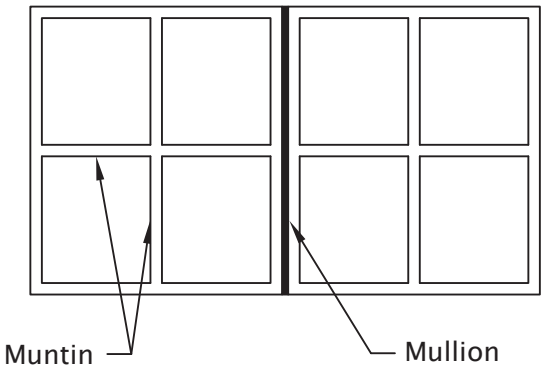
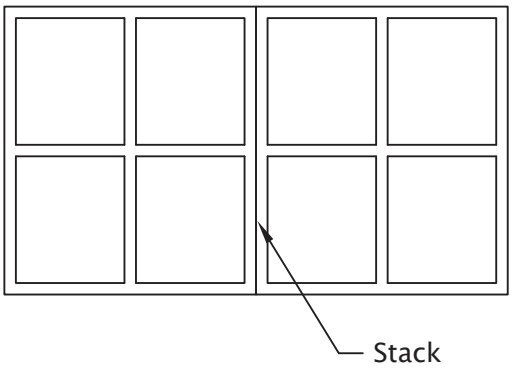
MUNTINS, MULLIONS, STACKS AND DEFLECTION CHANNELS

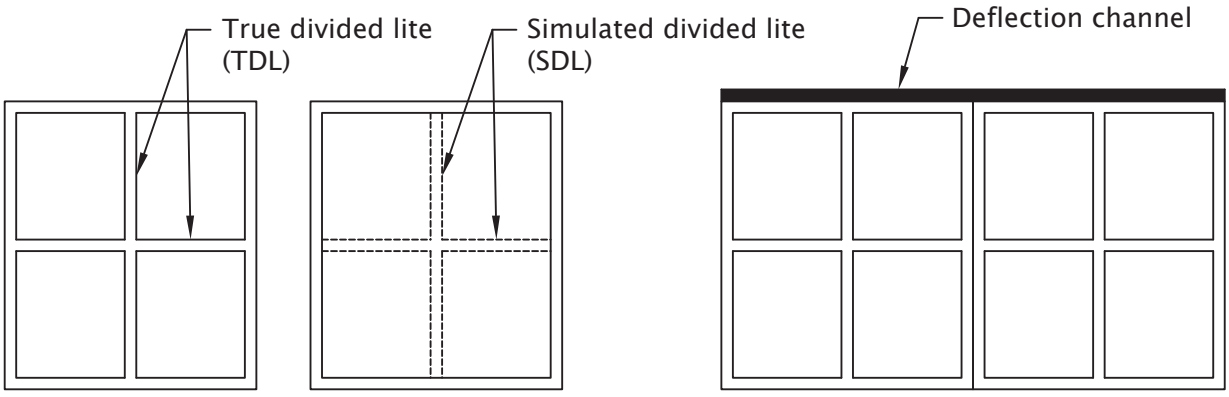
Hope's offers a variety of muntin systems in both true divided lite (TDL) and simulated divided lite (SDL) options. In addition, many of our TDL muntins can be reinforced to accommodate larger windloads and glassloads.

The many steel mullion and stacking systems can be utilized when combining multiple window and/or doors frames within an opening.

True Divided Lite	Divides the lites of glass
Simulated Divided Lite	Simulated division of lites of glass
Mullion	Separation of two or more windows
Stack	Joining windows without a mullion
Deflection Channel	Allows the window to adjust relative to the building movement, sag and settling



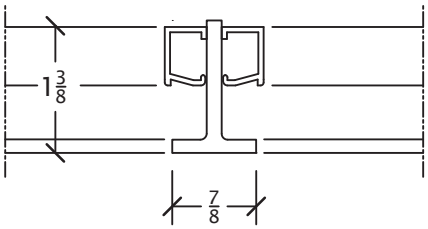




Elevations are for detail reference only. Elevations are not to scale.
All Hope's products are custom manufactured for your specific project requirements.

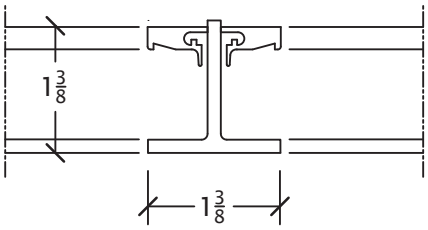
#T875
I-Values
Windload - .061
Glassload - .008

University Series™



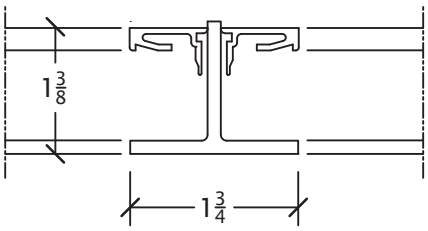
#T138
I-Values
Windload - .065
Glassload - .031

University Series™



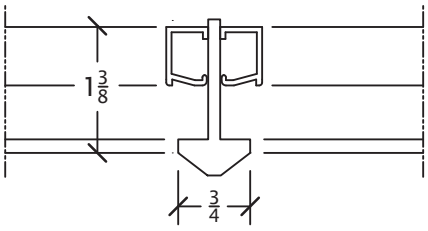
#T175
I-Values
Windload - .070
Glassload - .062

University Series™



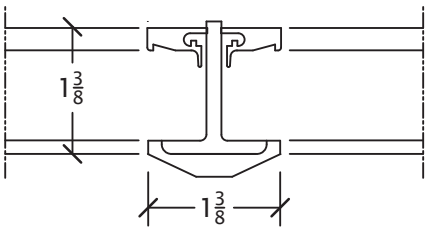
#84H
I-Values
Windload - .070
Glassload - .062

University Series™



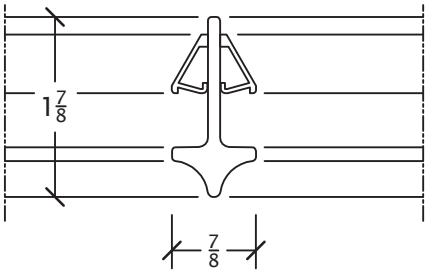
#T875 with
#84V Cap
I-Values
Windload - .070
Glassload - .062

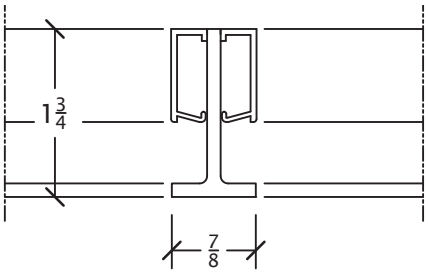
University Series™



One55 Muntin
I-Values
Windload - .098
Glassload - .084

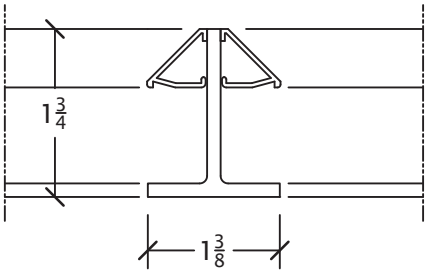
One55™ Series





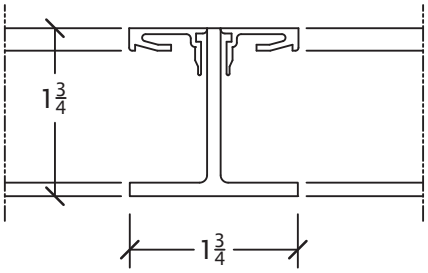
#T875L
I-Values
Windload - .111
Glassload - .008

