

## Single Hung Series Product Selection Guide

<http://www.peerlessproducts.com/>

Model Number	Description	Frame Depth	Typical Wall Thickness	AAMA Rating	Structural (PSF)	AIR (CFM /SF)	Water (PSF)	U-value	SHGC	STC	Blast	Impact	Dual Glazed w/ Blinds	Grid Options	Sash Weight	Test Size
GSH3	Single Hung (Tilt)	3.25	0.08	AW 50	75	<0.3	10	0.347	0.311	34-40	Yes	Yes 48x72	No	A-I-T	130	60" x 99"
GSH5	Single Hung (Tilt)	4.25	0.08	AW 50	75	<0.3	10	0.28	0.27	34-43	Avl	Avl	No	A-I-T	130	60" x 99"
4130	Single Hung (Tilt)	3.25	0.062	AW 50/90	75/135	<0.3	10	0.403	0.331	34-37	Yes	Yes 48x72	No	A-I-T	130	60" x 99"
9150	Single Hung (Side Load)	4.00	0.062	AW 85	127.5	<0.3	12	0.427	0.307	34-40	Yes	Yes 48x72	Yes	A-I-T	140	60" x 99"

\* All thermal tests performed with 1" insulated glass consisting of 1/4" Solarban 60 (Low-E #2) annealed/ Argon with TGI Spacer/ 1/4" Clear annealed

**A=Applied I=Internal T=True**

\* GSH5 thermal tests performed with 1 3/8" insulated glass consisting of 1/4" Solarban 60 (Low-E #2) annealed/ 1/4" Clear annealed/ 1/4" Sungate 500 (Low-E #6) annealed with Argon filled airspaces

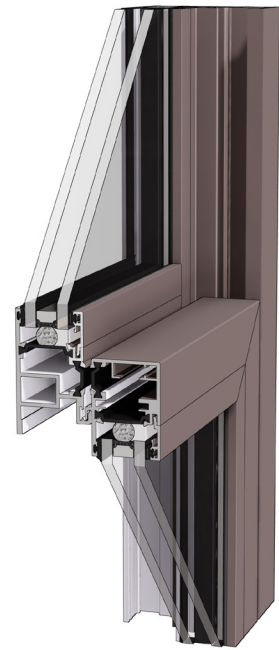
## Features

- AAMA standard Tested and Certified
- 3 1/4" Frame Depth-G300 polyamide strip thermal breaks
- Tilt in design
- 1" sealed insulating glass per ASTM E 2190-02
- Interlocking two piece adjustable corner key design.
- Equal length master frame legs
- Aluminum glazing beads with dual durometer bulb
- Manufactured on 1/8" increments
- Vent screens with charcoal colored fiberglass mesh
- Kynar 2605 finish in 10 standard colors
- Kynar 2605 anodized painted finish colors available

## Options

- All commercially available glazing material
- 1 3/8" glass pocket for glazing exterior applied grids
- A variety of arch options available. Minimum radius will apply
- Between-the-glass muntins in 2 different widths
- Exterior-applied and tape applied muntins in various widths
- 1" insulated panels
- Various structural mullions for joining side-lite windows in an opening
- Receptor systems
- Standard and custom panning systems
- Interior trim systems
- Sub-sills
- Project specific custom extrusions
- Aluminum, stainless steel, and solar screen mesh
- Limited sash travel options
- Custom, colors, 2605 painted finish, and anodized finish
- Two different color combinations for interior and exterior finish

## GSH3



## Features

- AAMA standard Tested and Certified
- 4 1/4" Frame Depth-G500 polyamide strip thermal breaks
- Tilt in design
- Aluminum bars within the thermal break for increased isolation
- Low-E foil to reflect heat back out
- Neoprene foam to absorb and isolate air transfer
- 1" sealed insulating glass per ASTM E 2190-02
- Interlocking two piece adjustable corner key design.
- Equal length master frame legs
- Aluminum glazing beads with dual durometer bulb
- Manufactured on 1/8" increments
- Vent screens with charcoal colored fiberglass mesh
- Kynar 2605 finish in 10 standard colors
- Kynar 2605 anodized painted finish colors available

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## GSH5



## Hardware

Locking Hardware	GSH3	GSH5
Auto Locks	Standard	Standard
Ergonomic Auto Locks	Optional	Optional
Sweep Lock	Optional	Optional

## Glazing

Glazing Options	GSH3	GSH5
1"	Standard	Standard
1 1/4"	Optional	Optional
1" with Ext Grid	N/A	Optional
1 3/8"	N/A	Optional
Dual Glazed with Access Panel	N/A	Optional

## Egress Formulas

<b>Double Single Windows</b>	<b>Width Minus</b>	<b>Height/2 Minus</b>
<b>GSH3</b>	<b>5.75</b>	<b>7.5625</b>
<b>GSH5</b>	<b>5.75</b>	<b>7.5625</b>

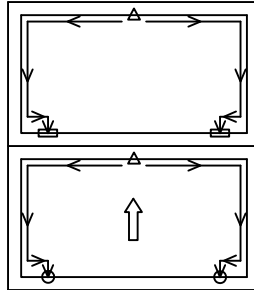
\* Standard frames used for all calculations

