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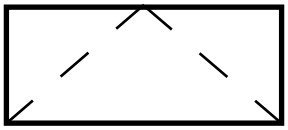

H450 Series
3 ¼" Frame Depth
Project-Out

H450 SERIES PROJECT-OUT

FEATURES

◊ Commercial Framing System
- 3 ¼" main frame
- Historically-correct bevel frame exterior
- Minimum of 0.080" wall thickness
- Dual Euro Groove System
- Available with or without integral nailing fin

◊ Thermally Enhanced Design
- Thermally-broken main frame and vent rails
- Azon pour and debridge thermal break technology

◊ Glazing
- 1" insulating glass

◊ Hardware
- Maxim LP Locking System, 4-Bar Hinge and Roto Hardware on crank out model
- Maxim LP Locking System, 4-Bar Hinge and Push/Pull Cup Hardware on push-out model

◊ Screen
- Easily removable FlexScreen on some operating models

BENEFITS

◊ Historically accurate profiles to help your project meet Historic Preservation codes

◊ The capacity to match exterior colors for unique project facades

◊ The ability to facilitate large sizes for taller and wider window openings

OPTIONS

◊ Available Configurations
- Project-out
- Push-out or Crank-out
- Continuous frame capabilities
- Fixed

◊ Floating Operator Available Configurations
- Multiple configurations of Fixed and Operating units with up to 5 units wide or 5 units tall, all within a continuous frame (*limitations apply*)

◊ Muntin Choices
- Internal or simulated divided lites available

◊ Hardware
- Limit Travel Accessories

◊ Screen
- Wicket Screen (push-out model only)

◊ Glazing
- Multiple Low-E and argon glazing choices
- Glazing pocket can accept 1 3/8" insulating glass for sound attenuation purposes
- Capillary tubes
- Wide variety of glazing, tinting and thickness options

◊ Panning & Trim Choices
- Wide variety of panning, receptor and trim available

◊ Mulling
- Wide variety of structural mulls

PERFORMANCE

◊ Structural & Thermal (test reports or thermal simulations available upon request)

Model	Project-Out
Test Size:	60" x 36"
NAFS Rating	CW-PG90-AP
Air Infiltration (cfm/ft²)	<0.30
Water (No Penetration) P.S.F.	12
U-Value (ranges based on multiple Low-E/Argon combinations)	0.39-0.59
SHGC (ranges based on multiple Low-E/Argon combinations)	0.14-0.48

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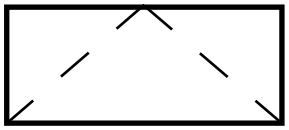

H450 Series
3 ¼" Frame Depth
Project-Out

H450 PROJECT-OUT

WITH ROTO HARDWARE

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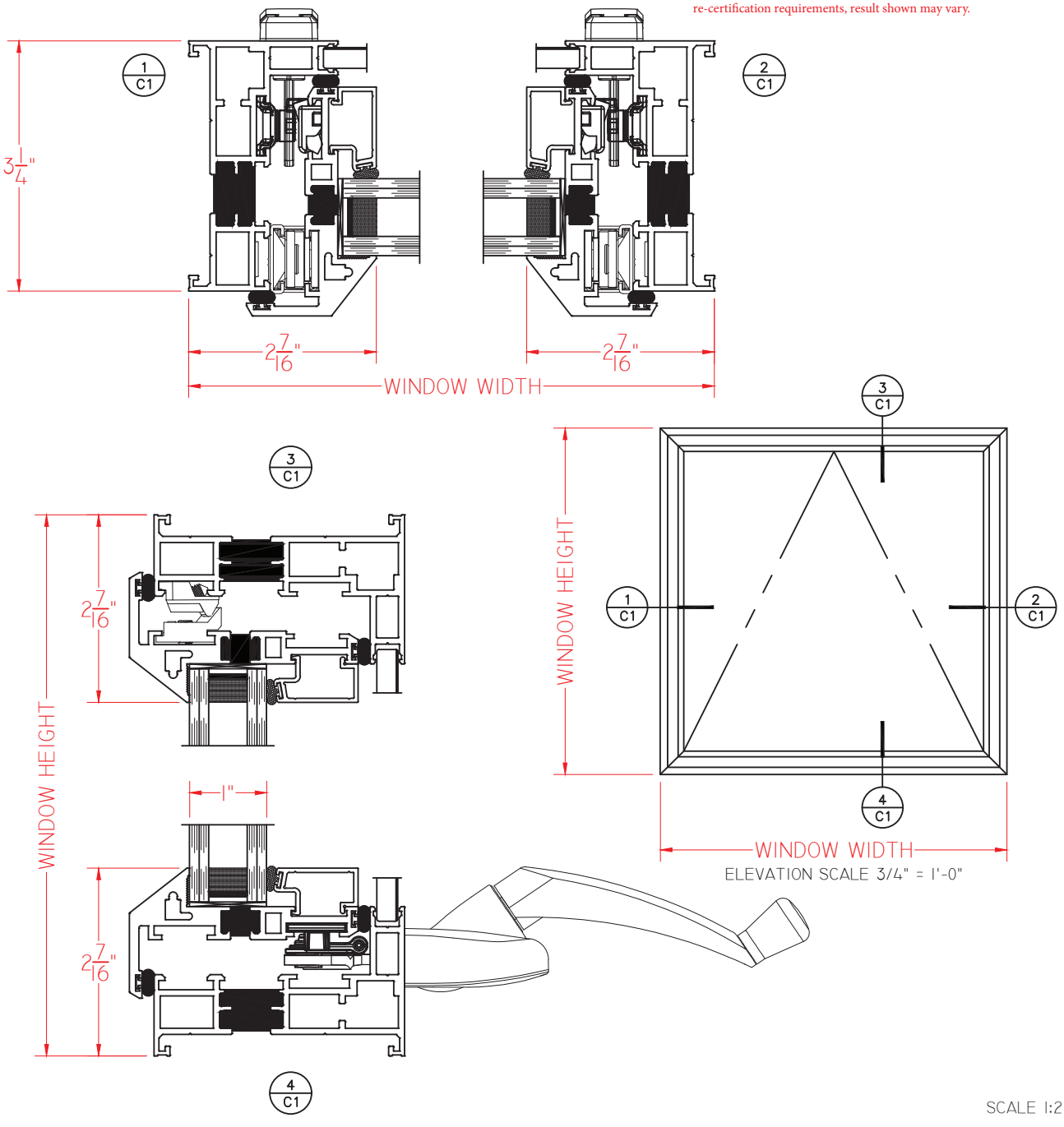

