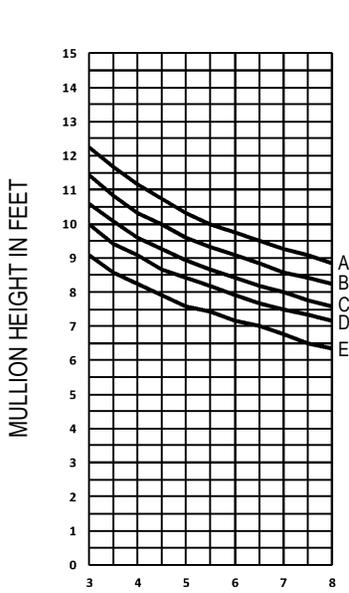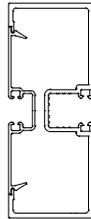# Windload Charts | ASL450 Series

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
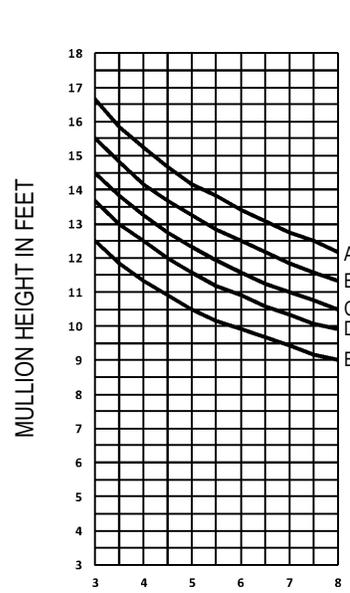Scale: N.T.S.   SHEET 1 OF 4

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$I = 2.924 \text{ IN}^4$

$S_1 = 1.162 \text{ IN}^3 \qquad S_2 = 0.177 \text{ IN}^3$

MULLION HEIGHT IN FEET

MULLION SPACING IN FEET   M157 / GF100

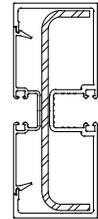$I = 7.631 \text{ IN}^4$

MULLION HEIGHT IN FEET
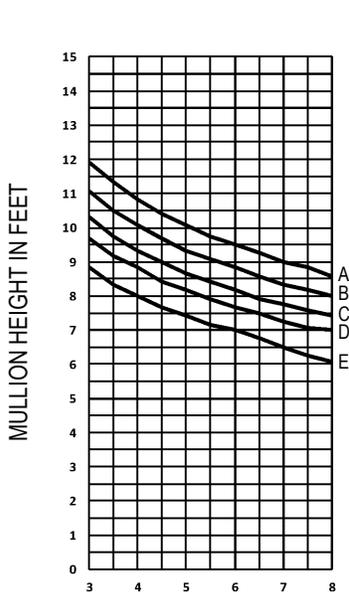
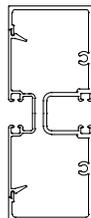MULLION SPACING IN FEET   M157 / GF100 WITH
                                 STEEL REINFORCEMENT
                                 1" X 4 3/16" X 10 GA.

- 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.
- 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.
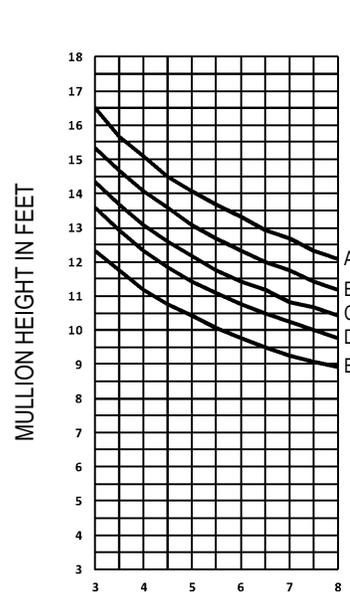
$I = 2.689 \text{ IN}^4$

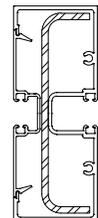$S_1 = 1.057 \text{ IN}^3 \qquad S_2 = 0.177 \text{ IN}^3$

MULLION HEIGHT IN FEET

MULLION SPACING IN FEET   M152 / GF100

$I = 7.396 \text{ IN}^4$

MULLION HEIGHT IN FEET
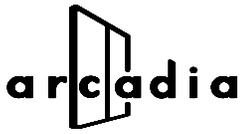
MULLION SPACING IN FEET   M152 / GF100 WITH
                                 STEEL REINFORCEMENT
                                 1" X 4 3/16" X 10 GA.