△ = 1/8" DIA EQUAL PRESSURE HOLE  
(CENTER LINE OF TOP HORIZONTAL)

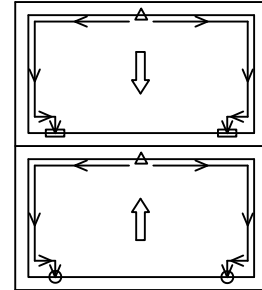
○ = 1/4" DIA WEEP HOLE  
(APPROX 3" FROM EDGE)

□ = FACE MOUNTED WEEP  
(APPROX 3" FROM EDGE)

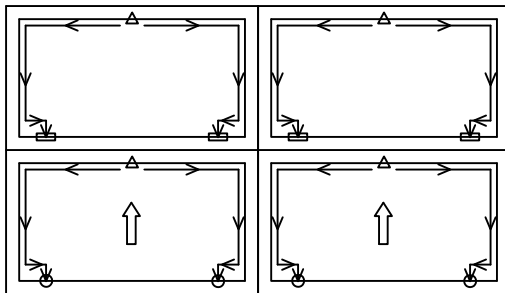
⊖ = WEEP OPTIONS: HOLE TO  
WEEP INTO SUBSILL, OR FACE  
MOUNTED WEEP IF NO SUBSILL  
(APPROX 3" FROM EDGE)



