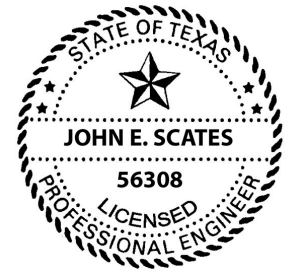




Supplemental Instructions

Pan Doors: Residential



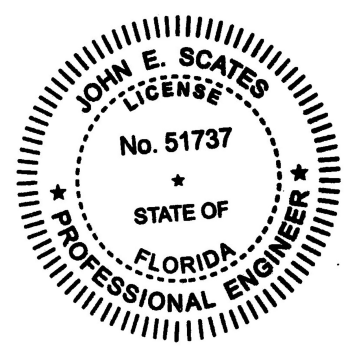
 CAUTION	Higher wind pressures and larger doors require additional reinforcement. Premature failure of door system may result from improper application. See chart in lower left corner of drawing sheet one for the approved wind pressures and door sizes.
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 WARNING	These supplemental instructions do not contain basic door installation steps and related safety information. Failure to follow basic installation steps and related safety information may result in injury or death. Door installers must follow a primary instruction manual for basic door installation steps and related safety information.
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The correct selection of door and framing materials in adherence with local building code directives is the responsibility of the building owner/designer. Use of a reinforced garage door does not constitute automatic compliance with any building code. Local building code officials determine compliance criteria.

A locking system must be installed if the door is not electrically operated.

See drawing for stop molding requirements, when door is not more than 1" wider than opening. When using stop molding, secure molding with minimum 8d nails or 2-1/2" long screws.



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

Digitally signed by John E Scates
Date: 2026.04.13 15:17:32 -05'00'

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Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

For Use With Drawing Number Z4i-16-01509

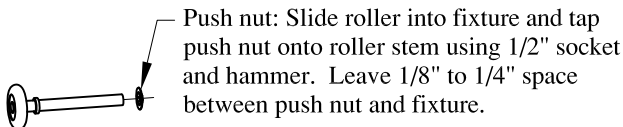
Strut Placement

Section Number	Door Height									
	6'-6" to 7'-0"	7'-6" to 8'-0"	8'-3" to 8'-9"	9'-0" to 10'-6"	10'-9" to 12'-3"	12'-6" to 14'-0"	14'-3" to 15'-9"	16'-0" to 17'-6"	17'-9" to 19'-3"	19'-6" to 20'-0"
12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1 at Detail A
11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1 at Detail A	1 at Detail B
10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1 at Detail A	1 at Detail B	1 at Detail B
9	N/A	N/A	N/A	N/A	N/A	N/A	1 at Detail A	1 at Detail B	1 at Detail B	1 at Detail B
8	N/A	N/A	N/A	N/A	N/A	1 at Detail A	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B
7	N/A	N/A	N/A	N/A	1 at Detail A	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B
6	N/A	N/A	N/A	1 at Detail A	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B
5	N/A	1 at Detail A	1 at Detail A	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B
4	1 at Detail A	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B
3	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B
2	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B	1 at Detail B
1	1 at Detail B 1 at Detail C	1 at Detail B 1 at Detail C	1 at Detail B 1 at Detail C	1 at Detail B 1 at Detail C	1 at Detail B 1 at Detail C	1 at Detail B 1 at Detail C	1 at Detail B 1 at Detail C	1 at Detail B 1 at Detail C	1 at Detail B 1 at Detail C	1 at Detail B 1 at Detail C

Push Nut Detail (use on all rollers)

use 3/8" I. D. on bottom fixture roller stem

use 7/16" I. D. on end hinge and top fixture roller stems

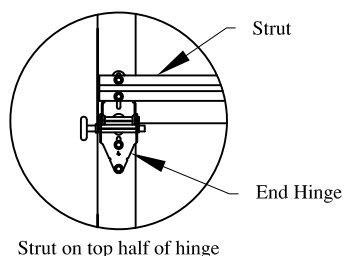
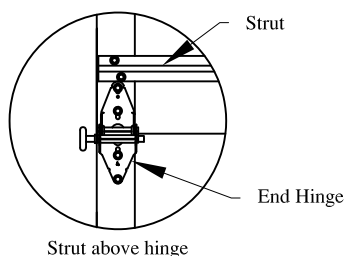


Track Bracket Spacing

Track bracket spacing shown for doors up to four sections high. Additional door sections may be added for maximum door height depicted on door drawing. Track brackets must be added (per track) for each section and spaced at a distance not greater than the corresponding section height (see door drawing for required quantities).

