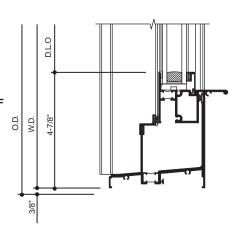


TYPICAL ELEVATION Log onto www.kawneer.com for other configurations



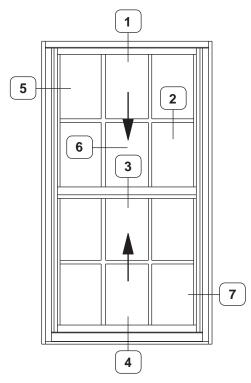




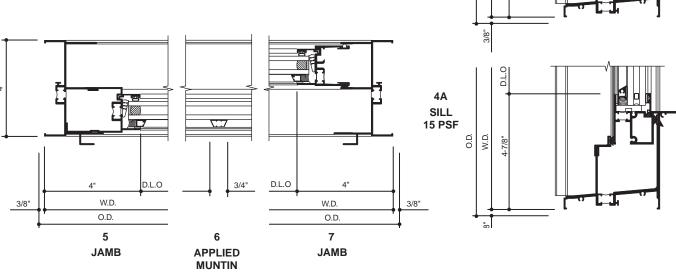


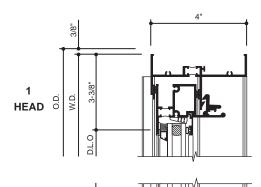


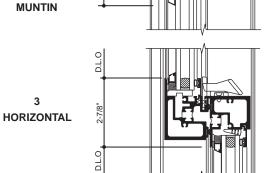
8450TL DOUBLE HUNG WINDOW with Glazed-in Muntin Grid



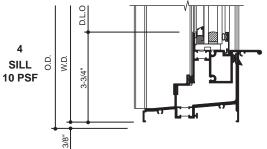
TYPICAL ELEVATION Log onto www.kawneer.com for other configurations

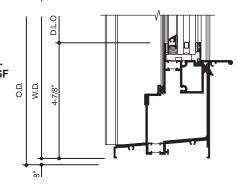






2 **APPLIED**





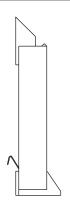
Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

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

EC 97911-075

8450TL DOUBLE HUNG

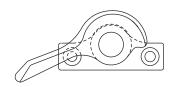
HEAVY DUTY BLOCK AND TACKLE BALANCES



Heavy duty balances are concealed in the left and right jambs. Balances are sized according to sash dimensions and sash weight.

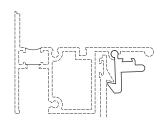
STANDARD SWEEP LOCK

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



Cast white bronze sweep locks and keepers secure the operating sash at the center meeting rails.

ALUMINUM AUTO LOCK



Aluminum auto locks are integral to the sash lift rail and used in lieu of cast white bronze auto locks. These locks are used in conjunction with sweep locks for additional security.

kawneer.com



BLANK PAGE

EC 97911-075

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

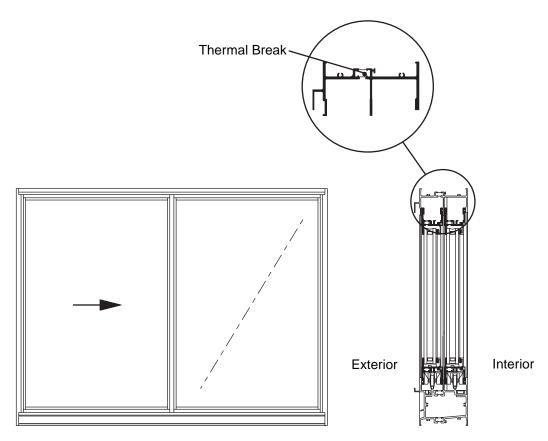
Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.



EC 97911-075 8470TL HORIZONTAL SLIDER

Features

- Architectural Grade Window
- Series 8470TL Standard Design
- IsoLock[™] Thermal Break
- Screw and Spline Frame and Sash Corner Joinery
- Factory Silicone Glazed
- Interior Applied Glazing Bead with Bulb Gasket
- Architectural Anodized Finishes and Applied Coatings
- Two Year Manufacturer's Warranty



Horizontal Sliding Window

For specific product applications, Consult your Kawneer representative.

