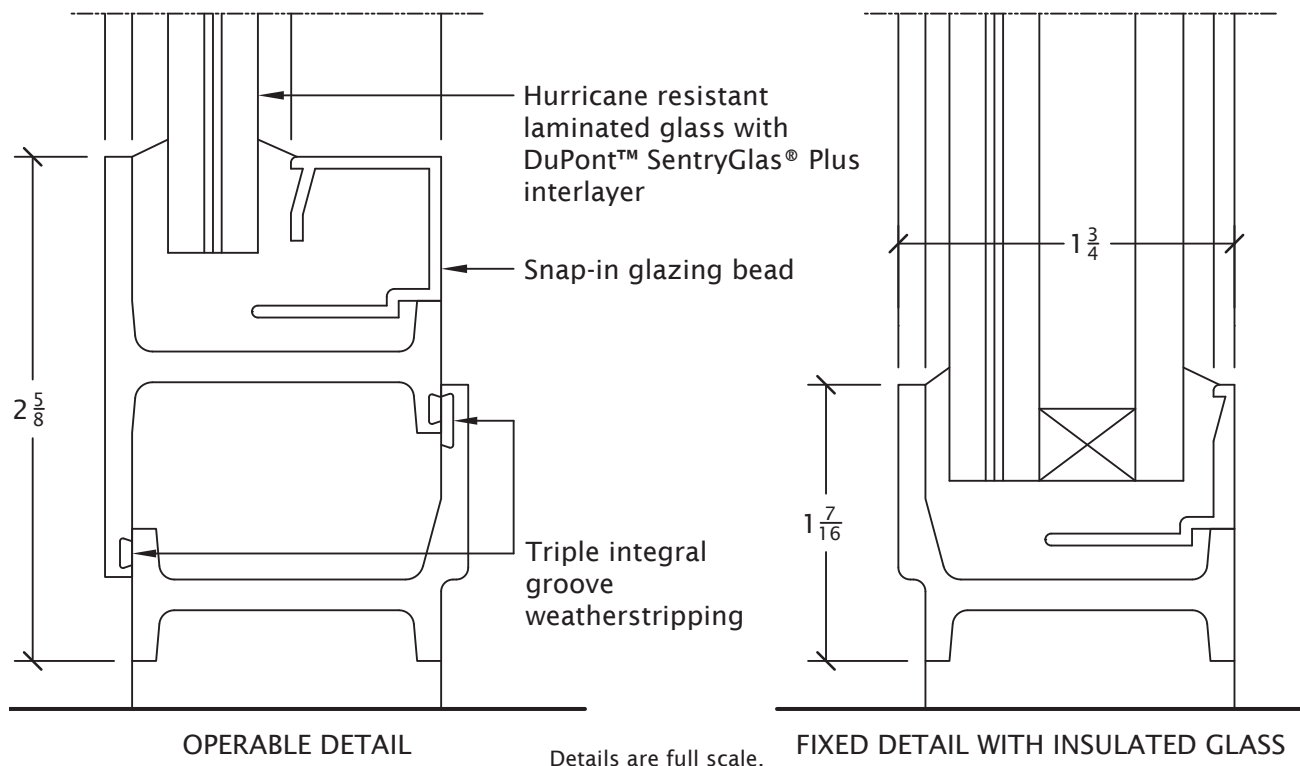


Hope's has developed an impact approved steel window for hurricane resistant applications manufactured from the classic hot-rolled, heavy custom steel profiles. Fixed, side hung-out casement and project-out windows have been tested and exceed the ASTM hurricane testing protocols: ASTM 330 (structural), ASTM E1886 (cycle), ASTM E1996 (impact) and Florida Building Code (FBC) High Velocity Hurricane Zone (HVHZ) protocols: TAS 201 (impact), TAS 202 (air, water, structural) and TAS 203 (cyclic) for large missile impact. These windows do not require hurricane shutters.

PRODUCT FEATURES

- Unique narrow profiles and seamless, handcrafted construction
- Tested in compliance with the International Building Code (IBC), the International Residential Code (IRC), the Florida Building Code (FBC) including High Velocity Hurricane Zone (HVHZ) and the Dade County Product Control Division
- Pressure rating up to 80 psf, both positive and negative
- Solidly fusion welded, seamless corners for superior strength and water tightness
- Accepts hurricane resistant laminated glass and insulating glass up to 1-7/32" thick
- Triple integral groove weatherstripping
- Solid brass or bronze hardware
- Impact Resistant Product Approval labels attached to all products where such certification is required
- Florida Building Code (FBC) product approval for both impact and non-impact situations (including HVHZ areas)
- Hope's Power of 5 Finishing System includes cleaning, pretreatment, epoxy e-coat primer, epoxy powder primer and ultrathane polyurethane top coat



MAXIMUM WINDOW SIZES AND DESIGN PRESSURE RATINGS

Hope's is continually testing additional products and larger sizes. Please contact Hope's for the most up to date information.