Jamestown175™ Series
Landmark175™ Series
5000 Series™
Empire Bronze™



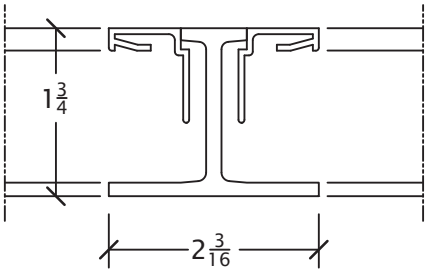
#T138L
I-Values
Windload - .130
Glassload - .031

Jamestown175™ Series
Landmark175™ Series
5000 Series™
Fire Rated



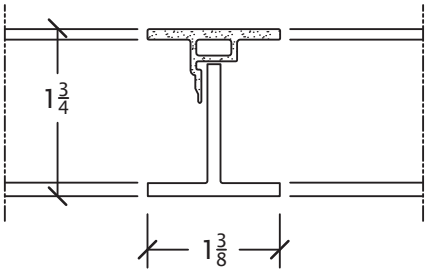
#T175L
I-Values
Windload - .140
Glassload - .063

Jamestown175™ Series
Landmark175™ Series
5000 Series™
Fire Rated



#175M
I-Values
Windload - .262
Glassload - .127

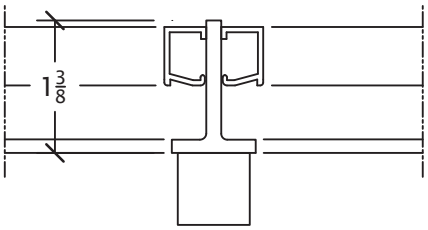
Jamestown175™ Series
Landmark175™ Series
5000 Series™
Fire Rated
Empire Bronze™

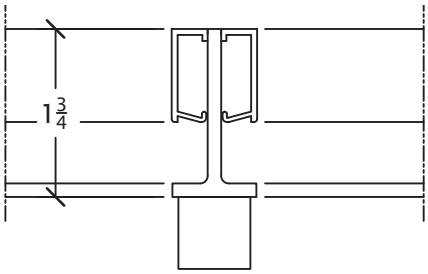


Thermal Muntin
I-Values
Windload - .046
Glassload - .053

Landmark175™ Series
thermal steel windows

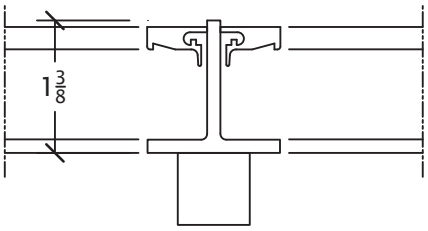
#T875
I-Values
Windload - .239
Glassload - .034

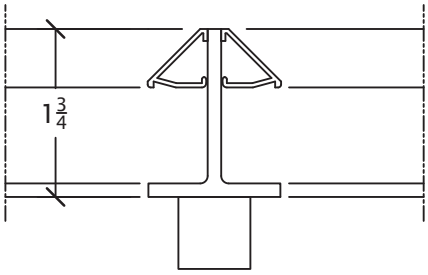




#T875L
I-Values
Windload - .358
Glassload - .035

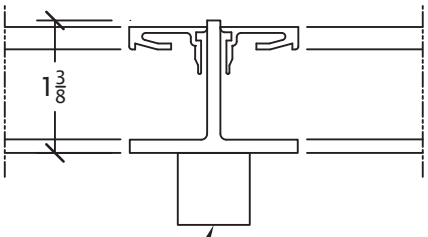
#T138
I-Values
Windload - .223
Glassload - .057



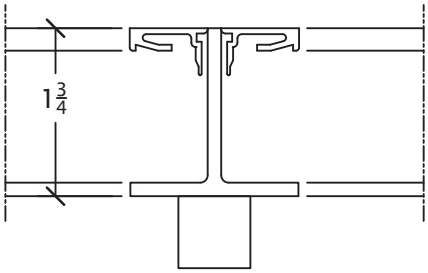


#T138L
I-Values
Windload - .358
Glassload - .057

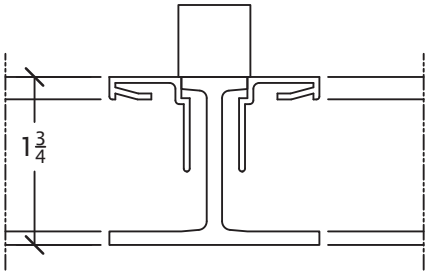
#T175
I-Values
Windload - .224
Glassload - .088



3/4 x 3/4 Steel Bar



#T175L
I-Values
Windload - .358
Glassload - .090



#175M
I-Values
Windload - .576
Glassload - .154

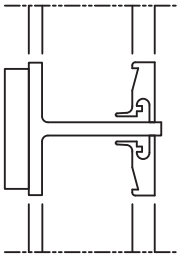
REINFORCED MUNTIN NOTES

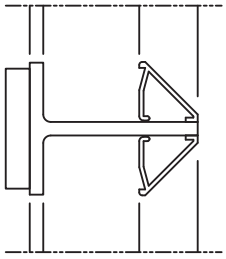
The details illustrate common reinforcing options.

The design loads for either windload or glassload may require reinforcing other than shown.

Details are half scale and shown inside glazed with 5/8" or 1" glass.

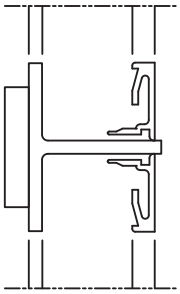
#T138
I-Value
Glassload - .071

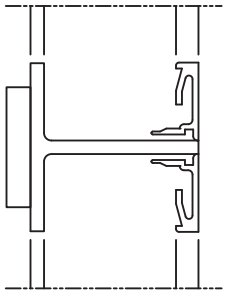




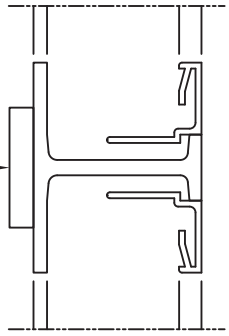
#T138L
I-Value
Glassload - .072

#T175
I-Value
Glassload - .062





#T175L
I-Value
Glassload - .104



#T175M
I-Value
Glassload - .168

1/4 x 1-1/4
steel flat

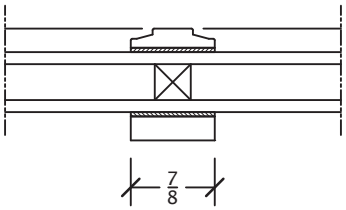
REINFORCED MUNTIN NOTES

The details illustrate common reinforcing options.

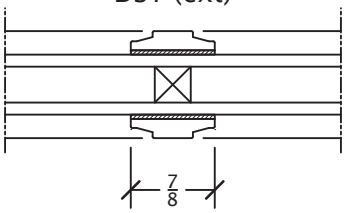
The design loads for either windload or glassload may require reinforcing other than shown.

Details are half scale and shown inside glazed with 5/8" or 1" glass.

