Windload Charts | ASL451 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.   SHEET 1 OF 4

arcadia

$I = 2.909$ IN^4

$S_1 = 1.116$ IN^3 $S_2 = 0.228$ IN^3

$I = 7.492$ IN^4

MULLION HEIGHT IN FEET
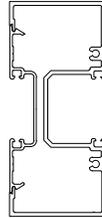
MULLION SPACING IN FEET   M202 / GF200
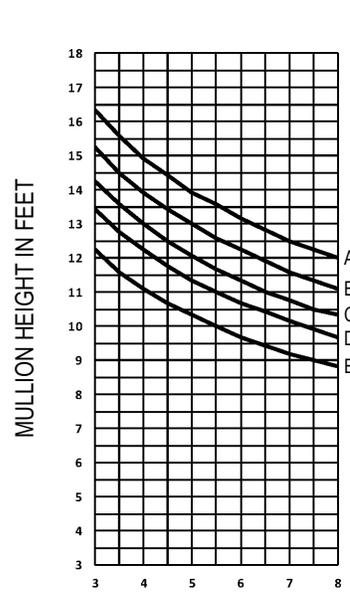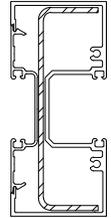
MULLION SPACING IN FEET   M202 / GF210 WITH
STEEL REINFORCEMENT
1 1/4" X 4 1/4" X 12 GA.

- 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.

$I = 3.480$ IN^4

$S_1 = 1.369$ IN^3 $S_2 = 0.228$ IN^3

$I = 7.891$ IN^4

MULLION HEIGHT IN FEET
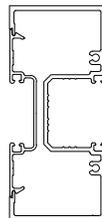
MULLION SPACING IN FEET   M212 / GF200
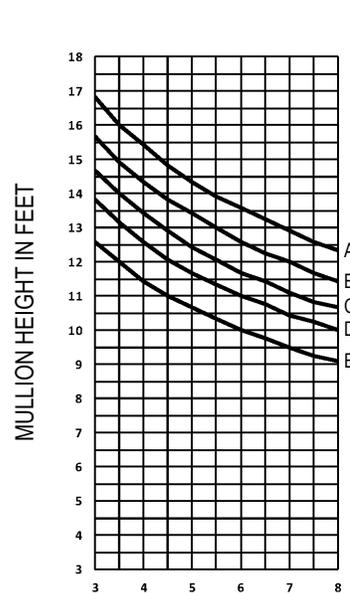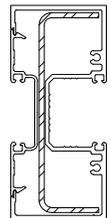
MULLION SPACING IN FEET   M212 / GF210 WITH
STEEL REINFORCEMENT
1 1/4" X 4 3/16" X 12 GA.

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

Windload Charts | ASL451 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.   SHEET 2 OF 4

arcadia
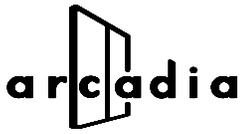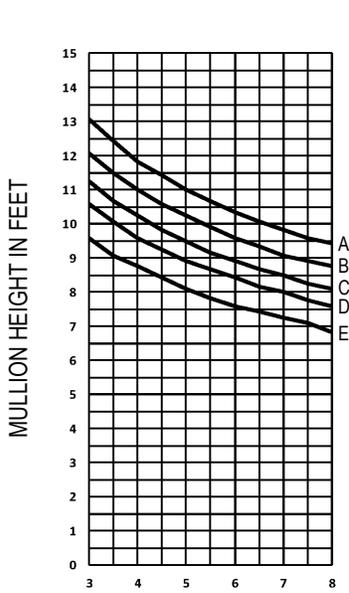
$I = 3.437\ IN^4$

