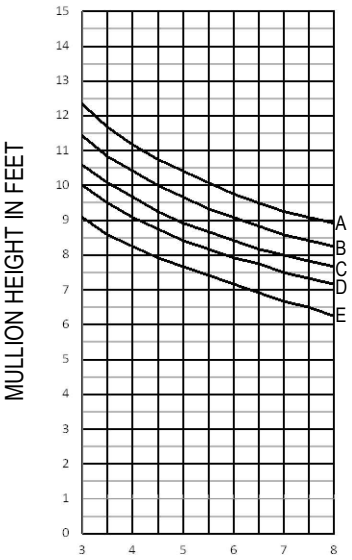
Windload Charts | AFG451T Series

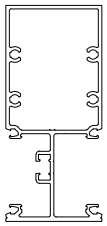
A = 16 P.S.F. (766 Pa)
B = 20 P.S.F. (958 Pa)
C = 25 P.S.F. (1197 Pa)
D = 30 P.S.F. (1436 Pa)
E = 40 P.S.F. (1915 Pa)

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

I = 2.951 IN ^{4}
S = 1.275 IN ^{3}

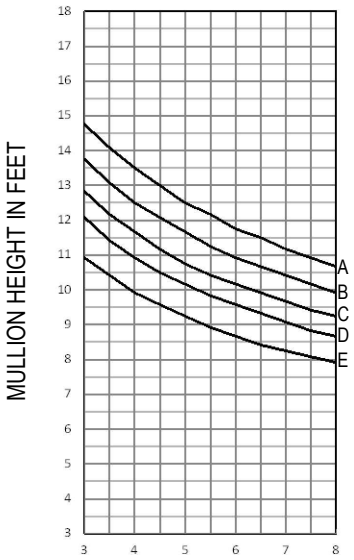


MULLION SPACING IN FEET

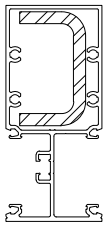


TB251

I = 5.161 IN ^{4}



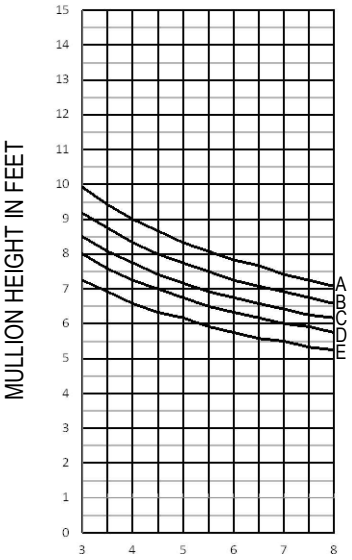
MULLION SPACING IN FEET



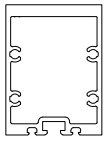
TB251 WITH
STEEL REINFORCEMENT
1 3/8" X 2 3/8" X 1/4"

- 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 = 1.526 IN ^{4}
S = 1.055 IN ^{3}

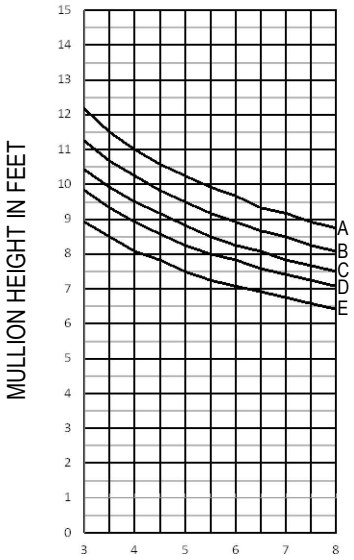


MULLION SPACING IN FEET

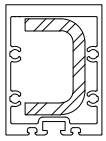


TB555

I = 2.818 IN ^{4}



MULLION SPACING IN FEET



TB555 WITH
STEEL REINFORCEMENT
1 1/4" X 2" X 1/4"