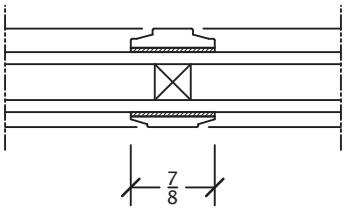
DS1 (int)
HW08 (ext)



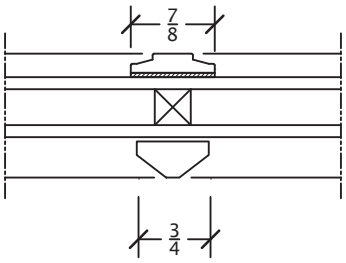
DS1 (int)
DS1 (ext)



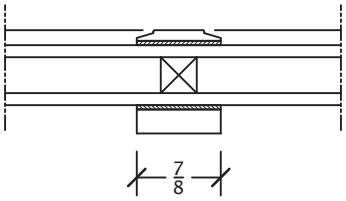
DS1 (int)
DS5 (ext)



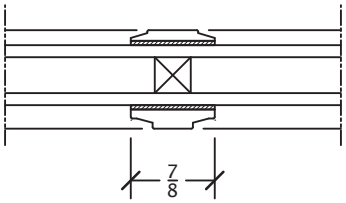
DS1 (int)
#84H (ext)



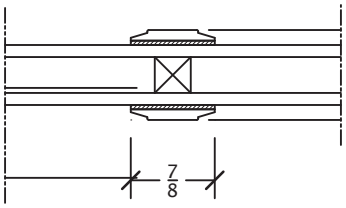
DS5 (int)
HW08 (ext)



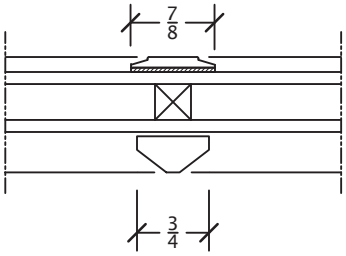
DS5 (int)
DS1 (ext)



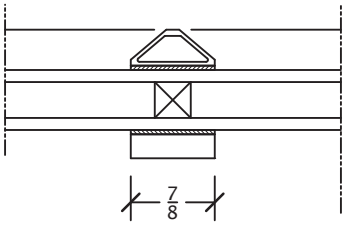
DS5 (int)
DS5 (ext)



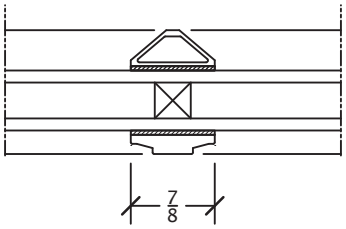
DS5 (int)
#84H (ext)



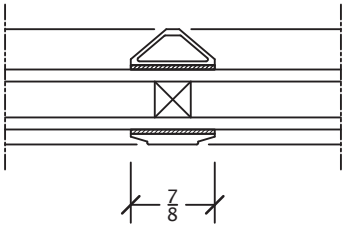
HW06 (int)
HW08 (ext)



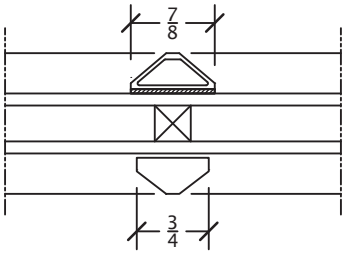
HW06 (int)
DS1 (ext)



HW06 (int)
DS5 (ext)



HW06 (int)
#84H (ext)



MUNTIN GRID NOTES

The #84H muntin grid is a hot-rolled stainless steel profile backwelded to the glazing leg of the window and at the intersections.

The DS1, DS5, HW05, HW06, HW08 and PS1 muntin grids are extrusions which are either cut square, mitered or coped and taped to the glass after glass installation.

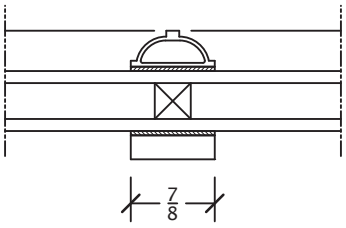
The spacer between the glass to simulate true muntins is optional and is provided by the glazier.

Optional fenestra joint available with the HW08 muntin grid.

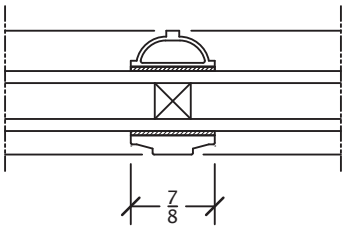
Additional muntin options are available — consult Hope's.

Details are half scale and shown inside glazed.

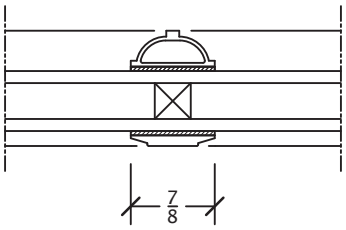
HW05 (int)
HW08 (ext)



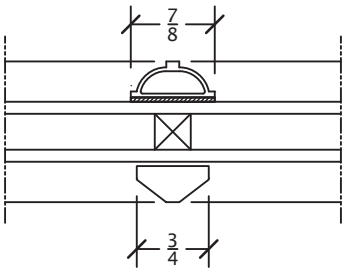
HW05 (int)
DS1 (ext)



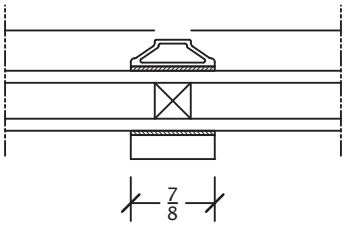
HW05 (int)
DS5 (ext)



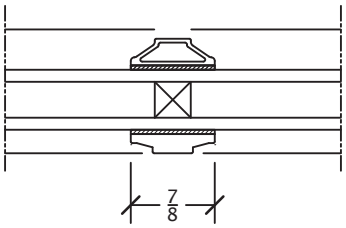
HW05 (int)
#84H (ext)



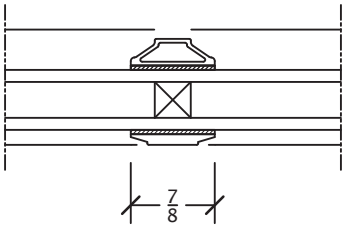
PS1 (int)
HW08 (ext)



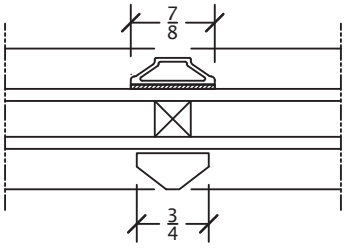
PS1 (int)
DS1 (ext)



PS1 (int)
DS5 (ext)



PS1 (int)
#84H (ext)



MUNTIN GRID NOTES

The #84H muntin grid is a hot-rolled stainless steel profile backwelded to the glazing leg of the window and at the intersections.

The DS1, DS5, HW05, HW06, HW08 and PS1 muntin grids are extrusions which are either cut square, mitered or coped and taped to the glass after glass installation.

The spacer between the glass to simulate true muntins is optional and is provided by the glazier.