$S_1 = 1.378\ IN^3$ $S_2 = 0.228\ IN^3$

MULLION HEIGHT IN FEET
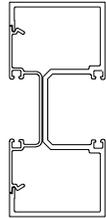
MULLION SPACING IN FEET

M222 / GF200

$I = 7.222\ IN^4$

MULLION HEIGHT IN FEET
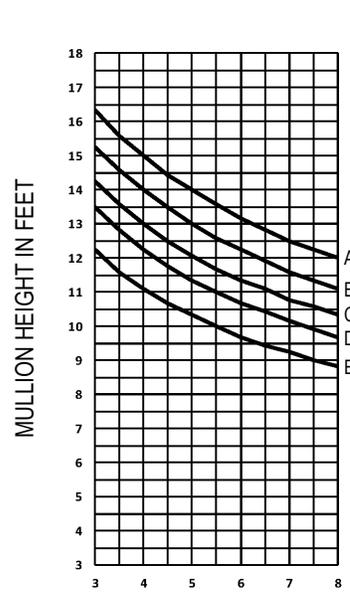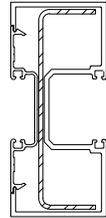
MULLION SPACING IN FEET

M222 / GF210 WITH
STEEL REINFORCEMENT
1 3/16" X 4 3/16" X 13 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.

$I = 2.990\ IN^4$

$S = 1.329\ IN^3$

MULLION HEIGHT IN FEET
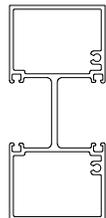
MULLION SPACING IN FEET

M215
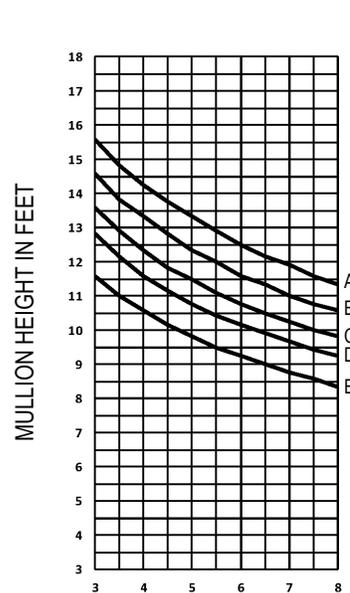
$I = 6.184\ IN^4$

$S = 2.748\ IN^3$

MULLION HEIGHT IN FEET
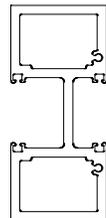
MULLION SPACING IN FEET

M216

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

Windload Charts | ASL451 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.   SHEET 3 OF 4

arcadia
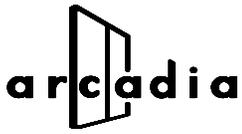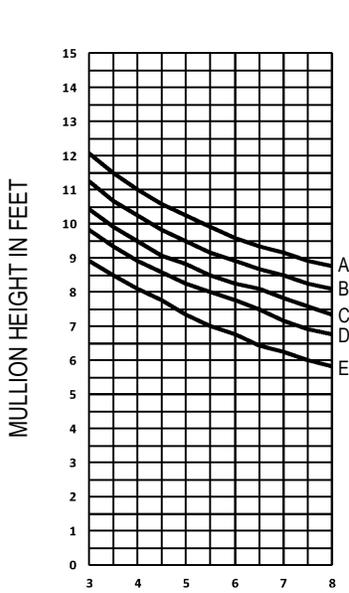
$I = 2.805$ IN^4

$S_1 = 1.069$ IN^3 $S_2 = 0.228$ IN^3
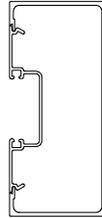
MULLION HEIGHT IN FEET / MULLION SPACING IN FEET

