

LINCOLN WOOD PRODUCTS, INC.

IF YOU HAVE QUESTIONS REGARDING SIZES OUTSIDE OF THESE LIMITATIONS, CONTACT LINCOLN WOOD PRODUCTS

ASEMENT							
		GLASS	MIN BOX	MAX BOX	SQUARE CLAD SASH	NOTES	
	Operating						
	Crank Out	DBL INSUL	16 x 18	42 x 96	Х	Single Pane Glass also Available 8:1 Glass Ratio Must be Tempered	
	Clark Out	TRPL INSUL	16 x 18	42 x 72 or 36 x 84	Х	Segment Casements: Minimum height for frame hinge leg is 25". Radius Square Sash Clad Not Available	
	Segment Head	DBL INSUL	20 x 28 leg 25	42 x 96		Triple Glaze Only Available For Clad Units as Indicated	
	*Duck out	DBL INSUL	16 x 18	42 x 90	Х	*Rectangle screen Not Allowed on Units < 20" Box Width or > 84" Box Height	
	*Pushout	TRPL INSUL	16 x 18	42 x 72 or 36 x 84	Х	Minimum 21" Glass Height for WOOD SCREEN Option.	
						Push-Out French Casement RETRACTABLE SCREEN: Maximum Cassette Width = 70". Maximum Box Height = 84"	
	Pushout French	DBL INSUL	30 x 20	72 x 90	Х	Push-Out French Not Available with Radius Radius French Casement Only	
						Available as Crank-Out	
	Studio		ı				
		SNGL PANE	12 X 12	38 sq ft MAX	Х	38 square feet maximum for wood SNGL pane TDL units	
	Casement	DBL INSUL	12 X 12	78 x 96	Х	48 square feet maximum for wood DBL pane TDL units Triple Glaze Only Available For Clad	
		TRPL INSUL	12 X 12	60 x 90	X	Units DBL Insulated Over 77x77 Box size must	
	Lincoln Fit	GLASS	MINIMUM SASH OPENING	MAXIMUM SASH OPENING		8:1 Glass Ratio Must be Tempered	
	Operating	DBL INSUL	15-5/8 x 13-1/4	42-3/8 x 84	Х	Lincoln Fit Casement: Radius units not available.	
	Studio	tudio DBL INSUL		78 x 108	Χ	avanasie.	
	Bow/Bay Window	N					
				144 Wide MAX	Х		
	Transom						
	Over Caseme	nt Studio	13 x 12	78 x 30	Х	Tempered Glass Standard on Glass Size 12 high and Under	
	Over 3 Wide (Casement	13 x 12	108 x 29	Х		
	Over 3 Wide S	wing Door	13 x 12	110-1/2 x 30	Х		
	Over DBL Hu	ng Studio	13 x 12	97-3/8 x 30	X		
	Over 3 Wide I	OBL Hung	13 x 12	100-1/8 x 30	Х		
	Operating				_		
	Sporacing	SNGL Pane	18 x 18	60 x 60		Triple Glaze Only Available For Clad	
	Crank Out	DBL INSUL	18 x 18	60 x 60	X	Units	
		TRPL INSUL	18 x 18	48 x 36 or 36 x 48	X		
	Push and	SNGL Pane	18 x 18	48 x 42	X		
	Pushout	DBL INSUL	18 x 18	48 x 42	Х		
12/12/23			1				



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Double Hung/Single Hung				
	Double Hung/	Single Hung/Linco	In Fit/Replacement	Kits
		MIN GLASS	MAX GLASS	NOTE
	Wide Rail	12 x 12	40 x 42	
	Narrow	12 x 12	40 x 43-1/16	
	Transom			
		8 x 12	40 x 24-3/8	Tempered Glass Standard on Glass Size 12" high and Under 49 square feet Maximum for IG, Tempered and Low-E double pane glass
	Double Hung	Studio/Lincoln FIT	Studio	38 square feet Maximum for single pane 1 lite units
		MIN BOX	MAX BOX	
	Studio	13-3/8 x 15	102 x 88	38 square feet Maximum for wood single pane TDL units 48 square feet Maximum for wood double pane TDL units 8:1 Glass Ratio Must be Tempered
				o. Totass real of Music De Tempered
	1/2 Round Si	ngle Hung		
		MIN BOX WIDTH	MAX GLASS SIZE	
	Clad	34	40 x 32	
	Wood	20	40 x 32	
	Segment Hea	d Single Hung		
		MIN GLASS	MAX GLASS	NOTE
		16 x 12	40 x 36	When converted into a single hung a Maximum glass size of 40×42 is allowable Minimum Radius = $17''$
				Lincoln Fit DH Minimum Radius = 12-7/8
	Double Glider	S		
		16 x 12	32-1/8 x 54	Units larger than 32 x 48 must be disclaimed - No Warranty for Operation or Performance
	Triple Gliders			
		16/32/16 x 12	24/48/24 x 54	



