

**GENERAL NOTES:**

1. THIS GLAZED RAILING SHOWN IN THIS PRODUCT APPROVAL DOCUMENT (REPORT) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2020 (7th EDITION) OF THE FLORIDA BUILDING CODE. DESIGN WIND LOADS FOR RAILING SYSTEM ON A GIVEN JOB SHALL BE DETERMINED AS PER SECTIONS 1620 & 1609 OF THE ABOVE MENTIONED CODE.

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.

2. 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.

3. ALL ALUMINUM EXTRUSIONS TO BE INDICATED ON THIS DRAWING. THE DIMENSIONS OF ALL EXTRUSIONS TO BE AS SHOWN ON THIS DRAWING.

4. ALL SCREWS TO BE AISI 410 SERIES STAINLESS STEEL WITH 92 ksi MINIMUM YIELD STRENGTH, AND SHALL COMPLY WITH CODES AND STANDARDS STATED HEREIN.

5. TEMPERED GLASS TO COMPLY WITH CODES AND STANDARDS STATED HEREIN.

6. 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.

7. SEE REMAINING SPECS FOR GLAZED RAILING COMPONENTS ON BILL OF MATERIALS ON SHEET 3.

8. 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.

9. 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.

14. 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.

COPIES NOT VALID FOR PERMIT

COPIES NOT VALID FOR PERMIT

**INDEX OF SHEETS 3 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**

**+120 / - 120 PSF**

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

PE SEAL REQUIRED

CERTIFYING ENGINEER AND CERT OF AUTH AS LISTED ON STAMP

VALID FOR 1 PERMIT ONLY U.N.O.

**DIGITAL SEAL NOTICE:**  
IF THIS DOCUMENT IS DIGITALLY SIGNED, THIS SHEET IS PART OF A DIGITALLY SIGNED FILE. IT SHALL REMAIN IN DIGITAL FORMAT, SHALL BE VERIFIED BY ELECTRONIC MEANS, & PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED.

**PRINTED DOCUMENT NOTICE:**  
IF THIS DOCUMENT IS PRINTED & DOES NOT CONTAIN AN ENGINEER'S ORIGINAL SIGNATURE & SEAL, THIS DOCUMENT IS VOID & NOT VALID FOR USE. PHOTOCOPIES ARE NOT PERMITTED FOR USE.

**ENGINEERING EXPRESS**  
CORPORATE OFFICE:  
160 SW 12th AVE, SUITE 106  
DEERFIELD BEACH, FL 33442  
(954) 354-0660 | (866) 396-9999  
TEAM@ENGINEERINGEXPRESS.COM  
ENGINEERINGEXPRESS.COM

**EASTERN METAL SUPPLY**  
4268 WESTROADS DRIVE  
WEST PALM BEACH, FL 33407  
PH: (800) 432-2204  
3-1/2" POST GLASS RAIL SYSTEM  
WELDED AT BOTTOM

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	FLB	04/05/16
FBC 2020 UPDATE	TAE	AJP	02/16/21

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

21-37035

SCALE: NTS UNLESS NOTED

S1 OF 14

VISIT [ECALC.IO/37035](http://ECALC.IO/37035) SCAN HERE

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



C:\Users\thayer\appdata\local\temp\AcPublish\_21160121-37035\_3.5in\_GRS\_weld.dwg  
thayer  
05/10/2021 - 12:38pm

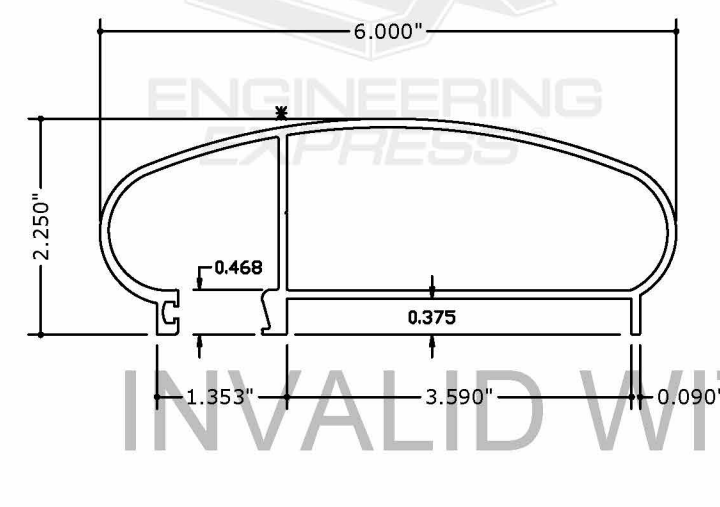


C:\Users\thayer\Engineering\Express\Production - Documents\Projects\21-37035 3.5' Post Welded Glass Rail System\WP\Drawings\21-37035 3.5in GRS\_weld.dwg  
thayer  
05/10/2021 - 9:06am

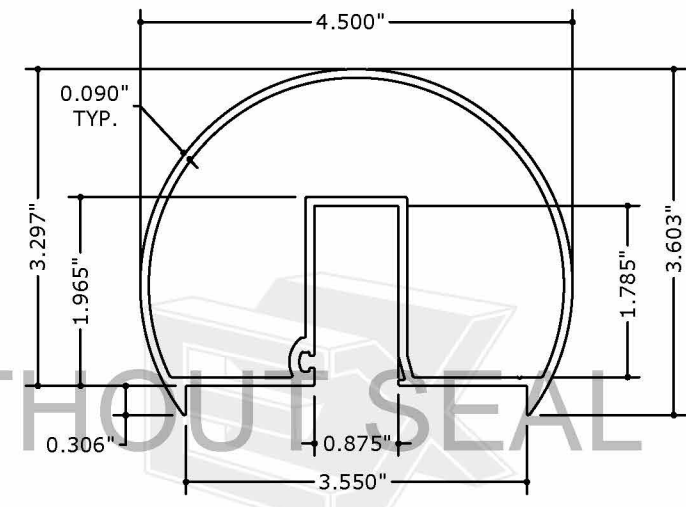
COPIES NOT VALID FOR PERMIT  
COPIES NOT VALID FOR PERMIT

INVALID WITHOUT SEAL

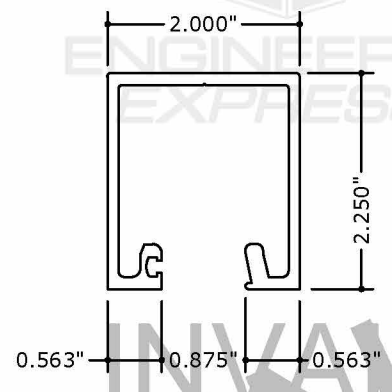
INVALID WITHOUT SEAL



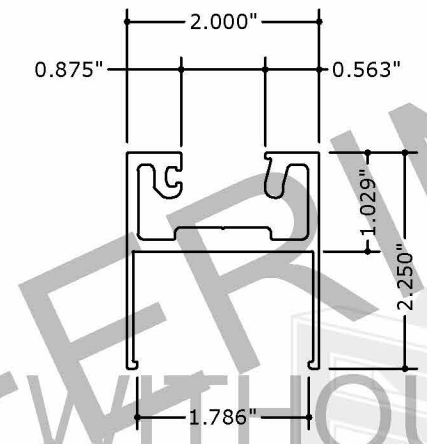
② OFFSET TOP RAIL/  
3 1/2" POST  
6083-T6 ALLOY  
28-63-750  
K-FH08969



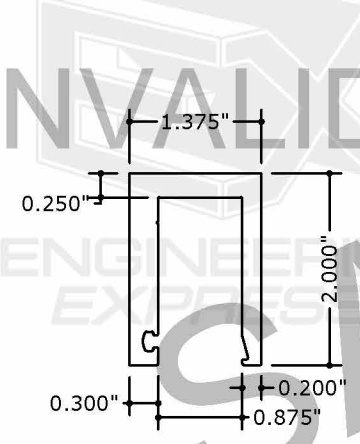
⑤ CENTERLINE 4.5" TOP CAP/  
3 1/2" POST  
6083-T6 ALLOY  
28-63-705  
K-FH08957



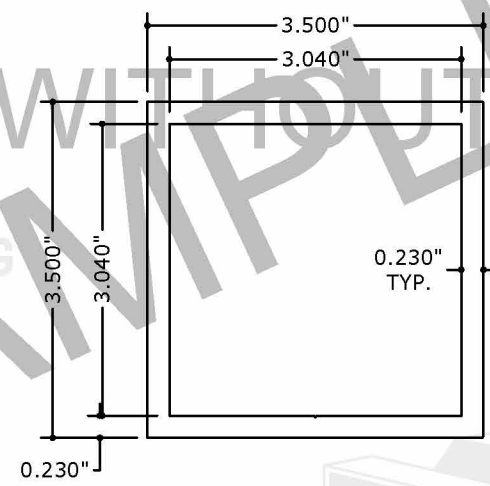
⑥ WELDED CENTERLINE  
INTERMEDIATE RAIL  
6083-T6 ALLOY  
28-63-720  
K-FS08960



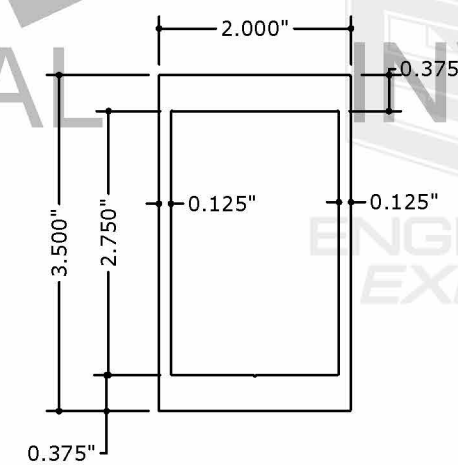
⑦ CENTERLINE BOTTOM RAIL  
6083-T6 ALLOY FOR 44" MAX RAILING  
28-63-715  
K-FS08959



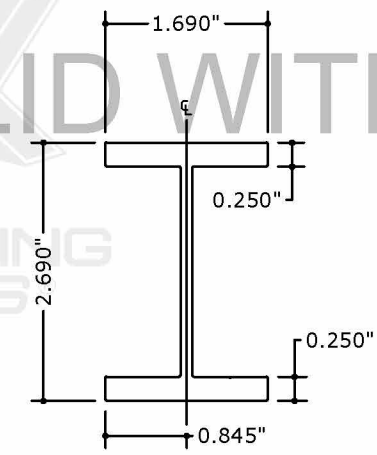
⑧A WELDED OFFSET  
BOTTOM RAIL  
6063-T6 ALLOY  
28-63-771  
K-FH0988



⑫ 3 1/2" CORNER POST  
6005-T5 ALLOY  
28-60-765  
K-FH08965



⑬ 3 1/2" BASIC  
INTERIOR END POST  
6005-T5 ALLOY  
28-60-760  
K-FH08966



⑮ 3 1/2" POST 12  
INSERT  
6005-T5 ALLOY  
28-60-745  
K-FS08968

PE SEAL  
REQUIRED

CERTIFYING ENGINEER AND CERT  
OF AUTH AS LISTED ON STAMP  
VALID FOR 1 PERMIT ONLY U.N.O  
**DIGITAL SEAL NOTICE:**  
IF THIS DOCUMENT IS DIGITALLY  
SIGNED, THIS SHEET IS PART OF A  
DIGITALLY SIGNED FILE. IT SHALL  
REMAIN IN DIGITAL FORMAT, SHALL  
BE VERIFIED BY ELECTRONIC MEANS,  
& PRINTED COPIES OF THIS  
DOCUMENT ARE NOT CONSIDERED  
SIGNED AND SEALED.  
**PRINTED DOCUMENT NOTICE:**  
IF THIS DOCUMENT IS PRINTED &  
DOES NOT CONTAIN AN ENGINEER'S  
ORIGINAL SIGNATURE & SEAL, THIS  
DOCUMENT IS VOID & NOT VALID FOR  
USE. PHOTOCOPIES ARE NOT  
PERMITTED FOR USE.

