IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-16 SHALL BE FIRST REDUCED TO A.S.D. DESIGN PRESSURE RATINGS INDICATED ON SHEET S14.

GLAZED RAILING CAPACITY TO SUSTAIN SAFEGUARD LOADS HAS BEEN VERIFIED PER THE CODES AND STANDARDS STATED HEREIN.

- GLASS CAPACITY FOR IMPACT (SAFETY GLAZING) AS WELL AS ASSEMBLY CAPACITY FOR WIND LOADS UNDER MAXIMUM A.S.D. PRESSURE RATINGS INDICATED ON SHEET 10 HAVE BEEN VERIFIED THRU TESTING PERFORMED AT FENESTRATION TESTING LABORATORY, REPORTS #8754, #8800, AS PER SECTIONS 1618 (ANSI Z97) AND 1616 OF THE 2014 (5TH EDITION) OF THE FLORIDA BUILDING CODE, AND AS PER TAS 202 PROTOCOL (STRUCTURALLY ONLY, WITH A SAFETY FACTOR OF 2.0) RESPECTIVELY FOR THE PURPOSE OF DETERMINING THE PERFORMANCE OF THE PRODUCT, THIS STANDARD IS EQUIVALENT TO THE ADOPTED STANDARDS IN THE ABOVE REFERENCED BUILDING CODES.
- ALL ALUMINUM EXTRUSIONS TO BE INDICATED ON THIS DRAWING. THE DIMENSIONS OF ALL EXTRUSIONS TO BE AS SHOWN ON THIS DRAWING.
- ALL SCREWS TO BE AISI 410 SERIES STAINLESS STEEL WITH 92 ksi MINIMUM YIELD STRENGTH, AND SHALL COMPLY WITH CODES AND STANDARDS STATED HEREIN.
- TEMPERED GLASS TO COMPLY WITH CODES AND STANDARDS STATED HEREIN.
- POST EMBEDMENT INTO EXISTING CONCRETE SLABS SHALL BE PERFORMED WITH HOLE SIZE SHOWN ON THIS DRAWING. INSTALLATION INTO EXISTING PRE-STRESSED OR POST TENSIONED SLABS SHALL BE CAREFULLY PERFORMED SO THAT THE EXISTING REBAR OR CABLES ARE NOT DAMAGED. PRESET HOLES ON CONCRETE ARE ALSO ALLOWED AS LONG AS THEY ARE PERFORMED WITH SIZES AS REQUIRED ON THIS DRAWING. ALL HOLES TO BE GROUTED WITH NON SHRINK GROUT COMPONENT 24 AS PER BILL OF MATERIALS ON SHEET 3.
- SEE REMAINING SPECS FOR GLAZED RAILING COMPONENTS ON BILL OF MATERIALS ON SHEET 3.
- ALUMINUM MEMBERS IN CONTACT WITH CONCRETE SHALL BE PROTECTED WITH ALKALI-RESISTANT COATING SUCH AS HEAVY BODIED BITUMINOUS PAINT OR WATER-WHITE METHACRYLATE LACQUER ACCORDINGLY TO COMPLY WITH CODES AND STANDARDS STATED HEREIN.
- ALL WELDING TO CONFORM TO THE AMERICAN WELDING SOCIETY AWS D1.2 AND WITH CODES AND STANDARDS STATED HEREIN.
- 10. THIS REPORT IS A GENERIC STRUCTURAL DRAWING AND DOES NOT CONSTITUTE AT ALL A SHOP DRAWING FOR THE THE DIRECT MANUFACTURE OF THIS RAILING. RAILING CONTRACTOR IS RESPONSIBLE FOR MEETING OR EXCEEDING ALL APPLICABLE RAILING REQUIREMENTS AS WELL AS F.B.C., N.F.P.A. AND ADA MANUALS IN APPLYING THESE GENERIC DRAWINGS TO ACTUAL CONDITIONS PARTICULAR TO THIS PROJECT.
- 11. IT SHALL BE THE RESPONSIBILITY OF THE PERMIT HOLDER TO VERIFY THAT THE EXISTING STRUCTURE CAN SUSTAIN THE SUPERIMPOSED LOADS.
- 12. THIS REPORT PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.E. WHERE THE SITE CONDITIONS DEVIATE FROM THIS REPORT
- 13. CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT, BASED ON THIS REPORT PROVIDED HE/SHE DOES NOT DEVIATE FROM CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTORS RESPONSIBILITY.
- THIS REPORT WILL BE CONSIDERED IF ALTERED BY ANY MEANS.
- 15. SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THIS REPORT ENGINEER OF RECORD ACTING AS A DELEGATED ENGINEER TO THIS REPORT ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWING FOR REVIEW.
- 16. ORIGINAL REPORT SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

