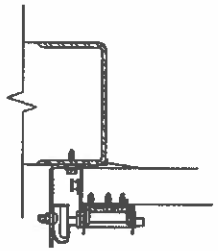
Door Width	Maximum Positive Pressure	Maximum Spacing: Self tapping screws in 3/16" steel	Maximum Spacing: Self tapping screws in 12 gauge steel
8	24.5 psf	24	24
	28.4 psf	24	22
	32.6 psf	24	19
	34.3 psf	24	18
	39.8 psf	24	15
	45.7 psf	24	13
	52.0 psf	24	12
	58.7 psf	22	10
	62.2 psf	21	10
9	20.7 psf	24	24
	24.3 psf	24	22
	28.2 psf	24	19
	32.3 psf	24	17
	34.0 psf	24	16
	39.5 psf	24	14
	45.3 psf	24	12
	51.5 psf	22	10
	58.2 psf	20	9
	61.6 psf	19	9
10	20.5 psf	24	24
	24.1 psf	24	20
	28.0 psf	24	17
	32.1 psf	24	15
	33.8 psf	24	14
	39.1 psf	24	12
	44.9 psf	23	11
	51.1 psf	20	9
	57.7 psf	18	8
	60.9 psf	17	8

Door Width	Maximum Positive Pressure	Maximum Spacing: Self tapping screws in 3/16" steel	Maximum Spacing: Self tapping screws in 12 gauge steel
12	17.0 psf	24	24
	20.3 psf	24	20
	23.8 psf	24	17
	27.6 psf	24	15
	31.7 psf	24	13
	33.3 psf	24	12
	38.6 psf	23	10
	44.3 psf	20	9
	50.9 psf	17	8
14	13.9 psf	24	24
	16.8 psf	24	21
	20.0 psf	24	17
	23.5 psf	24	15
	27.3 psf	24	13
	31.3 psf	24	11
	32.9 psf	23	10
	38.2 psf	19	9
	43.8 psf	17	8
	49.9 psf	15	7
16	11.3 psf	24	24
	13.9 psf	24	22
	16.8 psf	24	18
	20.0 psf	24	15
	23.5 psf	24	13
	27.3 psf	24	11
	31.3 psf	21	10
	32.9 psf	20	9
	38.2 psf	17	8
	43.8 psf	15	7
	49.9 psf	13	6
18	11.2 psf	24	24
	13.8 psf	24	20
	16.8 psf	24	16
	20.0 psf	24	13
	23.5 psf	24	11
	27.3 psf	21	10
	31.3 psf	18	8
	32.9 psf	17	8
	38.2 psf	15	7

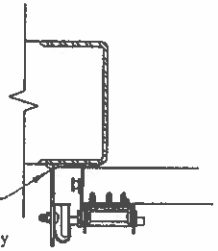
Self tapping screw with steel



3/16" steel Jambs; allowable load per screw= 444 lbs.
12 gauge steel Jambs; allowable load per screw= 209 lbs.
Anchor: 1/4" dia x 3/4" self tapping screw; must conform to ANSI/ASME B18.2.1.
Washer: 1-1/8" O.D. / 3/8" I.D. min; must conform to ANSI B18.22.1 type A.
Lowest fastener to be within 10-inches of the floor
Minimum of 3 anchors per jamb allowed.
Maximum spacing shown in chart. Lesser spacing may be used to avoid interference with door component system.
Add holes to continuous angle as required to satisfy fastener spacing in these charts.
These charts do not address spring pad connectionsto the building.
Load per jamb = 0.5 x door width x max positive pressure x door height

Calculation reference: DASMA TDS #161h, ITW Buildex Online Performance Data.

.100" x 1" fillet welds



.100" x 1" long fillet weld (E60XX Electrodes Min). Weld to be located vertically on angle at 24" centers and tack weld toe of angle at same spacing.

12 gauge steel Jambs; allowable load per weld= 1,272 lbs.
Use all necessary precautions when welding galvanized steel.
Welds to be evenly spaced between header and floor.
Lowest weld to be within 10-inches of the floor
Minimum of 3 welds per jamb allowed.
All welds should be performed by a Certified Welder or inspected by a Certified Welding Inspector to verify integrity of welds.
Fillet welds to have a straight or convex face surface.
Tack weld toe of angle at same spacing to prevent rotation of track angle.
Cracks and blemishes shall be ground to a smooth contour and checked to ensure soundness.
These charts do not address spring pad connectionsto the building.
Load per jamb = 0.5 x door width x max positive pressure x door height

Calculation reference: DASMA TDS #161g.

Alternative design may be approved by a registered professional engineer.

Supporting structural elements shall be designed by a registered professional engineer for wind loads in addition to other loads.

This drawing does not address the jamb/wall design, but only door attachment. Jamb/wall construction is shown only for illustration purposes. The building designer is responsible for ensuring that the jamb/wall is sufficient to carry the door live and static loads.

STATE OF TEXAS
JOHN E. SCATES
56308
LICENSED

John E Scates
7/27/10

Professional Engineer's seal provided only for verification of windload construction details

John E. Scates, P.E.
3121 Fairgate Drive
Carrollton, Texas 75007
TXPE 56308, F-2203

C.H.I. OVERHEAD DOORS

SCALE none

DATE 2-24-2010

Steel Attachment Detail

C.H.I. Drawing: BJA-006-02