**ENGINEERING  
EXPRESS®**  
CORPORATE OFFICE:  
160 SW 12th AVE, SUITE 106  
DEERFIELD BEACH, FL 33442  
(954) 354-0660 | (866) 396-9999  
TEAM@ENGINEERINGEXPRESS.COM  
ENGINEERINGEXPRESS.COM

**EASTERN METAL SUPPLY**  
4268 WESTROADS DRIVE  
WEST PALM BEACH, FL 33407  
PH: (800) 432-2204  
3-1/2" POST GLASS RAIL SYSTEM  
WELDED AT BOTTOM

DRWN	CHKD	DATE
JEM	FLB	04/05/16
TAE	AJP	02/16/21

REMARKS  
INIT ISSUE  
FBC 2020 UPDATE

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS,  
AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT  
WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS,  
ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT  
PERMITTED AND INVALIDATE OUR CERTIFICATION.

C:\Users\thayer\Engineering\Express\Production - Documents\Projects\21-37035\3.5 Post Welded Glass Rail System\WP\Drawings\21-37035 3.5in GRS\_weld.dwg  
 thayer  
 05/10/2021 - 9:06am

COPIES NOT VALID FOR PERMIT  
 COPIES NOT VALID FOR PERMIT

PE SEAL  
 REQUIRED

CERTIFYING ENGINEER AND CERT  
 OF AUTH AS LISTED ON STAMP  
 VALID FOR 1 PERMIT ONLY U.N.O.  
**DIGITAL SEAL NOTICE:**  
 IF THIS DOCUMENT IS DIGITALLY  
 SIGNED, THIS SHEET IS PART OF A  
 DIGITALLY SIGNED FILE. IT SHALL  
 REMAIN IN DIGITAL FORMAT, SHALL  
 BE VERIFIED BY ELECTRONIC MEANS,  
 & PRINTED COPIES OF THIS  
 DOCUMENT ARE NOT CONSIDERED  
 SIGNED AND SEALED.  
**PRINTED DOCUMENT NOTICE:**  
 IF THIS DOCUMENT IS PRINTED &  
 DOES NOT CONTAIN AN ENGINEER'S  
 ORIGINAL SIGNATURE & SEAL, THIS  
 DOCUMENT IS VOID & NOT VALID FOR  
 USE. PHOTOCOPIES ARE NOT  
 PERMITTED FOR USE.

**BILL OF MATERIALS: 3 1/2" POST GLASS RAILING SYSTEM, WELDED AT BOTTOM**

COMPONENT #	DESCRIPTION	MATERIAL	NOTES
2	OFFSET TOP RAIL / 3 1/2" POST	6063-T6 ALLOY	WELDED TO POST
5	CENTERLINE 4.5" TOP CAP/ 3 1/2" POST	6063-T6 ALLOY	WELDED TO POST
6	WELDED CENTERLINE INTERMEDIATE RAIL	6063-T6 ALLOY	
7	CENTERLINE BOTTOM RAIL	6063-T6 ALLOY	
8A	WELDED OFFSET BOTTOM RAIL	6063-T6 ALLOY	
12	3 1/2" CORNER POST	6063-T6 ALLOY	
13	3 1/2" INTERIOR/END POST	6063-T6 ALLOY	
15	3 1/2" POST 13 INSERT	6063-T6 ALLOY	
18	7/16" NOMINAL LAMINATED 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 QUICKCRETE	PORTLAND CEMENT	f'c= 9000 psi AT 3 hrs; 9500 psi AT 7 DAYS & 12500 psi AT 28 DAYS

**ENGINEERING EXPRESS**  
 CORPORATE OFFICE:  
 160 SW 12th AVE, SUITE 106  
 DEERFIELD BEACH, FL 33442  
 (954) 354-0660 | (866) 396-9999  
 TEAM@ENGINEERINGEXPRESS.COM  
 ENGINEERINGEXPRESS.COM

**EASTERN METAL SUPPLY**  
 4268 WESTROADS DRIVE  
 WEST PALM BEACH, FL 33407  
 PH: (800) 432-2204  
 3-1/2" POST GLASS RAIL SYSTEM  
 WELDED AT BOTTOM

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	FLB	04/05/16
FBC 2020 UPDATE	TAE	AJP	02/16/21

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS, AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®  
 21-37035  
 SCALE: NTS UNLESS NOTED  
 S3 OF 14



C:\Users\thayer\Engineering\Express\Production - Documents\Projects\21-37035\3.5' Post Welded Glass Rail System\WPDrawings\21-37035 3.5in GRS\_weld.dwg  
thayer  
05/10/2021 - 9:06am

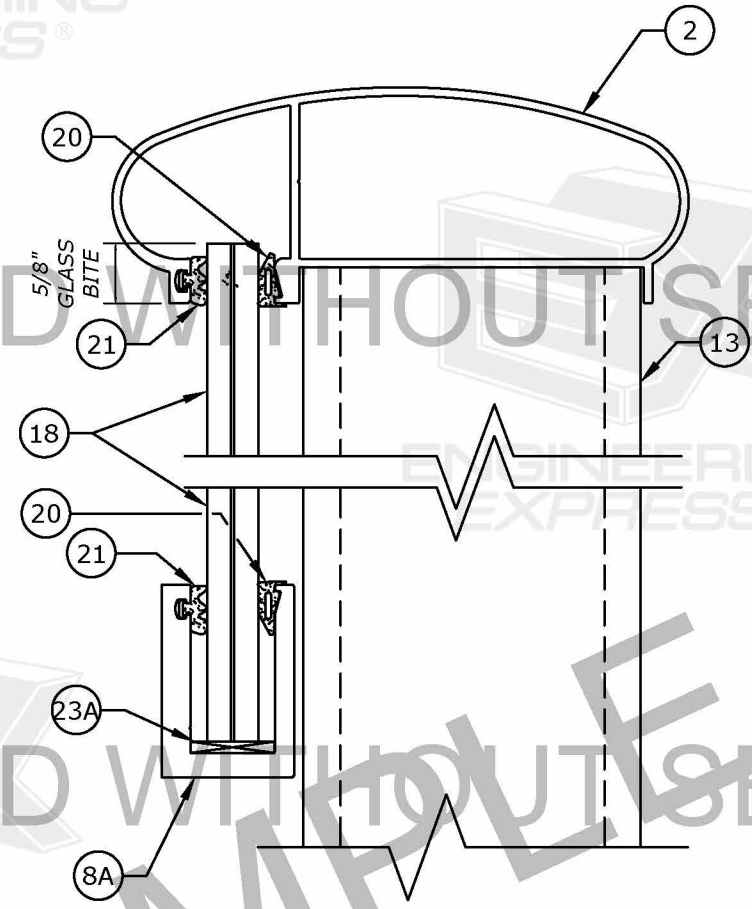
COPIES NOT VALID FOR PERMIT  
COPIES NOT VALID FOR PERMIT

PE SEAL  
REQUIRED

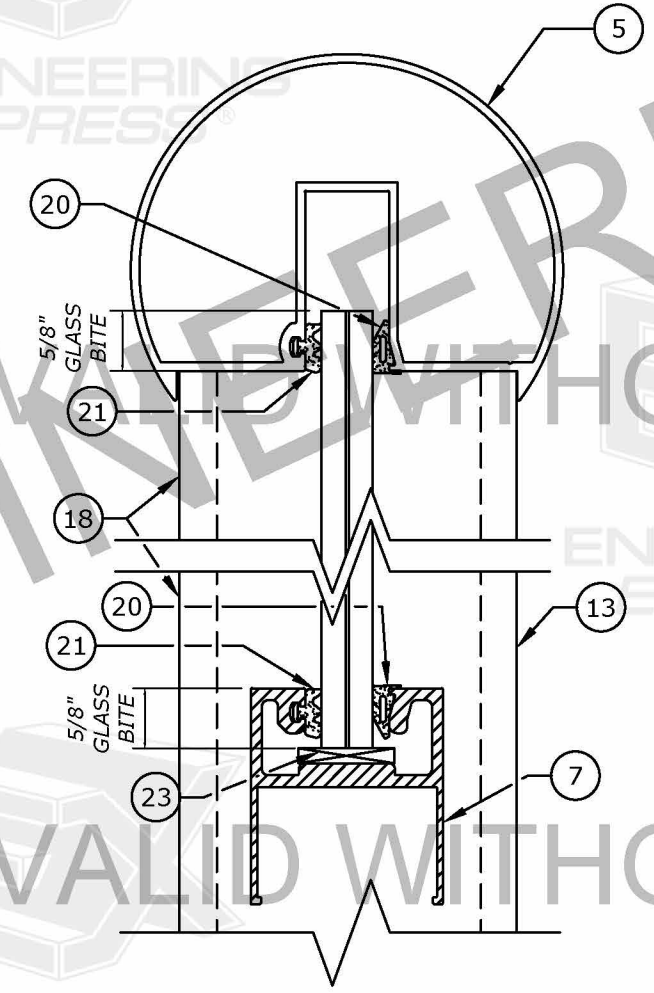
CERTIFYING ENGINEER AND CERT  
OF AUTH AS LISTED ON STAMP  
VALID FOR 1 PERMIT ONLY U.N.O.  
**DIGITAL SEAL NOTICE:**  
IF THIS DOCUMENT IS DIGITALLY  
SIGNED, THIS SHEET IS PART OF A  
DIGITALLY SIGNED FILE. IT SHALL  
REMAIN IN DIGITAL FORMAT, SHALL  
BE VERIFIED BY ELECTRONIC MEANS,  
& PRINTED COPIES OF THIS  
DOCUMENT ARE NOT CONSIDERED  
SIGNED AND SEALED.  
**PRINTED DOCUMENT NOTICE:**  
IF THIS DOCUMENT IS PRINTED &  
DOES NOT CONTAIN AN ENGINEER'S  
ORIGINAL SIGNATURE & SEAL, THIS  
DOCUMENT IS VOID & NOT VALID FOR  
USE. PHOTOCOPIES ARE NOT  
PERMITTED FOR USE.

