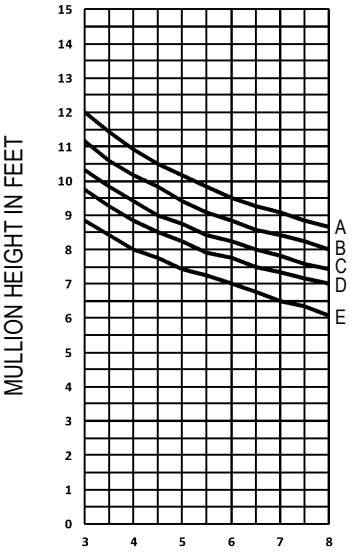
Windload Charts | A450 Series

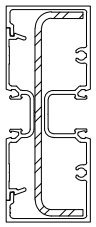
A = 16 P.S.F. (766 Pa)
B = 20 P.S.F. (958 Pa)
C = 25 P.S.F. (1197 Pa)
D = 30 P.S.F. (1436 Pa)
E = 40 P.S.F. (1915 Pa)

Description: 1 3/4" X 4 1/2" Center Glazed for 1/4" Glass
Function: Storefront
Detail: Design Criteria
Scale: N.T.S.

$I = 2.738\ IN^4$

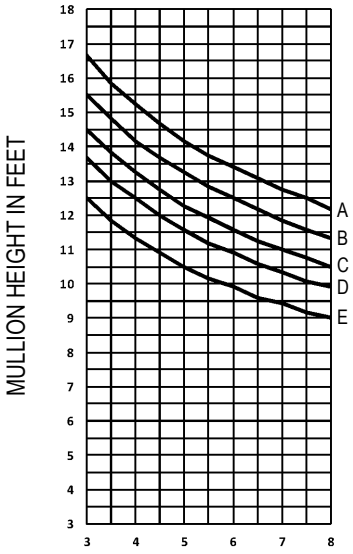
$S_1 = 1.031\ IN^3$ $S_2 = 0.233\ IN^3$

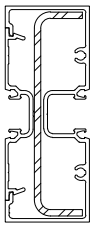




TL152 / TL110

$I = 7.617\ IN^4$



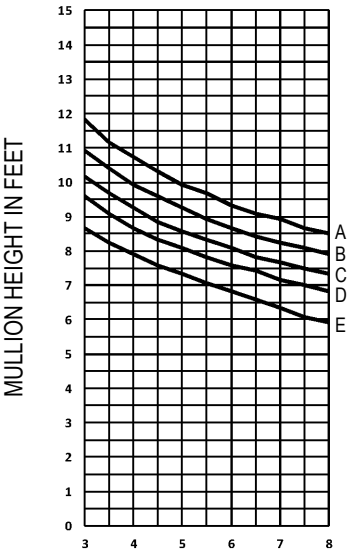


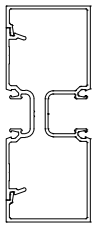
TL152 / TL110 WITH STEEL REINFORCEMENT 1" X 4 1/4" X 10 GA.

- Mullions are assumed to be single span, simple beam elements, uniformly loaded and adequately braced to prevent lateral-torsional buckling. All other complex design conditions shall be reviewed by Arcadia or a design professional.
- Aluminum extrusions shall be 6063-T6 alloy. Allowable stresses to be derived per Aluminum Design Manual. Deflection limitation of mullions shall be in accordance with AAMA TIR-A11 of L/175 for spans up to 13'-6" and L/240 + 1/4" for all others where L is equal to the span of mullion.
- A design professional shall be consulted to confirm that no lite of glass deflects more than H/175 or 3/4", whichever is less, where H indicates the height of glass.
- For mullions containing steel reinforcement, the reinforcement is assumed to be installed for the full length of the mullion. A design professional shall be consulted for instances where steel reinforcement is installed for a partial length of the mullion span.
- Windload pressure determinations shall be per ASCE 7 and according to local governing codes. A professional engineer shall be consulted for the most current laws and local building codes.
- Selection of perimeter fasteners and attachment of glazing system to building structure are project specific and therefore shall be reviewed and determined by a design professional.
- Arcadia assumes no responsibility for selecting the appropriate systems for specific projects.

$I = 2.586\ IN^4$

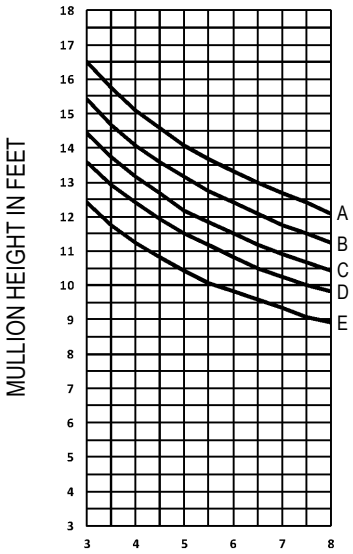
$S_1 = 0.964\ IN^3$ $S_2 = 0.233\ IN^3$

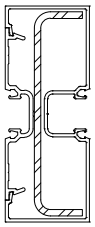




TL157 / TL110

$I = 7.465\ IN^4$





TL157 / TL 110 WITH STEEL REINFORCEMENT 1" X 4 1/4" X 10 GA.