Consult Your Local Arcadia Representative For Special Applications Not Covered By These Curves.
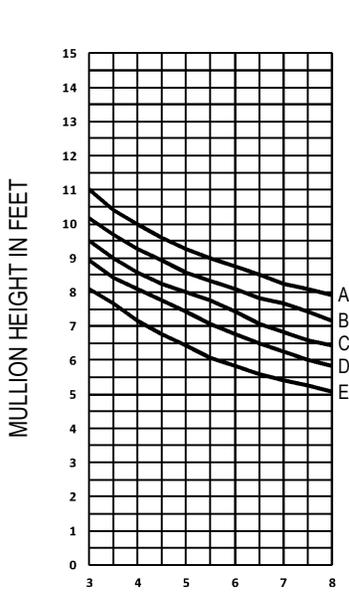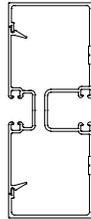
Windload Charts | ASL450 Series

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
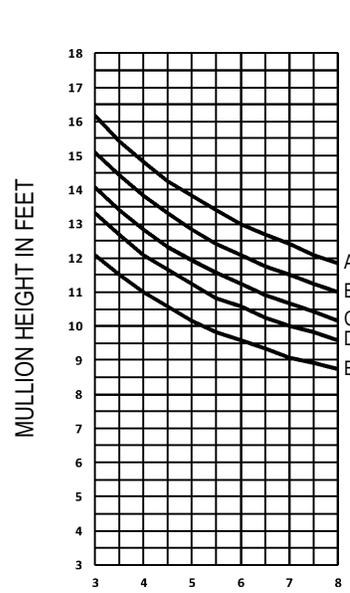Scale: N.T.S.   SHEET 2 OF 4

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$I = 2.091 \text{ IN}^4$
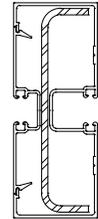$S_1 = 0.792 \text{ IN}^3$ $S_2 = 0.177 \text{ IN}^3$

$I = 6.970 \text{ IN}^4$

MULLION HEIGHT IN FEET

MULLION SPACING IN FEET   M156 / GF100
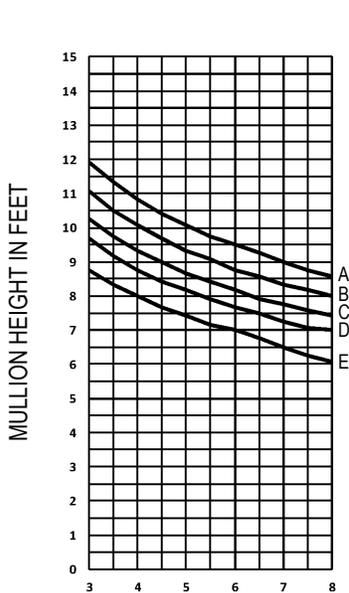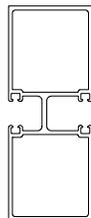
MULLION SPACING IN FEET   M156 / GF100 WITH
STEEL REINFORCEMENT
1" X 4 1/4" X 10 GA.

- 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.
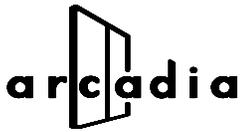
$I = 2.684 \text{ IN}^4$
$S = 1.193 \text{ IN}^3$

MULLION HEIGHT IN FEET

MULLION SPACING IN FEET   M155

Consult Your Local Arcadia Representative For Special Applications Not Covered By These Curves.
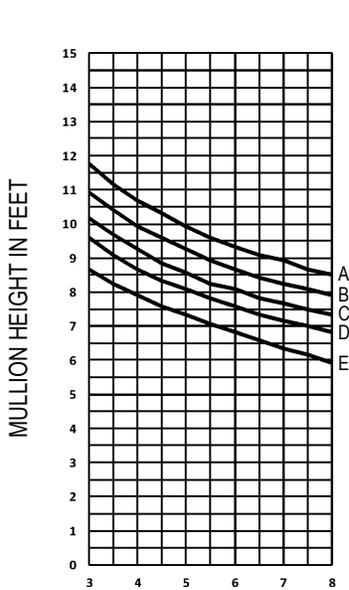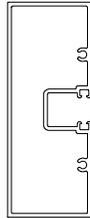
Windload Charts | ASL450 Series