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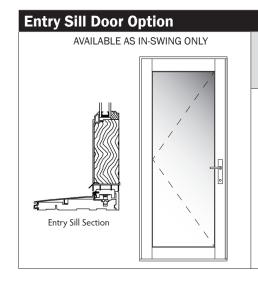
Quantum				
		MIN GLASS	MAX GLASS	NOTE
	Double Hung	16 x 16	48 x 52	Minimum frame radius in house for clad units is 72". Windows with smaller radius must be stretch bent and will be handled as individual request.
	Studio	36 x 32-7/8	72 x 104-7/8	52 square feet Maximum for IG, tempered and low-E double pane GLASS 38 square feet Maximum for single pane 1 lite units 38 square feet Maximum for wood single pane TDL units 52 square feet Maximum for wood double pane TDL units 8:1 GLASS ratio must be tempered
	Segment Head	32x32	48x52	

Slide Door				
		MIN BOX	MAX BOX	NOTE
	Sidelite: Narrow Lifestyle Wide	31-5/16 x 79-1/8 31-7/8 x 79-1/8 32-5/8 x 79-/18	49-5/16 x 98-1/4 49-7/8 x 110-1/4 50-5/8 x 110-1/4	
\Rightarrow	2 Wide	58-3/16 x 79-1/8	94-3/16 x 110-1/4	All Doors are Tempered Glass
	3 Wide: Narrow Lifestyle Wide	89-1/2 x 79-1/8 90-1/16 x 79-1/8 90-13/16 x 79-1/8	143-1/2 × 98-1/4 144-1/16 × 110-1/4 144-13/16 × 110-1/4	
	4 Wide	114-1/8 x 79-1/8	186-1/8 x 110-1/4	16/0 (4) Wide Door disclaimer - No Warranty for Operation or Performance
	Transom	31-5/16 x 12	117-13/16 x 28	Tempered Glass Standard on Glass Size 12" and Under Local code may require transom glass to be tempered



LINCOLN WOOD PRODUCTS, INC.

In/Out-Swing								
		MIN BOX	MAX BOX	NOTE				
	1-3/4"							
	Vented or Stationary Sidelite: Narrow Lifestyle Wide	13-3/8 x 79-1/8 25-3/8 x 79-1/8 25-3/8 x 79-1/8	25-3/8 x 110-1/4 37-3/8 x 110-1/4 37-3/8 x 110-1/4	Vented Sidelite with an Entry Door sill are NOT allowed. Radius Doors: 72" Frame Radius Standard. Special radius upon request True Radius Door: Not available under 5/0 width.				
(1 Wide Swing Operating Door	31-3/8 x 79-1/8	37-3/8 x 110-1/4	True radius and segment, single wide hinged doors cannot receive 5-point hardware.				
	2 Wide	61-15/16 x 79-1/8	73-15/16 x 110-1/4	3 Point Hardware Limitation: Doors with a frame height less than 73-1/4 can be made as double bore only.				
	French Door	49-15/16 x 79-1/8	73-15/16 x 110-1/4	,				
/	3 Wide Swing	92-1/2 x 79-1/8	110-1/2 x 98-1/4					
, ,	4 Wide French Door	99 x 79-1/8	147-1/8 x 98-1/4					
	2-1/4"							
	1 Wide fixed or Operating Door	31-3/8 x 82-1/4	43-3/8 x 122-1/4	Triple Glaze Doors SDL Bar: 1/4" thick Interior SDL bar only.				
	2 Wide	61-15/16 x 82-1/4	85-15/16 x 122-1/4	Lifestyle Swing Doors w/Triple Glaze: No less than 7-3/16" bottom rail unless the panel uses a mid-rail.				
	French Door	49-15/16 x 82-1/4	85-15/16 x 122-1/4	8:1 glass ratio must be tempered.				
	Sizes exceedi	ng those listed above	are not certified.					
Transoms 1-3/4 & 2-1/4								
		MIN BOX	MAX BOX	Transoms larger than 9/0 width will be split into				
		13-3/8 x 12	106-1/2 x 28	multiple units. Local code may require transom glass to be tempered 8:1 glass ratio must be tempered.				



