

01

c:\users\sam\engineering express\production - documents\projects\23-63500 series 2500 fbc update fl15936\work\drawings & cad\23-63500 series 2500 fl15936.1.dwg
8/9/2023 8:25 AM SAM

FRANK BENNARDO, PE.
PE# 0046549 CA# 9885

FL

FRANK L. BENNARDO

LICENSE

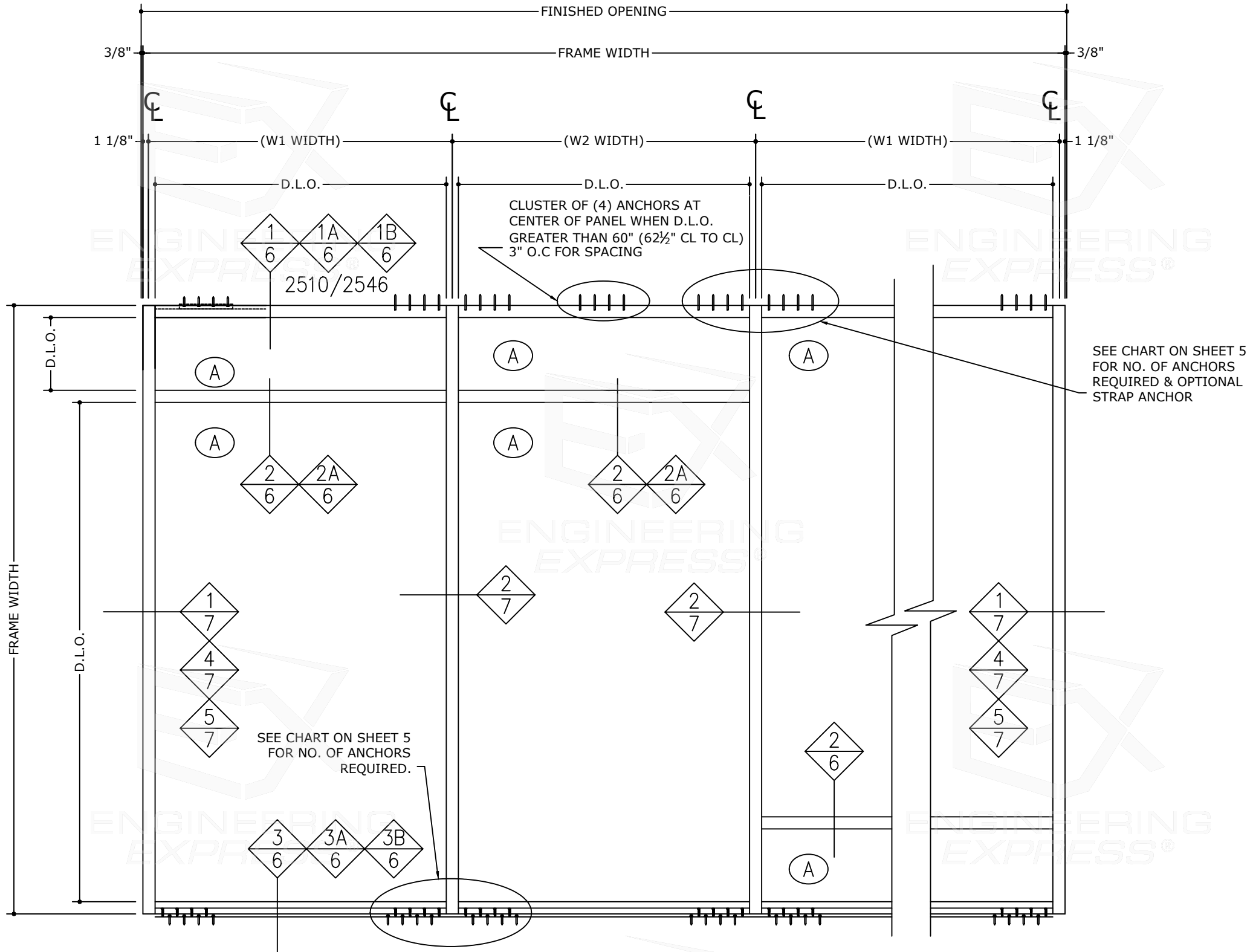
No 0046549

STATE OF FLORIDA

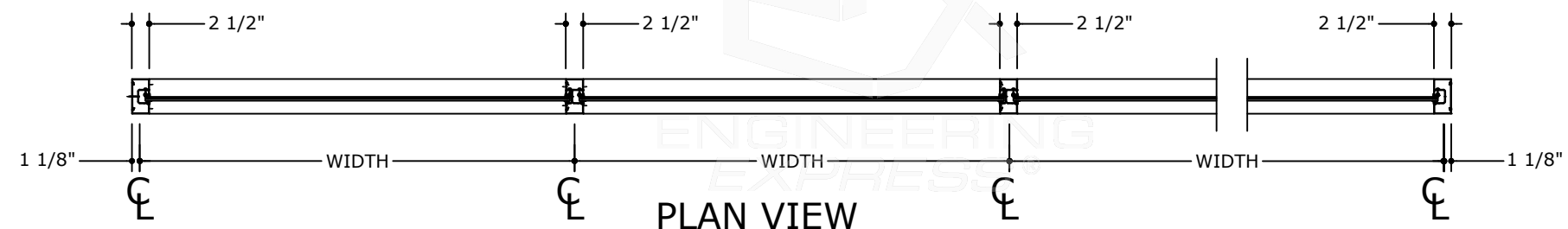
PROFESSIONAL ENGINEER

SIGNED: 08/10/2023

AUGUST 9, 2023



TYPICAL ELEVATION



PLAN VIEW

FL 15936.1

ENGINEERING
EXPRESS

POSTAL ADDRESS:
401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

AMERICAN PRODUCTS, INC.
13909 LYNMAR BLVD.
TAMPA, FL 33616
PHN. (813) 925-0144 / FAX. (813) 925-1414

SERIES 2500 FLUSH GLAZED STOREFRONT SYSTEM
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#15936.1)

REMARKS	DRWN	CHKD	DATE
FBC 2020 (21-38295)	SQ	RS	03/15/21
FBC 2023 UPDATE	-	RS	08/03/23
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

23-63500

SCALE: NTS UNLESS NOTED

02 OF 09



The diagrams illustrate different window and door configurations with their respective dimensions and formulas:

- Top Left:** A single window with width $W1$ and height FRAME HEIGHT . The formula is $W1 / 2 = \text{WIDTH (W)}$.