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
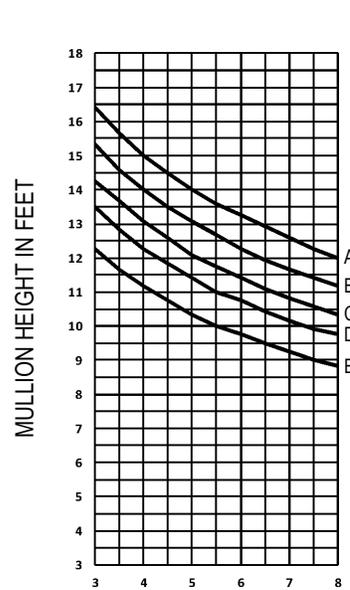Detail: Design Criteria
Scale: N.T.S.   SHEET 3 OF 4
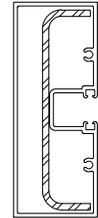
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$I = 2.581 \text{ IN}^4$
$S = 1.147 \text{ IN}^3$

$I = 8.626 \text{ IN}^4$

MULLION HEIGHT IN FEET

MULLION SPACING IN FEET   DJM151
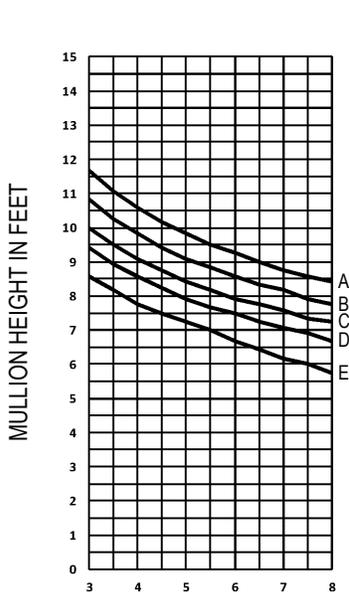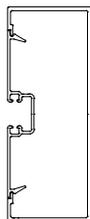
MULLION SPACING IN FEET   DJM151 WITH STEEL REINFORCEMENT 1" X 4 3/16" X 10 GA.

- 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.
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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.
- 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.
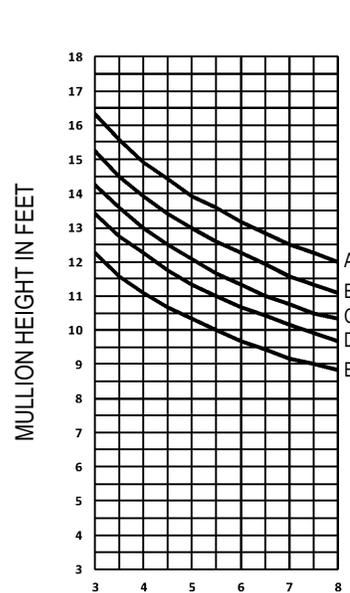- Arcadia assumes no responsibility for selecting the appropriate systems for specific projects.

$I = 2.480 \text{ IN}^4$
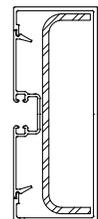$S_1 = 0.964 \text{ IN}^3$ $S_2 = 0.177 \text{ IN}^3$

$I = 7.187 \text{ IN}^4$

MULLION HEIGHT IN FEET

MULLION SPACING IN FEET   DJ151 / GF100
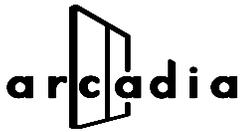
MULLION SPACING IN FEET   DJ151 / GF100 WITH STEEL REINFORCEMENT 1" X 4 3/16" X 10 GA.

Consult Your Local Arcadia Representative For Special Applications Not Covered By These Curves.
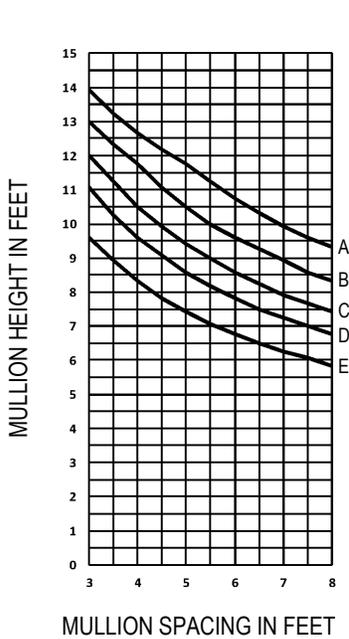
Windload Charts | ASL450 Series

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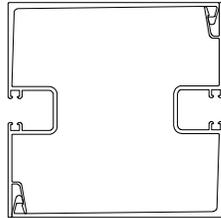D = 30 P.S.F. (1436 Pa)
E = 40 P.S.F. (1915 Pa)

