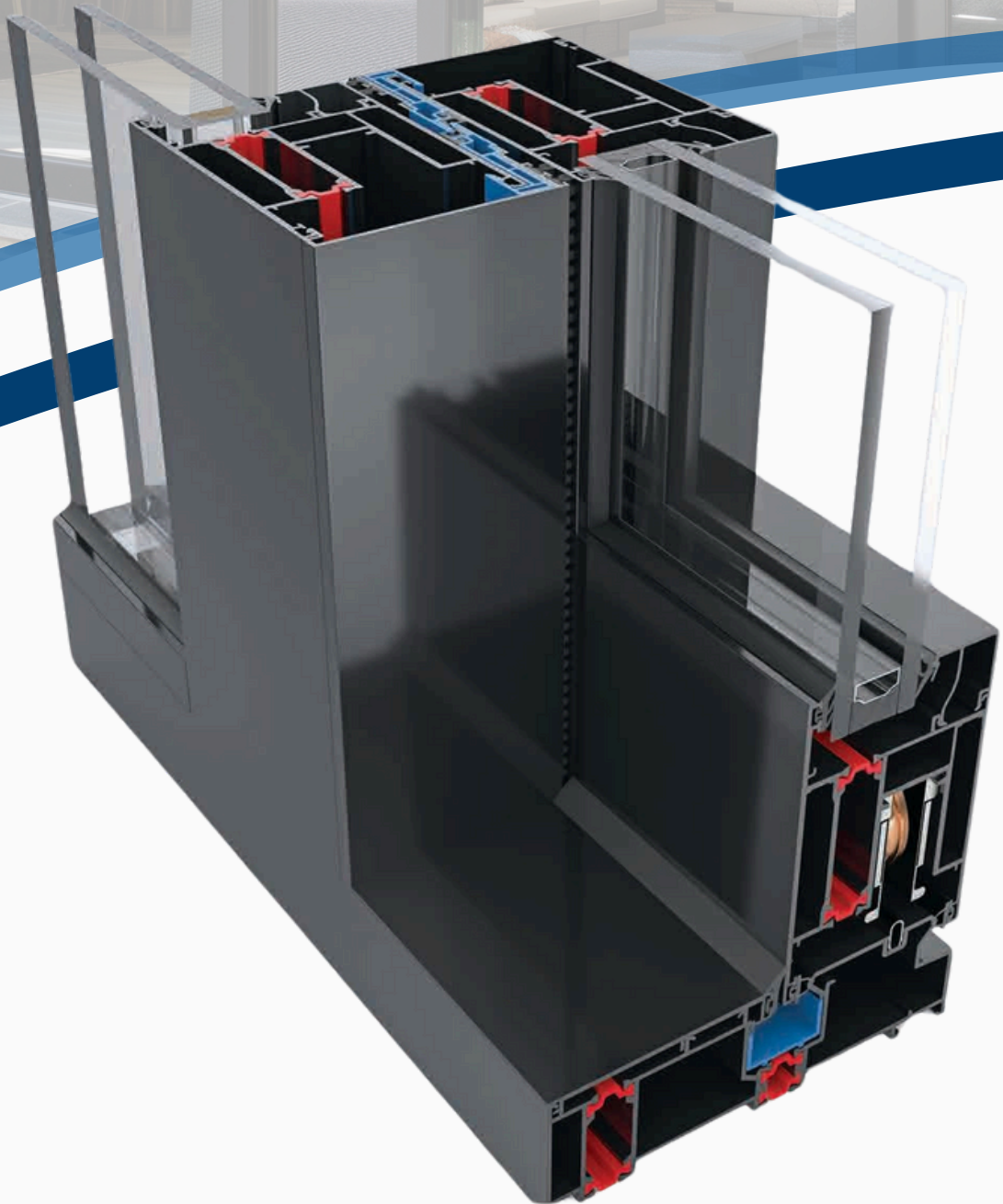




(2025)  
PRODUCT  
SPECIFICATIONS  
SKY BUILDING  
MATERIALS  
SLIDING DOOR SYSTEM

# SLIDING DOOR SYSTEM (2025)

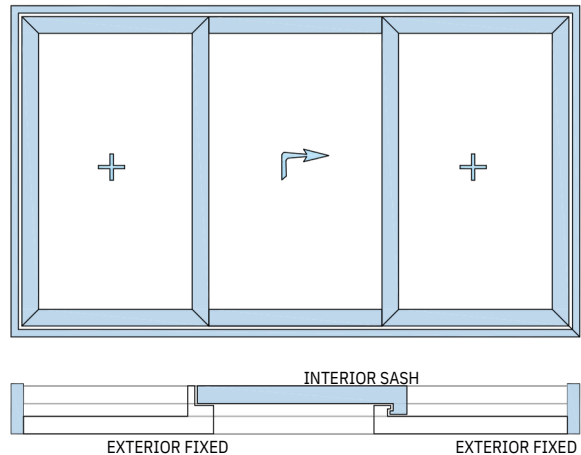
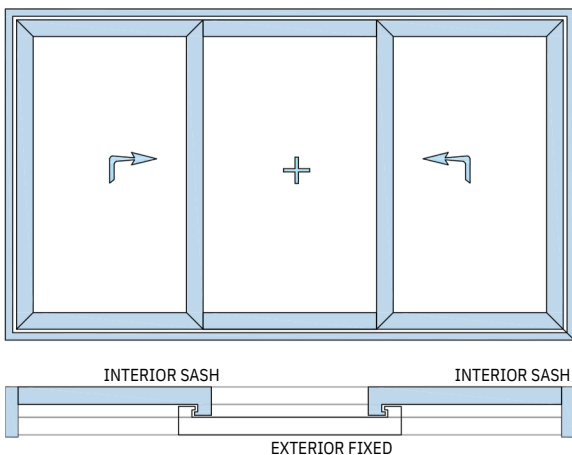
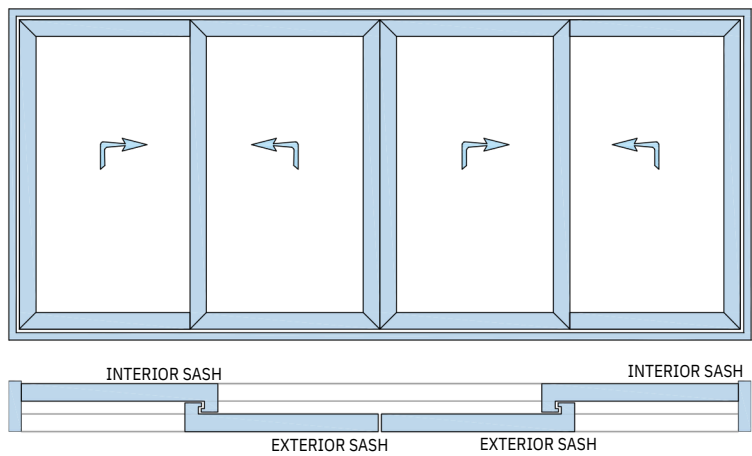
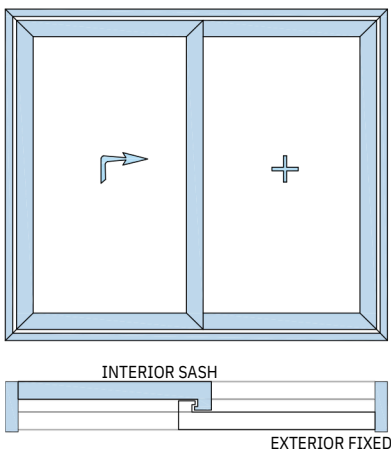
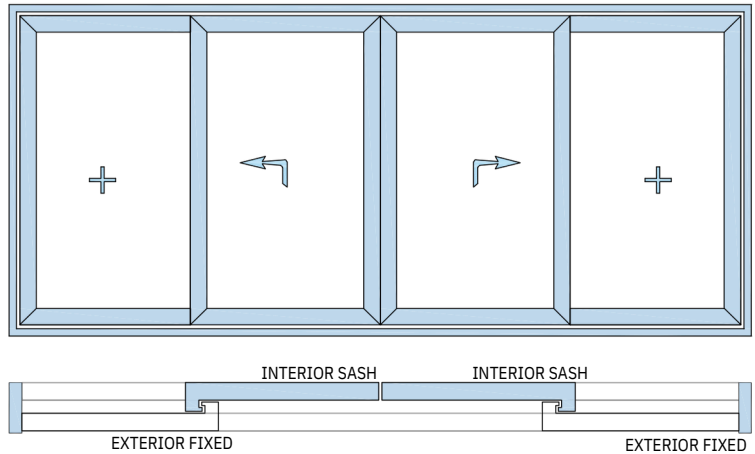
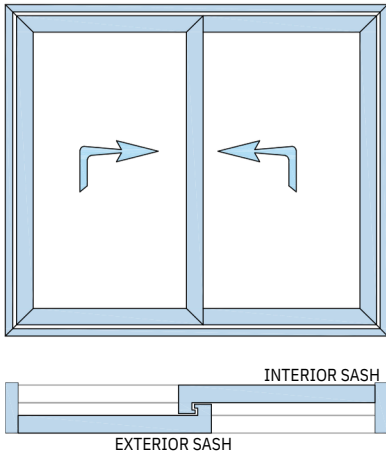


