

SECTION B-B

P.S.F. TABLE					
DOOR SIZE		DESIGN PRESSURE		TEST PRESSURE	
WIDTH	HEIGHT	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
9'-0"	7'-0"	+22.9	-26.4	+34.4	-39.6

DOORS SHOWN ON THIS DRAWING HAVE BEEN DEMONSTRATED TO WITHSTAND THE PRESSURES LISTED IN THE TABLE ABOVE. MPH SHOWN FOR REFERENCE ONLY.
 FBC/IBC/IRC ASSUMPTIONS: 120 MPH EXPOSURE "B", 30' ROOF HEIGHT. ROOF PITCH > 10°, 2' OF DOOR IN END ZONE, FULLY ENCLOSED.
 DETERMINATION OF SUITABILITY FOR SPECIFIC SITES IS THE RESPONSIBILITY OF OTHERS.
 DOORS SMALLER THAN THOSE SHOWN WILL WITHSTAND THE INCREASED PRESSURE LOADS, GIVEN THE SAME CONDITIONS. THE INCREASE IN DOOR STRENGTH IS GREATER THAN THE INCREASE IN PRESSURE AS THE DOOR SIZE IS MADE NARROWER OR SHORTER.

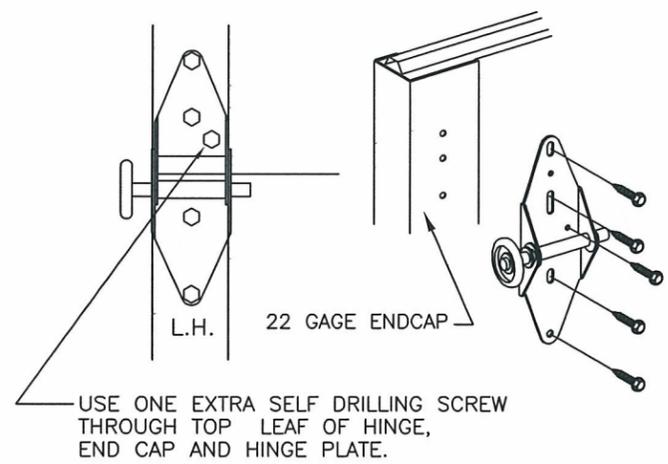
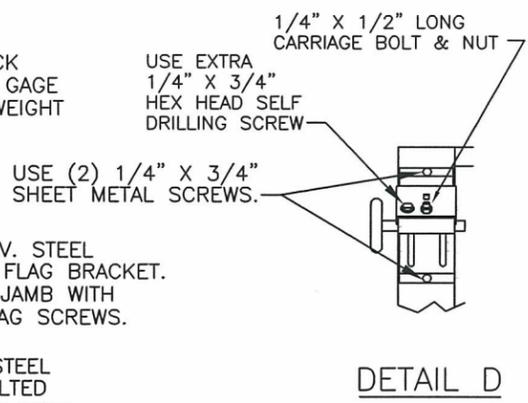
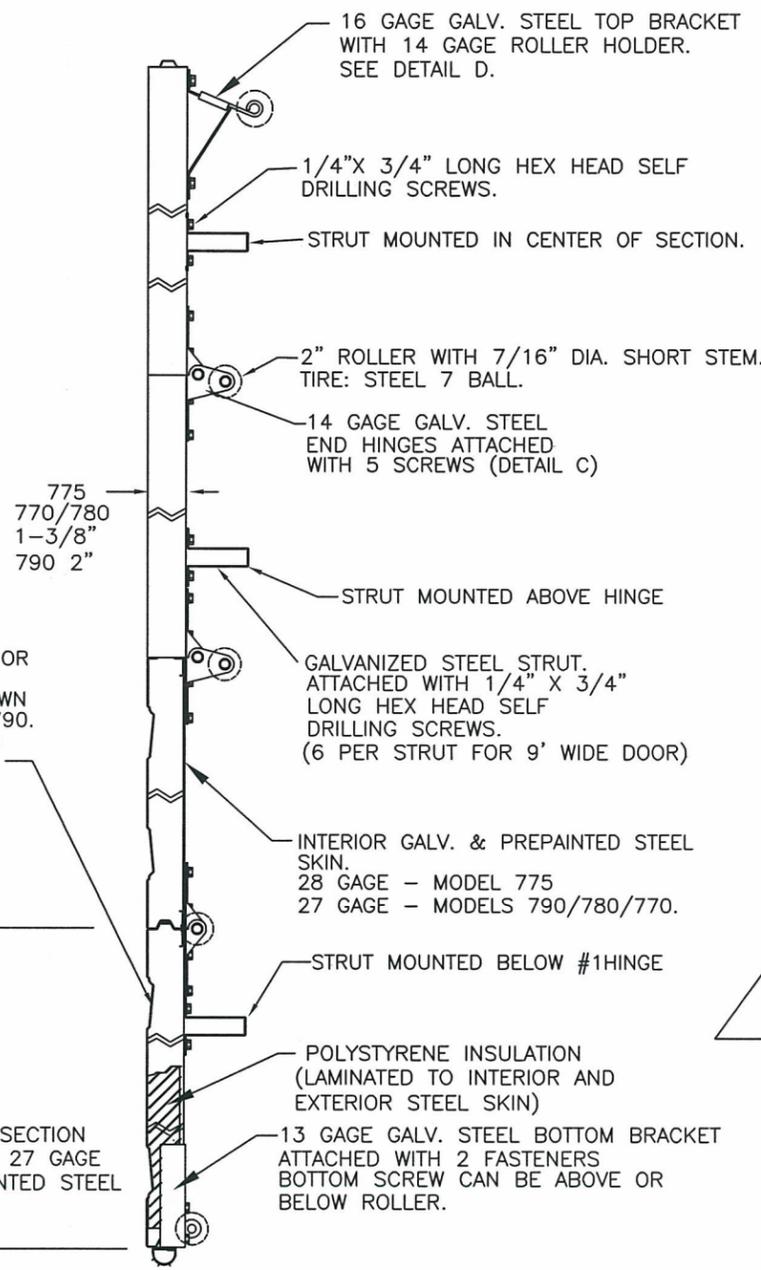
DECORATIVE SHORT OR LONG EMBOSS ON EXTERIOR SIDE SHOWN FOR MODELS 775/790. FLUSH FOR MODELS 780/770/775/790.