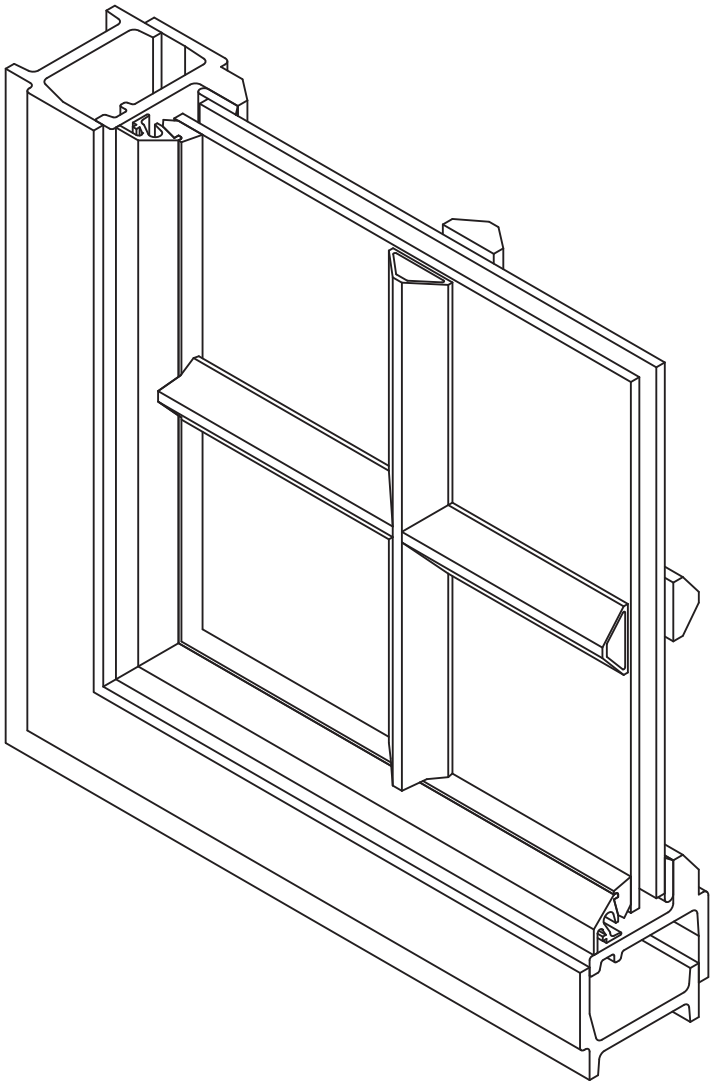
Optional fenestra joint available with the HW08 muntin grid.

Additional muntin options are available — consult Hope's.

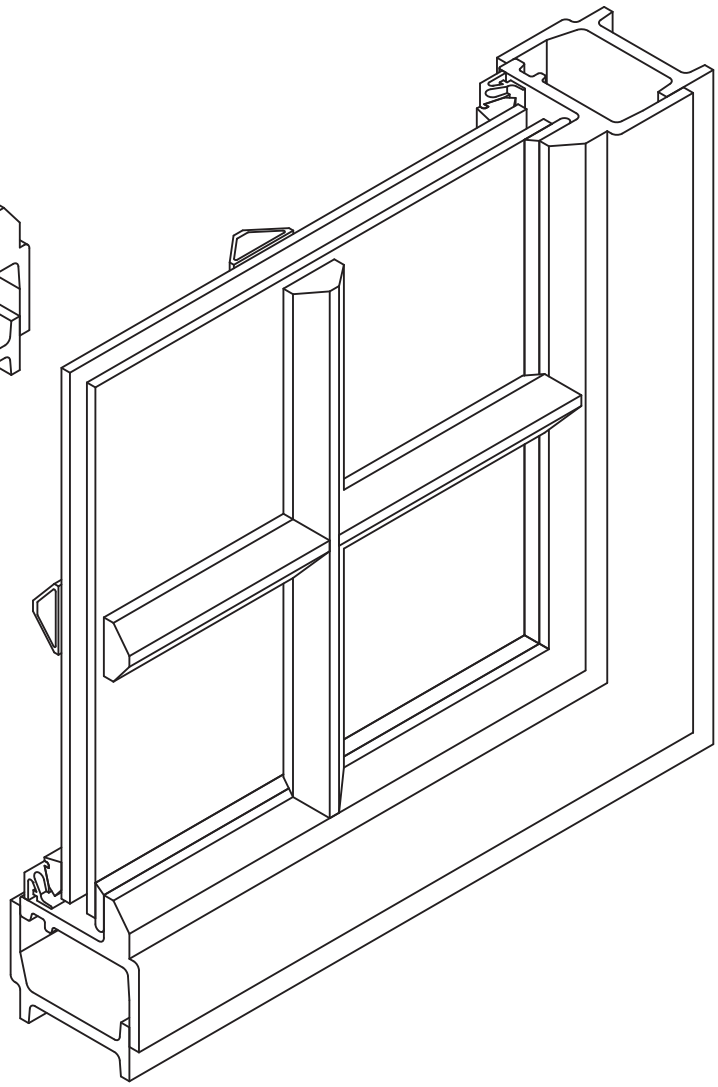
Details are half scale and shown inside glazed.

SIMULATED DIVIDED LITE (SDL)

University Series™ Steel Window
with Muntin Grids



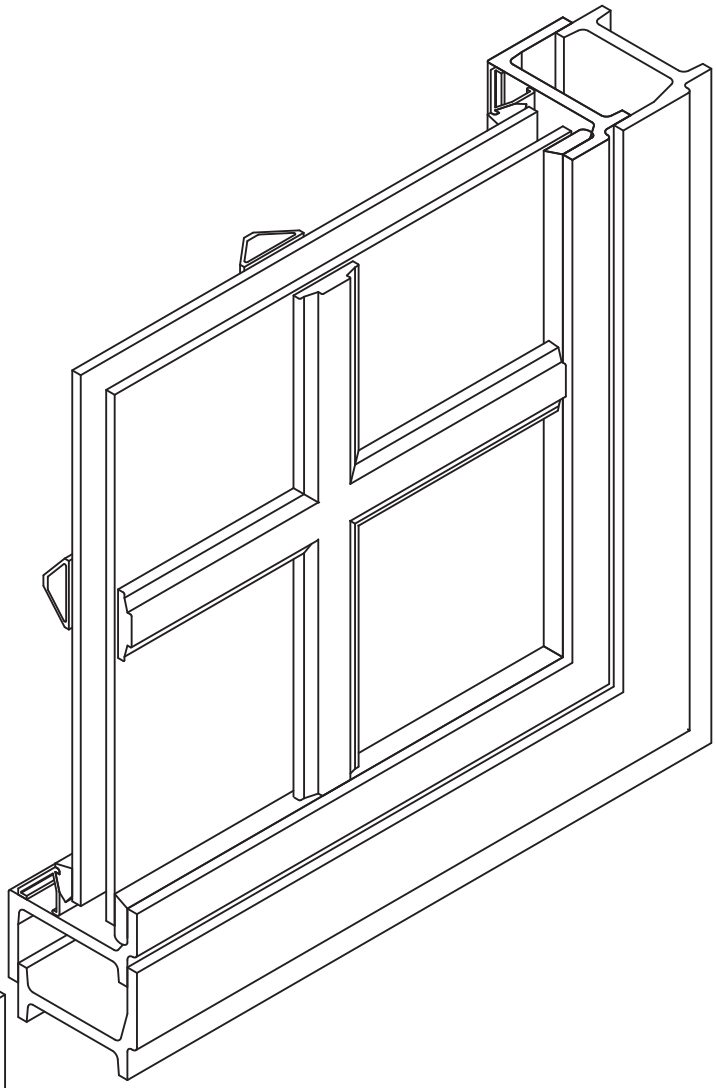
INTERIOR VIEW
University Series™ steel window
shown with interior SDL muntin HW06
with #241 glazing bead for 1/2" glass