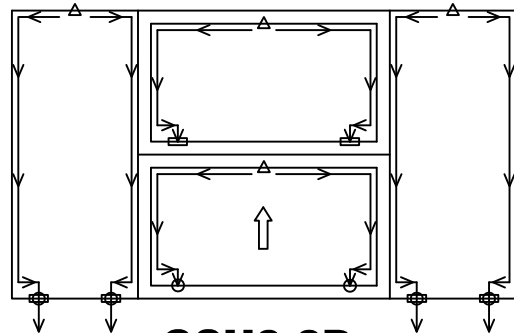
**GSH3  
GSH5**



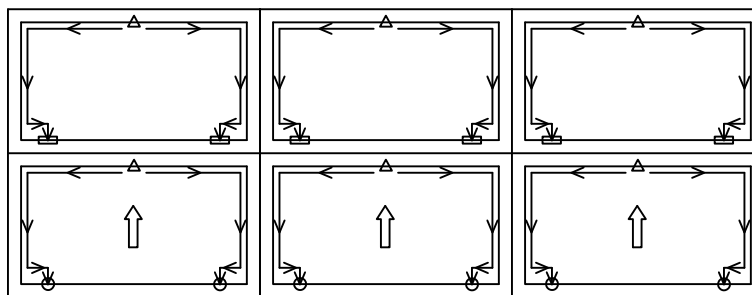
**GDH3  
GDH5**



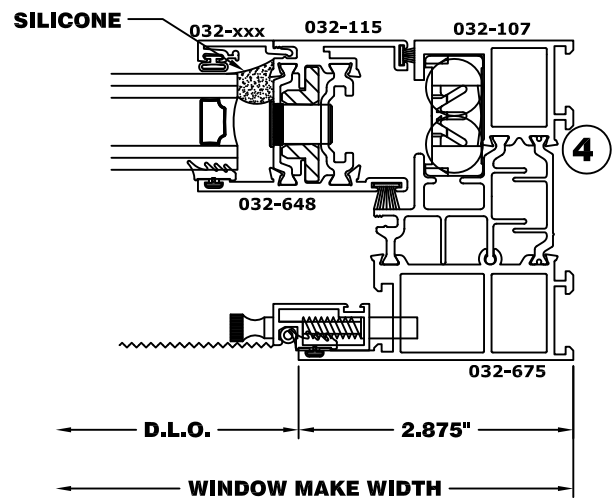
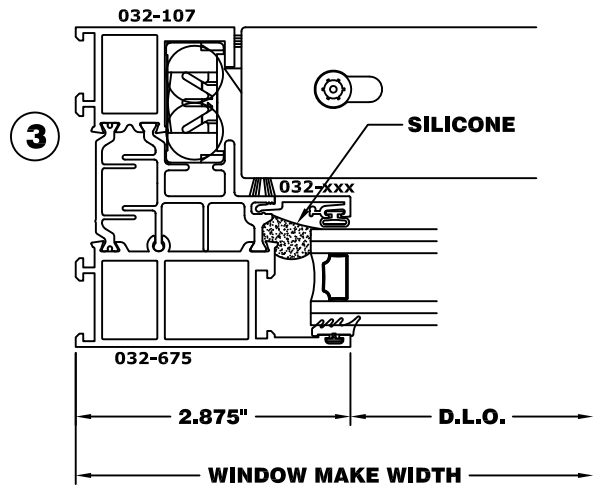
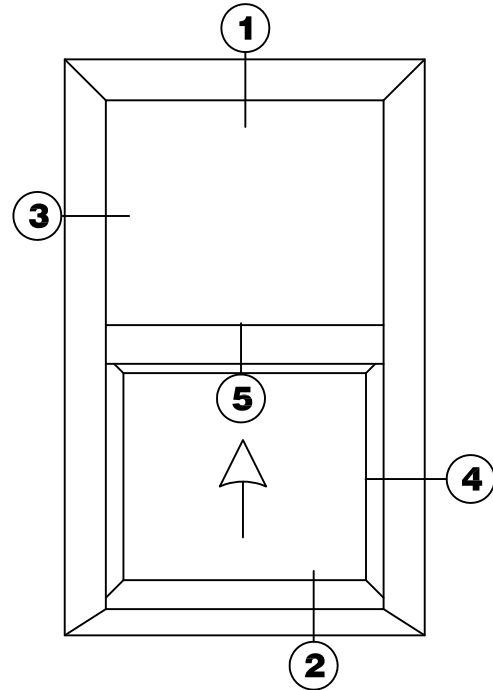
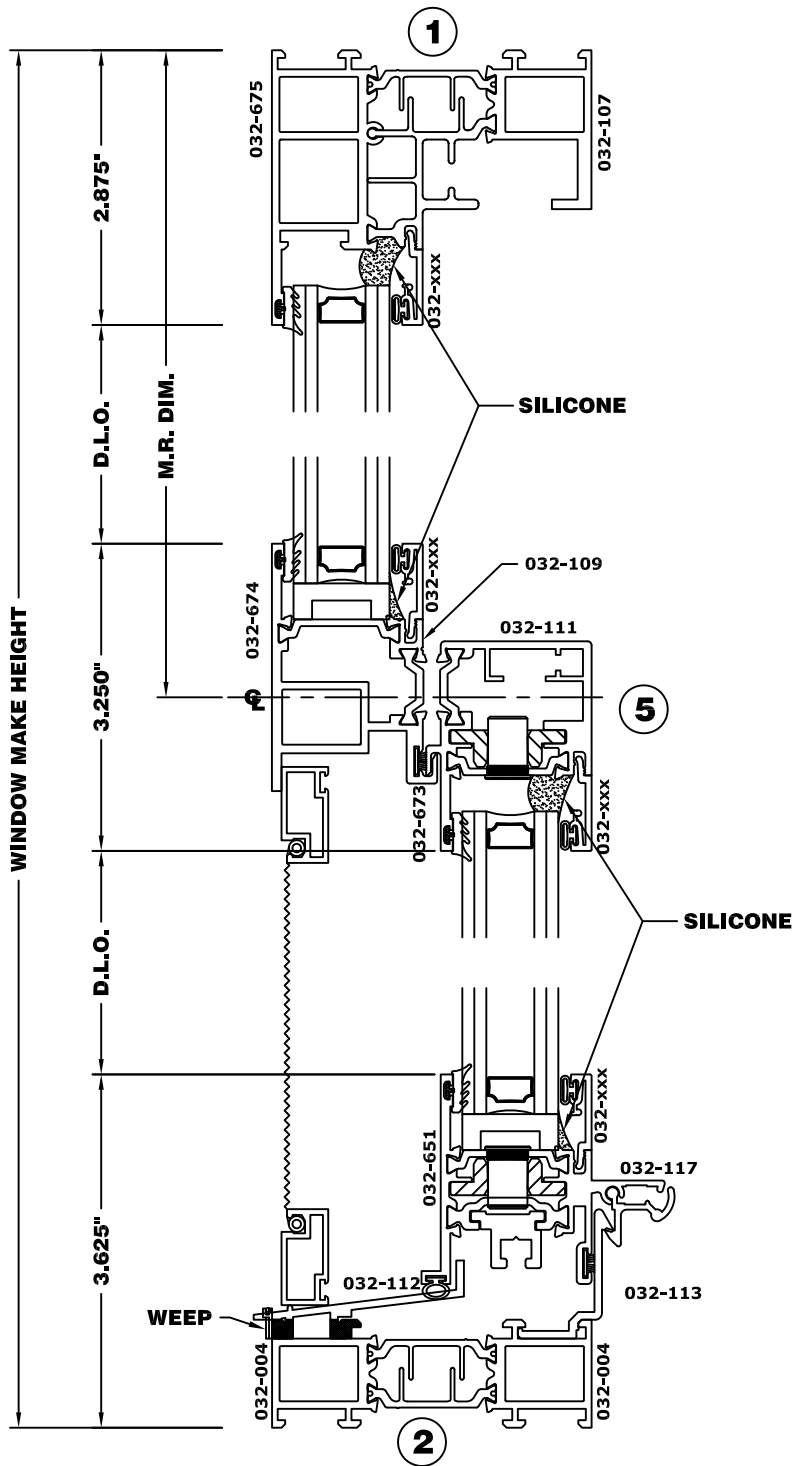
**GSH3-2**



**GSH3-2P**



**GSH3-3**

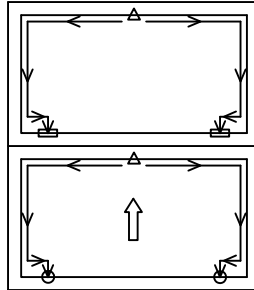


△ = 1/8" DIA EQUAL PRESSURE HOLE  
(CENTER LINE OF TOP HORIZONTAL)

