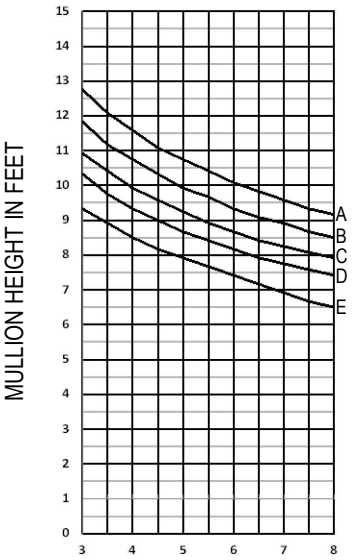
Windload Charts | AG451 Series

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)

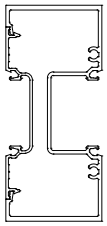
Description: 2" X 4 1/2" Center Glazed for 1" Glass
Function: Storefront
Detail: Design Criteria
Scale: N.T.S.

$I = 3.236\ IN^4$

$S_1 = 1.290\ IN^3$ $S_2 = 0.185\ IN^3$

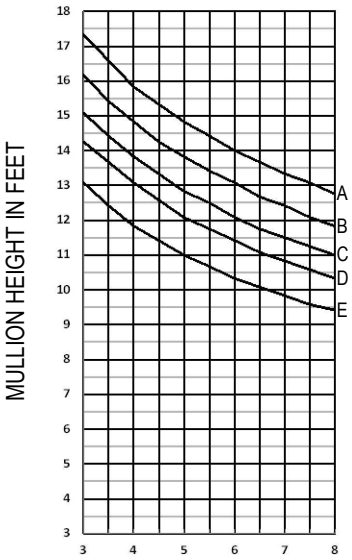


MULLION SPACING IN FEET

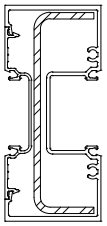


TL202 / TL210

$I = 8.746\ IN^4$



MULLION SPACING IN FEET

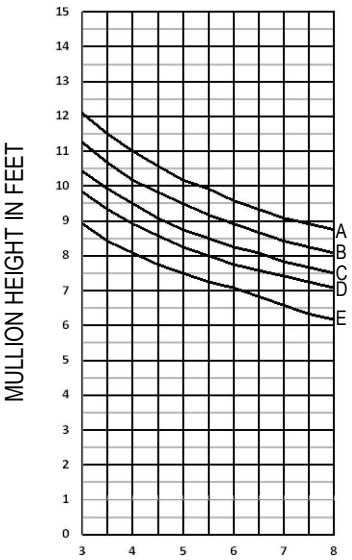


TL202 / TL210 WITH STEEL REINFORCEMENT 1 1/4" X 4 3/16" X 10 GA.

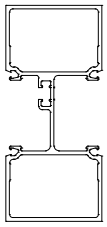
- Mullions are assumed to be single span, simple beam elements, uniformly loaded and adequately braced to prevent lateral-torsional buckling. All other complex design conditions shall be reviewed by Arcadia or a design professional.
- Aluminum extrusions shall be 6063-T6 alloy. Allowable stresses to 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.