21" HIGH SECTION EXTERIOR MATERIAL 27 GAGE GALV. AND PREPAINTED STEEL

SECTION A-A

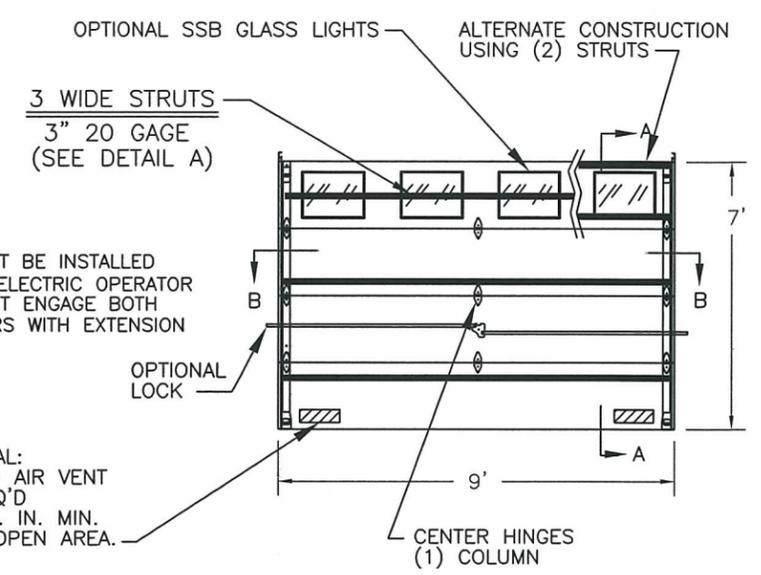
John E Scates PE
 Florida P.E. #51737
 1411 LeMay #205
 Carrollton, TX 75007
 (972)466-0550
 Professional Engineer's seal provided only for verification of windload construction details.

