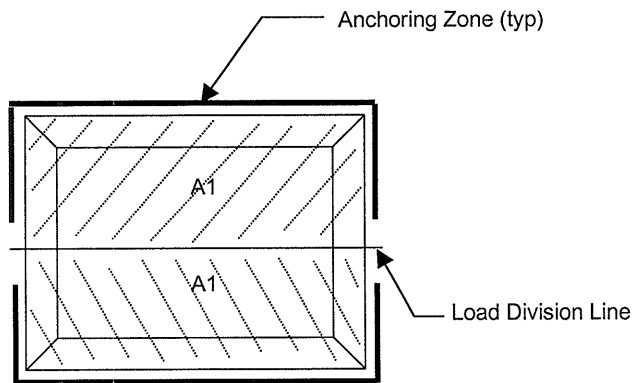


WINDOW FRAME ANCHORING

The 2001 FLORIDA BUILDING CODE requires window and door assemblies to be anchored according to the manufacturer's recommendations to achieve the design pressures specified (see Section 1707.4.4 Anchorage Methods). The sketches below represent the load paths used to calculate this anchoring.

WINDOW TYPE: Awning

Load Path Sketch:



Awning Window

Anchoring Formula:

NA = Number of Anchors Required per Zone

P = Design Pressure (psf)

A1 = Area (sq. feet) per zone

FV = Fastener Shear Value (lbs.)

$$NA = A1 * P / FV$$

Example:

60" wide X 36" high
 Design Pressure = 55 psf
 FV = 180 lbs.
 A1 = 7.5 sf

$$NA = A1 * P / FV$$

$$NA = (7.5)(55)/180 = 2.3 \text{ (round up to 3)}$$

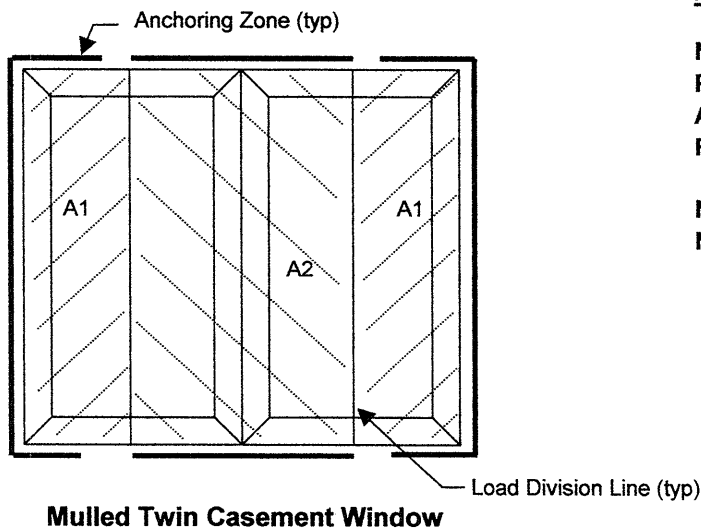
Therefore, a minimum of 3 anchors per zone are required (6 total).

5/13/2002

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DOOR FRAME ANCHORING

The 2001 FLORIDA BUILDING CODE requires window and door assemblies to be anchored according to the manufacturer's recommendations to achieve the design pressures specified (see Section 1707.4.4 Anchorage Methods). The sketches below represent the load paths used to calculate this anchoring.

WINDOW TYPE: Muller Twin Casement**Load Path Sketch:****Anchoring Formula:**

NA = Number of Anchors Required per Zone

P = Design Pressure (psf)

A1, A2 = Area (sq. feet) per zone

FV = Fastener Shear Value (lbs.)

$$NA1 = A1 * P / FV$$

$$NA2 = A2 * P / FV$$

Example:

74" high X 108" wide
Design Pressure = 50 psf
FV = 180 lbs.
A1 = 13.5 sf
A2 = 27 sf


$$NA1 = A1 * P / FV$$

$$NA1 = (13.5)(50)/180 = 3.8 \text{ (round up to 4)}$$

$$NA2 = A2 * P / FV$$

$$NA2 = (27)(50)/180 = 7.5 \text{ (round up to 8)}$$

Therefore, a minimum of 4 anchors in each zone A1 and 8 anchors in zone A2 are required (16 total).