- Top Right:** A double window with widths $W1$ and $W2$, and height FRAME HEIGHT . The formula is $(W1 + W2) / 2 = \text{WIDTH (W)}$.
- Middle Left:** A window with a central door. Widths are $W1$, $W2$, and $W1$. Height is FRAME HEIGHT . The formula is $(W1 + W2) / 2 = \text{WIDTH (W)}$. A note points to the door: "SEE SEPARATE APPROVAL FOR DOORS".
- Middle Right:** A window with a central door. Widths are $W1$ and $W2$. Height is FRAME HEIGHT . The formula is $(W1 + W2) / 2 = \text{WIDTH (W)}$. A note points to the door: "SEE SEPARATE APPROVAL FOR DOORS".
- Bottom Left:** A window with a central door. Widths are $W1$, $W2$, and $W1$. Height is FRAME HEIGHT . The formula is $W1 / 2 + W2 / 4 = \text{WIDTH (W)}$. A note points to the door: "SEE SEPARATE APPROVAL FOR DOORS".
- Bottom Right:** A window with a central door. Widths are $W1$ and $W2$. Height is FRAME HEIGHT . The formula is $(W1 + W2) / 2 = \text{WIDTH (W)}$. A note points to the door: "SEE SEPARATE APPROVAL FOR DOORS".

NOTE: FOR D.L.O.'S GREATER THAN 60" HORIZONTAL MULLION
REINFORCEMENT IS REQUIRED. SEE DETAIL 2A/6

03



9/16" GLASS BITE (TYP.)

EXTERIOR

INTERIOR

1/4" TEMPERED

1/2" AIR GAP

1/4" H.S.

.090 SGP BY KURARAY

1/4" H.S.