John E Scates
 3/20/08
 TX 56308

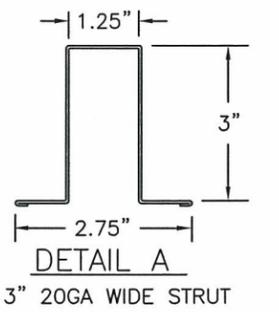


DETAIL C

NOTE: GLAZING DOES NOT SATISFY IMPACT DEBRIS REQUIREMENTS IN FBC



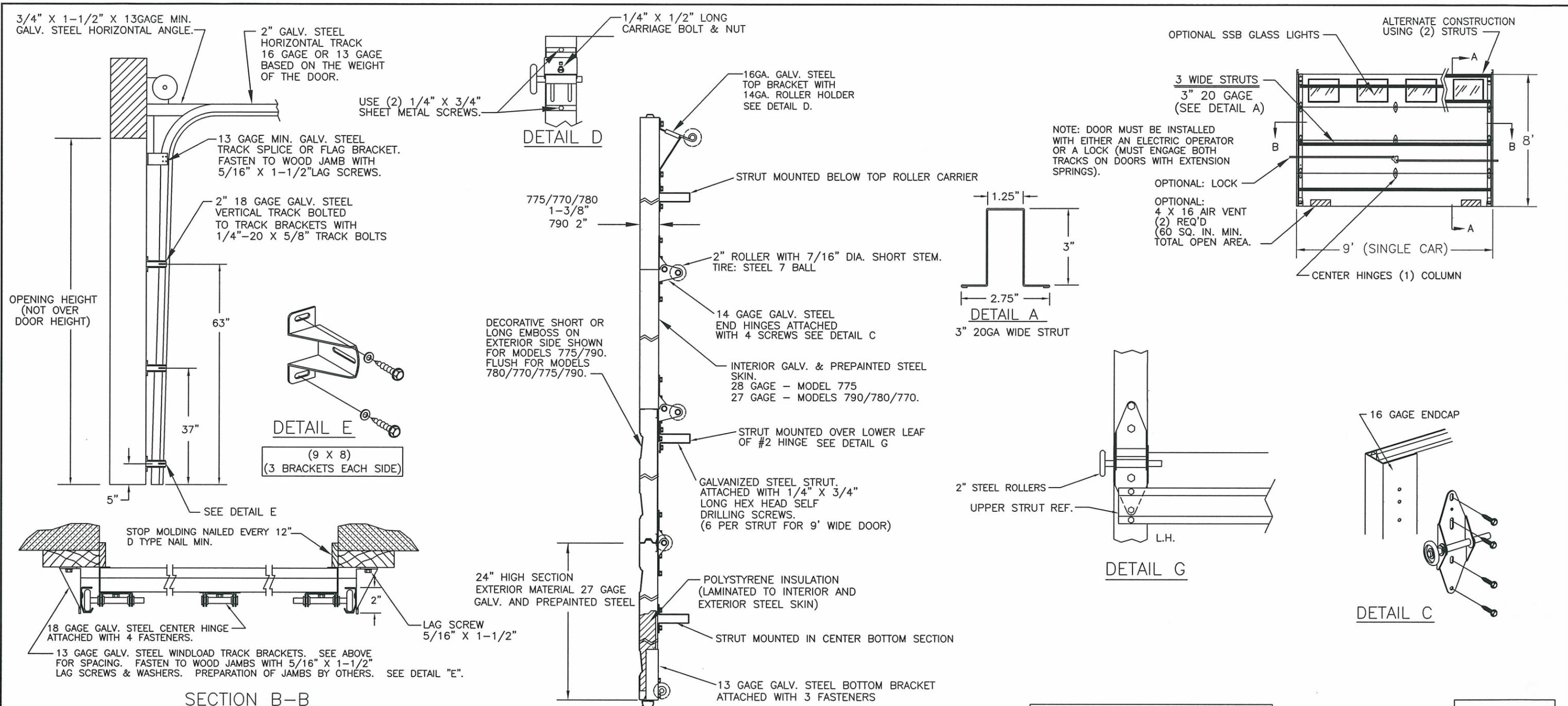
NOTE: ALL NON-DESCRIPTIVE FASTENERS SHOWN TO BE 1/4"-20 X 5/8" HEX BOLTS & NUTS OR 1/4" X 3/4" LONG HEX HEAD SHEET METAL SCREWS.