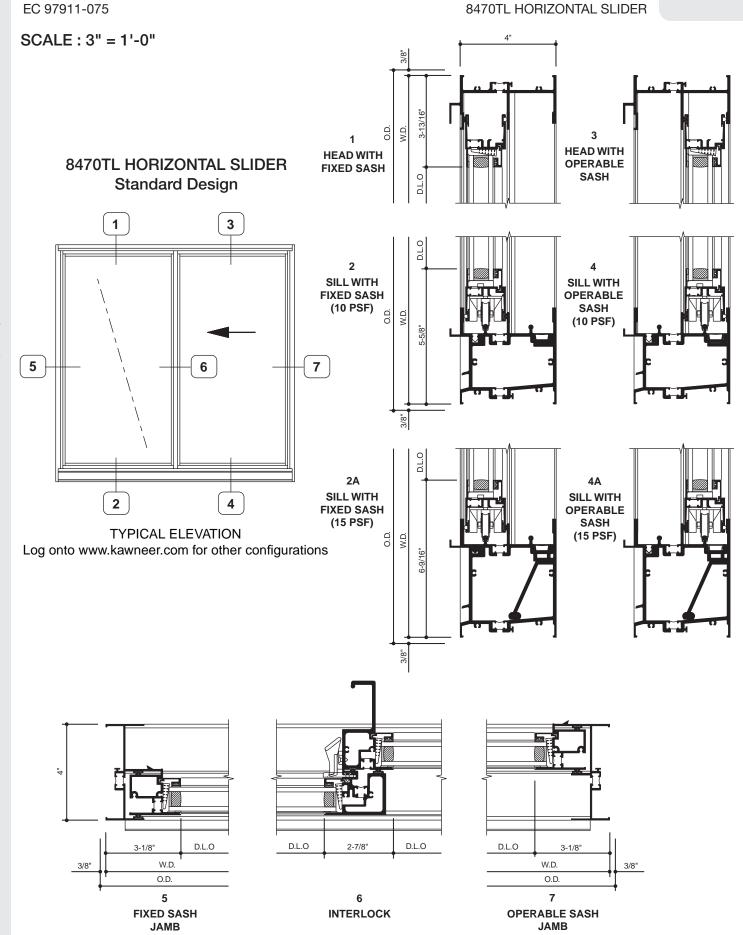


CLASS and GRAI	DE	Architectu	Architectural Grade Window HS-HC70 / HS-AW70 / AW-PG70-HS			PG70-HS
TESTING STAND	ARD	AAMA / V	AAMA / WDMA / CSA 101 / I.S. 2 / A440 (NAFS)			
FRAME DEPTH		4" Overal	Frame Depth			
TYPICAL WALL T	HICKNESS	.070 to .1	25 Nominal			
TYPICAL MAXIM	MAXIMUM SIZE 99" x 79" (OX,XO,XX) 148" x 79" (OXO,XOX) 198" x 79" (OXXO)			OXXO)		
TYPICAL MINIMU	JM SIZE	32" x 20"	(OX,XO,XX) 48'	x 20" (OXO,XO	X) 64" x 20" (OX	(XO)
TYPICAL CONFIG	GURATIONS	-	- \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			\ <u></u>
STANDARD INFILL OPTIONS 1/4", 3/4" with Glazed-in Muntin Grid, and 1"						
STANDARD HAR	DWARE	Steel Roller Assembly Cast White Bronze Sweep Locks				
OPTIONAL HARDWARE Aluminum Auto Lock						
OTHER OPTIONS Exterior Glazed-in Muntin Grids Perimeters and Sills Exterior Pannings and Interior Trims True Intermediate Mullions Structural Mullions Vertically or Horizontally Stacked Sill for 10 PSF or 15 PSF Water Performance Insect Screens Standard and Heavy Duty Interlock						
PERFORMANCE	Air Infiltration Cfm/ft²	Water Resistance PSF	Design Load PSF	Thermal Transmittance "U" Value	Condensation Resistance CRF	Sound Transmittance STC
	.30 @ 6.24 psf	10 / 15	70	.74	51	34

Note: Thermal and STC values are based upon 1" clear insulating glass.