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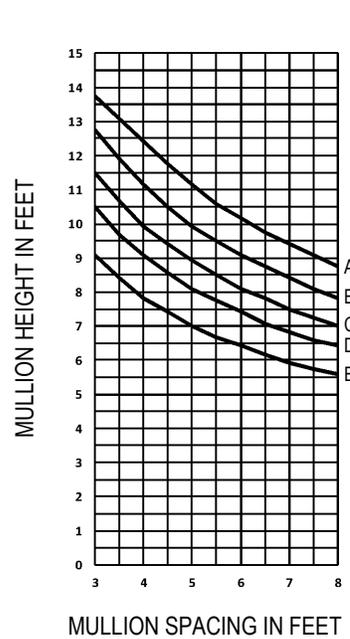Scale: N.T.S.   SHEET 4 OF 4

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$I = 4.296 \text{ IN}^4$
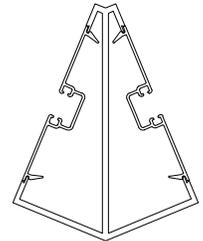$S_1 = 0.674 \text{ IN}^3$ $S_2 = 0.674 \text{ IN}^3$
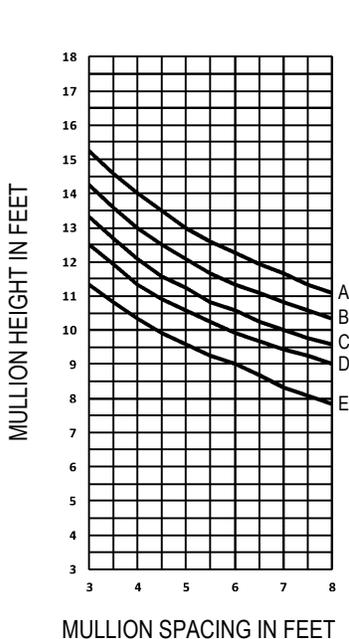

MULLION SPACING IN FEET   CT150 / CT150

$I = 4.109 \text{ IN}^4$
$S_1 = 1.147 \text{ IN}^3$ $S_2 = 0.316 \text{ IN}^3$

MULLION SPACING IN FEET   C145 / GF100

- 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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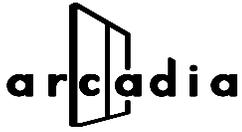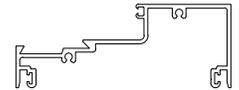
$Ix = 4.141 \text{ IN}^4$
$Iy = 4.048 \text{ IN}^4$
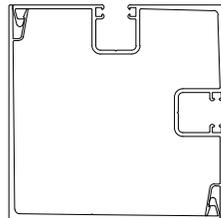
MULLION SPACING IN FEET   CT151 / CT209

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

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$I = 0.250 \text{ IN}^4$
$S = 0.262 \text{ IN}^3$

GLASS HEIGHT IN FEET

A
B

MULLION WIDTH IN FEET   HM153 - 1/4" GLASS

$I = 0.246 \text{ IN}^4$
$S = 0.263 \text{ IN}^3$

GLASS HEIGHT IN FEET

MULLION WIDTH IN FEET   HM158 - 1/4" GLASS
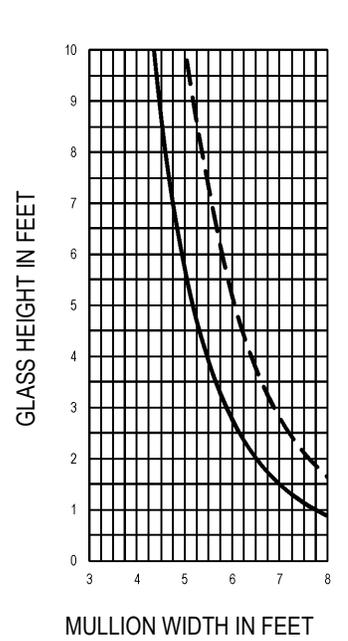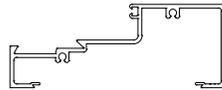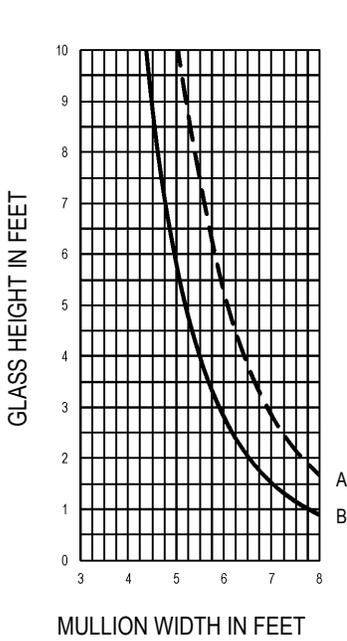
CURVE REPRESENTATION
A (- - - -) = 1/8" PTS.
B (——) = 1/4" PTS.