

# Architectural Binder Section Tilt Turn and Fixed Windows



Folding Glass Walls by NanaWall



# NanaWall Generation 4 Tilt Turn Windows | Fixed and Transom Windows

Generation 4 Tilt Turn and Fixed window systems are designed to match the Generation 4 product line. This comprehensive line of windows comes in aluminum, wood, and clad.

With concealed hinge hardware, these windows offer the same clean aesthetics as Generation 4 folding glass walls. The Tilt Turn windows are easily operated with a single hand. The windows tilt inward to provide safe ventilation with the tilt opening from the top. The turn of the window, specified from the left or the right, swings the window inward on its hinges for increased ventilation. The benefit of this operation is that the outside of the window can be easily cleaned indoors.

The Fixed window options allow for side lites and transoms overhead and are designed to visually align with adjacent full-height operable panels and Tilt Turn windows.

#### **Finishes**

Standard aluminum finishes for NW TiltTurn 620, NW Fixed 610, NW TiltTurn 820, and NW Fixed 810 are available in 50 standard powder coat colors in standard AAMA 2604 (2605 optional). Over 200 additional color options are available in powder coat and anodized finishes.

For NW TiltTurn 520, NW Fixed 510, NW TiltTurn 720, and NW Fixed 710, sustainably harvested wood options include: Sapeli Mahogany, Meranti, Pine, Western Hemlock, and Red Grandis. To ensure the longevity of our wood systems, we provide triple and quadruple laminated cross-grains to accommodate the wood's natural expansion and contraction. Market availability of quadruple laminated cross-grained wood may differ by wood species.

Frames and panels have a sanding sealer or a base coat applied. For NW TiltTurn 720 and NW Fixed 710, one additional clear coat is applied.

## Thermal Efficiency and Glazing Options

A fundamental benefit of this Generation 4 folding glass wall is energy efficiency. The system comes standard with different levels of continuous seals along the perimeter of each panel frame. Furthermore, standard to each window system is two levels of insulating thermal breaks for optimal defense from heat and cold.

These systems are dry glazed for double or triple insulated glass and provide controlled drainage.

- The glass pocket for NW TiltTurn 620 can accommodate glass from 24 mm to 45 mm.
- The glass pocket for NW TiltTurn 820 can accommodate glass from 24 mm to 60 mm.
- The glass pocket for NW TiltTurn 520 can accommodate glass from 28 mm to 48 mm.
- The glass pocket for NW TiltTurn 720 can accommodate glass from 28 mm to 52 mm.

## **Handle Options**

Stainless steel in brushed satin or black titanium finishes.

## NOTE:

For mulled Fixed or Tilt Turn window units or a combination of different units, please consult with a qualified structural engineer to determine how project design windloads and other requirements determine the use of structural stiffeners between the units.

Generation 4 Folding System	Corresponding Matching Tilt Turn and Fixed System
NW Aluminum 640	NW TiltTurn 620 and NW Fixed 610
NW Aluminum 840	NW TiltTurn 820 and NW Fixed 810
NW Wood 540	NW TiltTurn 520 and NW Fixed 510
NW Clad 740	NW TiltTurn 720 and NW Fixed 710



# Performance Testing Results

NW TiltTurn 620, NW TiltTurn 820, NW TiltTurn 520, and NW TiltTurn 720

TYPE OF TEST	RESULTS	
00	@ 1.60 psf (75 Pa): 0.08 (1 L/s/m²)	
Air Infiltration (1) ASTM E-283, cfm/ft <sup>2</sup>	@ 6.20 psf (300 Pa): 0.19 (8 L/s/m²)	
Water Penetration <sup>①</sup> ASTM E-547 and E-331	No uncontrolled water entry  @ 12 psf (600 Pa)	
Structural Load  ASTM E-330: pass  Note that the structural test pressures were 50% higher than the design pressures.	Positive  @ 120 psf (5760 Pa)	Negative  @ 120 psf (5760 Pa)
Forced Entry Resistance <sup>1</sup>	In accordance with ASTM F 588 – Grade 40 & CAWM 301	

① Excerpts of results of a 3' 11 1/4" x 5' 10 7/8" (1200 mm x 1800 mm) standard unit tested by Intertek Building & Construction, Melle, Germany, an independent testing laboratory in February 2024 in accordance with AAMA/WDMA/CSA 101/I.S.2/A440 standard.

The sample tested met the performance requirements for a DAW-C50 1220 x 1822 (48 x 72) rating.