FOR SIZES: REFER TO 1-3/4 , 2-1/4 IN/OUT-SWING and 1-3/4 STATIONARY SIDELITE Sections Above

Single Point Lock Standard. Multi-point and Double Bore Optional.

5 Point Hardware not an available option.

Multi-Point option not available over 8/0 height.

Bronze sill / threshold only.

Available as 1-3/4" and 2-1/4 door.

Available as 1 wide, 2 wide and French only

6-9/16" exterior jamb option is available.

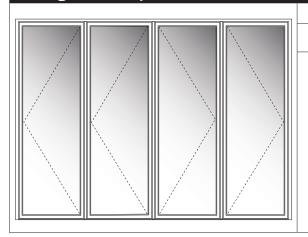
Frame sizes match current door frame sizes

Vented Sidelite with an Entry Door sill are NOT allowed.



LINCOLN WOOD PRODUCTS, INC.

Folding Window Specifications - Twin Point Hardware



MIN BOX	MAX BOX
25-9/16 x 37-3/16	288-3/8 x 72

Single swinging panel not allowed

One handle hinge located near the bottom at every lock location.

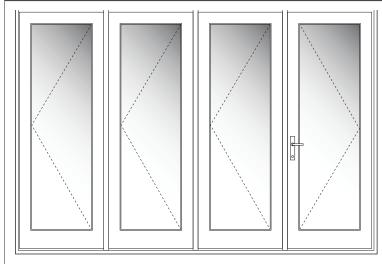
Panel height 53-13/16" (57" Box height) and larger will have 3 hinges. Smaller sizes will have 2 hinges.

Center of handle height = 17"

Sill channel only.

Standard height offerings:					
Box Height	Panel Height				
38	34-13/16				
42	38-13/16				
48	44-13/16				
54	50-13/16				
60	56-13/16				
66	62-13/16				
72	68-13/16				

Folding Door Specifications - Twin Point Hardware

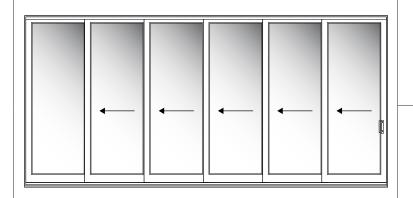


	MIN BOX	MAX BOX
1-3/4 Panel Standard Sill	49-11/16 x 81-1/8	288-3/8 x 112-1/4
2-1/4 Panel Standard Sill	49-11/16 x 81-1/8	288-3/8 x 124-1/4
1-3/4 Panel Floor Channel	49-11/16 x 80	288-3/8 x 111-1/8
2-1/4 Panel Floor Channel	49-11/16 x 80	288-3/8 x 124-1/4
1		

9/0 Call Out Door Height Maximum on 1-3/4

Center of handle height = 36"

Multi-Slide Door



1-3/4" Panel Thickness

Maximum Panel Width: 4' 0-1/2"

Maximum Panel Height: 9' 0"

Maximum Number of Panels: 10

Approximate Maximum Width: 38'

Maximum Height: 9' 0-3/16"

Minimum Roof Overhang: 8' 0"

2-1/4" Panel Thickness

Maximum Panel Width: 6' 0"

Maximum Panel Height: 10' 0"

Maximum Number of Panels: 10

Approximate Maximum Width: 38' 0"

Maximum Height: 10' 3-1/8"

Minimum Roof Overhang: 8' 0"