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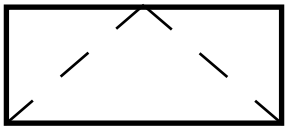

H450 Series
3 ¼" Frame Depth
Project-Out

H450 PROJECT-OUT

WITH PUSH-PULL
CUP HARDWARE

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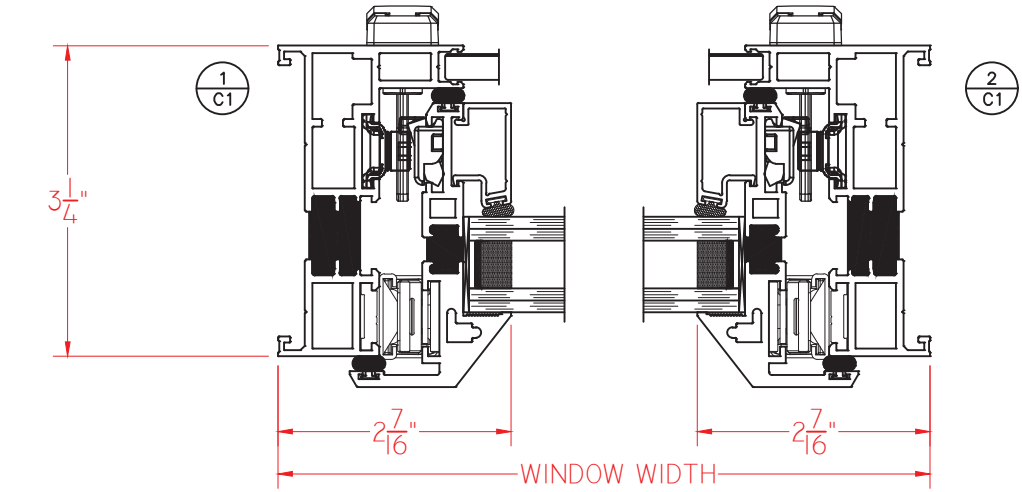