9 X 7

REV.	E.C.N.	DATE:	APPROV.
A	2866	3/10/08	RLB
	2851	11/1/07	RLB

WR WINDSOR REPUBLIC DOORS		P.O. BOX 8915 LITTLE ROCK, AR 72219-8915 (501) 562-1872	
MODELS: 775, 790, 770, 780			
PART NAME: WINDLOAD RESIDENTIAL STEEL DOOR FOR IBC/FBC/IRC 120 MPH. EXPOSURE "B"			
TOLERANCE	FRAC. ± 1/64"	DATE: 10/11/07	DWG. NO. 99-B-086
	DEC. ± .015	DRN. BY BH	SHT 1 OF 4
	ANG. ± 1°		



P.S.F. TABLE

DOOR SIZE		DESIGN PRESSURE		TEST PRESSURE	
WIDTH	HEIGHT	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
9'-0"	8'-0"	+27.0	-30.4	+40.5	-45.6

NOTE: ALL NON-DESCRIPTIVE FASTENERS SHOWN TO BE 1/4"-20 X 5/8" HEX BOLTS & NUTS OR 1/4" X 3/4" LONG HEX HEAD SHEET METAL SCREWS.

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 FBC/IBC/IRC ASSUMPTIONS: 120 MPH EXPOSURE "B", 30' ROOF HEIGHT. ROOF PITCH > 10°, 2' OF DOOR IN END ZONE, FULLY ENCLOSED.

DETERMINATION OF SUITABILITY FOR SPECIFIC SITES IS THE RESPONSIBILITY OF OTHERS.
 DOORS SMALLER THAN THOSE SHOWN WILL WITHSTAND THE INCREASED PRESSURE LOADS, GIVEN THE SAME CONDITIONS. THE INCREASE IN DOOR STRENGTH IS GREATER THAN THE INCREASE IN PRESSURE AS THE DOOR SIZE IS MADE NARROWER OR SHORTER.

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 3/20/08
 TX 56308

NOTE: GLAZING DOES NOT SATISFY IMPACT DEBRIS REQUIREMENTS IN FBC

9 X 8

				P.O. BOX 8915 LITTLE ROCK, AR 72219-8915 (501) 562-1872	
				MODELS: 775, 790, 770, 780	
PART NAME: WINDLOAD RESIDENTIAL STEEL DOOR FOR IBC/FBC/IRC 120 MPH. EXPOSURE B				TOLERANCE FRAC. ± 1/64" DEC. ± .015 ANG. ± 1°	
A 2866 3/10/08 RLB		2851 11/1/07 RLB		NEXT LEVEL DATE: 11/1/07	
REV. E.C.N. DATE: APPROV.		SCALE NONE		DWG. NO. 99-B-086 SHT 2 OF 4	

3/4" X 1-1/2" X 13GAGE MIN. GALV. STEEL HORIZONTAL ANGLE.

2" GALV. STEEL HORIZONTAL TRACK 16 GAGE OR 13 GAGE BASED ON THE WEIGHT OF THE DOOR.

1/4" X 1/2" LONG CARRIAGE BOLT & NUT
USE EXTRA 1/4" X 3/4" HEX HEAD SELF DRILLING SCREW
USE (2) 1/4" X 3/4" SHEET METAL SCREWS.

13 GAGE MIN. GALV. STEEL TRACK SPLICE OR FLAG BRACKET. FASTEN TO WOOD JAMB WITH 5/16" X 1-1/2" LAG SCREWS.

2" 16 GAGE GALV. STEEL VERTICAL TRACK BOLTED TO TRACK BRACKETS WITH 1/4"-20 X 5/8" TRACK BOLTS

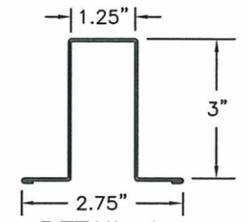
OPENING HEIGHT (NOT OVER DOOR HEIGHT)

74" (16 X 8)
SEE DETAIL E

54" (16 X 7)
50" (16 X 8)

36" (16 X 7)
24" (16 X 8)

DETAIL E
16 X 7
3 BRACKETS EACH SIDE
16 X 8
4 BRACKETS EACH SIDE



DETAIL A
3" 18GA WIDE STRUT

DECORATIVE SHORT OR LONG EMBOSS ON EXTERIOR SIDE SHOWN FOR MODELS 775/790. FLUSH FOR MODELS 780/770/775/790.

