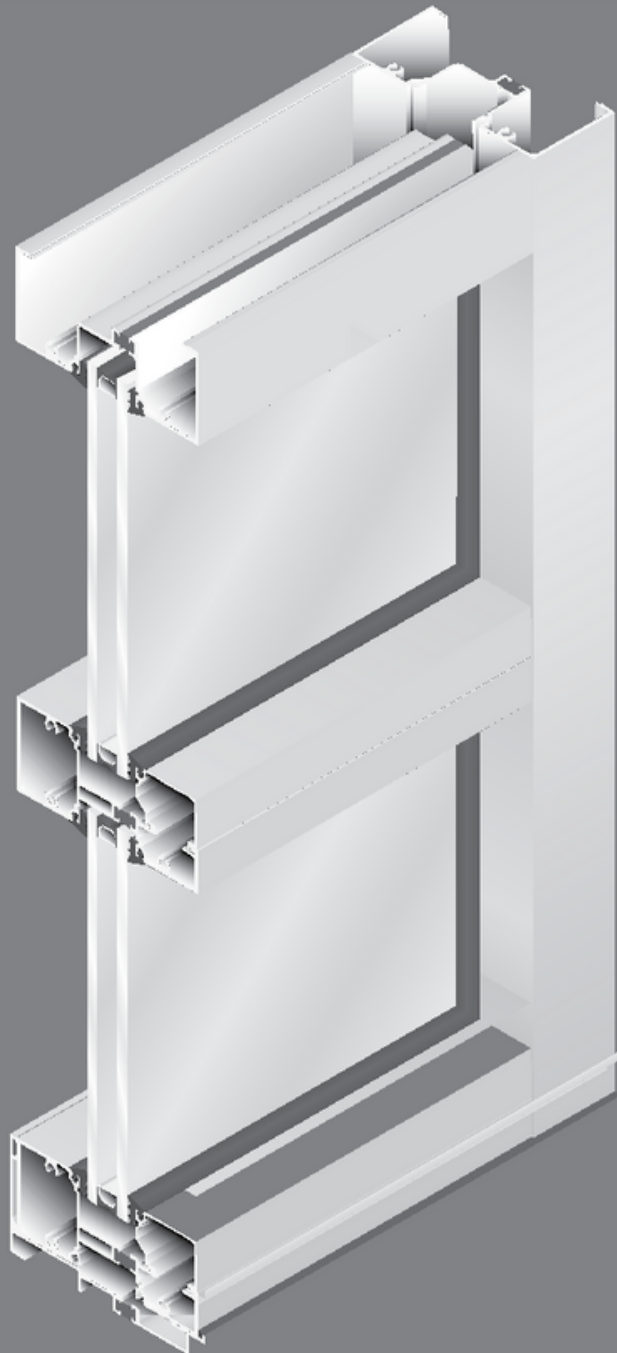


ACRO

ALUMINUM INC.

SECTION B1

**SERIES T451 STOREFRONT SYSTEM
2" X 4 1/2" for 1" GLAZING**



SECTION B1

Series T451 (Thermal) STOREFRONT SYSTEM Series 451 (Non-Thermal) STOREFRONT SYSTEM 2" X 4½ FOR 1" GLAZING

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SERIES T451 (Thermal)

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SERIES 451 (Non-Thermal)

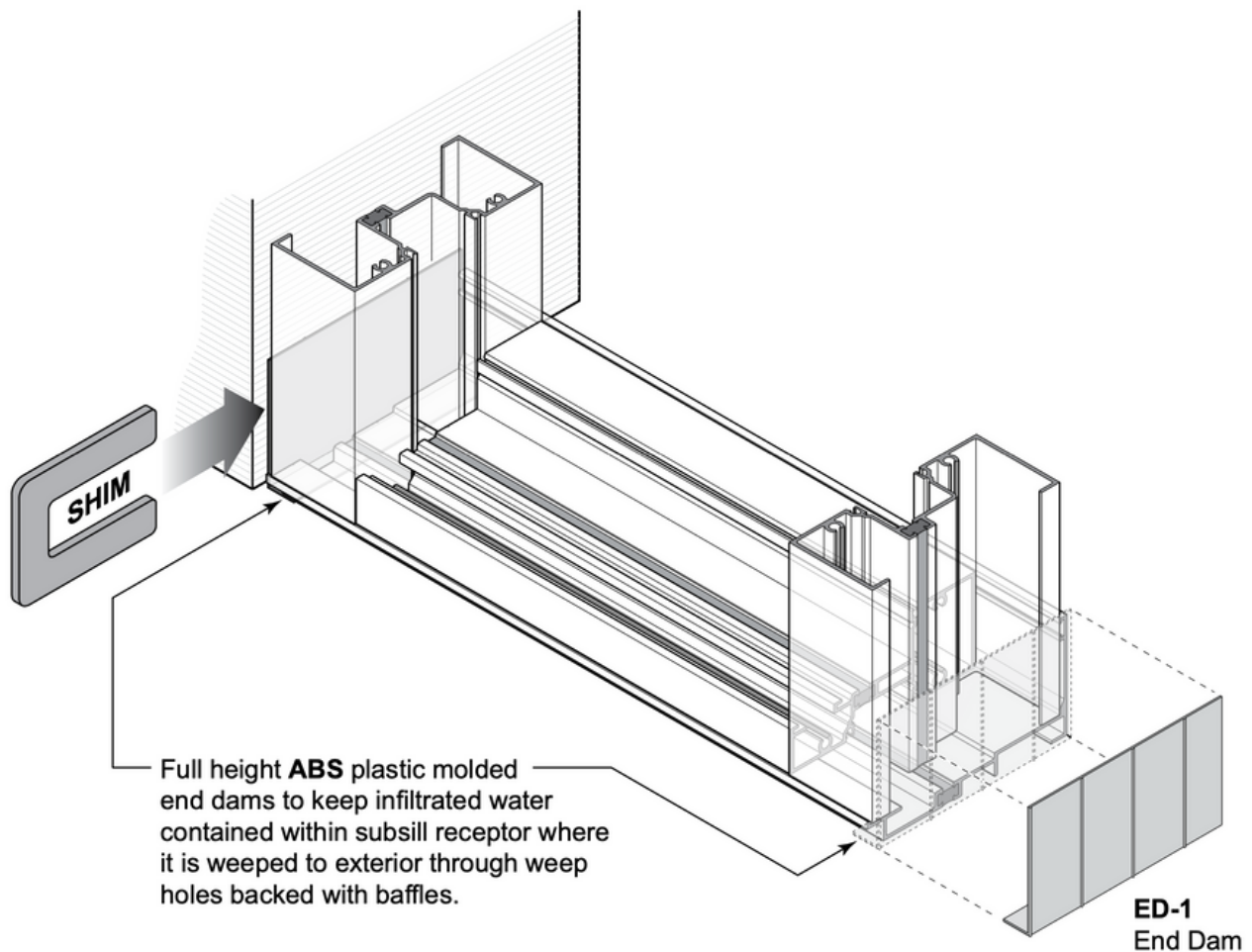
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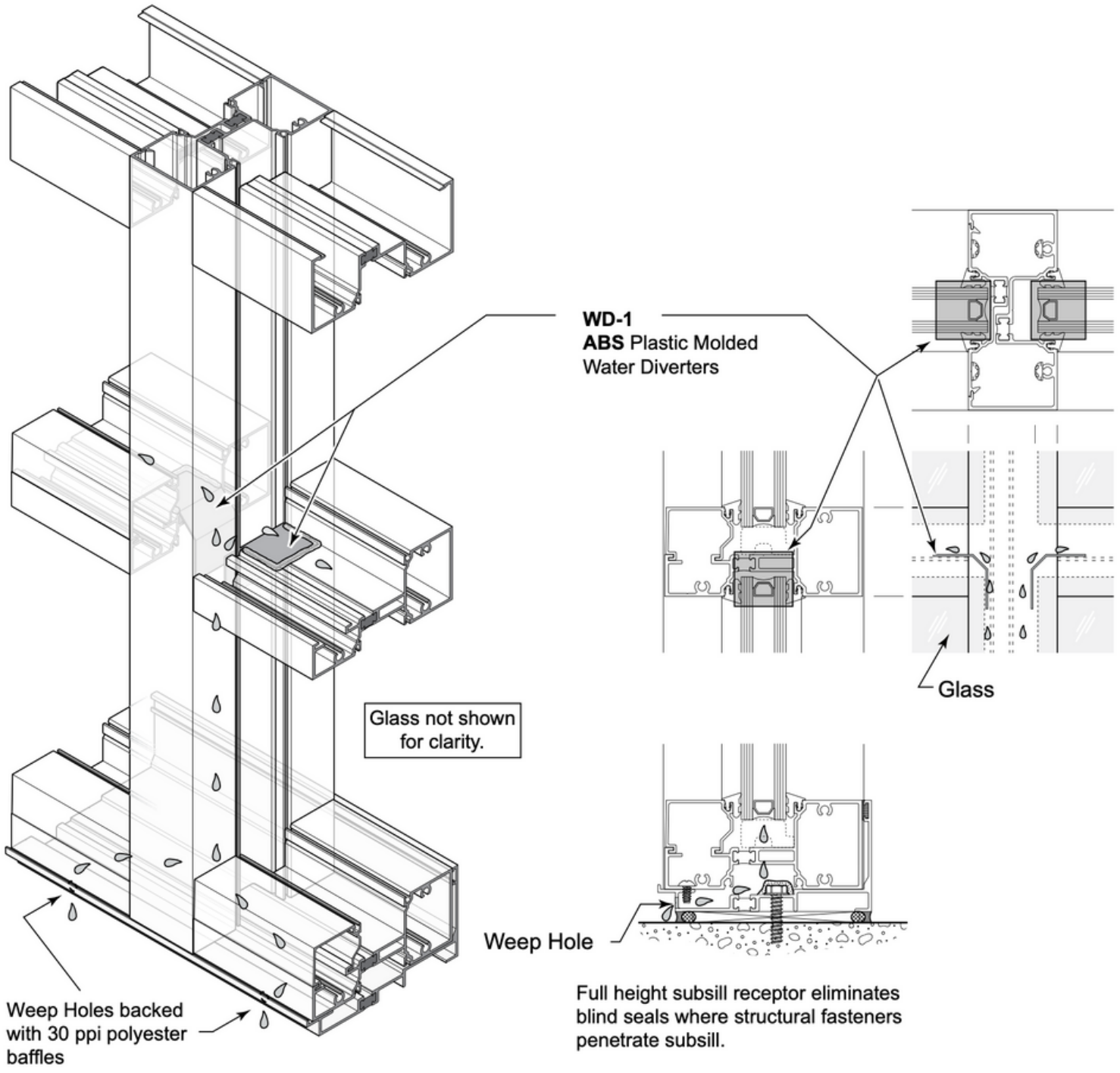
Series T451 Features:

Series **T451** is a commercial flush glazed system for exterior glazing ground floor applications or interior glazing when used as a low rise window wall system. The system is designed for the vertical mullions and filler plates to run through for optimum strength. All ACRO Aluminum framing is mechanically jointed using self-tapping screws into integral splines extruded within the body of the section. Jointing is by butt joints with applied sealant to protect against water egress and to reduce air infiltration.

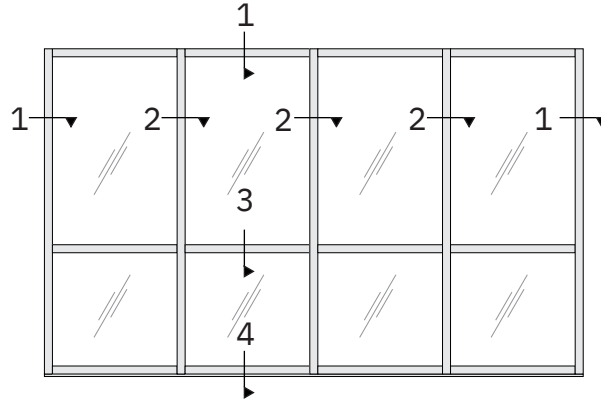
System features:

- ▶ Sightline 2" x 4½" for 1" glazing infill
- ▶ May also be used for Non-thermal applications (**Series 451**)
- ▶ EPDM glazing gaskets
- ▶ Shop fabrication and precision punch die fabrication for screw spline holes
- ▶ Shop supervision and quality control
- ▶ Ladder assembly for transportation to job site for quicker installation
- ▶ Heavy duty mullions and/or steel reinforcement to meet high wind velocity requirements
- ▶ Sill receptor allows for heads of structural fasteners in subsill to be sealed prior to installing ladder panels
- ▶ Framing accepts **Series 200 and 300** entrance doors

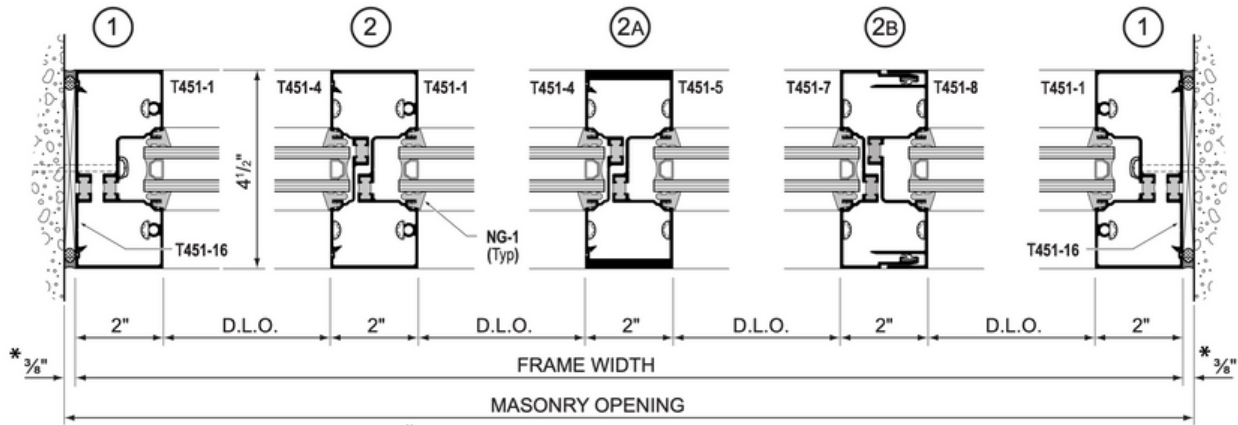




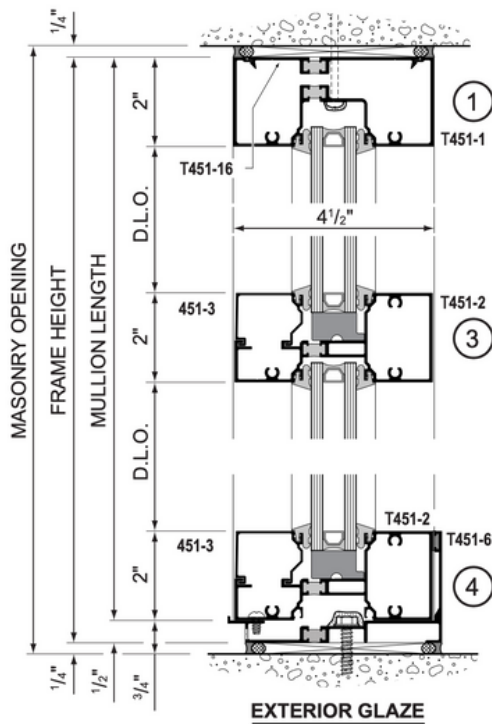
STANDARD FRAMING DETAILS



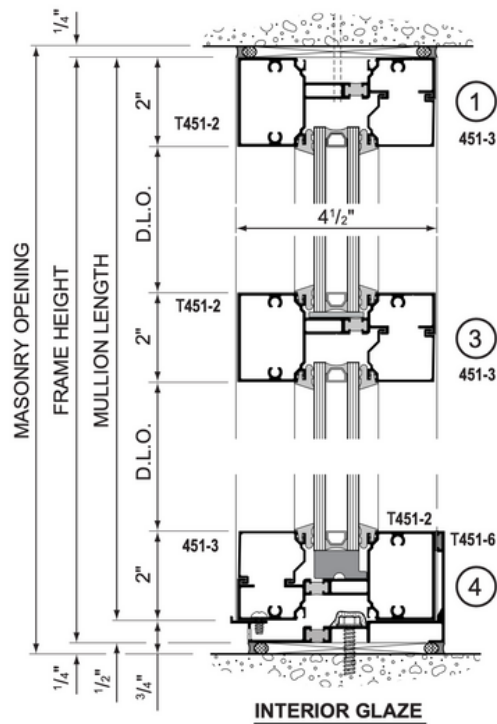
KEY ELEVATION



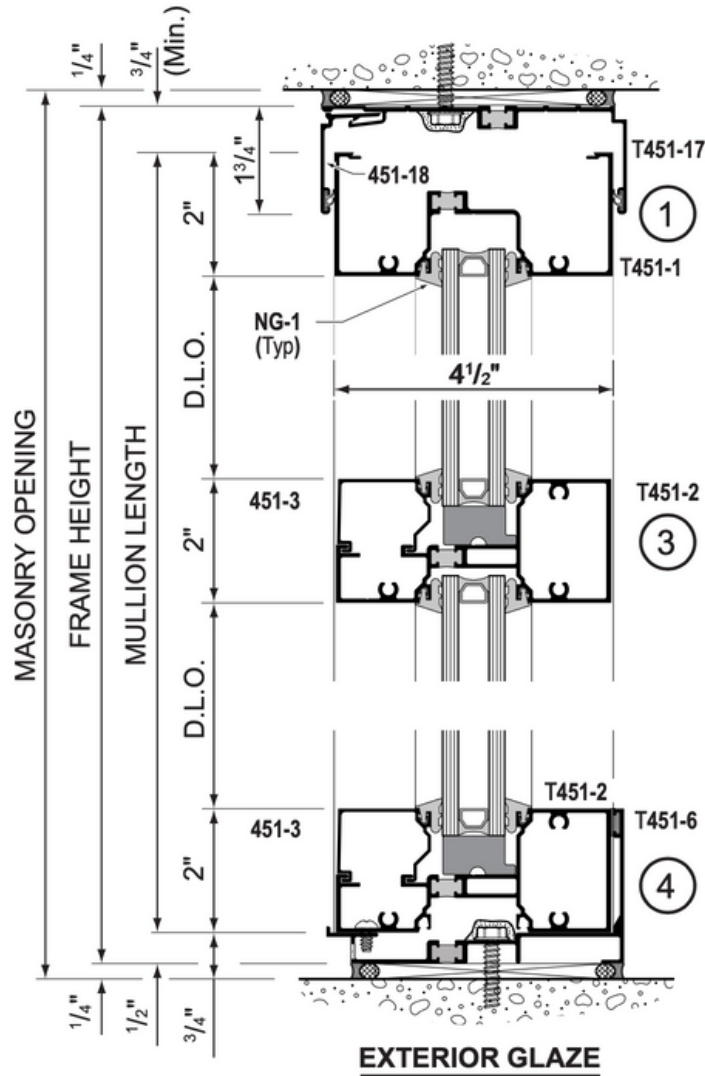
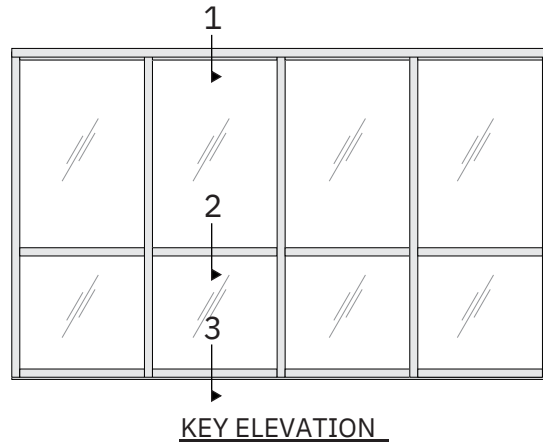
*Includes 1/8" allowance for subsill receptor



