



Supplemental Instructions

Sandwich Doors: Commercial

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.

WARNING

These supplemental instructions do not contain basic door installation steps and related safety information.

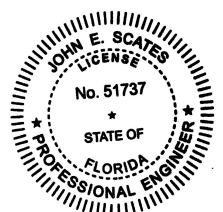
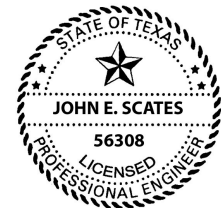
Failure to follow basic installation steps and related safety information may result in injury or death.

Door installers must follow a primary instruction manual for basic door installation steps and related safety information.

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.



Digitally signed by John E Scates
Date: 2026.08.14 23:42:38 -05'00'

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

For Use With Drawing Number Z5i-20-63518

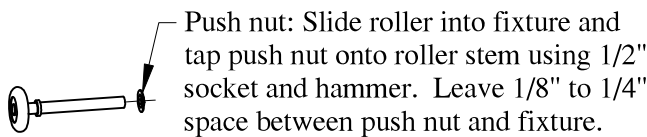
Strut Placement

Section Number	Door Height								
	6'-0" to 8'-0"	8'-3" to 10'-0"	10'-3" to 12'-0"	12'-3" to 14'-0"	14'-3" to 16'-0"	16'-3" to 18'-0"	18'-3" to 20'-0"	20'-3" to 22'-0"	22'-3" to 24'-0"
12	N/A	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 C
11	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 C	1 at Detail D 1 at Detail C
10	N/A	N/A	N/A	N/A	N/A	N/A	1 at Detail A 1 at Detail B 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C
9	N/A	N/A	N/A	N/A	N/A	1 at Detail A 1 at Detail B 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C
8	N/A	N/A	N/A	N/A	1 at Detail A 1 at Detail B 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C
7	N/A	N/A	N/A	1 at Detail A 1 at Detail B 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C
6	N/A	N/A	1 at Detail A 1 at Detail B 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C
5	N/A	1 at Detail A 1 at Detail B 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C
4	1 at Detail A 1 at Detail B 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C
3	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C
2	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C	1 at Detail D 1 at Detail C
1	1 at Detail D 1 at Detail B 1 at Detail E	1 at Detail D 1 at Detail B 1 at Detail E	1 at Detail D 1 at Detail B 1 at Detail E	1 at Detail D 1 at Detail B 1 at Detail E	1 at Detail D 1 at Detail B 1 at Detail E	1 at Detail D 1 at Detail B 1 at Detail E	1 at Detail D 1 at Detail B 1 at Detail E	1 at Detail D 1 at Detail B 1 at Detail E	1 at Detail D 1 at Detail B 1 at Detail E

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

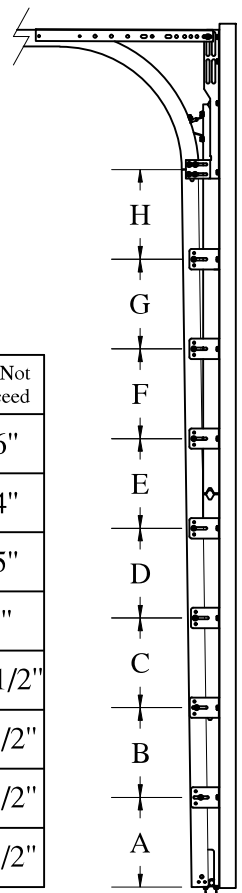


Track Bracket Spacing

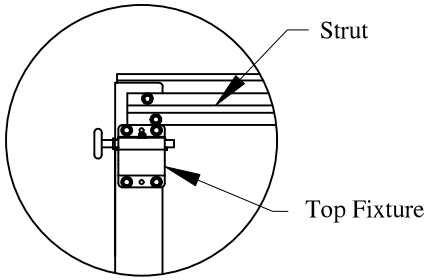
Track bracket spacing shown for doors up to four sections high. Additional door sections may be added for maximum door height depicted on door drawing. Track brackets must be added (per track) for each section and spaced at a distance not greater than the corresponding section height (see door drawing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

	Do Not Exceed
H	16"
G	14"
F	15"
E	9"
D	14-1/2"
C	9-1/2"
B	6-1/2"
A	3-1/2"

