

Window Options:
 1/8" DSB
 1/4" Tempered Glass
 7/16" Insulated Glass
 7/16" Tempered Insulated Glass

Door Height	Section Quantity	Strut Quantity	Trk Brkt Per Side
6'-0" to 8'-0"	4	4	4
8'-3" to 10'-0"	5	5	6
10'-3" to 12'-0"	6	6	7
12'-3" to 14'-0"	7	7	8
14'-3" to 16'-0"	8	8	10
16'-3" to 18'-0"	9	9	11
18'-3" to 20'-0"	10	10	13
20'-3" to 22'-0"	11	11	15
22'-3" to 24'-0"	12	12	17

Track bracket quantities shown are for use with grade 2 or better southern pine jambs. When using softer wood species like spruce-pine-fir (SPP) use the quantity of track brackets specified in the chart plus four track brackets per side.

This door has been evaluated per ASCE 7-02 & 7-05 as referenced by 2006 IBC 1609 & 2006 IRC 301, in accordance with ANSI/DASMA 108-02, 108-05, & ASTM E330-02. Design Pressures (DP) typically meet requirements for the following exposure B wind speeds. These wind speeds are for 8' high doors on buildings with a flat roof height less than 30 feet.

Door Width	With windows		No windows	
	Design Pressure	Exp B	Design Pressure	Exp B
09'-10"	44.5 / - 51.4 (psf)	176 (mph)	44.5 / - 51.4 (psf)	176 (mph)
09'-02"	51.2 / - 59.1 (psf)	188 (mph)	51.2 / - 59.1 (psf)	188 (mph)
08'-02"	64.5 / - 74.5 (psf)	211 (mph)	64.5 / - 74.5 (psf)	211 (mph)
07'-02"	64.5 / - 74.5 (psf)	210 (mph)	73.5 / - 84.9 (psf)	224 (mph)
06'-00"	64.5 / - 74.5 (psf)	208 (mph)	87.8 / - 101 (psf)	243 (mph)

Supporting structural elements to be designed by registered professional engineer for specified wind loads. If door is not electrically operated, a lock must be installed. Door height: 24'-0" max. Section height: 24" max.

SCALE 1/8" = 1'-0"
DATE 2-18-2013
MODELS: 3212, 3216, 3285
ITIS

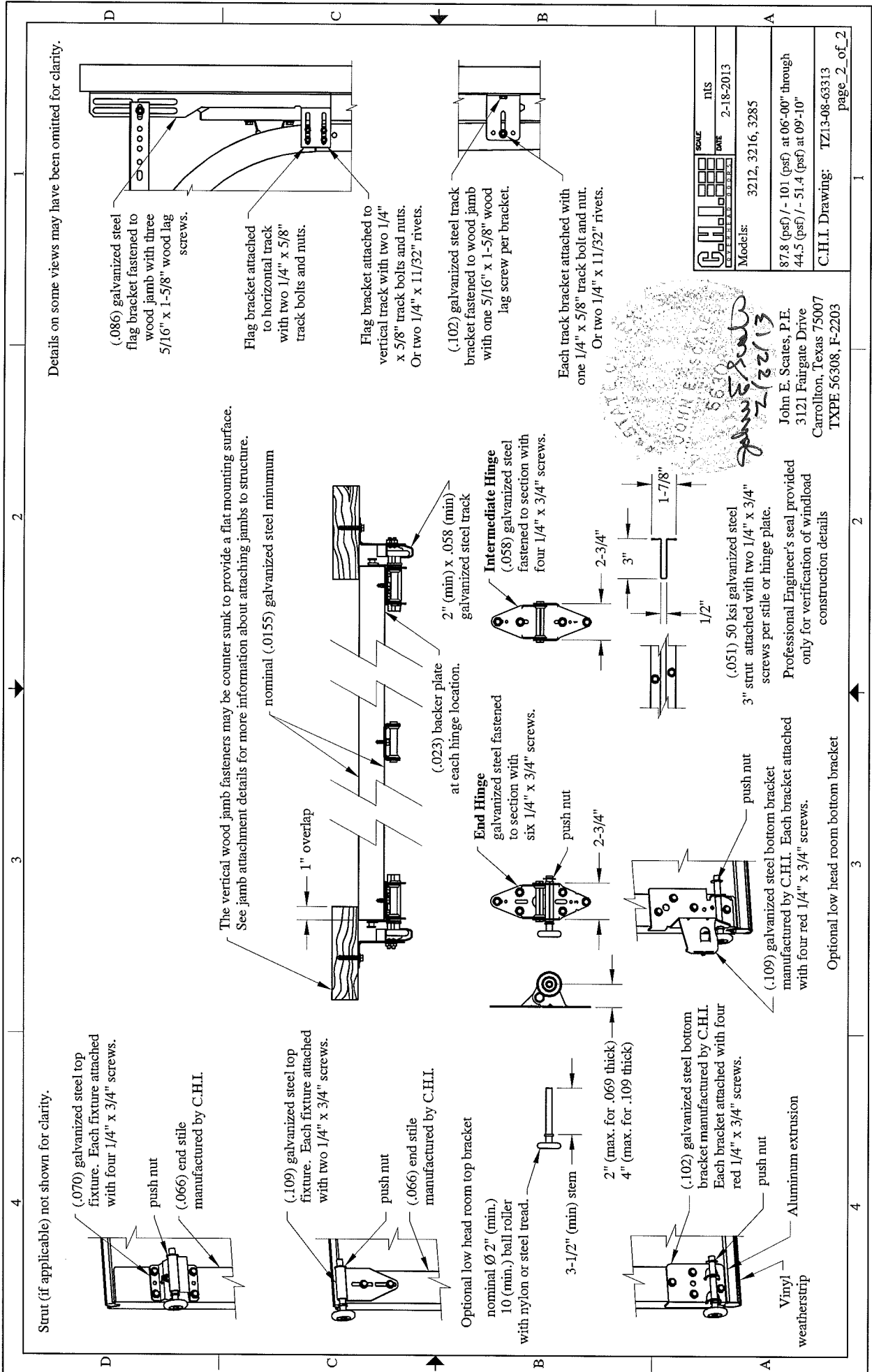
87.8 (psf) / - 101 (psf) at 06'-00" through 44.5 (psf) / - 51.4 (psf) at 09'-10"