# Performance Testing Results

NW Fixed 610 and NW Fixed 810

TYPE OF TEST	RESULTS		
00	@ 1.60 psf (75 Pa): 0.01 (1 L/s/m²)		
Air Infiltration (1) ASTM E-283, cfm/ft <sup>2</sup>	@ 6.20 psf (300 Pa): 0.05 (8 L/s/m²)		
Water Penetration <sup>①</sup> ASTM E-547 and E-331	No uncontrolled water entry  @ 12 psf (600 Pa)		
1000	DESIGN PRESSURE	DESIGN PRESSURE	
Structural Load  ASTM E-330: pass  Note that the structural test pressures were 50% higher than the design pressures.	Positive  @ 120 psf  (5760 Pa)	Negative  @ 120 psf (5760 Pa)	
Forced Entry Resistance <sup>①</sup>	In accordance with ASTM F 588 – Grade 40 & CAWM 301		

① Excerpts of results of a 4' 11 1/16" x 5' 10 7/8" (1500 mm x 1800 mm) standard unit tested by Intertek Building & Construction, Melle, Germany, an independent testing laboratory in February 2024 in accordance with AAMA/WDMA/CSA 101/I.S.2/A440 standard.

The sample tested met the performance requirements for a DAW-C50 1220 x 1822 (48 x 72) rating.



# Performance Testing Results

NW Fixed 510 and NW Fixed 710

TYPE OF TEST	RESULTS	
00	@ 1.60 psf (75 Pa): 0.01 (1 L/s/m²)	
Air Infiltration (1) ASTM E-283, cfm/ft <sup>2</sup>	@ 6.20 psf (300 Pa): 0.04 (.8 L/s/m²)	
Water Penetration <sup>①</sup> ASTM E-547 and E-331	No uncontrolled water entry  @ 12 psf (600 Pa)	
1000	DESIGN PRESSURE	DESIGN PRESSURE
Structural Load  ASTM E-330: pass  Note that the structural test pressures were 50% higher than the design pressures.	Positive @ <b>120</b> psf (5760 Pa)	Negative @ 120 psf (5760 Pa)
Forced Entry Resistance <sup>1</sup>	In accordance with ASTM F 588 – Grade 40 & CAWM 301	

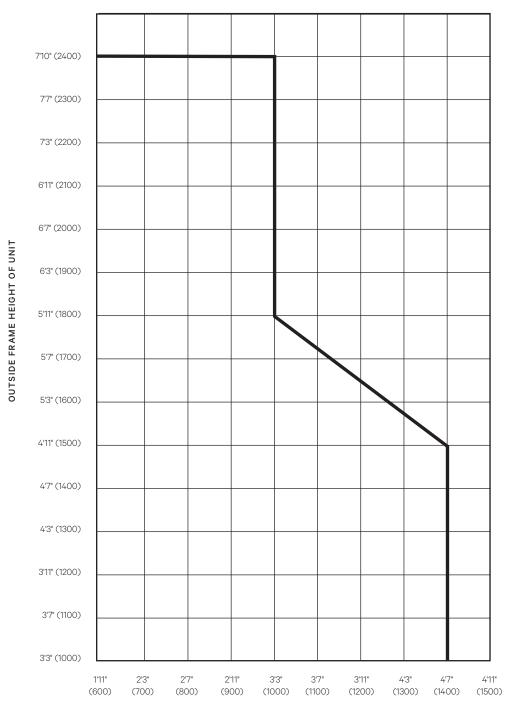
① Excerpts of results of a 4' 11 1/16" x 5' 10 7/8" (1500 mm x 1800 mm) standard unit tested by Intertek Building & Construction, Melle, Germany, an independent testing laboratory in February 2024 in accordance with AAMA/WDMA/CSA 101/I.S.2/A440 standard.

The sample tested met the performance requirements for a DAW-C50 1220 x 1822 (48 x 72) rating.



# Maximum Size Chart | Tilt Turn Windows

NW TiltTurn 620, NW TiltTurn 820, NW TiltTurn 520, NW TiltTurn 720,



Any custom size is possible up to the maximum size shown.

Solid dark line on chart indicates maximum frame height possible for a given maximum frame width.

The maximum size limits shown are based on the weight of a unit that has a net glass thickness of 5/16" (8 mm). The composition of standard insulated glass is 5/32" glass/air space/ 5/32" glass. For other net glass thicknesses, this maximum size chart may not apply.