$I = 2.792\ IN^4$

$S = 1.229\ IN^3$



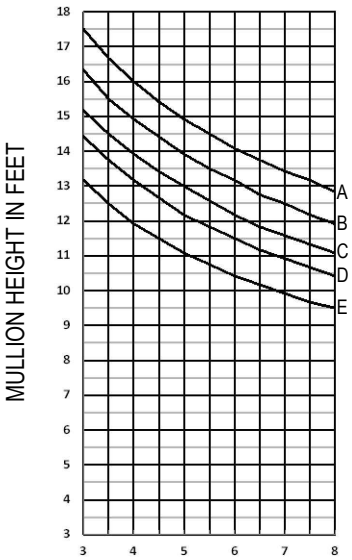
MULLION SPACING IN FEET



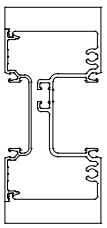
TG215

$I = 8.923\ IN^4$

$S_1 = 3.806\ IN^3$ $S_2 = 0.185\ IN^3$



MULLION SPACING IN FEET



TG212 / TL210

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

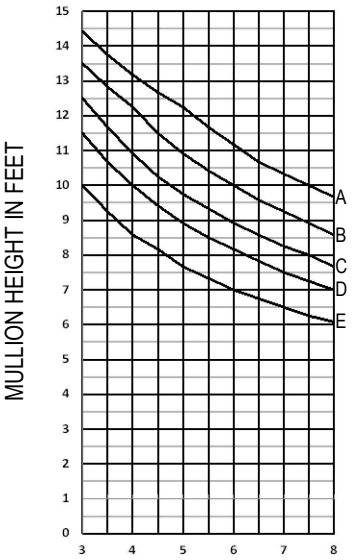
Windload Charts | AG451 Series

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)

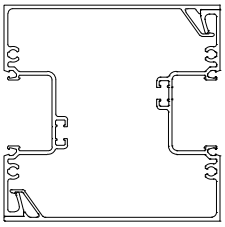
Description: 2" X 4 1/2" Center Glazed for 1" Glass
Function: Storefront
Detail: Design Criteria
Scale: N.T.S.

$I = 4.828\ IN^4$

$S_1 = 0.851\ IN^3$ $S_2 = 0.851\ IN^3$

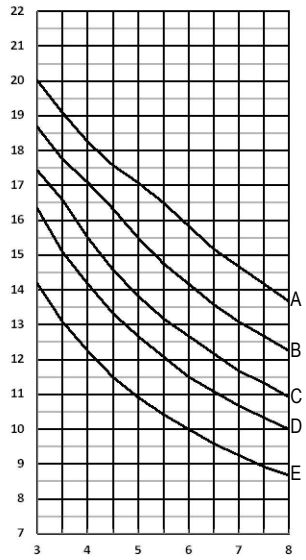


MULLION SPACING IN FEET

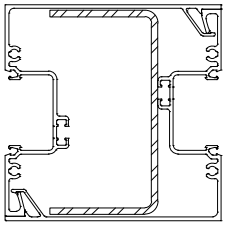


TG207 / TG207

$I = 13.78\ IN^4$



MULLION SPACING IN FEET

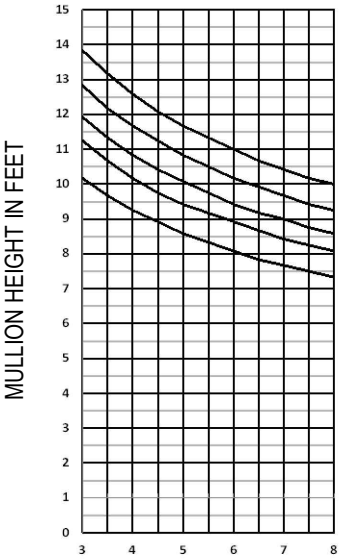


TG207 / TG207 WITH STEEL REINFORCEMENT 2 1/4" X 4 1/4" X 10 GA.

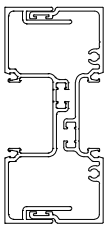
- Mullions are assumed to be single span, simple beam elements, uniformly loaded and adequately braced to prevent lateral-torsional buckling. All other complex design conditions shall be reviewed by Arcadia or a design professional.
- Aluminum extrusions shall be 6063-T6 alloy. Allowable stresses to 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.