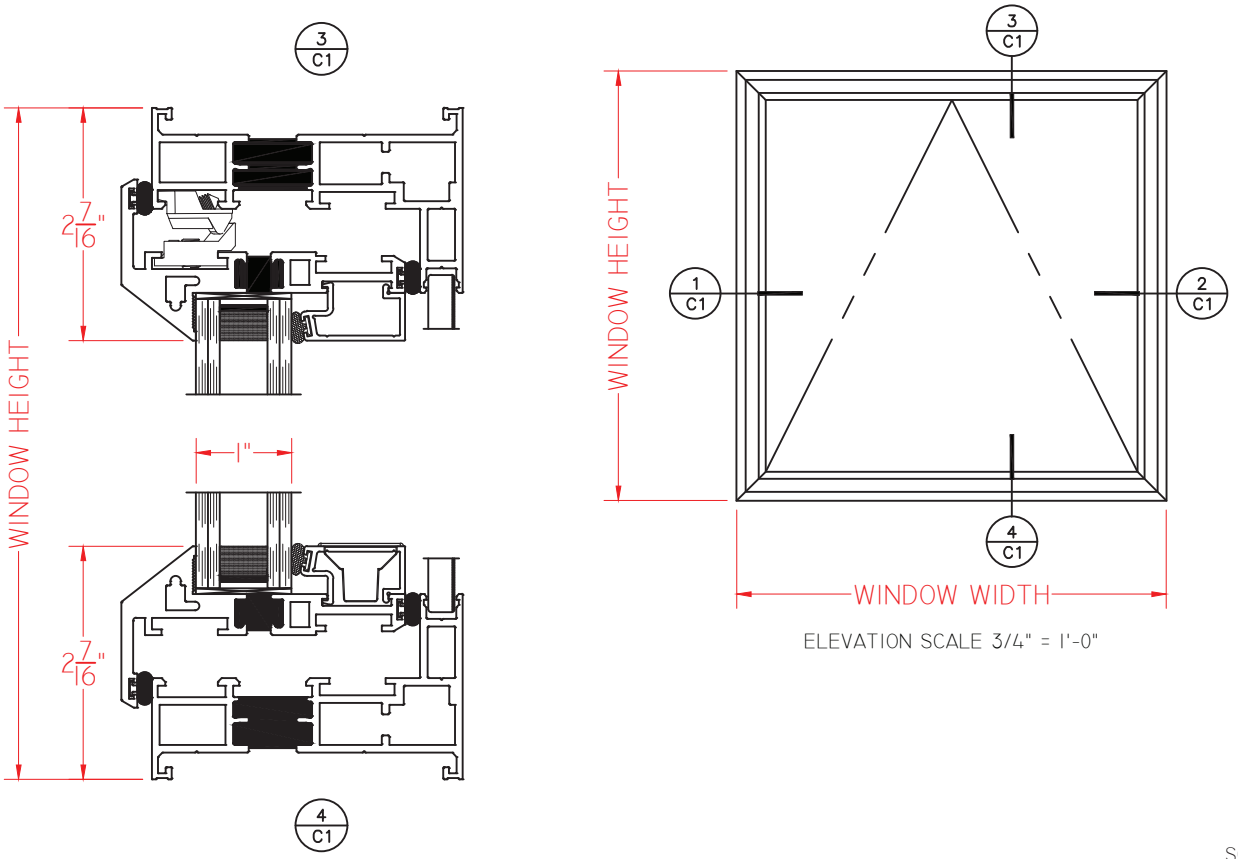

ELEVATION SCALE 3/4" = 1'-0"

SCALE 1:2

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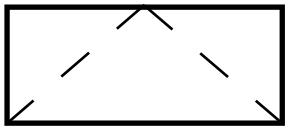

H450 Series
3 ¼" Frame Depth
Project-Out

H450 PROJECT-OUT/PROJECT-OUT (STACKED)