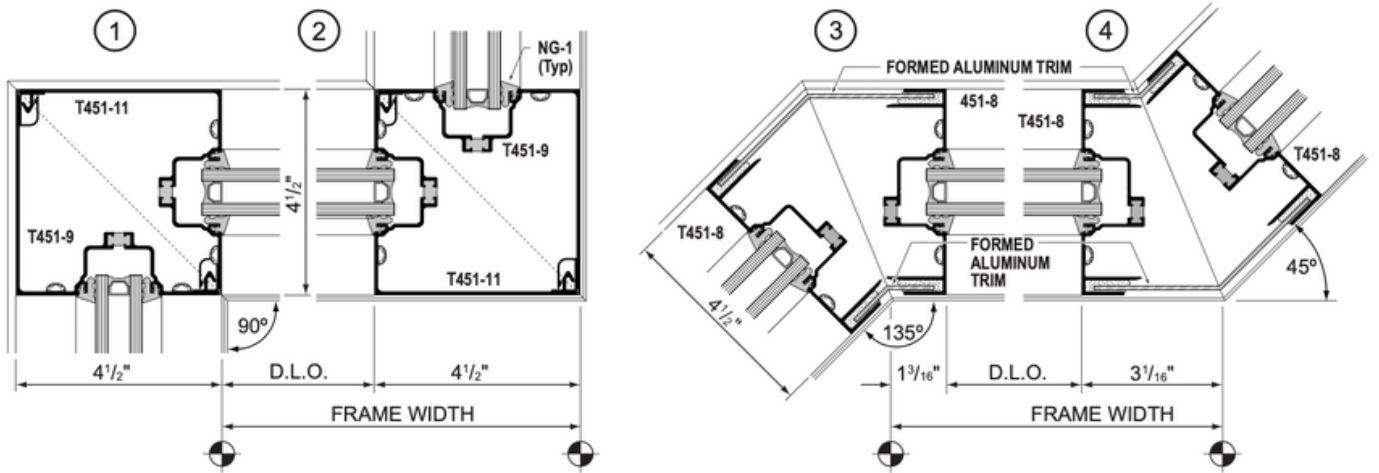
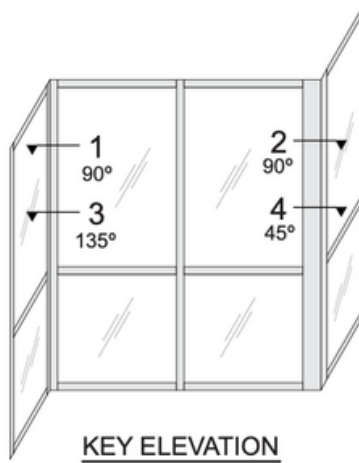
EXTERIOR GLAZE



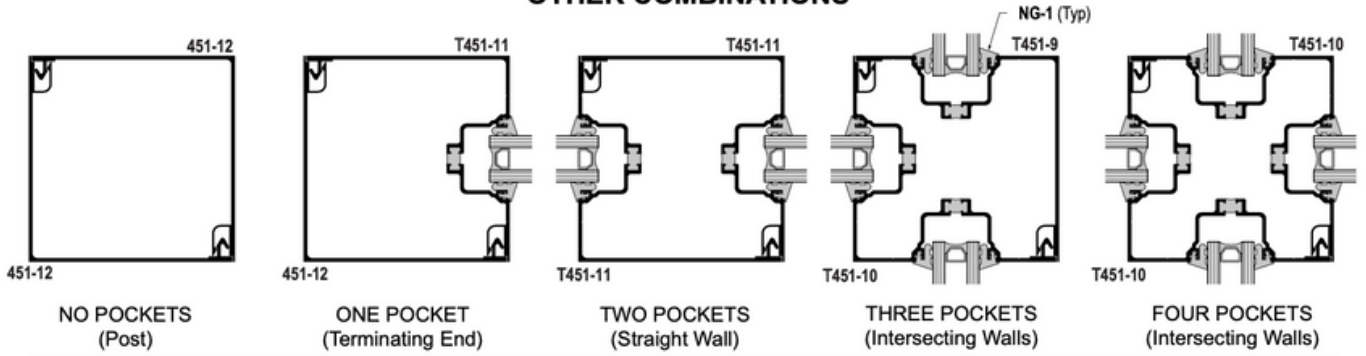
INTERIOR GLAZE



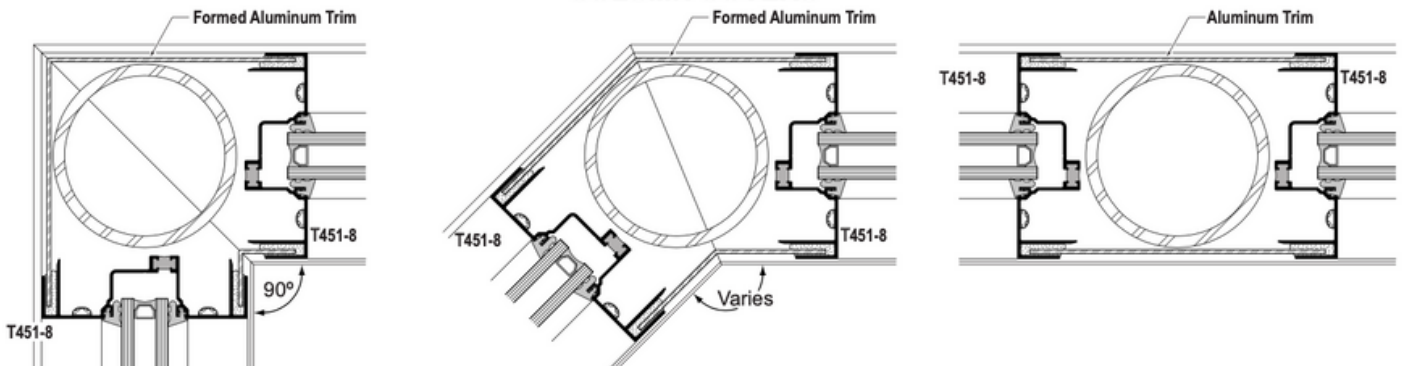
CORNER DETAILS



OTHER COMBINATIONS



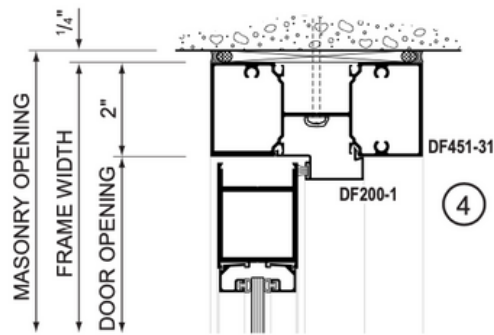
COLUMN COVERS



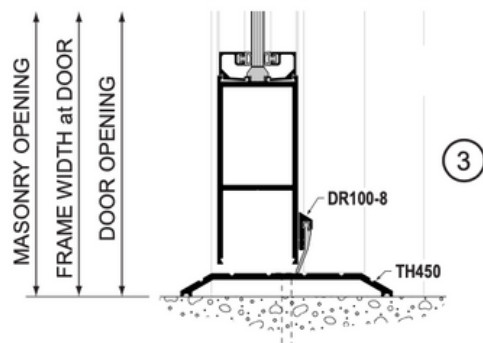
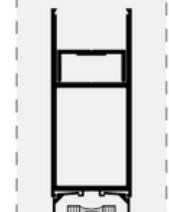
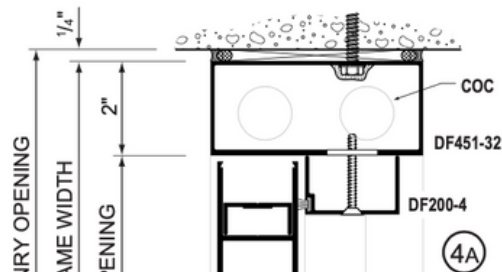
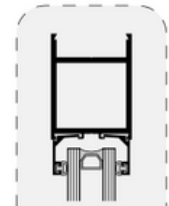
HORIZONTAL OFFSET CONTINUOUS HINGE DOORFRAME DETAILS



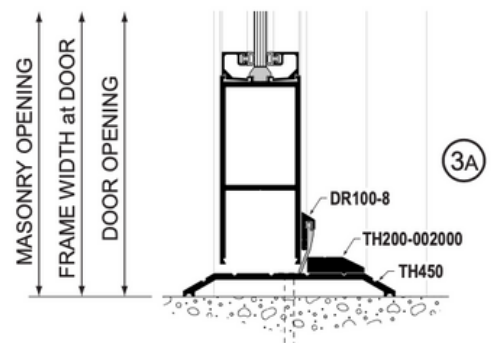
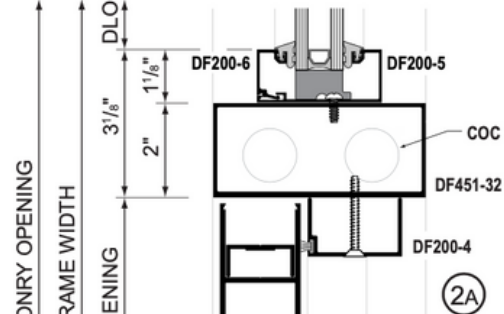
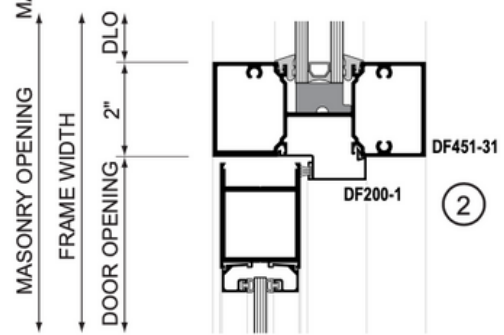
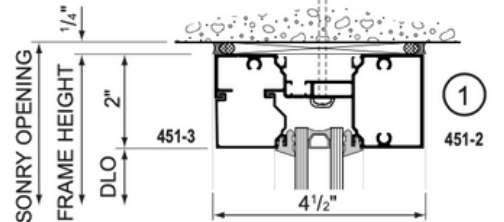
**KEY ELEVATION
ENTRANCE**



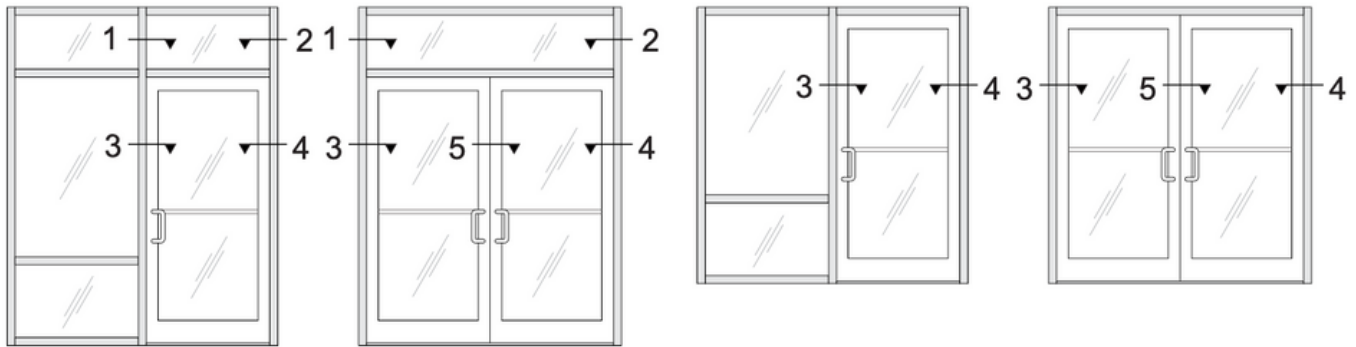
1" Insulated Glass



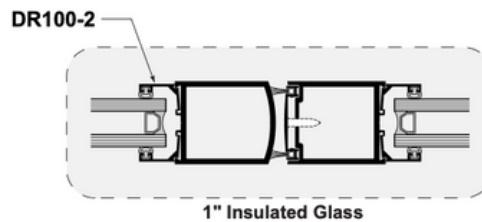
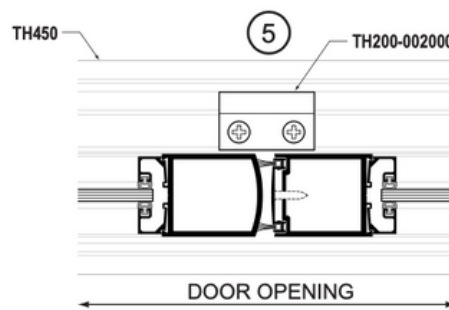
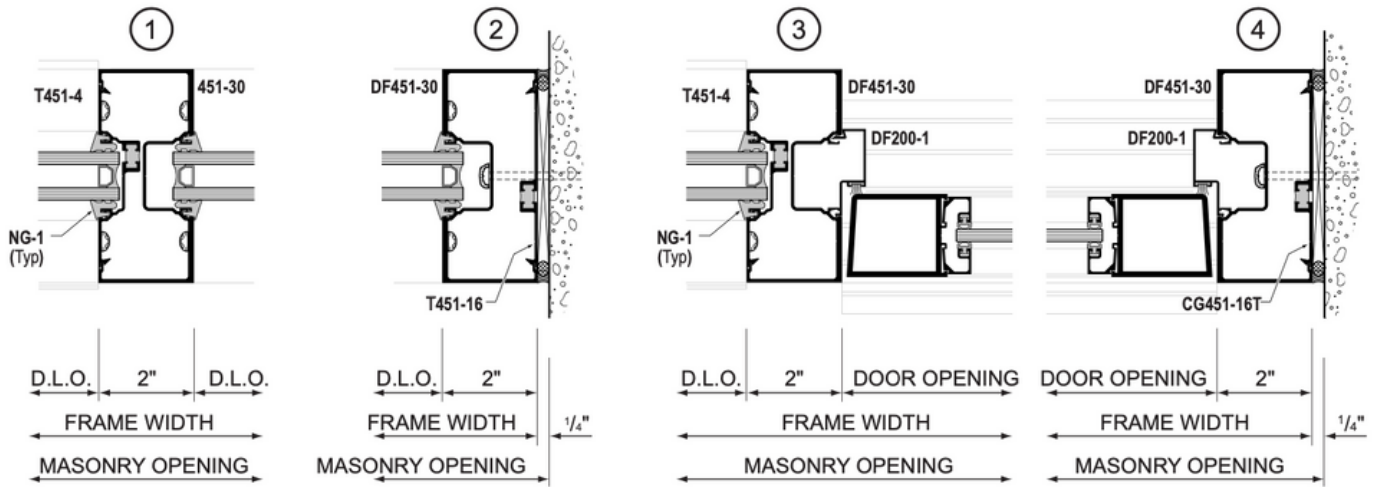
1" Insulated Glass