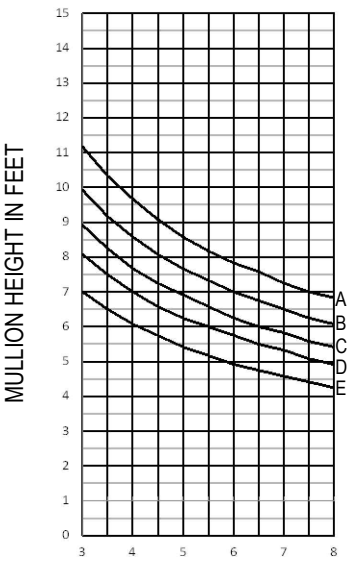
Consult Your Local Arcadia Representative For Special Applications Not Covered By These Curves.

Windload Charts | AFG451T Series

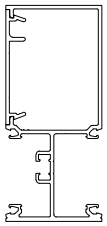
A = 16 P.S.F. (766 Pa)
B = 20 P.S.F. (958 Pa)
C = 25 P.S.F. (1197 Pa)
D = 30 P.S.F. (1436 Pa)
E = 40 P.S.F. (1915 Pa)

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

I = 2.679 IN^4
S_1= 0.977 IN^3 S_2= 0.118 IN^3

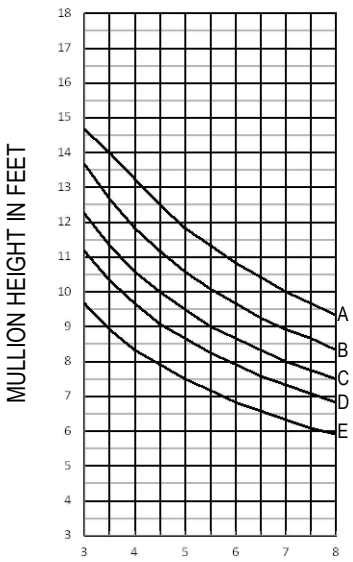


MULLION SPACING IN FEET

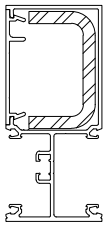


TB557 / TB205

I = 5.061 IN^4



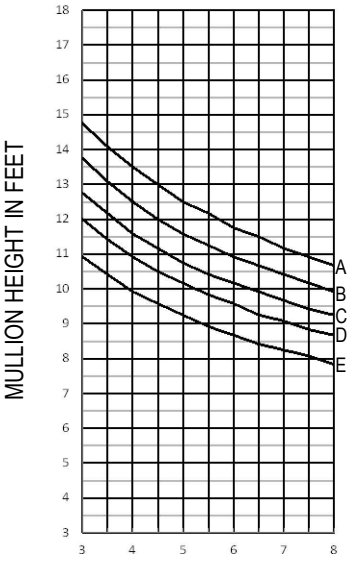
MULLION SPACING IN FEET



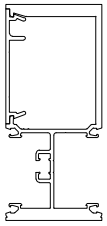
TB557 / TB205 WITH STEEL REINFORCEMENT 1 3/8" X 2 7/16" X 1/4"

- 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 = 5.138 IN^4
S_1= 2.181 IN^3 S_2= 0.118 IN^3

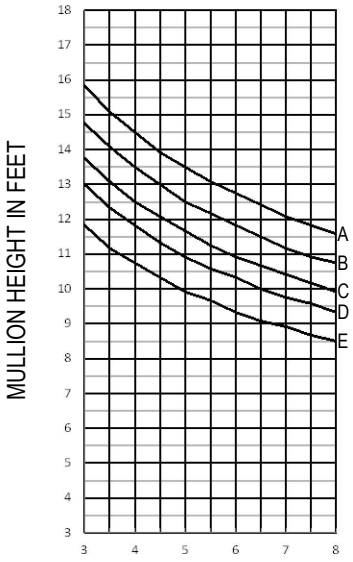


MULLION SPACING IN FEET

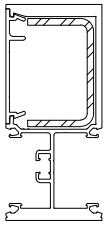


TB558 / TB205

I = 6.458 IN^4



MULLION SPACING IN FEET



TB558 / TB205 WITH STEEL REINFORCEMENT 1 3/8" X 2 1/4" X 10 GA.