$I = 4.168\ IN^4$

$S_1 = 0.956\ IN^3$ $S_2 = 0.878\ IN^3$



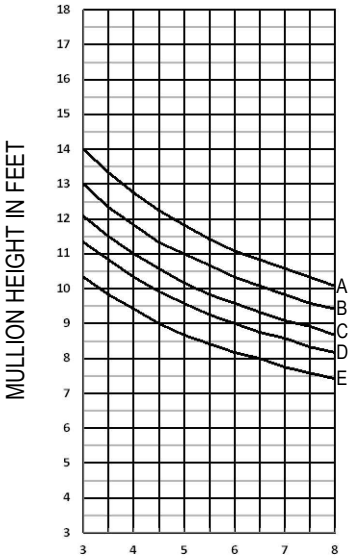
MULLION SPACING IN FEET



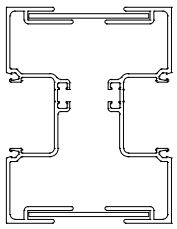
TG204 / TG205

$I = 4.342\ IN^4$

$S_1 = 0.956\ IN^3$ $S_2 = 0.956\ IN^3$



MULLION SPACING IN FEET



TG204 / TG204

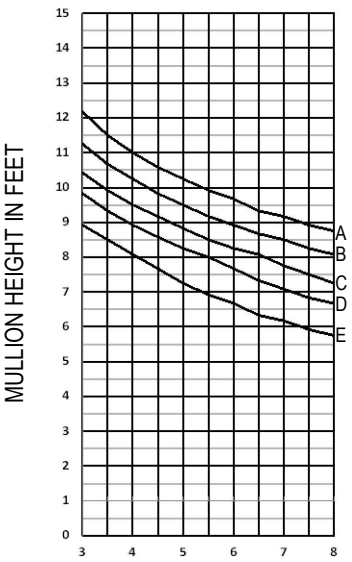
Consult Your Local Arcadia Representative For Special Applications Not Covered By These Curves.

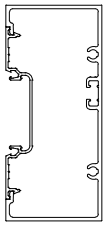
Windload Charts | AG451 Series

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

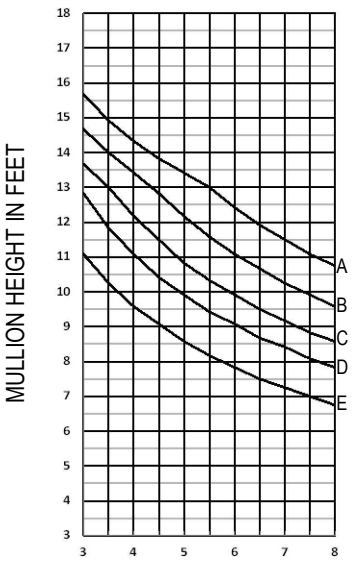
$I = 2.819\ IN^4$
$S_1 = 1.094\ IN^3$ $S_2 = 0.185\ IN^3$

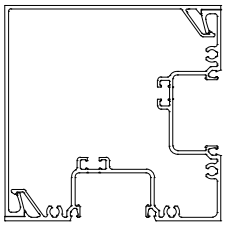




TGDJ / TL210

$Ix = 4.435\ IN^4$
$Iy = 4.484\ IN^4$

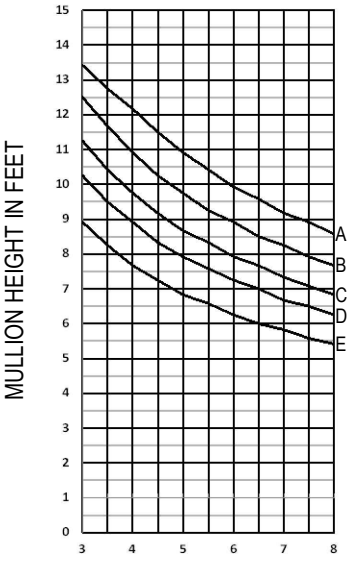


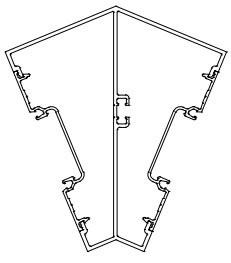


TG209 / TG206

- 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.