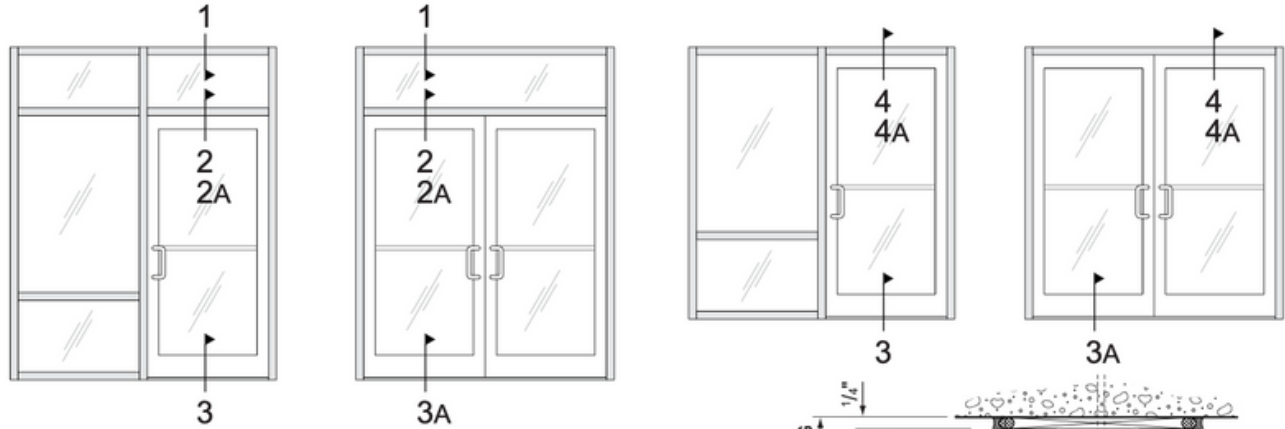
VERTICAL OFFSET CONTINUOUS HINGE DOORFRAME DETAILS



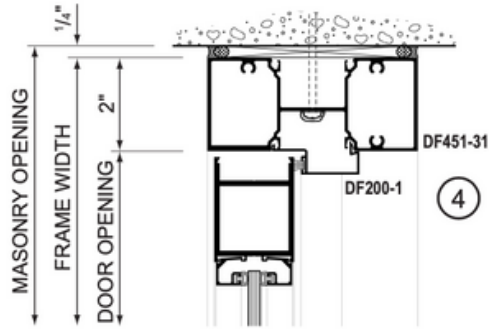
**KEY ELEVATION
ENTRANCE**



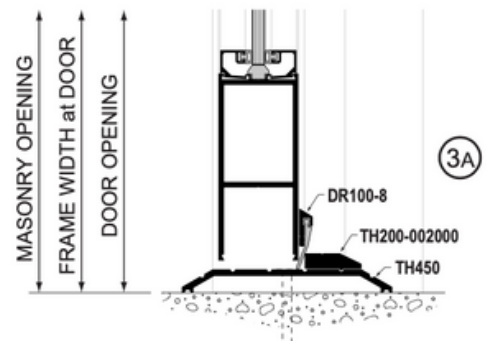
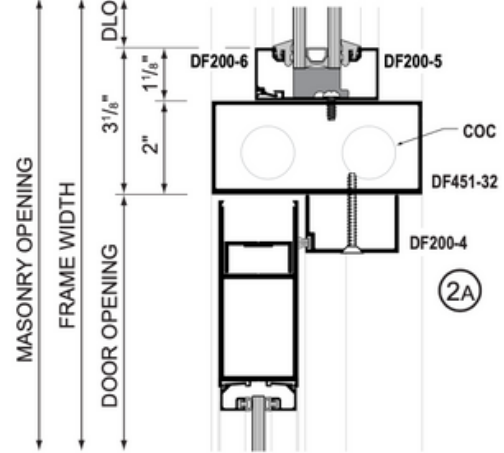
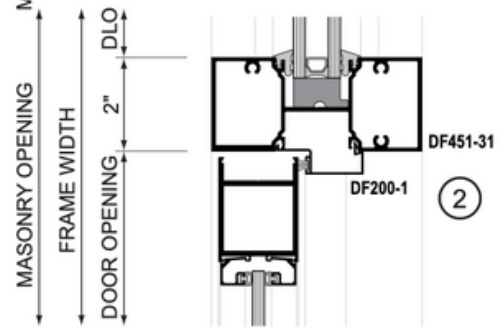
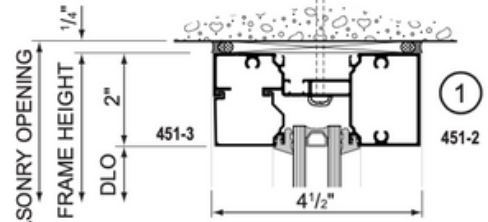
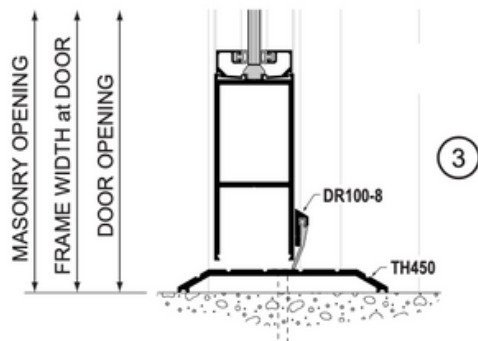
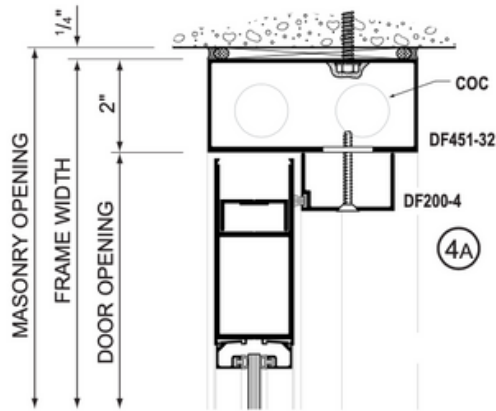
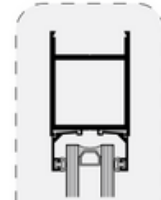
HORIZONTAL OFFSET BUTT HUNG DOORFRAME DETAILS



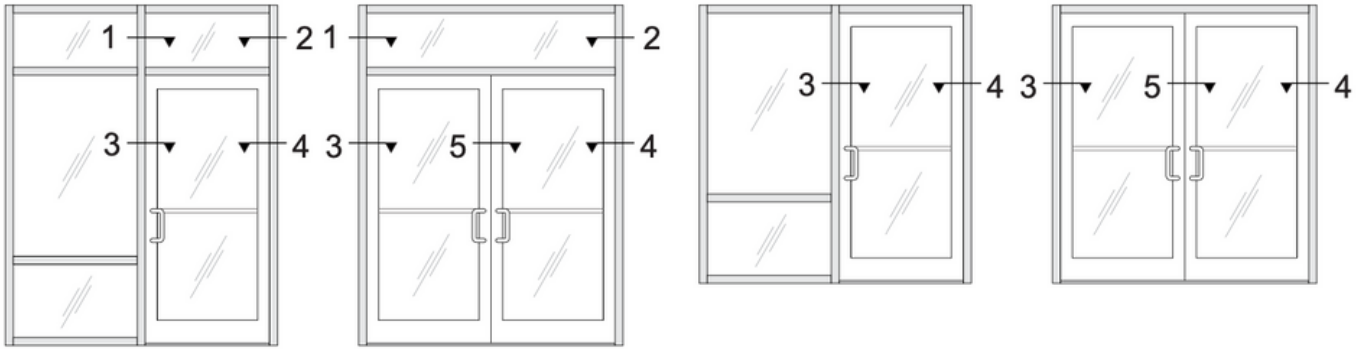
**KEY ELEVATION
ENTRANCE**



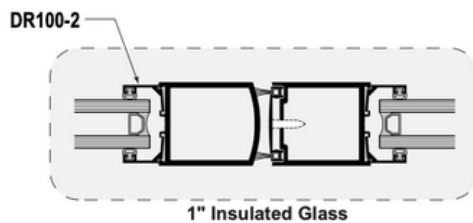
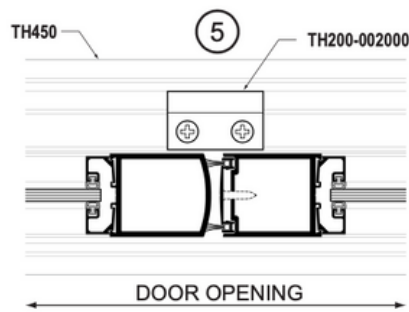
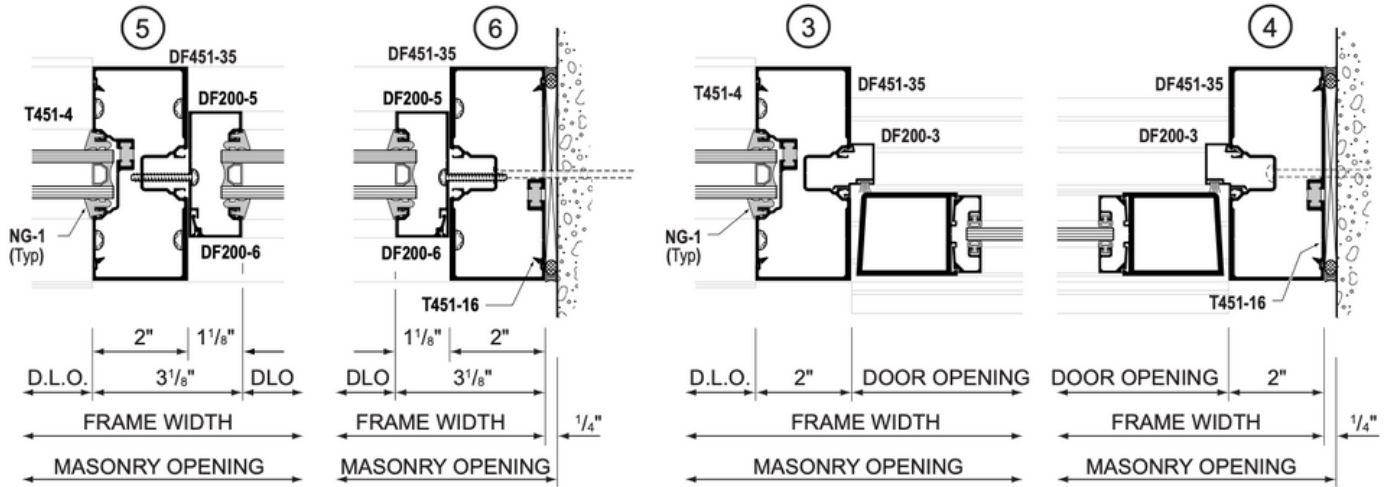
1" Insulated Glass

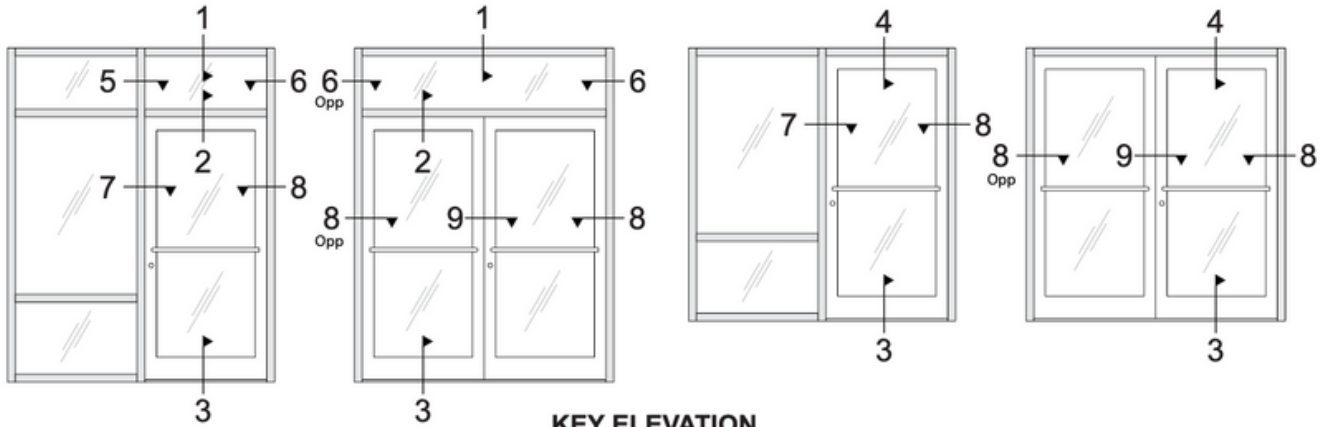


VERTICAL OFFSET BUTT HUNG DOORFRAME DETAILS

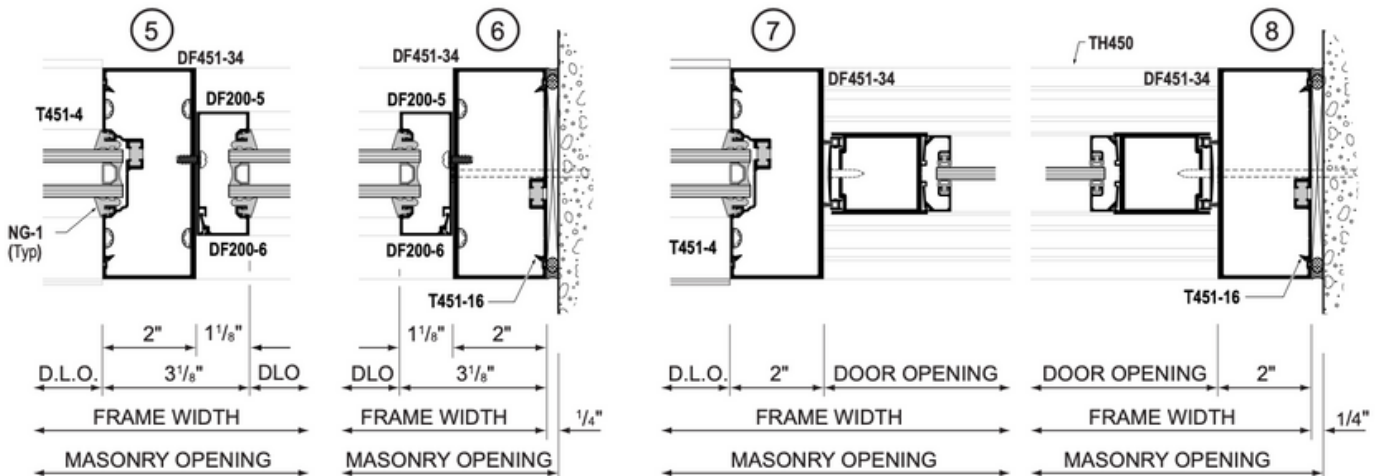
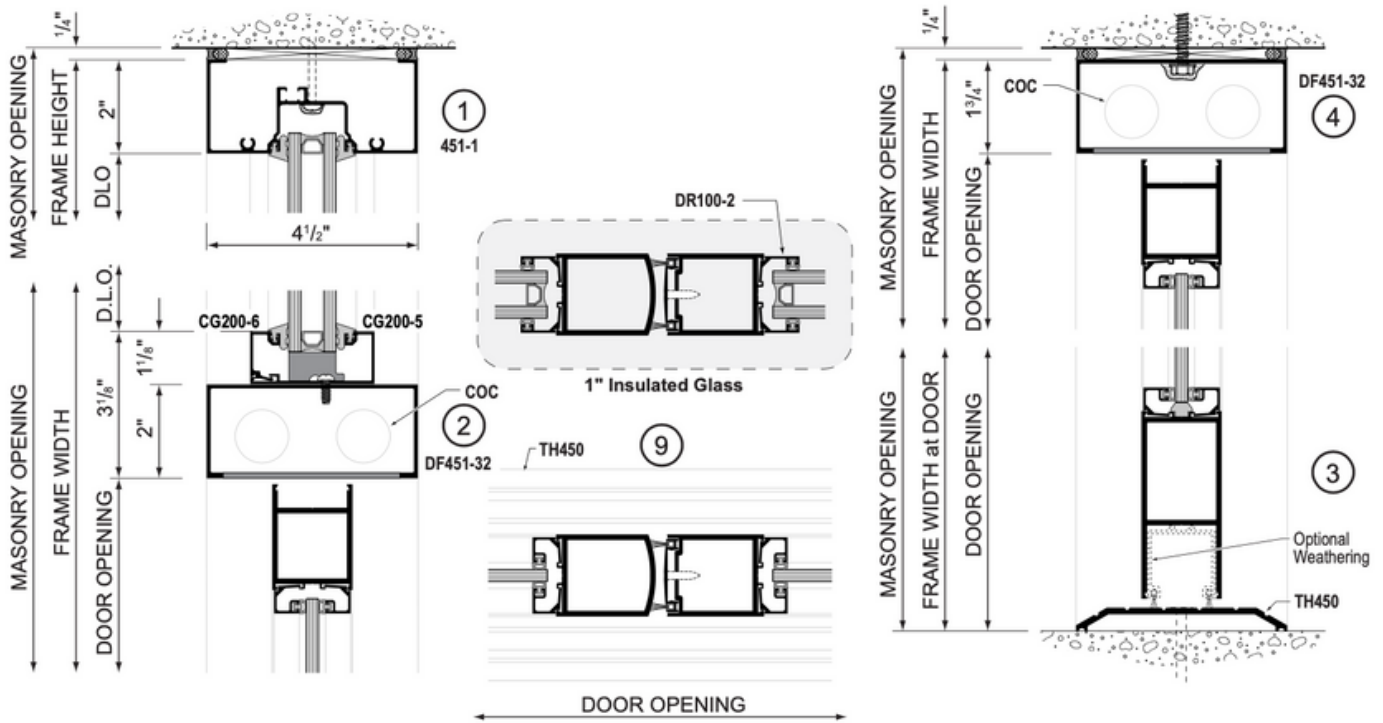