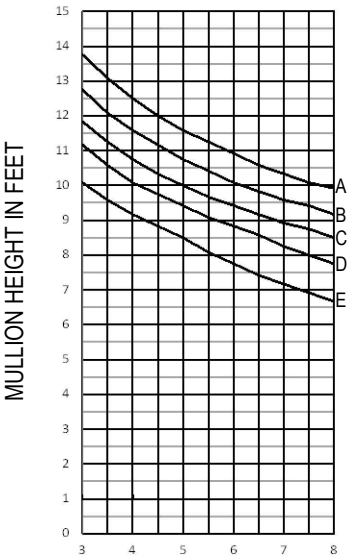
Consult Your Local Arcadia Representative For Special Applications Not Covered By These Curves.

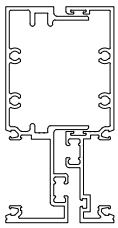
Windload Charts | AFG451T Series

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" Offset Glazed For 1" Glass
Function: Storefront
Detail: Design Criteria
Scale: N.T.S.

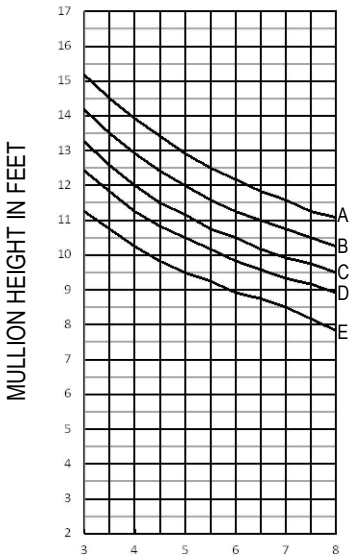
I = 4.130 IN^4
S_1= 1.086 IN^3 S_2= 0.701 IN^3

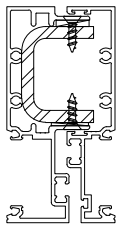




TB238 / TB237

I = 5.709 IN^4

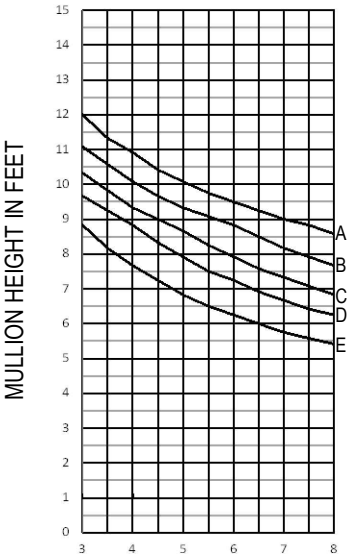


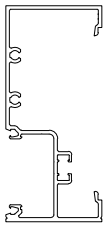


TB238 / TB237 WITH STEEL REINFORCEMENT 1 1/2" X 2" X 1/4"

- 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.

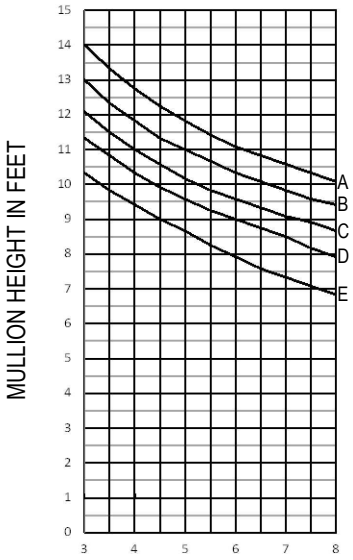
I = 2.706 IN^4
S = 1.112 IN^3

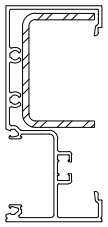




TB265

I = 4.342 IN^4





TB265 WITH STEEL REINFORCEMENT 1 1/2" X 2 3/8" X 10 GA.

