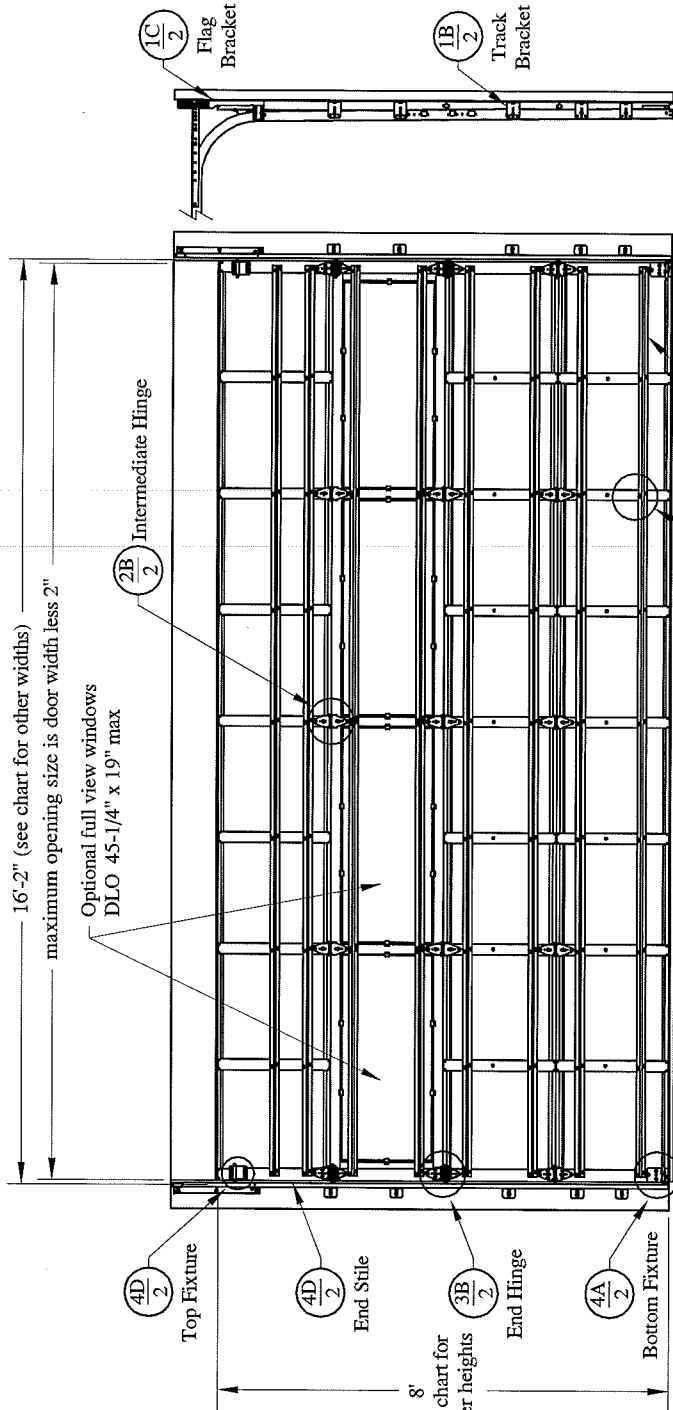


Window options:
 1/8" DSB
 1/4" Tempered Glass
 7/16" Insulated Glass
 7/16" Tempered Insulated Glass



Door Height	Section Quantity	Strut Quantity	Trk Brkt Per Side
6'-0" to 8'-0"	4	8	5
8'-3" to 10'-0"	5	10	7
10'-3" to 12'-0"	6	12	9
12'-3" to 14'-0"	7	14	11
14'-3" to 16'-0"	8	16	13
16'-3" to 18'-0"	9	18	15
18'-3" to 20'-0"	10	20	17
20'-3" to 22'-0"	11	22	19
22'-3" to 24'-0"	12	24	21

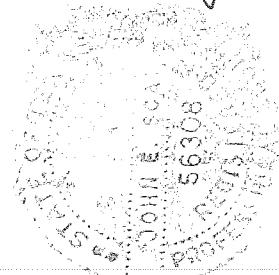
Track bracket quantities shown are for use with grade 2 or better southern pine jambs. When using softer wood species like spruce-pine-fir (SPF) use the quantity of track brackets specified in the chart plus two track brackets per side.

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.

Model:	3220, 3221, 3222, 3240,
	3241, 3242, 3250, 3251, 3252

33.3 (psf) / -41.6 (psf) at 12'-08" through
 30.1 (psf) / -37.6 (psf) at 17'-00"

C.H.I. Drawing: TZ8-16-66313
 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

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.

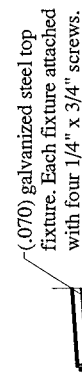
Door Width	With and Without Windows	Center Stiles
17'-00"	30.1 / -37.6 (psf)	148 (mph)
16'-02"	33.3 / -41.6 (psf)	155 (mph)
15'-02"	33.3 / -41.6 (psf)	155 (mph)
14'-02"	33.3 / -41.6 (psf)	154 (mph)
13'-02"	33.3 / -41.6 (psf)	154 (mph)
12'-08"	33.3 / -41.6 (psf)	154 (mph)

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
 windows. Sections with windows may reduce minimum center stile quantity as shown.