GLAZING

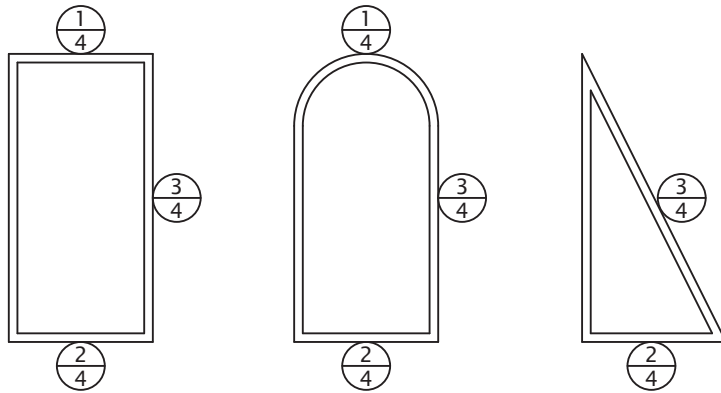
- 15/32" laminated glass or 1-7/32" insulating glass
- DuPont™ SentryGlas® Plus interlayer
- Snap-in glazing beads
- Dow Corning® #995 Structural Silicone sealant
- Interior or exterior glazing

ANCHORING

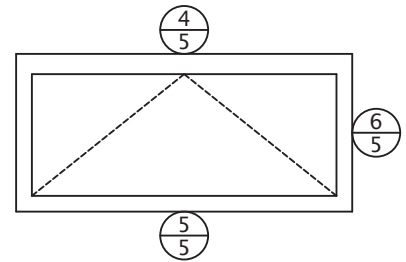
- Equal leg or long leg
- Wood or masonry construction
- Direct fastening or anchor clips

ALL WINDOWS MUST BE MANUFACTURED, INSTALLED AND GLAZED
IN STRICT ACCORDANCE WITH HOPE'S SHOP DRAWINGS.

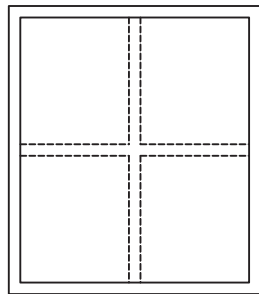
FIXED



PROJECT OUT

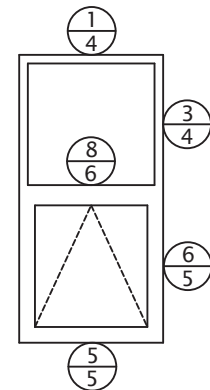


MUNTINS

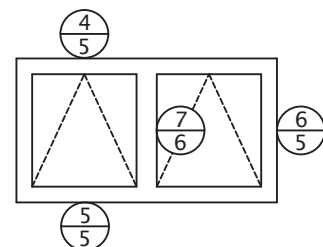
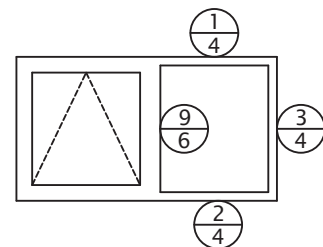
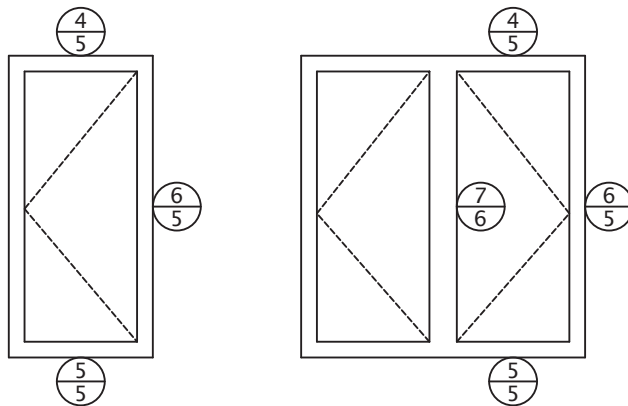


SIMULATED DIVIDED LITES (SDL)
(MUNTIN GRIDS)

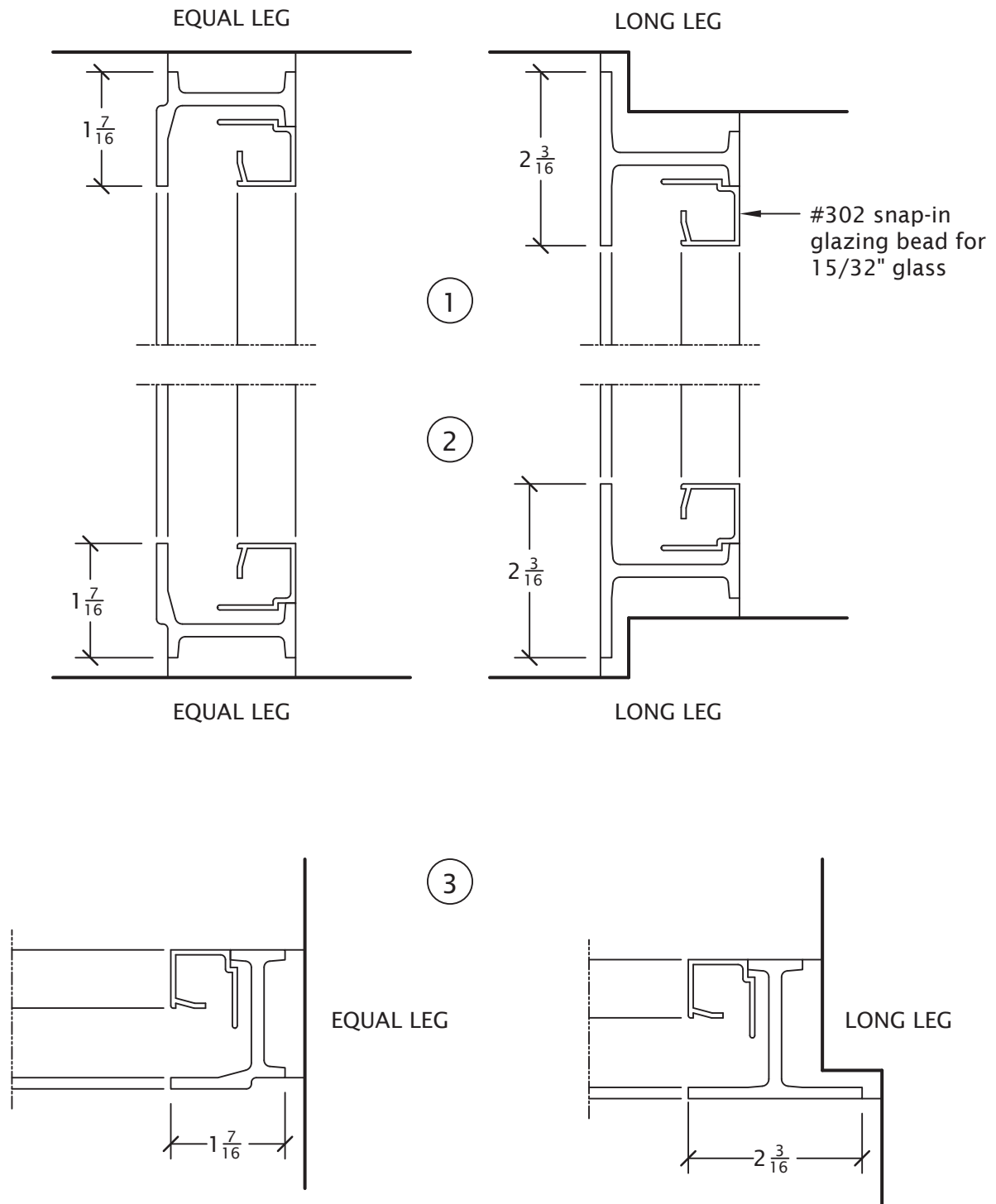
(Consult Hiope's for true divided lite
muntin options)