GLASS TYPE "A"

9/16" GLASS BITE (TYP.)

EXTERIOR

INTERIOR

1/4" H.S.

.090 SGP BY KURARAY

1/4" H.S.

GLASS TYPE "B"

The diagram illustrates a three-panel glass curtain wall system. Each panel is labeled with 'DLO WIDTH' and 'DLO HEIGHT'. The panels are separated by vertical mullions. The bottom of the panels is labeled 'GLASS CAPACITY +/- 60 Psf.'.

FL 15936.1

**EXENGINEERING
EXPRESS®**

POSTAL ADDRESS:
401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

AMERICAN PRODUCTS, INC.
13909 LYNMAR BLVD.
TAMPA, FL 33616
PHN. (813) 925-0144 / FAX. (813) 925-1414
SERIES 2500 FLUSH GLAZED STOREFRONT SYSTEM
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA #F15936 1)

REMARKS	DRWN	CHKD	DATE
FBC 2020 (21-38295)	SQ	RS	03/15/21
FBC 2023 UPDATE	-	RS	08/03/23
-	-	-	-
-	-	-	-
-	-	-	-

23-63500

SCALE: NTS UNLESS NOTE

04 09



**ENGINEERING
EXPRESS®**

POSTAL ADDRESS:

401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

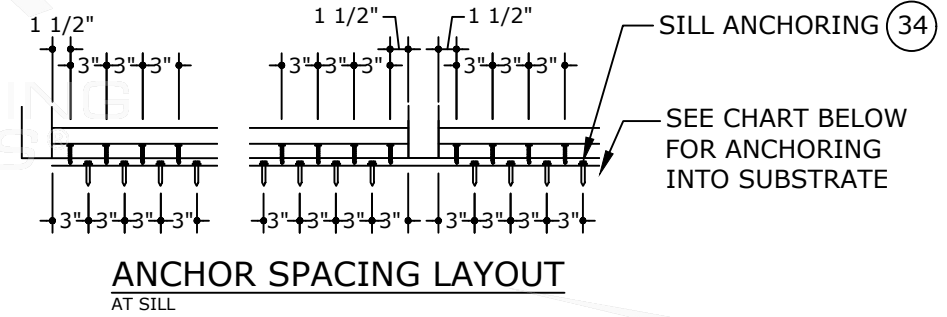
AMERICAN PRODUCTS, INC.
13909 LYNMAR BLVD.

TAMPA, FL 33616
PHN. (813) 925-0144 / FAX. (813) 925-1414

SERIES 2500 FLUSH GLAZED STOREFRONT SYSTEM
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#15936.1)

[illegible]**SCALE: NTS UNLESS NOTED**

05



TYPE 'A'	
CONCRETE	<u>DIRECTLY INTO CONCRETE</u> (2846 PSI MIN) 1/4" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI) 1-3/4" MIN. EMBED INTO CONCRETE
TYPE 'B'	
GROUT FILLED CMU	<u>DIRECTLY INTO GROUT FILLED BLOCK</u> (ASTM C-90 MIN) 1/4" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI) 1-3/4" MIN. EMBEDMENT.
TYPE 'C'	
WOOD	<u>INTO 2BY WOOD BUCKS OR WOOD STRUCTURES</u> (SYP#2 G=0.55 MIN. 1 1/2" MIN. THICKNESS) 1/4" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI) 1-1/2" MIN. PENETRATION INTO WOOD
TYPE 'D'	
METAL	<u>INTO METAL STRUCTURES</u> (3 PITCHES PASS THE THREAD PLANE MIN.) STEEL: 18-18 GAGE STEEL MIN (Fy=36 KSI MIN) ALUMINUM: 1/8" THK MIN. (6063-T5 MIN) 1/4-20 DIA. DRIL-FLEX BY 'DEWALT' (GRADE 5 MIN) (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)
<u>TYPICAL EDGE DISTANCE</u> INTO CONCRETE/HOLLOW BLOCK/GROUT FILLED BLOCK= 2-1/2" MIN. INTO WOOD STRUCTURE = 1" MIN. INTO METAL STRUCTURE = 3/4" MIN.	