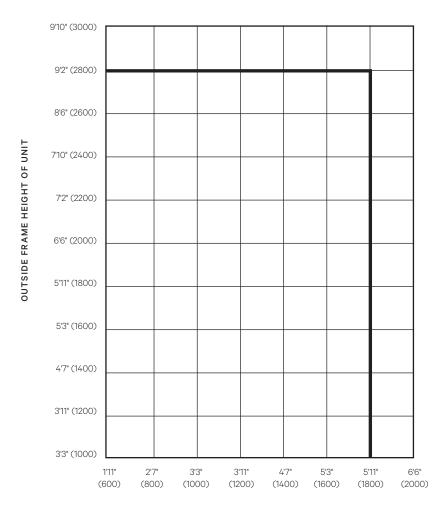
max. 2.4 m<sup>2</sup>





# Maximum Size Chart | Fixed and Transom Windows

NW Fixed 610, NW Fixed 810, NW Fixed 510, NW Fixed 710



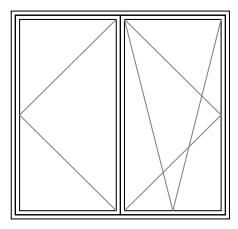
Any custom size is possible up to the maximum size shown.

Solid dark line on chart indicates maximum frame height possible for a given maximum frame width.

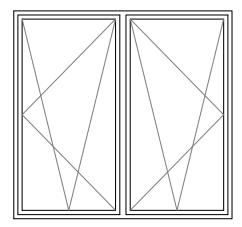
The maximum size limits shown are based on the weight of a unit that has a net glass thickness of 5/16" (8 mm). The composition of standard insulated glass is 5/32" glass/ air space/ 5/32" glass. For other net glass thicknesses, this maximum size chart may not apply.

max. 5 m<sup>2</sup>

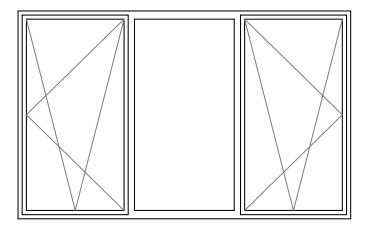
OUTSIDE FRAME WIDTH OF UNIT



2 Panel Window (Turn + Tilt Turn)



2 Panel Window (Tilt Turn + Tilt Turn with required vertical post in the middle)



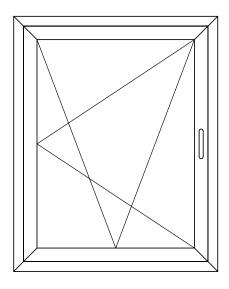
3 Panel Window (Tilt Turn + Fixed + Tilt Turn with required vertical posts between panels)

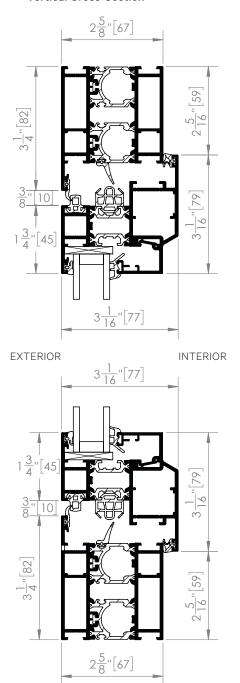


# Generation 4 NW TiltTurn 620 to Match NW Aluminum 640 and NW Acoustical 645

(Available as a single window or multiple unit).

## Elevation



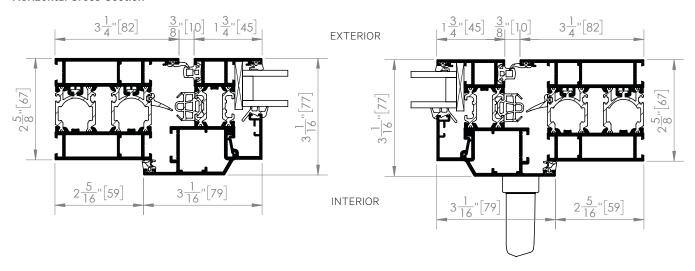


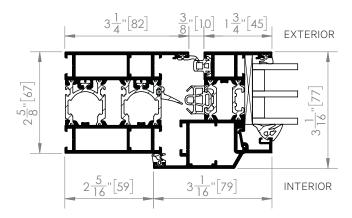


# Generation 4 NW TiltTurn 620 to Match NW Aluminum 640 and NW Acoustical 645

(Available as a single window or multiple unit).

