

SUBMITTAL FORM: FF70 PERFORMANCE SERIES HURRICANE RATED DOOR



A SENNECA COMPANY

PROJECT NAME:

PROJECT #:

DOOR QUANTITY:

DOOR SIZE

A) 14'-0" x 14'-0"

B) FLEX\* W x H  
(CONTACT SALES FOR PRICING)

SELECTION:

WINDOW LAYOUTS

A) 4 WINDOWS

B) 3 WINDOWS

C) 2 WINDOWS MID

D) 2 WINDOWS HIGH

E) 1 WINDOW

F) SOLID (NO WINDOWS)

G) 2 TALL WINDOWS

H) 1 TALL WINDOW MID

J) 1 TALL WINDOW HIGH

- CUSTOM LAYOUT (ADD TO NOTES SECTION)

SELECTION:

OPERATION

A) POWER

B) MANUAL

EXCLUDES OPERATOR AND ALL ELECTRICAL COMPONENTS

SELECTION:

INCOMING ELECTRICAL

A) 110-120VAC SINGLE PHASE

B) 208-240VAC SINGLE PHASE

C) 208-240VAC THREE PHASE

D) 460-480VAC THREE PHASE

SELECTION:

NOTES:

IMPACT RATING

A) LEVEL D

B) LEVEL E

SELECTION:

GLASS TINT

A) STANDARD - ENERGY ADVANTAGE/CLEAR

ADDITIONAL OPTIONS (NOT INCLUDED IN BASE PRICE)

B) ENERGY ADVANTAGE/GREY

C) ENERGY ADVANTAGE/BRONZE

D) SOLARBAN 60/CLEAR

E) SOLARBAN 60/GREY

F) SOLARBAN 60/BRONZE

G) SOLARBAN 70/CLEAR

H) SOLARBAN 70/GREY

J) SOLARBAN 70/BRONZE

- CUSTOM TINT (ADD TO NOTES SECTION)

SELECTION:

FINISH SCHEDULE

- SURFACE MOUNTED FRAMING AND COMPONENTS (MANUFACTURES STANDARD GRAY)

- ROLLER TRACK (GALVANIZED STEEL)

SELECTED DOOR PANEL FINISH RAL #:

BUILDING MATERIAL

A) CMU (1/2" x 5-1/2" EXPANSION ANCHORS)

B) PRECAST (1/2" x 5-1/2" EXPANSION ANCHORS)

C) STEEL (1/2" x 1-1/2" THREAD FORMING FASTENERS)

SELECTION:

ADDITIONAL OPTIONS (NOT INCLUDED IN BASE PRICE)

WARNING STROBE/ALARM

QUANTITY PER OPENING:

LOOP DETECTOR (LOOP WIRE BY OTHERS)

RED/GREEN LED LIGHT STRIPS (1 PAIR PER OPENING)

INTERIOR SWING PATH SAFETY EDGE (1 PAIR PER OPENING)

THREE BUTTON PUSHBUTTON STATION (1 SURFACE MOUNT PER OPENING INCLUDED IN BASE PRICE)

SURFACE MOUNT (ADDITIONAL)

ADDITIONAL PER OPENING:

FLUSH MOUNT (REPLACES SURFACE MOUNT)

QUANTITY PER OPENING:

MASTER PUSHBUTTON STATION

FLUSH MOUNTED

NUMBER OF OPENINGS CONTROLLED:

QUANTITY PER JOB SITE:

SURFACE MOUNTED

NUMBER OF OPENINGS CONTROLLED:

QUANTITY PER JOB SITE:

MULTI DOOR COMMAND BUTTON (MUSHROOM BUTTON)

UP TO 3 DOOR COMMAND

QUANTITY PER JOB SITE:

UP TO 6 DOOR COMMAND

QUANTITY PER JOB SITE:

\* FLEX AVAILABLE IN SIZES 7' 6" TO 16' 0" IN WIDTH AND HEIGHT

APPROVAL TO RELEASE FOR PRODUCTION

CUSTOMER SIGNATURE:

DATE:

REQUESTED DELIVERY DATE:

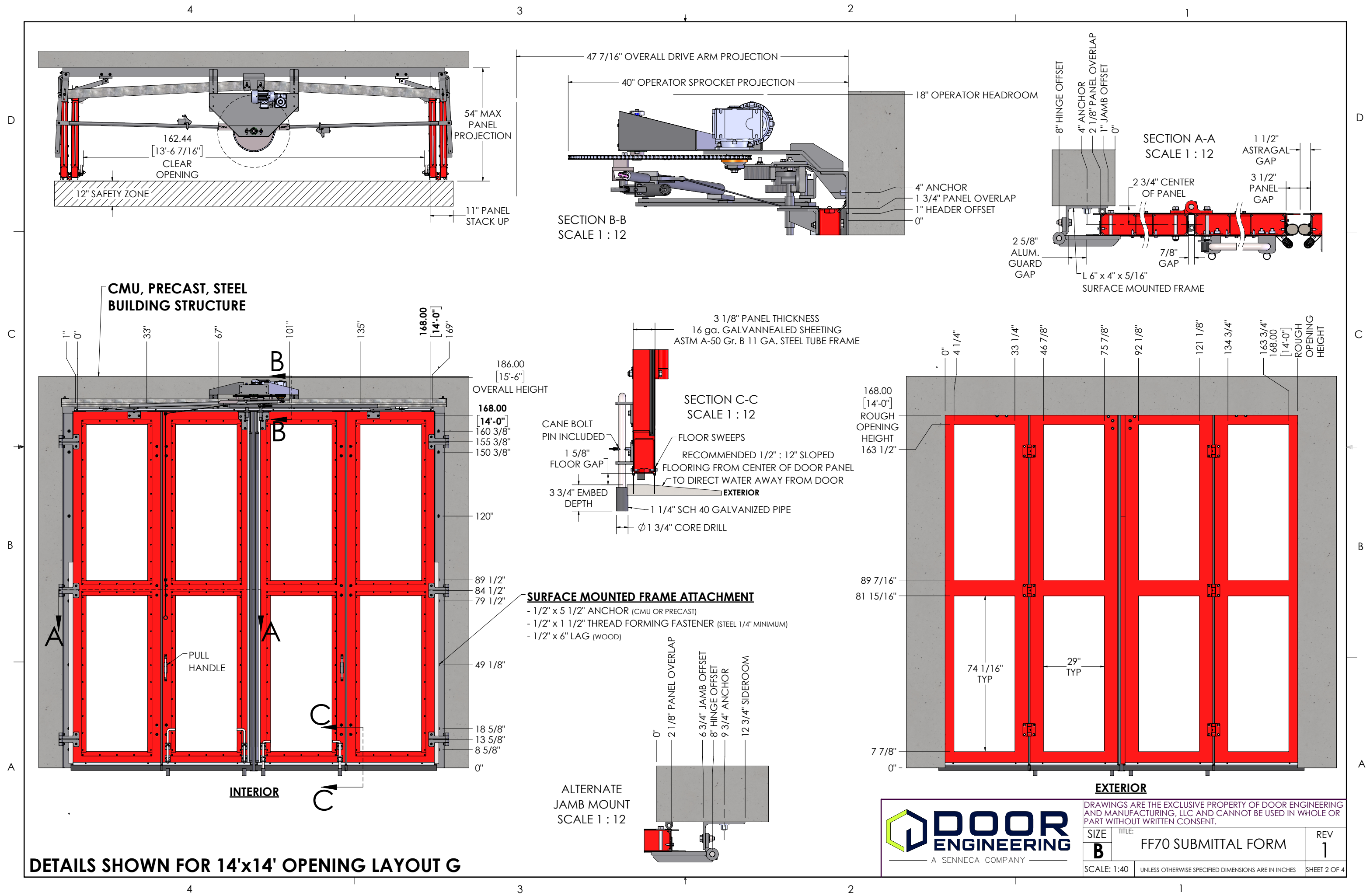


A SENNECA COMPANY

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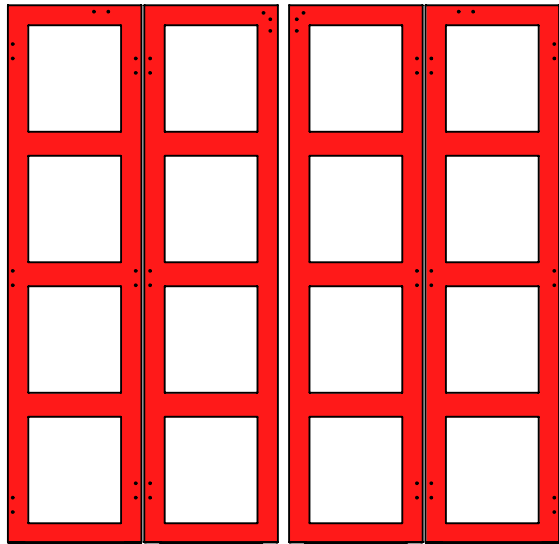
SIZE	TITLE:	REV
B	FF70 SUBMITTAL FORM	1

SCALE: NTS UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES SHEET 1 OF 4

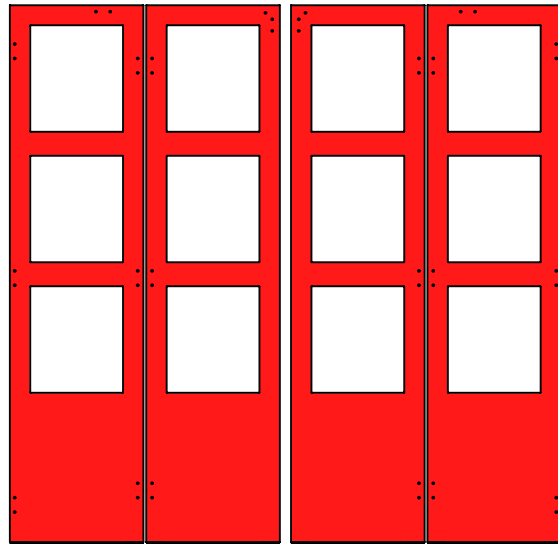


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SIZE <b>B</b>	TITLE: FF70 SUBMITTAL FORM	REV <b>1</b>
SCALE: 1:40		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
		SHEET 2 OF 4