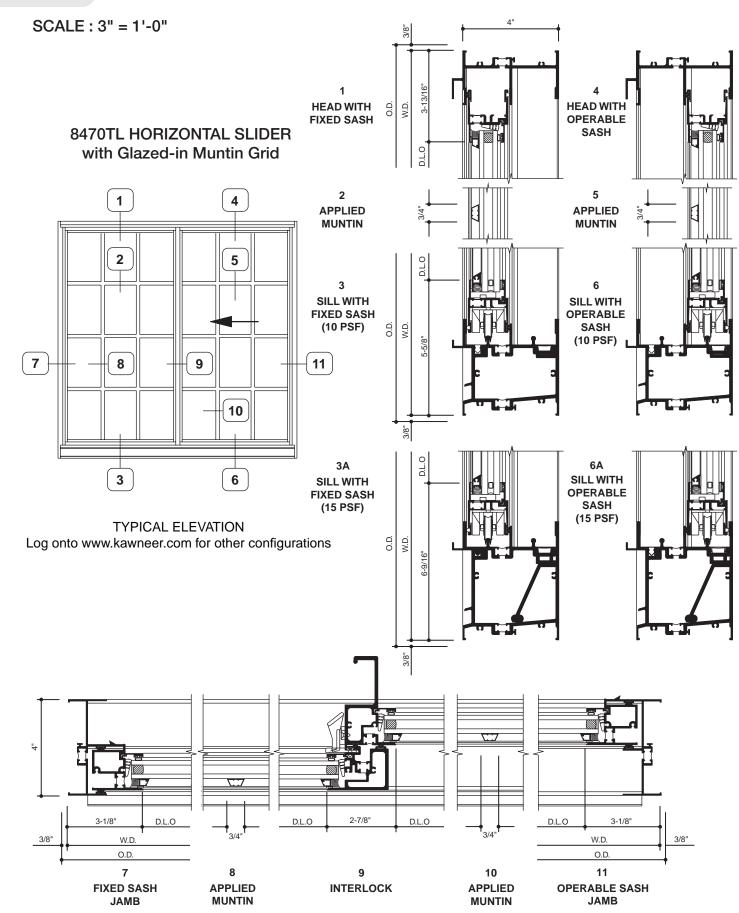


8470TL HORIZONTAL SLIDER



8470TL HORIZONTAL SLIDER WITH GLAZED-IN MUNTIN GRID

EC 97911-075



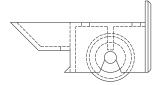
Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

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

8470TL HORIZONTAL SLIDER

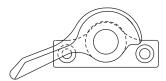
EC 97911-075

STEEL ROLLER ASSEMBLY



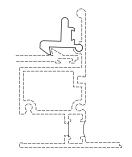
Steel ball bearing roller and glass filled nylon housing provide smooth and lasting operation.

STANDARD SWEEP LOCK



Cast white bronze sweep locks and keepers secure the operating sash at the center meeting rails.

ALUMINUM AUTO LOCK



Aluminum auto locks are integral to the handle rail. These locks are used in conjunction with sweep locks for additional security.



EC 97911-075

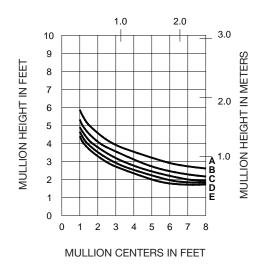
WIND LOAD CHARTS:

MULLIONS

THESE CHARTS ARE BASED ON A MAXIMUM DEFLECTION OF L\175 AND\OR A MAXIMUM STRESS OF 15,152 PSI (104 MPa).

A = 30 PSF (1436) B = 40 PSF (1915)C = 50 PSF (2394) D = 60 PSF (2874)E = 70 PSF (3352)

MULLION CENTERS IN METERS

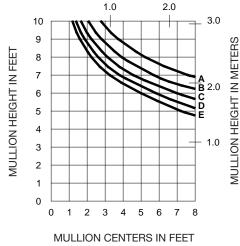


VERTICAL MULLION

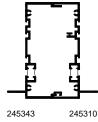


WITH HORIZONTALS

MULLION CENTERS IN METERS



8410 **FIXED WINDOW**



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

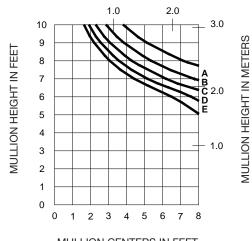
EC 97911-075 **MULLIONS**

WIND LOAD CHARTS:

THESE CHARTS ARE BASED ON A MAXIMUM DEFLECTION OF L\175 AND\OR A MAXIMUM STRESS OF 15,152 PSI (104 MPa).

A = 30 PSF (1436) B = 40 PSF (1915)C = 50 PSF (2394) D = 60 PSF (2874)E = 70 PSF (3352)

MULLION CENTERS IN METERS

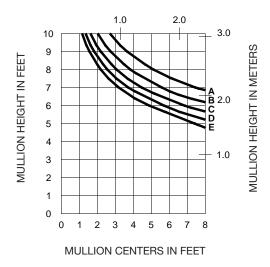


8430 SINGLE HUNG 8450 DOUBLE HUNG 245238 245239

MULLION CENTERS IN FEET

WITH HORIZONTALS

MULLION CENTERS IN METERS





WITH HORIZONTALS



MULLIONS

A = 30 PSF (1436)

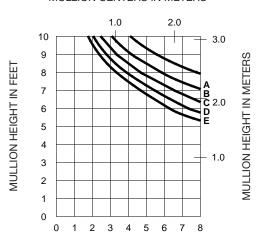
B = 40 PSF (1915)

C = 50 PSF (2394)

D = 60 PSF (2874)

E = 70 PSF (3352)