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

Details on some views may have been omitted for clarity.

Aluminum Section Detail



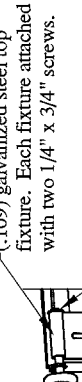
(.070) galvanized steel top fixture. Each fixture attached with four 1/4" x 3/4" screws.



(.066) end stile on full view panel
(.045) end stile manufactured by C.H.I.



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



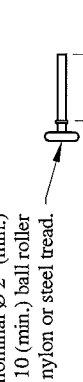
(.102) galvanized steel bottom bracket manufactured by C.H.I. Each bracket attached with four red 1/4" x 3/4" screws.



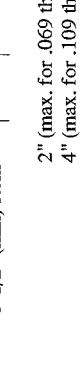
(.109) galvanized steel bottom bracket manufactured by C.H.I. Each bracket attached with four red 1/4" x 3/4" screws.



(.109) galvanized steel bottom bracket manufactured by C.H.I. Each bracket attached with four red 1/4" x 3/4" screws.



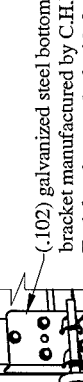
(.109) galvanized steel bottom bracket manufactured by C.H.I. Each bracket attached with four red 1/4" x 3/4" screws.



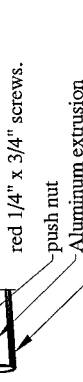
(.109) galvanized steel bottom bracket manufactured by C.H.I. Each bracket attached with four red 1/4" x 3/4" screws.



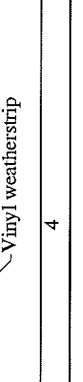
(.109) galvanized steel bottom bracket manufactured by C.H.I. Each bracket attached with four red 1/4" x 3/4" screws.



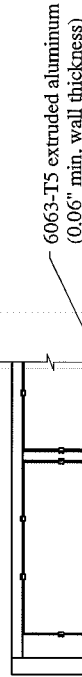
(.109) galvanized steel bottom bracket manufactured by C.H.I. Each bracket attached with four red 1/4" x 3/4" screws.



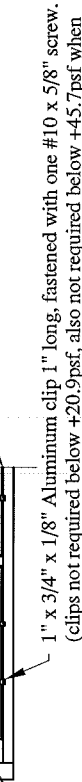
(.109) galvanized steel bottom bracket manufactured by C.H.I. Each bracket attached with four red 1/4" x 3/4" screws.



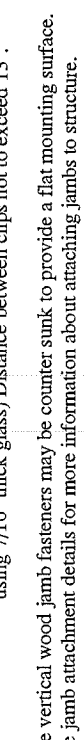
(.109) galvanized steel bottom bracket manufactured by C.H.I. Each bracket attached with four red 1/4" x 3/4" screws.



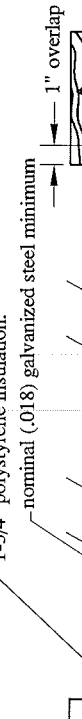
6063-T5 extruded aluminum (0.06" min. wall thickness)



1" x 3/4" x 1/8" Aluminum clip 1" long, fastened with one #10 x 5/8" screw. (clips not required below +20.9psf, also not required below +45.7psf when using 7/16" thick glass) Distance between clips not to exceed 13".



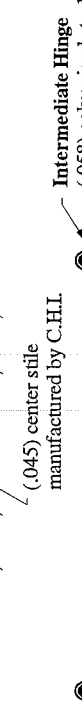
The vertical wood jamb fasteners may be counter sunk to provide a flat mounting surface. See jamb attachment details for more information about attaching jambs to structure.



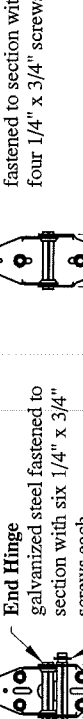
nominal (.018) galvanized steel minimum insulation.



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



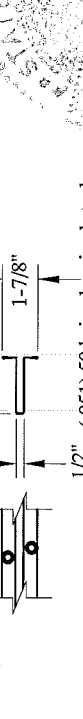
Intermediate Hinge (.058) galvanized steel fastened to section with four 1/4" x 3/4" screws.



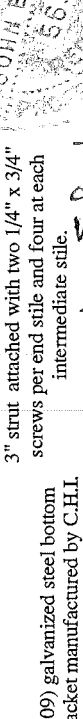
End Hinge galvanized steel fastened to section with six 1/4" x 3/4" screws each.



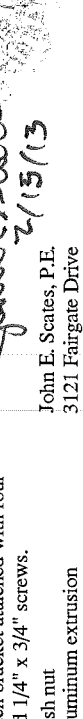
1/2" (.051) 50 ksi galvanized steel 3" strut attached with two 1/4" x 3/4" screws per end stile and four at each intermediate stile.



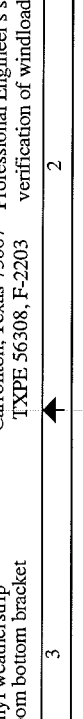
(.102) galvanized steel track bracket fastened to wood jamb with one 5/16" x 1-5/8" wood lag screw per bracket.