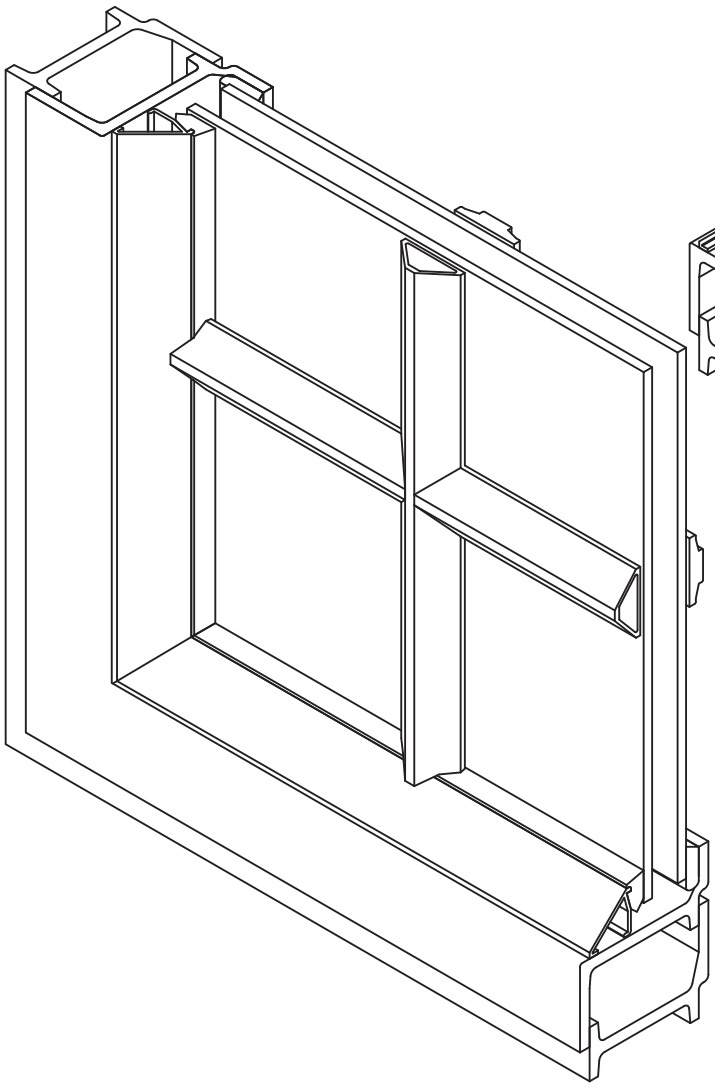
EXTERIOR VIEW
University Series™ steel window
shown with exterior SDL muntin #84H
with 1/2" glass

SIMULATED DIVIDED LITE (SDL)

Landmark175™ Series Steel Window
with Muntin Grids



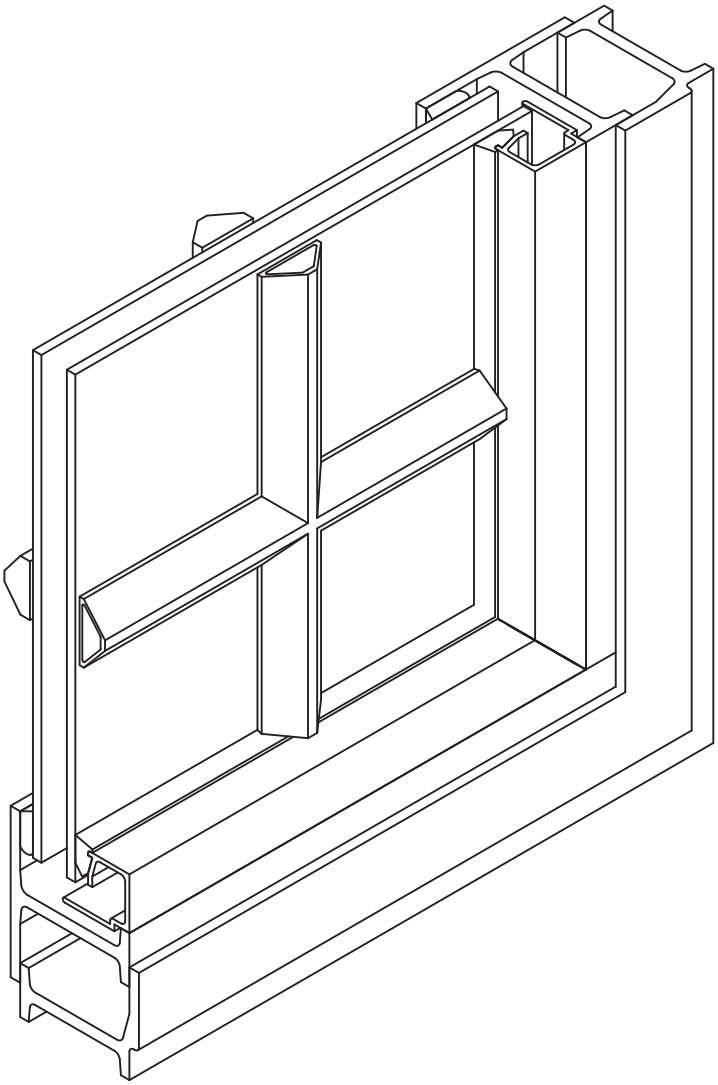
INTERIOR VIEW
Landmark175™ Series steel window
shown with interior SDL muntin #DS5
with 5/8" glass



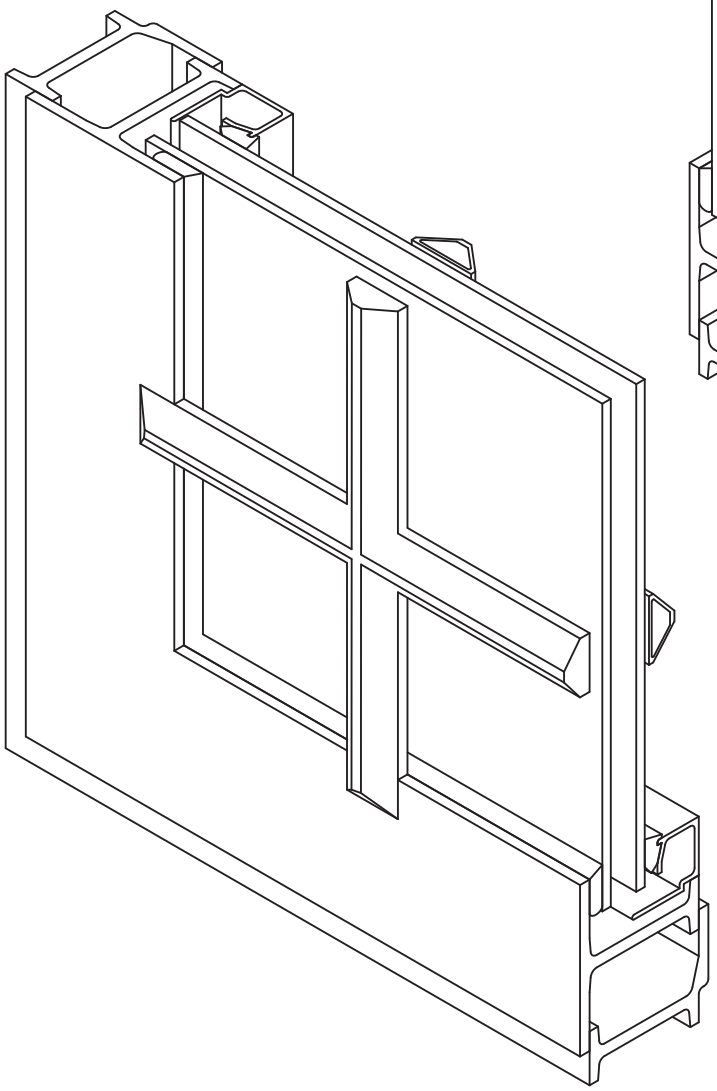
EXTERIOR VIEW
Landmark175™ Series steel window
shown with exterior SDL muntin HW06
with #240 glazing bead for 5/8" glass

SIMULATED DIVIDED LITE (SDL)