NOTE: DOOR MUST BE INSTALLED WITH EITHER AN ELECTRIC OPERATOR OR A LOCK (MUST ENGAGE BOTH TRACKS ON DOORS WITH EXTENSION SPRINGS).

16 GAGE GALV. STEEL TOP BRACKET WITH 14 GAGE ROLLER HOLDER (SEE DETAIL D)

STRUT MOUNTED BELOW TOP ROLLER CARRIER

INTERIOR GALV. & PREPAINTED STEEL SKIN.
28 GAGE - MODEL 775
27 GAGE - MODELS 790/780/770.

1/4" X 3/4" LONG HEX HEAD SELF DRILLING SCREWS.

STRUT ON UPPER PART OF SECTION OVER HINGE LEAF. (SEE DETAIL B).

2" ROLLER WITH 7/16" DIA. SHORT STEM. TIRE: STEEL 7 BALL.

14 GAGE GALV. STEEL END HINGES ATTACHED WITH (5) SCREWS. SEE DETAIL B & C.

STRUT ON UPPER PART OF SECTION OVER HINGE LEAF. (SEE DETAIL B).

GALVANIZED STEEL STRUT, ATTACHED WITH 1/4" X 3/4" LONG HEX HEAD SELF DRILLING SCREWS. (10 PER STRUT FOR 16' WIDE DOOR)

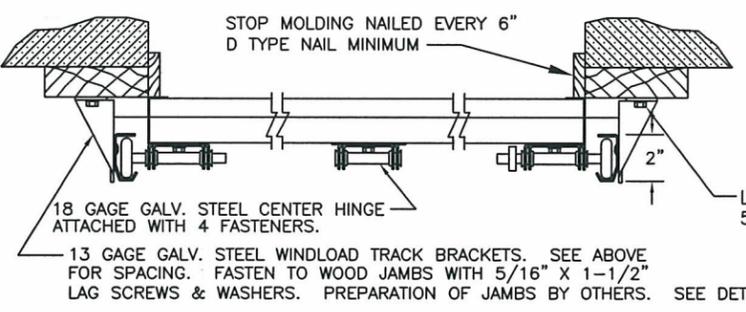
STRUT ON UPPER PART OF SECTION OVER HINGE LEAF. (SEE DETAIL B).

POLYSTYRENE INSULATION (LAMINATED TO INTERIOR AND EXTERIOR STEEL SKIN)

STRUT MOUNTED OVER TOP OF BOTTOM BRACKET

13 GAGE GALV. STEEL BOTTOM BRACKET ATTACHED WITH 2 FASTENERS. BOTTOM SCREW CAN BE ABOVE OR BELOW ROLLER.

SECTION A-A
(4) SECTIONS



SECTION B-B

		P.S.F. TABLE			
DOOR SIZE		DESIGN PRESSURE		TEST PRESSURE	
WIDTH	HEIGHT	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
16'-0"	7'-0"	+22.2	-25.0	+33.3	-37.5
16'-0"	8'-0"	+22.2	-25.0	+33.3	-37.5

NOTE: ALL NON-DESCRIPTIVE FASTENERS SHOWN TO BE 1/4"-20 X 5/8" HEX BOLTS & NUTS OR 1/4" X 3/4" LONG HEX HEAD SHEET METAL SCREWS.

DOORS SHOWN ON THIS DRAWING HAVE BEEN DEMONSTRATED TO WITHSTAND THE PRESSURES LISTED IN THE TABLE ABOVE. MPH SHOWN FOR REFERENCE ONLY.

FBC/IBC/IRC ASSUMPTIONS: 120 MPH EXPOSURE "B", 30' ROOF HEIGHT. ROOF PITCH > 10', 2' OF DOOR IN END ZONE, FULLY ENCLOSED.

DETERMINATION OF SUITABILITY FOR SPECIFIC SITES IS THE RESPONSIBILITY OF OTHERS.