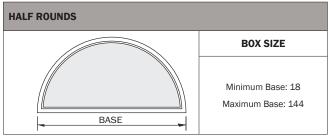
Direct Set Minimum and Maximums

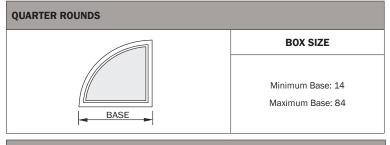
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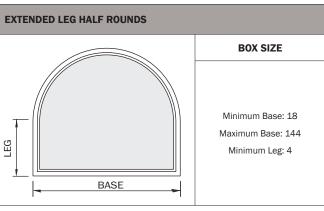
Direct Set			
	MIN Box	MAX Box	Note
	12x12	12' Maximum in either width or height, not to exceed 70 square ft.	38 square feet maximum for single pane 1 lite unit 38 square feet maximum for wood single pane TDL units
	Triple Glaze Annealed: 62" x 81" / 81" x 62" or 35" x 142" / 142" x 35"		48 square feet maximum for wood double pane TDL units 8:1 glass ratio must be tempered
		Triple Glaze Tempered: 62" x 112" / 112" x 62"	Square footage is based on actual glass size not a rectangular piece of glass
Corner Window			
	Sec	One leg can be 96" max frame size. ond leg can only be a max of 72" frame size. Max Height = 96"	

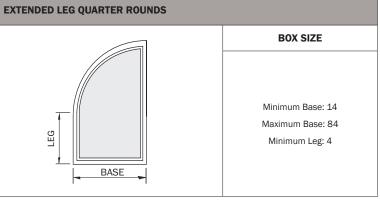
Specialty units are available within these parameters, other custom shapes may be available upon request.

Units not to exceed 70 square ft. See previous page for Triple Glaze Unit limits.









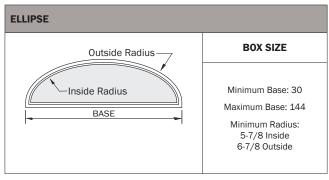


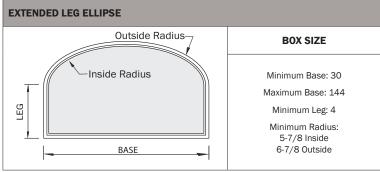
Direct Set Minimum and Maximums

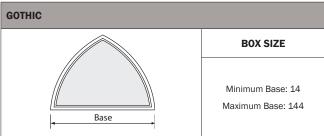
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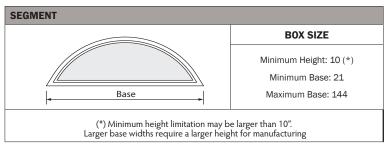
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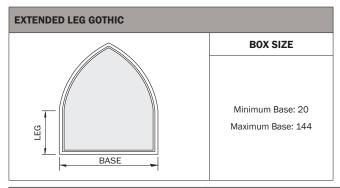
Units not to exceed 70 square ft.