INVALID WITHOUT SEAL

INVALID WITHOUT SEAL



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



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

INVALID WITHOUT SEAL

INVALID WITHOUT SEAL

INVALID WITHOUT SEAL

INVALID WITHOUT SEAL

INVALID WITHOUT SEAL

INVALID WITHOUT SEAL

**ENGINEERING EXPRESS**  
CORPORATE OFFICE:  
160 SW 12th AVE, SUITE 106  
DEERFIELD BEACH, FL 33442  
(954) 354-0660 | (866) 396-9999  
TEAM@ENGINEERINGEXPRESS.COM  
ENGINEERINGEXPRESS.COM

**EASTERN METAL SUPPLY**  
4268 WESTROADS DRIVE  
WEST PALM BEACH, FL 33407  
PH: (800) 432-2204  
3-1/2" POST GLASS RAIL SYSTEM  
WELDED AT BOTTOM

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	FLB	04/05/16
FBC 2020 UPDATE	TAE	AJP	02/16/21

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS.  
AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT  
WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS,  
ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT  
PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®  
21-37035  
SCALE: NTS UNLESS NOTED  
S4 14





COPIES NOT VALID FOR PERMIT

COPIES NOT VALID FOR PERMIT

INVALID WITHOUT SEAL

INVALID WITHOUT SEAL

ENGINEERING EXPRESS®

ENGINEERING EXPRESS®

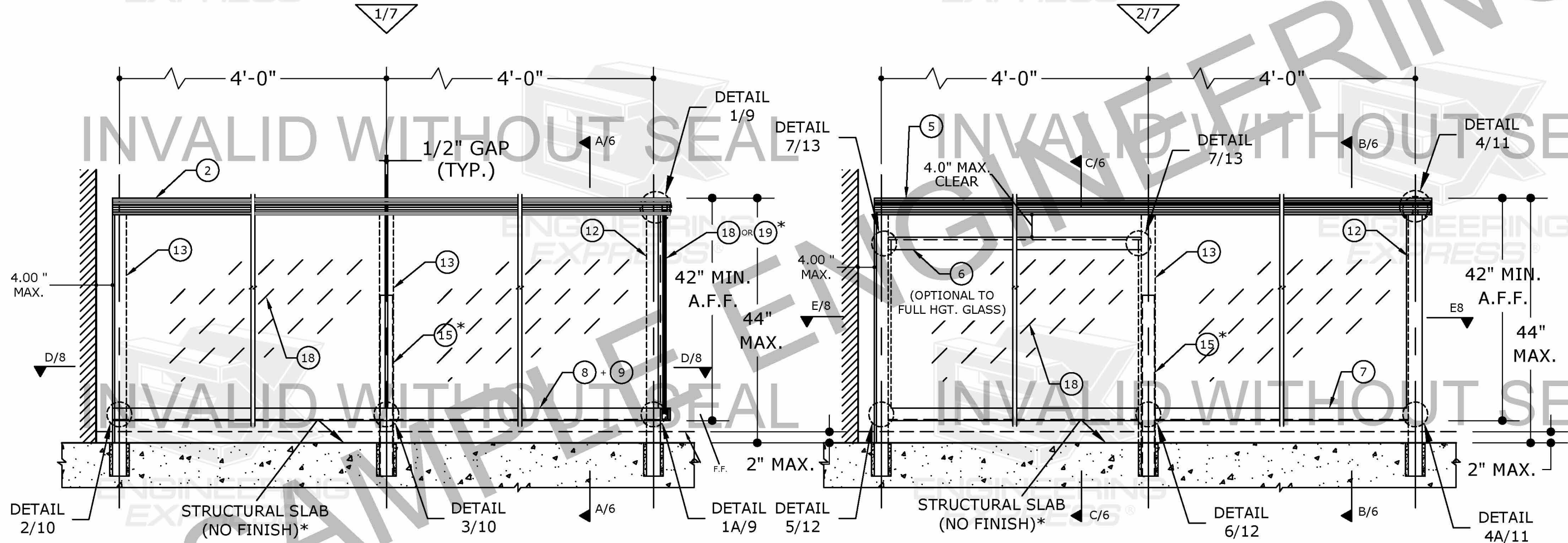
CERTIFYING ENGINEER AND CERT OF AUTH AS LISTED ON STAMP

VALID FOR 1 PERMIT ONLY U.N.O.

**DIGITAL SEAL NOTICE:**  
IF THIS DOCUMENT IS DIGITALLY SIGNED, THIS SHEET IS PART OF A DIGITALLY SIGNED FILE. IT SHALL REMAIN IN DIGITAL FORMAT, SHALL BE VERIFIED BY ELECTRONIC MEANS, & PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED.

**PRINTED DOCUMENT NOTICE:**  
IF THIS DOCUMENT IS PRINTED & DOES NOT CONTAIN AN ENGINEER'S ORIGINAL SIGNATURE & SEAL, THIS DOCUMENT IS VOID & NOT VALID FOR USE. PHOTOCOPIES ARE NOT PERMITTED FOR USE.

**ENGINEERING EXPRESS®**  
CORPORATE OFFICE:  
160 SW 12th AVE, SUITE 106  
DEERFIELD BEACH, FL 33442  
(954) 354-0660 | (866) 396-9999  
TEAM@ENGINEERINGEXPRESS.COM  
ENGINEERINGEXPRESS.COM



TYPICAL RAILING ELEVATION W/ EMBEDDED POSTS INTO CONCRETE SLAB W/ OFFSET GLASS

TYPICAL RAILING ELEVATION W/ EMBEDDED POSTS INTO CONCRETE SLAB W/ CENTERLINE GLASS

**EASTERN METAL SUPPLY**  
4268 WESTROADS DRIVE  
WEST PALM BEACH, FL 33407  
PH: (800) 432-2204  
3-1/2" POST GLASS RAIL SYSTEM  
WELDED AT BOTTOM

DRWN	CHKD	DATE
JEM	FLB	04/05/16
TAE	AJP	02/16/21

REMARKS  
INIT ISSUE  
FBC 2020 UPDATE

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

21-37035

SCALE: NTS UNLESS NOTED

S5 OF 14

\* SEE SCHEDULE ON SHEET 14.

ENGINEERING EXPRESS®

ENGINEERING EXPRESS®



C:\Users\thayer\Engineering\Express\Production - Documents\Projects\21-37035 3.5 Post Welded Glass Rail System\WP\Drawings\21-37035 3.5in GRS\_weld.dwg  
 thayer  
 05/10/2021 - 9:06am

COPIES NOT VALID FOR PERMIT  
 COPIES NOT VALID FOR PERMIT

PE SEAL  
 REQUIRED

CERTIFYING ENGINEER AND CERT  
 OF AUTH AS LISTED ON STAMP  
 VALID FOR 1 PERMIT ONLY U.N.O.  
**DIGITAL SEAL NOTICE:**  
 IF THIS DOCUMENT IS DIGITALLY  
 SIGNED, THIS SHEET IS PART OF A  
 DIGITALLY SIGNED FILE. IT SHALL  
 REMAIN IN DIGITAL FORMAT, SHALL  
 BE VERIFIED BY ELECTRONIC MEANS,  
 & PRINTED COPIES OF THIS  
 DOCUMENT ARE NOT CONSIDERED  
 SIGNED AND SEALED.  
**PRINTED DOCUMENT NOTICE:**  
 IF THIS DOCUMENT IS PRINTED &  
 DOES NOT CONTAIN AN ENGINEER'S  
 ORIGINAL SIGNATURE & SEAL, THIS  
 DOCUMENT IS VOID & NOT VALID FOR  
 USE. PHOTOCOPIES ARE NOT  
 PERMITTED FOR USE.

**ENGINEERING EXPRESS**  
 CORPORATE OFFICE:  
 160 SW 12th AVE, SUITE 106  
 DEERFIELD BEACH, FL 33442  
 (954) 354-0660 | (866) 396-9999  
 TEAM@ENGINEERINGEXPRESS.COM  
 ENGINEERINGEXPRESS.COM

**EASTERN METAL SUPPLY**  
 4268 WESTROADS DRIVE  
 WEST PALM BEACH, FL 33407  
 PH: (800) 432-2204  
 3-1/2" POST GLASS RAIL SYSTEM  
 WELDED AT BOTTOM

