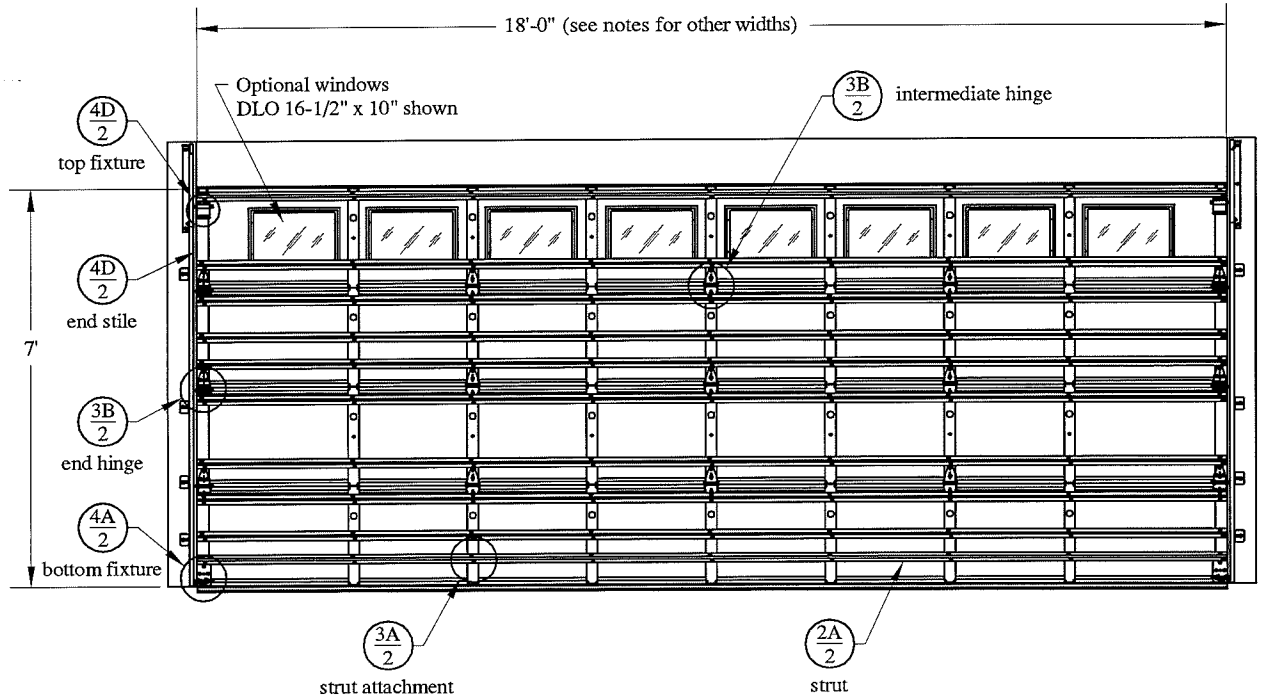
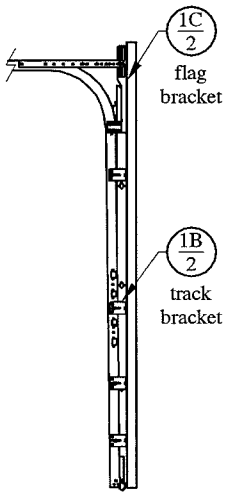




Window Options :
Max daylight opening 16-1/2" x 10"
1/8" DSB
1/4" Tempered Glass
7/16" Insulated Glass
7/16" Tempered Insulated Glass

door height	section quantity	strut quantity	trk brkt per side
6'-6" to 7'-0"	4	10	4
7'-6" to 8'-0"	5	12	5
8'-3" to 8'-9"	5	13	5
9'-0" to 10'-6"	6	16	6
10'-9" to 12'-3"	7	19	7
12'-6" to 14'-0"	8	22	8
14'-3" to 15'-9"	9	25	9
16'-0" to 17'-6"	10	28	10
17'-9" to 19'-3"	11	31	11
19'-6" to 20'-0"	12	34	12

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.

This door has been evaluated in accordance with ASTM E 330-02 and ANSI/DASMA 108-02 and 108-05. Per ASCE 7-02 & 7-05 as referenced by 2006 IBC 1609 and 2006 IRC 301.

Design Pressures (DP) typically meet or exceed the requirements for the following wind speeds. These wind speeds are for 7' high doors.