**KEY ELEVATION
ENTRANCE**





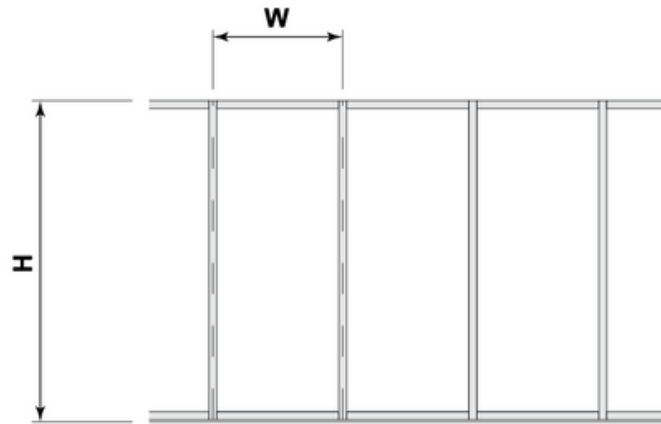
**KEY ELEVATION
ENTRANCE**



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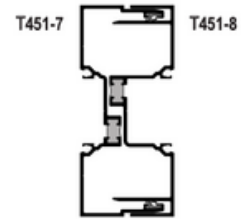
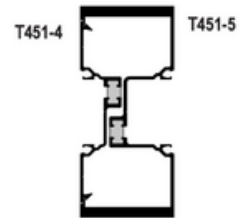
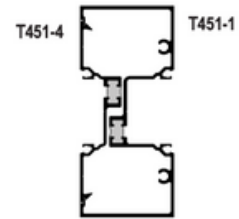
WIND LOAD CHARTS

(Assumes Total Lateral Support of flanges)

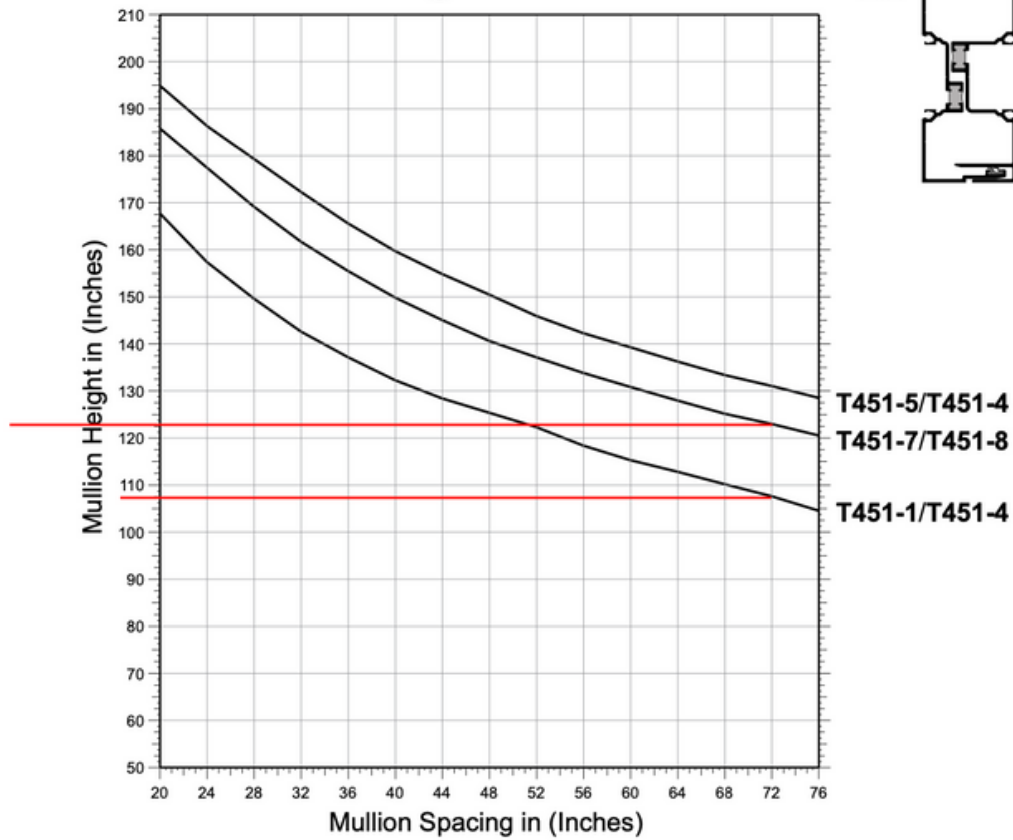


EXAMPLE ELEVATION

H = Mullion Height
W = Mullion Spacing



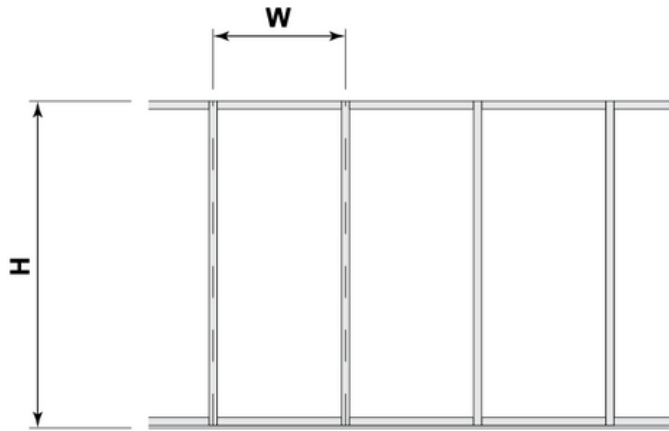
T451 @ 20 PSF



Curves are based on deflection limited to L/175 not to exceed 1" and total lateral support of flanges.

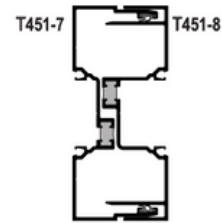
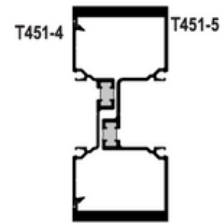
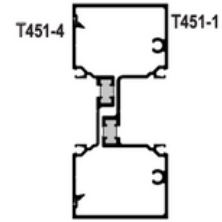
WIND LOAD CHARTS

(Assumes Total Lateral Support of flanges)

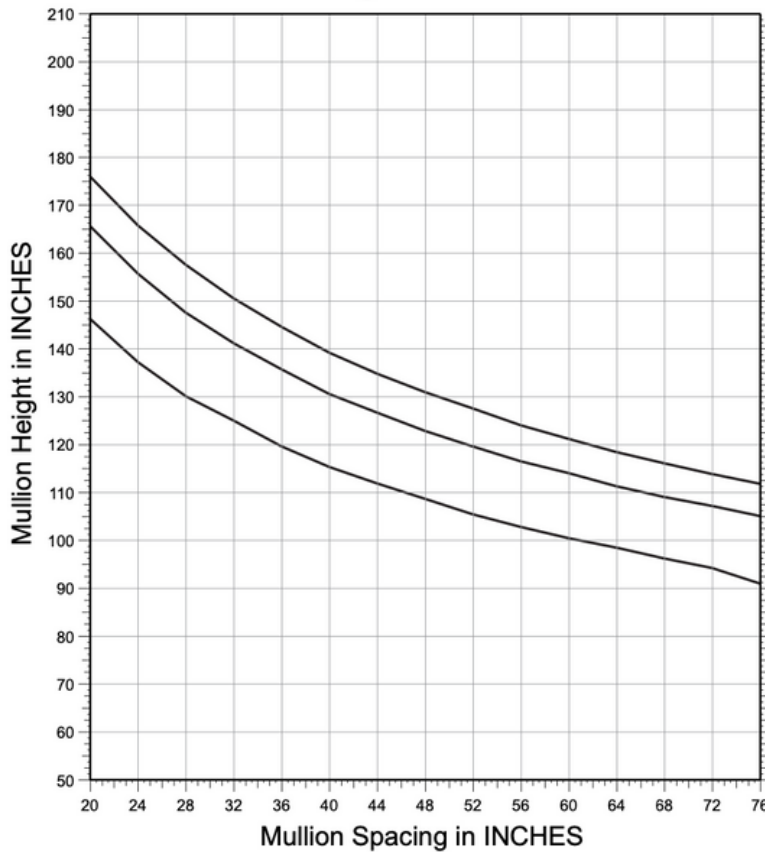


EXAMPLE ELEVATION

H = Mullion Height
W = Mullion Spacing (Center of Light to Center of Light)



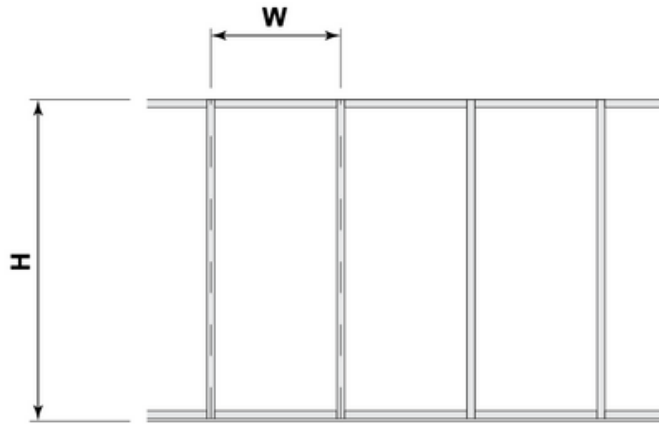
451 @ 30 PSF



Curves are based on deflection limited to L/175 not to exceed 1" and total lateral support of flanges.

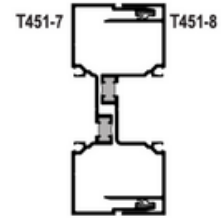
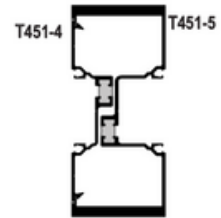
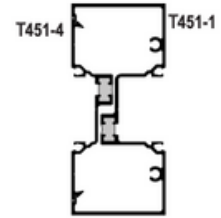
WIND LOAD CHARTS

(Assumes Total Lateral Support of flanges)

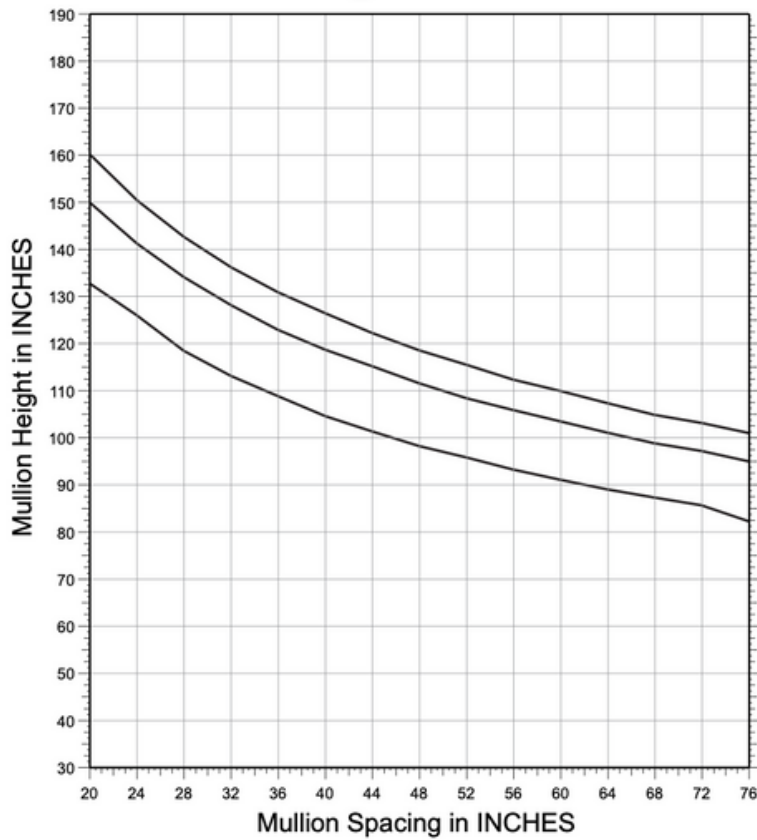


EXAMPLE ELEVATION

H = Mullion Height
W = Mullion Spacing (Center of Light to Center of Light)

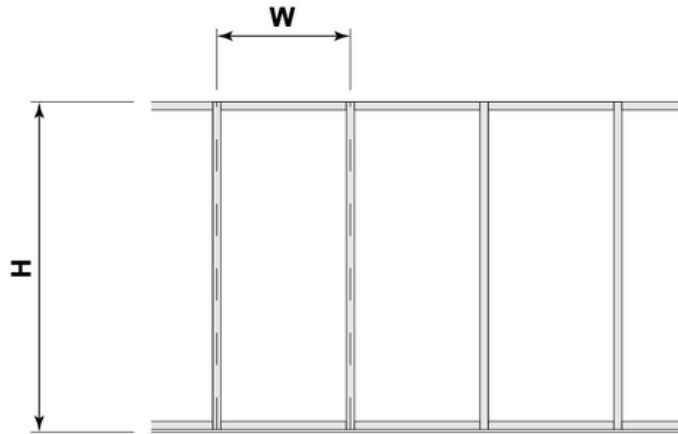


451 @ 40 PSF



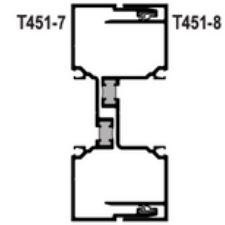
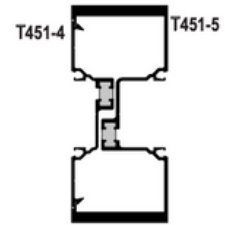
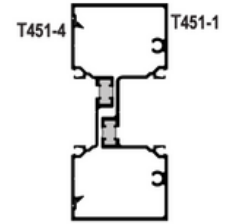
Curves are based on deflection limited to L/175 not to exceed 1" and total lateral support of flanges.

WIND LOAD CHARTS
(Assumes Total Lateral Support of flanges)

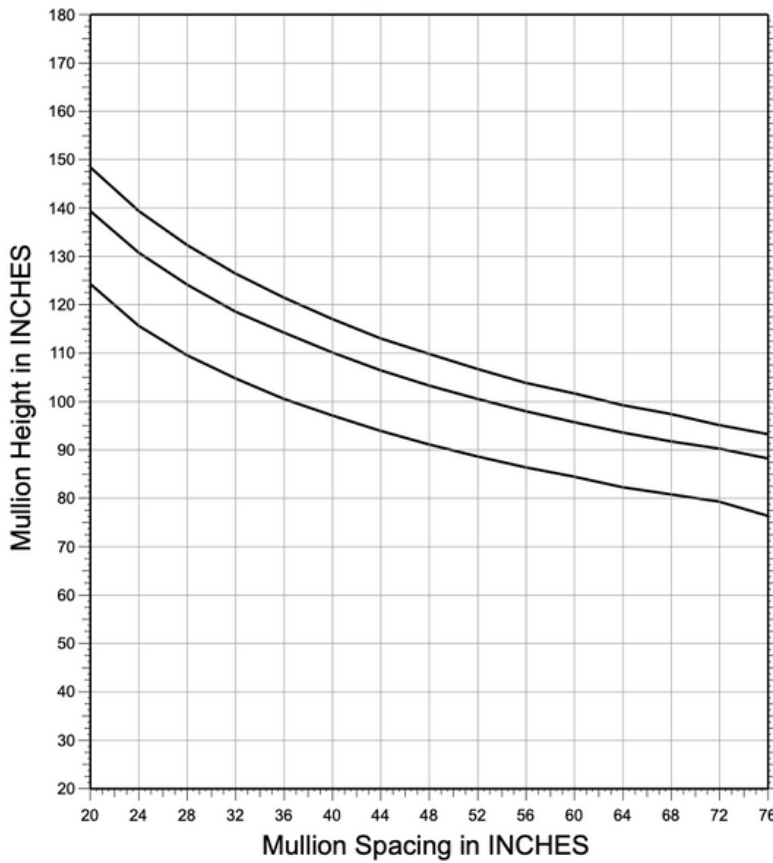


EXAMPLE ELEVATION

H = Mullion Height
W = Mullion Spacing (Center of Light to Center of Light)

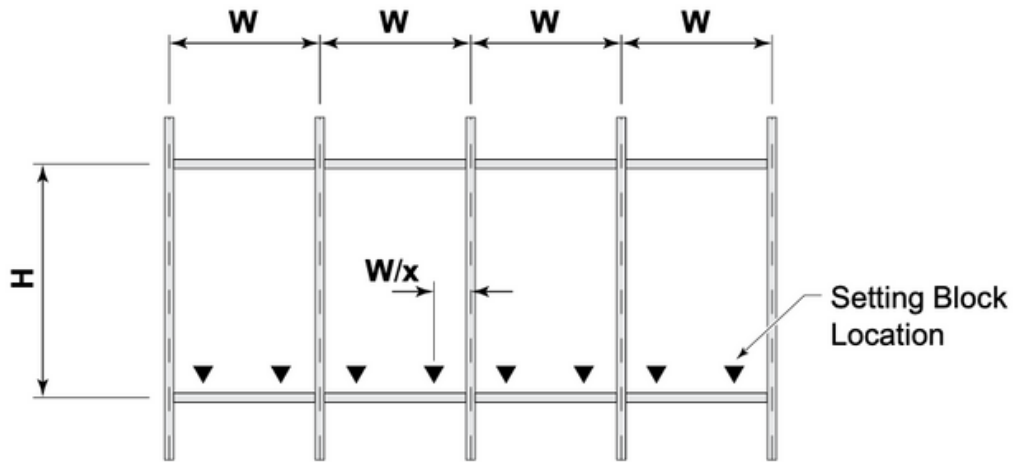


451 @ 50 PSF



Curves are based on deflection limited to L/175 not to exceed 1" and total lateral support of flanges.