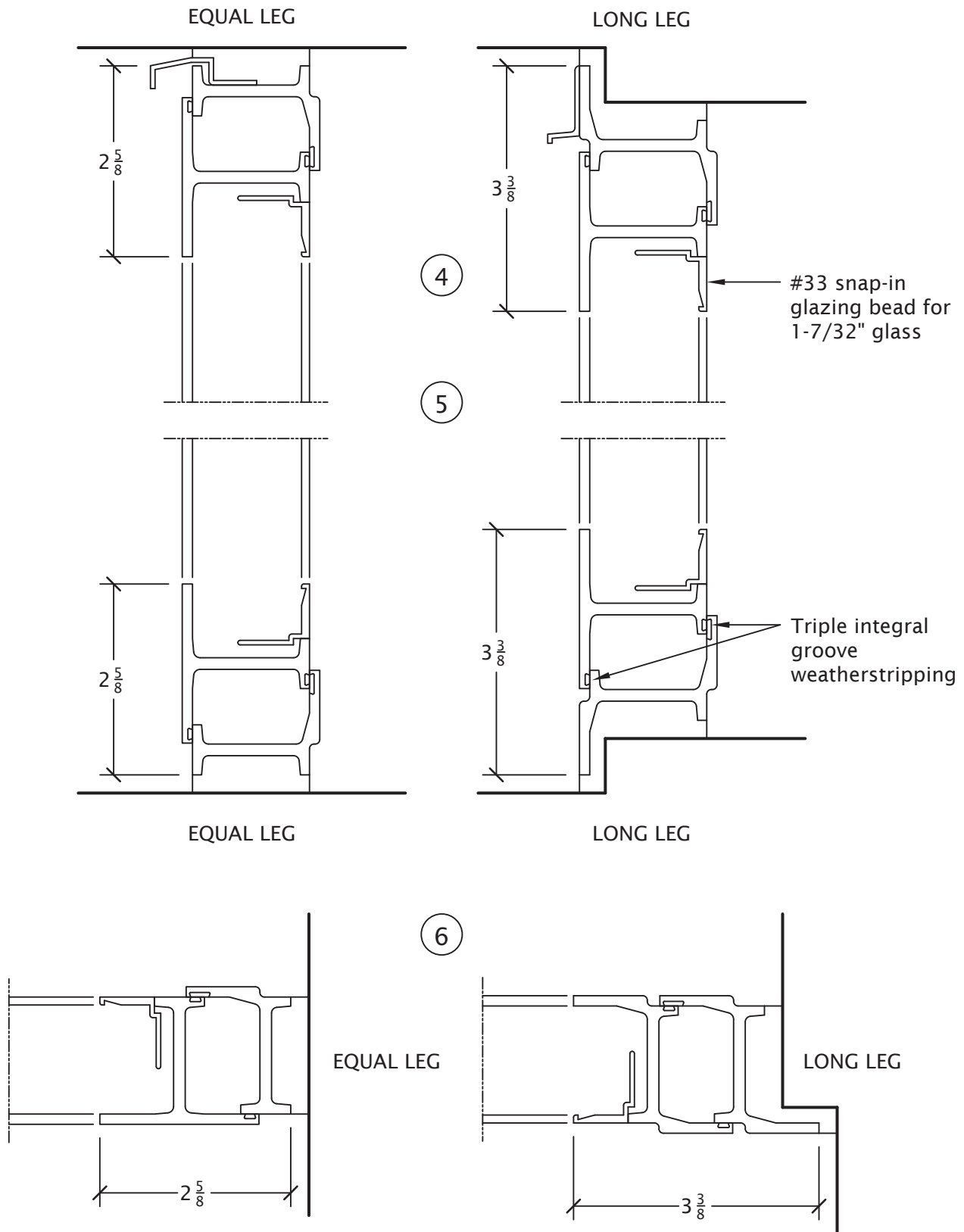
SIDE HUNG-OUT CASEMENT



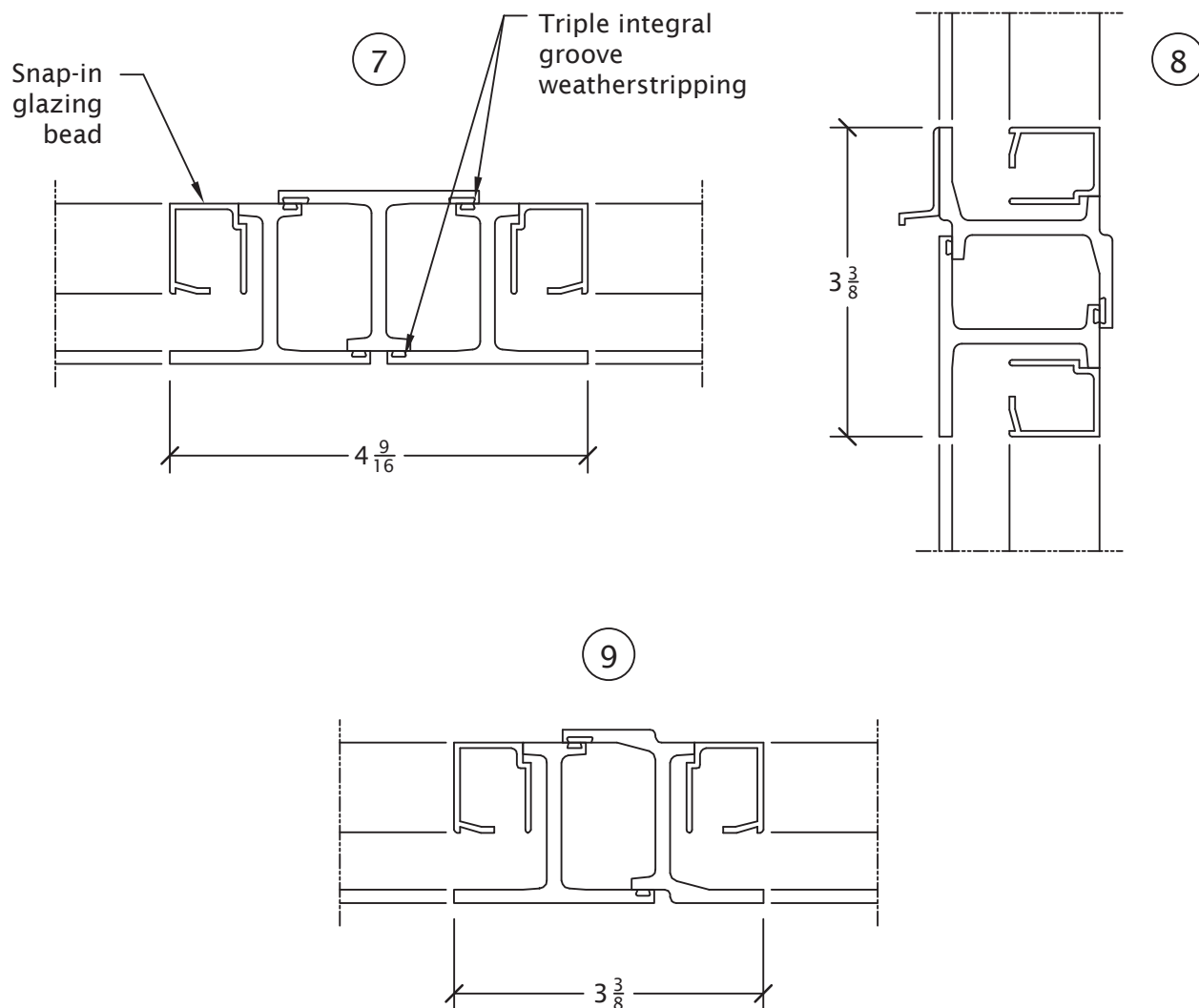
Elevations are for detail reference only. Elevations are not to scale.
All Hope's products are custom manufactured for your specific project requirements.



Details are half scale and shown with 15/32" glass.
See page 6 for further glazing bead options.

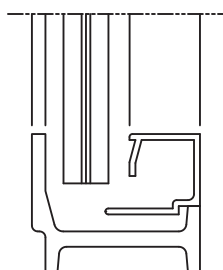


Details are half scale and shown with 1-7/32" glass.
See page 6 for further glazing bead options.

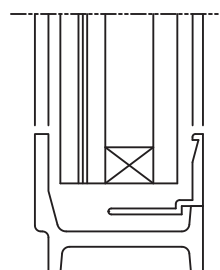


Details are half scale and shown with $\frac{5}{16}$ " glass.