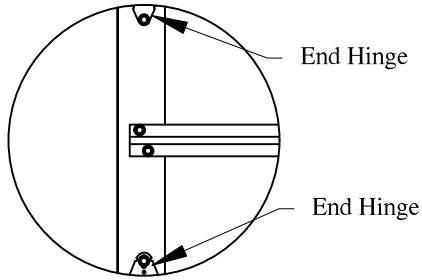
+/-3" tolerance



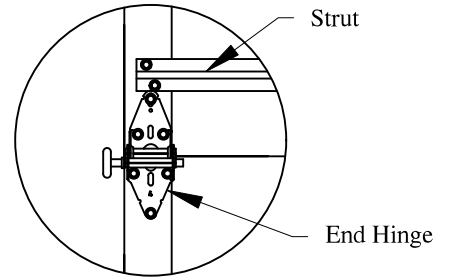
Strut Placement Detail



Strut above top fixture

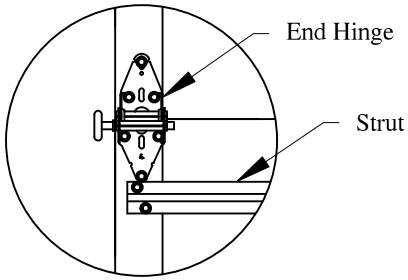


Strut in center of section

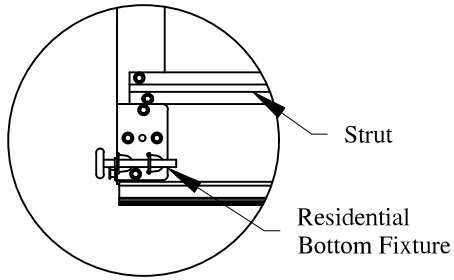


Strut above hinge

Detail A



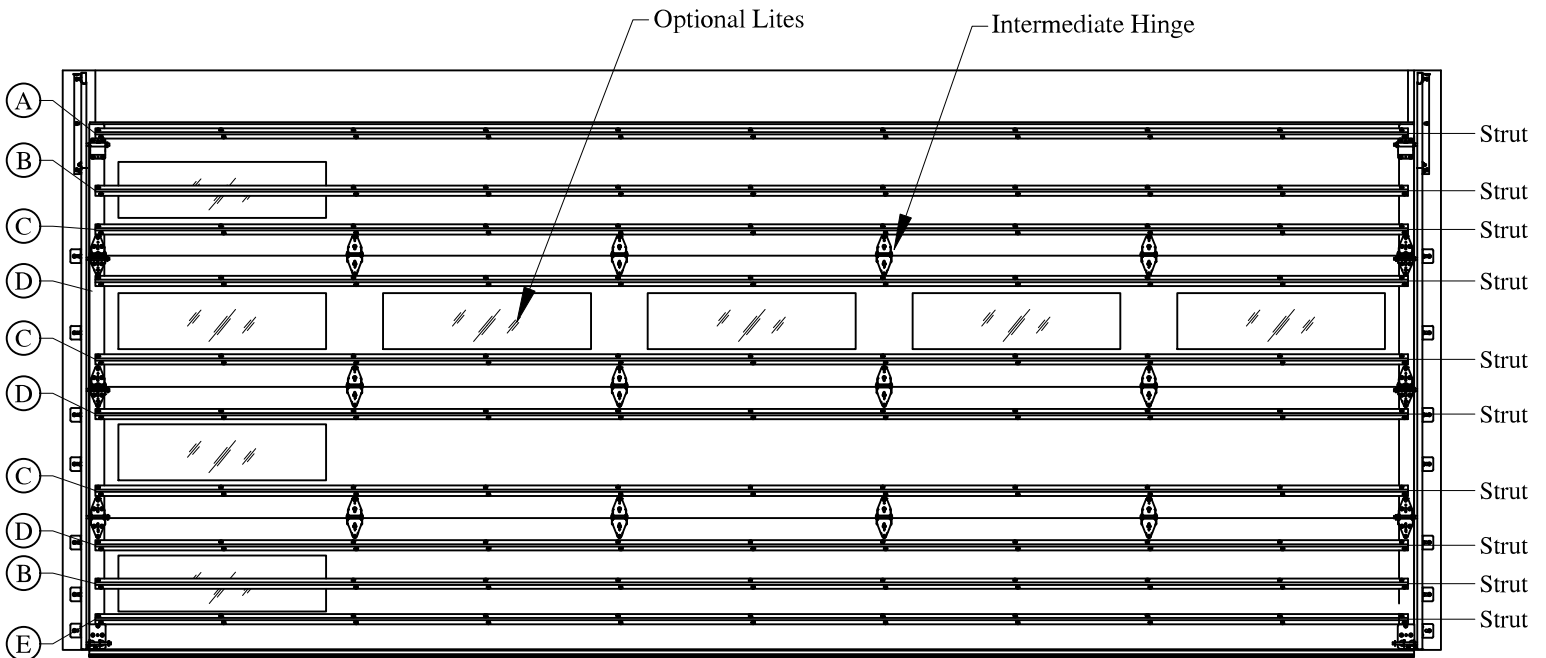
Strut below hinge



Strut above bottom fixture

Detail D

Detail E



4

3

2

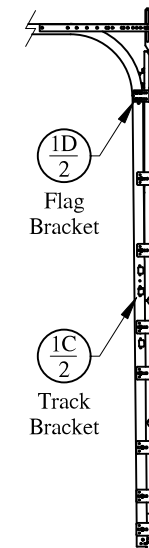
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Glazing Options: 1/4" thick polycarbonate
 ◦exterior mounted-factory installed with decorative frame
 ◦2-1/2" larger than Day Light Opening
 ◦3/16" bulbing rivets
 16-3/4" x 10-1/4" D.L.O.
 ◦12 rivets total
 38" x 10-1/4" D.L.O.
 ◦28 rivets total

Or, as provided by National Door Industries
 ◦29-3/8" x 13" max daylight opening
 ◦Grooved, 1/4" Polycarbonate
 ◦Aluminum Frame

20'-2" width shown
 (see notes for other widths)
 maximum opening size is door width less 2"
 Impact Windows