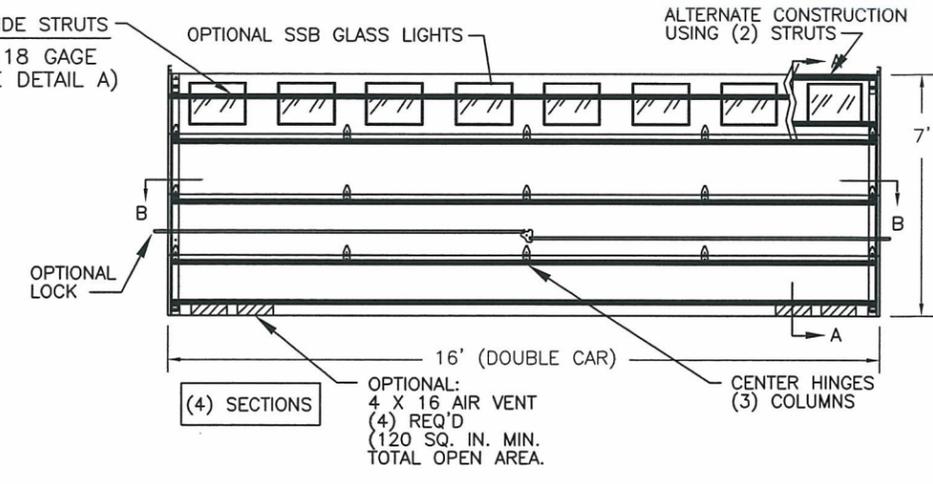
DOORS SMALLER THAN THOSE SHOWN WILL WITHSTAND THE INCREASED PRESSURE LOADS, GIVEN THE SAME CONDITIONS. THE INCREASE IN DOOR STRENGTH IS GREATER THAN THE INCREASE IN PRESSURE AS THE DOOR SIZE IS MADE NARROWER OR SHORTER.

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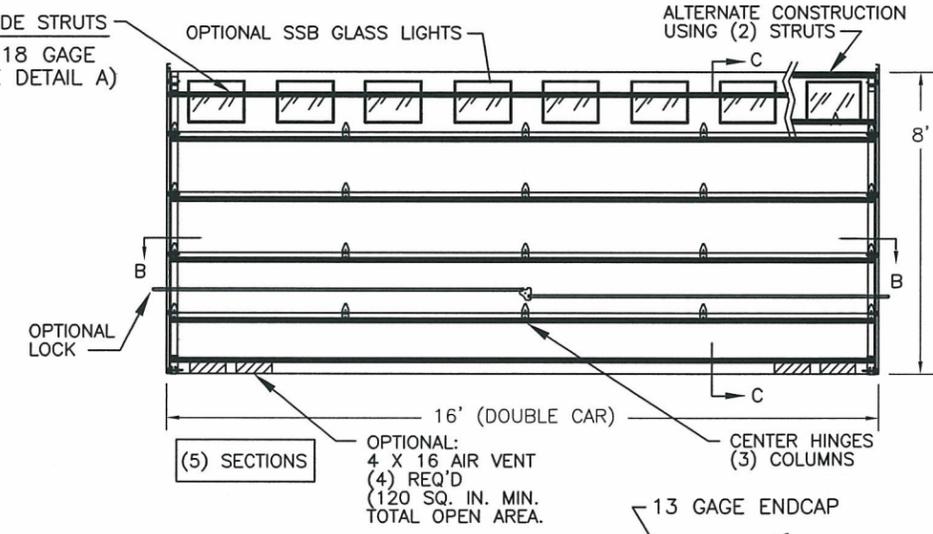
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3/20/08
TX 56308

5 WIDE STRUTS
3" 18 GAGE (SEE DETAIL A)

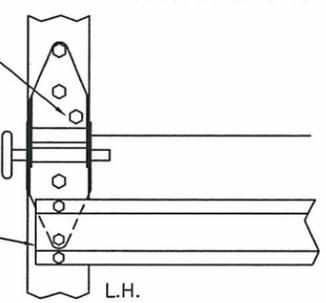


6 WIDE STRUTS
3" 18 GAGE (SEE DETAIL A)

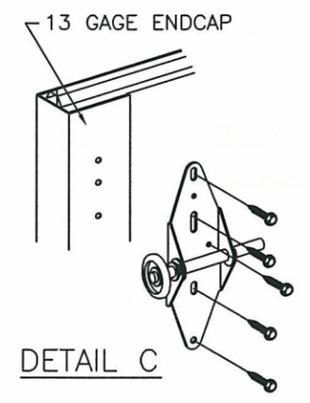


USE ONE EXTRA SELF DRILLING SCREW THROUGH TOP LEAF OF HINGE, END CAP & HINGE PLATE. TYPICAL PER EACH END HINGE.