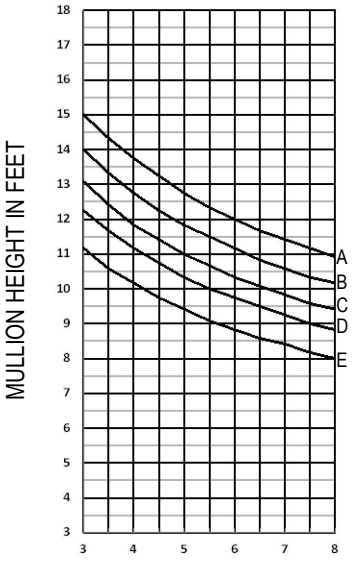
$I = 3.820\ IN^4$
$S_1 = 1.073\ IN^3$ $S_2 = 0.327\ IN^3$

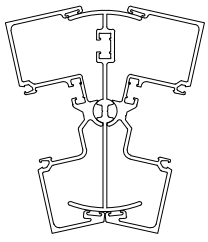




TG145 / TL210

$I = 5.472\ IN^4$
$S_1 = 0.702\ IN^3$ $S_2 = 1.634\ IN^3$





TF220 / TG224

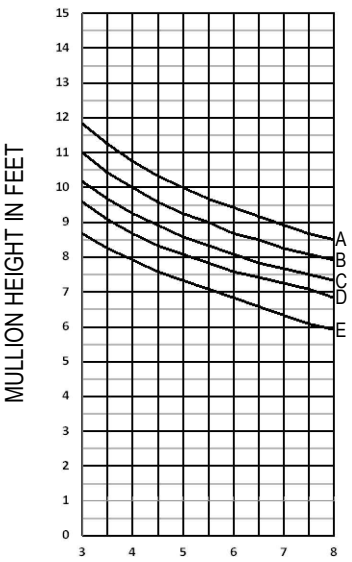
Consult Your Local Arcadia Representative For Special Applications Not Covered By These Curves.

Windload Charts | AG451 Series

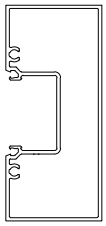
A = 16 P.S.F. (766 Pa)
B = 20 P.S.F. (958 Pa)
C = 25 P.S.F. (1197 Pa)
D = 30 P.S.F. (1436 Pa)
E = 40 P.S.F. (1915 Pa)

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

I = 2.610 IN^4
S = 1.160 IN^3

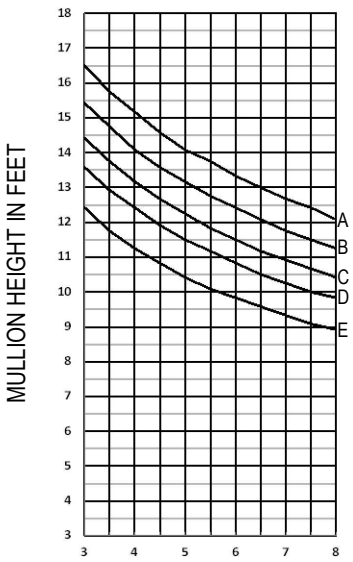


MULLION SPACING IN FEET

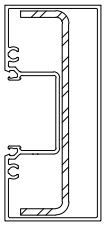


TL251

I = 7.489 IN^4



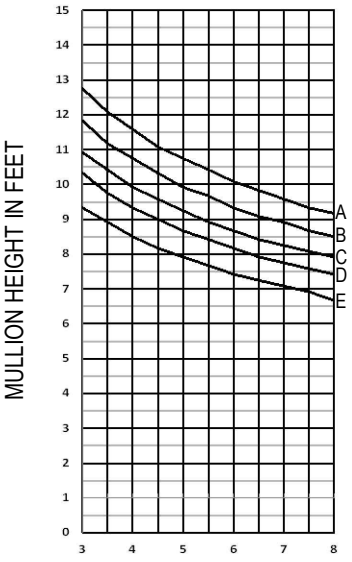
MULLION SPACING IN FEET



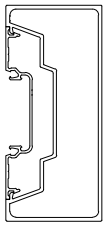
TL251 WITH
STEEL REINFORCEMENT
1" X 4 1/4" X 10 GA.