SNAP-IN GLAZING BEADS



15/32" GLASS
#302 BEAD



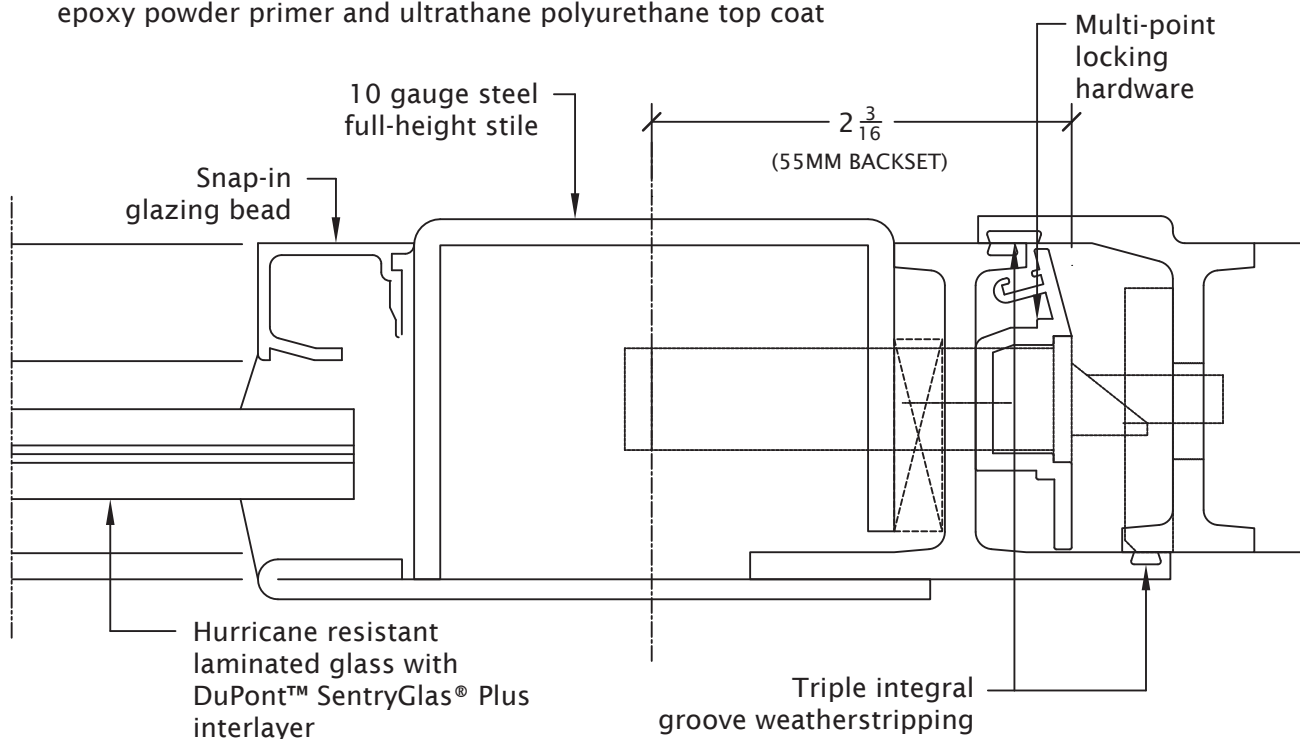
1-7/32" INSULATING GLASS
#33 BEAD

Details are half scale and shown inside glazed.

Hope's has developed an impact approved steel door for hurricane resistant applications manufactured from the classic hot-rolled, heavy custom steel profiles that maintain the elegance and narrow sightlines of the hot-rolled steel windows. Swing-out doors have been tested and exceed the ASTM hurricane testing protocols: ASTM 330 (structural), ASTM E1886 (cycle), ASTM E1996 (impact) and Florida Building Code (FBC) High Velocity Hurricane Zone (HVHZ) protocols: TAS 201 (impact), TAS 202 (air, water, structural) and TAS 203 (cyclic) for large missile impact. These doors do not require hurricane shutters.

PRODUCT FEATURES

- Unique narrow profiles and seamless, handcrafted construction
- Tested in compliance with the International Building Code (IBC), the International Residential Code (IRC), the Florida Building Code (FBC) including High Velocity Hurricane Zone (HVHZ) and the Dade County Product Control Division
- Pressure rating meets or exceeds FBC (HVHZ)/Miami-Dade product approval requirements
- Solidly fusion welded, seamless corners for superior strength and water tightness
- Accepts hurricane resistant laminated glass and insulating glass up to 1-7/32" thick
- Triple integral groove weatherstripping
- Solid brass or bronze hardware
- Impact Resistant Product Approval labels attached to all products where such certification is required
- Florida Building Code (FBC) product approval for both impact and non-impact situations (including HVHZ areas)
- Hope's Power of 5 Finishing System includes cleaning, pretreatment, epoxy e-coat primer, epoxy powder primer and ultrathane polyurethane top coat



Details are full scale.

MAXIMUM DOOR SIZES AND DESIGN PRESSURE RATINGS

Hope's is continually testing additional products and larger sizes. Please contact Hope's for the most up to date information.

GLAZING

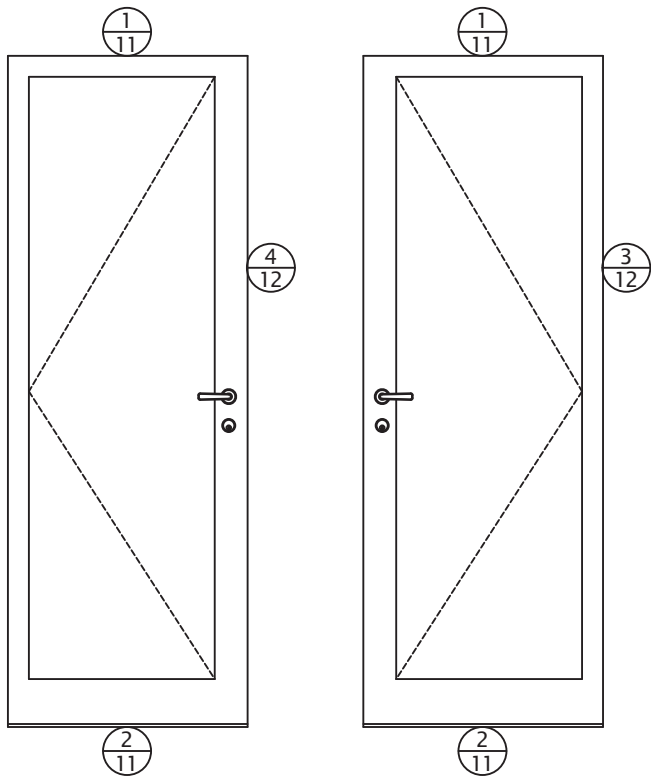
- 15/32" laminated glass or 1-7/32" insulating glass (FBC only)
- DuPont™ SentryGlas® Plus interlayer
- Snap-in glazing beads
- Dow Corning® #995 Structural Silicone sealant
- Interior or exterior glazing