Technical drawing of a reinforced flat filler. The drawing shows a cross-section of the filler with a 5" height. The top surface is labeled "11" API-2580 STRAP ANCHOR". The filler is labeled "API-2546 REINFORCED FLAT FILLER". The bottom surface is labeled "N O A". The drawing includes dimensions for the filler's width and height, and the spacing of the reinforcement straps.

5"

11" API-2580 STRAP ANCHOR

API-2546 REINFORCED FLAT FILLER

N O A

1.5"

3/4"

1.5"

1"

3"

3"

3"

NOTE:
OPTIONAL STRAP-ANCHOR
APPROVED TO 50 PSF ONLY



06



**ENGINEERING
EXPRESS®**

POSTAL ADDRESS:

401 W. ATLANTIC AVE R10 BOX 2195
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

AMERICAN PRODUCTS, INC.

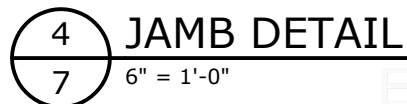
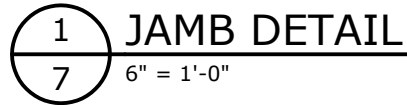
13909 LYNMAR BLVD.
TAMPA, FL 33616

PHN. (813) 925-0144 / FAX. (813) 925-1414

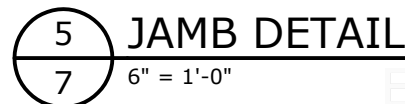
SERIES 2500 FLUSH GLAZED STOREFRONT SYSTEM
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (ESA # 15936.1)

COPYRIGHT ENGINEERING EXPRESS**SCALE: NTS UNLESS NOTE**

07 09

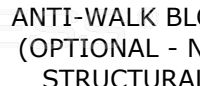
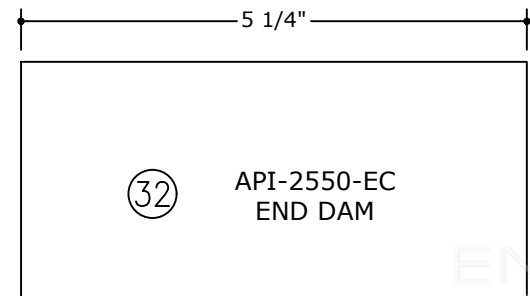
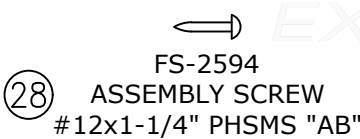
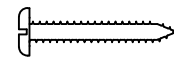
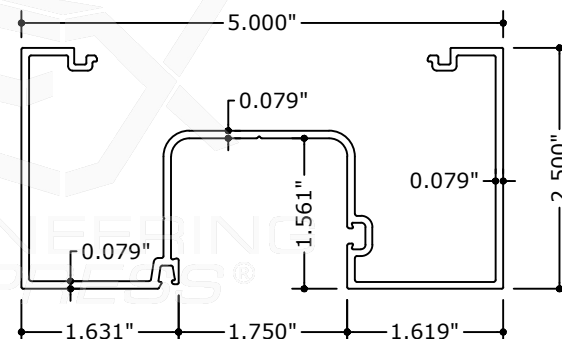
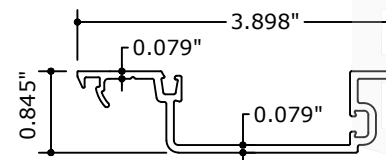
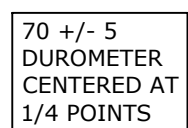
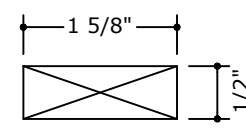
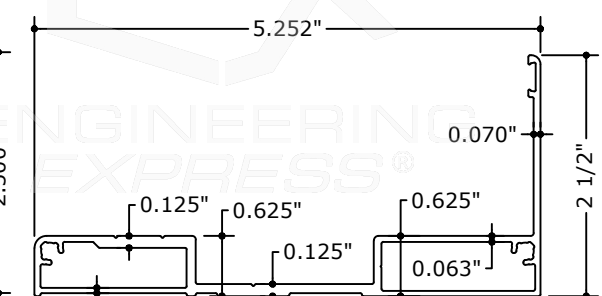
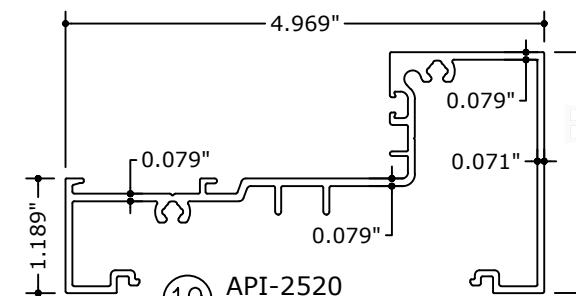
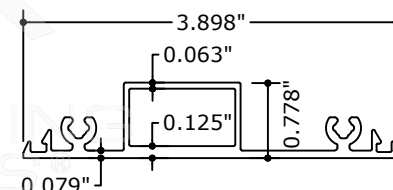
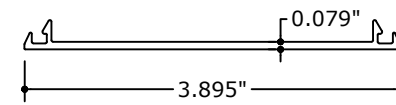
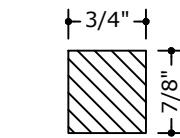
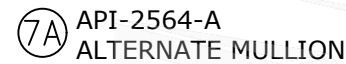
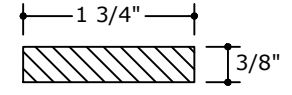
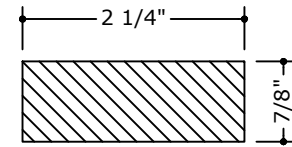
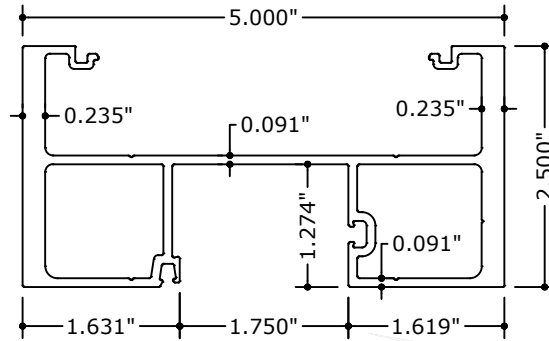
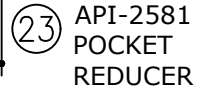