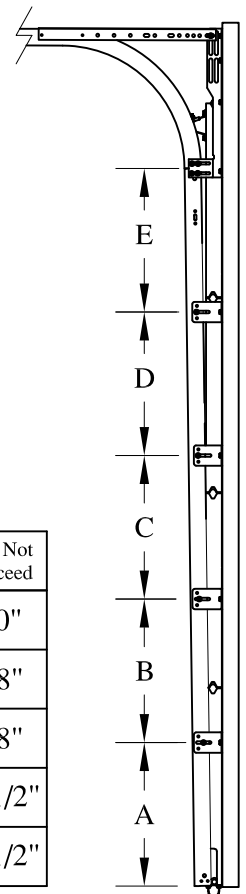
Strut Placement Concerning Windows

Where a strut crosses a window, it is acceptable to move the strut from a position of "Strut above hinge" down to "Strut on top half of the hinge".

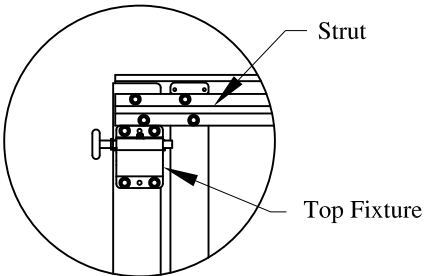


	Do Not Exceed
E	10"
D	28"
C	28"
B	6-1/2"
A	3-1/2"