TYP. UPPER STRUT REF.



DETAIL B



DETAIL C

NOTE: GLAZING DOES NOT SATISFY IMPACT DEBRIS REQUIREMENTS IN FBC

REV.	E.C.N.	DATE:	APPROV.
A	2866	3/10/08	RLB
	2851	11/1/07	RLB

WR WINDSOR REPUBLIC DOORS
P.O. BOX 8915
LITTLE ROCK, AR
72219-8915
(501) 562-1872

MODELS:		775, 790, 770, 780	
PART NAME:		WINDLOAD RESIDENTIAL STEEL DOOR FOR IBC/FBC/IRC 120 MPH. EXPOSURE "B"	
TOLERANCE	FRAC. ± 1/64" DEC. ± .015 ANG. ± 1'	DATE:	DWG. NO.
SCALE	PLOT SCALE	DRN. BY	SHT 3 OF 4

3/4" X 1-1/2" X 13GAGE MIN. GALV. STEEL HORIZONTAL ANGLE.

2" GALV. STEEL HORIZONTAL TRACK 16 GAGE OR 13 GAGE BASED ON THE WEIGHT OF THE DOOR.

1/4" X 3/4" SHEET METAL SCREWS

EXTRA 1/4" X 3/4" HEX HEAD SELF DRILLING SCREW

13 GAGE MIN. GALV. STEEL TRACK SPLICE OR FLAG BRACKET. FASTEN TO WOOD JAMB WITH 5/16" X 1-1/2" LAG SCREWS.

2" 16 GAGE GALV. STEEL VERTICAL TRACK BOLTED TO TRACK BRACKETS WITH 1/4"-20 X 5/8" TRACK BOLTS.

SEE DETAIL E

74" (18 X 8)

OPENING HEIGHT (NOT OVER DOOR HEIGHT)

63" (18 X 7)

54" (18 X 8)

42" (18 X 7)

39" (18 X 8)

21" (18 X 7)

24" (18 X 8)

5"

STOP MOLDING NAILED EVERY 6" D TYPE NAIL MINIMUM

LAG SCREW 5/16" X 1-1/2"

18 GAGE GALV. STEEL CENTER HINGE ATTACHED WITH 4 FASTENERS.

13 GAGE GALV. STEEL WINDLOAD TRACK BRACKETS. SEE ABOVE FOR SPACING. FASTEN TO WOOD JAMBS WITH 5/16" X 1-1/2" LAG SCREWS & WASHERS. PREPARATION OF JAMBS BY OTHERS. SEE DETAIL "E".

SECTION B-B

DOOR SIZE		P.S.F. TABLE			
WIDTH	HEIGHT	DESIGN PRESSURE POSITIVE	DESIGN PRESSURE NEGATIVE	TEST PRESSURE POSITIVE	TEST PRESSURE NEGATIVE
18'-0"	7'-0"	+22.2	-25.0	+33.3	-37.5
18'-0"	8'-0"	+22.2	-25.0	+33.3	-37.5

NOTE: ALL NON-DESCRIPTIVE FASTENERS SHOWN TO BE 1/4"-20 X 5/8" HEX BOLTS & NUTS OR 1/4" X 3/4" LONG HEX HEAD SHEET METAL SCREWS.

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DETAIL D

DETAIL E

18 X 7
4 BRACKETS EACH SIDE

18 X 8
5 BRACKETS EACH SIDE

DECORATIVE SHORT OR LONG EMBOSS ON EXTERIOR SIDE SHOWN FOR MODELS 775/790. FLUSH FOR MODELS 780/770/775/790.