DRWN	CHKD	DATE
JEM	FLB	04/05/16
TAE	AJP	02/16/21

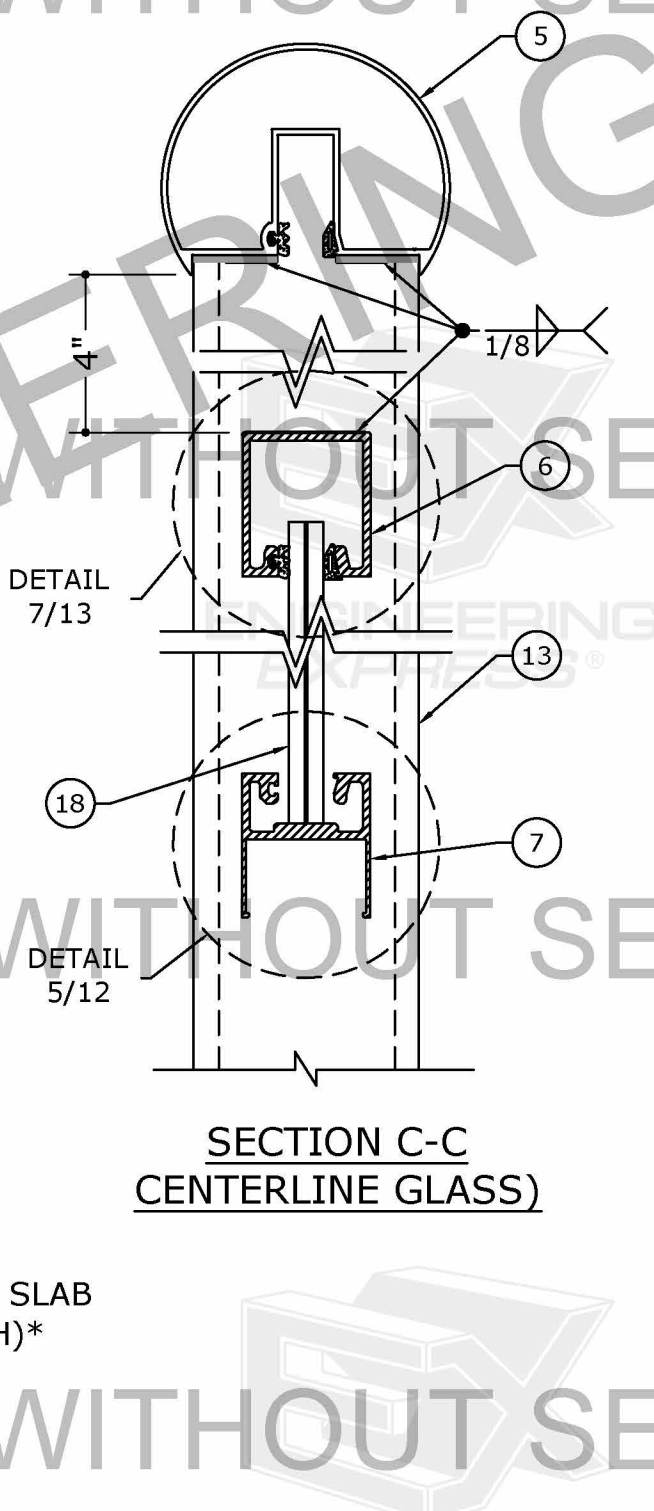
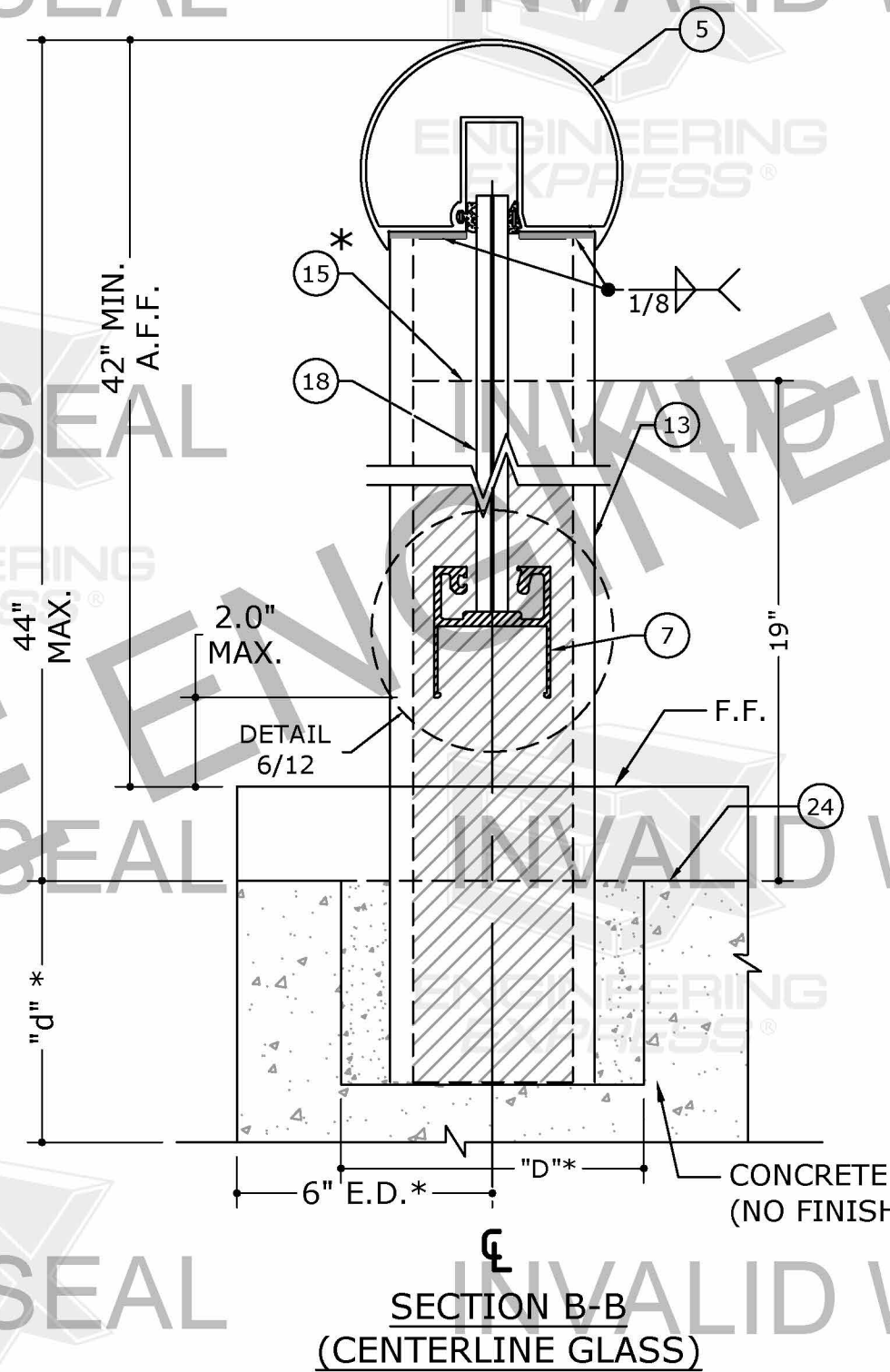
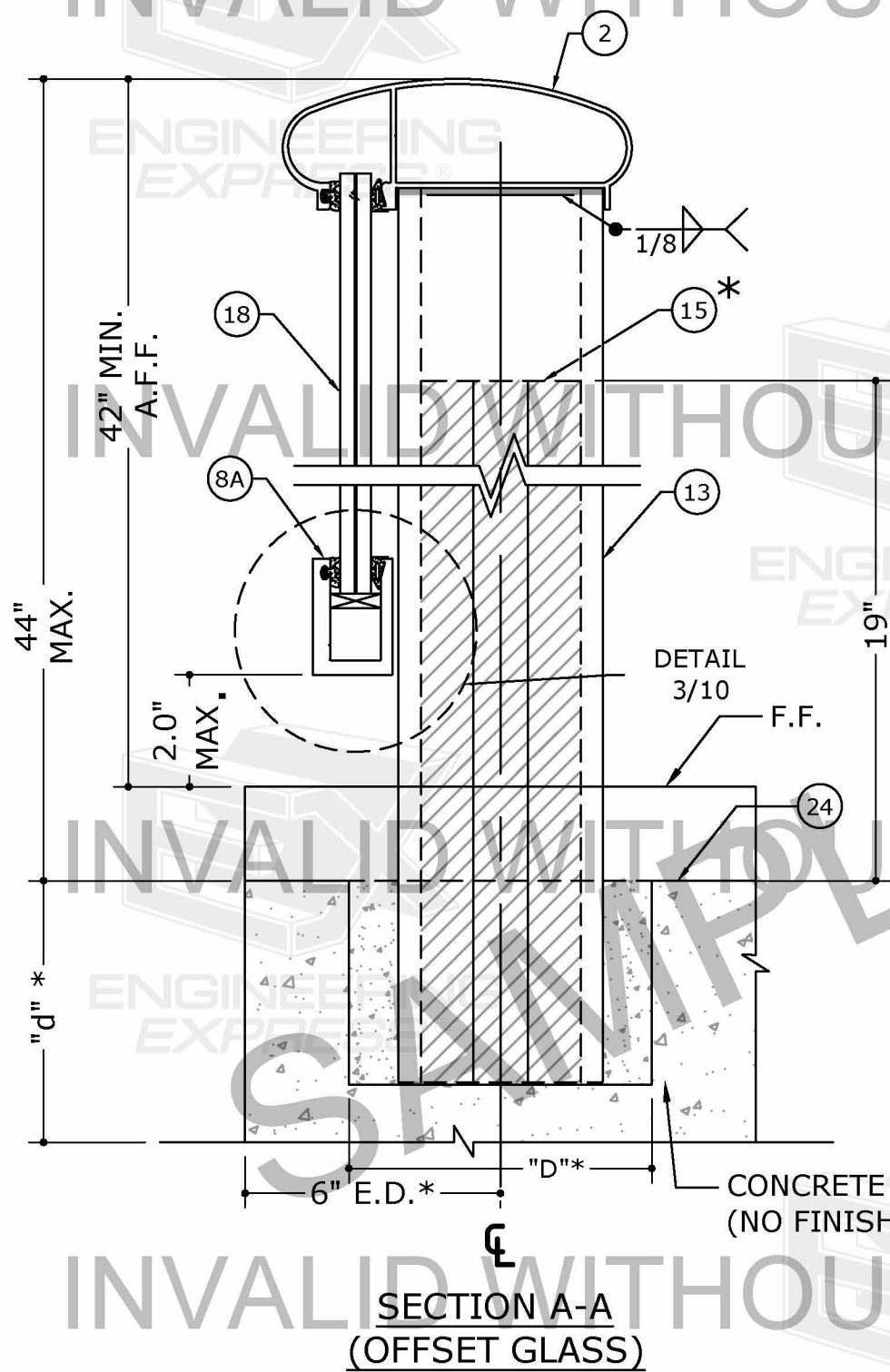
REMARKS	INIT	ISSUE
FBC 2020 UPDATE		

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS.  
 AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT  
 WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS,  
 ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT  
 PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®  
 21-37035

SCALE: NTS UNLESS NOTED

S6 OF 14



\* SEE SCHEDULE ON SHEET 14.



COPIES NOT VALID FOR PERMIT

COPIES NOT VALID FOR PERMIT

INVALID WITHOUT SEAL

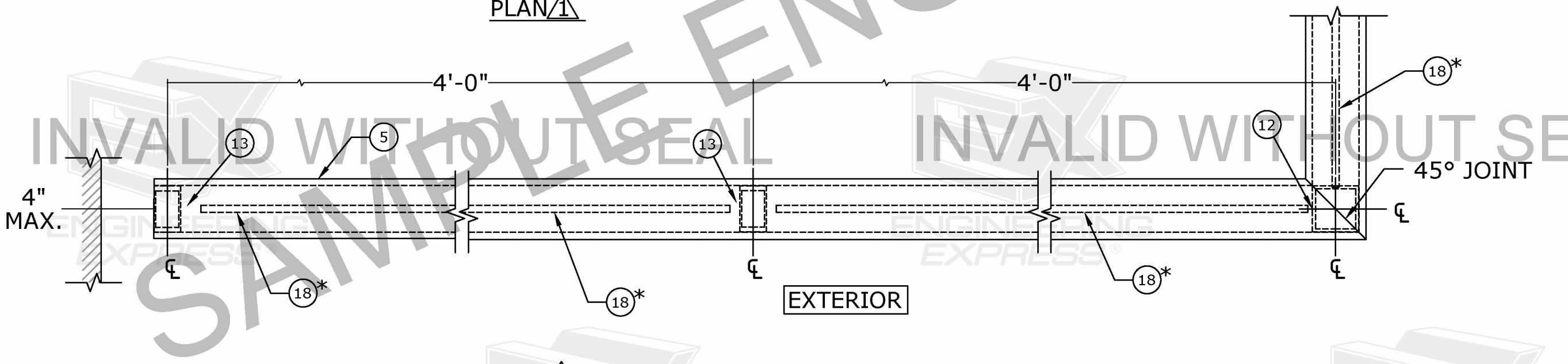
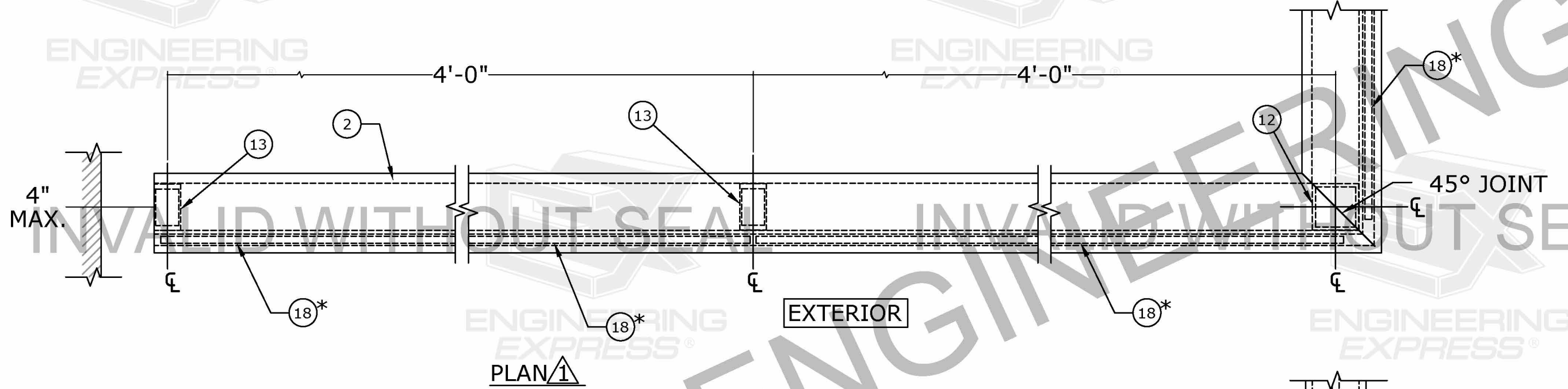
INVALID WITHOUT SEAL