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### **INDEX OF SHEETS 2 1/2" POST GLASS RAILING** SYSTEM, WELDED AT BOTTOM

SHEET #1: GENERAL NOTES

SHEET #2: COMPONENTS

SHEET #3: BILL OF MATERIAL

SHEET #4: GLAZING DETAILS SHEET #5: TYPICAL RAILING ELEVATIONS

SHEET #6: VERTICAL SECTIONS

SHEET #7: PLANS

SHEET #8: HORIZONTAL SECTIONS

SHEET #9: BOTTOM RAIL CONNECTION AT CORNER POST (OFFSET GLASS)

SHEET #10: BOTTOM RAIL CONNECTION AT INT./END POST (OFFSET GLASS)

SHEET #11: BOTTOM RAIL CONNECTION AT CORNER POST (CENT. GLASS)

SHEET #12: BOTTOM RAIL CONNECTION AT INT. END POST (CENT. GLASS)

SHEET #13: INTERMEDIATE RAIL CONNECTION AT POST (CENT. GLASS)

SHEET #14: MAX. A.S.D. DESIGN PRESSURE RATING

### MAXIMUM RATED **ASD DESIGN PRESSURE**

+80 / - 80 PSF

FOR DETAILED APPROVED PRESSURE RATINGS, REFER TO THE INFORMATION IN THE MAX. ASD DESIGN PRESSURE RATING SCHEDULE ON PAGE S14.

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### VISIT ECALC.IO/37043

FOR HELPFUL RESOURCES, SITE SPECIFIC JOB ORDERING & MORE INFORMATION ABOUT THIS PRODUCT & RELATED SERVICES



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SUPPLY

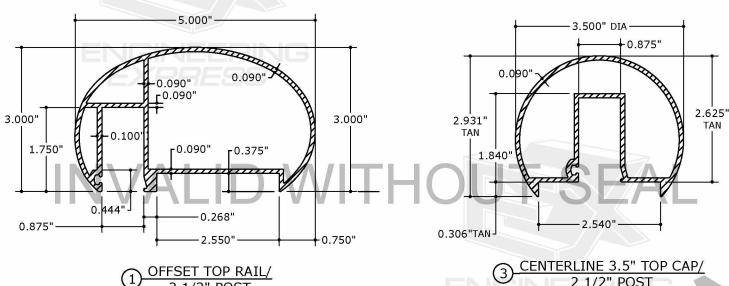
**EASTERN METAL** 

21-37043

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2 1/2" POST

6083-T6 ALLOY

28-63-760

K-FH08961

CENTERLINE BOTTOM RAIL

6063-T6 ALLOY FOR 44" MAX. RAILING

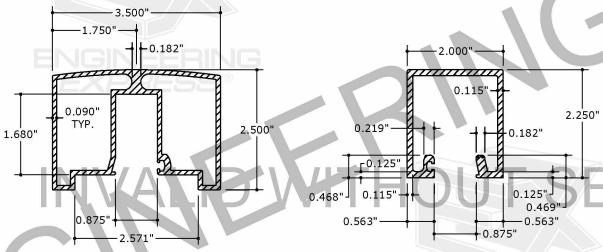
28-63-715

K-FS08959

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CENTERLINE 3.5" TOP CAP/ 2 1/2" POST

6083-T6 ALLOY 28-63-700 K-FH08956

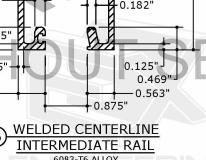


4 ALTERNATE CENTERLINE 3.5" TOP CAP/ 2 1/2" POST

1.750"

0.375" (2)

6083-T6 ALLOY 28-63-710 K-FH08958



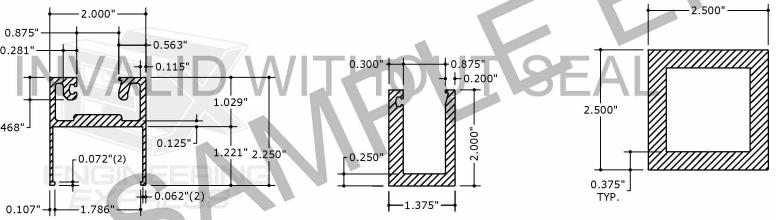
6083-T6 ALLOY 28-63-720 K-FS08960

-0.375"