21" HIGH SECTION EXTERIOR MATERIAL 27 GAGE GALV. AND PREPAINTED STEEL

SECTION A-A

(4) SECTIONS

NOTE: DOOR MUST BE INSTALLED WITH EITHER AN ELECTRIC OPERATOR OR A LOCK (MUST ENGAGE BOTH TRACKS ON DOORS WITH EXTENSION SPRINGS).

(3) 1/4" X 1/2" LONG CARRIAGE BOLT & NUT

13 GAGE GALV. STEEL TOP BRACKET WITH 10 GAGE ROLLER HOLDER. NOTE THAT ROLLER HOLDER CURL IS TURNED DOWN. SEE DETAIL D.

STRUT MOUNTED CENTER OF SECTION

INTERIOR GALV. & PREPAINTED STEEL SKIN.
28 GAGE - MODEL 775
27 GAGE - MODELS 790/780/770.

2" ROLLER WITH 7/16" DIA. LONG STEM. TIRE: STEEL 10 BALL.

STRUT ON UPPER PART OF SECTION OVER HINGE LEAF. (SEE DETAIL B).

14 GAGE GALV. STEEL END HINGES ATTACHED WITH 6 SCREWS. SEE DETAIL C.

STRUT ON UPPER PART OF SECTION OVER HINGE LEAF. (SEE DETAIL B).

STRUT MOUNTED ABOVE HINGE

GALVANIZED STEEL STRUT. ATTACHED WITH 1/4" X 3/4" LONG HEX HEAD SELF DRILLING SCREWS. (10 PER STRUT FOR 18' WIDE DOOR)

STRUT MOUNTED IN CENTER OF SECTION

POLYSTYRENE INSULATION (LAMINATED TO INTERIOR AND EXTERIOR STEEL SKIN)

13 GAGE GALV. STEEL BOTTOM BRACKET ATTACHED WITH 3 FASTENERS. BOTTOM SCREW CAN BE ABOVE OR BELOW ROLLER.

SECTION C-C

(5) SECTIONS

6 WIDE STRUTS
3" 18 GAGE (SEE DETAIL A)

OPTIONAL SSB GLASS LIGHTS

ALTERNATE CONSTRUCTION USING (2) STRUTS

OPTIONAL:
4 X 16 AIR VENT (4) REQ'D (120 SQ. IN. MIN. TOTAL OPEN AREA.)

18' (DOUBLE CAR)

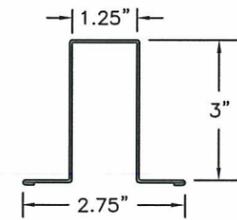
(4) SECTIONS

CENTER HINGES (3) COLUMNS

8 WIDE STRUTS
3" 18 GAGE (SEE DETAIL A)

OPTIONAL SSB GLASS LIGHTS

ALTERNATE CONSTRUCTION USING (2) STRUTS



3" 18GA WIDE STRUT

OPTIONAL:
4 X 16 AIR VENT (4) REQ'D (120 SQ. IN. MIN. TOTAL OPEN AREA.)

18' (DOUBLE CAR)

(5) SECTIONS

CENTER HINGES (3) COLUMNS

13 GAGE ENDCAP

DETAIL C

TYP. LOWER STRUT REF.

USE TWO EXTRA SELF DRILLING SCREWS THROUGH TOP AND BOTTOM LEAF OF HINGE, END CAP AND HINGE PLATE.

2" STEEL ROLLERS (LONG STEM)

TYP. UPPER STRUT REF.

L.H.

DETAIL B

18' X 7'

18' X 8'

NOTE: GLAZING DOES NOT SATISFY IMPACT DEBRIS REQUIREMENTS IN FBC

REV.	E.C.N.	DATE:	APPROV.
A	2866	3/10/08	RLB
	2851	11/1/07	RLB



P.O. BOX 8915
LITTLE ROCK, AR
72219-8915
(501) 562-1872

MODELS: 775, 790, 770, 780

PART NAME: WINDLOAD RESIDENTIAL STEEL DOOR FOR IBC/FBC/IRC 120 MPH. EXPOSURE "B"

TOLERANCE: FRAC. ± 1/64" DEC. ± .015 ANG. ± 1'

SCALE: PLOT SCALE

DATE: 11/1/07

DRN. BY: BH

DWG. NO. 99-B-086

SHT 4 OF 4

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