PE SEAL  
REQUIRED

CERTIFYING ENGINEER AND CERT  
OF AUTH AS LISTED ON STAMP  
VALID FOR 1 PERMIT ONLY U.N.O

**DIGITAL SEAL NOTICE:**  
IF THIS DOCUMENT IS DIGITALLY  
SIGNED, THIS SHEET IS PART OF A  
DIGITALLY SIGNED FILE. IT SHALL  
REMAIN IN DIGITAL FORMAT, SHALL  
BE VERIFIED BY ELECTRONIC MEANS,  
& PRINTED COPIES OF THIS  
DOCUMENT ARE NOT CONSIDERED  
SIGNED AND SEALED.

**PRINTED DOCUMENT NOTICE:**  
IF THIS DOCUMENT IS PRINTED &  
DOES NOT CONTAIN AN ENGINEER'S  
ORIGINAL SIGNATURE & SEAL, THIS  
DOCUMENT IS VOID & NOT VALID FOR  
USE. PHOTOCOPIES ARE NOT  
PERMITTED FOR USE.



PLAN 2 : TYPICAL RAILING W/ EMBEDDED POSTS INTO  
CONCRETE SLAB W/ CENTERLINE GLASS

**ENGINEERING EXPRESS**  
CORPORATE OFFICE:  
160 SW 12th AVE, SUITE 106  
DEERFIELD BEACH, FL 33442  
(954) 354-0660 | (866) 396-9999  
TEAM@ENGINEERINGEXPRESS.COM  
ENGINEERINGEXPRESS.COM

**EASTERN METAL SUPPLY**  
4268 WESTROADS DRIVE  
WEST PALM BEACH, FL 33407  
PH: (800) 432-2204  
3-1/2" POST GLASS RAIL SYSTEM  
WELDED AT BOTTOM

DRWN	CHKD	DATE
JEM	FLB	04/05/16
TAE	AJP	02/16/21

REMARKS  
INIT ISSUE  
FBC 2020 UPDATE

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS,  
AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT  
WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS,  
ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT  
PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

21-37035

SCALE: NTS UNLESS NOTED

S7 OF 14

\* SEE SCHEDULE ON SHEET 14.

C:\Users\thayer\Engineering\Express\Production - Documents\Projects\21-37035\3.5' Post Welded Glass Rail System\VP1 Drawings\21-37035 3.5in GRS\_weld.dwg  
thayer  
05/10/2021 - 9:06am



COPIES NOT VALID FOR PERMIT

COPIES NOT VALID FOR PERMIT

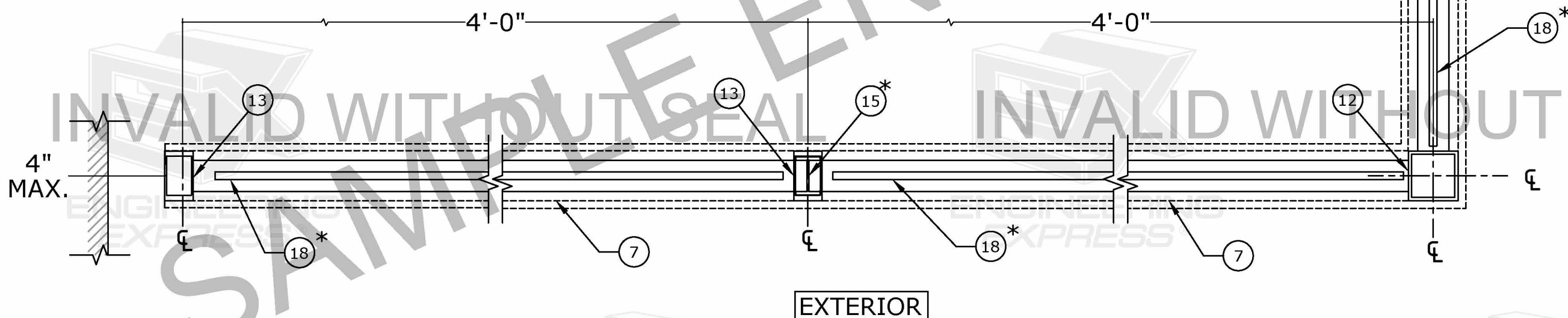
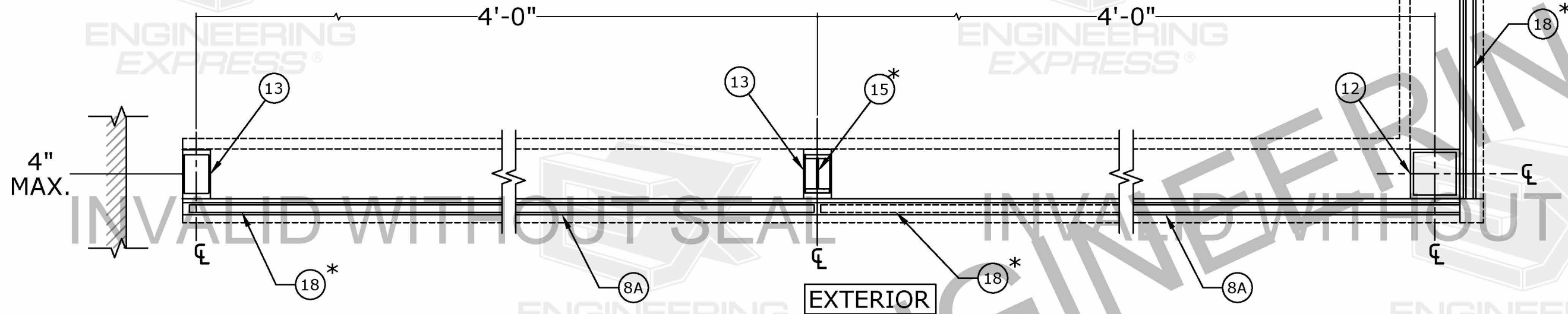
INVALID WITHOUT SEAL

INVALID WITHOUT SEAL

PE SEAL  
REQUIRED

CERTIFYING ENGINEER AND CERT  
OF AUTH AS LISTED ON STAMP  
VALID FOR 1 PERMIT ONLY U.N.O

**DIGITAL SEAL NOTICE:**  
IF THIS DOCUMENT IS DIGITALLY  
SIGNED, THIS SHEET IS PART OF A  
DIGITALLY SIGNED FILE. IT SHALL  
REMAIN IN DIGITAL FORMAT, SHALL  
BE VERIFIED BY ELECTRONIC MEANS,  
& PRINTED COPIES OF THIS  
DOCUMENT ARE NOT CONSIDERED  
SIGNED AND SEALED.  
**PRINTED DOCUMENT NOTICE:**  
IF THIS DOCUMENT IS PRINTED &  
DOES NOT CONTAIN AN ENGINEER'S  
ORIGINAL SIGNATURE & SEAL, THIS  
DOCUMENT IS VOID & NOT VALID FOR  
USE. PHOTOCOPIES ARE NOT  
PERMITTED FOR USE.



**ENGINEERING EXPRESS®**  
CORPORATE OFFICE:  
160 SW 12th AVE, SUITE 106  
DEERFIELD BEACH, FL 33442  
(954) 354-0660 | (866) 396-9999  
TEAM@ENGINEERINGEXPRESS.COM  
ENGINEERINGEXPRESS.COM

**EASTERN METAL SUPPLY**  
4268 WESTROADS DRIVE  
WEST PALM BEACH, FL 33407  
PH: (800) 432-2204  
3-1/2" POST GLASS RAIL SYSTEM  
WELDED AT BOTTOM

DRWN	CHKD	DATE
JEM	FLB	04/05/16
TAE	AJP	02/16/21

REMARKS  
INIT ISSUE  
FBC 2020 UPDATE

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS.  
AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT  
WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS,  
ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT  
PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

21-37035

SCALE: NTS UNLESS NOTED

S8 14

\* SEE SCHEDULE ON SHEET 14.