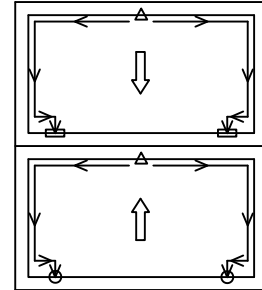
○ = 1/4" DIA WEEP HOLE  
(APPROX 3" FROM EDGE)

□ = FACE MOUNTED WEEP  
(APPROX 3" FROM EDGE)

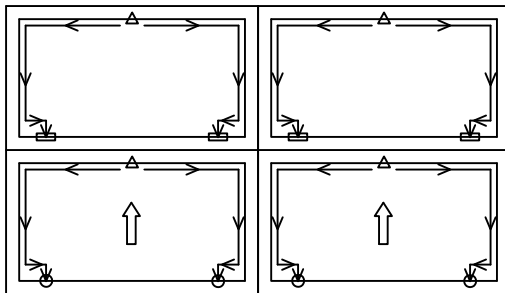
⊖ = WEEP OPTIONS: HOLE TO  
WEEP INTO SUBSILL, OR FACE  
MOUNTED WEEP IF NO SUBSILL  
(APPROX 3" FROM EDGE)



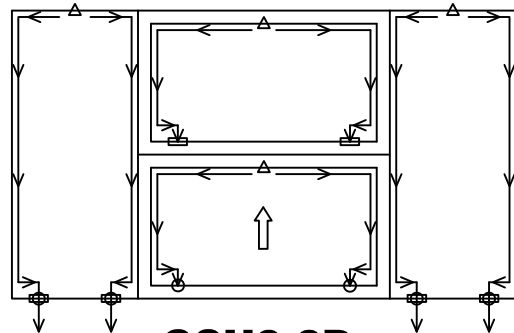
**GSH3  
GSH5**



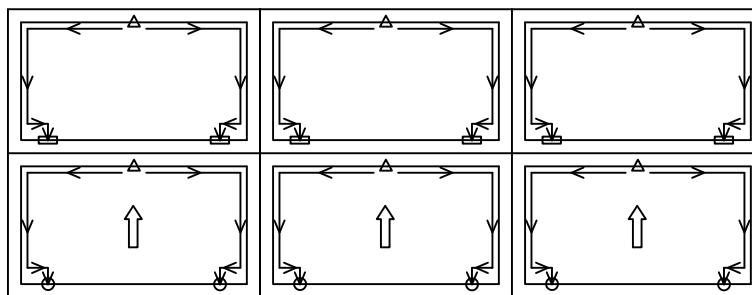
**GDH3  
GDH5**



**GSH3-2**

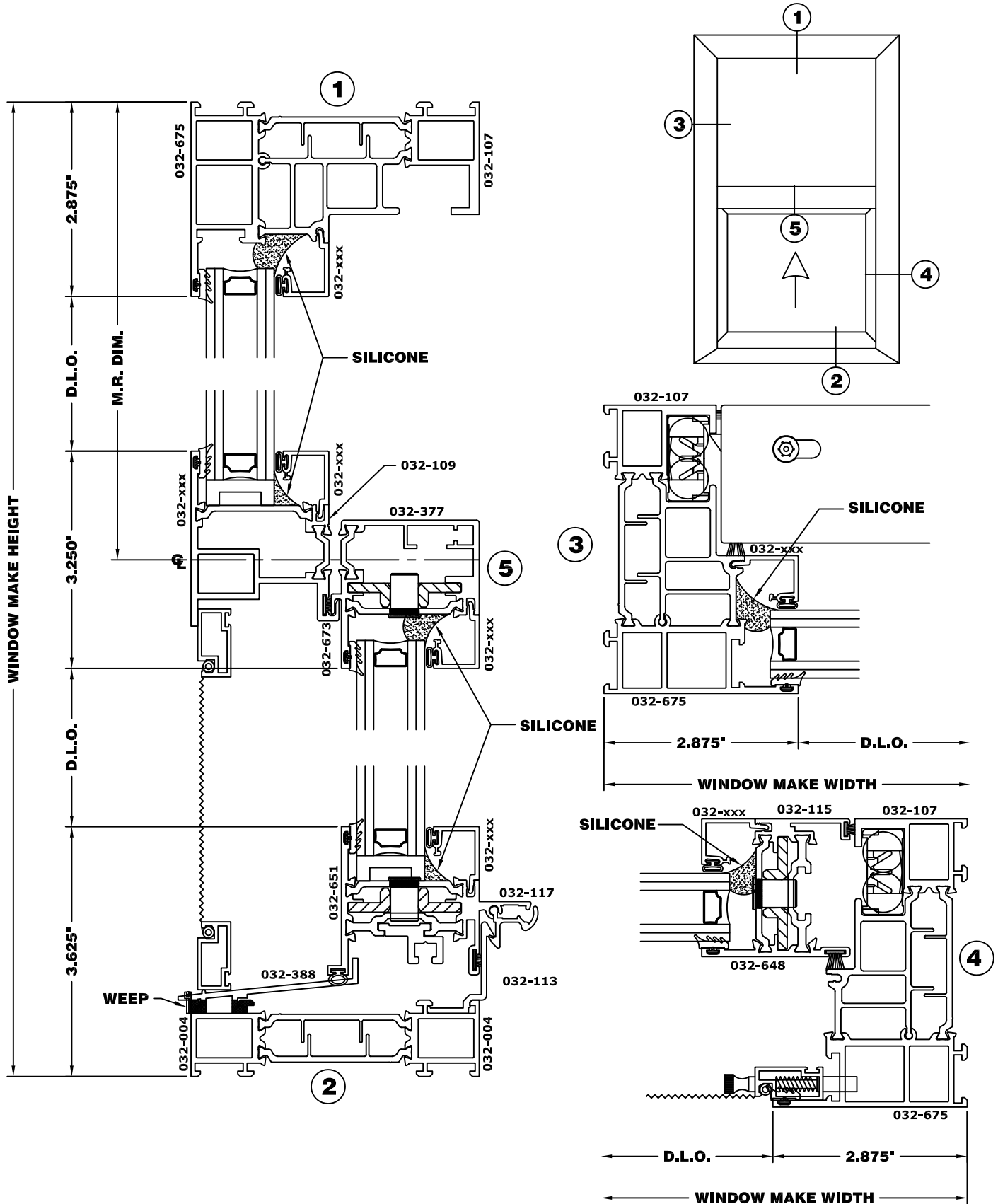


**GSH3-2P**



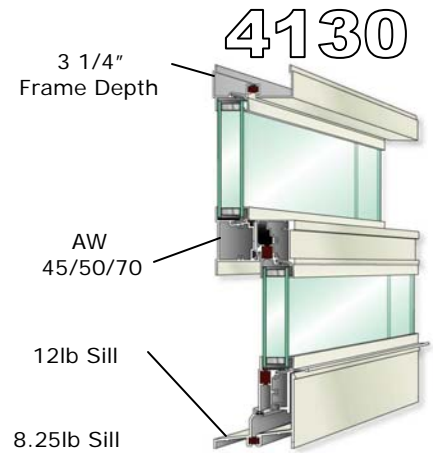
**GSH3-3**





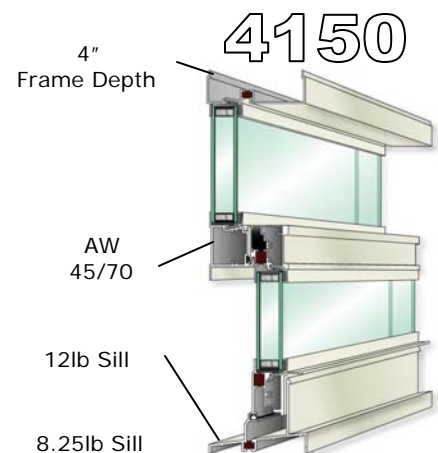
## Features:

- AAMA standard Tested and Certified
- Structural thermal breaks
- Coped corner construction
- 1" sealed insulating glass per ASTM E 2190-02 tested and approved
- Aluminum bead glazed
- Operable hung tilt sash for easy cleaning
- Stainless steel pivot bars
- Positive interlocks
- Double fin type weather stripping
- Full-width lift handles
- Spiral sash balances
- Self-aligning high-security cam-type sash locks
- Vent screens with charcoal colored fiberglass mesh
- Self-stacked mullionless mating with other 4000 series windows
- Manufactured on 1/8" increments
- 1/2" extended sill leg
- Kynar 2605 finish in 25 standard colors.



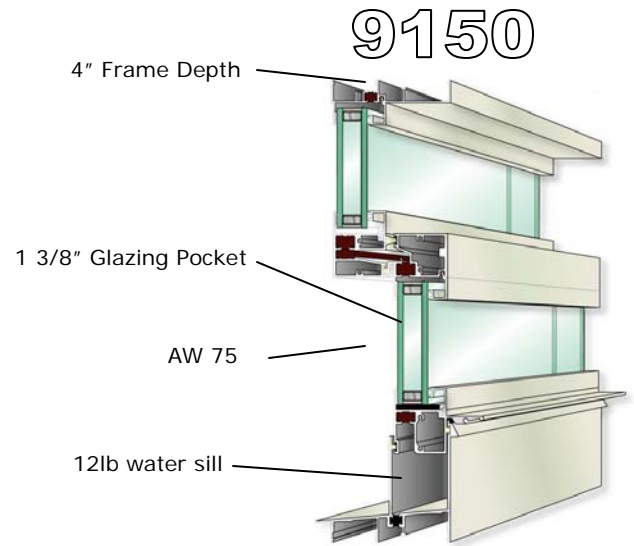
## Options:

- Between-the-glass, exterior applied, interior tape applied, or true muntins
- Aluminum or solar screen mesh
- All commercially available glazing materials
- Limited sash travel
- Pole ring, cast bronze, automatic or keyed sash locks
- Single glazing available
- Standard and custom panning
- Receptor, mullion, and sub-sill systems
- Factory-provided equal length sill legs when needed for stacking or use with sub-sill or existing horizontal sill of opening
- Class 5 balances (Ultra-Lift)
- Single hung 3-lite design
- Various high performance modifications
- Custom colors, 2603 Fluorocryl, 2604 Kynar, and anodized finishes



## Features:

- AAMA standard Tested and Certified
- 4" frame depth
- Side load design
- Structural thermal breaks
- Coped corner screw spline design
- Positive meeting rail interlock
- Full width lift and pull handles
- Equal length master frame legs
- Double fin type weather stripping
- 1" sealed insulating glass per ASTM E 2190-02
- Aluminum glazing beads with dual duroator bulb
- Class 5 reduced lift (Ultra-Lift) balances as required by specifications or sash weight
- Auto Latch Standard
- Manufactured on 1/8" increments
- Vent screens with charcoal colored fiberglass mesh
- Kynar 2605 finish in 25 standard colors.