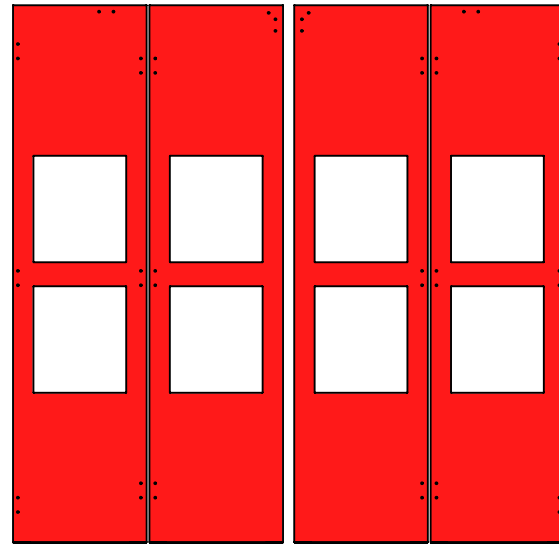
WINDOW LAYOUTS: REFER TO SHEET 1 FOR SELECTED WINDOW LAYOUT



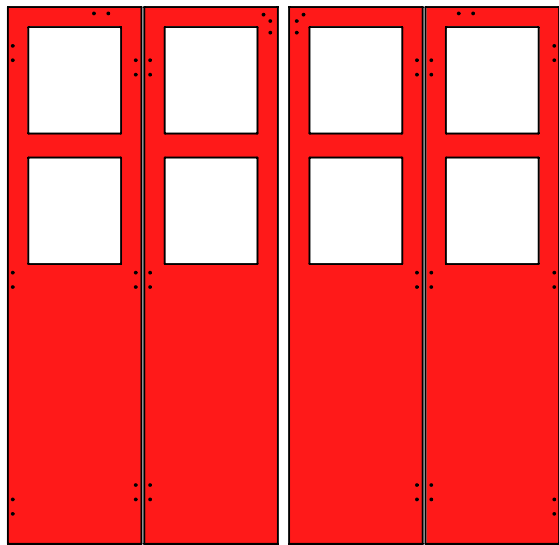
LAYOUT A  
4 WINDOW



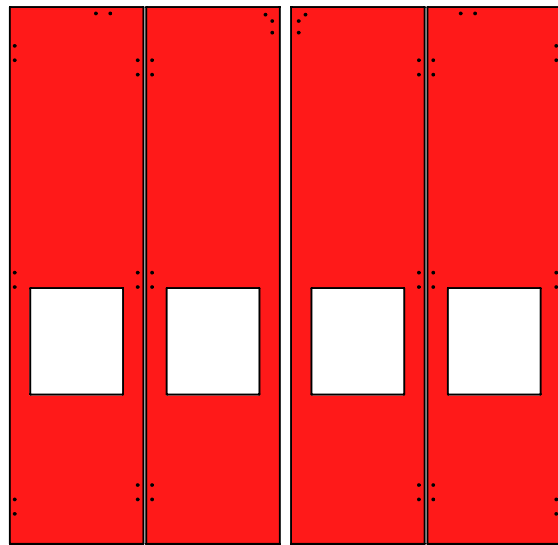
LAYOUT B  
3 WINDOW



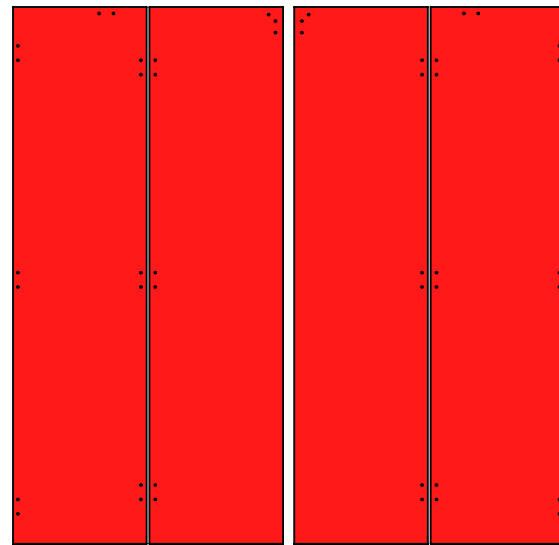
LAYOUT C  
2 WINDOW MID



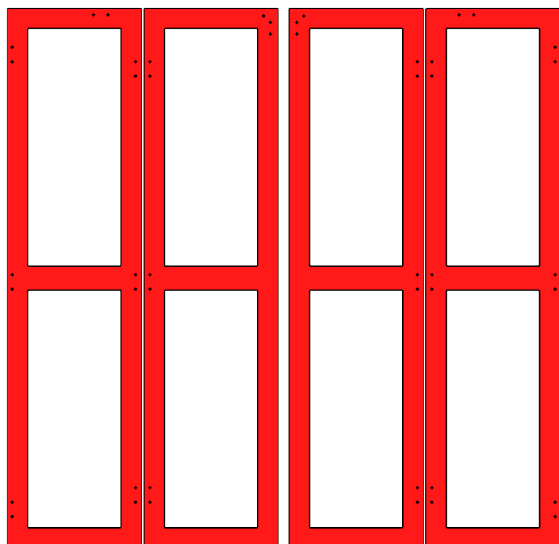
LAYOUT D  
2 WINDOW HIGH



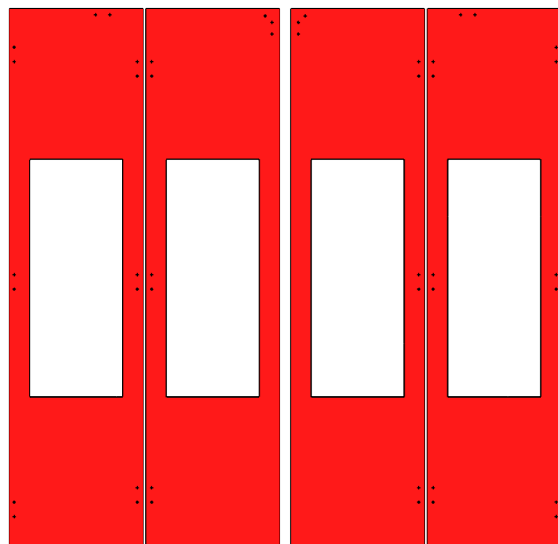
LAYOUT E  
1 WINDOW



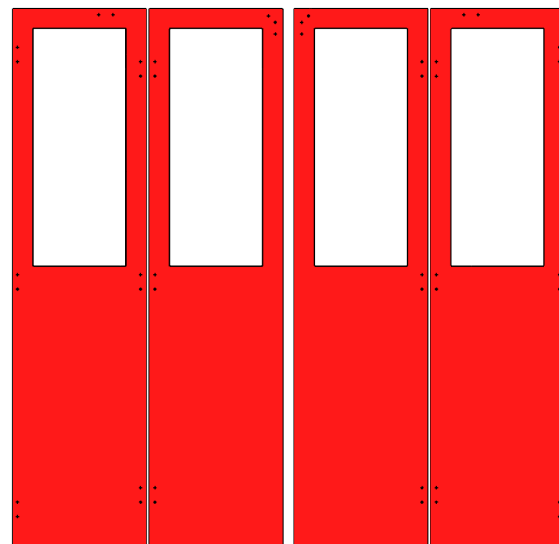
LAYOUT F  
SOLID



LAYOUT G  
2 TALL WINDOWS



LAYOUT H  
1 TALL WINDOW MID



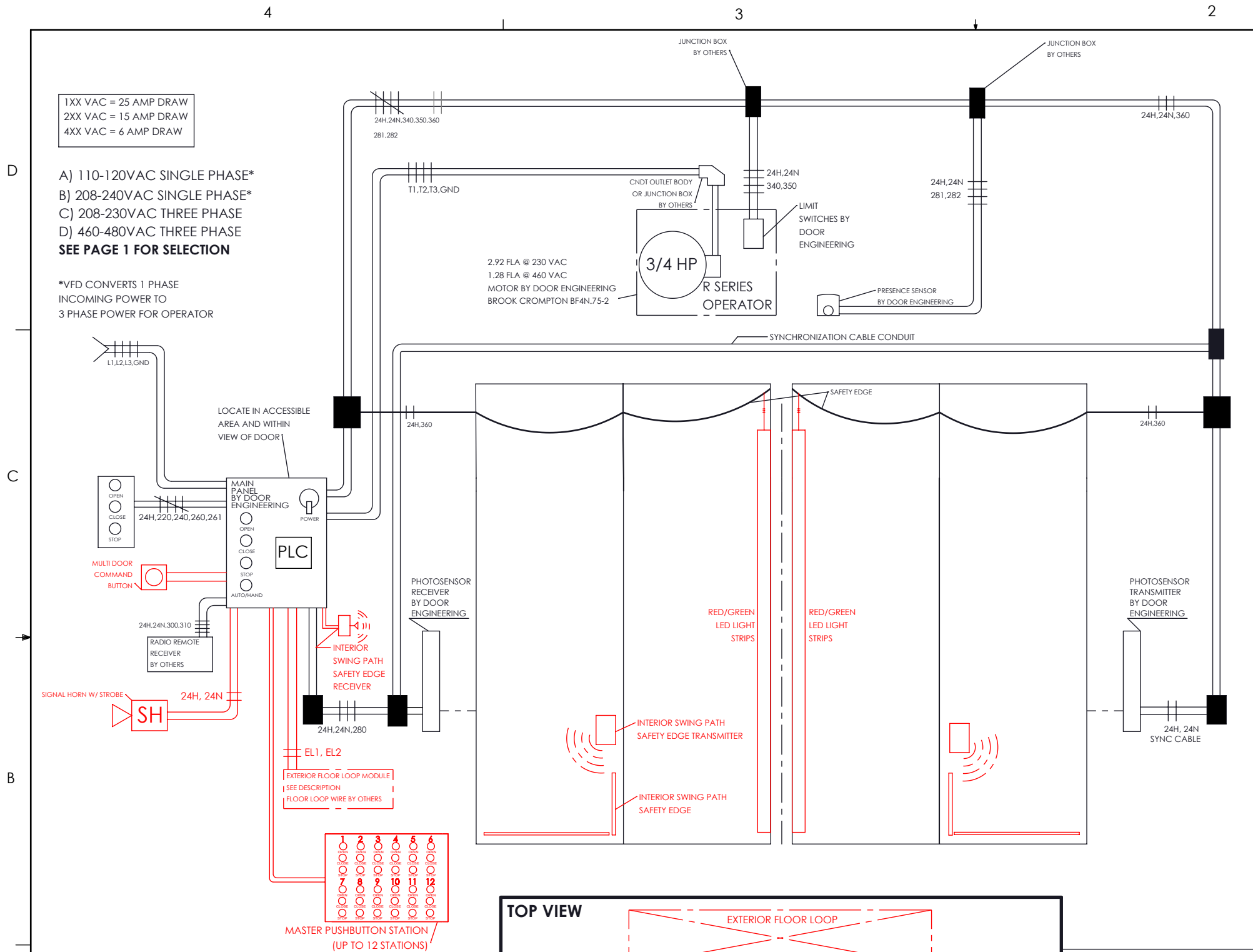
LAYOUT J  
1 TALL WINDOW HIGH

NOTES:

- DOORS TESTED AND APPROVED FOR HIGH VELOCITY HURRICANE ZONES UP TO +/-65PSF ASD (+/-108PSF LRFD)
  - FBC #FLXXXXX LEVEL D
  - FBC #FLXXXXX LEVEL E
- DOORS TESTED AND APPROVED FOR UP TO 16'-0"x16'-0" OPENINGS CONSULT MANUFACTURER FOR LARGER OPENINGS.
- HURRICANE LOCKING SYSTEM: LOCKING CANE BOLTS SHALL BE MOUNTED TO THE DOOR PANELS AND SHALL EXTEND INTO THE FLOOR AT FOUR LOCATIONS.
- LAYOUT F (SOLID SHEETED) IS LEVEL E RATED.