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# APPLICATION TYPES

## LIFT & SLIDE

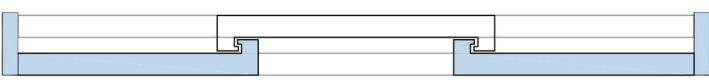
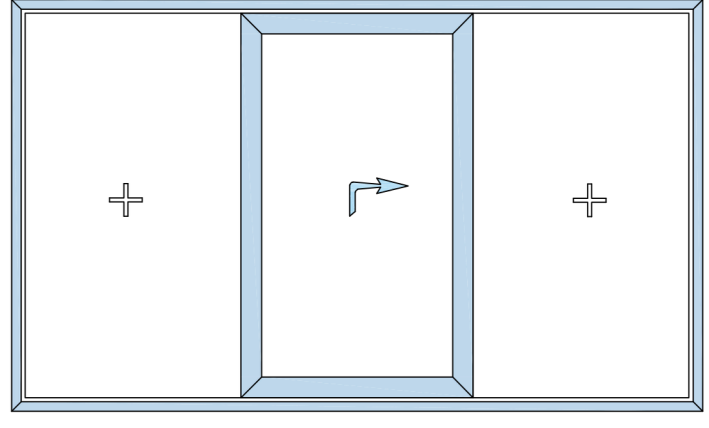
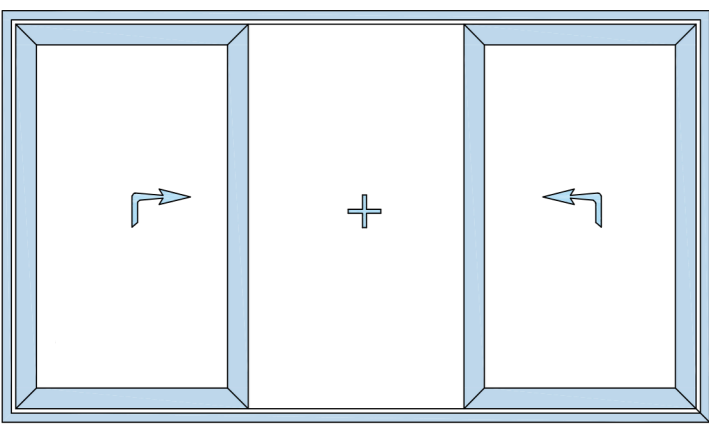
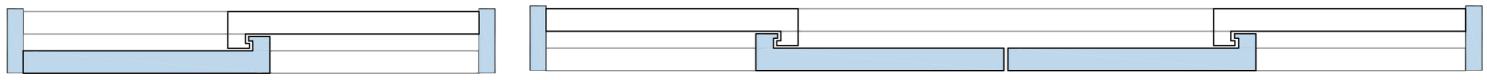
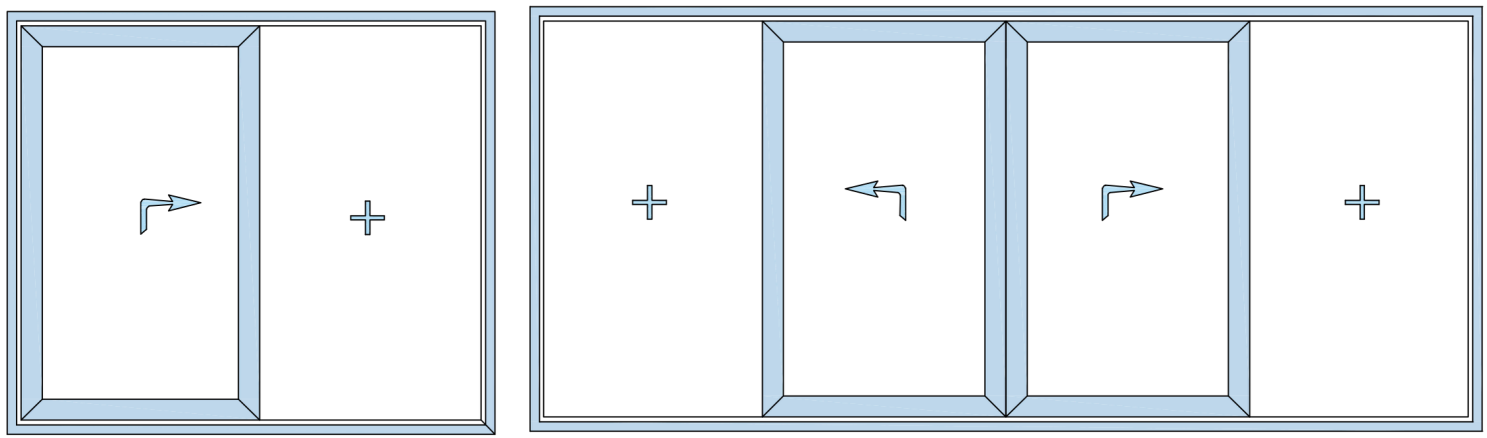
## HIGH PERFORMANCE SLIDING SYSTEM