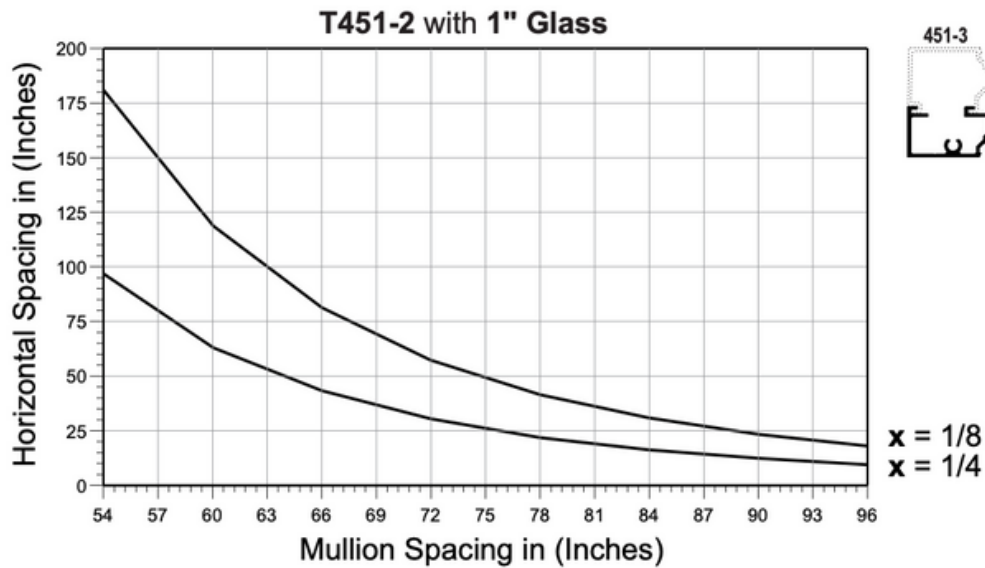
DEAD LOAD CHART



EXAMPLE ELEVATION

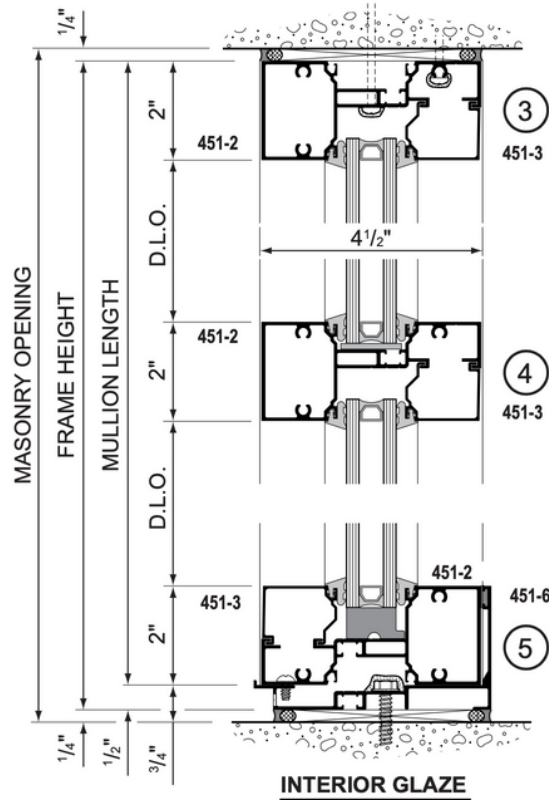
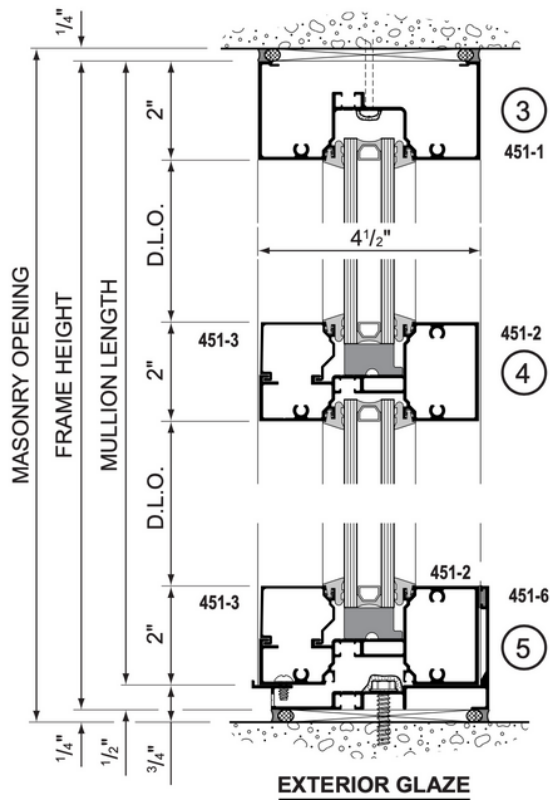
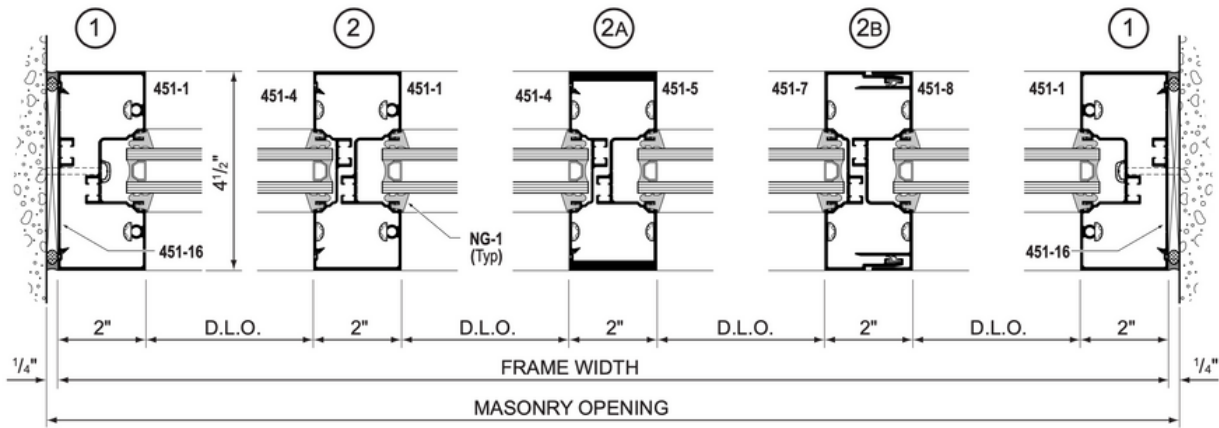
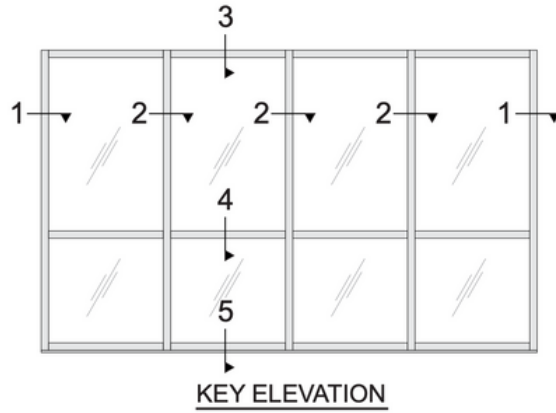
- H** = Distance between Horizontals
- W** = Mullion Spacing
- x** = Location of setting blocks as a fraction of **W**

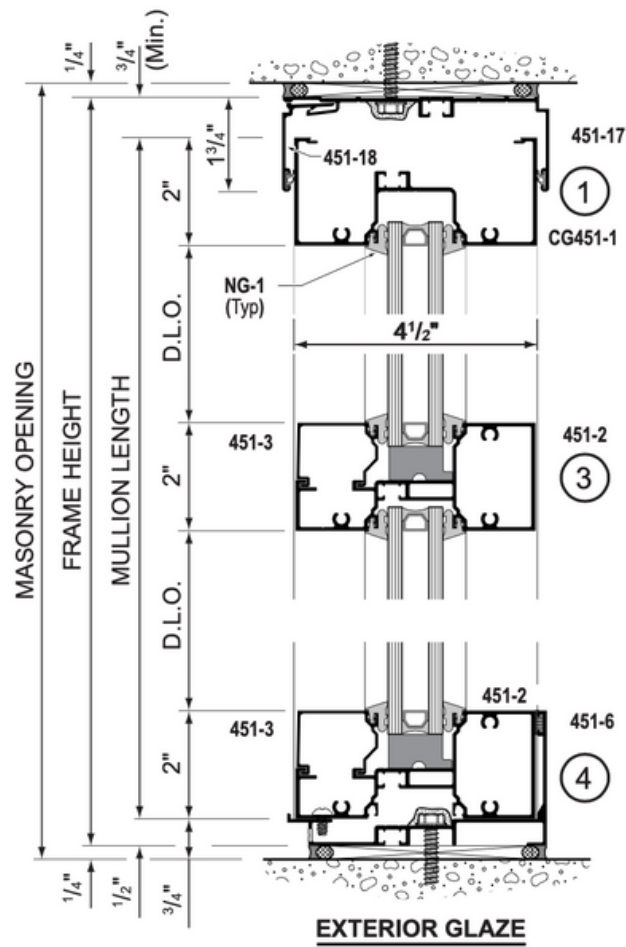
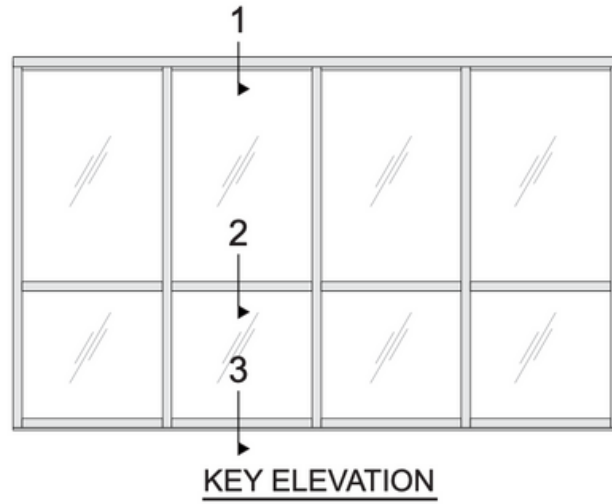
NOTE: Curves are based on deflection limited to 1/8".



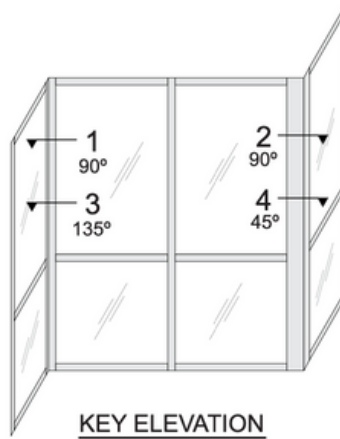
These charts are designed to help with the selection of a mullion for storefront applications given the height (H) of the glass and the width (W) of the mullion spacing.

STANDARD FRAMING DETAILS

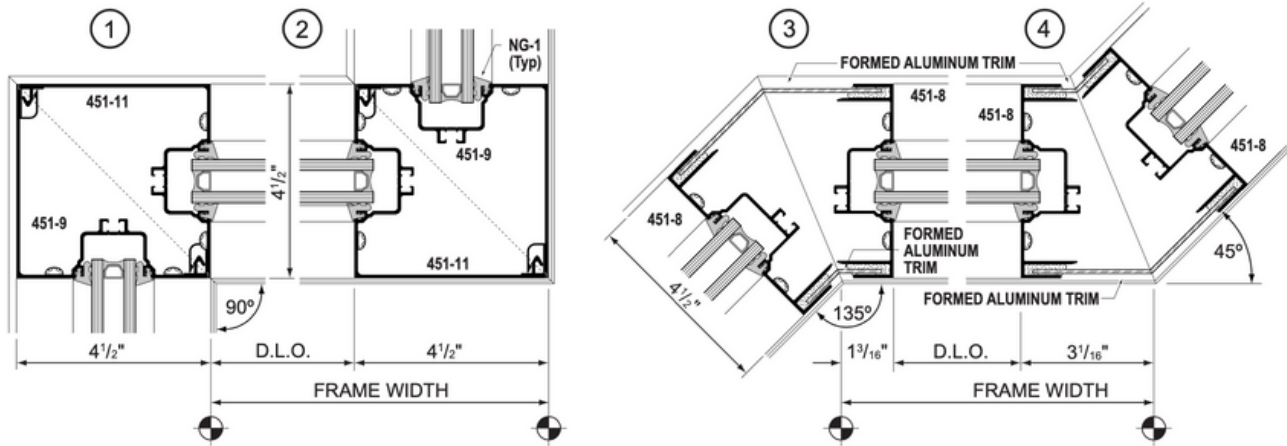




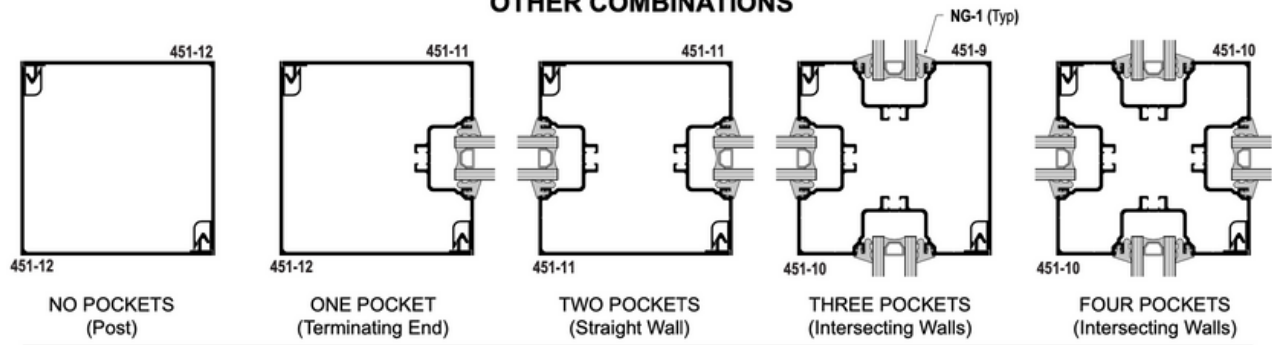
CORNER DETAILS



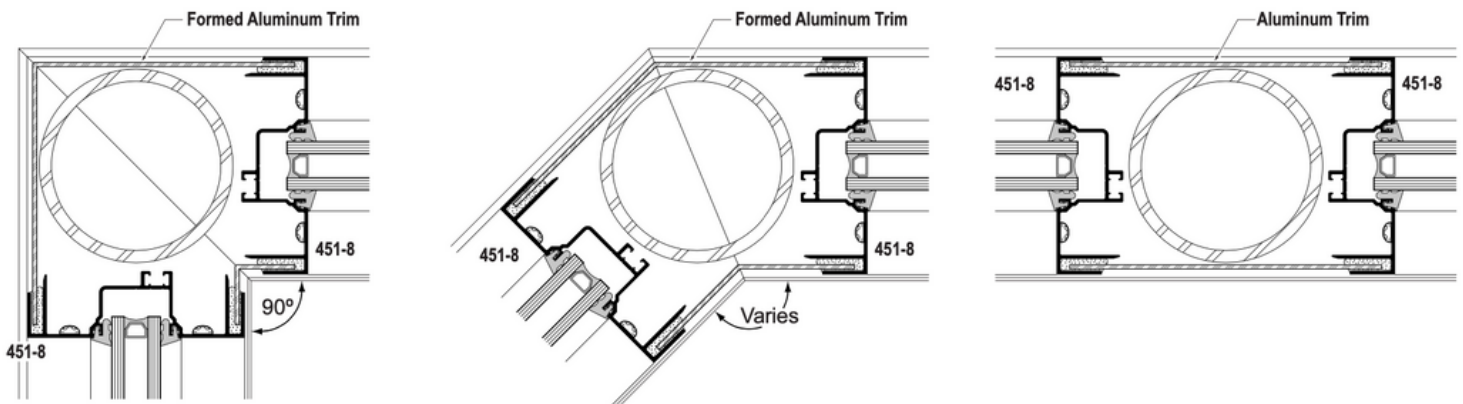
KEY ELEVATION



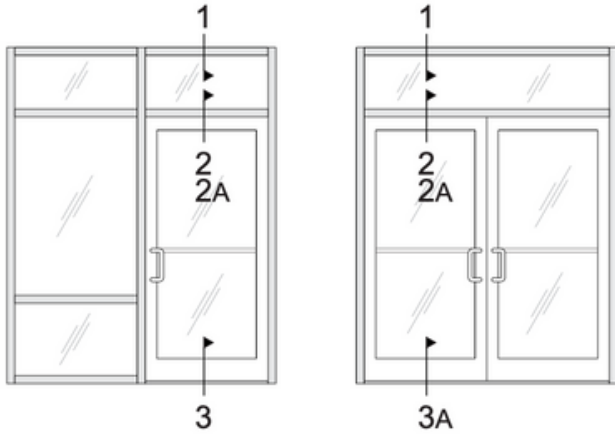
OTHER COMBINATIONS



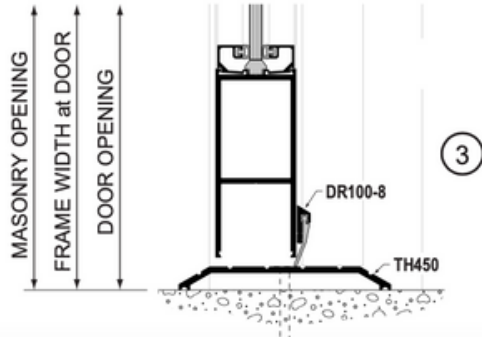
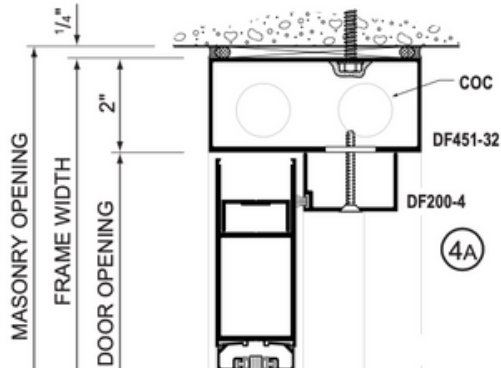
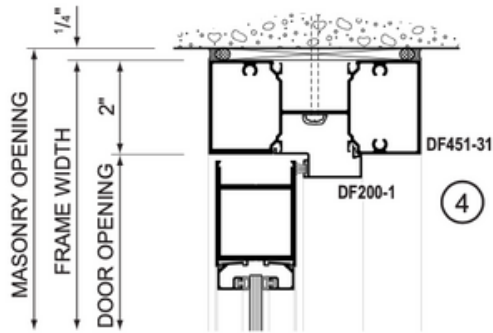
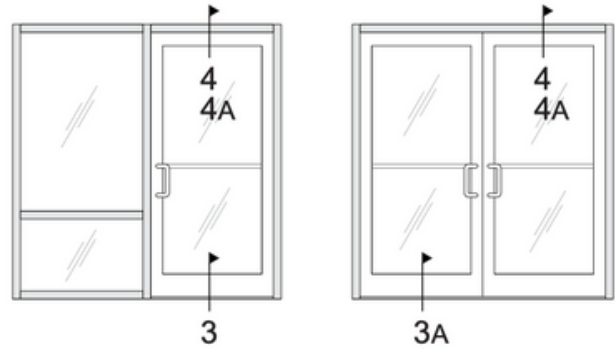
COLUMN COVERS