- GLAZING SHALL BE EITHER 19/32" LEVEL D OR 1 1/16" LEVEL E SAFETY GLASS, SEE SHEET 1 FOR SELECTION.
- ALL GLAZING TO BE FACTORY INSTALLED AND CAULKED.



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SIZE <b>B</b>	TITLE: FF70 SUBMITTAL FORM	REV <b>1</b>
SCALE: 1:60	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	SHEET 3 OF 4



**Equipment Provided by Door Engineering:**

**1) Control Panel, 1 per door**

- "Open," "Close," "Stop," "Auto/Hand" pushbuttons on face
- 16" x 14" x 8", NEMA 4 rated
- Amp monitoring
- VFD to adjust speed
- Face mounted PLC
- Pad lockable
- Power Disconnect (non-fused)

**2) Remote Pushbutton Station, "Surface Mount," Default 1 per door**

- "Open," "Close," and "Stop" pushbuttons
- 5.75" x 2.75" x 2.5", NEMA 4 rated, raised pushbuttons

**3) Electric Safety Edge Monitored**

- SO-rated cord
- Safety Edge will not open a closed door
- Safety Edge will stop a closing door upon activation and return to "open" position

**4) Safety Light Curtain, "Surface Mount", 1 per door**

- Must be wired to use Normally Closed (N.C.) contacts
- Thru-beam (transmitter/receiver type)
- Activation stops a closing door and returns door to "open" position
- Activation stops an opening door and waits for command
- Minimum IP67 Rated

**5) Presence Sensor, 1 per door**

- 1 Remote Control per job site
- Activation stops a closing door and returns door to "open" position

**ADDITIONAL OPTIONS:** (Not included in base price, see Sheet 1 for selections)

• **Signal Horn w/ Strobe**

- Active when the door is Opening and/or Closing
- 24VDC, 95DBA @ 10'

• **Loop Detector, Close/Hold ( Loop wire by others )**

- Holds open an "open" door
- Activates close timer (Timer Program #2)
- Stops a "closing" door and returns to "open" position

• **Red/Green LED light strip**

- 60" long red/green LED strip 24V DC
- Red when door is closed
- Red flashing when door is in operation
- Green when door is fully open

• **Interior Swing Path Safety Edge - Monitored, 2 per door**

- 2 wireless transmitters
- 1 receiver
- Swing Path Safety Edge will not close an opened door
- Swing Path Safety Edge will stop a opening door and wait for command