#### **Horizontal Cross-Section**



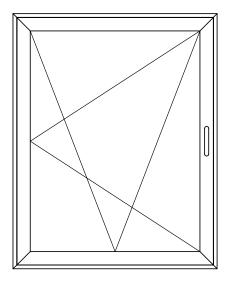


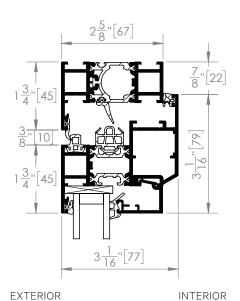


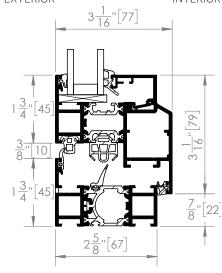
# Generation 4 NW TiltTurn 620 Narrow Frame Option to Match NW Aluminum 640 and NW Acoustical 645

(Available as a single window or multiple unit).

## Elevation



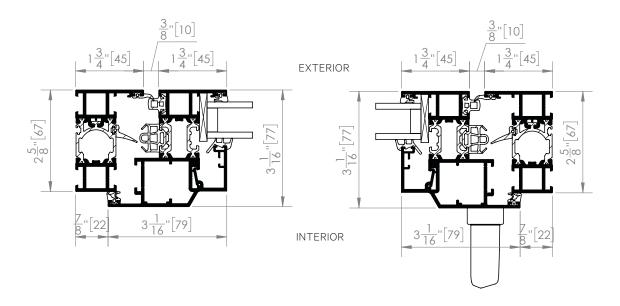


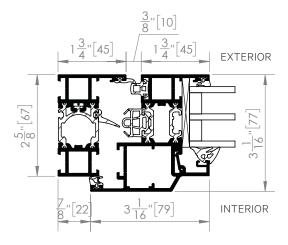


# Generation 4 NW TiltTurn 620 Narrow Frame Option to Match NW Aluminum 640 and NW Acoustical 645

(Available as a single window or multiple unit).

#### **Horizontal Cross-Section**

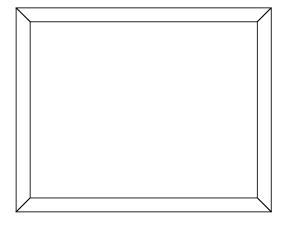


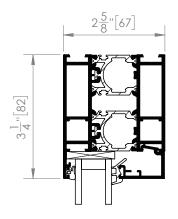




# NanaWall NW Fixed 610 to Match NW Aluminum 640 and NW Acoustical 645

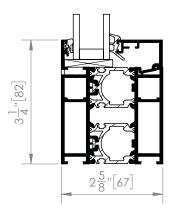
## Elevation





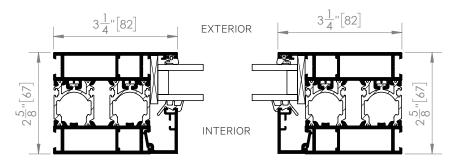
EXTERIOR

INTERIOR

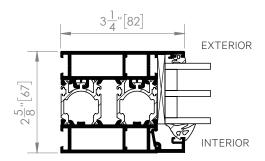


# NanaWall NW Fixed 610 to Match NW Aluminum 640 and NW Acoustical 645

## **Horizontal Cross-Section**



# Typical Glass Stop Profile with Triple Glazing



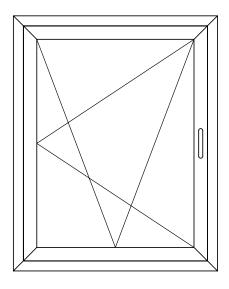


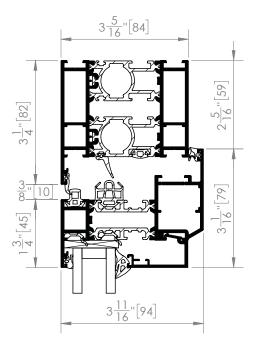
13

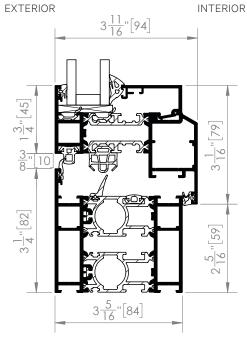
# NanaWall NW TiltTurn 820 Window to Match NW Aluminum 840

(Available as a single window or multiple unit).