-0.375"

1.095"-

1.690"



WELDED OFFSET BOTTOM RAIL 6063-T6 ALLOY 28-63-771

10 2 1/2" CORNER POST 6005-T5 ALLOY 28-60-730 K-FH08963

2 1/2" BASIC INTERIOR END POST 6005-T5 ALLOY 28-60-735 K-FH08964

-2.500"

2 1/2" POST 11 **INSERT** 

6005-T5 ALLOY 28-60-740 K-FS08967

0.250"

K-FH09888

CERTIFYING ENGINEER AND CERT OF AUTH AS LISTED ON STAMP

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A SUPPLY IS DRIVE 7. FL 33407 2-1/2" POST GLASS RAIL SYSTEM WELDED AT BOTTOM

EASTERN METAL

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	BILL OF MATERIALS: 2 1/2" POST GLASS RAILING SYSTEM,	WELDED AT E	ВОТТОМ
COMPONENT #	DESCRIPTION	MATERIAL	NOTES
JGINEE	OFFSET TOP RAIL / 2 1/2" POST	6063-T6 ALLOY	WELDED TO POST
3 _/_	CENTERLINE 3.5" TOP CAP/ 2 1/2" POST	6063-T6 ALLOY	WELDED TO POST
4	ALTERNATE CENTERLINE 3.5" TOP CAP/ 2 1/2" POST	6063-T6 ALLOY	WELDED TO POST
6	WELDED CENTERLINE INTERMEDIATE RAIL	6063-T6 ALLOY	USE AT 130psf. MAX.
7	CENTERLINE BOTTOM RAIL	6063-T6 ALLOY	
8A	WELDED OFFSET BOTTOM RAIL	6063-T6 ALLOY	
10	2 1/2" CORNER POST	6063-T6 ALLOY	
<b>/</b> -11	2 1/2" INTERIOR/END POST	6063-T6 ALLOY	
14	2 1/2" POST 11 INSERT	6063-T6 ALLOY	
18	7/16" NOMINAL LAMINTATED GLASS: 3/16" TEMPERED GLASS + 0.035" SENTRY GLASS LAMINATE BY DUPONT + 3/16" TEMPERED GLASS	LAMINATED GLASS	SEE SCHEDULE ON SHEET 16 FOR LIMITATIONS
20	W514/ INTERIOR GLAZING GASKET BY REED RUBBER PRODUCTS	TPV	USE AT GLASS (18) & GLASS (19)
21	B140/ EXTERIOR GLAZING GASKET BY REED RUBBER PRODUCTS	TPV	USE AT GLASS (18)
23	SETTING BLOCK FOR (7), 1/8"x1"x4", DUROMETER 80 MIN.	NEOPRENE	BN02164, LOCATED @ 1/4" POINTS
23A	SETTING BLOCK FOR (8), 1/4"x7/8"x4", DUROMETER 80 MIN.	NEOPRENE	BN04164, LOCATED @ 1/4" POINTS, CUT 1/8" FROM 1" WIDE
24	QUICKCRETE NON SHRINK PRECISION GROUT, MODEL# 1585-00, MANUFACTURED BY	PORTLAND	f'c= 9000 psi AT 3 hrs; 9500 psi AT 7

**CEMENT** 

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QUICKCRETE

DAYS & 12500 psi AT 28 DAYS

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EASTERN METAL SUPPLY 4268 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (800) 432-2204 2-1/2" POST GLASS RAIL SYSTEM WELDED AT BOTTOM

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\$3

GLAZING DETAIL AT TOP & BOTTOM RAIL (7) W/ GLASS (18) (CENTERLINE GLASS)

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EASTERN METAL SUPPLY
4268 WESTROADS DRIVE

21-37043



SCALE: NTS UNLESS NOTED



GLAZING DETAIL AT TOP & BOTTOM RAIL (8) W/ GLASS (18) (OFFSET GLASS)

INVALID WITHOUT SEAL

DETAIL 1/9 DETAIL DETAIL 7/13 1/2" GAP DETAIL **▲** A/6 4/11 7/15 4.0" MAX. (TYP.) **CLEAR** -18 × 19 10 or 16 10 or 16 4.00 MAX. 42" MIN. 42" MIN 4.00 " MAX. A.F.F. 44" MAX. 2" MAX. MAX. STRUCTURAL SLAB (NO FINISH)\* STRUCTURAL SLAB (NO FINISH)\* DETAIL DETAIL DETAIL 2/10 B/6 **DETAIL DETAIL** 3/12 1A/9 5/12 6/14 4A/11

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INVALID WITHOUT SEAL

SEE SCHEDULE ON SHEET 14.