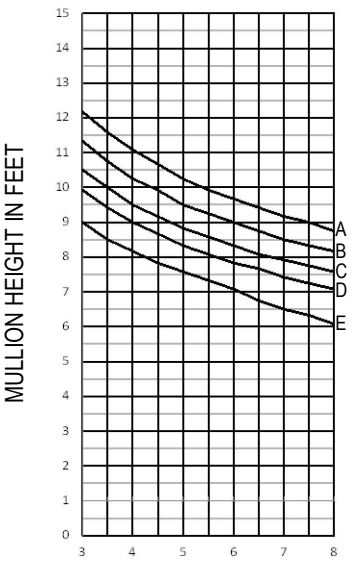
Consult Your Local Arcadia Representative For Special Applications Not Covered By These Curves.

Windload Charts | AFG451T Series

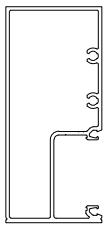
A = 16 P.S.F. (766 Pa)
B = 20 P.S.F. (958 Pa)
C = 25 P.S.F. (1197 Pa)
D = 30 P.S.F. (1436 Pa)
E = 40 P.S.F. (1915 Pa)

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

I = 2.857 IN ^{4}
S = 1.215 IN ^{3}

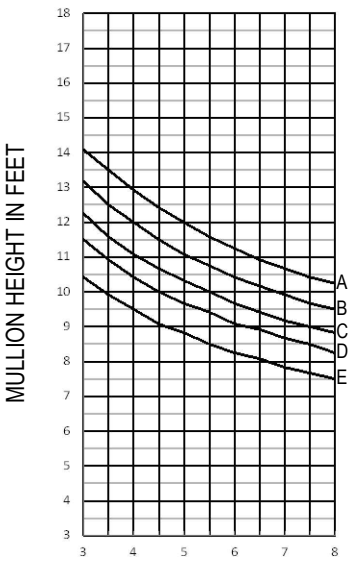


MULLION SPACING IN FEET

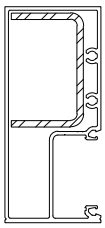


TB266

I = 4.493 IN ^{4}



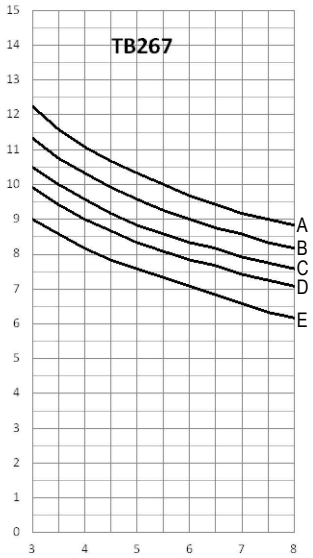
MULLION SPACING IN FEET

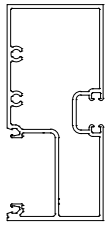


TB266 WITH
STEEL REINFORCEMENT
1 1/2" X 2 3/8" X 10 GA.

- 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.