Jamestown175™ Series Steel Window
with Muntin Grids



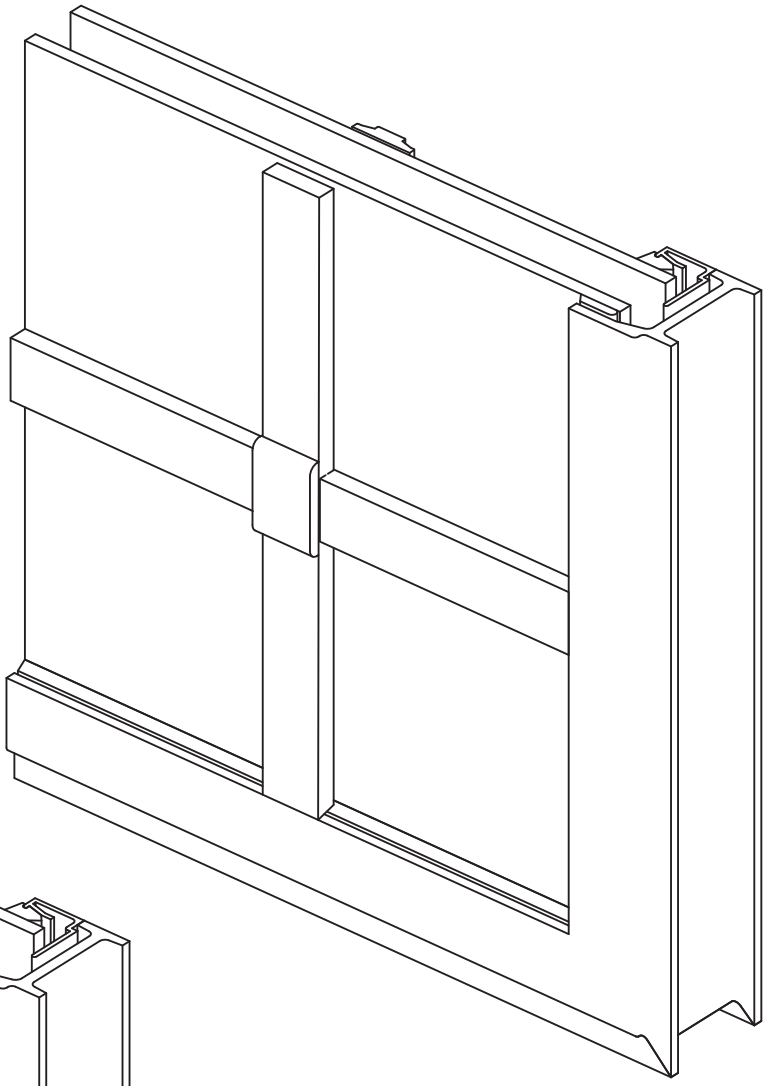
INTERIOR VIEW
Jamestown175™ Series steel window
shown with interior SDL muntin HW06
with #30 glazing bead for 5/8" glass



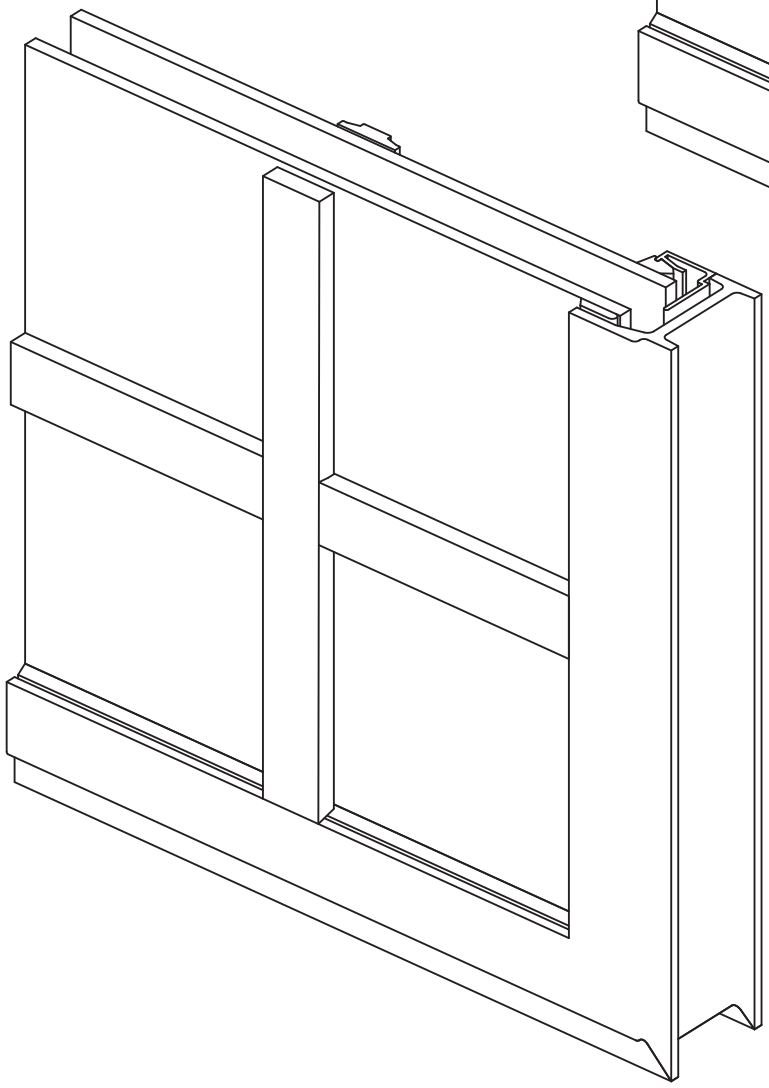
EXTERIOR VIEW
Jamestown175™ Series steel window
shown with exterior SDL muntin #84H
with 5/8" glass

SIMULATED DIVIDED LITE (SDL)

Jamestown175™ Series Steel Window
with Muntin Grids

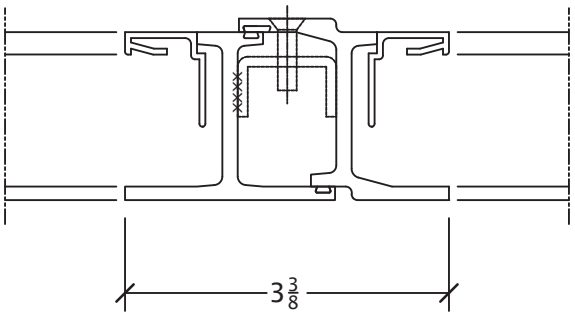


EXTERIOR VIEW
Jamestown175™ Series steel window
shown with exterior SDL muntin HW08
and HW09 fenestra intersection

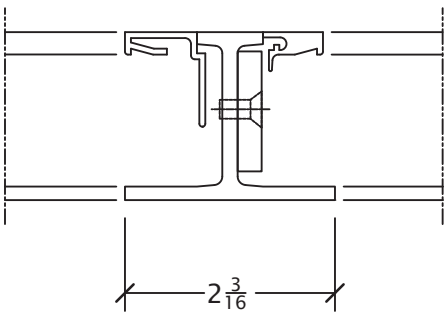


EXTERIOR VIEW
Jamestown175™ Series steel window
shown with exterior SDL muntin HW08