WITH ROTO HARDWARE

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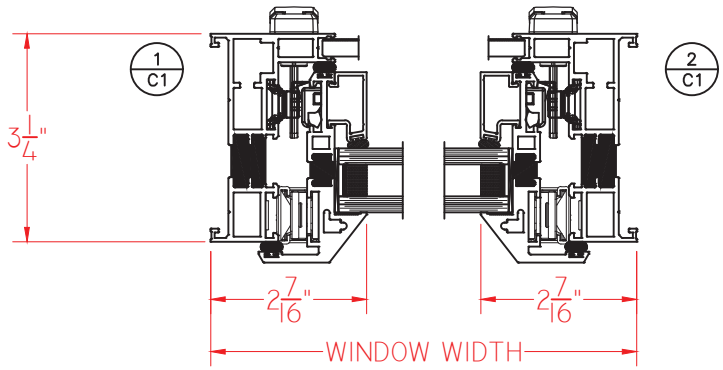
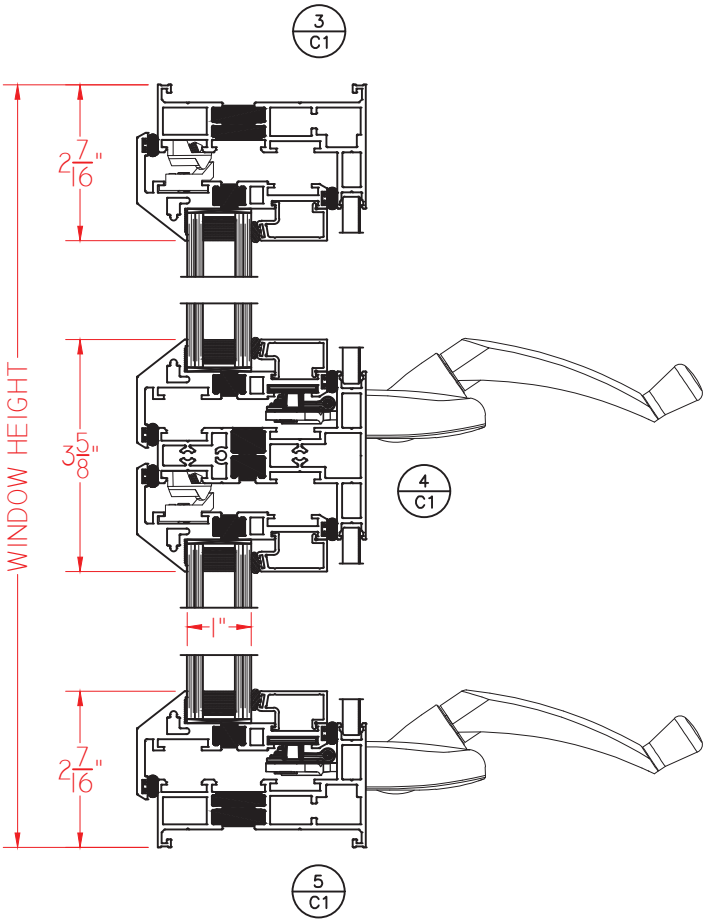
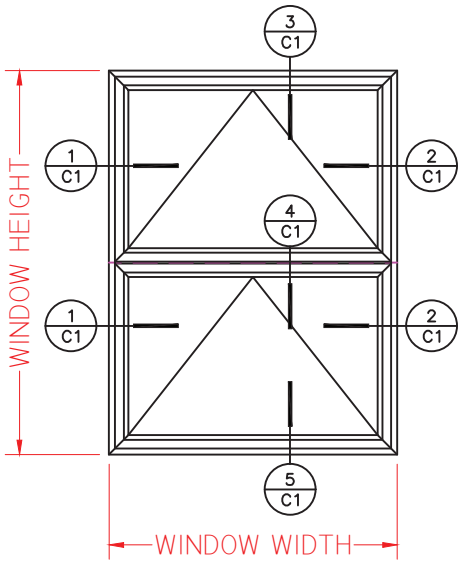




SCALE 1:3



ELEVATION SCALE 1/2" = 1'-0"

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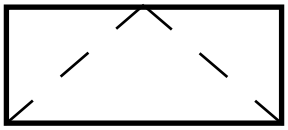

H450 Series
3 ¼" Frame Depth
Project-Out

H450 PROJECT-OUT/PROJECT-OUT (STACKED)

WITH PUSH-PULL CUP HARDWARE

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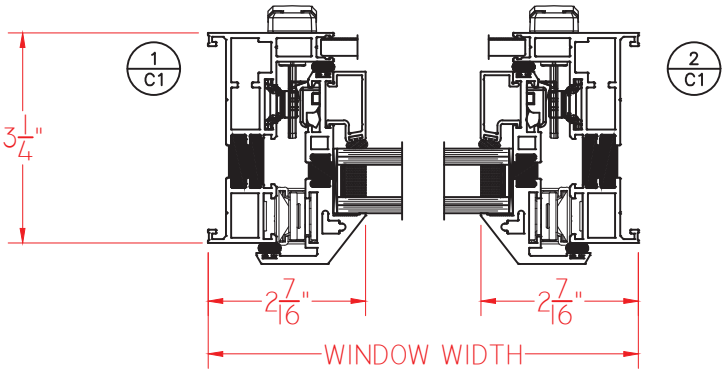