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S5

3 OR 4 1/8 DETAIL 7/13 -(11) OR (16) DETAIL 5/12 SECTION C-C

CENTERLINE GLASS)

CONCRETE SLAB (NO FINISH)\*

SECTION B-B (CENTERLINE GLASS)

-(3) OR (4)

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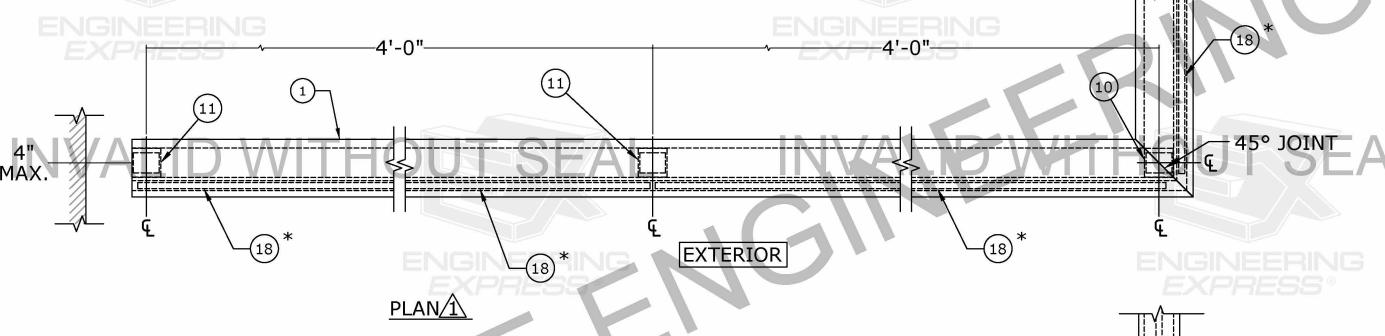


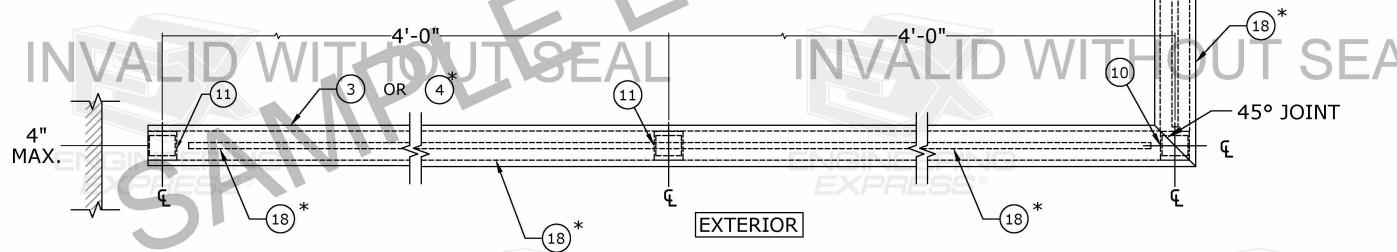
**E.D.**\*

**SECTION A-A** (OFFSET GLASS)

2" MIN. A.F.F. 42" MIN. A.F.F. 1/8 1/8 (11) OR (16) -11) OR (16) 44" MAX. 44" MAX. 2.0" MAX.  $\oplus$  $\oplus$ **DETAIL** 2.0" MAX 3/10 DETAIL 6/12 4.4 4. **CONCRETE SLAB** 

INVALID WITHOUT SEAL





PLAN : TYPICAL RAILING W/ EMBEDDED POSTS INTO CONCRETE SLAB W/ CENTERLINE GLASS

INVALID WITHOUT SEAL

SEE SCHEDULE ON SHEET 14.