HORIZONTAL OFFSET PIVOT HUNG DOORFRAME DETAILS

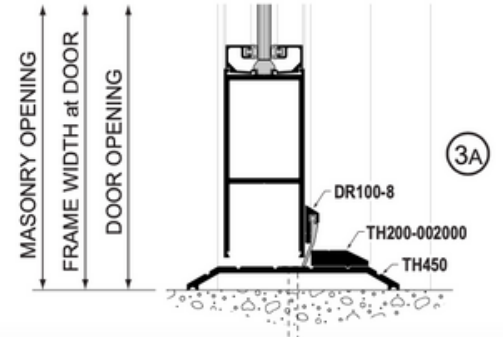
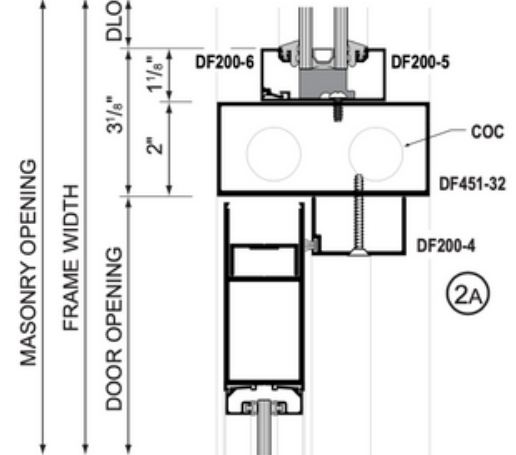
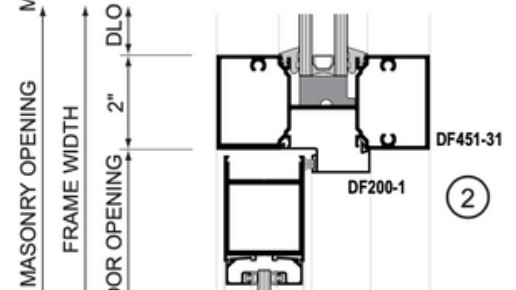
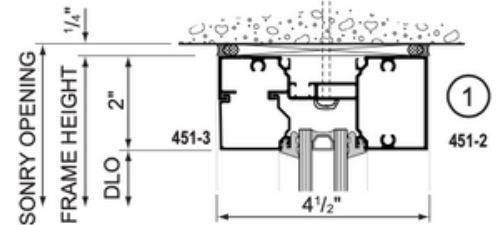


**KEY ELEVATION
ENTRANCE**

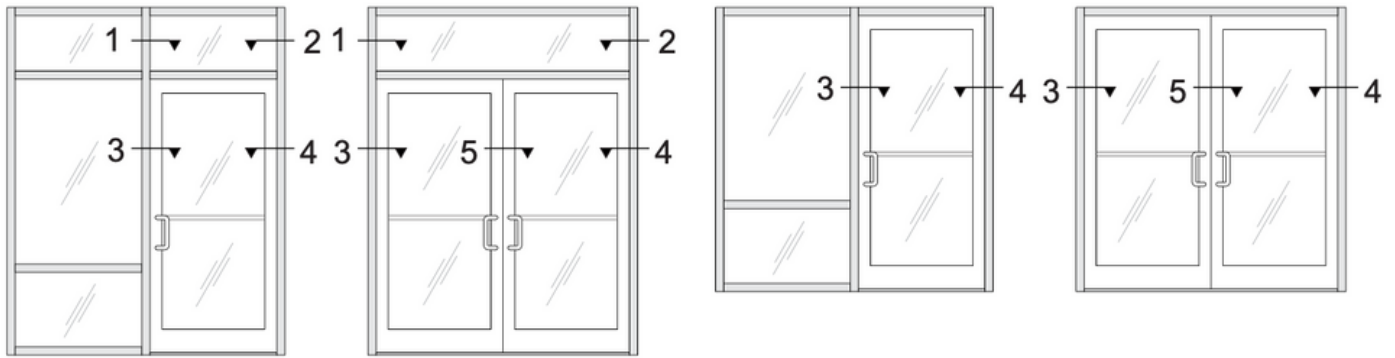


1" Insulated Glass

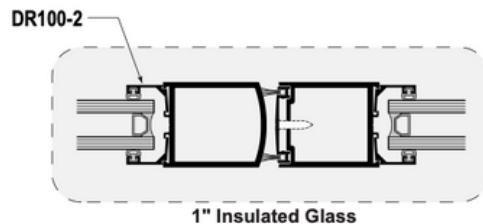
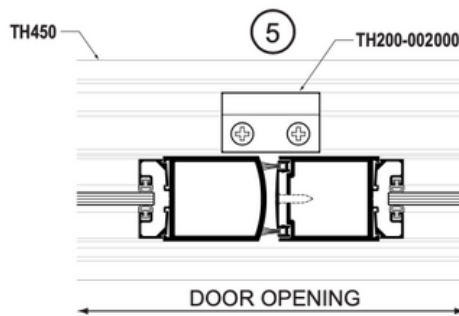
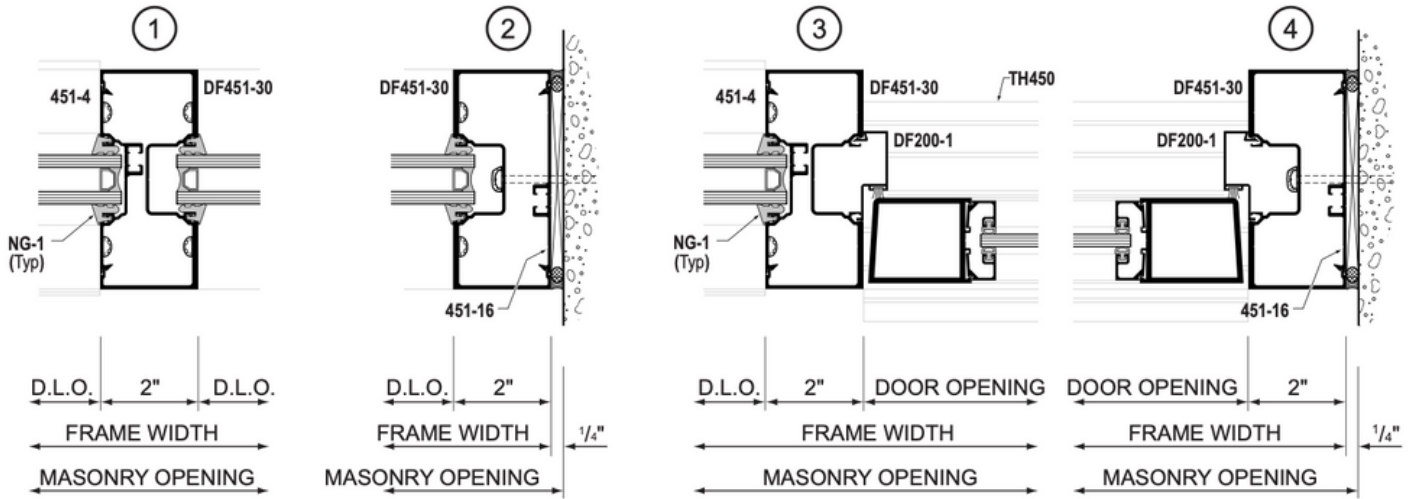
1" Insulated Glass