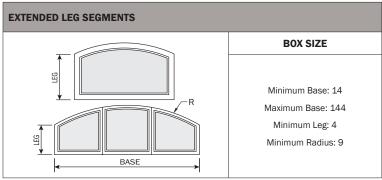


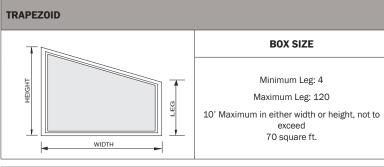


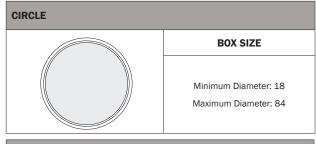


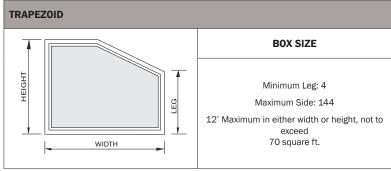


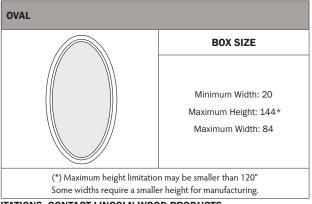












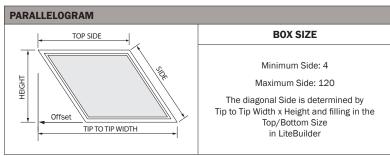


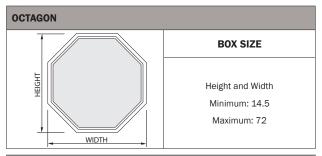
Direct Set Minimum and Maximums

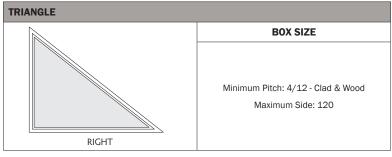
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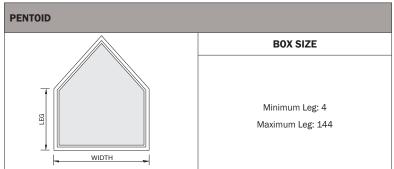
Units not to exceed 70 square ft.

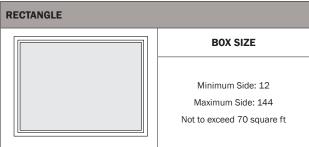












Vented/Fixed Sash Set Minimum and Maximums

Radius and Geometric Sas	h Set Units					
			Note			
	Insulated Glass	Radius and Geometric Shapes not to exceed 27 square feet w/internal grills and 35 square feet w/o Internal grills	13-1/2" Minimum Sash Radius for Clad Sash Set (Putty Glaze Clad) 29" Minimum Box Size for Sash Set Half Rounds w/Putty Glaze Sash Clad Square footage is based on actual glass size not a rectangular piece of glass Radius Square Sash Clad Not Available			
	SNGL Pane	Radius and Geometric Shapes not to exceed 38 square feet				
	Units do not meet egress opening requirements					

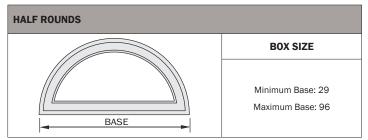


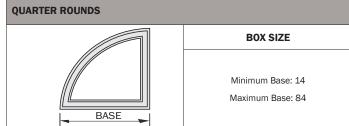
Vented/Fixed Sash Set Minimum and Maximums

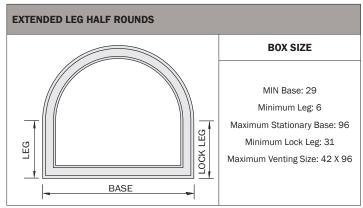
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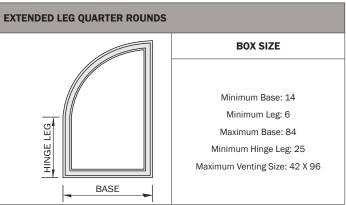
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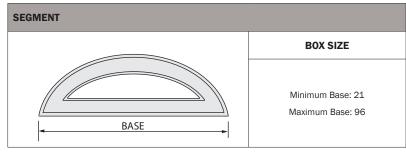
Single Pane Units not to exceed 38 square feet.

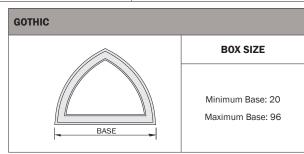


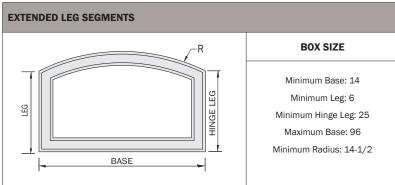


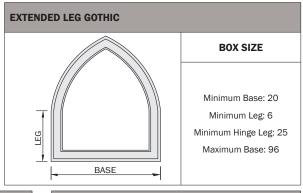


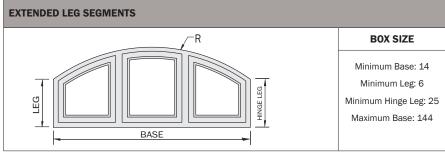


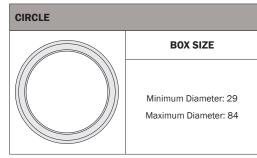










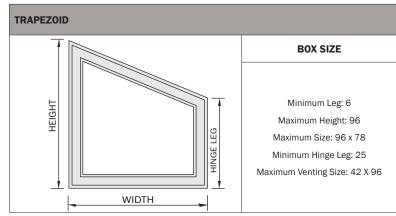


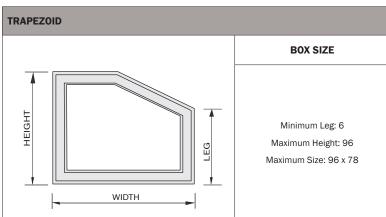


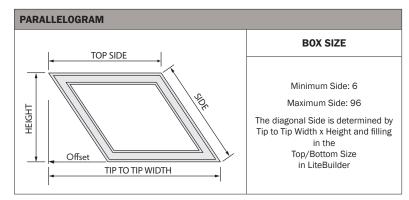
Vented/Fixed Sash Set Minimum and Maximums