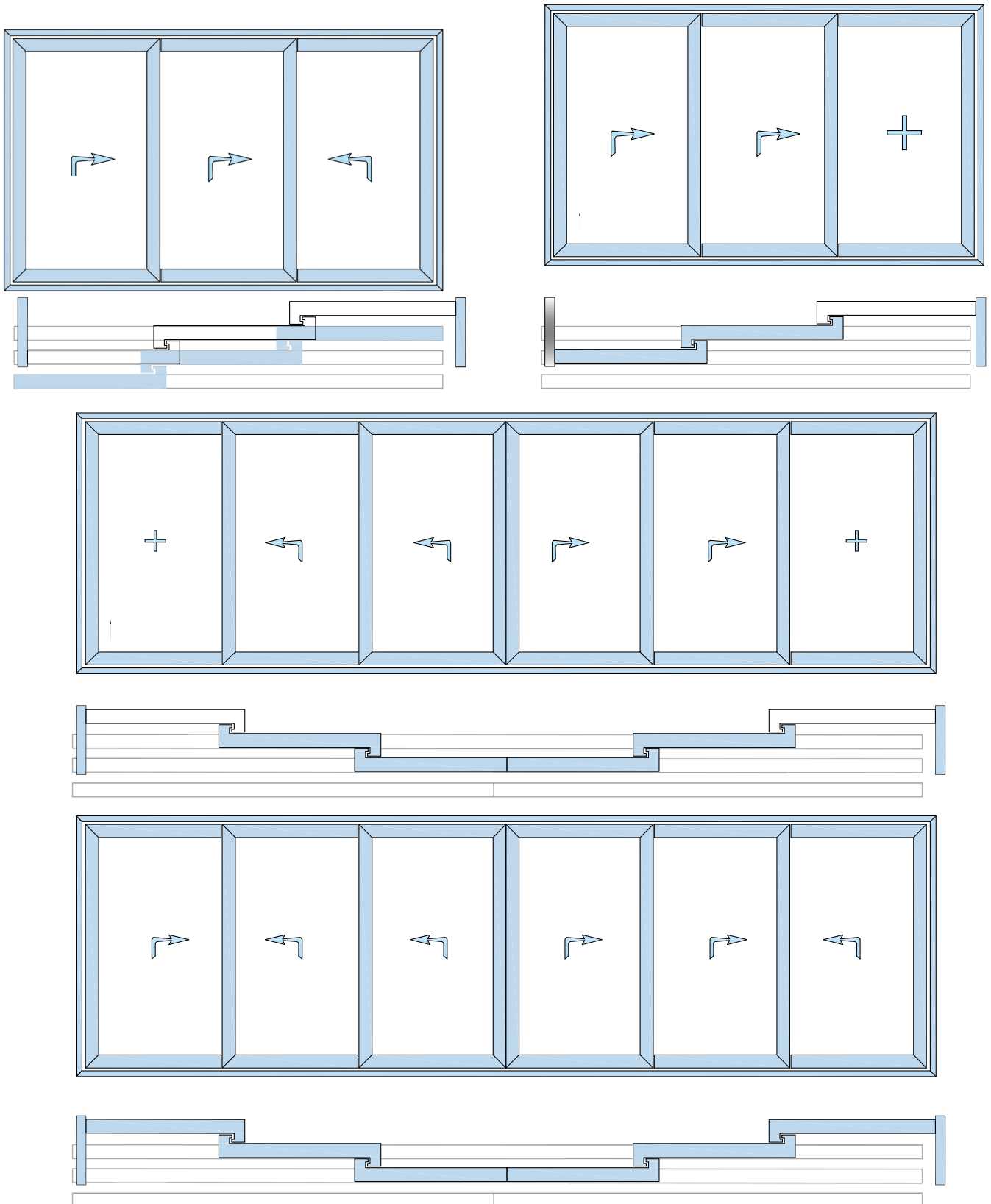
# LIFT & SLIDE

## HIGH PERFORMANCE

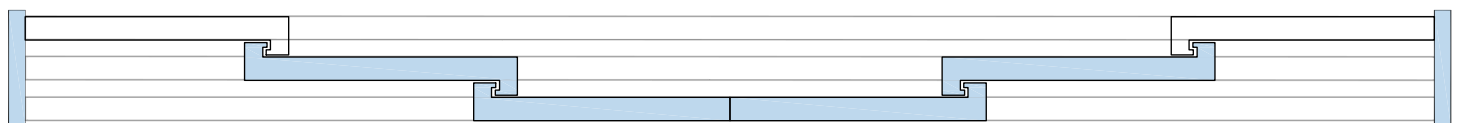
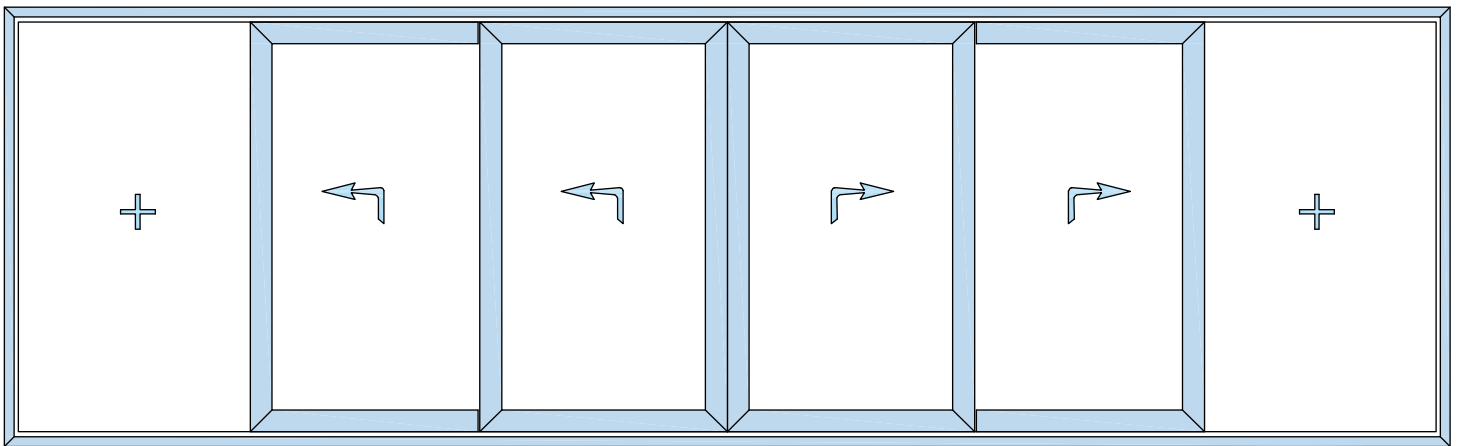
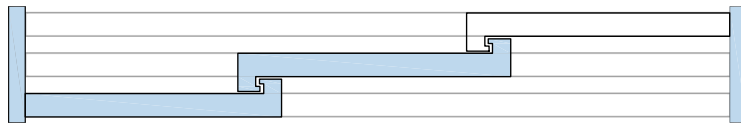
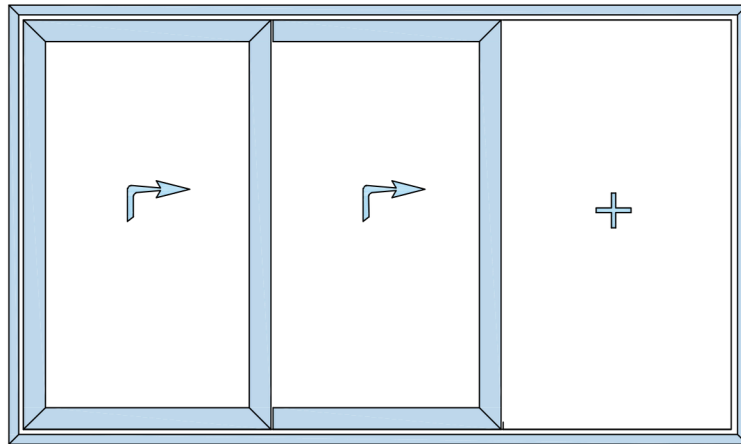
### SLIDING SYSTEM