MULLION CENTERS IN METERS



8410 FIXED WINDOW

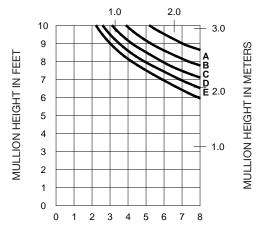
245310

245310

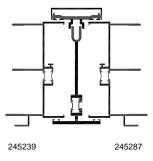
MULLION CENTERS IN FEET

WITH HORIZONTALS

MULLION CENTERS IN METERS



8430 SINGLE HUNG 8450 DOUBLE HUNG



MULLION CENTERS IN FEET

WITH HORIZONTALS



© Kawneer Company, Inc., 2011

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

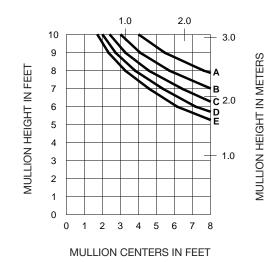
MULLIONS

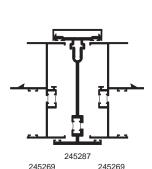
WIND LOAD CHARTS:

THESE CHARTS ARE BASED ON A MAXIMUM DEFLECTION OF L\175 AND\OR A MAXIMUM STRESS OF 15,152 PSI (104 MPa).

A = 30 PSF (1436) B = 40 PSF (1915) C = 50 PSF (2394) D = 60 PSF (2874)E = 70 PSF (3352)

MULLION CENTERS IN METERS



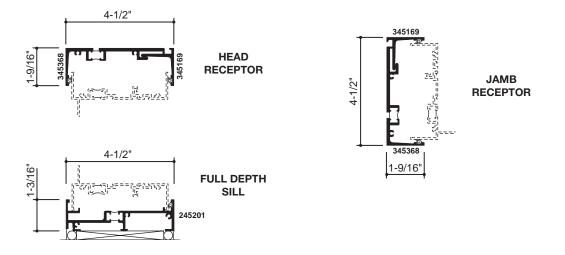


8470 **HORIZONTAL SLIDER**

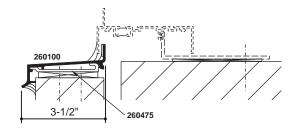
8400TL Thermal Windows

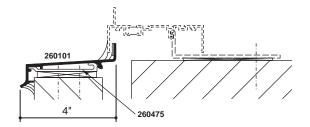
WITH HORIZONTALS

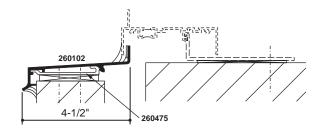
SCALE: 3" = 1'-0"

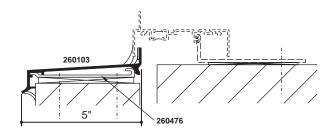


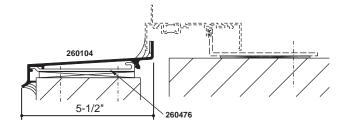
SUB SILLS













© Kawneer Company, Inc., 2011

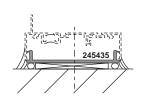
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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

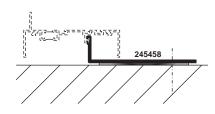
© Kawneer Company, Inc., 2011

EC 97911-075 ANCHORING

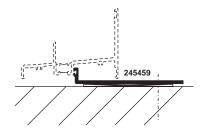
SCALE: 3" = 1'-0"



PVC PERIMETER (Head and Jamb Similar)



STRAP ANCHOR WITH FIXED WINDOW



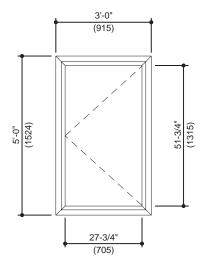
STRAP ANCHOR WITH HUNG WINDOW



BHARKIA GHARTS

EC 97911-075

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



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

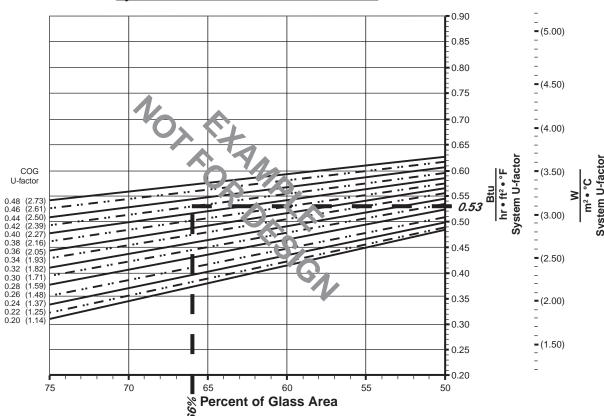
Total Daylight Opening = 27-3/4" • 51-3/4" = 9.97ft²

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

Percent of Glass = (Total Daylight Opening ÷ Total Projected Area)100

 $= (9.97 \div 15)100 = 66\%$

System U-factor vs Percent of Glass Area



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



Laws and building and safety codes governing the design and use of glazed entrance, window, and cutrain wild 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.