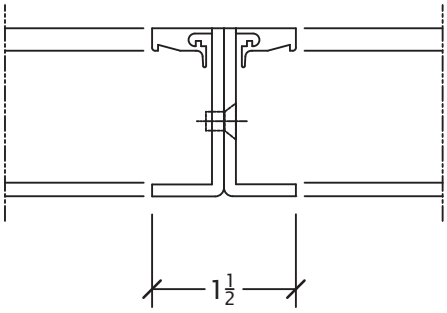
FRAME STACKS



SECTION STACK
I-Value
Windload - .604

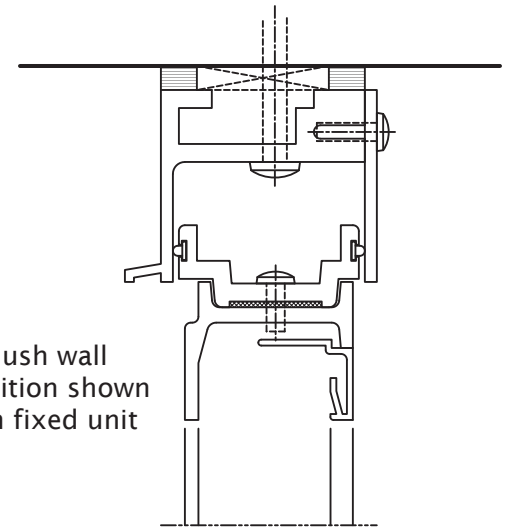


BAR STACK
I-Value
Windload - .301

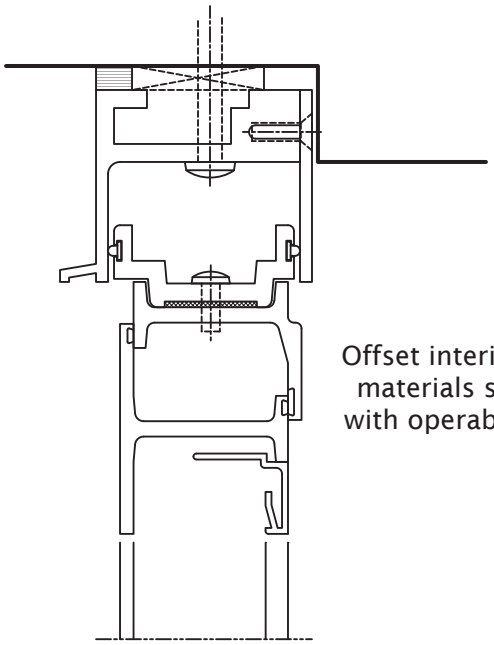


ANGLE STACK
I-Value
Windload - .186

DEFLECTION CHANNELS

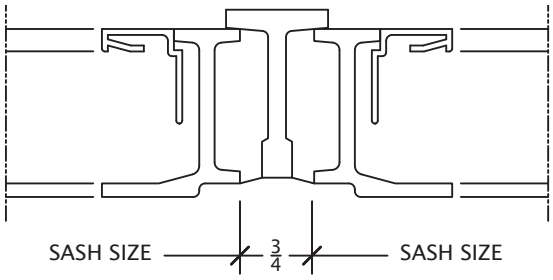


Flush wall condition shown with fixed unit



Offset interior wall materials shown with operable unit

Details are half scale and shown inside glazed with 1" glass.



SECTION MULLION - #1556A
I-Value
Windload - .192
(.620 with sections as shown)

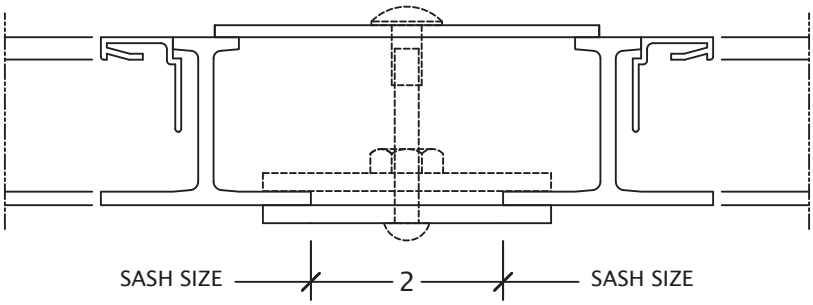
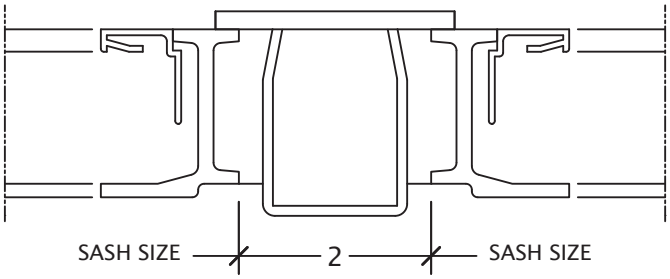
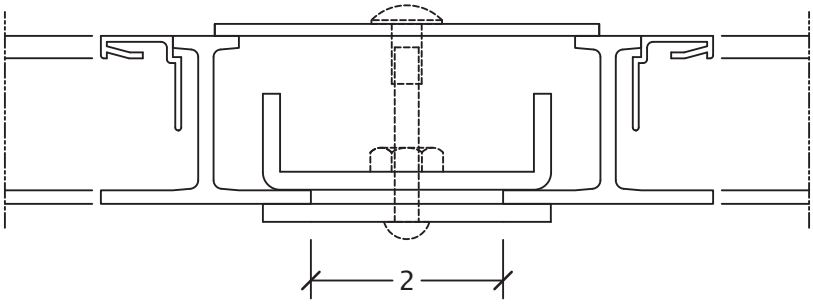


PLATE MULLION
I-Value
Windload - .430 (with sections as shown)

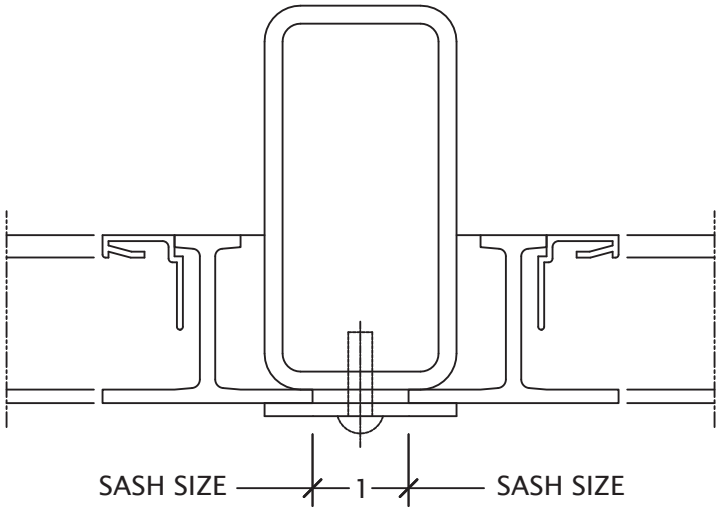


HAT MULLION
I-Value
Windload - .628
(1.056 with sections as shown)



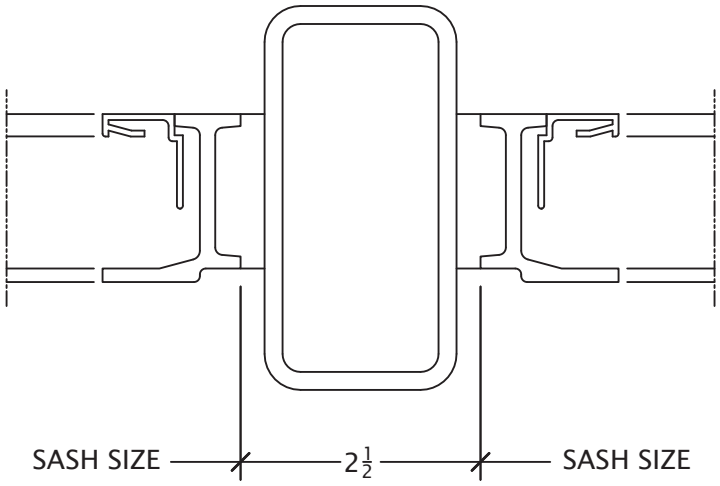
REINFORCED PLATE MULLION
I-Value
Windload - .590 (with sections as shown)

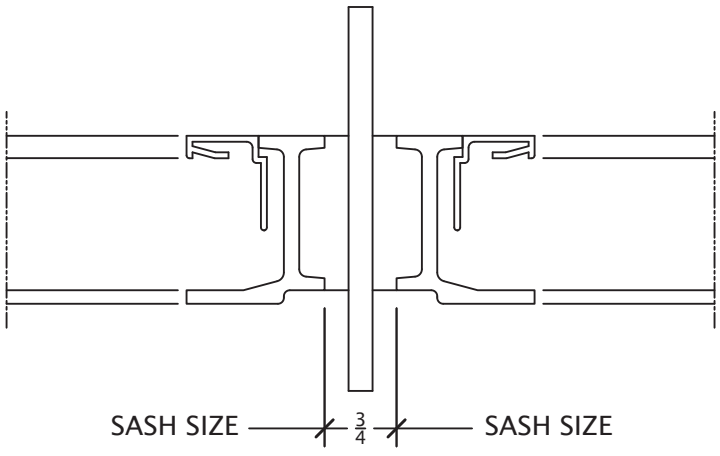
Details are half scale and shown inside glazed with 1" glass.