ANCHORING

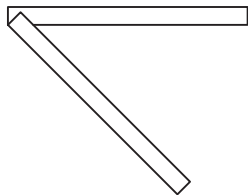
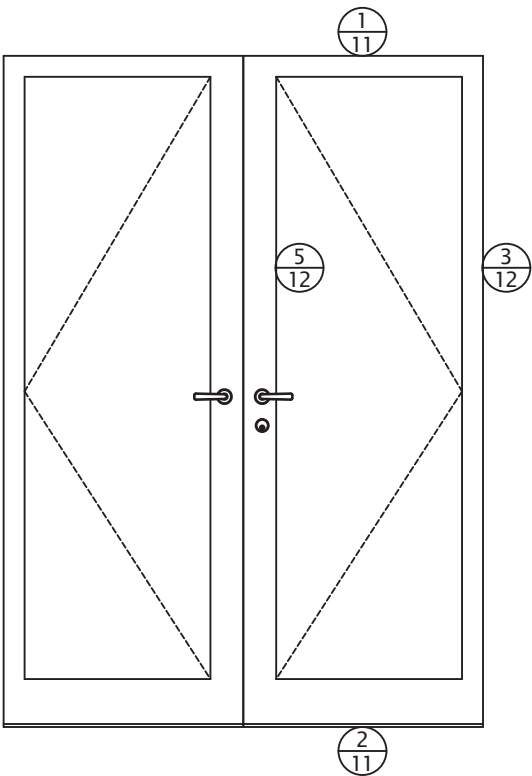
- Equal leg or long leg
- Wood or masonry construction
- Direct fastening or anchor clips

ALL DOORS MUST BE MANUFACTURED, INSTALLED AND GLAZED
IN STRICT ACCORDANCE WITH HOPE'S SHOP DRAWINGS.

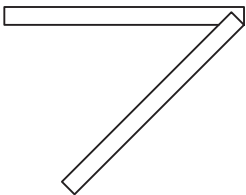
SINGLE DOOR



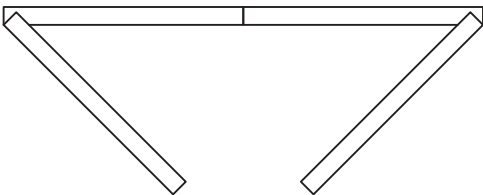
DOUBLE DOOR



LEFT HAND
(SWING-OUT)

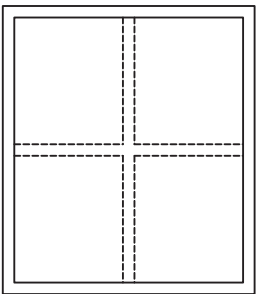


RIGHT HAND
(SWING-OUT)



LEFT HAND
(SWING-OUT)

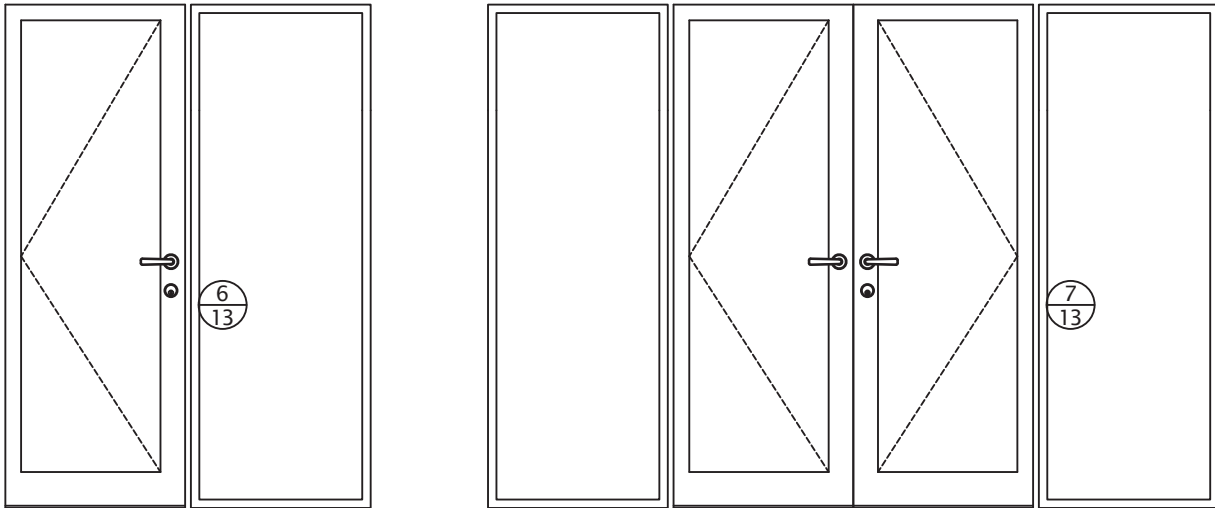
RIGHT HAND
(SWING-OUT)