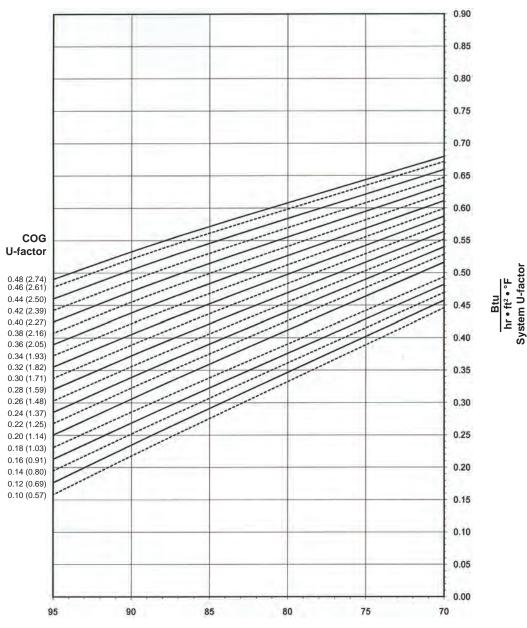
EC 97911-075 THERMAL CHARTS

FIXED WINDOW WITH 1" GLAZING

Note:

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

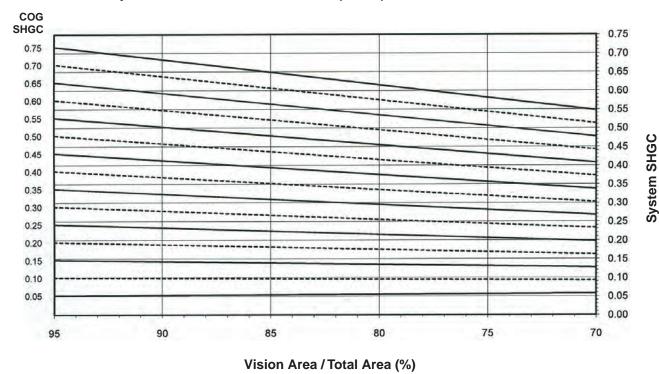


THERMAL CHARTS

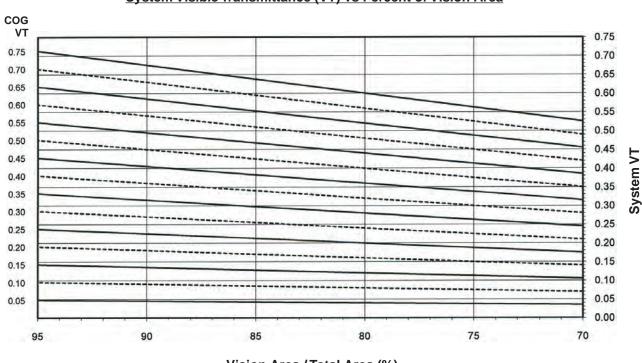
EC 97911-075

FIXED WINDOW WITH 1" GLAZING

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



System Visible Transmittance (VT) vs Percent of Vision Area



Vision Area / Total Area (%)



Laws and building and safety codes governing the design and use of glazed entrance, window, and cutain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor. Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

© Kawneer Company, Inc., 2011

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

Glass U-Factor ³	Overall U-Factor 4
0.48	0.56
0.46	0.55
0.44	0.54
0.42	0.52
0.40	0.50
0.38	0.49
0.36	0.47
0.34	0.46
0.32	0.44
0.30	0.43
0.28	0.41
0.26	0.39
0.24	0.38
0.22	0.36
0.20	0.35
0.18	0.33
0.16	0.31
0.14	0.29
0.12	0.28
0.10	0.26

FIXED WINDOW WITH 1" GLAZING

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

- 1. U-Factors are determined in accordance with NFRC 100.
- 2. SHGC and VT values are determined in accordance with NFRC 200.
- 3. Glass properties are based on center of glass values and are obtained from your glass supplier.
- 4. Overall U-Factor, SHGC, and VT Matricies are based on the standard NFRC specimen size of 1200mm wide by 1500mm high (47-1/4" by 59-1/16").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC 4
0.75	0.66
0.70	0.61
0.65	0.57
0.60	0.53
0.55	0.48
0.50	0.44
0.45	0.40
0.40	0.36
0.35	0.31
0.30	0.27
0.25	0.23
0.20	0.18
0.15	0.14
0.10	0.10
0.05	0.05