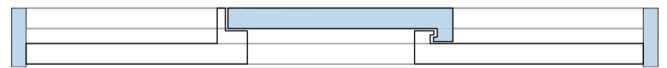
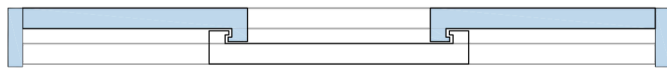
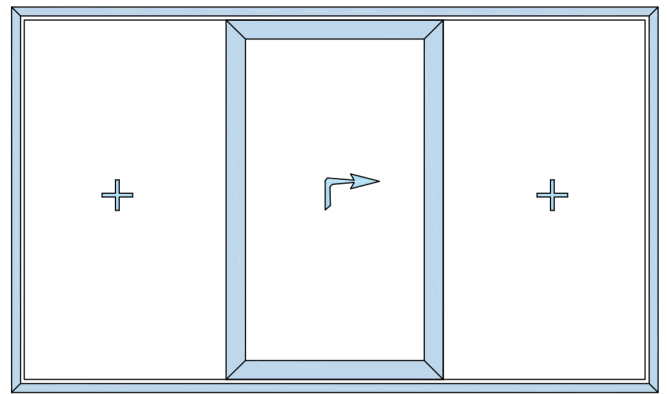
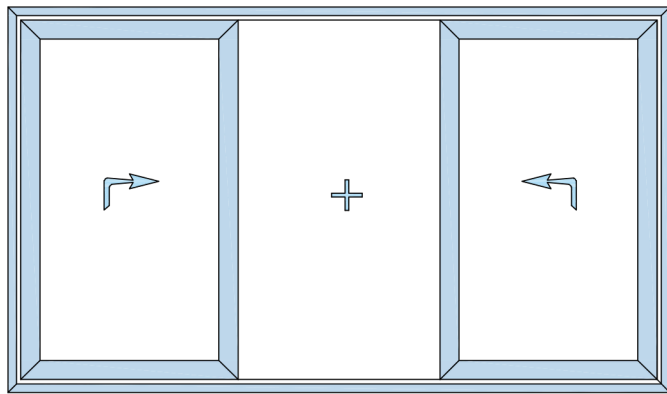
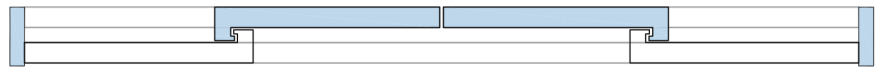
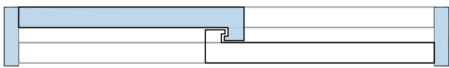
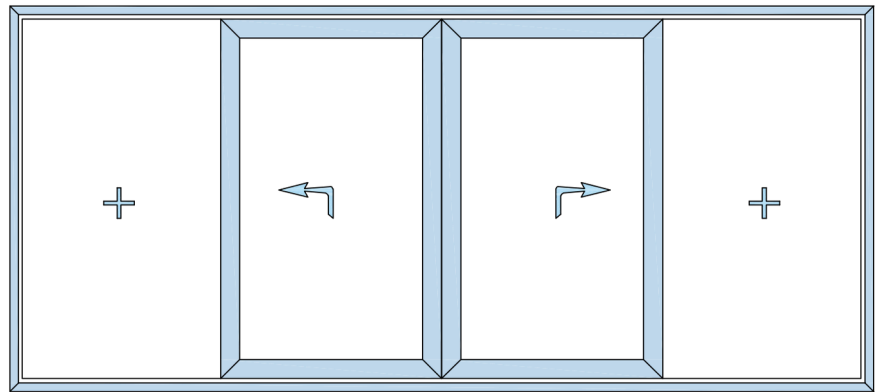
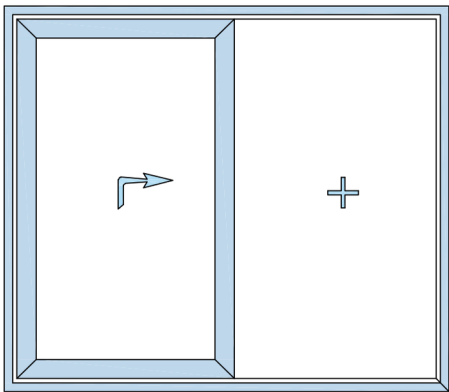
# LIFT & SLIDE HIGH PERFORMANCE SLIDING SYSTEM



# LIFT & SLIDE HIGH PERFORMANCE SLIDING SYSTEM

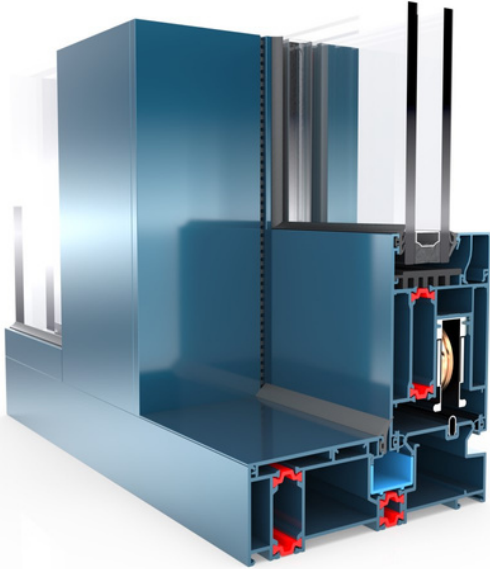


# HIGH PERFORMANCE SLIDING SYSTEM



# LIFT & SLIDE

## HIGH PERFORMANCE SLIDING SYSTEM



Double insulated glass, 3 options:

- 1" overall 366 over clear tempered
- 1" overall 360 over clear tempered
- 1" overall 452 over clear tempered

All options include:

Dual seal & stainless steel spacer

Filled with argon gas

20 years manufacturing  
guaranty.