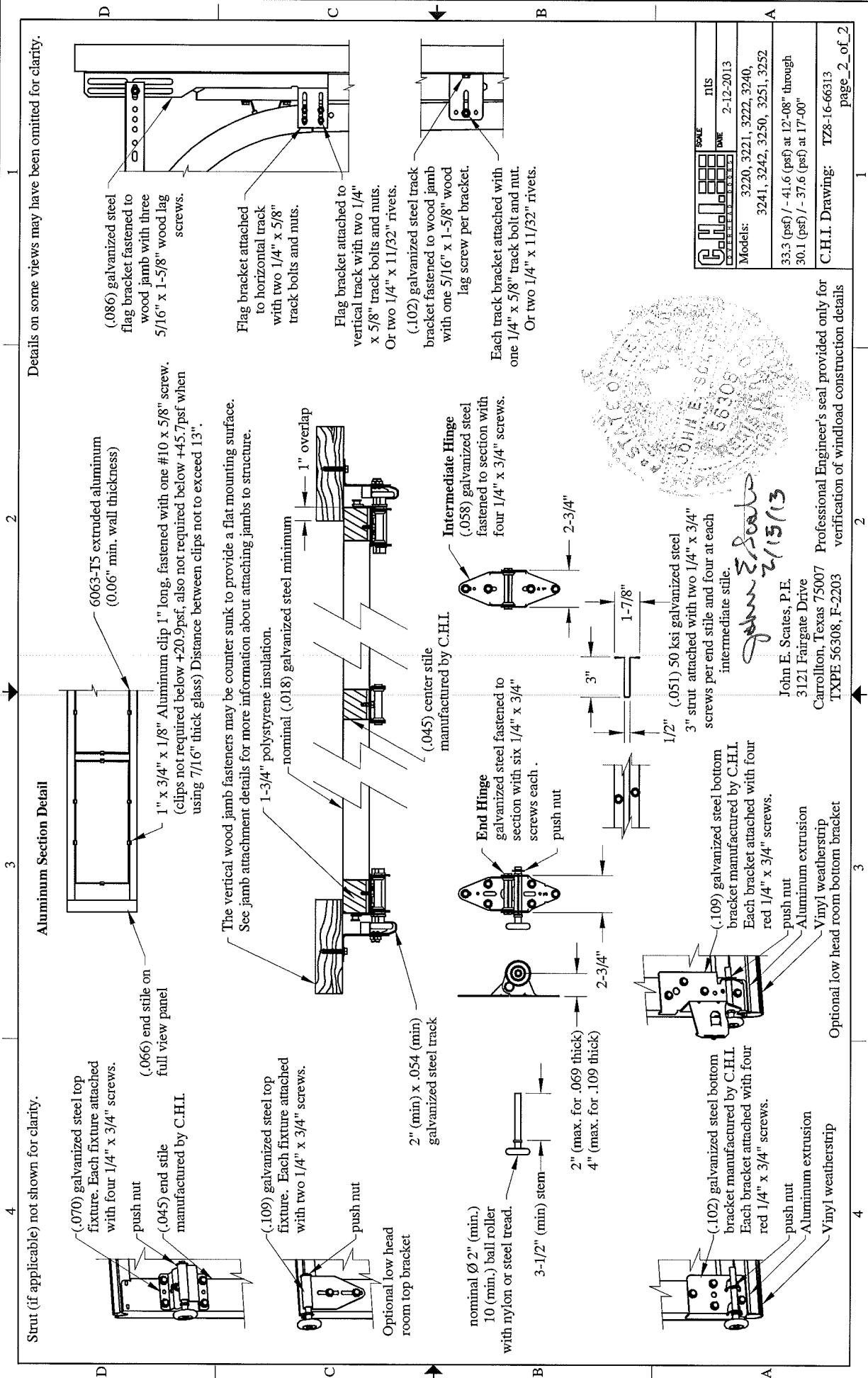
Flag bracket attached to horizontal track with two 1/4" x 5/8" track bolts and nuts.



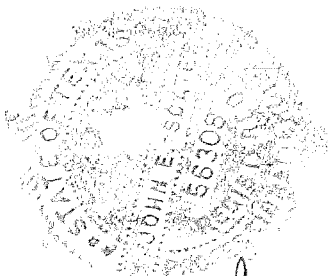
Flag bracket attached to vertical track with two 1/4" x 5/8" track bolts and nuts. Or two 1/4" x 11/32" rivets.



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



	SCALE	NIS
	DATE	2-12-2013
Models:	3221, 3222, 3240, 3241, 3242, 3250, 3251, 3252	
	33.3 (psf) / - 41.6 (psf) at 12'-08" through 30.1 (psf) / - 37.6 (psf) at 17'-00"	
C.H.I. Drawing: TZ8-16-66313		page_2_of_2



John E. Scates
2/15/13

John E. Scates, P.E.
3121 Fairgate Drive
Carrllton, Texas 75007
TXPE 56308, F-2203
Professional Engineer's seal provided only for verification of windload construction details