Visible Transmittance ²

VISIBIC ITALISHIILLANDC				
Glass VT ³	Overall VT 4			
0.75	0.65			
0.70	0.60			
0.65	0.56			
0.60	0.52			
0.55	0.47			
0.50	0.43			
0.45	0.39			
0.40	0.34			
0.35	0.30			
0.30	0.26			
0.25	0.22			
0.20	0.17			
0.15	0.13			
0.10	0.09			
0.05	0.04			



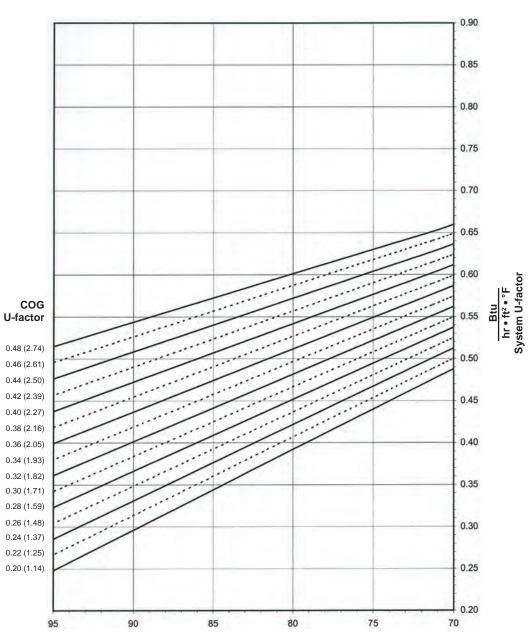
EC 97911-075

SINGLE HUNG VERTICAL SLIDER WITH 1" GLAZING

Note:

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

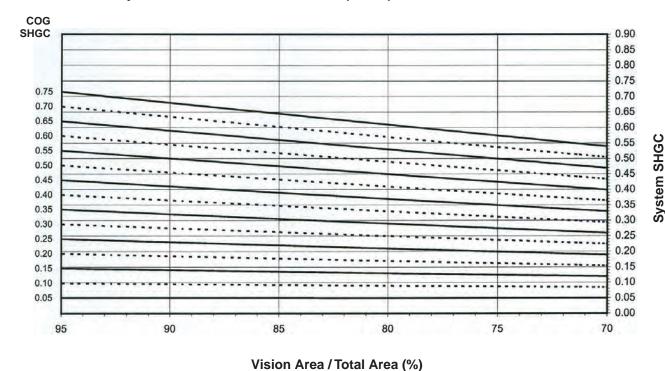
For glass values that are not listed, linear interpolation is permitted. Glass properties are based on center of glass values and are obtained from your glass supplier.



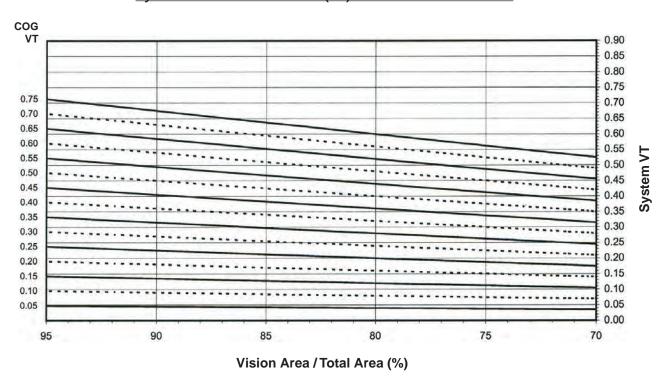
EC 97911-075 THERMAL CHARTS

SINGLE HUNG VERTICAL SLIDER WITH 1" GLAZING

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



System Visible Transmittance (VT) vs Percent of Vision Area





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

Glass U-Factor ³	Overall U-Factor 4
0.48	0.65
0.46	0.64
0.44	0.63
0.42	0.61
0.40	0.60
0.38	0.59
0.36	0.58
0.34	0.56
0.32	0.55
0.30	0.54
0.28	0.53
0.26	0.51
0.24	0.50
0.22	0.49
0.20	0.47

SINGLE HUNG VERTICAL SLIDER WITH 1" GLAZING

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

- 1. U-Factors are determined in accordance with NFRC 100.
- SHGC and VT values are determined in accordance with NFRC 200.
- 3. Glass properties are based on center of glass values and are obtained from your glass supplier.
- 4. Overall U-Factor, SHGC, and VT Matricies are based on the standard NFRC specimen size of 1200mm wide by 1500mm high (47-1/4" by 59-1/16").