 (see Glazing Options)

4D
2
Top Fixture
 4D
2
End Stile
 8'
 3B
2
End Hinge
 4A
2
Bottom Fixture



Door Height	Section Quantity	Strut Quantity	Trk Brkt Per Side
6'-0" to 8'-0"	4	10	7
8'-3" to 10'-0"	5	12	9
10'-3" to 12'-0"	6	14	11
12'-3" to 14'-0"	7	16	13
14'-3" to 16'-0"	8	18	15
16'-3" to 18'-0"	9	20	17
18'-3" to 20'-0"	10	22	19
20'-3" to 22'-0"	11	24	21
22'-3" to 24'-0"	12	26	23

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.
20'-02"	+25.6 / -27.9	9
18'-02"	+31.5 / -34.4	9
16'-05"	+38.6 / -42.1	7
16'-02"	+39.8 / -43.4	7
14'-02"	+43.0 / -48.3	7
12'-11"	+43.0 / -48.3	5
12'-02"	+43.0 / -48.3	5

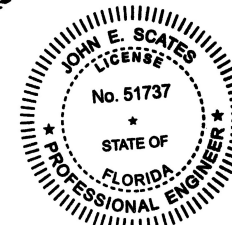
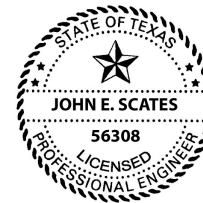
Complies with current FBC (See Eval Report)

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

Tested per ANSI/DASMA 108 and 115

Maximum door height: 24'-00"

Glazing and door have been tested for windborne debris

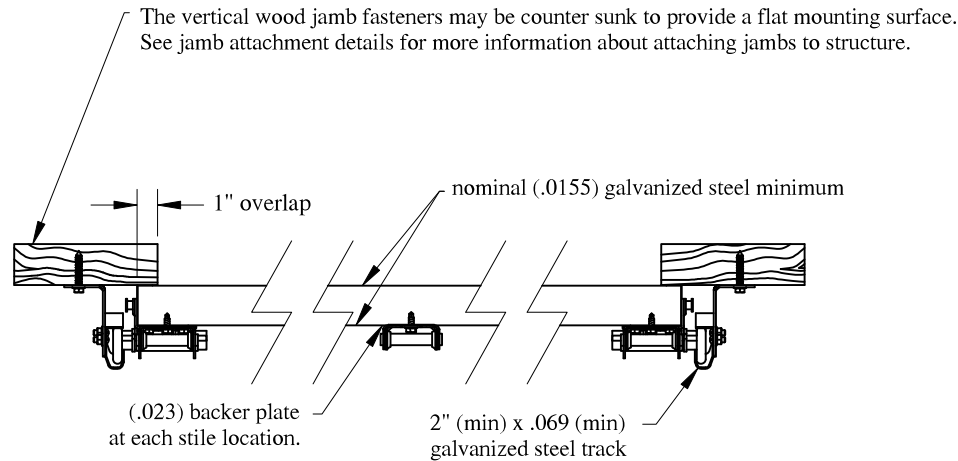
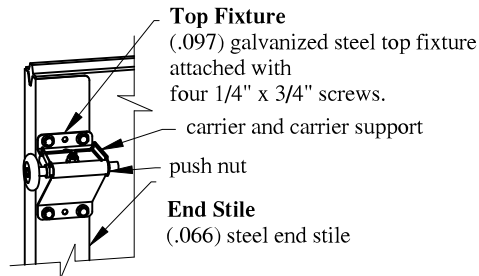