- 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 = 3.237 IN^4
S_1= 1.290 IN^3 S_2= 0.185 IN^3

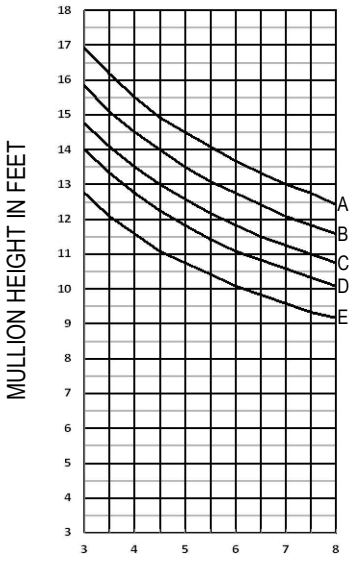


MULLION SPACING IN FEET

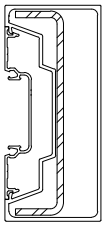


TL259 / TL210

I = 8.116 IN^4



MULLION SPACING IN FEET



TL259 / TL210 WITH
STEEL REINFORCEMENT
1" X 4 1/4" X 10 GA.

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

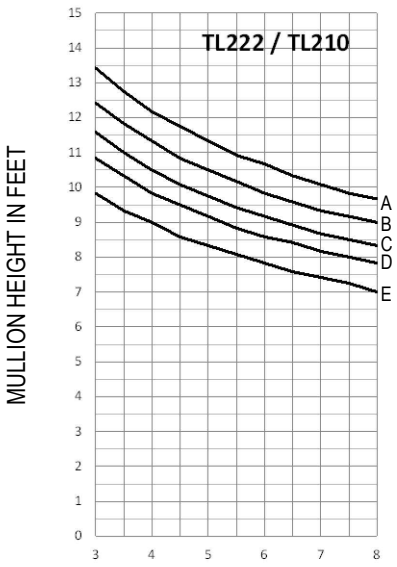
Windload Charts | AG451 Series

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)

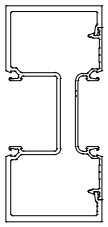
Description: 2" X 4 1/2" Center Glazed for 1" Glass
Function: Storefront
Detail: Design Criteria
Scale: N.T.S.

$I_T = 3.795\ IN^4$

$S = 1.538\ IN^3$ $S_2 = 0.185\ IN^3$

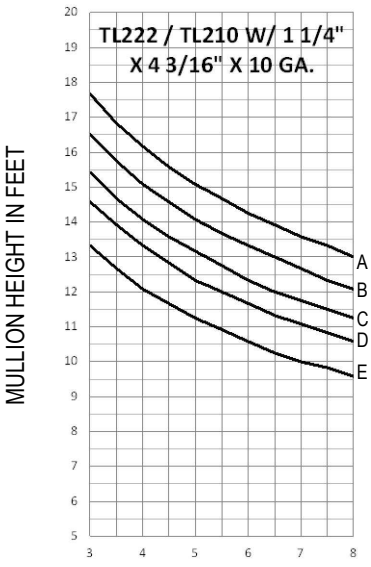


MULLION SPACING IN FEET

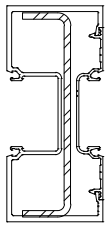


TL222 / TL210

$I = 9.305\ IN^4$



MULLION SPACING IN FEET



TL222 / TL210 WITH STEEL REINFORCEMENT 1 1/4" X 4 3/16" X 10 GA.