SHGC Matrix ²

STIGC WALLIX				
Glass SHGC ³	Overall SHGC ⁴			
0.75	0.55			
0.70	0.51			
0.65	0.48			
0.60	0.44			
0.55	0.41			
0.50	0.37			
0.45	0.33			
0.40	0.30			
0.35	0.26			
0.30	0.23			
0.25	0.19			
0.20	0.16			
0.15	0.12			
0.10	0.08			
0.05	0.05			

Visible Transmittance ²

Glass VT ³	Overall VT 4
0.75	0.54
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	0.29
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



THERMAL CHARTS

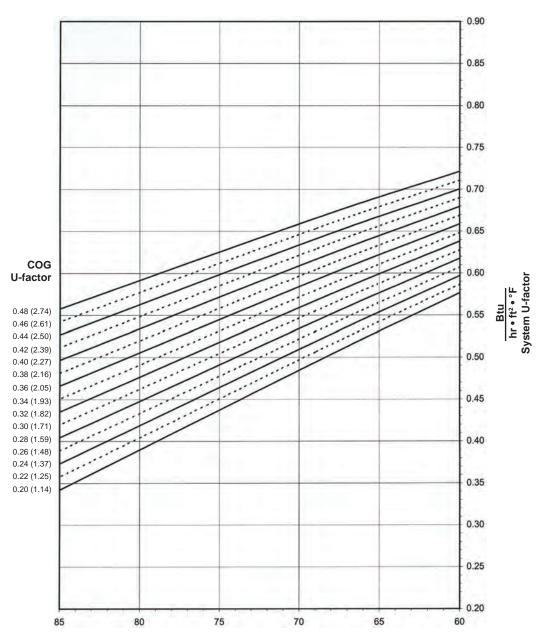
EC 97911-075

DOUBLE HUNG VERTICAL SLIDER WITH 1" GLAZING

Note:

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

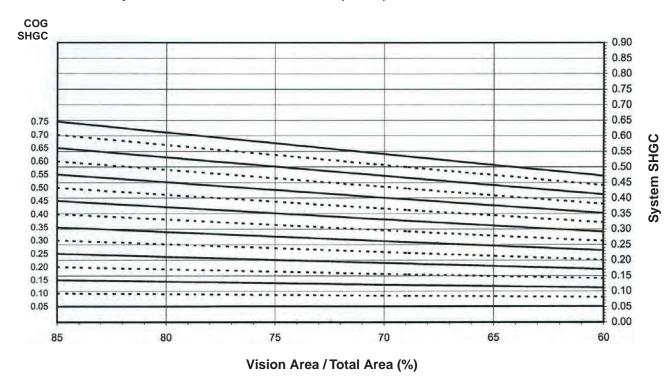


THERMAL CHARTS

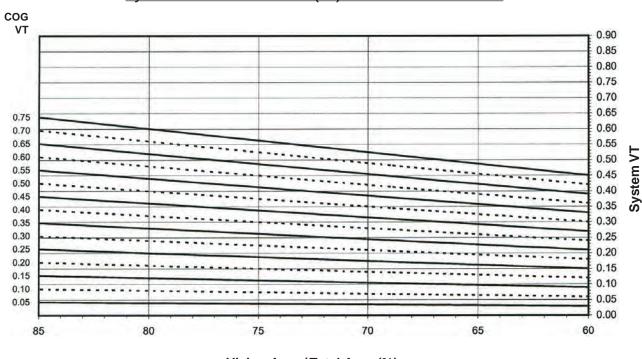
EC 97911-075

DOUBLE HUNG VERTICAL SLIDER WITH 1" GLAZING

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



System Visible Transmittance (VT) vs Percent of Vision Area



Vision Area / Total Area (%)



Laws and building and safety codes governing the design and use of glazed entrance, window, and cutain 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.

THERMAL PERFORMANCE MATRIX (NFRC SIZE)

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

Glass U-Factor ³	Overall U-Factor 4
0.48	0.67
0.46	0.65
0.44	0.64
0.42	0.63
0.40	0.62
0.38	0.60
0.36	0.59
0.34	0.58
0.32	0.57
0.30	0.56
0.28	0.54
0.26	0.53
0.24	0.52
0.22	0.51
0.20	0.49

DOUBLE HUNG VERTICAL SLIDER WITH 1" GLAZING

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

- 1. U-Factors are determined in accordance with NFRC 100.
- 2. SHGC and VT values are determined in accordance with NFRC 200.
- 3. Glass properties are based on center of glass values and are obtained from your glass supplier.
- 4. Overall U-Factor, SHGC, and VT Matricies are based on the standard NFRC specimen size of 1200mm wide by 1500mm high (47-1/4" by 59-1/16").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC 4
0.75	0.53
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	0.12
0.10	0.09
0.05	0.05

Visible Transmittance ²

21 272	
Glass VT ³	Overall VT 4
0.75	0.52
0.70	0.48
0.65	0.45
0.60	0.41
0.55	0.38
0.50	0.35
0.45	0.31
0.40	0.28
0.35	0.24
0.30	0.21
0.25	0.17
0.20	0.14
0.15	0.10
0.10	0.07
0.05	0.03