## Options:

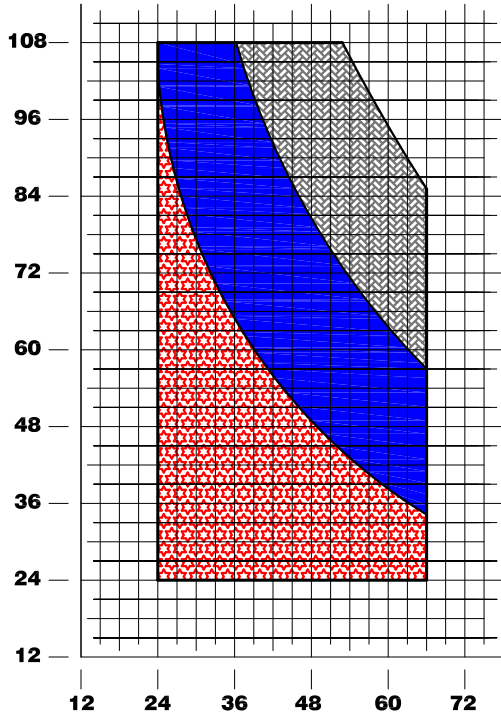
- Snap-in front flange panning legs with 1 1/4" extensions for head, jamb, sill or all locations
- Snap-in nailing fins (field applied)
- Slide on strap anchors with 1 1/4" extension beyond interior face of the window
- Integral mulling of window types in same master frame
- Round tops
- All commercially available glazing materials
- 1 3/8" glass pocket for glazing exterior applied grids and maintains 1" insulating glass
- Single glazing
- Between-the-glass muntins
- Exterior-applied muntins in 4 different widths
- True muntins 2 7/16" sightline
- 1/4", 1", 1 3/8" 1 1/2" insulated panels
- Split sash designs with dual glazing to accommodate polycarbonate glazing
- Split sash designs to accommodate 5/8" depth between glass blinds and interior lift out panel design
- Cast bronze auto sill locks or extruded auto sill locks
- Cast white bronze cam type locking handles
- Limited sash travel
- Maintenance-only cast bronze "keyed" security locks at meeting rail
- Various structural mullions for joining multiple windows in an opening
- Receptor Systems
- Standard and custom panning systems
- Interior trim systems
- Sub-sills
- Project specific custom extrusions
- Aluminum, stainless steel or solar screen mesh
- Custom colors, 2603 Fluorocryl, 2604 Kynar, and anodized finishes

## Hardware & Glazing Tables

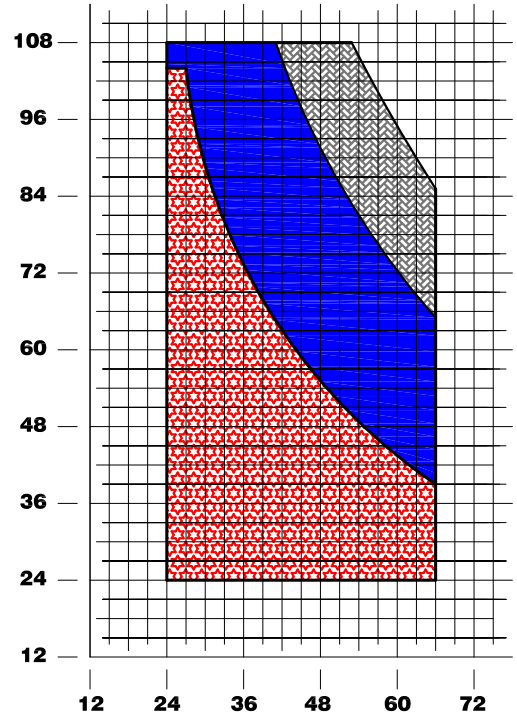
Locking Hardware	4130	4150	9150
Zamac Black Sweep Lock	Standard	Standard	N/A
White Bronze Sweep Lock	Optional	Optional	Optional
White Bronze Pole Ring Sweep Lock	Optional	Optional	Optional
White Bronze Custodial Lock	Optional	Optional	Optional
Extruded Auto Sill Locks	Optional	Optional	Standard
White Bronze Auto Sill Locks	Optional	Optional	N/A
Operating Hardware			
Ultra Lift Balances (Class V)	Standard	Standard	Standard
Spiral Balances (Weight Limits Apply)	Optional	Optional	N/A
Block & Tackle Balances (Weight Limits Apply)	Optional	Optional	N/A