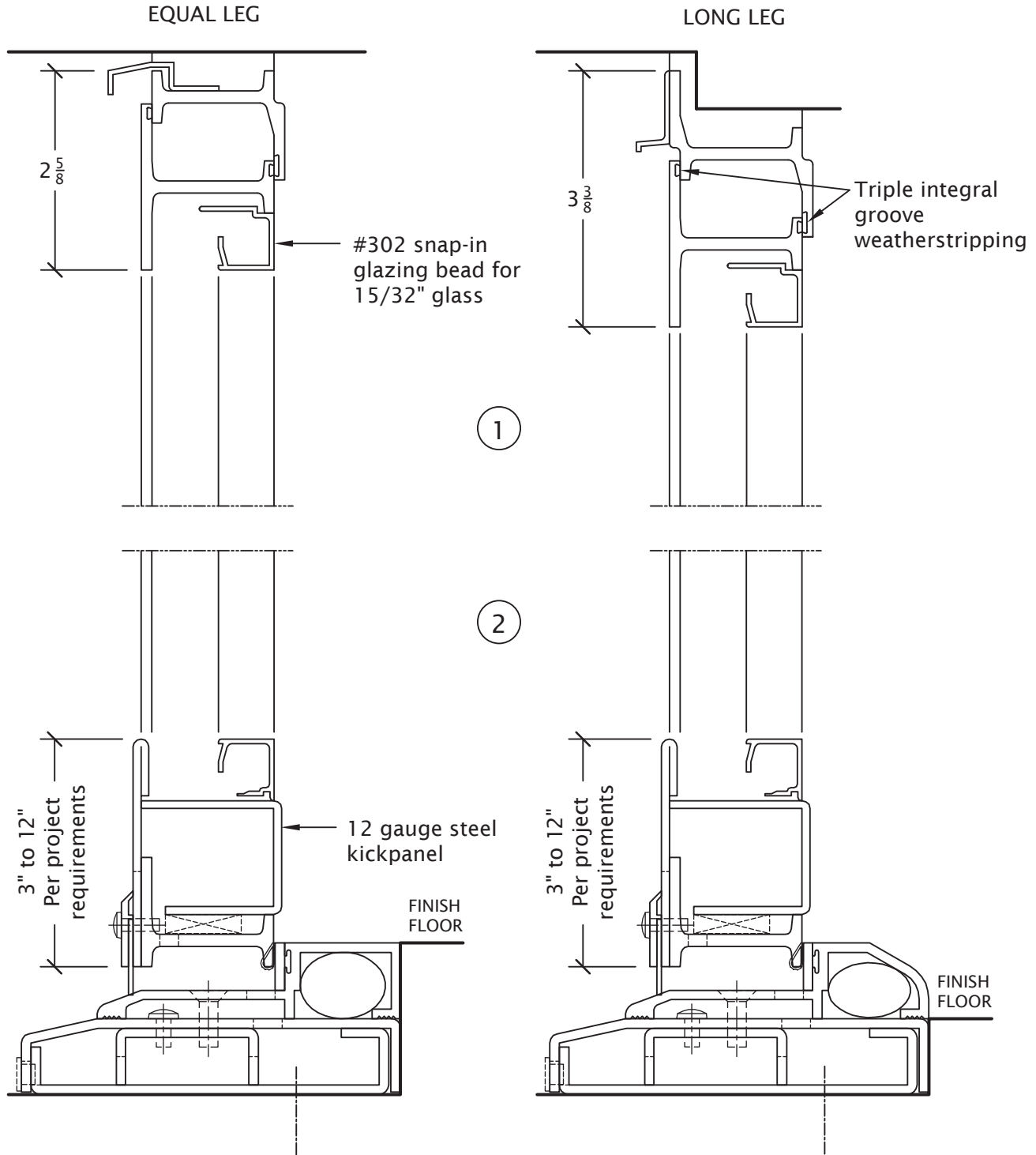
SIMULATED DIVIDED LITES (SDL)
(MUNTIN GRIDS)

(Consult Hiope's for true divided lite
muntin options)