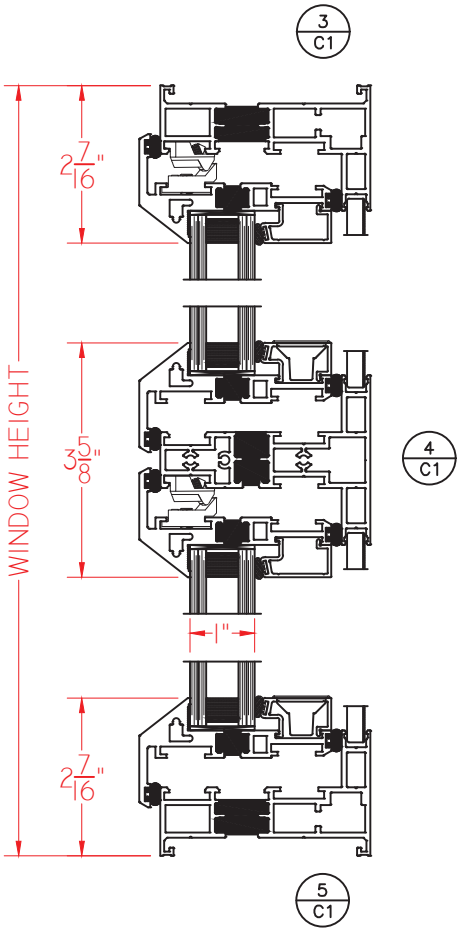

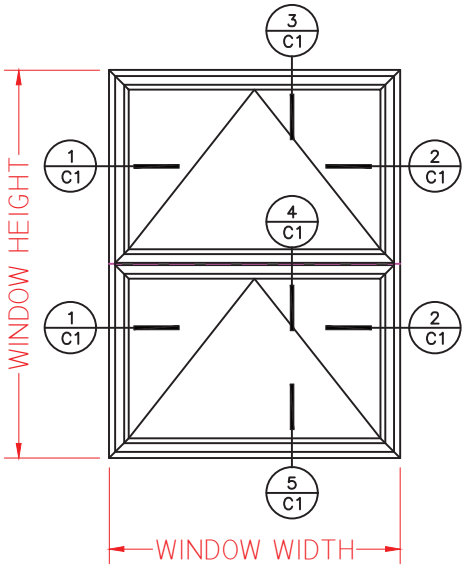

ELEVATION SCALE 1/2" = 1'-0"

SCALE 1:3

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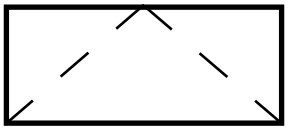

H450 Series
3 ¼" Frame Depth
Project-Out

H450 PROJECT-OUT/FIXED (SIDE-BY-SIDE)

WITH ROTO HARDWARE

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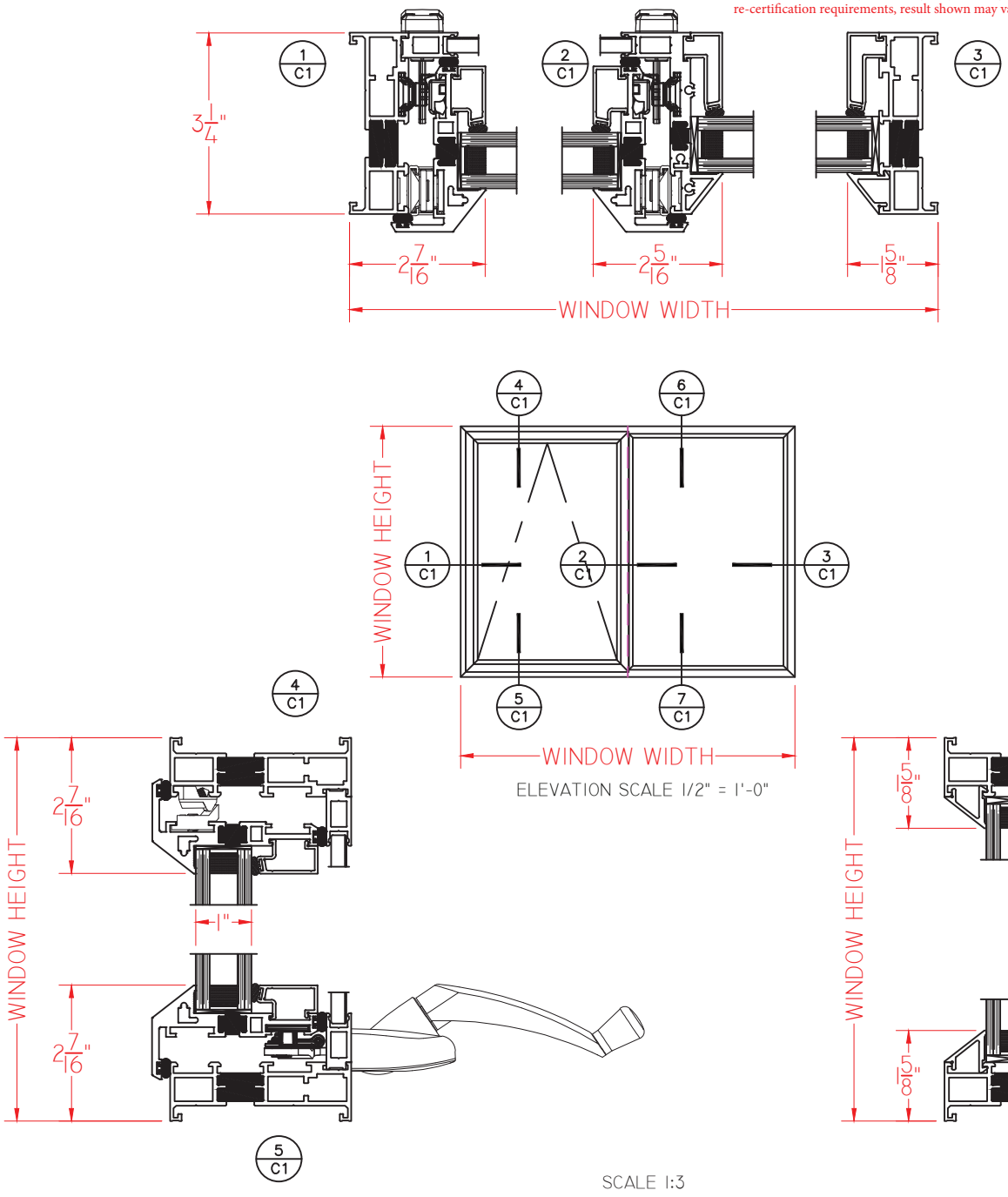