## Elevation



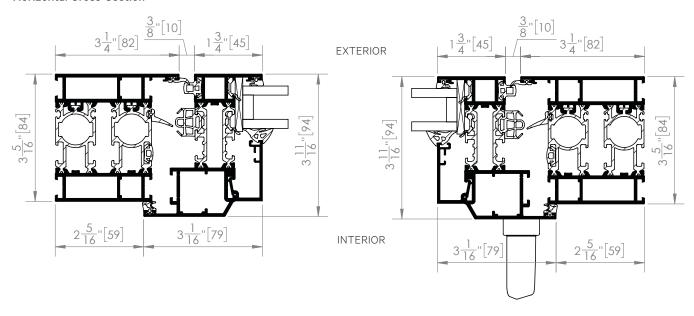


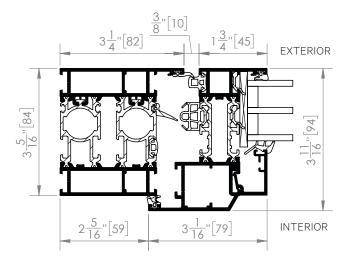


# NanaWall NW TiltTurn 820 Window to Match NW Aluminum 840

(Available as a single window or multiple unit).

## **Horizontal Cross-Section**

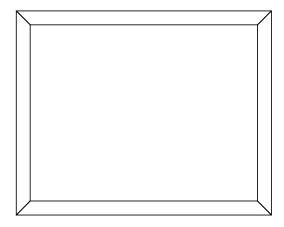


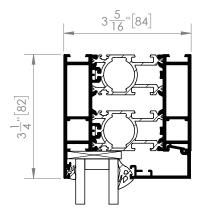




# NanaWall NW Fixed 810 Window to Match NW Aluminum 840

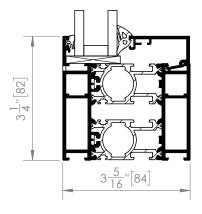
## Elevation





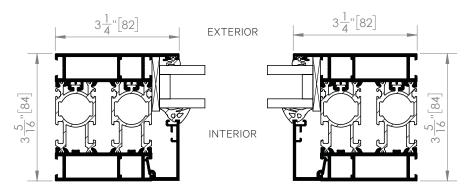
EXTERIOR

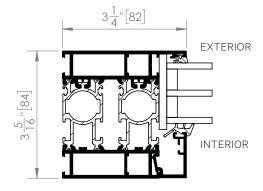
INTERIOR



# NanaWall NW Fixed 810 Window to Match NW Aluminum 840

## **Horizontal Cross-Section**



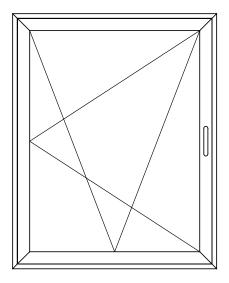


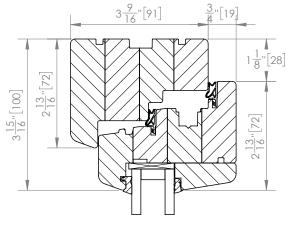


# NanaWall NW TiltTurn 520 Window to Match NW Wood 540 and NW Acoustical 545

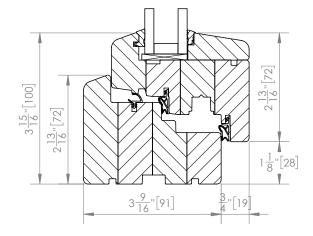
(Available as a single window or multiple unit).

## Elevation





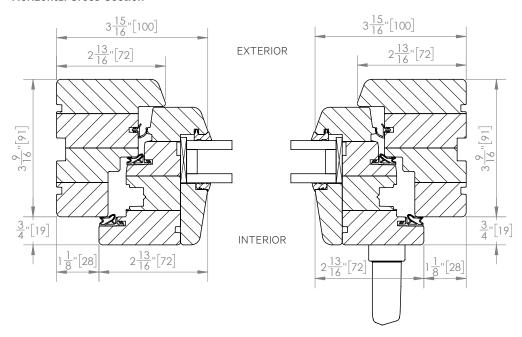
EXTERIOR INTERIOR

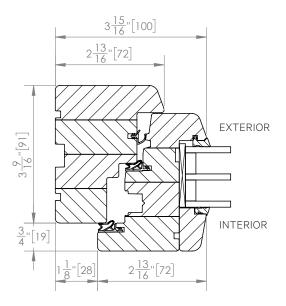


# NanaWall NW TiltTurn 520 Window to Match NW Wood 540 and NW Acoustical 545

(Available as a single window or multiple unit).