5/21/2002

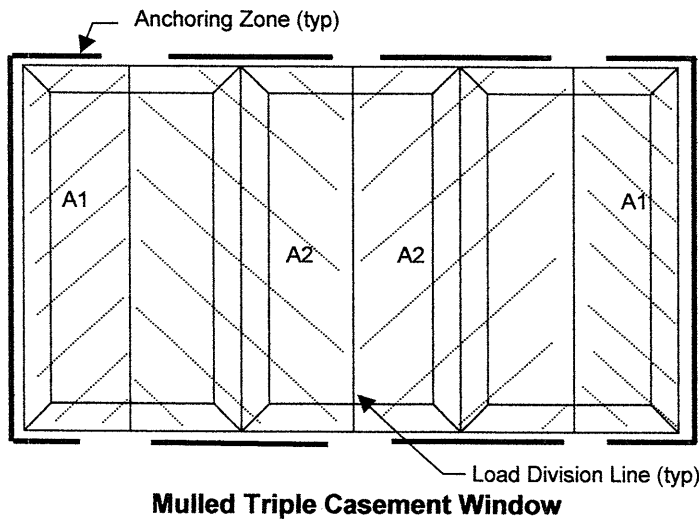
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WINDOW FRAME ANCHORING

The 2001 FLORIDA BUILDING CODE requires window and door assemblies to be anchored according to the manufacturer's recommendations to achieve the design pressures specified (see Section 1707.4.4 Anchorage Methods). The sketches below represent the load paths used to calculate this anchoring.

WINDOW TYPE: Mullied Triple Casement

Load Path Sketch:



Anchoring Formula:

NA = Number of Anchors Required per Zone
P = Design Pressure (psf)
A1, A2 = Area (sq. feet) per zone
FV = Fastener Shear Value (lbs.)

NA1 = A1 * P / FV
NA2 = A2 * P / FV

Example:

72" high X 108" wide
 Design Pressure = 50 psf
 FV = 180 lbs.
 A1 = 9 sf
 A2 = 18 sf

NA1 = A1 * P / FV
 NA1 = (9)(50)/180 = 2.25 (round up to 3)

NA2 = A2 * P / FV
 NA2 = (18)(50)/180 = 5.0 (round up to 6)

Therefore, a minimum of 3 anchors in each zone A1 and 6 anchors in each zone A2 are required (18 total).

5/21/2002

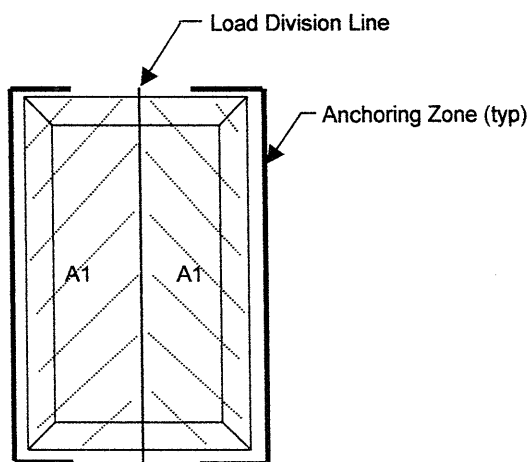
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WINDOW FRAME ANCHORING

The 2001 FLORIDA BUILDING CODE requires window and door assemblies to be anchored according to the manufacturer's recommendations to achieve the design pressures specified (see Section 1707.4.4 Anchorage Methods). The sketches below represent the load paths used to calculate this anchoring.

WINDOW TYPE: Casement

Load Path Sketch:



Casement Window

Anchoring Formula:

NA = Number of Anchors Required per Zone

P = Design Pressure (psf)

A1 = Area (sq. feet) per zone

FV = Fastener Shear Value (lbs.)

$$NA = A1 * P / FV$$

Example:

36" wide X 80" high
 Design Pressure = 55 psf
 FV = 180 lbs.
 A1 = 10 sf

$$NA = A1 * P / FV$$

$$NA = (10)(55)/180 = 3.1 \text{ (round up to 4)}$$

Therefore, a minimum of 4 anchors per zone are required (8 total).

5/21/2002

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