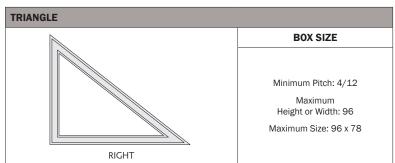
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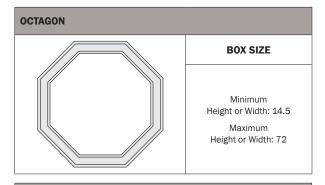
Specialty units are available within these parameters, other custom shapes are available upon request. Double Pane Units not to exceed 27 square feet w/internal grills and 58 square feet w/o Internal grills. Single Pane Units not to exceed 38 square feet.

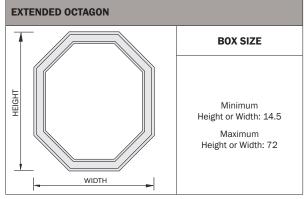


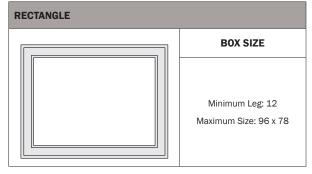


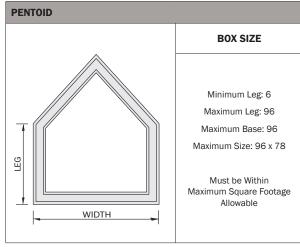










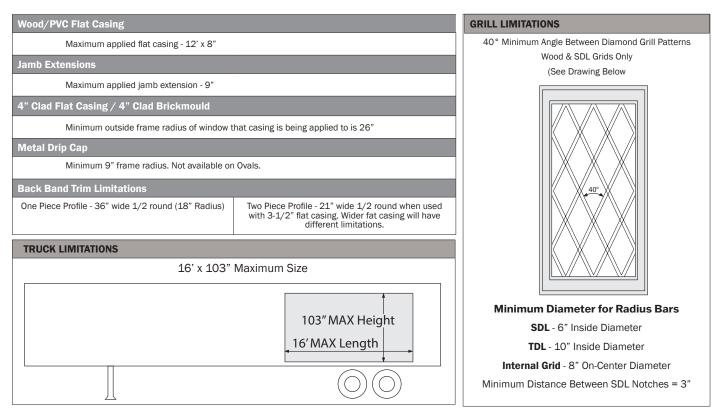


IF YOU HAVE QUESTIONS REGARDING SIZES OUTSIDE OF THESE LIMITATIONS, CONTACT LINCOLN WOOD PRODUCTS 10



LINCOLN WOOD PRODUCTS, INC.