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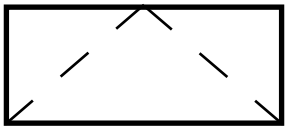

H450 Series
3 ¼" Frame Depth
Project-Out

H450 PROJECT-OUT/FIXED (STACKED)

WITH ROTO HARDWARE

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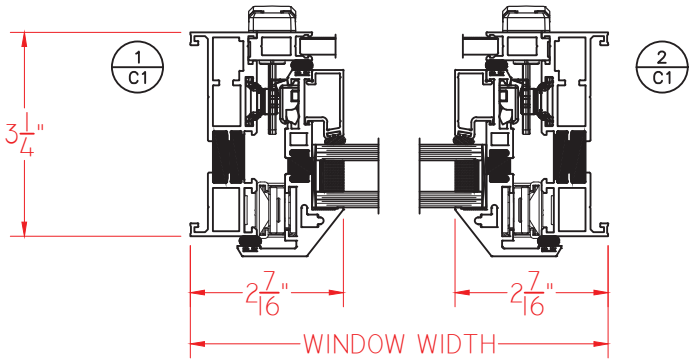

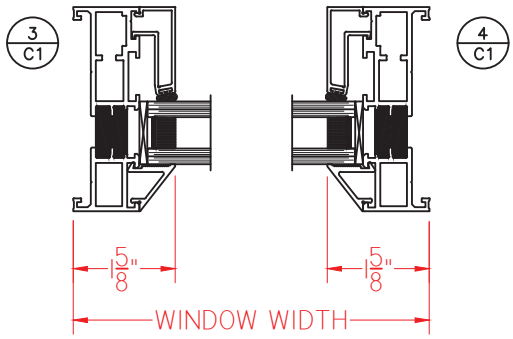

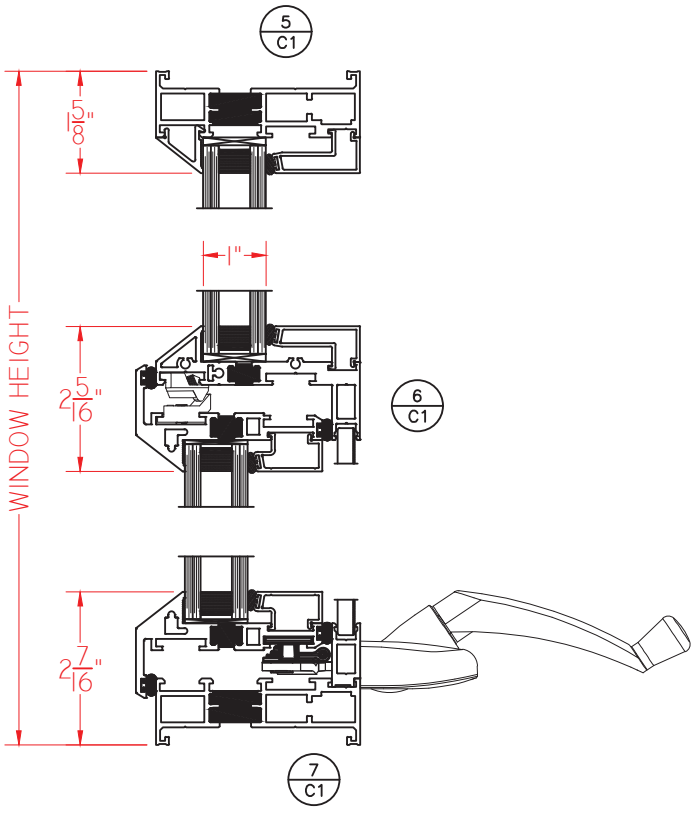

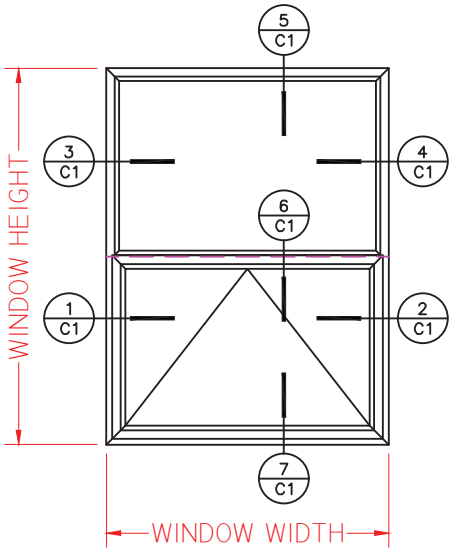

ELEVATION SCALE 1/2" = 1'-0"