### TECHNICAL PROPERTIES

FRAME DEPTH :	5.528 inch   140.4 mm
SASH DEPTH :	2.528 inch   64.2 mm
PROFILE WALL THICKNESS :	0.079 inch   2 mm
MAXIMUM GLASS THICKNESS :	1.89 inch   48 mm
INSULATION BARRIERS :	0.583 - 0.945 inch   14,8 - 24 mm
THERMAL INSULATION VALUE (Uf) :	0.7207 - 0.9269 Btu   4,09 - 5,26 W/m <sup>2</sup> K

### APPLICATION ALTERNATIVES

	WINDOW	DOOR
SINGLE SASH SLIDING :	●	●
TOP FIXED SLIDING :	●	●
SELF JAMBED SLIDING :	●	●
MIDDLE MOVABLE SLIDING :	●	●
REINFORCED TRANSOM :	●	●
INSECT SCREEN SLIDING :	●	●

# TECHNICAL PROPERTIES OF MATERIALS

Aluminum extrusion profiles are produced according to ISO 9001, ISO 14001, OHSAS 18001 and ISO/IEC 27001 quality assurance.

## **1-Profile Raw Material**

AA 6063 (AlMgSi 0.5 F22), EN 573-3

## **2-Mechanical Properties: EN 755-2**

Density: 169.2 lb/ft<sup>3</sup> | 2.71 g/cm<sup>3</sup>  
Elasticity Modulus: 10.2 million PSI | 7000 kN/cm<sup>2</sup>  
Yield Strength: 31183 PSI | 215 N/mm<sup>2</sup>  
Flow Strength: 23206 PSI | 160 N/mm<sup>2</sup>  
Elongation: Minimum 6%  
Hardness: 75 HB | 70 HRB

## **3- Thermal Barrier Raw Material**

PA 66 GF 25; 25% glass fiber-reinforced polyamide (Inserted before anodization or powder coating)

## **4-Anodization**

Technical standards regarding anodized products: DIN 17661, EN 12371-1 (QUALANOD)  
Anodizing coat thickness: 0.3937 - 0.5906 mil | 10 - 15 microns, EN ISO 2360  
Standards of Immersion Coloring: DIN 50018  
Sealing Standard: EN 12373-5, ISO 3210

## **5-Powder Coating Standards**

Thickness: Minimum 2.3622 mil | 60 microns  
Adhesion: EN ISO 2409  
Elasticity: EN ISO 1519  
Deformation: EN ISO 6272-1  
Hardness: EN ISO 2815

## **6-Surface Appearance**

By visual inspection, no visible defects such as swelling, stains etc. should be on the surfaces.

## **7-All gaskets**

Raw Material: EPDM  
Raw Material of gaskets for suture: Silicone  
Measurement Tolerances Standards: DIN ISO 3302-1/E2  
Quality Control Standard: RAL-GZ 716

## **8-Measurement Tolerances Standards**

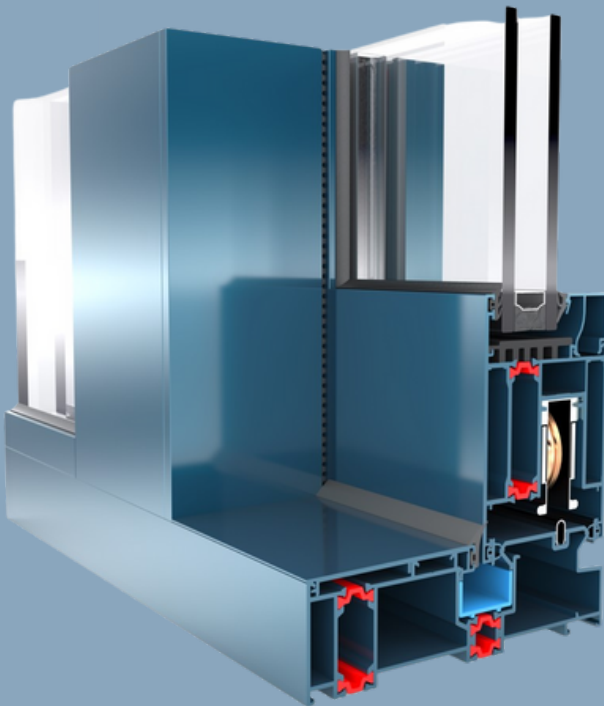
Standards for Profile Design and Manufacturing: EN 12020-2

# LIFT & SLIDE

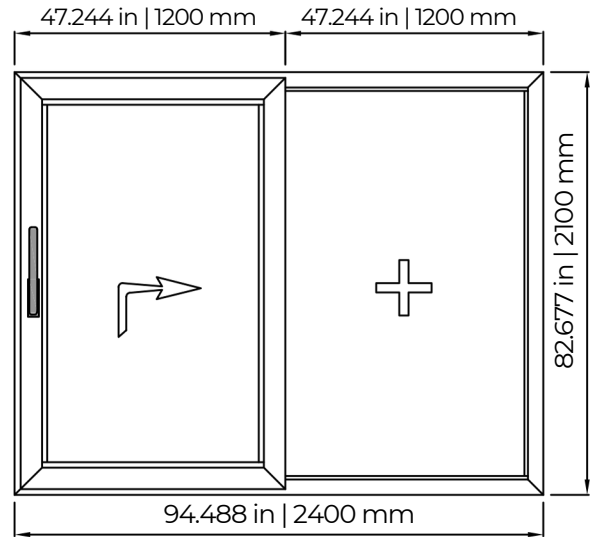
## AIR-WATER-WIND TEST RESULTS

These are the performance test results performed in the accredited test laboratory for the Lift & Slide system.