Single Glazed, IGU's & Panels	4130	4150	9150
1"	Standard	Standard	Standard
1/8" – 1/4"	Optional	Optional	Optional
5/8" with Ext Grid	Optional	Optional	N/A
5/8" with Int/Ext Grid	N/A	N/A	Optional
1" with Ext Grid	N/A	N/A	Optional
1 3/8"	N/A	N/A	Optional
Dual Glazed			
1/8" – 1/4" Int/Ext	Optional	Optional	Optional

1/4"-1/4" IG GLASS

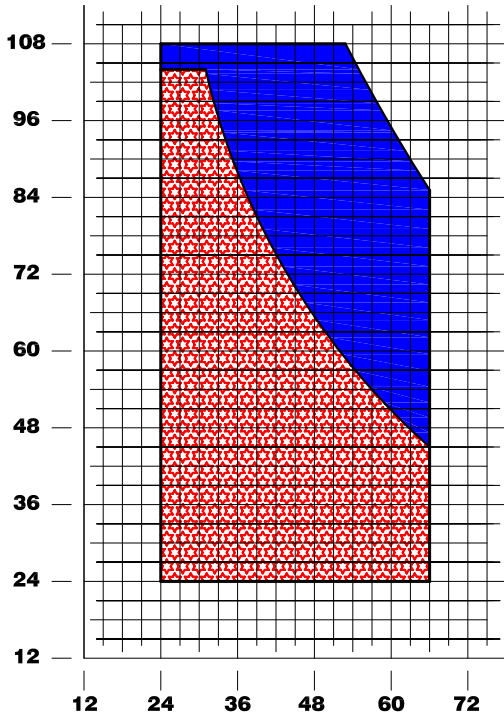


3/16"-3/16" IG GLASS

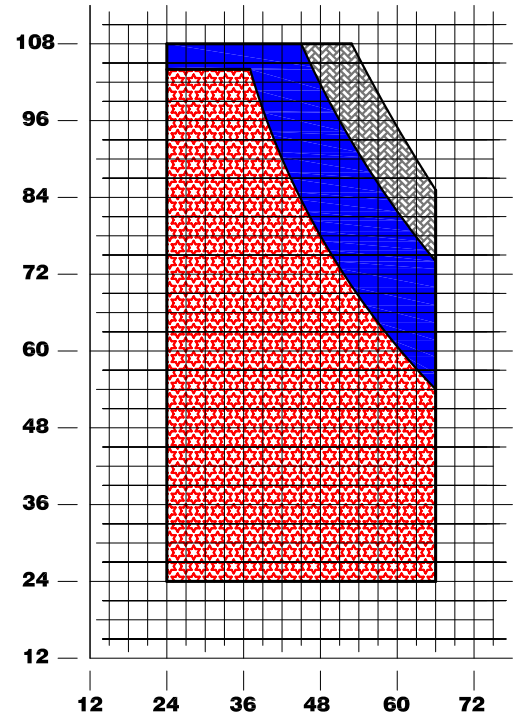


 ACCEPTABLE AREA FOR SUPER-LIFT BALANCES ONLY  
 ACCEPTABLE AREA FOR UL BALANCES ONLY  
 ACCEPTABLE AREA FOR SPIRAL AND UL BALANCES