Professional Engineer's seal provided
 only for verification of windload
 construction details

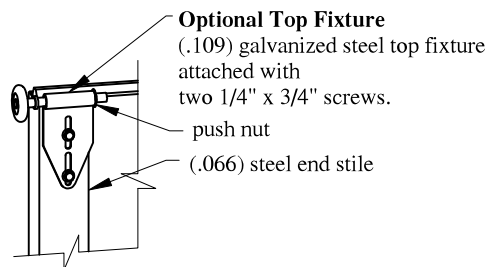
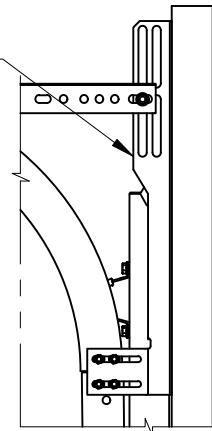
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C.H.I. 333 OVERHEAD DOORS	SCALE	nts
	DATE	09-17-2020
Model Series: Sandwich Doors, Commercial		
C.H.I. Drawing: Z5i-20-63518		

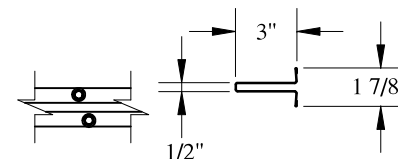
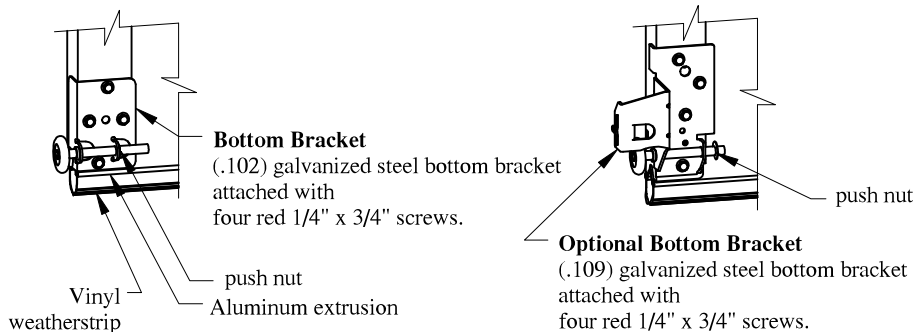
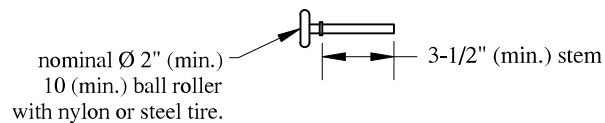
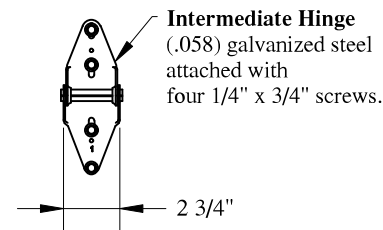
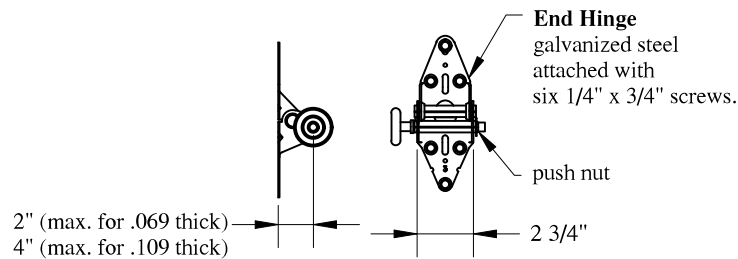
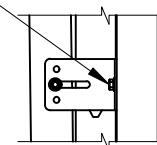
Details on some views may have been omitted for clarity.



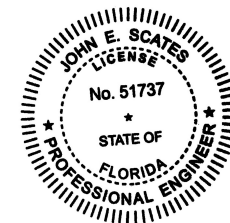
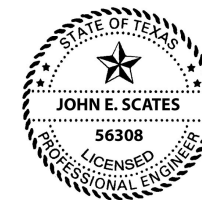
Flag Bracket
(.086) galvanized steel flag bracket attached to wood jamb with three 5/16" x 1-5/8" wood lag screws, to horizontal track with two 1/4" x 5/8" track bolts and nuts and to vertical track with two 1/4" x 5/8" track bolts and nuts.



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.



Strut and Strut Attachment
(.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. Drawing	SCALE	nts
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Model Series: Sandwich Doors, Commercial		
C.H.I. Drawing: Z5i-20-63518		
page 5 of 5		