LINEAL, BACK BAND, GLASS, GRILL AND TRUCK LIMITATIONS



SS LIMITATIONS	
1/8" GLASS – Up to 15 square feet	5/32" PATTERN "62" - maximum sheet size 70" x 82"
5/32" GLASS – 15 to 24 square feet	3.1MM, 4.7MM Single Glue Chip - maximum sheet size 58"x 82"
3/16" GLASS - 24 to 34 square feet	5.7MM Solar Cool Grey - maximum sheet size 94"x 128"
1/4" GLASS - 34 to 44 square feet	5.7MM Solar Cool Bronze - maximum sheet size 82" x 128"
1/8" Tempered – maximum 16 square feet, maximum width 34", maximum height 80"	3.9MM Narrow Reeded - maximum sheet size 58"x 82"
8:1 Glass Ratio Must be Tempered	3.9MM Rain Vertical - maximum sheet size 70"x 82"
TEMPERED GLASS – 82" X 142" maximum sheet – must not exceed our square foot limitations, even if within our limitations cannot exceed 82" in either direction.	4.7MM Rain Vertical - maximum sheet size 70"x 82"
MINIMUM TEMPERED SIZE = 6" X 9"	3.9MM Rain Horizontal - maximum sheet size 82x70
When matching Low "E" with solar cool bronze or grey glass the Low "E" lite must be tempered.	4.7MM Rain Horizontal - maximum sheet size 82x70
Our 7/16" overall glass causes some combinations to be unavailable. For	3.9MM Seedy Reemy - maximum sheet size 58x82
example, pattern "62" glass is 5/32" thick and cannot be matched with tempered for this thickness of glass.	3.1MM, 5.7MM Matte Frost - maximum sheet size 61x86
Spandrel Glass is only available in ¼" thickness and must be matched with either heat strengthened or tempered lite. This could cause problems	3.9MM Spraylite - maximum sheet size 58x82
with our overall glass thickness.	3.9MM Florex - maximum sheet size 58X82
Triple glaze internal grilles always located in exterior air space.	3.9MM Hammered - maximum sheet size 58x82
1/8" LAMINATED – maximum sheet size 48" x 84" – cannot exceed 9 square feet	Unsupported grilles in air space cannot exceed 68" in length



IG Unit Size & Square Footage Limits

LINCOLN WOOD PRODUCTS, INC.

CARDINAL IG UNIT SIZE LIMITS 1 AND MAXIMUM DIMENSIONS PER AIR SPACE

		AN	ANNEALED GLASS			HEAT TREATED GLASS			Maximum Dimensions Per Air Space		
	Minimum		Maximum	Area ³ (ft ²)							
Glass Thickness (mm)	Recommended Short Glass Dimension for Argon Filled Unit ² (in)	Maximum Long Dimension (in)	Aspect Ratio Less than 2	Aspect Ratio Greater than 2	Short	Maximum Long Dimension (in)	Maximum Area ³ (ft ²)	Airspace Dimension (mm)	Maximum Long Dimension (in)	Maximum Area ³ (ft ²)	
2.2	8	70	9	6	-	70	15	5.5	70	15	
3.0	12	80	14	10	36	80	20	6.5 & 7.0	80	20	
3.9	16	90	19	16	48	90	30	8.0	90	30	
4.7	20	100	25	21	60	100	40	9.8	100	40	
5.7	24	120	32	29	83½	143½	60	≥11.5	143½	60	

- 1. Limits shown do not apply to shapes or units fabricated with mismatched glass thicknesses.
- 2. Minimum dimensions do not apply to breather tube units.
- 3. Maximum area based on 40 psf design windload and/or safe handling limit.
- 4. This chart applies to both 2-pane IGUs and 3-pane IGUs.
- 5. The suggested limit on maximum short dimension for Heat Treated glass is based on reducing the potential of bi-stable glass (oil canning and soft centered).
- 6. The maximum short and long dimension for 5.7 mm glass is based on the size of the tempering line and also allows for glass trim.
- 7. These are guidelines only, and is not a substitute for the ASTM standard E1300.

CARDINAL IG SQUARE FOOT LIMITS

IG Construction (mm)	ANNEALED GLASS Maximum Square Footage	Maximum Length (Inches)	HEAT STRENGTHENED or TEMPERED GLASS Maximum Square Footage	Squareness Factor Max Short Dimension (inches)	Maximum Length (inches)
2.2 / 2.2	10	72	NA	NA	72
3.0 / 3.0	15	82	20	36	84
3.9 / 3.9	24	90	30	48	96
4.7 / 4.7	33	140	50	60	140
5.7 / 5.7	50	143.5	60	80	143.5

- Square footage limits are based on handling and manufacturing limits only. The above limits do not take into
 account windload requirements.
- 2. The squareness factor/oil canning factor for Heat Treated Glass is based on reducing the potential of bi-stable glass (oil canning and soft center).
- 3. All factors must be met for fabrication allowance. For example: An IG unit constructed with 3mm tempered glass that has a dimension of 37"x74" has a square footage of 19 square feet and its maximum length is 74 inches. Both of these criteria are under the specified limits for 3mm tempered glass, however, the short dimension is greater than the maximum 36 inches allowed, therefore, it does not meet the Squareness Factor.

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