5/32"-5/32" IG GLASS



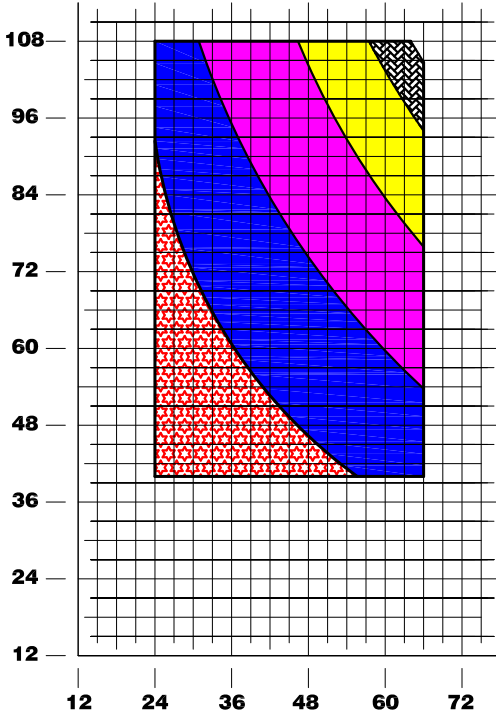
1/8"-1/8" IG GLASS



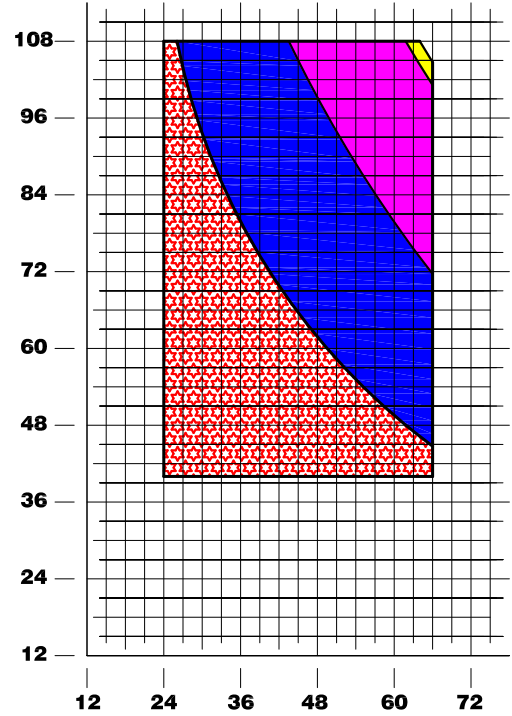
- THESE GRAPHS ARE BASED ON THE WEIGHT CAPABILITIES OF OUR BALANCES, THE SQUARE FOOTAGE OF GLASS, AND THE MAXIMUM WEIGHT OF A TOTAL WINDOW.  
 - THE MAX. SASH WEIGHT OF OUR BALANCES ARE AS FOLLOWS:  
 ~ SPIRAL - 50 LBS  
 ~ ULTRA LIFTS - 100 LBS  
 ~ SUPER LIFTS - 100 LBS  
 - THE MAX WEIGHT OF A TOTAL WINDOW IS 240 LBS  
 - THE MAX. SQUARE FOOTAGE OF 1/8" IG GLASS IS 15 SQUARE FEET PER SASH






These Graphs are Based on Equal Lite Configurations.

1/4"-1/4" IG GLASS

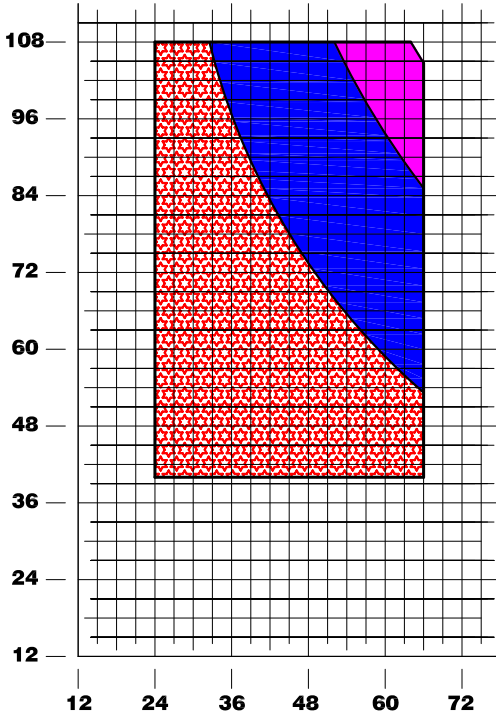


3/16"-3/16" IG GLASS

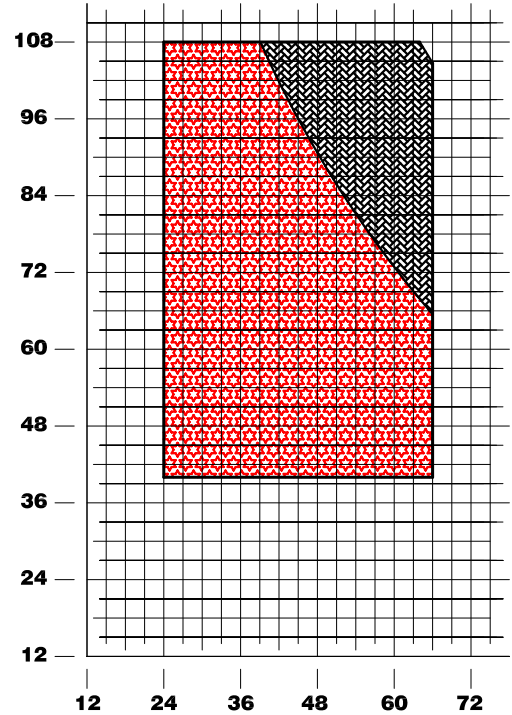


-  NOT AVAILABLE
-  ACCEPTABLE AREA FOR DUAL UL BALANCES ONLY
-  ACCEPTABLE AREA FOR HD B&T & DUAL UL BALANCES
-  ACCEPTABLE AREA FOR HD B&T & UL BALANCES
-  ACCEPTABLE AREA FOR B&T, & UL BALANCES

5/32"-5/32" IG GLASS



1/8"-1/8" IG GLASS



· THESE GRAPHS ARE BASED ON THE WEIGHT CAPABILITIES OF OUR BALANCES, THE SQUARE FOOTAGE OF GLASS, AND THE MAXIMUM WEIGHT OF A TOTAL WINDOW.

· THE MAX. SASH WEIGHT OF OUR BALANCES ARE AS FOLLOWS:

- ~ BLOCK & TACKLE - 50 LBS
- ~ ULTRA LIFTS - 80 LBS
- ~ HD BLOCK & TACKLE - 100 LBS
- ~ DUAL ULTRA LIFTS - 100 LBS

· THE MAX WEIGHT OF A TOTAL WINDOW IS 240 LBS  
· THE MAX. SQUARE FOOTAGE OF 1/8" IG GLASS IS 15 SQUARE FEET PER SASH

These Graphs are Based on Equal Lite Configurations.

## Egress Formulas

Single Hung Windows	Width Minus	Height/2 Minus
4130	4.125	8.6875
4150	4.125	8.6875
9150 UL	5.875	15.0625

\* Standard frames used for all calculations