+/-3" tolerance

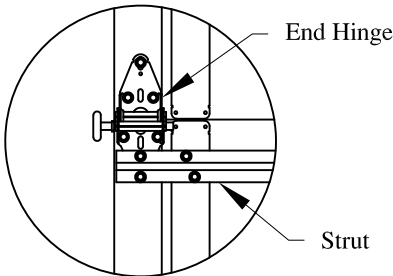


For Use With Drawing Number
Z4i-16-01509



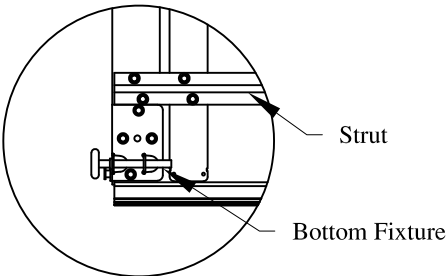
Strut above top fixture

Detail A



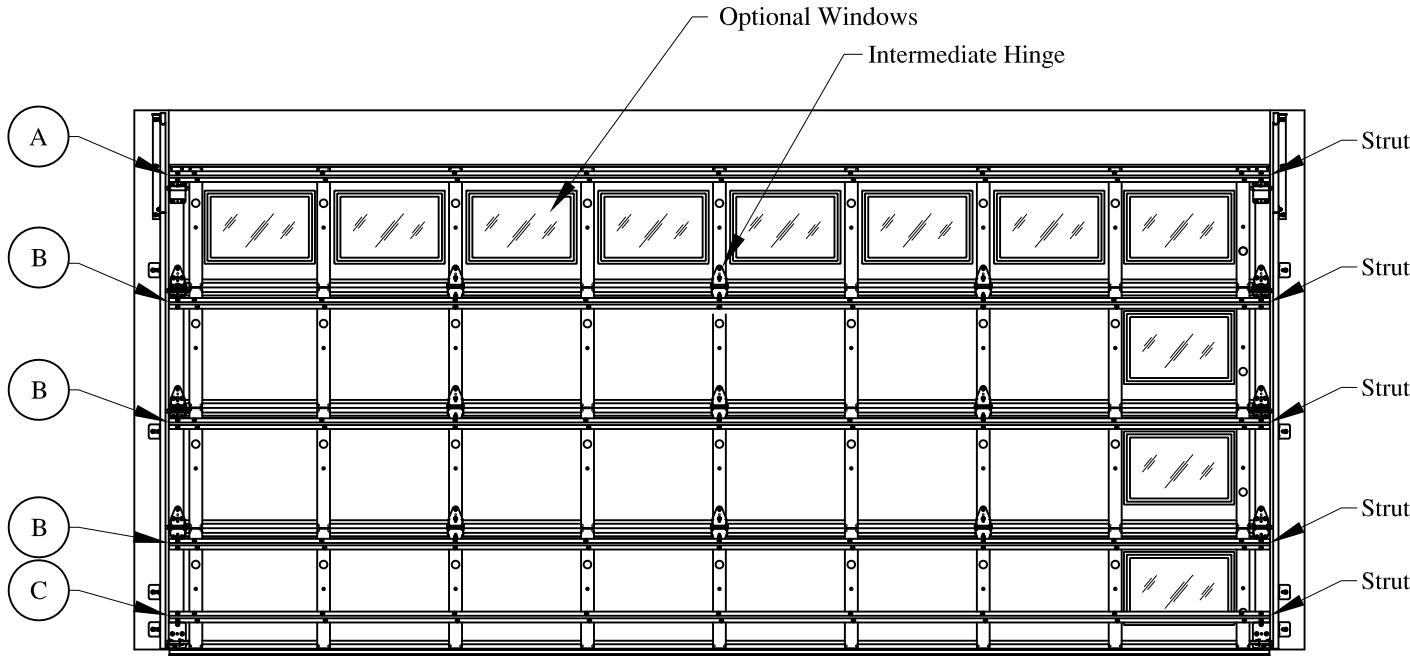
Strut on bottom half of hinge

Detail B



Strut above bottom fixture

Detail C



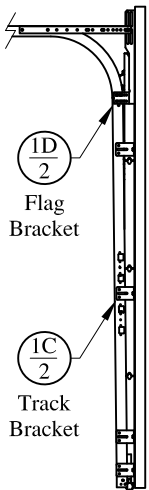
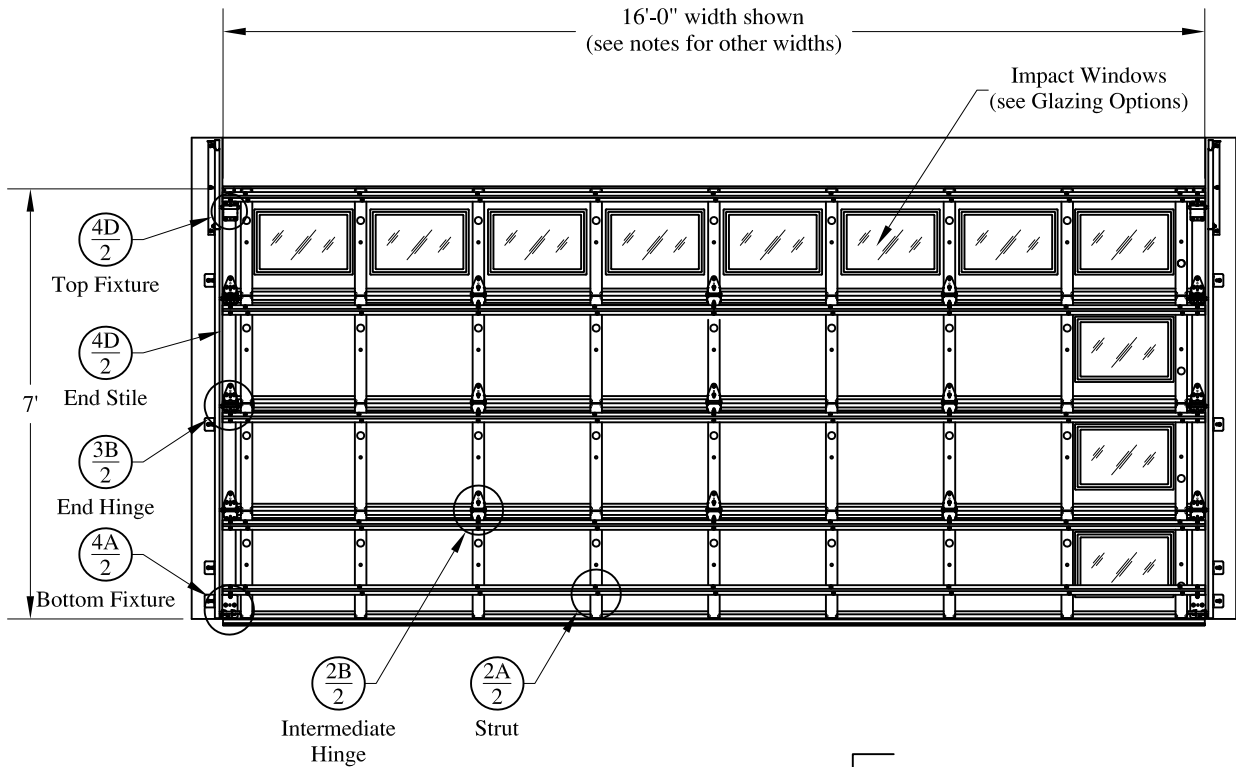
5 Struts

Glazing Options: By C.H.I.