C:\Users\thayer\Engineering\Express\Production - Documents\Projects\21-37035\3.5' Post Welded Glass Rail System\VP\Drawings\21-37035\_3.5in\_GRS\_weld.dwg  
thayer  
05/10/2021 - 9:06am

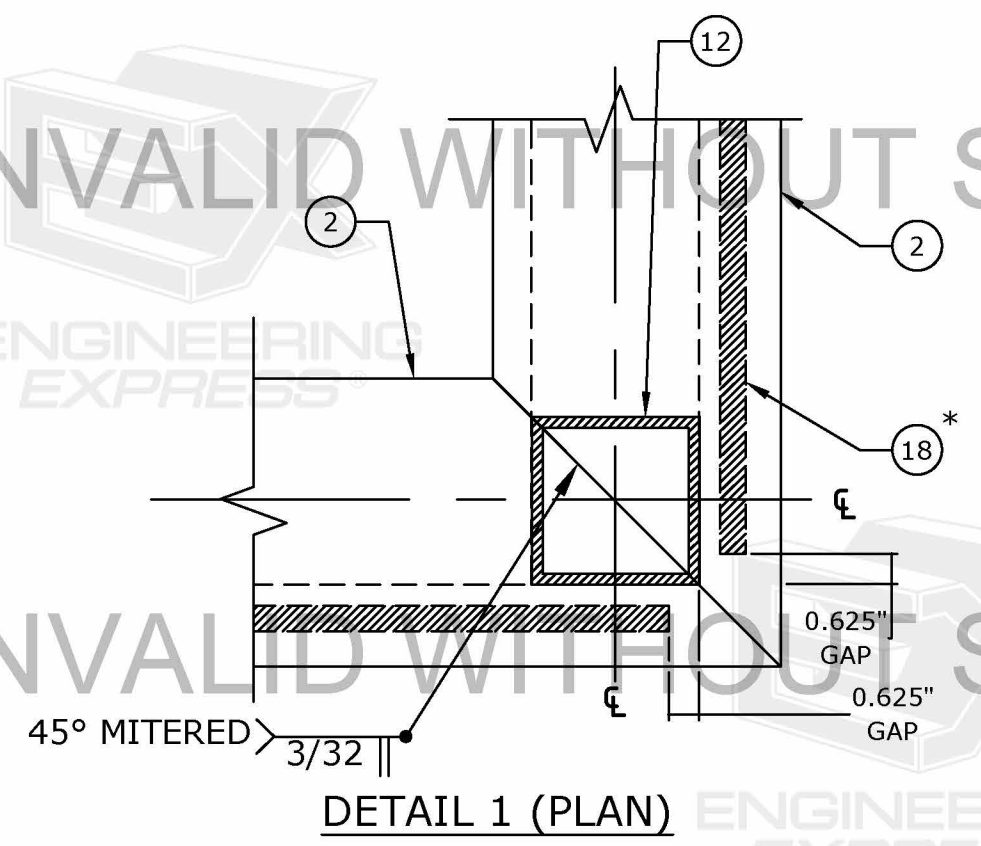


C:\Users\thayer\Engineering\Express\Production - Documents\Projects\21-37035\3.5' Post Welded Glass Rail System\VP1\Drawings\21-37035\_3.5in\_GRS\_weld.dwg  
thayer  
05/10/2021 - 9:06am

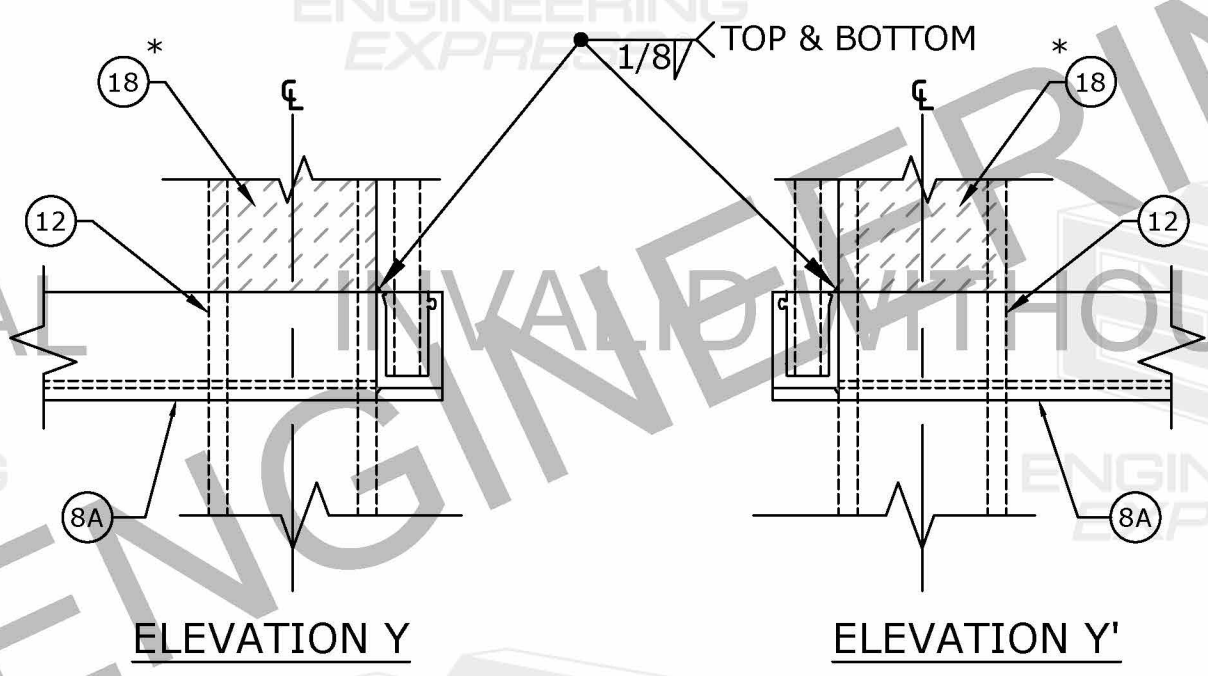
COPIES NOT VALID FOR PERMIT  
COPIES NOT VALID FOR PERMIT

PE SEAL  
REQUIRED

CERTIFYING ENGINEER AND CERT  
OF AUTH AS LISTED ON STAMP  
VALID FOR 1 PERMIT ONLY U.N.O  
**DIGITAL SEAL NOTICE:**  
IF THIS DOCUMENT IS DIGITALLY  
SIGNED, THIS SHEET IS PART OF A  
DIGITALLY SIGNED FILE. IT SHALL  
REMAIN IN DIGITAL FORMAT, SHALL  
BE VERIFIED BY ELECTRONIC MEANS,  
& PRINTED COPIES OF THIS  
DOCUMENT ARE NOT CONSIDERED  
SIGNED AND SEALED.  
**PRINTED DOCUMENT NOTICE:**  
IF THIS DOCUMENT IS PRINTED &  
DOES NOT CONTAIN AN ENGINEER'S  
ORIGINAL SIGNATURE & SEAL, THIS  
DOCUMENT IS VOID & NOT VALID FOR  
USE. PHOTOCOPIES ARE NOT  
PERMITTED FOR USE.

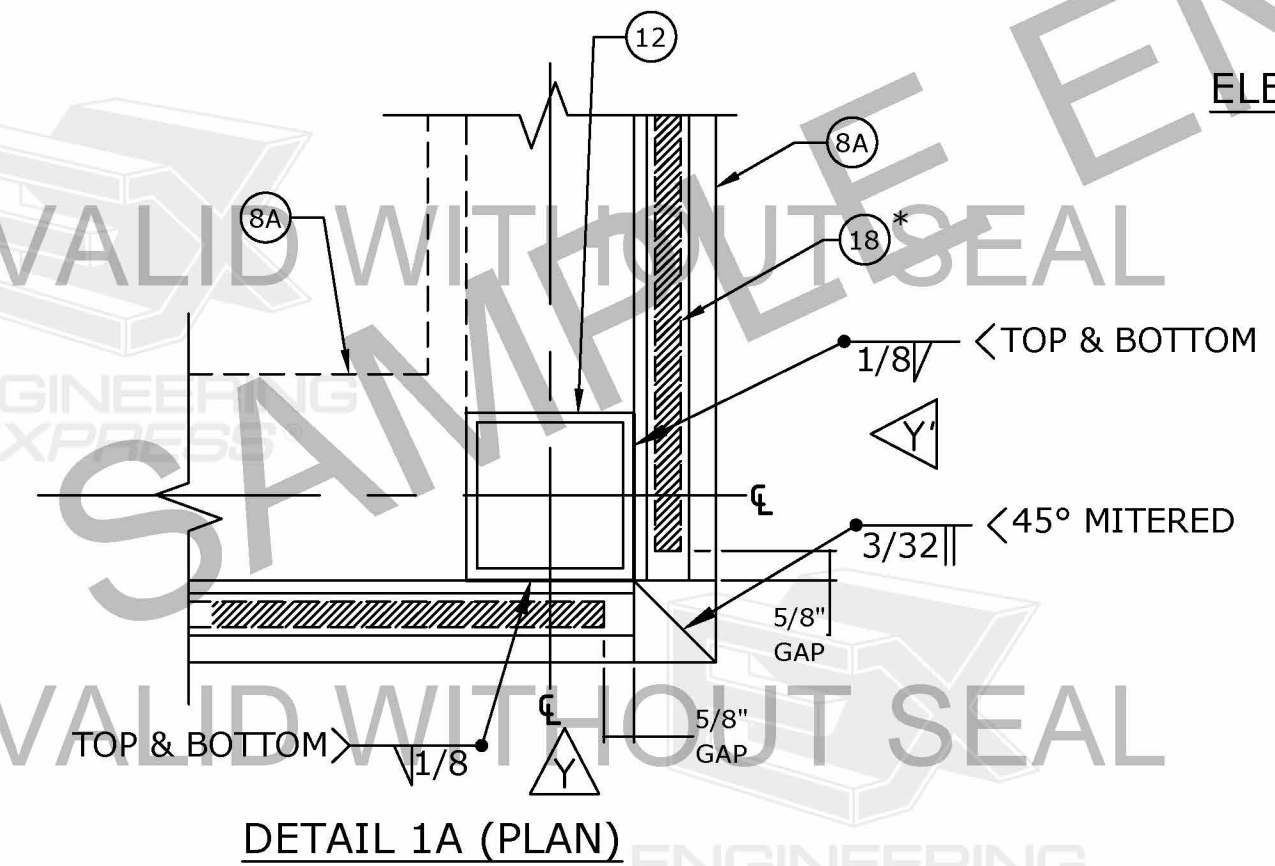


DETAIL 1 (PLAN)



ELEVATION Y

ELEVATION Y'



DETAIL 1A (PLAN)

**BOTTOM RAIL CONNECTION AT CORNER POST  
(OFFSET GLASS)**

\* SEE SCHEDULE ON SHEET 14.