TUBE MULLION
I-Values
2 x 4 x 3/16 - 3.865 (shown)
2 x 4 x 1/4 - 4.689
2 x 6 x 3/16 - 10.820
2 x 6 x 1/4 - 13.300

NOTE: I-values listed are for the tube only. The sections are not included.

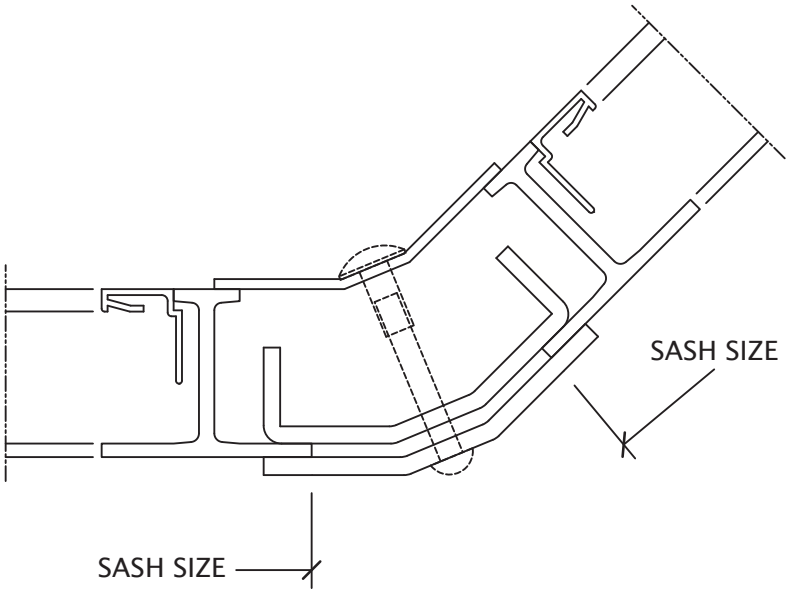




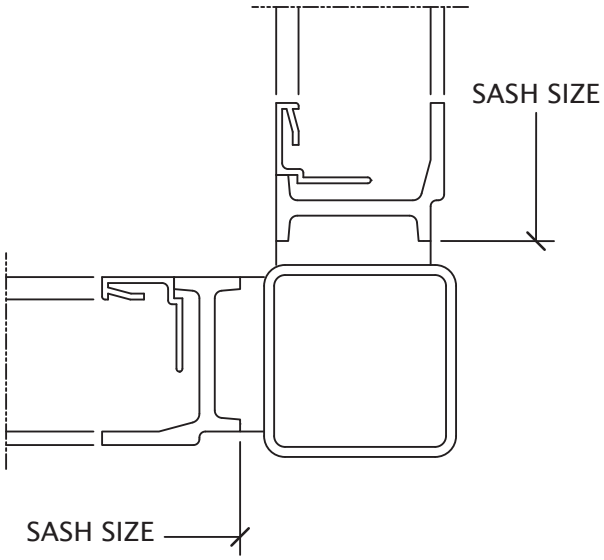
FLAT BAR MULLION
I-Values
1/4 x 2 - .167
1/2 x 2 - .333
1/4 x 4 - 1.333
1/2 x 4 - 2.667
1/4 x 6 - 4.500
1/2 x 6 - 9.000

NOTE: I-values listed are for the flat only. The sections are not included.

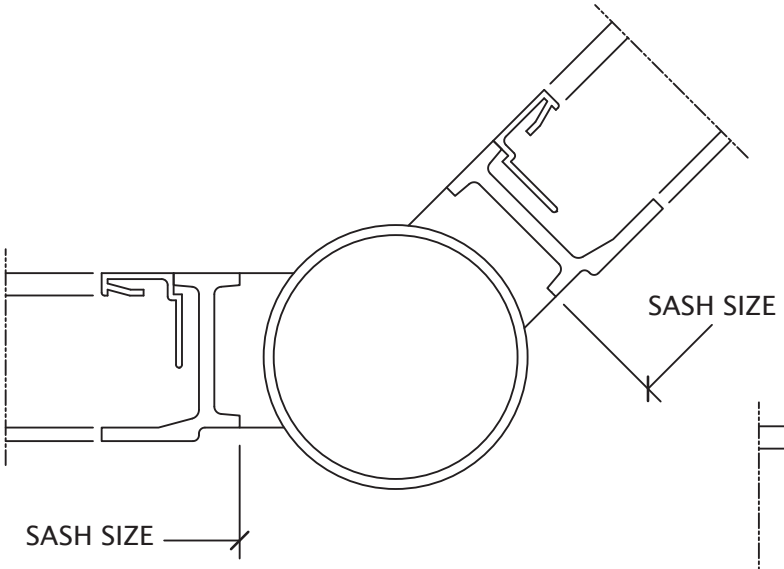
Details are half scale and shown inside glazed with 1" glass.



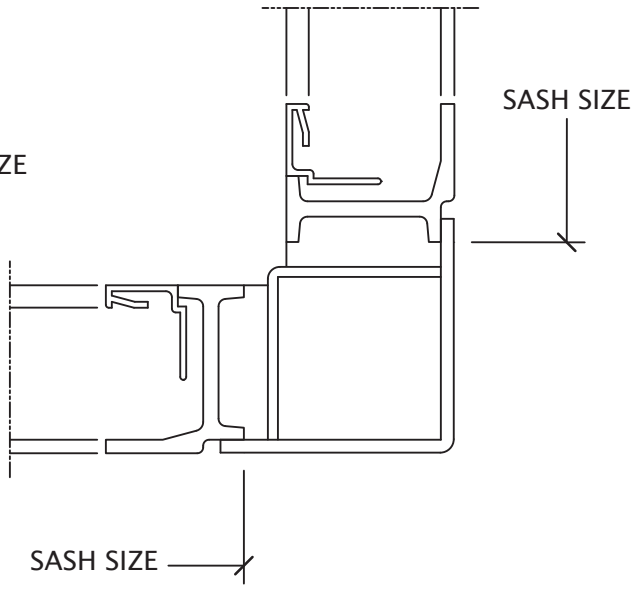
45° CORNER PLATE MULLION
I-Value
Windload - .706 (with sections as shown)



90° CORNER TUBE MULLION
2 x 2 x 12 gauge steel
I-Value
Windload - .706
(1.134 with sections as shown)



CORNER ROUND TUBE MULLION
2-3/4" diameter x 12 gauge steel
I-Value
Windload - 1.019
(1.447 with sections as shown)



CORNER HAT MULLION
I-Value
Windload - .469
(.897 with sections as shown)

Details are half scale and shown inside glazed with 1" glass.