DJ201 / GF200

$I = 7.512$ IN^4
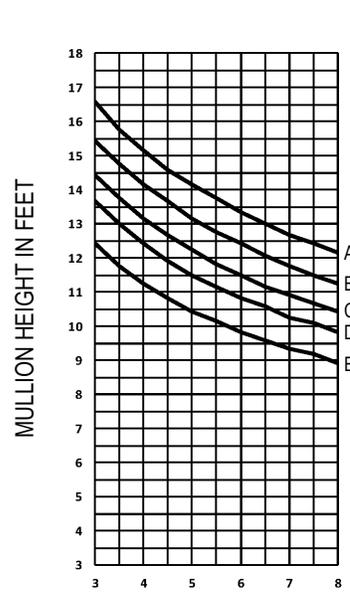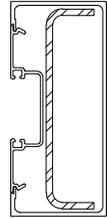
MULLION HEIGHT IN FEET / MULLION SPACING IN FEET

DJ201 / GF200 WITH
STEEL REINFORCEMENT
1" 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.
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$I = 3.713$ IN^4

$S_1 = 0.855$ IN^3 $S_2 = 0.796$ IN^3
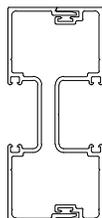
MULLION HEIGHT IN FEET / MULLION SPACING IN FEET

M204 / M205
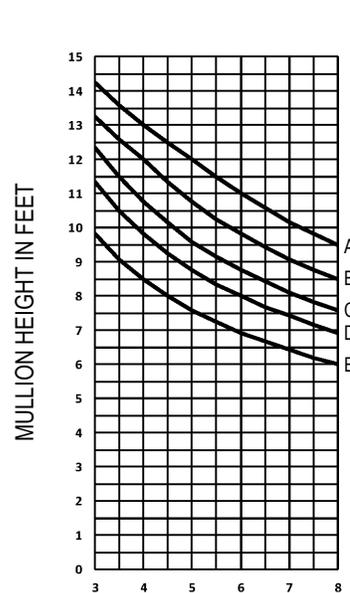
$I = 4.614$ IN^4

$S_1 = 0.731$ IN^3 $S_2 = 0.731$ IN^3
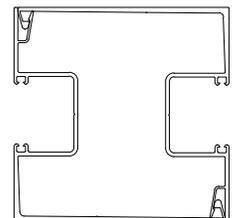
MULLION HEIGHT IN FEET / MULLION SPACING IN FEET

CT210 / CT210

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

Windload Charts | ASL451 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.   SHEET 4 OF 4

arcadia

$I_x = 3.946 \ IN^4$
$I_y = 4.177 \ IN^4$

$I = 4.267 \ IN^4$ $S_1 = 1.147 \ IN^3$ $S_2 = 0.399 \ IN^3$

MULLION HEIGHT IN FEET

MULLION SPACING IN FEET   CT211 / CT209
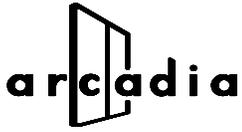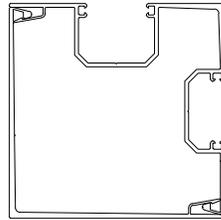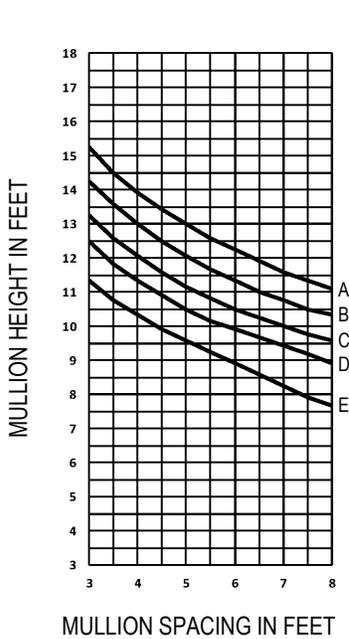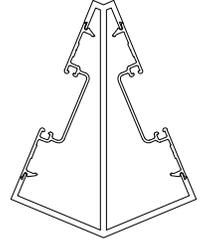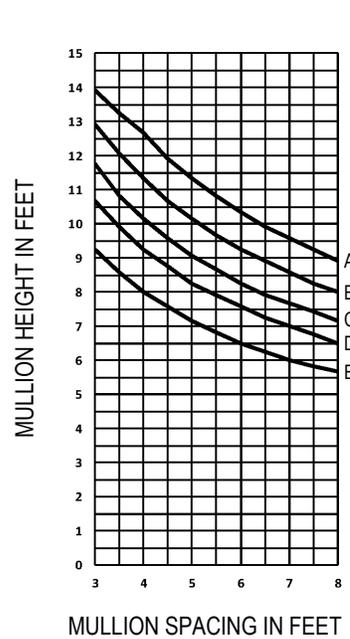
MULLION SPACING IN FEET   C145 / GF200

