

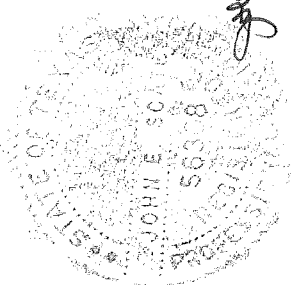
Window options (max 33.9 / - 41.9 psf)  
 1/8" DSB  
 1/4" Tempered Glass  
 7/16" Insulated Glass  
 7/16" Tempered Insulated Glass

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

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

Supplemental instructions contain details for doors up to 24'-0" high. These are required in addition to this drawing for installation. Always use supplemental instructions in addition to this drawing during door installation.

	SCALE	NIS
	DATE	2-12-2013
Models:	3220, 3221, 3222, 3240, 3241, 3242, 3250, 3251, 3252	
	36.9 (psf) / - 45.6 (psf) at 09'-04" through 29.9 (psf) / - 36.9 (psf) at 10'-10"	
C.H.I. Drawing: TZ7-10-61313 page 1_of_2		



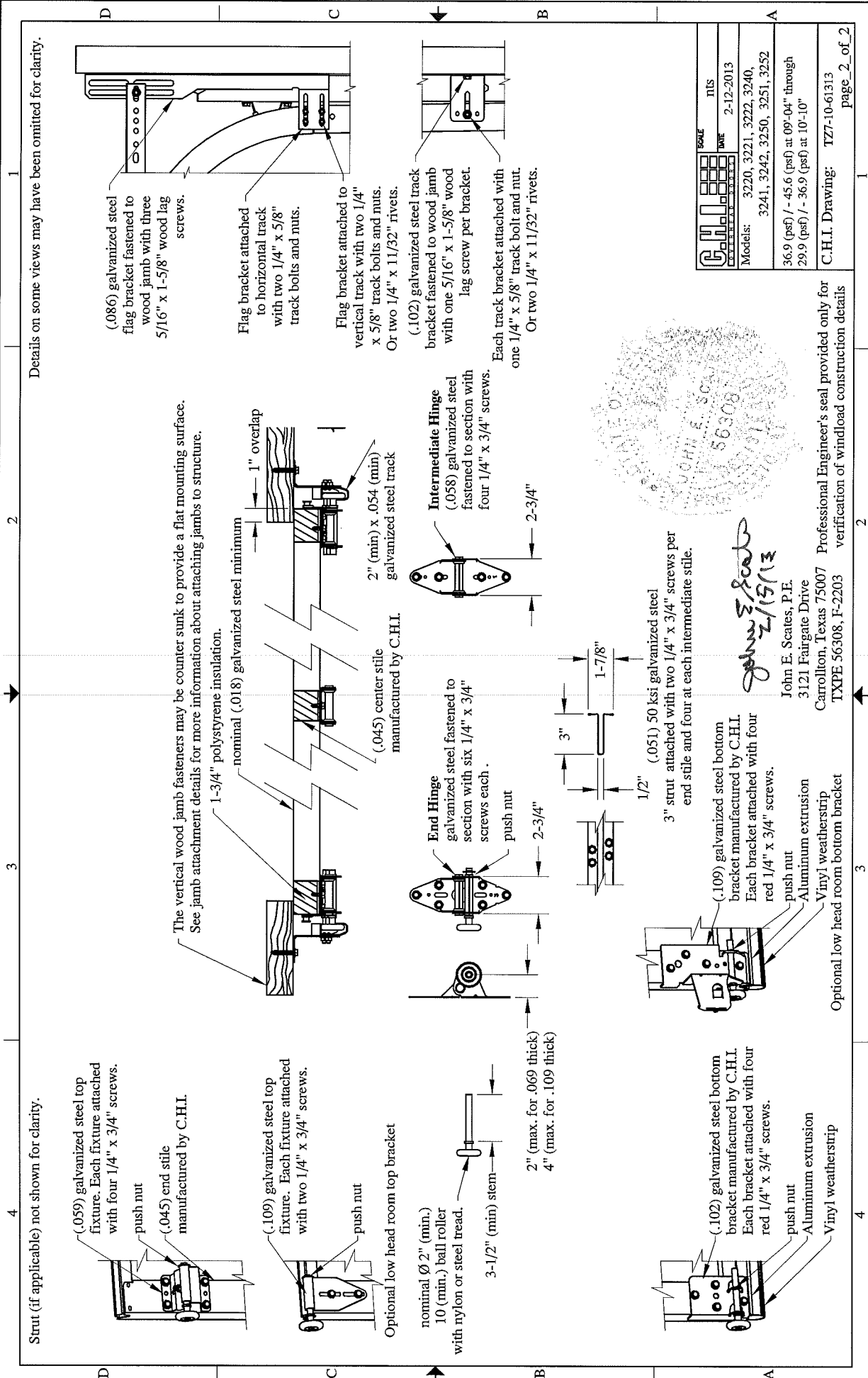
*John E. Scates*  
 2/15/13  
 John E. Scates, P.E.  
 3121 Fairgate Drive  
 Carrollton, Texas 75007  
 TXPE 56308, F-2203

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

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		Center Stiles
	Design Pressure	Exp B	Design Pressure	Exp B	
10'-10"	29.9 / - 36.9 (psf)	145 (mph)	29.9 / - 36.9 (psf)	145 (mph)	2
10'-06"	31.8 / - 39.3 (psf)	149 (mph)	31.8 / - 39.3 (psf)	149 (mph)	2
10'-02"	33.9 / - 41.9 (psf)	154 (mph)	33.9 / - 41.9 (psf)	154 (mph)	2
09'-04"	33.9 / - 41.9 (psf)	153 (mph)	36.9 / - 45.6 (psf)	160 (mph)	1

Center stile quantity is minimum per section.



Details on some views may have been omitted for clarity.

Strut (if applicable) not shown for clarity.

(.059) galvanized steel top fixture. Each fixture attached with four 1/4" x 3/4" screws.

push nut  
(.045) 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

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)

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.

1-3/4" polystyrene insulation.

nominal (.018) galvanized steel minimum

1" overlap

2" (min) x .054 (min) galvanized steel track

(.045) center stile manufactured by C.H.I.

End Hinge galvanized steel fastened to section with six 1/4" x 3/4" screws each.

push nut

2-3/4"

Intermediate Hinge (.058) galvanized steel fastened to section with four 1/4" x 3/4" screws.

2-3/4"

(.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

(.109) 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

Optional low head room bottom bracket

3" strut attached with two 1/4" x 3/4" screws per end stile and four at each intermediate stile.

(.109) 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

Optional low head room bottom bracket

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

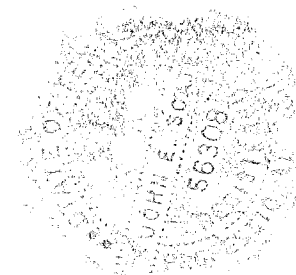
Flag bracket attached to horizontal track with two 1/4" x 5/8" track bolts and nuts.

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.

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