**ENGINEERING EXPRESS**  
CORPORATE OFFICE:  
160 SW 12th AVE, SUITE 106  
DEERFIELD BEACH, FL 33442  
(954) 354-0660 | (866) 396-9999  
TEAM@ENGINEERINGEXPRESS.COM  
ENGINEERINGEXPRESS.COM

**EASTERN METAL SUPPLY**  
4268 WESTROADS DRIVE  
WEST PALM BEACH, FL 33407  
PH: (800) 432-2204  
3-1/2" POST GLASS RAIL SYSTEM  
WELDED AT BOTTOM

DRWN	CHKD	DATE
JEM	FLB	04/05/16
TAE	AJP	02/16/21

REMARKS  
INIT ISSUE  
FBC 2020 UPDATE

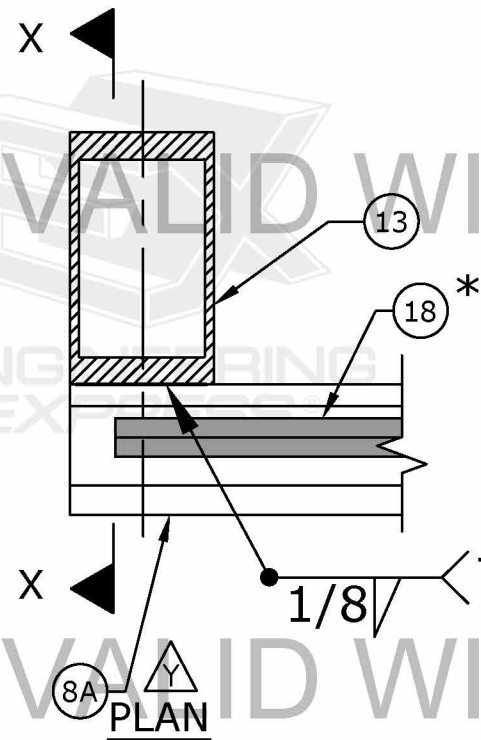
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS,  
AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT  
WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS,  
ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT  
PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®  
21-37035  
SCALE: NTS UNLESS NOTED  
14  
S9



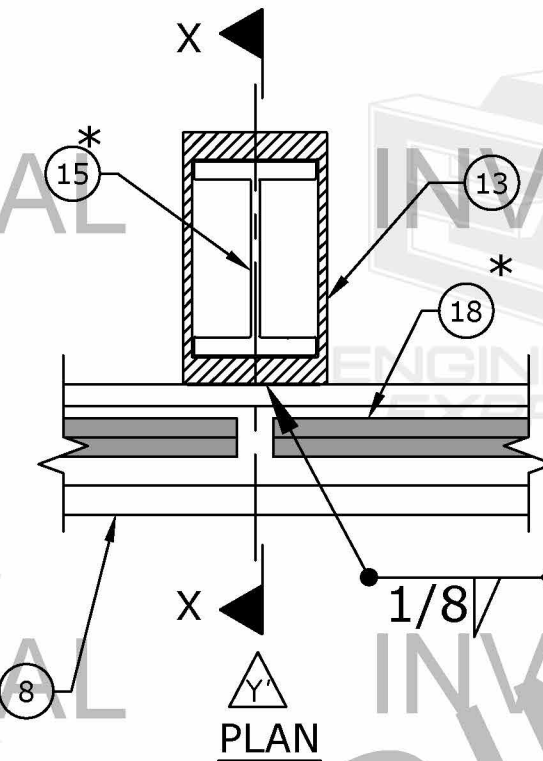
COPIES NOT VALID FOR PERMIT

COPIES NOT VALID FOR PERMIT



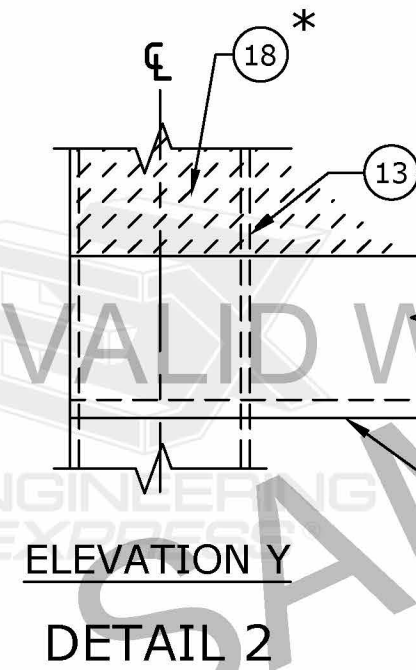
TOP & BOTTOM

PLAN

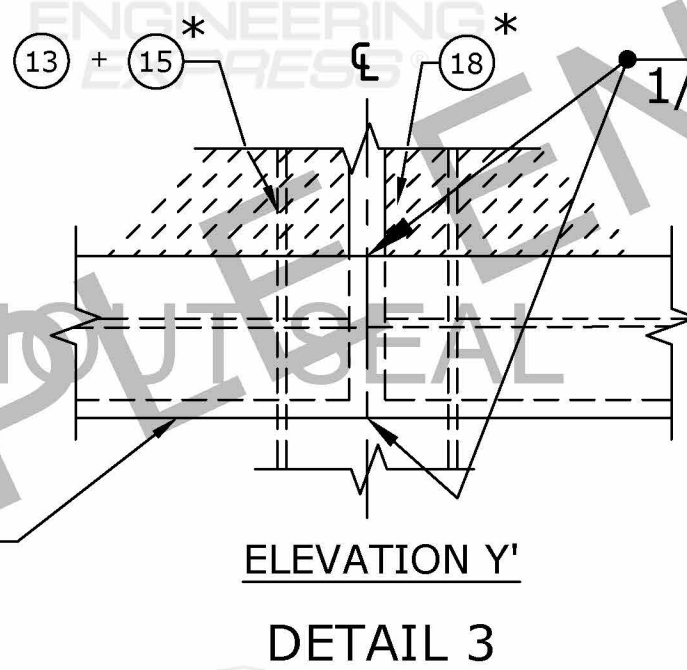


TOP & BOTTOM

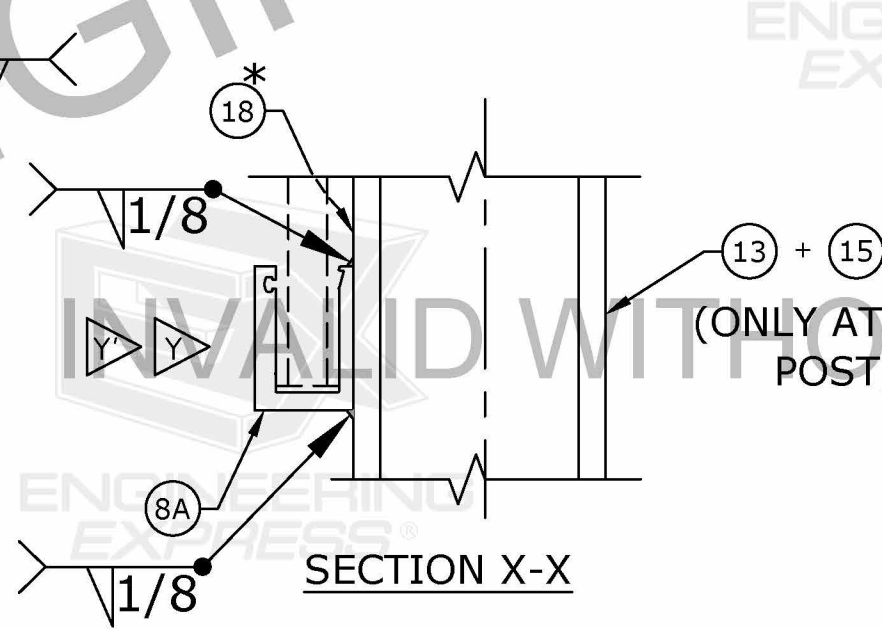
PLAN



ELEVATION Y  
DETAIL 2



ELEVATION Y'  
DETAIL 3



SECTION X-X

**BOTTOM RAIL CONNECTION AT INT./END POST  
(OFFSET GLASS)**

\* SEE SCHEDULE ON SHEET 14.

CERTIFYING ENGINEER AND CERT OF AUTH AS LISTED ON STAMP  
VALID FOR 1 PERMIT ONLY U.N.O

**DIGITAL SEAL NOTICE:**  
IF THIS DOCUMENT IS DIGITALLY SIGNED, THIS SHEET IS PART OF A DIGITALLY SIGNED FILE. IT SHALL REMAIN IN DIGITAL FORMAT, SHALL BE VERIFIED BY ELECTRONIC MEANS, & PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED.  
**PRINTED DOCUMENT NOTICE:**  
IF THIS DOCUMENT IS PRINTED & DOES NOT CONTAIN AN ENGINEER'S ORIGINAL SIGNATURE & SEAL, THIS DOCUMENT IS VOID & NOT VALID FOR USE. PHOTOCOPIES ARE NOT PERMITTED FOR USE.

**ENGINEERING EXPRESS®**  
CORPORATE OFFICE:  
160 SW 12th AVE, SUITE 106  
DEERFIELD BEACH, FL 33442  
(954) 354-0660 | (866) 396-9999  
TEAM@ENGINEERINGEXPRESS.COM  
ENGINEERINGEXPRESS.COM

**EASTERN METAL SUPPLY**  
4268 WESTROADS DRIVE  
WEST PALM BEACH, FL 33407  
PH: (800) 432-2204  
3-1/2" POST GLASS RAIL SYSTEM  
WELDED AT BOTTOM

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	FLB	04/05/16
FBC 2020 UPDATE	TAE	AJP	02/16/21

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS. IT SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

21-37035

SCALE: NTS UNLESS NOTED

S10 OF 14



C:\Users\thayer\Engineering\Express\Production - Documents\Projects\21-37035\3.5' Post Welded Glass Rail System\VP1\Drawings\21-37035\_3.5in\_GRS\_weld.dwg  
thayer  
05/10/2021 - 9:06am

COPIES NOT VALID FOR PERMIT  
COPIES NOT VALID FOR PERMIT

PE SEAL  
REQUIRED

CERTIFYING ENGINEER AND CERT  
OF AUTH AS LISTED ON STAMP  
VALID FOR 1 PERMIT ONLY U.N.O  
**DIGITAL SEAL NOTICE:**  
IF THIS DOCUMENT IS DIGITALLY  
SIGNED, THIS SHEET IS PART OF A  
DIGITALLY SIGNED FILE. IT SHALL  
REMAIN IN DIGITAL FORMAT, SHALL  
BE VERIFIED BY ELECTRONIC MEANS,  
& PRINTED COPIES OF THIS  
DOCUMENT ARE NOT CONSIDERED  
SIGNED AND SEALED.  
**PRINTED DOCUMENT NOTICE:**  
IF THIS DOCUMENT IS PRINTED &  
DOES NOT CONTAIN AN ENGINEER'S  
ORIGINAL SIGNATURE & SEAL, THIS  
DOCUMENT IS VOID & NOT VALID FOR  
USE. PHOTOCOPIES ARE NOT  
PERMITTED FOR USE.