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

FRAMING-ARCADIA-ASL451-WINDLOAD.pdf   As of: 08/09/16
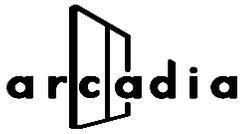
Deadload Charts | ASL451 Series

arcadia

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. | SHEET 1 OF 1

$I = 0.322 \text{ IN}^4$
$S = 0.319 \text{ IN}^3$

GLASS HEIGHT IN FEET

MULLION WIDTH IN FEET

HM203 - 1' GLASS

$I = 0.583 \text{ IN}^4$
$S = 0.490 \text{ IN}^3$

GLASS HEIGHT IN FEET

MULLION WIDTH IN FEET

HM213 - 1" GLASS
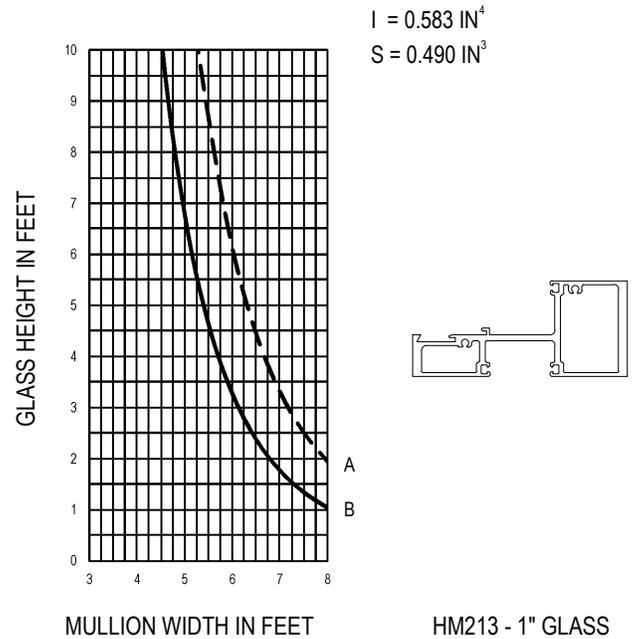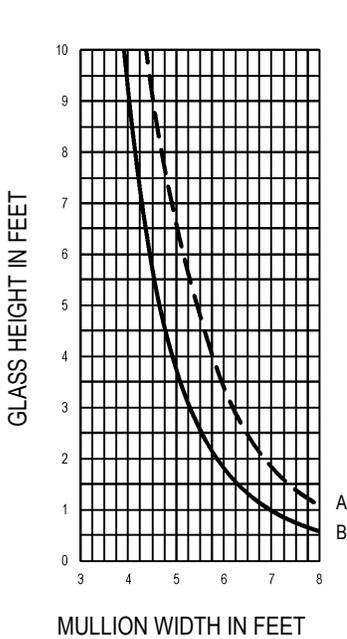
CURVE REPRESENTATION
A (- - - -) = 1/8" PTS.
B (——) = 1/4" PTS.

$I = 3.161 \text{ IN}^4$
$S = 1.322 \text{ IN}^3$

GLASS HEIGHT IN FEET

MULLION WIDTH IN FEET

HM203 - 1" GLASS