SCALE 1:3

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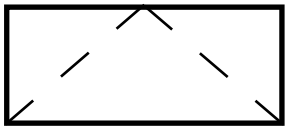

H450 Series
3 ¼" Frame Depth
Project-Out

H450 FIXED/PROJECT-OUT (STACKED)

WITH PUSH-PULL
CUP HARDWARE

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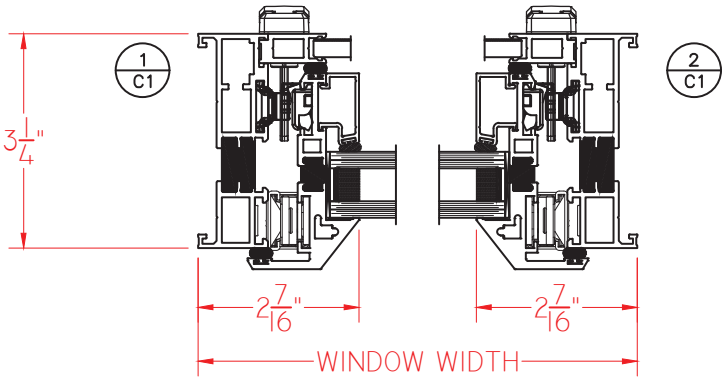

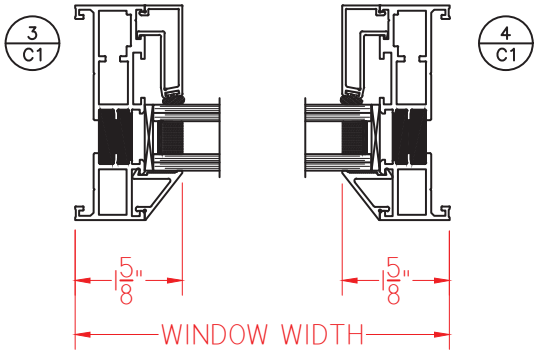

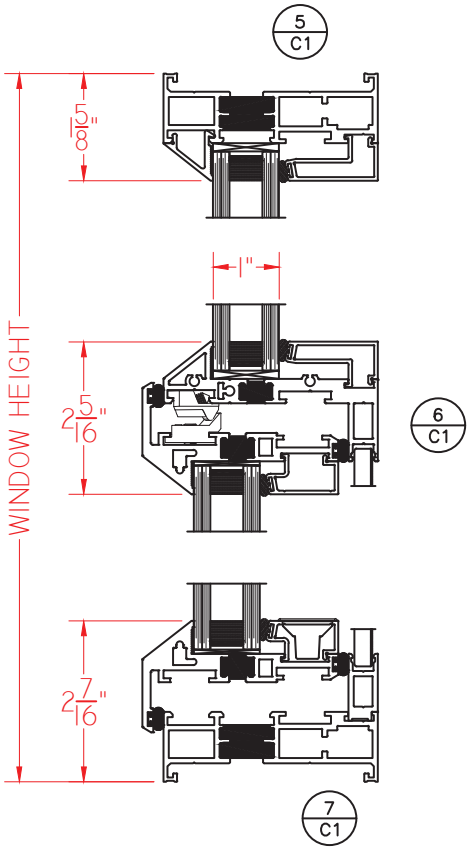

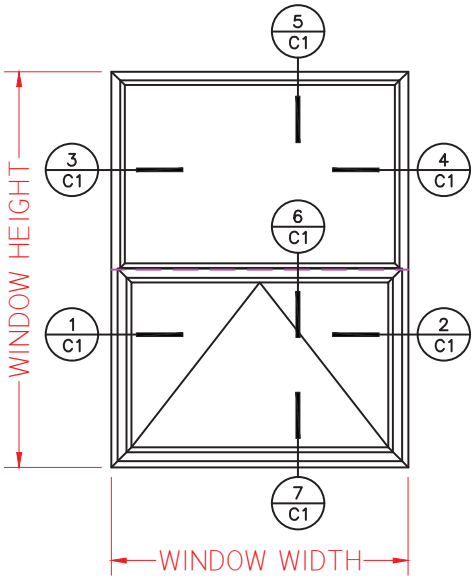

ELEVATION SCALE 1/2" = 1'-0"

SCALE 1:3

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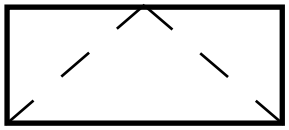