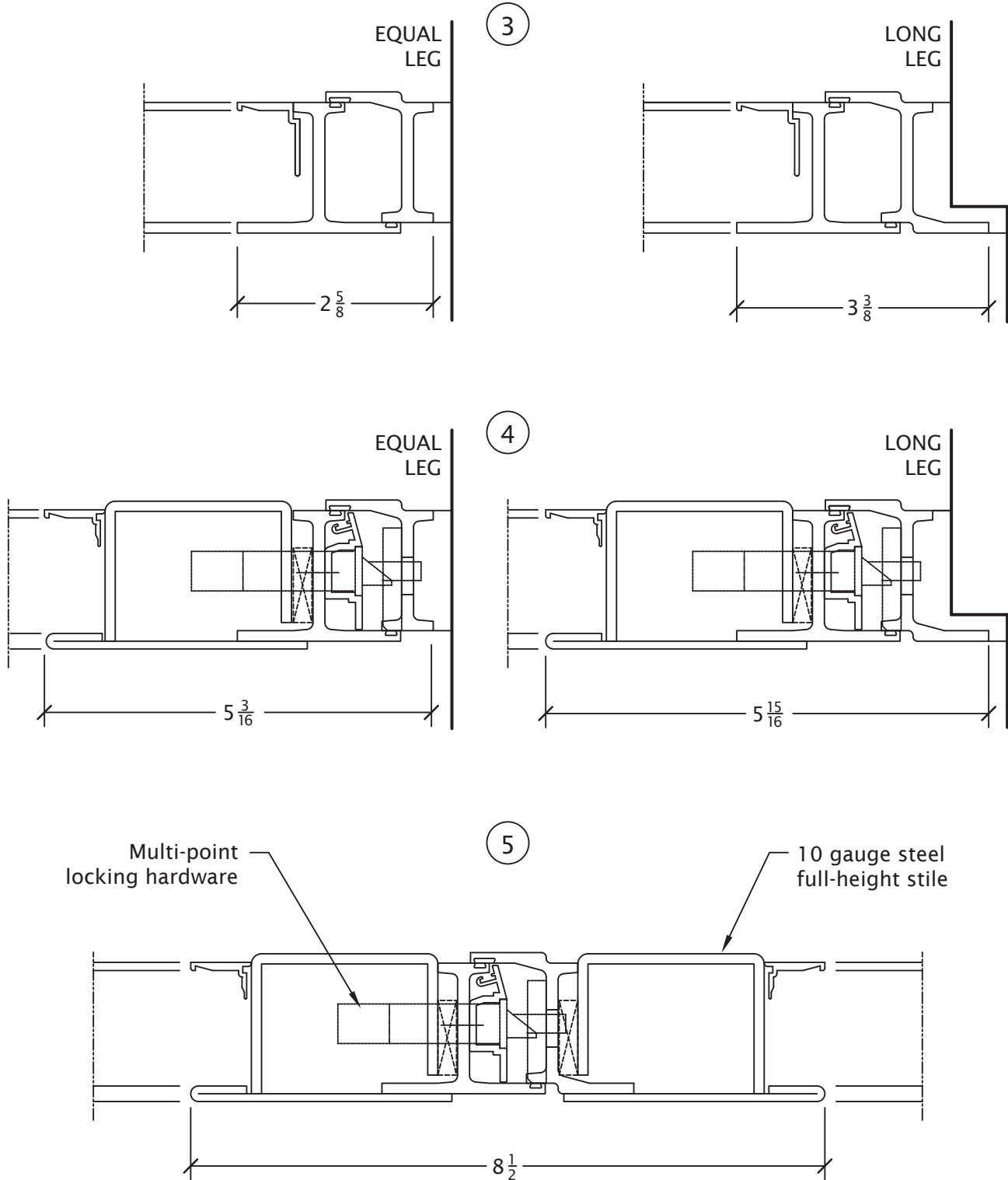
Elevations are for detail reference only. Elevations are not to scale.
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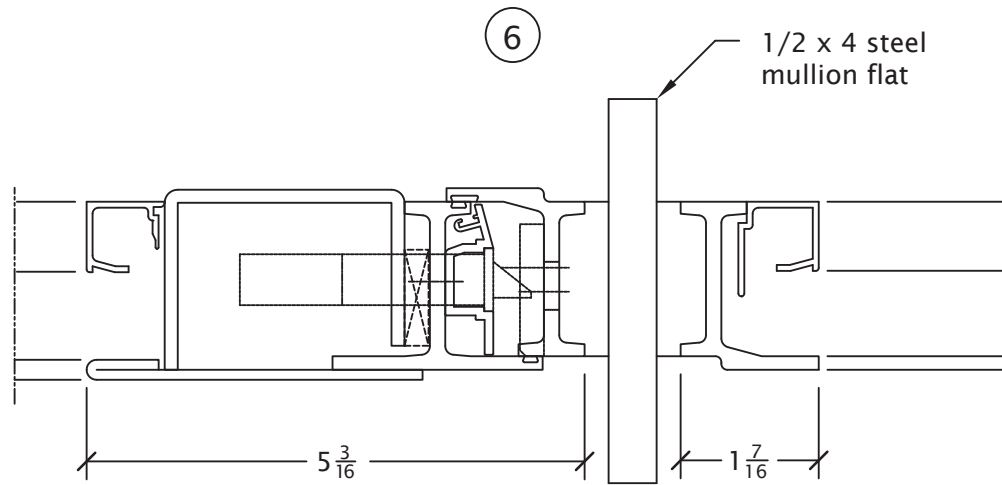
Elevations are for detail reference only. Elevations are not to scale.
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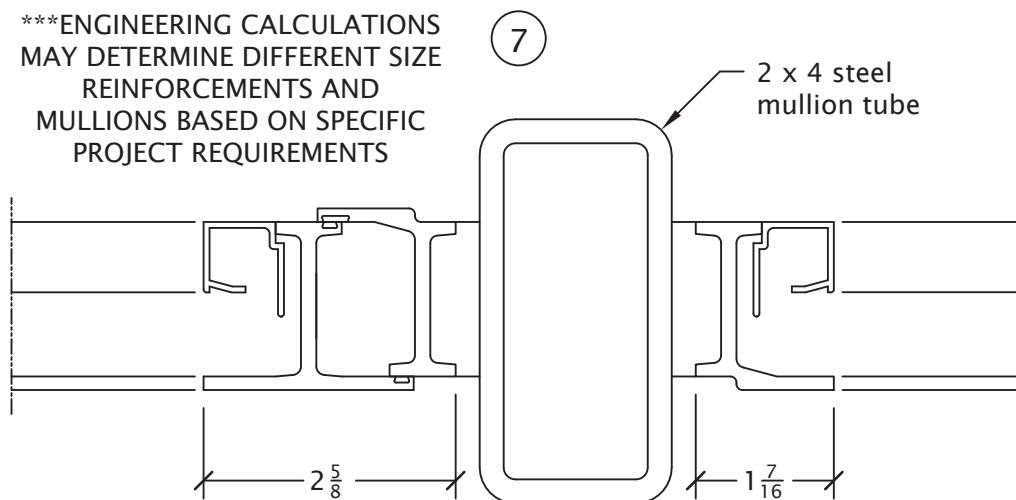
Details are half scale and shown inside glazed with 15/32" glass.
See page 14 for further glazing bead options.



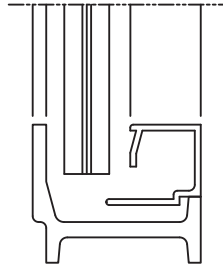
Details are half scale and shown inside glazed with 1-7/32" glass.
See page 14 for further glazing bead options.



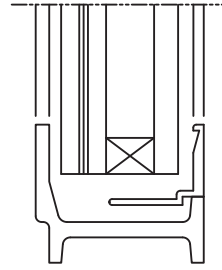
***ENGINEERING CALCULATIONS
MAY DETERMINE DIFFERENT SIZE
REINFORCEMENTS AND
MULLIONS BASED ON SPECIFIC
PROJECT REQUIREMENTS



Details are half scale and shown inside glazed with 15/32" glass.
See page 14 for further glazing bead options.



15/32" GLASS
#302 BEAD



1-7/32" INSULATING GLASS
#33 BEAD

Details are half scale and shown inside glazed.