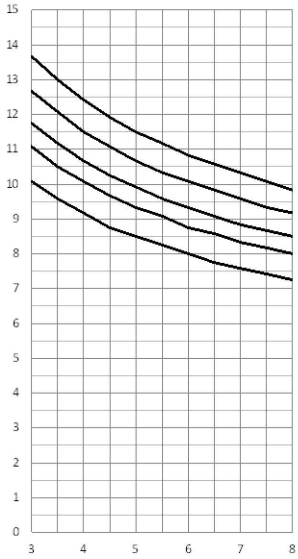
I = 2.877 IN ^{4}
S = 1.228 IN ^{3}

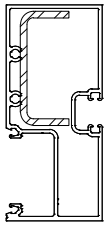




TB267

I = 4.025 IN ^{4}





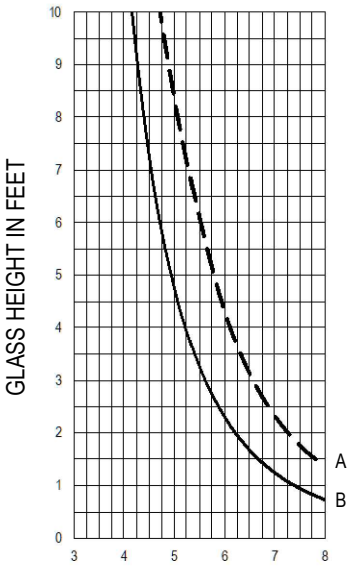
TB267 WITH
STEEL REINFORCEMENT
1" X 2 3/8" X 10 GA.

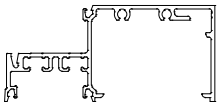
Consult Your Local Arcadia Representative For Special Applications Not Covered By These Curves.

Deadload Charts | AFG451T Series

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

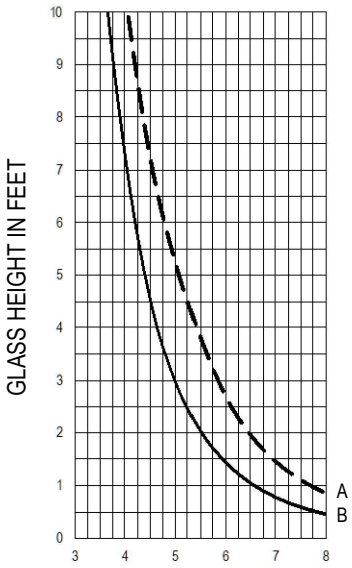
I = 0.408 IN^4
S = 0.357 IN^3

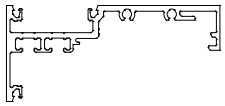




TBD428 - 1" GLASS

I = 0.255 IN^4
S = 0.173 IN^3

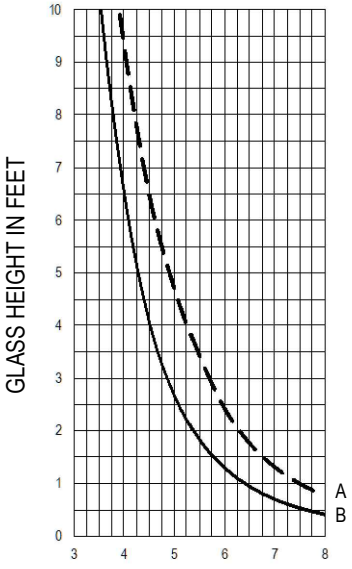


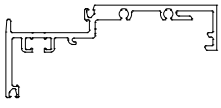


TBD436 - 1" GLASS

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

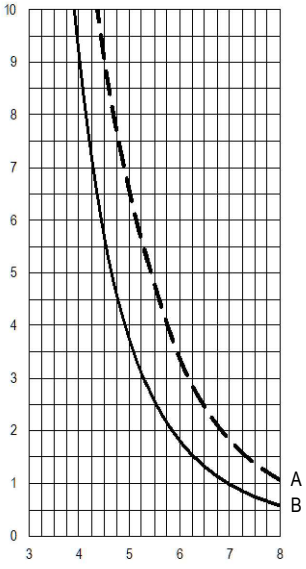
I = 0.229 IN^4
S = 0.161 IN^3

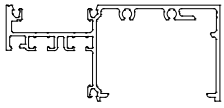




TB436 - 1" GLASS

I = 0.320 IN^4
S = 0.233 IN^3





TB427 - 1" GLASS