C.H.I. Drawing: TZ13-08-6313
 page 1 of 2

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



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



Strut (if applicable) not shown for clarity.

(.070) galvanized steel top fixture. Each fixture attached with four 1/4" x 3/4" screws.
 push nut
 (.066) end stile manufactured by C.H.I.

(.109) galvanized steel top fixture. Each fixture attached with two 1/4" x 3/4" screws.
 push nut
 (.066) end stile manufactured by C.H.I.

Optional low head room top bracket
 nominal Ø 2" (min.)
 10 (min.) ball roller with nylon or steel tread.
 3-1/2" (min) stem
 2" (max. for .069 thick)
 4" (max. for .109 thick)

(.102) galvanized steel bottom bracket manufactured by C.H.I. Each bracket attached with four red 1/4" x 3/4" screws.
 push nut
 Aluminum extrusion
 Vinyl weatherstrip

The vertical wood jamb fasteners may be counter sunk to provide a flat mounting surface. See jamb attachment details for more information about attaching jambs to structure.

nominal (.0155) galvanized steel minimum

(.023) backer plate at each hinge location.
 2" (min) x .058 (min) galvanized steel track
 Intermediate Hinge (.058) galvanized steel fastened to section with four 1/4" x 3/4" screws.
 End Hinge galvanized steel fastened to section with six 1/4" x 3/4" screws.
 push nut
 2-3/4"

(.051) 50 ksi galvanized steel 3" strut attached with two 1/4" x 3/4" screws per stile or hinge plate.
 Professional Engineer's seal provided only for verification of windload construction details

Professional Engineer's Seal
 JOHN E. SCATES
 5630
 2/22/13

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

Details on some views may have been omitted for clarity.

(.086) galvanized steel flag bracket fastened to wood jamb with three 5/16" x 1-5/8" wood lag screws.

Flag bracket attached to horizontal track with two 1/4" x 5/8" track bolts and nuts.

Flag bracket attached to vertical track with two 1/4" x 5/8" track bolts and nuts. Or two 1/4" x 11/32" rivets.

(.102) galvanized steel track bracket fastened to wood jamb with one 5/16" x 1-5/8" wood lag screw per bracket.

Each track bracket attached with one 1/4" x 5/8" track bolt and nut. Or two 1/4" x 11/32" rivets.

SCALE		N1S	
DATE		2-18-2013	
Models: 3212, 3216, 3285			
87.8 (psf) / - 101 (psf) at 06'-00" through		44.5 (psf) / - 51.4 (psf) at 09'-10"	
C.H.I. Drawing: TZ13-08-63313 page 2 of 2			