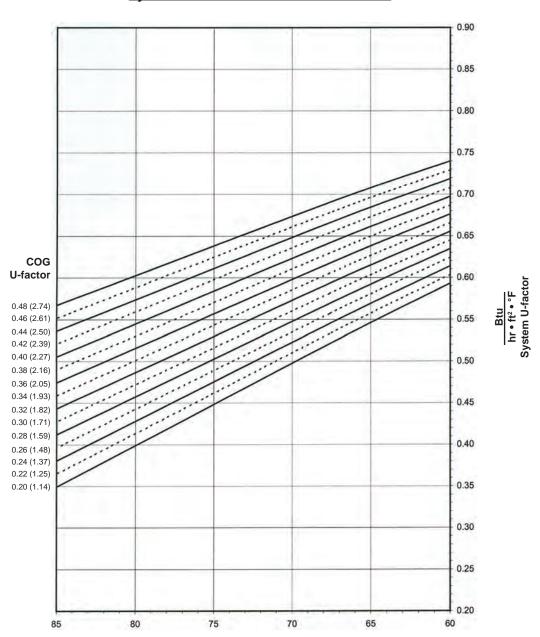
THERMAL CHARTS

HORIZONTAL SLIDER WITH 1" GLAZING

Note:

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



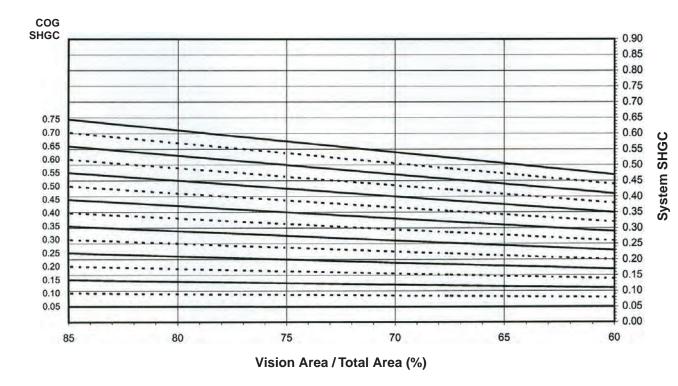
Laws and building and safety codes governing the design and use of glazed entrance, window, and cutain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

© Kawneer Company, Inc., 2011

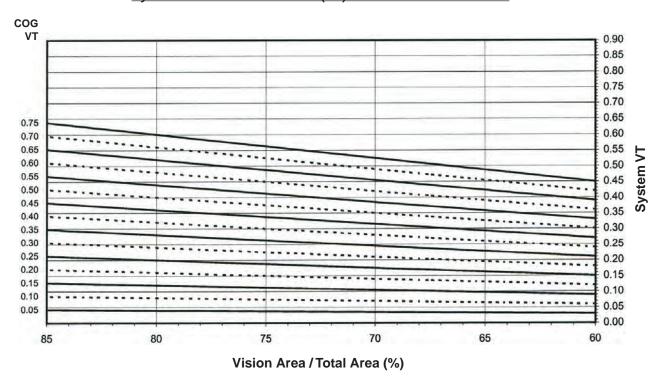
EC 97911-075 THERMAL CHARTS

HORIZONTAL SLIDER WITH 1" GLAZING

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



System Visible Transmittance (VT) vs Percent of Vision Area





kawneer.com ADME080

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

Glass U-Factor ³	Overall U-Factor 4
0.48	0.69
0.46	0.68
0.44	0.67
0.42	0.65
0.40	0.64
0.38	0.63
0.36	0.62
0.34	0.61
0.32	0.59
0.30	0.58
0.28	0.57
0.26	0.56
0.24	0.54
0.22	0.53
0.20	0.52

HORIZONTAL SLIDER WITH 1" GLAZING

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

- 1. U-Factors are determined in accordance with NFRC 100.
- SHGC and VT values are determined in accordance with NFRC 200.
- 3. Glass properties are based on center of glass values and are obtained from your glass supplier.
- 4. Overall U-Factor, SHGC, and VT Matricies are based on the standard NFRC specimen size of 1500mm wide by 1200mm high (59-1/16" by 47-1/4").

SHGC Matrix ²

Overall SHGC ⁴
Overall SHGC
0.52
0.49
0.46
0.42
0.39
0.35
0.32
0.29
0.25
0.22
0.18
0.15
0.12
0.08
0.05

Visible Transmittance ²

Glass VT ³	Overall VT 4
0.75	0.51
0.70	0.47
0.65	0.44
0.60	0.41
0.55	0.37
0.50	0.34
0.45	0.30
0.40	0.27
0.35	0.24
0.30	0.20
0.25	0.17
0.20	0.14
0.15	0.10
0.10	0.07
0.05	0.03



ADME080 kawneer.com