#### **Horizontal Cross-Section**

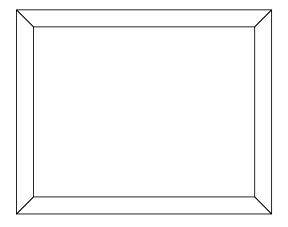


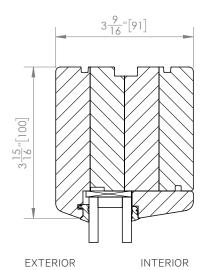


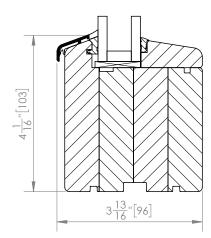


# NanaWall NW Fixed 510 Window to Match NW Wood 540 and NW Acoustical 545

## Elevation

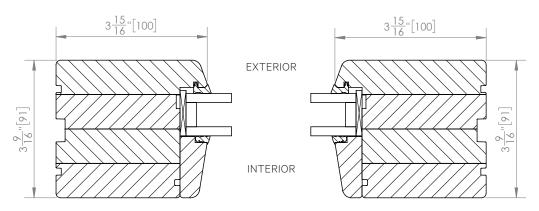


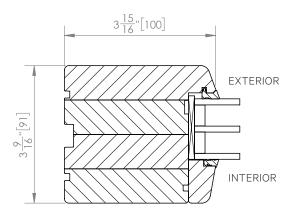




# NanaWall NW Fixed 510 Window to Match NW Wood 540 and NW Acoustical 545

## **Horizontal Cross-Section**



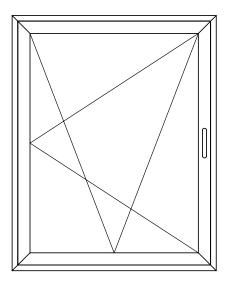


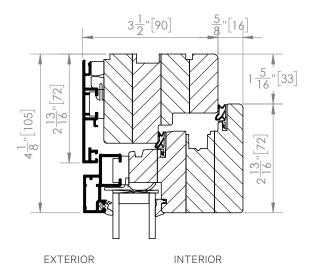


# NanaWall NW TiltTurn 720 Window to Match NW Clad 740

(Available as a single window or multiple unit).

## Elevation

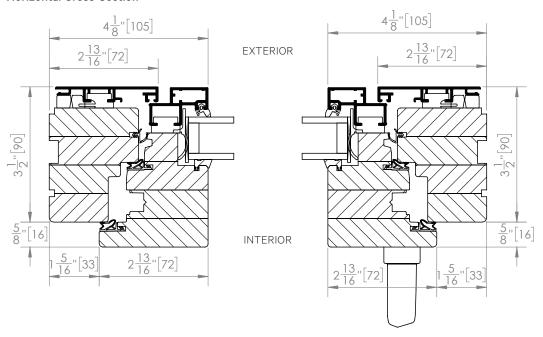


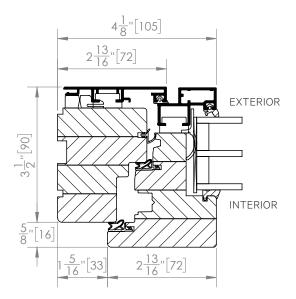


# NanaWall NW TiltTurn 720 Window to Match NW Clad 740

(Available as a single window or multiple unit).

## **Horizontal Cross-Section**

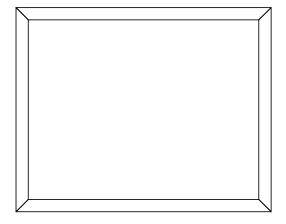


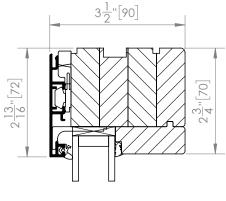




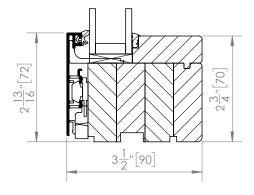
# NanaWall NW Fixed 710 Window to Match NW Clad 740

## Elevation





EXTERIOR INTERIOR



# NanaWall NW Fixed 710 Window to Match NW Clad 740

## **Horizontal Cross-Section**