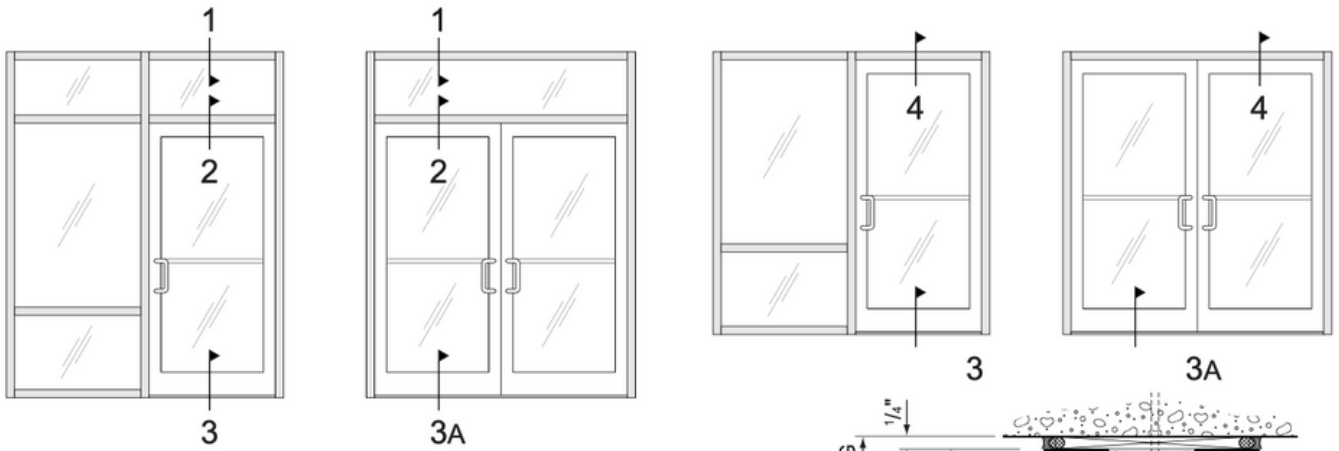
VERTICAL OFFSET PIVOT HUNG DOORFRAME DETAILS



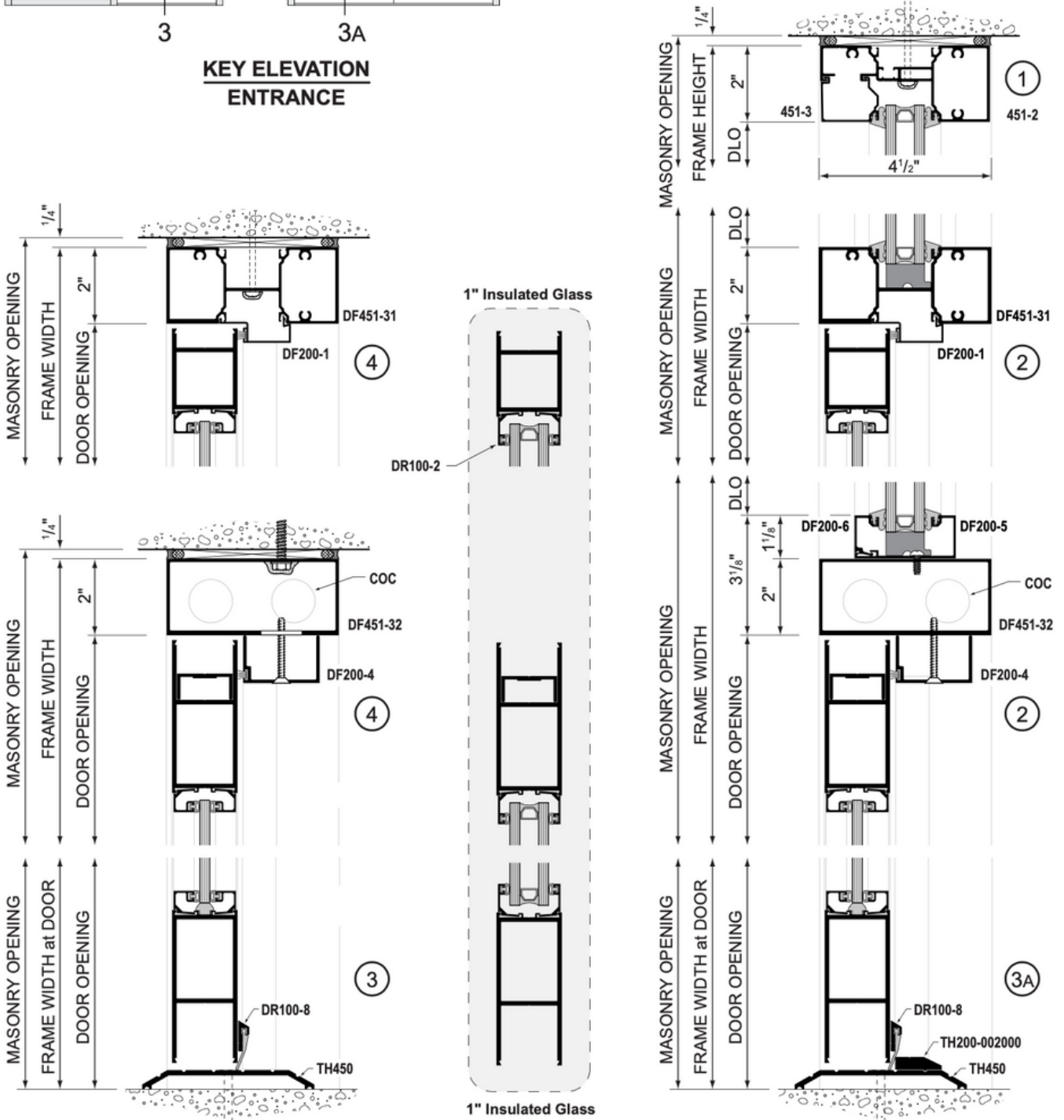
**KEY ELEVATION
ENTRANCE**



HORIZONTAL OFFSET BUTT HUNG DOORFRAME DETAILS

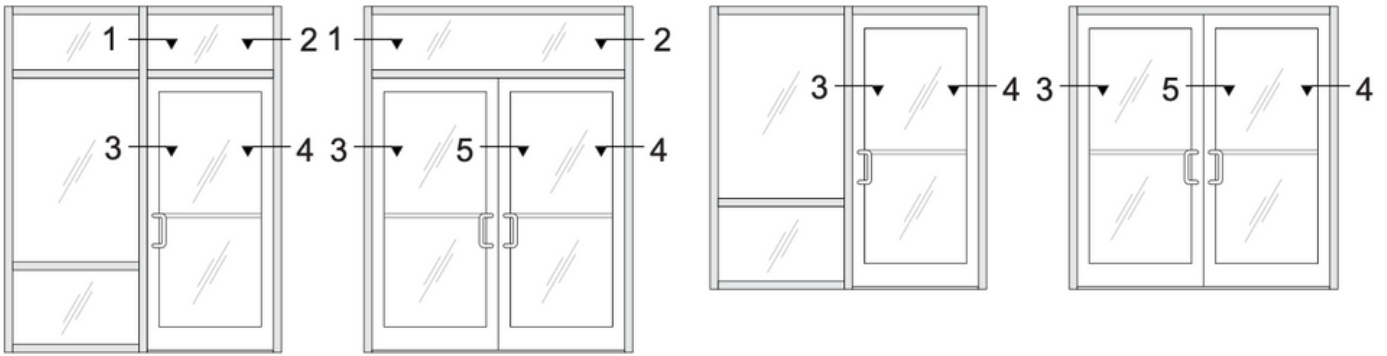


**KEY ELEVATION
ENTRANCE**

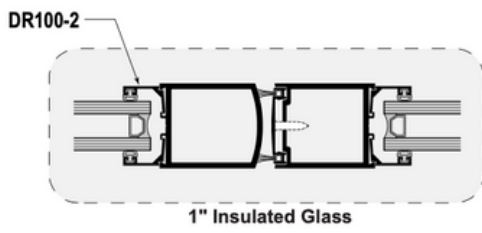
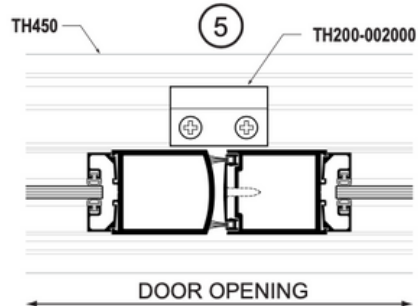
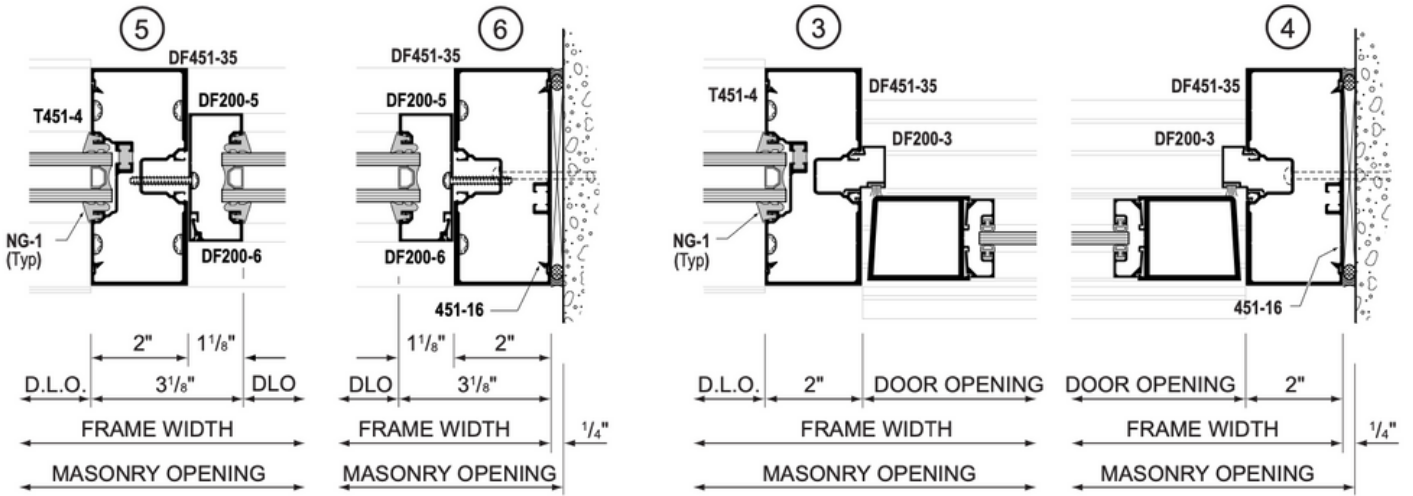


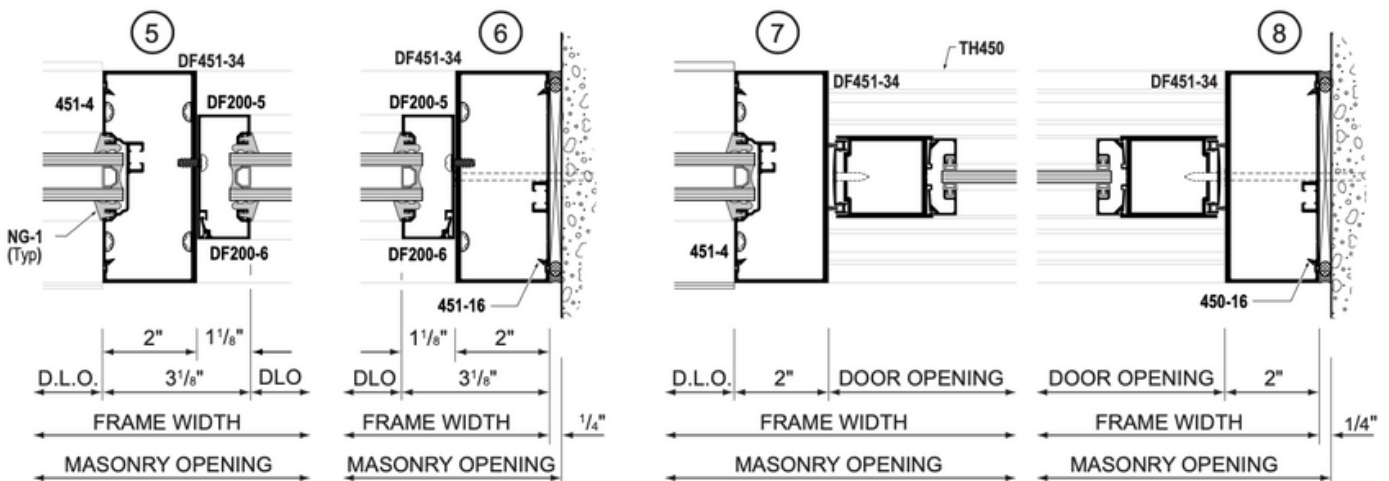
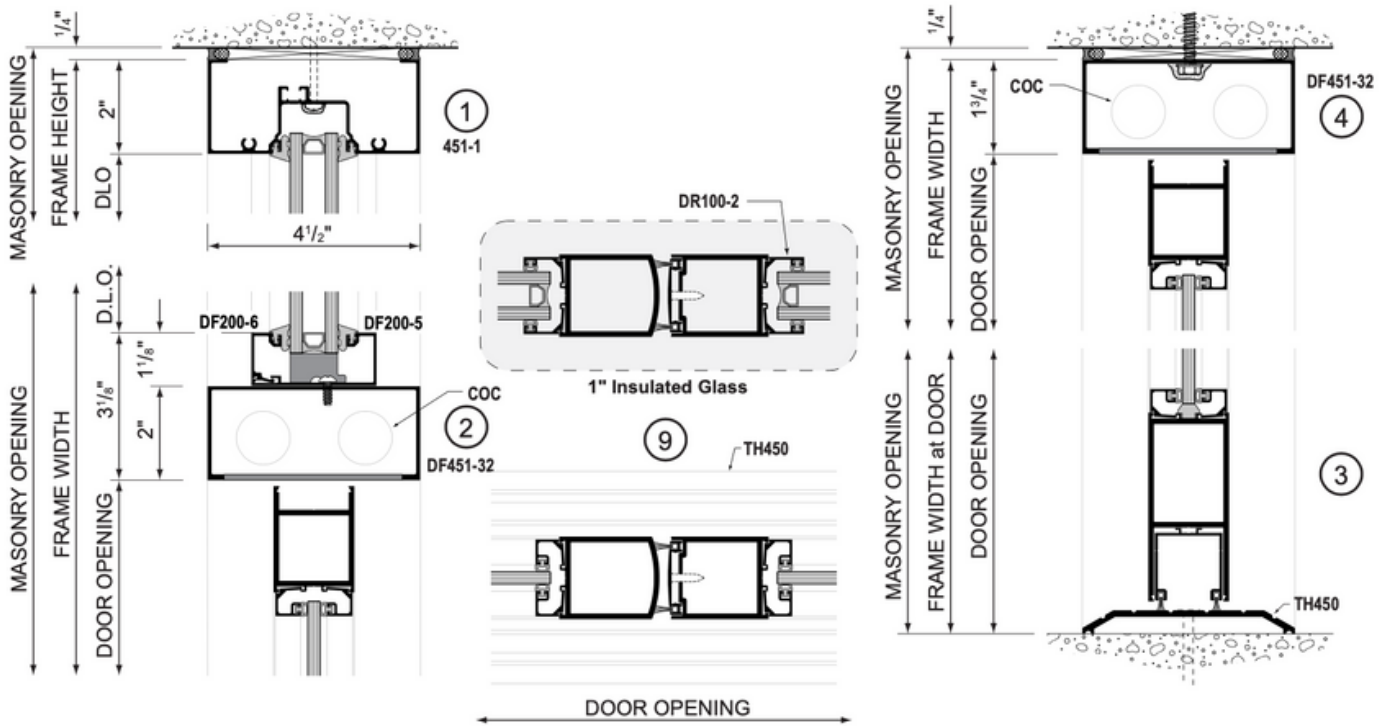
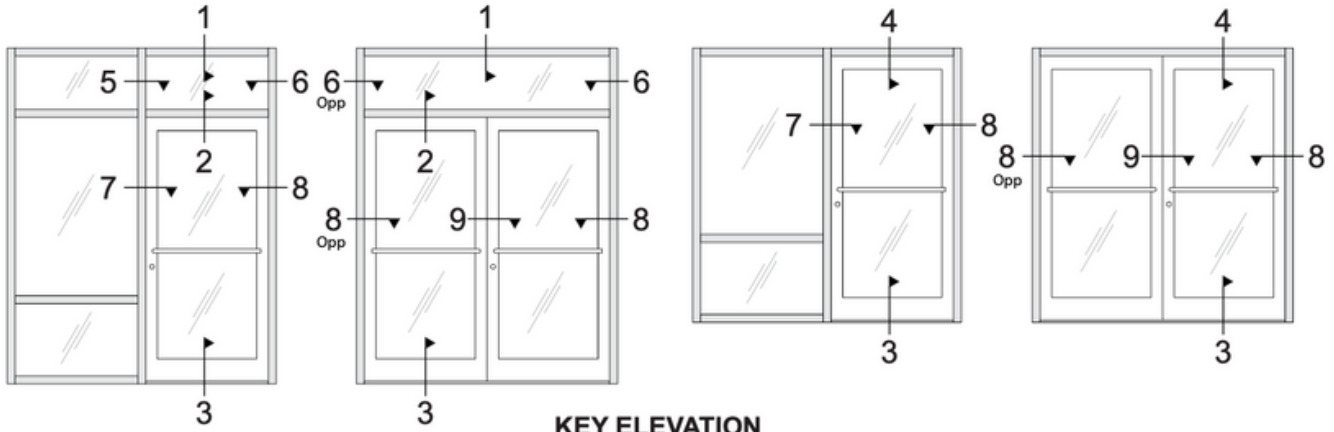
SERIES T451 2" x 4½" - B1

VERTICAL OFFSET BUTT HUNG DOORFRAME DETAILS

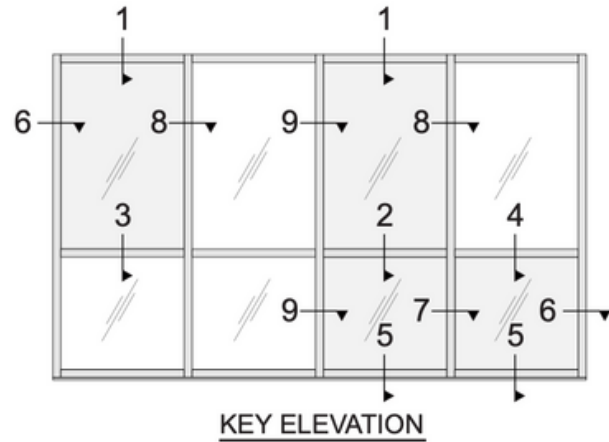
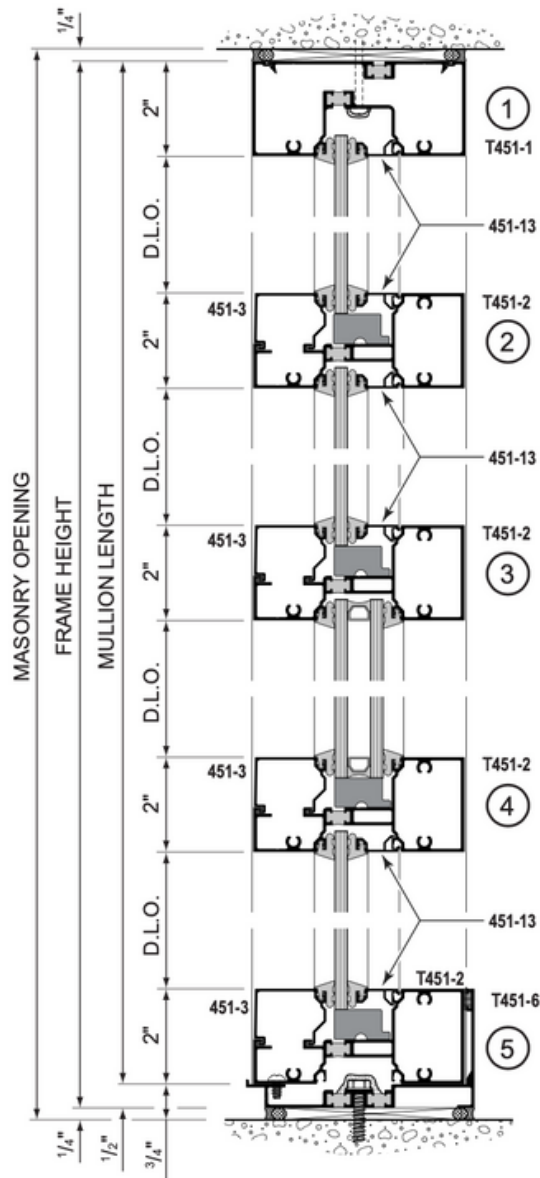


KEY ELEVATION ENTRANCE

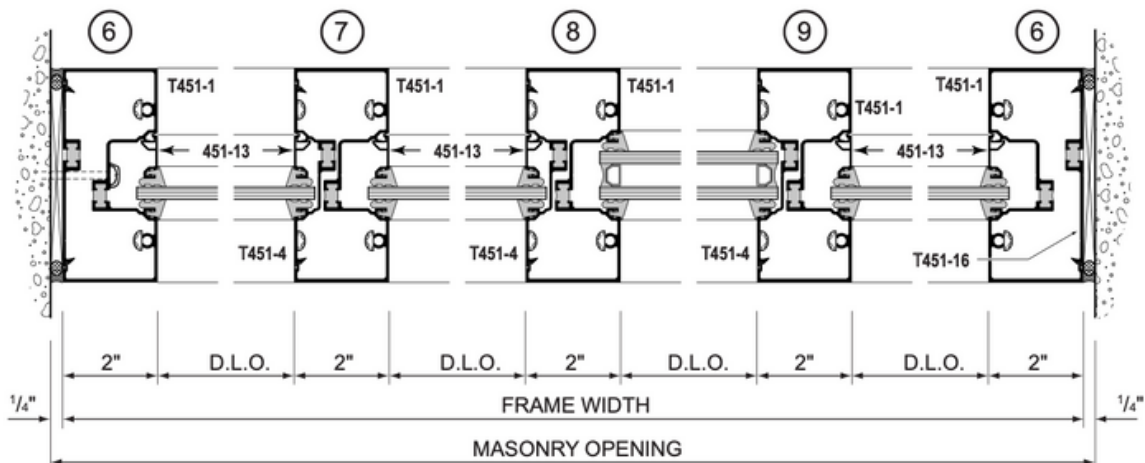




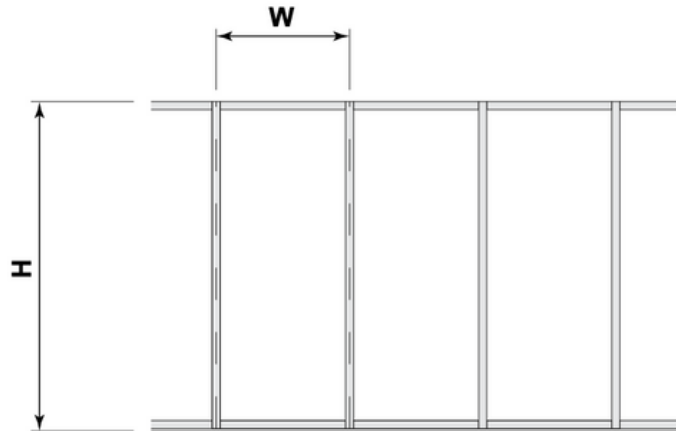
1" GLASS to 1/4" GLASS TRANSITIONS



NOTE:
For non-thermal frameing remove the suffix letter 'T' from part numbers.



