

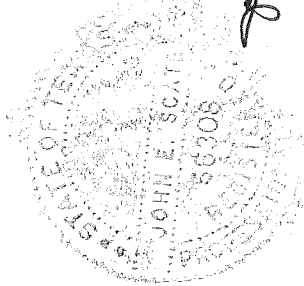
Window Options:
 1/8" DSB
 1/4" Tempered Glass
 7/16" Insulated Glass
 7/16" Tempered Insulated Glass

Door Height	Section Quantity	Strut Quantity	Trk Brkt Per Side
6'-0" to 8'-0"	4	4	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 one track bracket 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	THIS
DATE	2-18-2013
Models:	3212, 3216, 3285
	20.1 (psf) / - 25.0 (psf) at 16'-08" through 16.5 (psf) / - 20.6 (psf) at 19'-02"
C.H.I. Drawing:	TZ3-18-63313 page 1_of_2



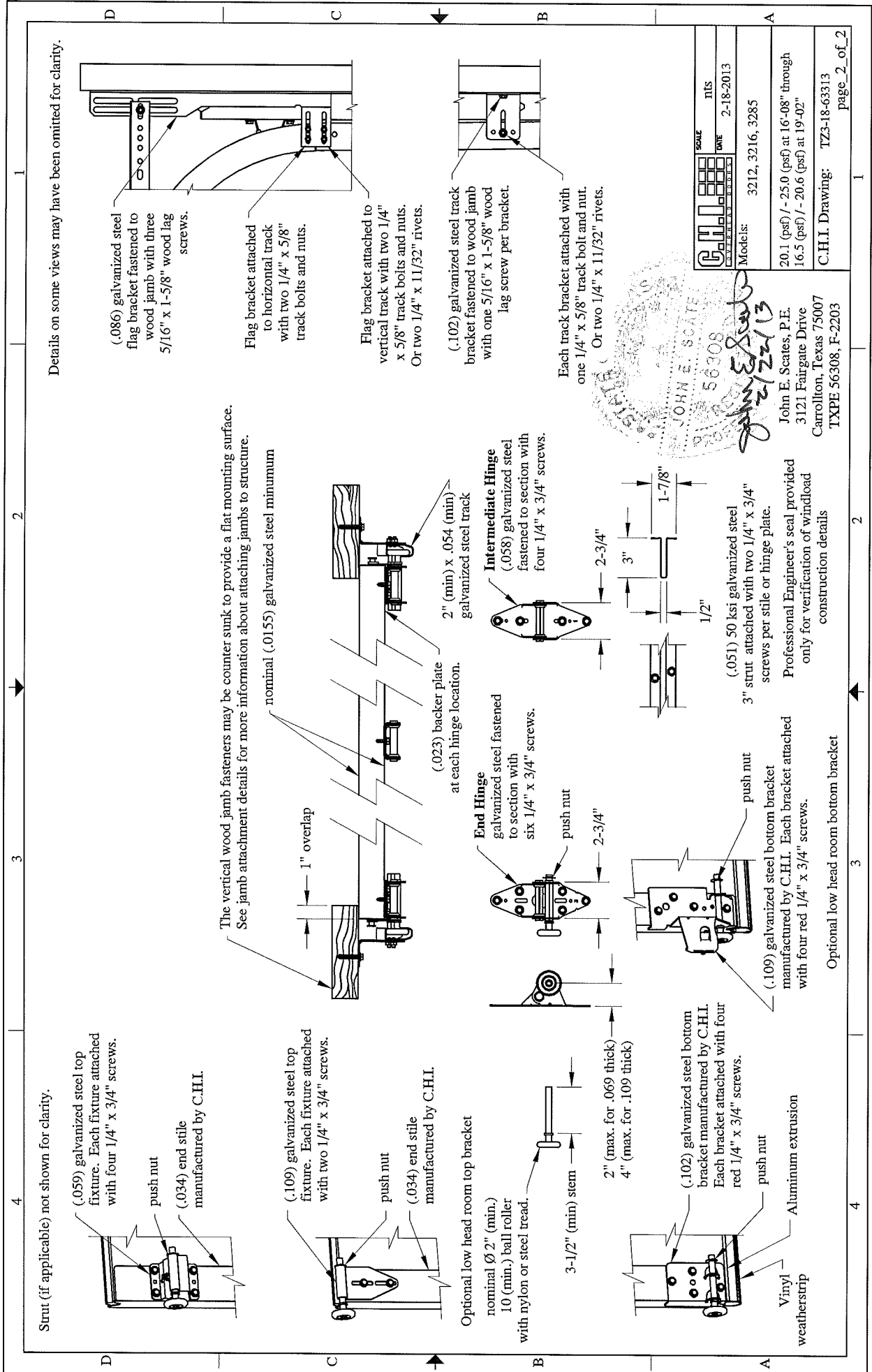
John E. Scates
 2/22/13
 John E. Scates, P.E.
 3121 Fairgate Drive
 Carrollton, Texas 75007
 TYPPE 56308, F-2203

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 IRC 1609 & 2006 IRC 301, in accordance with ANS/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		Backer plates
	Design Pressure	Exp B	Design Pressure	Exp B	
19'-02"	16.5 / - 20.6 (psf)	110 (mph)	16.5 / - 20.6 (psf)	110 (mph)	4
18'-02"	18.4 / - 22.9 (psf)	116 (mph)	18.4 / - 22.9 (psf)	116 (mph)	4
17'-02"	18.4 / - 22.9 (psf)	116 (mph)	19.5 / - 24.2 (psf)	119 (mph)	4
16'-08"	18.4 / - 22.9 (psf)	115 (mph)	20.1 / - 25.0 (psf)	121 (mph)	4

Backer plate quantity is minimum per section.



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
(.034) 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
(.034) end stile manufactured by C.H.I.

Optional low head room top bracket
nominal Ø 2" (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 .054 (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

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	NIS
DATE	2-18-2013
Models:	3212, 3216, 3285
	20.1 (psf) / - 25.0 (psf) at 16'-08" through 16.5 (psf) / - 20.6 (psf) at 19'-02"
C.H.I. Drawing:	ITZ3-18-63313 page 2 of 2

JOHN E. SCATES
56308
Professional Engineer
Signature: John E. Scates
Date: 2/21/13

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