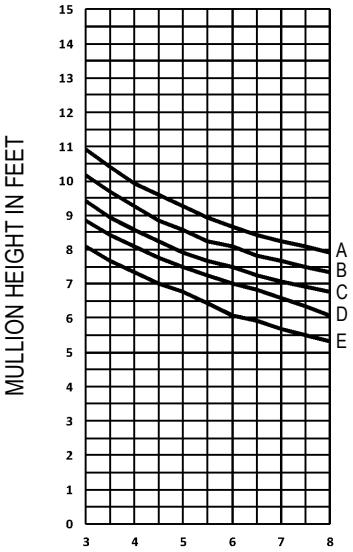
Consult Your Local Arcadia Representative For Special Applications Not Covered By These Curves.

Windload Charts | A450 Series

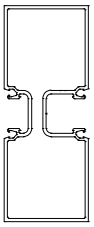
A = 16 P.S.F. (766 Pa)
B = 20 P.S.F. (958 Pa)
C = 25 P.S.F. (1197 Pa)
D = 30 P.S.F. (1436 Pa)
E = 40 P.S.F. (1915 Pa)

Description: 1 3/4" X 4 1/2" Center Glazed for 1/4" Glass
Function: Storefront
Detail: Design Criteria
Scale: N.T.S.

$I = 2.066\ IN^4$
$S = 0.918\ IN^3$

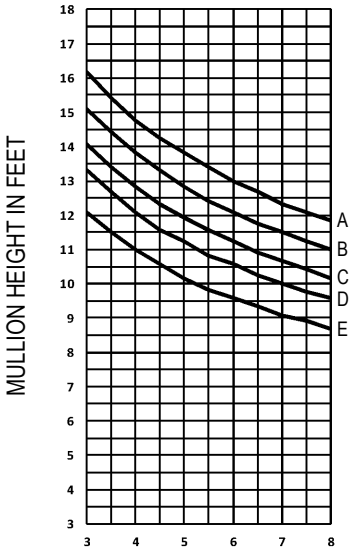


MULLION SPACING IN FEET

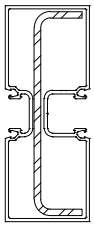


TL155

$I = 6.945\ IN^4$



MULLION SPACING IN FEET



TL155 WITH
STEEL REINFORCEMENT
1" X 4 1/4" X 10 GA.

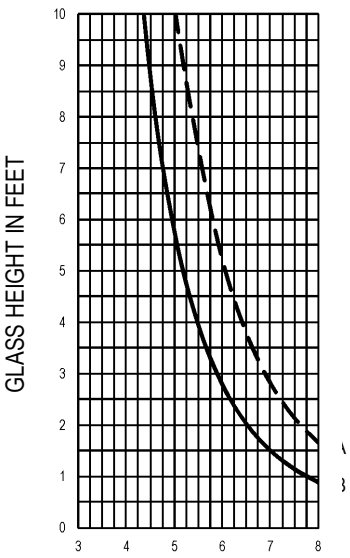
- Mullions are assumed to be single span, simple beam elements, uniformly loaded and adequately braced to prevent lateral-torsional buckling. All other complex design conditions shall be reviewed by Arcadia or a design professional.
- Aluminum extrusions shall be 6063-T6 alloy. Allowable stresses to be derived per Aluminum Design Manual. Deflection limitation of mullions shall be in accordance with AAMA TIR-A11 of L/175 for spans up to 13'-6" and L/240 + 1/4" for all others where L is equal to the span of mullion.
- A design professional shall be consulted to confirm that no lite of glass deflects more than H/175 or 3/4", whichever is less, where H indicates the height of glass.
- For mullions containing steel reinforcement, the reinforcement is assumed to be installed for the full length of the mullion. A design professional shall be consulted for instances where steel reinforcement is installed for a partial length of the mullion span.
- Windload pressure determinations shall be per ASCE 7 and according to local governing codes. A professional engineer shall be consulted for the most current laws and local building codes.
- Selection of perimeter fasteners and attachment of glazing system to building structure are project specific and therefore shall be reviewed and determined by a design professional.
- Arcadia assumes no responsibility for selecting the appropriate systems for specific projects.

Consult Your Local Arcadia Representative For Special Applications Not Covered By These Curves.

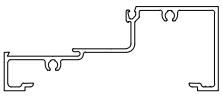
Deadload Charts | A450 Series

Description: 1 3/4" X 4 1/2" Center Glazed for 1/4" Glass
Function: Storefront
Detail: Design Criteria
Deadload Charts for 1/4" Glass (3.25 PSF) | Scale: N.T.S.

I = 0.248 IN^4
S = 0.273 IN^3

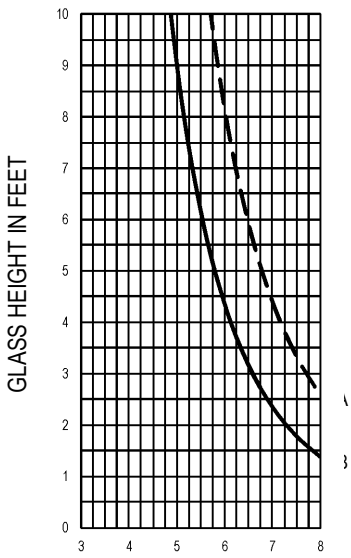


MULLION WIDTH IN FEET

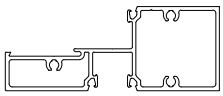


TL153 - 1" GLASS

I = 0.387 IN^4
S = 0.365 IN^3



MULLION WIDTH IN FEET



TL154 - 1" GLASS

CURVE REPRESENTATION
A (- - - -) = 1/8" PTS.
B (▬) = 1/4" PTS.