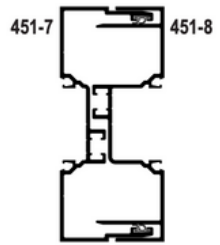
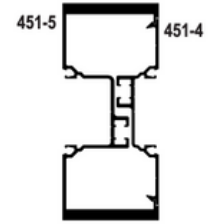
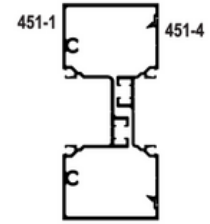
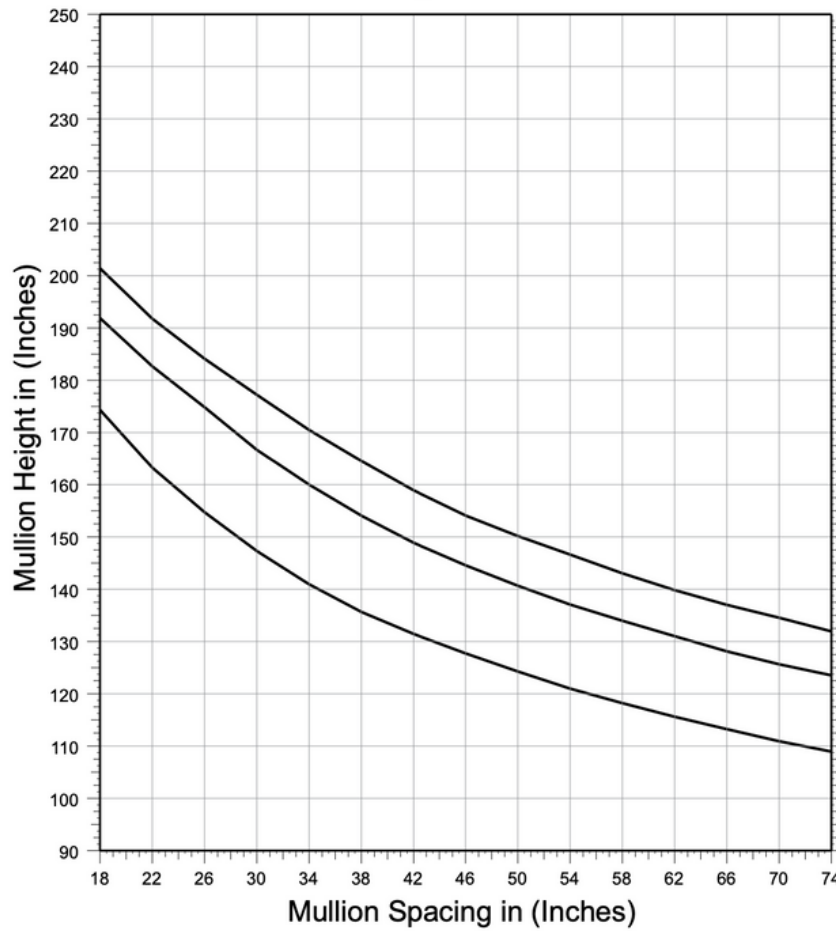
WIND LOAD CHARTS
(Assumes Total Lateral Support of flanges)



EXAMPLE ELEVATION

H = Mullion Height
W = Mullion Spacing

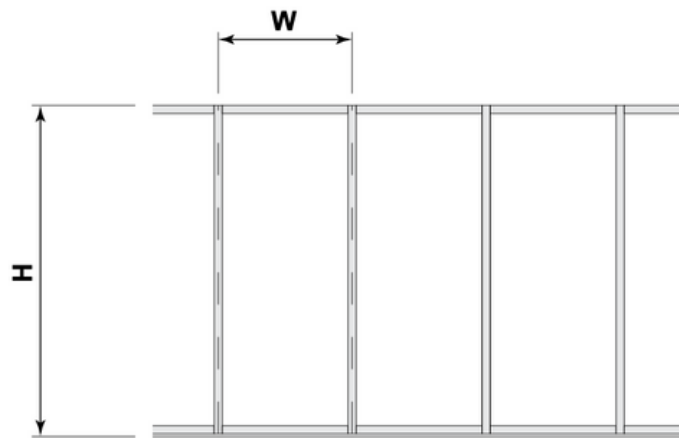
451 @ 20 PSF



Curves are based on deflection limited to L/175 not to exceed 1" and total lateral support of flanges.

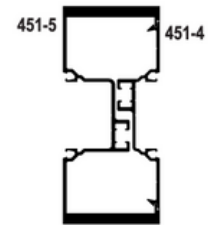
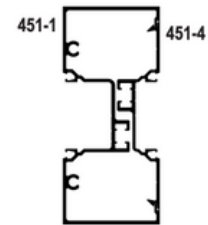
WIND LOAD CHARTS

(Assumes Total Lateral Support of flanges)

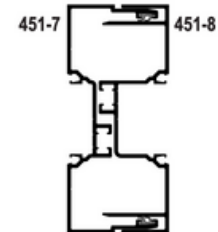
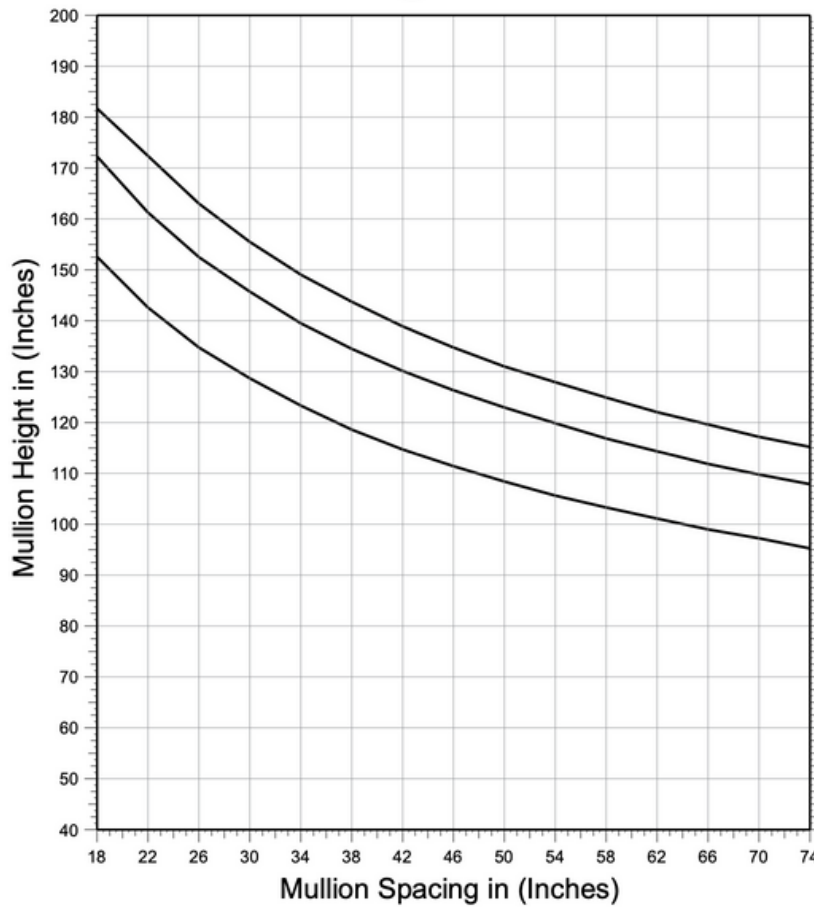


EXAMPLE ELEVATION

H = Mullion Height
W = Mullion Spacing



451 @ 30 PSF

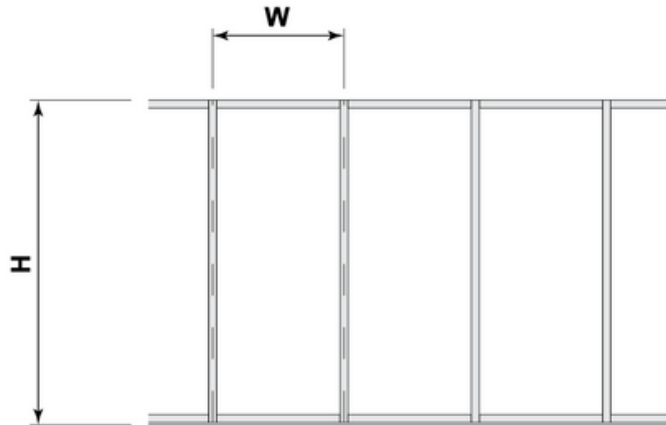


451-5/451-4
451-7/451-8
451-1/451-4

Curves are based on deflection limited to L/175 not to exceed 1" and total lateral support of flanges.

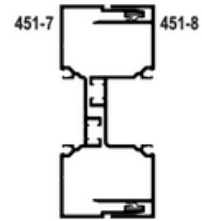
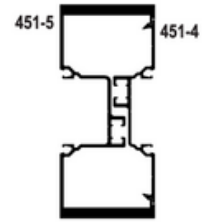
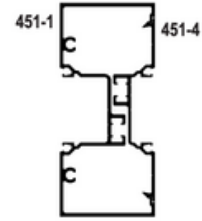
WIND LOAD CHARTS

(Assumes Total Lateral Support of flanges)

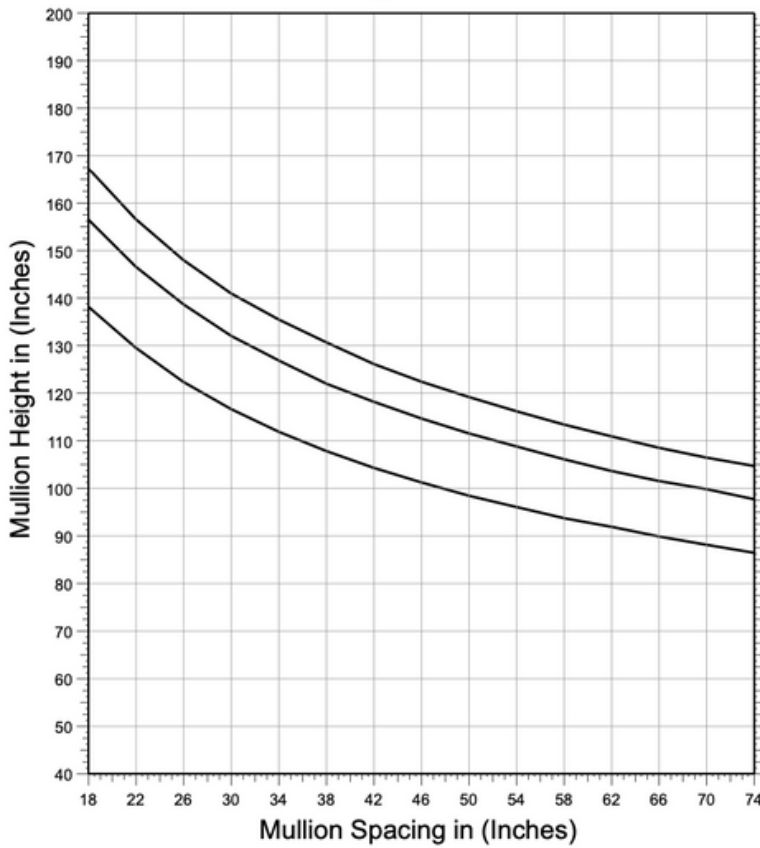


EXAMPLE ELEVATION

H = Mullion Height
W = Mullion Spacing



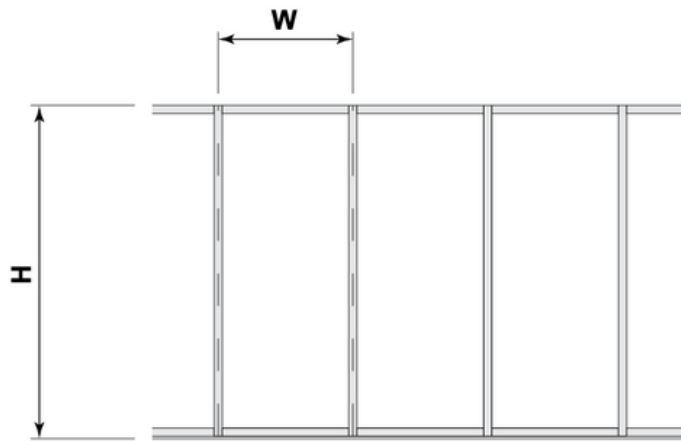
451 @ 40 PSF



Curves are based on deflection limited to L/175 not to exceed 1" and total lateral support of flanges.

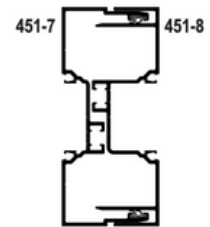
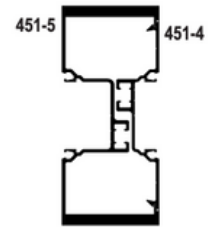
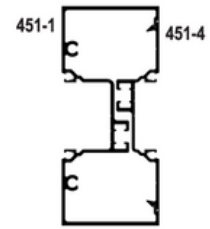
WIND LOAD CHARTS

(Assumes Total Lateral Support of flanges)

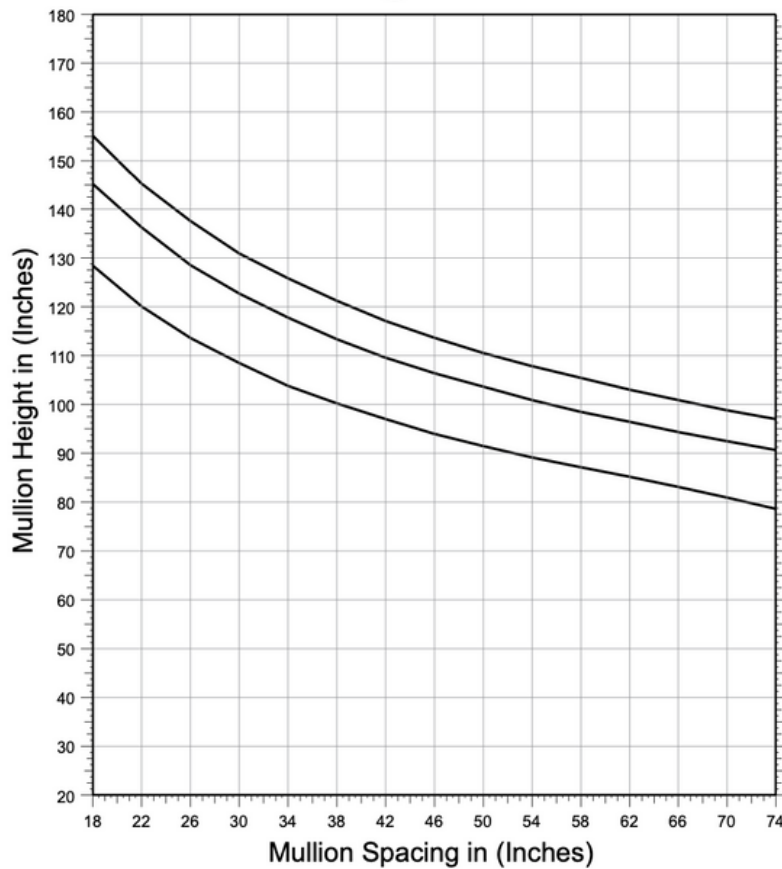


EXAMPLE ELEVATION

H = Mullion Height
W = Mullion Spacing

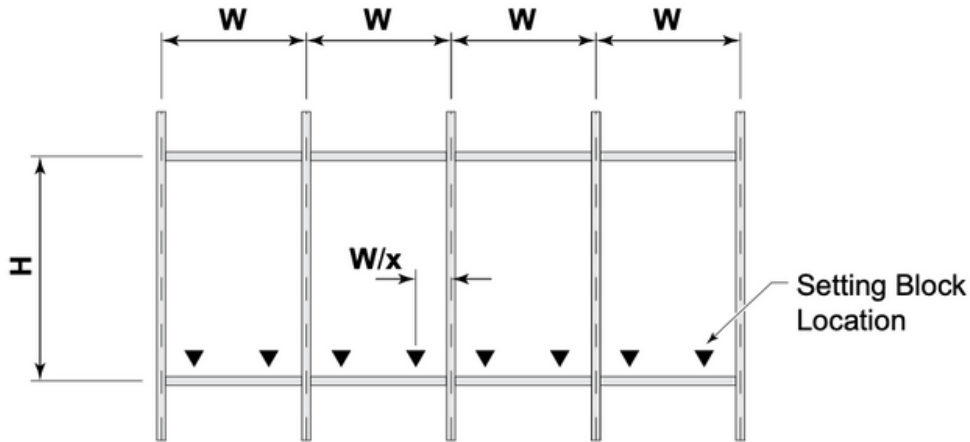


451 @ 50 PSF



Curves are based on deflection limited to L/175 not to exceed 1" and total lateral support of flanges.

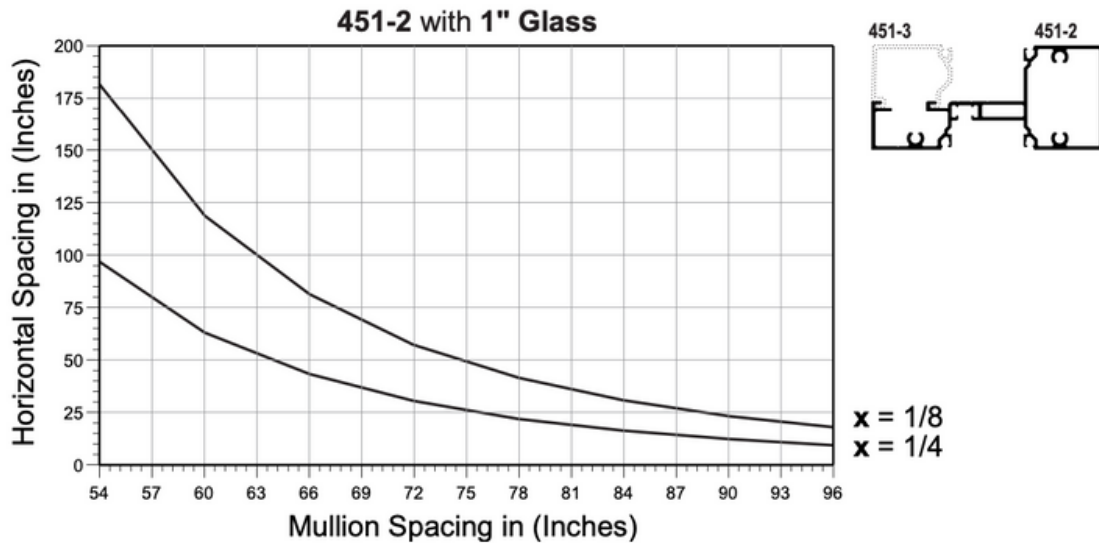
DEAD LOAD CHARTS



EXAMPLE ELEVATION

- H** = Distance between Horizontals
- W** = Mullion Spacing
- x** = Location of setting blocks as a fraction of **W**

NOTE: Curves are based on deflection limited to 1/8".



These charts are designed to help with the selection of a mullion for storefront applications given the height (H) of the glass and the width (W) of the mullion spacing.