### FLOOD-PROOF & HIGHLY RESISTANT TO WINDS



### TEST SAMPLE'S DIMENSIONS



#### Frame

Width: 94.488 in | 2400 mm

Height: 82.677 in | 2100 mm

#### Opening Sash

Width: 47.638 in | 1210 mm

Height: 79.843 in | 2028 mm

#### Fixed Window

Width: 49.291 in | 1252 mm

Height: 82.677 in | 2100 mm

### PERFORMANCE TEST RESULTS

#### AIR PERMEABILITY - EN 12207

1 (3.13 psf   150 Pa)	2 (6.27 psf   300 Pa)	3 (9.398 psf   450 Pa)	4 (12.531 psf   600 Pa)
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#### WATERTIGHTNESS - EN 12208

2A 1.04 psf 50 Pa	3A 2.09 psf 100 Pa	4A 3.13 psf 150 Pa	5A 4.18 psf 200 Pa	6A 5.22 psf 250 Pa	7A 6.26 psf 300 Pa	8A 9.39 psf 450 Pa	9A 12.5 psf 600 Pa	E1200 25.1 psf 1200 Pa
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#### RESISTANCE TO WIND LOAD - EN 12210

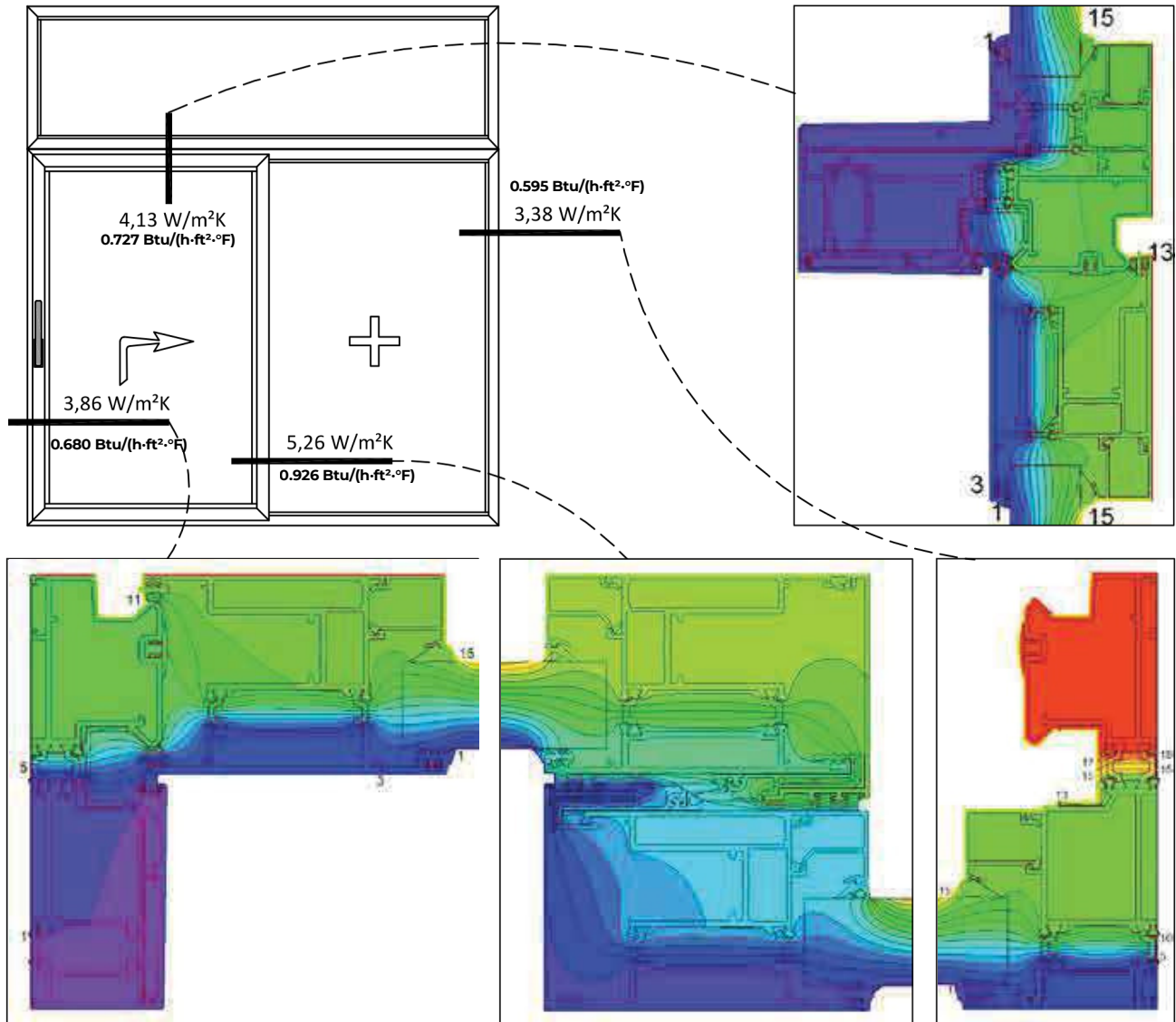
1 (8.35 psf   400 Pa)	2 16.7 psf   800 Pa	3 (25.1 psf   1200 Pa)	4 33.5 psf   1600 Pa	5 41.8 psf   2000 Pa
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#### DEFLECTION CRITERIA - EN 12210

A (<L/150)	B (<L/200)	C (<L/300)
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# THERMAL INSULATION VALUES

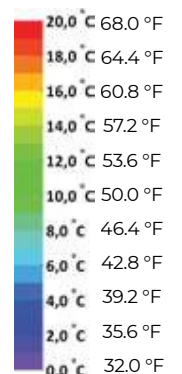
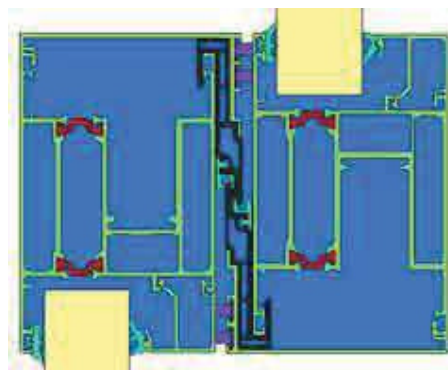
These are thermal calculation results created through the heat transfer analysis software with the Lift & Slide System.



## MATERIALS AND SECTION COLORINGS

### Material

- Aluminium (Si alloys)
  - EPDM (ethylene propylene diene monomer)
  - PVC, flexible (PVC-P) 40% softener
  - Panel
  - Polyamid 6.6 with 25% glassfibre
  - Unventilated air cavity \*
- \* EN ISO 10077-2:2017, 6.4.3/anisotrop



As per EN 10077-2 standard; room temperature is 68°F | 20°C, outer temperature is 32°F | 0°C and relative humidity is %50

# STANDARDS USED IN STATIC CALCULATIONS

## STATIC CALCULATION METHOD

### DIN 1055, EN 13830

- 1-Horizontal Wind Load
- 2-Vertical Glass Load
- 3-Snow Load

#### Wind Load:

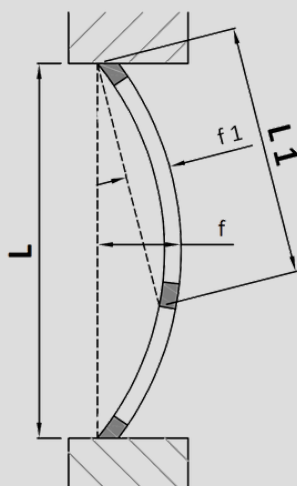
Before starting the static calculation, assign the wind shape coefficient and select the wind load from the table below according to the height of the building as a reference value.