• **Remote Pushbutton Station, "Flush Mount"**

- "Open," "Close," and "Stop" pushbuttons
- 4.25" x 2.75" (Faceplate), 4.5" x 2.75" (Back Box), NEMA 1 rated

• **Master Pushbutton Station "Flush Mount"**

- "Open" "Close" and "Stop" raised pushbuttons
- Up to 12 push button stations per panel

• **Master Pushbutton Station "Surface Mount"**

- "Open" "Close" and "Stop" raised pushbuttons
- Up to 12 push button stations per panel
- NEMA 4 rated

• **Multi Door Command Button "Mushroom Head"**

- Opens up to three or six openings (see Sheet 1 for selection)
- Single Mushroom Head, Watertight Enclosure

**Equipment Provided by Others (Vendor, Installer, End User, etc.)**

**1) Radio Remote Control Transmitters and Receivers**



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SIZE <b>B</b>	TITLE: FF70 SUBMITTAL FORM	REV <b>1</b>
SCALE: NTS	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	SHEET 4 OF 4

**CONDUIT TO ENTER BOTTOM OF PANEL  
DRAWING FOR REPRESENTATION ONLY.**

CONDUIT LAYOUT DOES NOT REFLECT IN FIELD CONDITIONS

**CONTROL PANEL OUTPUTS**

Maximum output current per relay 3A VAC or VDC, resistive

Maximum total output current 5A continuous

**POWER SUPPLY**

Maximum DC power supply output current is 0.5A on standard control panel.

**CONTROL PANEL OUTPUT DESCRIPTIONS**

The following outputs are available if the customer chooses to wire them (Refer to riser diagram)

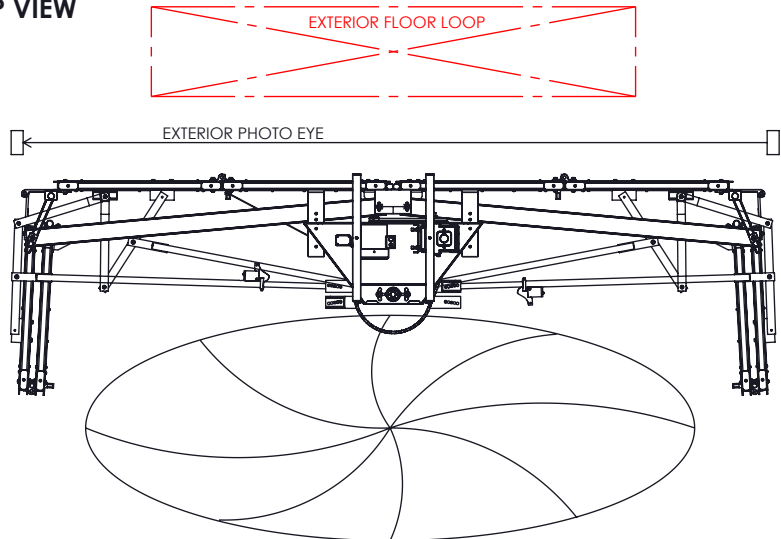
Q3 Door Open signal - N.O. Energized when the door is fully open.

Q4 Door Closed signal - N.O. Energized when the door is fully closed.

Q5 Close Warning - N.O. Energized while the Close Warning Timer is running and stays energized while the door is in motion.

Q6 Door In Motion - N.O. Energized when the door is either opening or closing.

**TOP VIEW**



**Field Wiring**

- 1) Fused disconnect to be provided by others. Fuses to be of time delay type with maximum rating as indicated.
- 2) All field wiring to be a minimum 14 ga. 60 C. copper, stranded & 600 volt rated
- 3) Terminal blocks to be tightened to max:  
4.4 in-lbs for small  
7.1 in-lbs for large
- 4) High and low voltage wires should all be in separate conduit runs.
- 5) All conduit hubs must have NEMA 4 rating.

**Panel Specifications**

- 1) All wiring to be 600 volt rated, stranded, copper, type MTW.
- 2) Power wiring to be black, 14 ga.
- 3) AC control wiring to be red (hot) and white (neut) 16 ga.
- 4) DC control wiring to be blue, 16 ga.
- 5) Enclosure shall have NEMA 4 rating unless otherwise specified.