MAX. FRAME HEIGHT	GAP	
	MIN.	MAX.
60"	$\frac{1}{4}"$	$\frac{3}{4}"$
72"	$\frac{3}{8}"$	$\frac{3}{4}"$
84"	$\frac{7}{16}"$	$\frac{3}{4}"$
96"	$\frac{1}{2}"$	$\frac{3}{4}"$
108"	$\frac{9}{16}"$	$\frac{3}{4}"$
120"	$\frac{5}{8}"$	$\frac{3}{4}"$
126"	$\frac{3}{4}"$	$\frac{3}{4}"$





⑥ API-2510
OPEN BACK
HORIZONTAL

FL 15936.1

**EXENGINEERING
EXPRESS®**

POSTAL ADDRESS:
401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

AMERICAN PRODUCTS, INC.
13909 | YNIMAR BLVD

TAMPA, FL 33616
PHN. (813) 925-0144 / FAX. (813) 925-1414

SERIES 2500 FLUSH GLAZED STOREFRONT SYSTEM
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FILE #15936.1)

[illegible]

23-63500

SCALE: NTS UNLESS NOTE

08

99



**ENGINEERING
EXPRESS®**

POSTAL ADDRESS:
401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

TAMPA, FL 33616
PHN. (813) 925-0144 / FAX. (813) 925-1414

SERIES 2500 FLUSH GLAZED STOREFRONT SYSTEM
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#15936.1)

REMARKS	DRWN	CHKD	DATE
FBC 2020 (21-38295)	SQ	RS	03/15/21
FBC 2023 UPDATE	-	RS	08/03/23
-	-	-	-
-	-	-	-
-	-	-	-

SCALE: NTS UNLESS NOTED

09



NOTE:
SEAL ALL CORNERS WITH
DOWSIL 795 SILICONE