H450 Series
3 ¼" Frame Depth
Project-Out

H450 FLOATING OPERATOR

WITH PUSH-PULL
CUP HARDWARE

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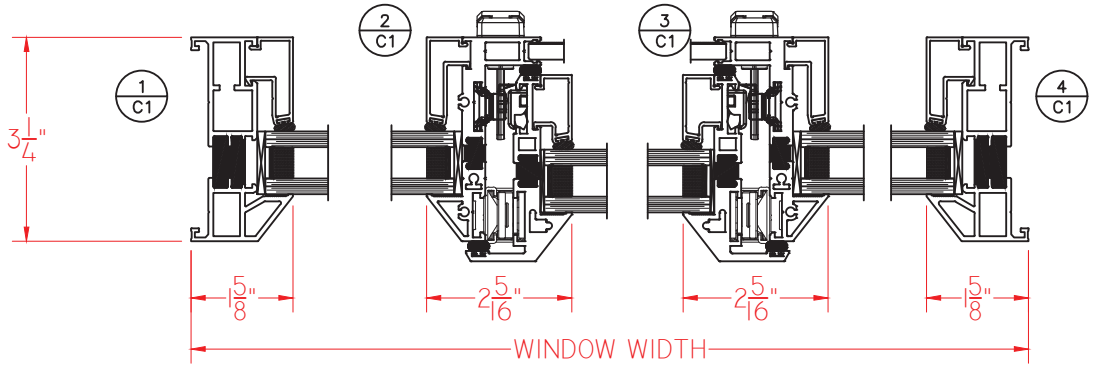

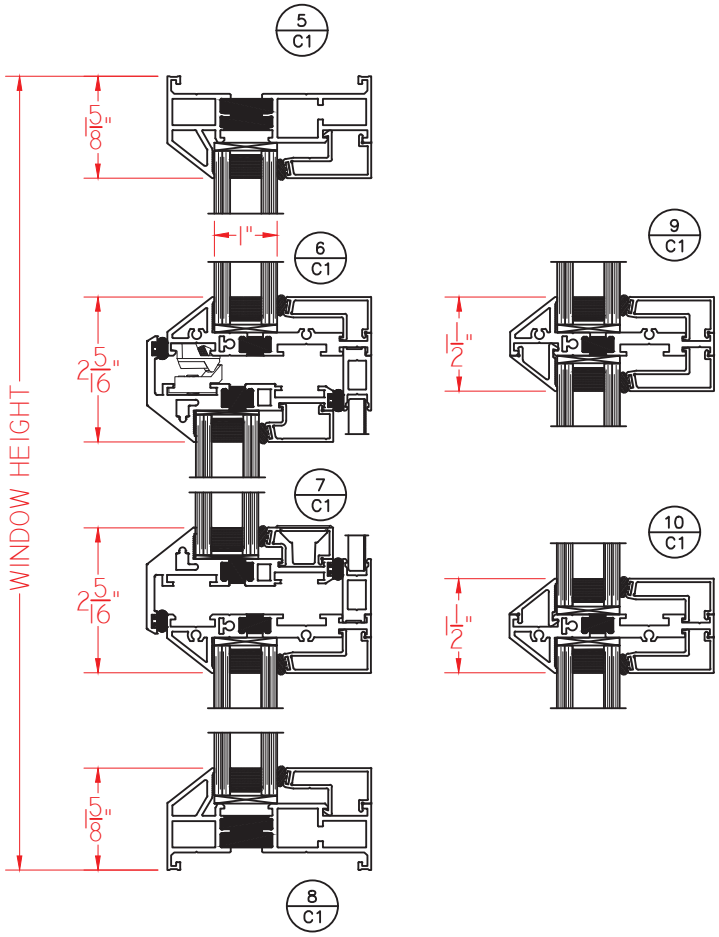

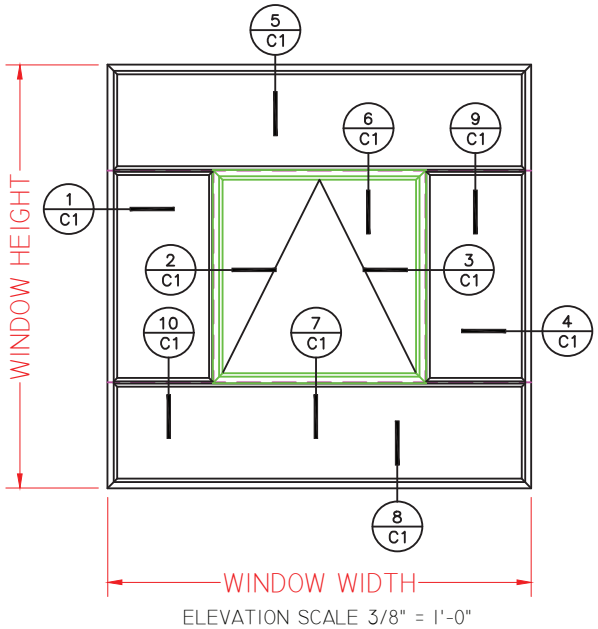

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