#### Shape Coefficient of wind:

Height of building / Minimum width of building < 5 · c = 1.2  
 Height of building / Minimum width of building > 5 · c = 1.6

SHAPE COEFFICIENT OF WIND	GROUND ELEVATION (ft)	WIND SPEED (mph)	ABSORPTION (lb/ft <sup>2</sup> )	WIND LOAD (lb/ft <sup>2</sup> )
<b>1.2</b>	0 - 26.25	62.7	10.24	12.29
	29.5-65.6	80.5	16.39	19.66
	68.9-328.1	94.0	22.53	27.03
	> 328.1	102.9	26.63	31.96
<b>1.6</b>	0 - 26.25	62.7	10.24	16.39
	29.5 - 65.6	80.5	16.39	26.22
	68.9 - 328.1	94.0	22.53	36.06
	> 328.1	102.9	26.63	42.59

### DEFLECTION ACCEPTANCE OF STATIC CALCULATIONS:



#### SINGLE GLAZED

SUPPORT GAP	MAXIMUM DEFLECTION
L < 9.84 ft	f = L / 200
L > 9.84 ft	f = L / 300

#### DOUBLE GLAZED

WITHOUT TRANSOM	
L ≤ 9.84ft	f = max. 0.315in
L < 6.56ft	f = L / 200
WITH TRANSOM;	
a) GLASS HEIGHT L1 ;	
L1 ≤ 94.49in	f1 ≤ L1 / 300
L1 > 94.49in	f1 ≤ 0.315in
b) PROFILE LENGTH L ;	
L ≤ 118.11in	f1 ≤ L / 200
L > 78.74in	f1 ≤ L / 300

#### ABBREVIATIONS:

- W: Wind Load
- c: Wind shape coefficient
- q: Speed Pressure
- V: Wind Speed
- L: Vertical Clearance
- E: Elasticity Modulus
- f: Maximum deflection

# WIND LOAD & SPEED RELATED USAGE LIMITS

## Information on Diagrams:

The curves shown in the tables are drawn separately for the total inertia value of reinforced or unreinforced purlin profiles and for four different wind loads of 12.29, 19.66, 27.03, 31.96 lb/ft<sup>2</sup> [60, 96, 132, and 156 kg/m<sup>2</sup>]. The shaded areas below the curves indicate the “applicable” dimensions for that wind load.

## Limits of opening accessory:

Minimum - Maximum Sash Width: 27.56 in - 118.11 in | 700mm - 3000mm

Minimum - Maximum Sash Height: 33.46 in- 127.95 in | 850 mm - 3250 mm

Maximum Total Sash Weight: 881.85 lb | 400 kg

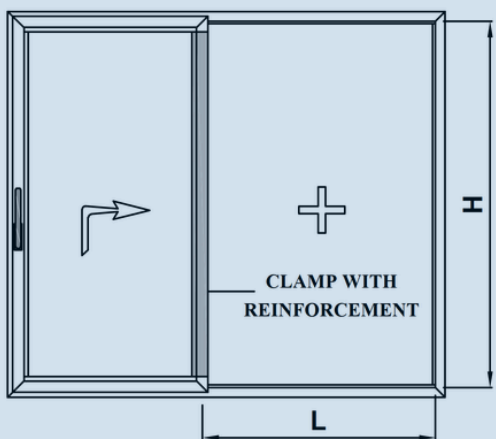
## Limits of Static Calculations:

H: Vertical Transom Connection Clearance

L: Widest Horizontal Part Clearance

Deflection Criteria: H/300

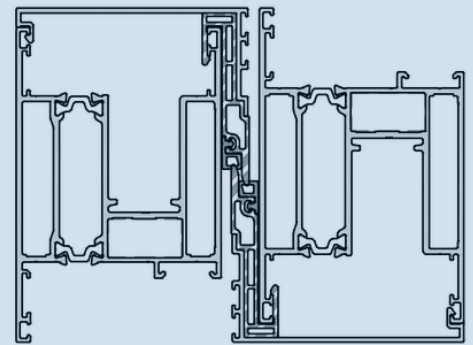
## DIAGRAM-1 STATIC DIAGRAM FOR CLAMP WITHOUT REINFORCEMENT



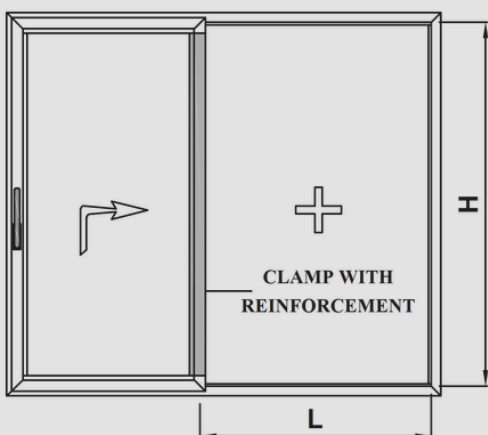
Static Value of Clamp Area Without Reinforcement:

TOTAL STATIC VALUE

2.64 in<sup>4</sup> | 110 cm<sup>4</sup>



## DIAGRAM-2 STATIC DIAGRAM FOR CLAMP WITH REINFORCEMENT



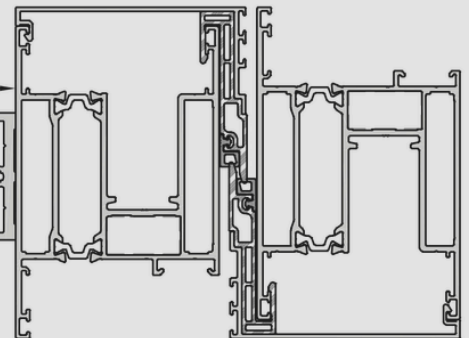
Static Value of Clamp Area With Reinforcement:

TOTAL STATIC VALUE

5.28 in<sup>4</sup> | 220 cm<sup>4</sup>

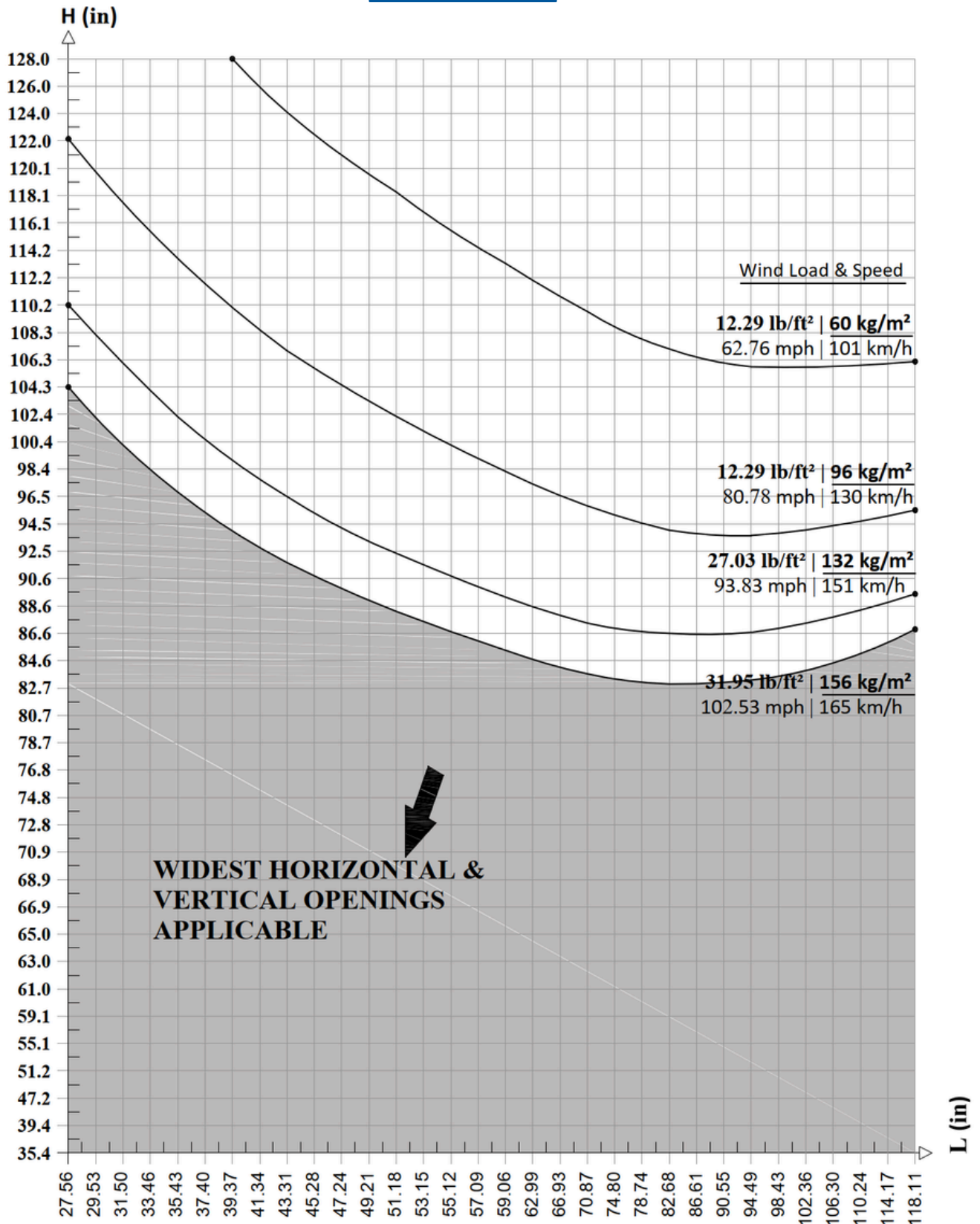
3.15in | 80 mm

1.57in | 40mm



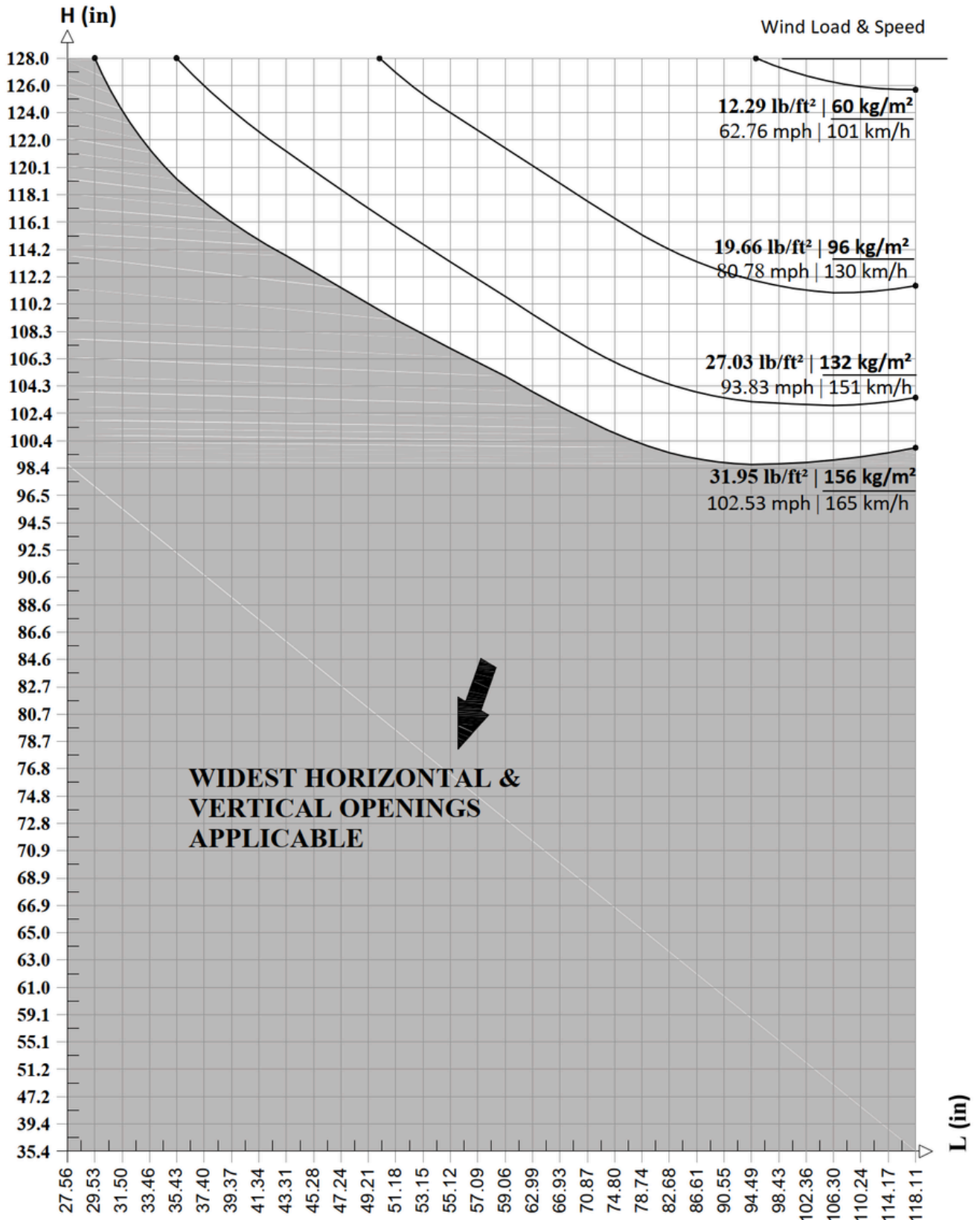
# USAGE LIMITS DIAMGRAMS ACCORDING TO WIND & LOAD SPEED

DIAGRAM-1



# USAGE LIMITS DIAMGRAMS ACCORDING TO WIND & LOAD SPEED

DIAGRAM-2





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