Width	Design Pressure	Exposure -B-	Exposure -C-	Windows	Center Stiles
22'-00"	23.1 (psf) / - 25.7 (psf)	124 (mph)	105 (mph)	YES	9
21'-06"	24.2 (psf) / - 26.9 (psf)	127 (mph)	107 (mph)	YES	9
21'-00"	25.3 (psf) / - 28.2 (psf)	130 (mph)	110 (mph)	YES	9
20'-06"	26.6 (psf) / - 29.6 (psf)	133 (mph)	113 (mph)	YES	9
20'-00"	27.9 (psf) / - 31.1 (psf)	137 (mph)	115 (mph)	YES	9
19'-06"	29.4 (psf) / - 32.7 (psf)	140 (mph)	118 (mph)	YES	9
19'-00"	31.0 (psf) / - 34.5 (psf)	143 (mph)	121 (mph)	YES	9
18'-06"	32.7 (psf) / - 36.4 (psf)	147 (mph)	124 (mph)	YES	9
18'-00"	34.5 (psf) / - 38.4 (psf)	151 (mph)	128 (mph)	YES	7
17'-06"	35.5 (psf) / - 39.5 (psf)	153 (mph)	129 (mph)	YES	7

Center stile quantity is minimum per section.

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.
Maximum door height: 20'-0"
Maximum section height: 21"

Supplemental Instructions contain details for doors up to 20'-0" high. These are required in addition to this drawing for installation. Always use supplemental instructions in addition to this drawing during door installation.

STATE OF TEXAS
JOHN E. SCATES
56308
John E. Scates
12/20/12

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 nts
DATE 12-03-2012

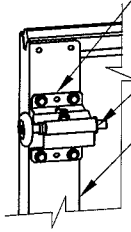
Models: 2240/41, 2250/51, 4240/41, 4250/51, 5240/41, 5250/51

35.5 (psf) / - 39.5 (psf) at 17'-06" through 23.1 (psf) / - 25.7 (psf) at 22'-00"

C.H.I. Drawing: TZ7-18-01313

Strut (if applicable) not shown for clarity.

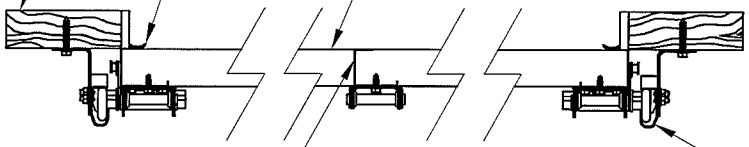
Details on some views may have been omitted for clarity.



(.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.



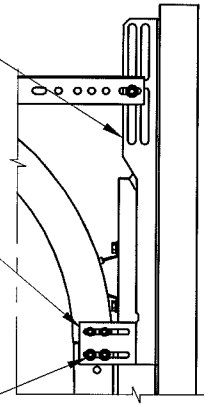
The vertical wood jamb fasteners may be counter sunk to provide a flat mounting surface. See jamb attachment details for more information about attaching jambs to structure.

2" x 7/16" (nominal) stop molding to be secured with minimum 8d nail or 2-1/2" long screw on 5" spacing. Stop molding not required when door is more than 1" wider than opening.

nominal .0185 galvanized steel minimum

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

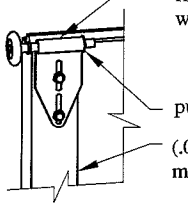
2" (min) x .058 (min) galvanized steel track



(.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.



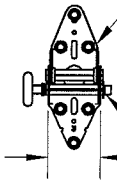
(.109) galvanized steel top fixture. Each fixture attached with two 1/4" x 3/4" screws.

push nut

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

Optional low head room top bracket

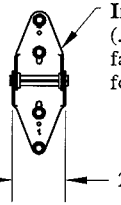
2" (max. for .069 thick)
4" (max. for .109 thick)



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

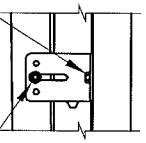
push nut

2-3/4"



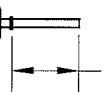
Intermediate Hinge
(.058) galvanized steel fastened to section with four 1/4" x 3/4" screws.

2-3/4"



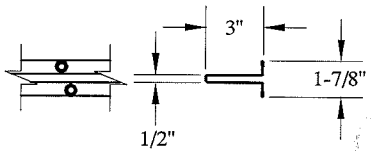
(.102) galvanized steel track bracket fastened to wood jamb with one 5/16" x 1-5/8" wood lag screw per bracket.

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



nominal Ø 2" (min.)
10 (min.) ball roller with nylon or steel tread.

3-1/2" (min.) stem

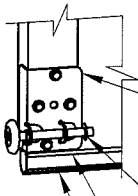


3"

1-7/8"

1/2"

(.051) 50 ksi galvanized steel 3" strut attached with two 1/4" x 3/4" screws per stile or hinge plate.

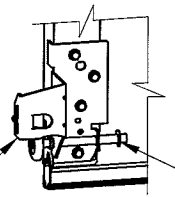


(.102) galvanized steel bottom bracket manufactured by C.H.I. Each bracket attached with four red 1/4" x 3/4" screws.

push nut

Vinyl weatherstrip

Aluminum extrusion



push nut

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

Optional low head room bottom bracket

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

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TXPE 56308, F-2203

JOHN E. SCATES
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C.H.I. OVERHEAD DOORS	SCALE nts
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