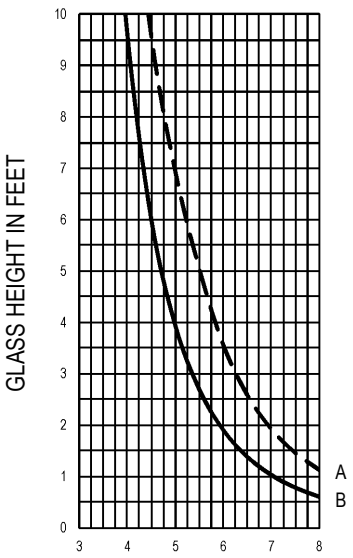
- Mullions are assumed to be single span, simple beam elements, uniformly loaded and adequately braced to prevent lateral-torsional buckling. All other complex design conditions shall be reviewed by Arcadia or a design professional.
- Aluminum extrusions shall be 6063-T6 alloy. Allowable stresses to 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.

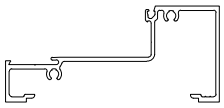
Deadload Charts | AG451 Series

Description: 2" X 4 1/2" Center Glazed for 1" Glass
Function: Storefront
Detail: Design Criteria
Deadload Charts for 1" Glass (7.00 PSF) | Scale: N.T.S.

I = 0.338 IN^4
S = 0.331 IN^3

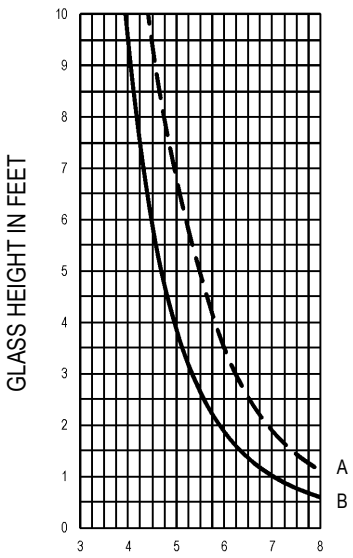


MULLION WIDTH IN FEET

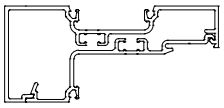


TL203 - 1" GLASS

I = 0.332 IN^4
S = 0.161 IN^3



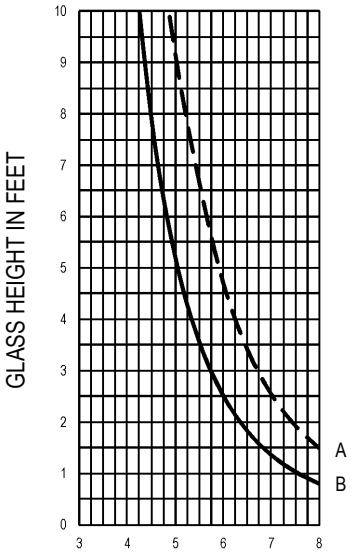
MULLION WIDTH IN FEET



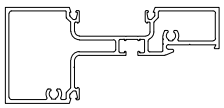
TG233 / TG223 - 1" GLASS

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

I = 0.447 IN^4
S = 0.373 IN^3

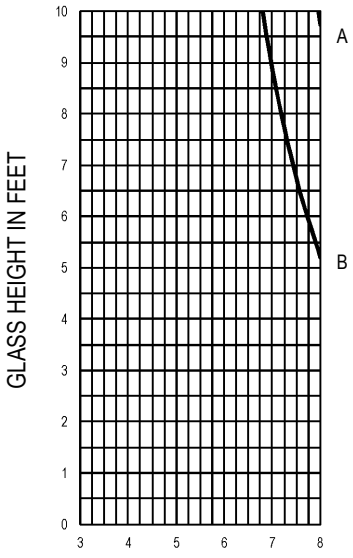


MULLION WIDTH IN FEET

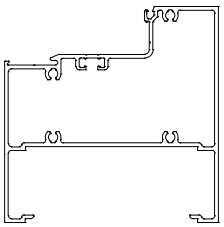


TG213 - 1" GLASS

I = 2.820 IN^4
S = 1.186 IN^3



MULLION WIDTH IN FEET



TG413 - 1" GLASS