- exterior mounted-factory installed with decorative frame
- 16-3/4" x 10-1/4" D.L.O.
- 1/4" Polycarbonate, 2-1/2" larger than Day Light Opening
- 3/16" bulbing rivets, 12 total

Or, as provided by National Door Industries

- 16-3/4" x 10-1/4" max daylight opening
- Grooved, 1/4" Polycarbonate
- Aluminum Frame



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

Track bracket quantities shown are for use with grade 2 or better Southern Yellow Pine. Refer to Jamb Attachment Detail supplemental instructions for usage of alternate jamb materials.

Supporting structural elements shall be designed by a registered professional engineer for wind loads shown on this drawing. If door is not electrically operated, a lock must be installed.

Width	Design Pressure (PSF)	Stile Qty.
16'-00"	+22.2 / -24.7	7
15'-11"	+22.2 / -24.7	6
13'-11"	+22.2 / -24.7	5
11'-11"	+22.2 / -24.7	4
10'-07"	+22.2 / -24.7	4

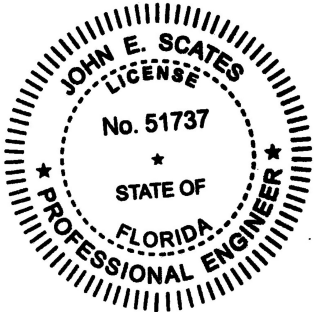
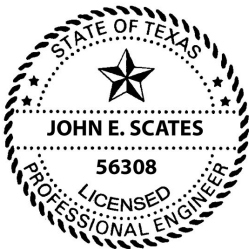
Complies with current FBC (See Eval Report)

Complies with IBC/IRC 2018/2021/2024 (Texas)

Tested per ANSI/DASMA 108 and 115

Maximum door height: 20'-00"

Glazing and door have been tested for windborne debris



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C.H.I.  OVERHEAD DOORS	SCALE	nts
	DATE	08-27-2020
Models Series: Pan Doors, Residential		
C.H.I. Drawing: Z4i-16-01509 page 4 of 5		

Strut (if applicable) not shown for clarity.

Top Fixture

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

push nut

(.034) center stile

End Stile

(.066) steel end stile

Optional Top Fixture

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

push nut

(.034) center stile

(.066) steel end stile

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 attached with minimum 8d nail or 2-1/2" long screw on 8" spacing. Stop molding not required when door is more than 1" wider than opening.

1-3/8" polystyrene insulation with vinyl back (both ends).

nominal (.0185) galvanized steel minimum

(.034) steel center stile

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

Flag Bracket

(.086) galvanized steel flag bracket attached to wood jamb with three 5/16" x 1-5/8" wood lag screws, to horizontal track with two 1/4" x 5/8" track bolts and nuts and to vertical track with two 1/4" x 5/8" track bolts and nuts.

Track Bracket

(.102) galvanized steel track bracket attached to wood jamb with one 5/16" x 1-5/8" wood lag screw per bracket and attached to vertical track with one 1/4" x 5/8" track bolt and nut or two 1/4" x 11/32" rivets.

End Hinge

galvanized steel attached with six 1/4" x 3/4" screws.

push nut

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

2 3/4"

Intermediate Hinge

(.058) galvanized steel attached with four 1/4" x 3/4" screws.

2 3/4"

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

3-1/2" (min.) stem

Bottom Bracket

(.102) galvanized steel bottom bracket attached with four red 1/4" x 3/4" screws.

push nut

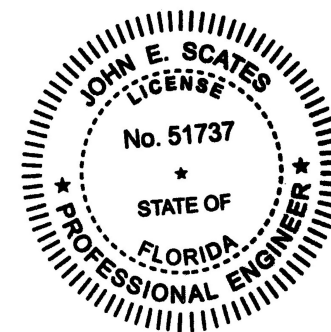
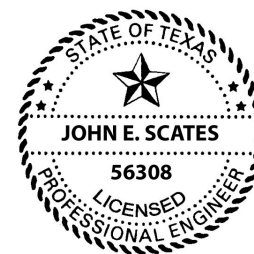
Aluminum extrusion

Optional Bottom Bracket

(.109) galvanized steel bottom bracket attached with four red 1/4" x 3/4" screws.

Strut

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



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C.H.I. 333 OVERHEAD DOORS	SCALE	nts
	DATE	08-27-2020
Models Series: Pan Doors, Residential		
C.H.I. Drawing: Z4i-16-01509		
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