2-1/2" POST GLASS RAIL SYSTEM WELDED AT BOTTOM

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4'-0" (18) (8A EXTERIOR

SECTION D-D (W/ EMBEDDED POSTS INTO CONCRETE SLAB W/ OFFSET GLASS)

MAX.

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EXTERIOR

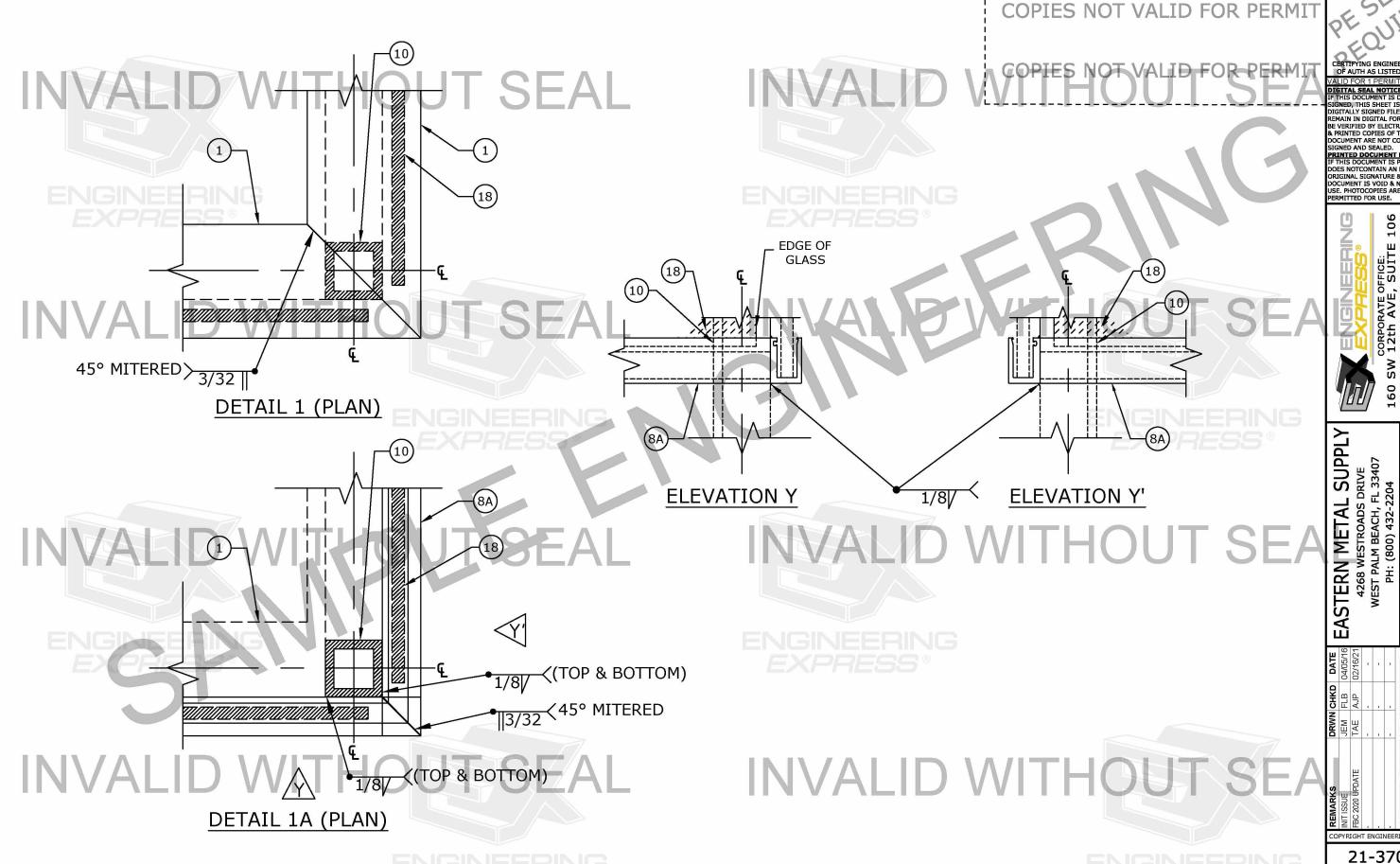
SECTION E-E (W/ EMBEDDED POSTS INTO CONCRETE SLAB W/ CENTERLINE GLASS)

SCALE: NTS UNLESS NOTED \$8

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SEE SCHEDULE ON SHEET 14.



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2-1/2" POST GLASS RAIL SYSTEM WELDED AT BOTTOM

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SEE SCHEDULE ON SHEET 14.



11 18 <(TOP & BOTTOM) TOP & BOTTOM) Y\ PLAN PLAN

**ELEVATION Y ELEVATION Y'** DETAIL 2 **DETAIL 3** 

(BEYOND) 14 (8A) **SECTION X-X** ((TOP & BOTTOM)

CONNECTION AT INT./END POST (OFFSET GLASS)

SEE SCHEDULE ON SHEET 14.

2-1/2" POST GLASS RAIL SYSTEM WELDED AT BOTTOM

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SCALE: NTS UNLESS NOTED

10 ((TOP & BOTTOM)

**ELEVATION Y** 

**ELEVATION Y'** 

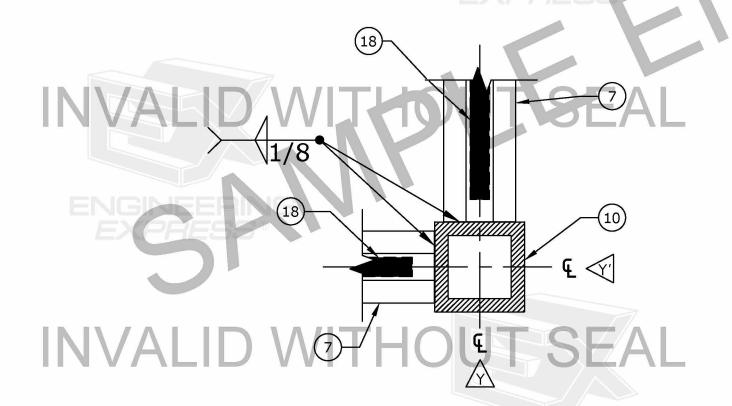
CONNECTION AT CORNER POST (CENTERLINE GLASS)

1/8/

SEE SCHEDULE ON SHEET 14.

4 (10)45° MITERED

DETAIL 4 (PLAN)

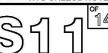


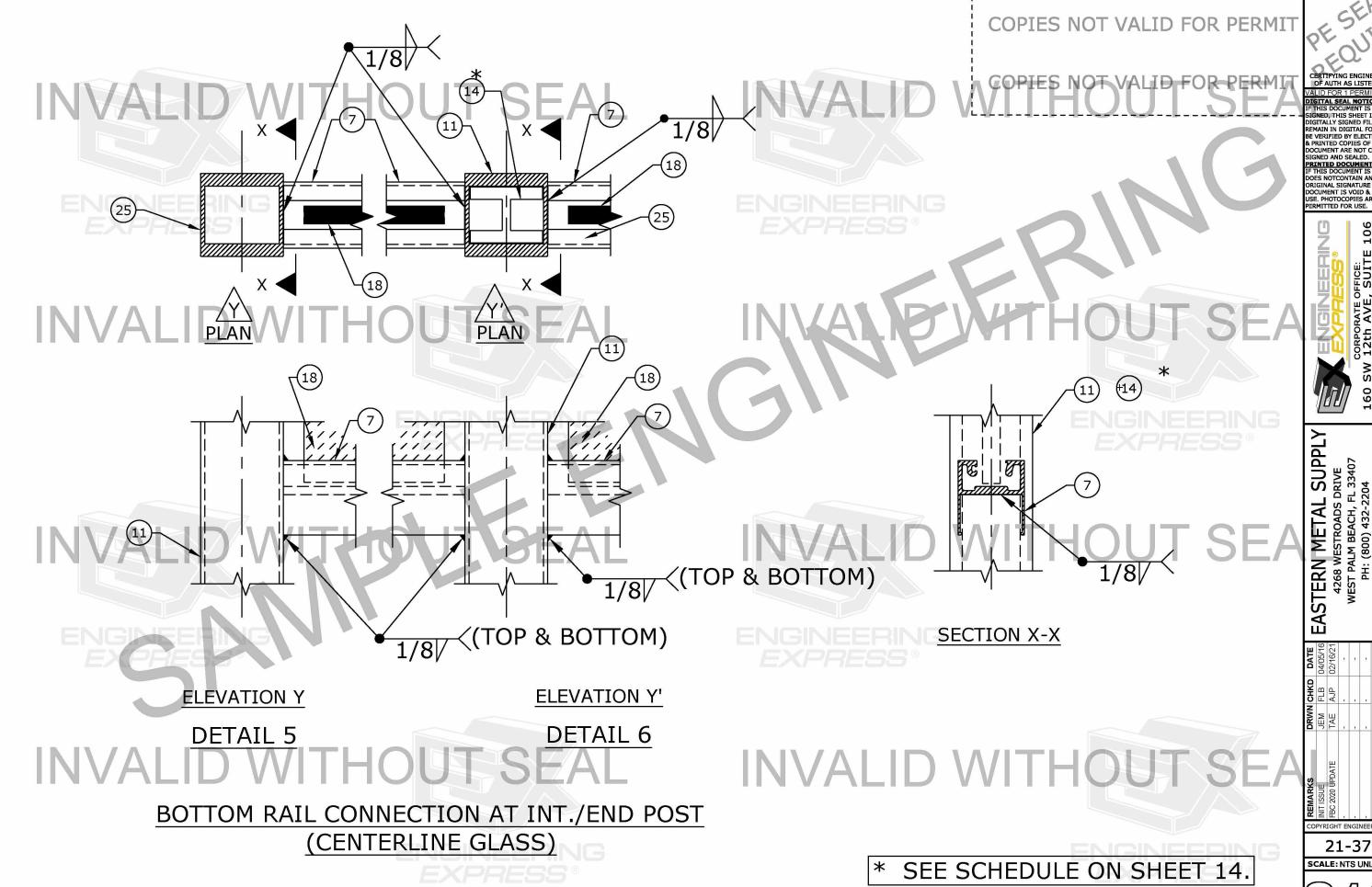
DETAIL 4A (PLAN)

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2-1/2" POST GLASS RAIL SYSTEM WELDED AT BOTTOM

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SCALE: NTS UNLESS NOTED

18

1/8/ 1/8/ **SECTION X-X** 

**ELEVATION Y** 

**ELEVATION Y'** 

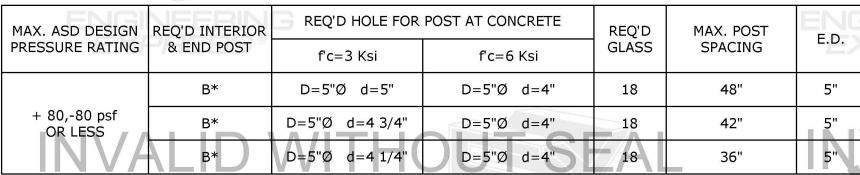
DETAIL 7

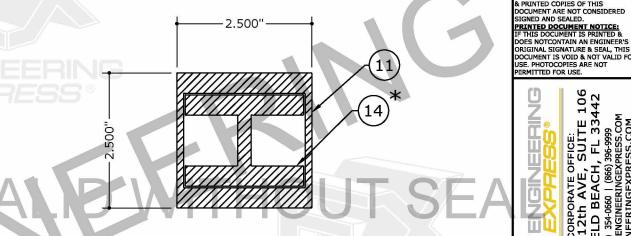
INTERMEDIATE RAIL CONNECTION (CENTERLINE GLASS)

SEE SCHEDULE ON SHEET 14.

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WEST PALM BEACH, FL 33407
PH: (800) 432-2204 2-1/2" POST GLASS RAIL SYSTEM WELDED AT BOTTOM

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POST B

6005-T5 ALLOY 28-60-735 K-FH08964

**CORNER POST** 6005-T5 ALLOY

28-60-730 K-FH08963

2.500" 0.375" TYP.

\*\* (C) CORNER POST IS ALLOWED FOR ALL 2 1/2" POST SYSTEM

(B) W/ WELDED BOTTOM RAIL (CENTERLINE OR OFFSET GLASS)

# INVALID WITHOUT SEAL

BOTTOM RAIL MUST BE WELDED TO POST W/O INSTALLING REINFORCING POST INSERT

INTO POST. INSERT MUST BE FIT INTO POST AFTER WELD OF BOTTOM RAIL TO POST

28-60-730 K-FH08963

POST C\*\*

COMENT IS VOID & NOT VALID SE. PHOTOCOPIES ARE NOT ERMITTED FOR USE.

SUPPLY

**EASTERN METAL** 

2-1/2" POST GLASS RAIL SYSTEM WELDED AT BOTTOM

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10 2 1/2" CORNER POST