**ENGINEERING  
EXPRESS®**  
CORPORATE OFFICE:  
160 SW 12th AVE, SUITE 106  
DEERFIELD BEACH, FL 33442  
(954) 354-0660 | (866) 396-9999  
TEAM@ENGINEERINGEXPRESS.COM  
ENGINEERINGEXPRESS.COM

**EASTERN METAL SUPPLY**  
4268 WESTROADS DRIVE  
WEST PALM BEACH, FL 33407  
PH: (800) 432-2204  
3-1/2" POST GLASS RAIL SYSTEM  
WELDED AT BOTTOM

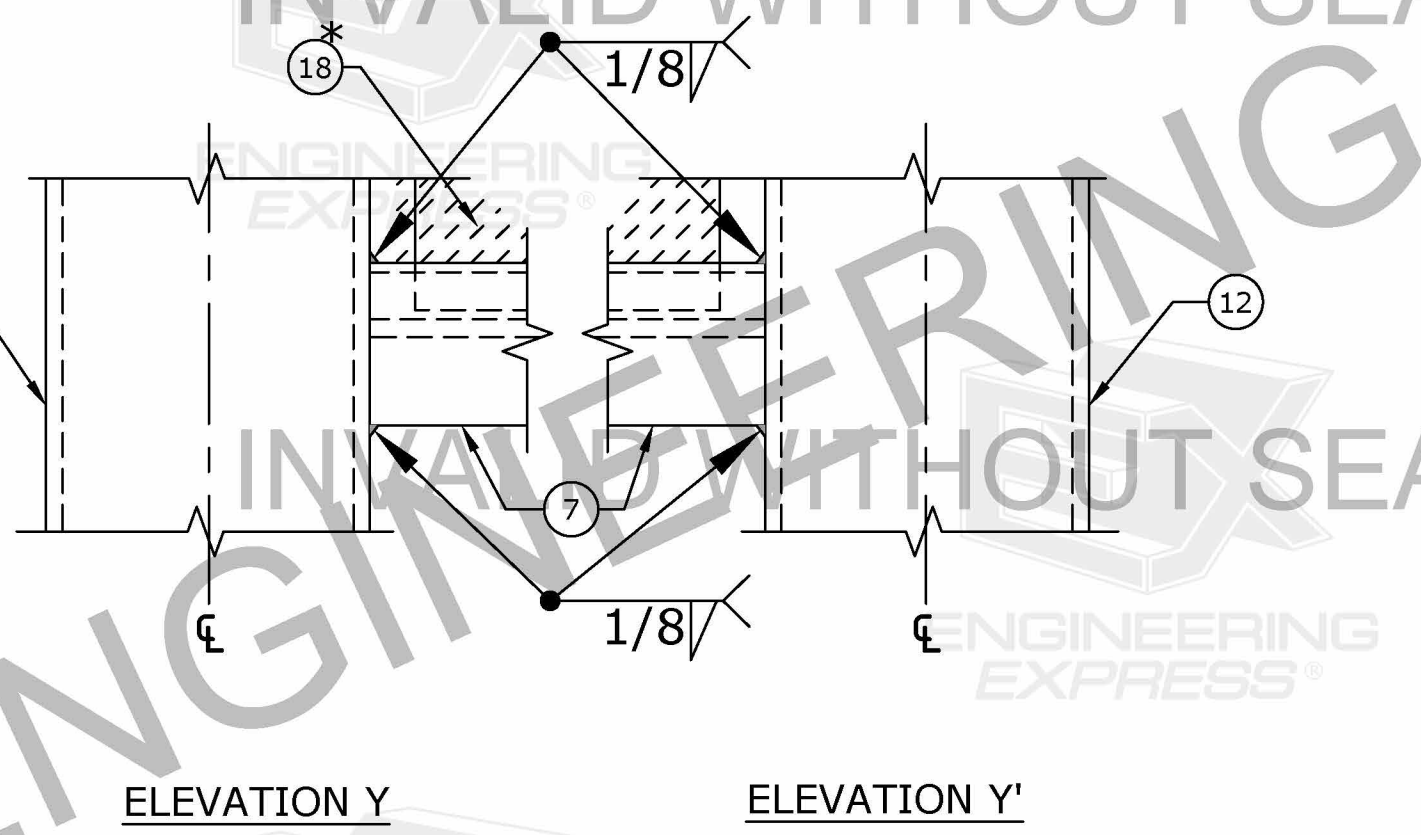
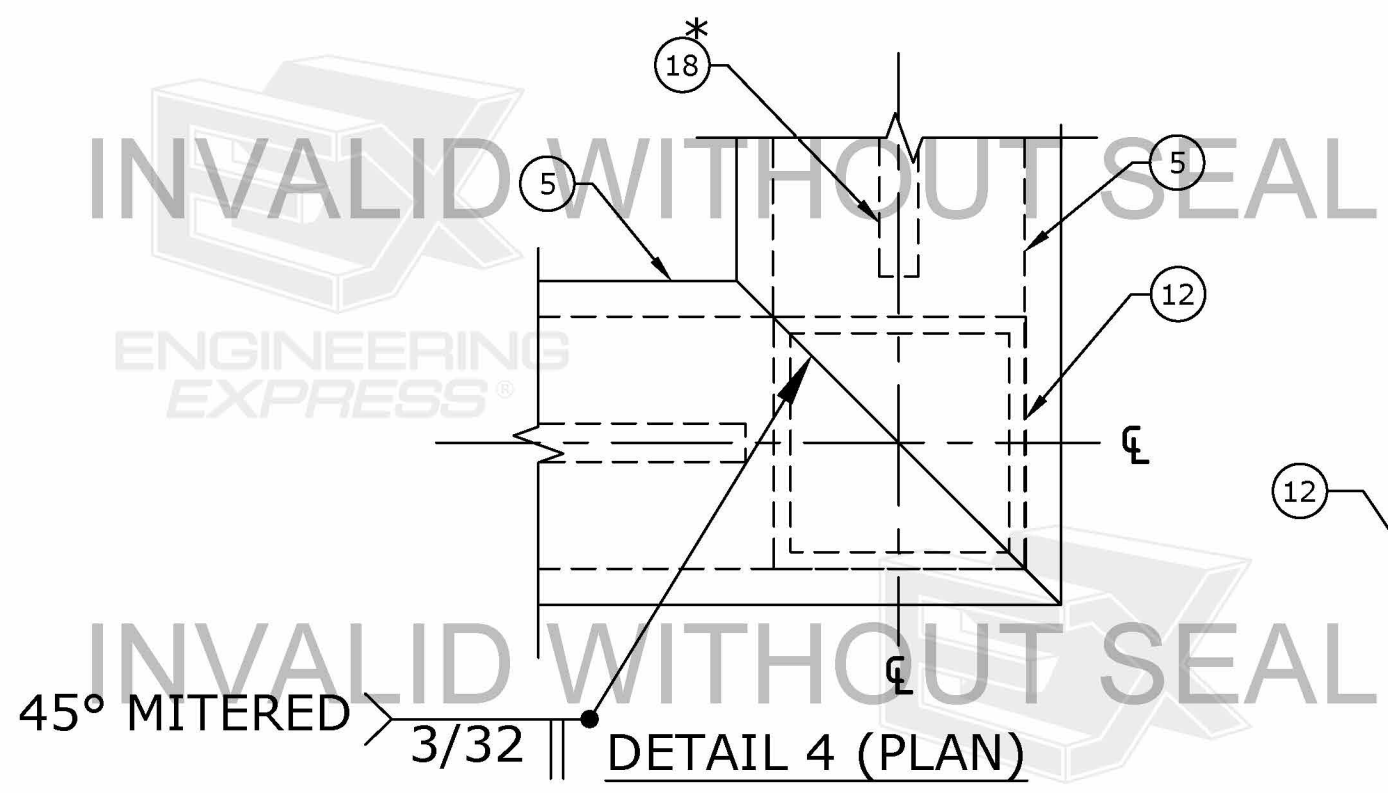
DRWN	CHKD	DATE
JEM	FLB	04/05/16
TAE	AJP	02/16/21

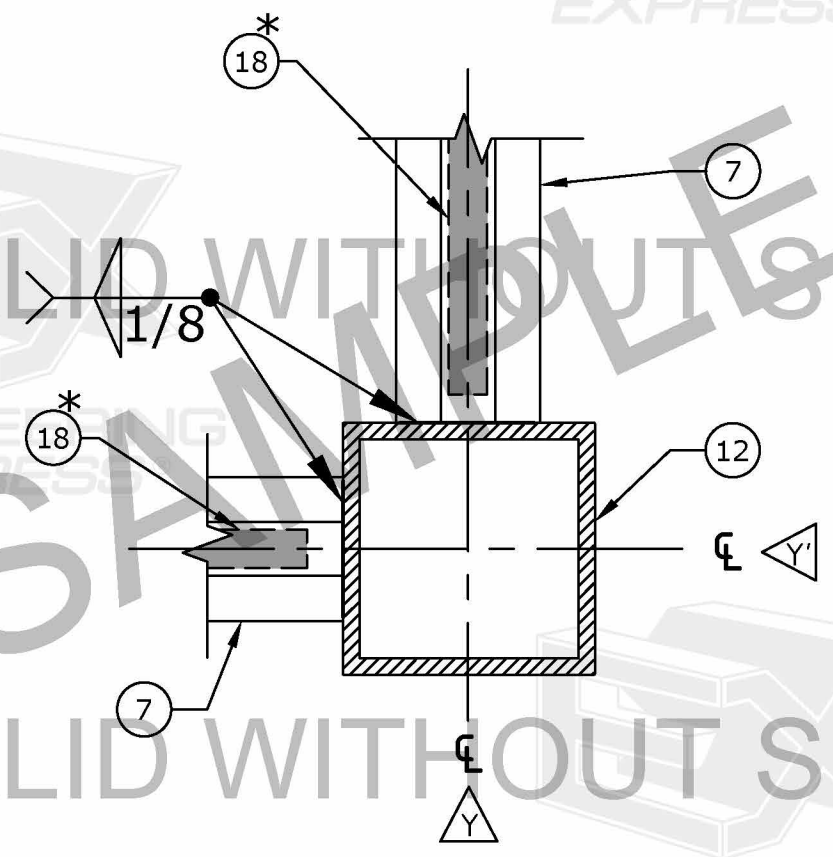
REMARKS	INIT	ISSUE	UPDATE
FBC 2020			

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS.  
AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT  
WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS,  
ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT  
PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®  
21-37035  
SCALE: NTS UNLESS NOTED  
S11 OF 14



BOTTOM RAIL CONNECTION AT CORNER POST  
(CENTERLINE GLASS)



\* SEE SCHEDULE ON SHEET 14.



C:\Users\thayer\Engineering Express\Production - Documents\Projects\21-37035 3.5' Post Welded Glass Rail System\WPDrawings\21-37035 3.5in GRS\_weld.dwg  
 thayer  
 05/10/2021 - 9:06am

COPIES NOT VALID FOR PERMIT  
 COPIES NOT VALID FOR PERMIT

PE SEAL  
 REQUIRED  
 CERTIFYING ENGINEER AND CERT  
 OF AUTH AS LISTED ON STAMP  
 VALID FOR 1 PERMIT ONLY U.N.O

**DIGITAL SEAL NOTICE:**  
 IF THIS DOCUMENT IS DIGITALLY  
 SIGNED, THIS SHEET IS PART OF A  
 DIGITALLY SIGNED FILE. IT SHALL  
 REMAIN IN DIGITAL FORMAT, SHALL  
 BE VERIFIED BY ELECTRONIC MEANS,  
 & PRINTED COPIES OF THIS  
 DOCUMENT ARE NOT CONSIDERED  
 SIGNED AND SEALED.  
**PRINTED DOCUMENT NOTICE:**  
 IF THIS DOCUMENT IS PRINTED &  
 DOES NOT CONTAIN AN ENGINEER'S  
 ORIGINAL SIGNATURE & SEAL, THIS  
 DOCUMENT IS VOID & NOT VALID FOR  
 USE. PHOTOCOPIES ARE NOT  
 PERMITTED FOR USE.

**ENGINEERING EXPRESS®**  
 CORPORATE OFFICE:  
 160 SW 12th AVE, SUITE 106  
 DEERFIELD BEACH, FL 33442  
 (954) 354-0660 | (866) 396-9999  
 TEAM@ENGINEERINGEXPRESS.COM  
 ENGINEERINGEXPRESS.COM

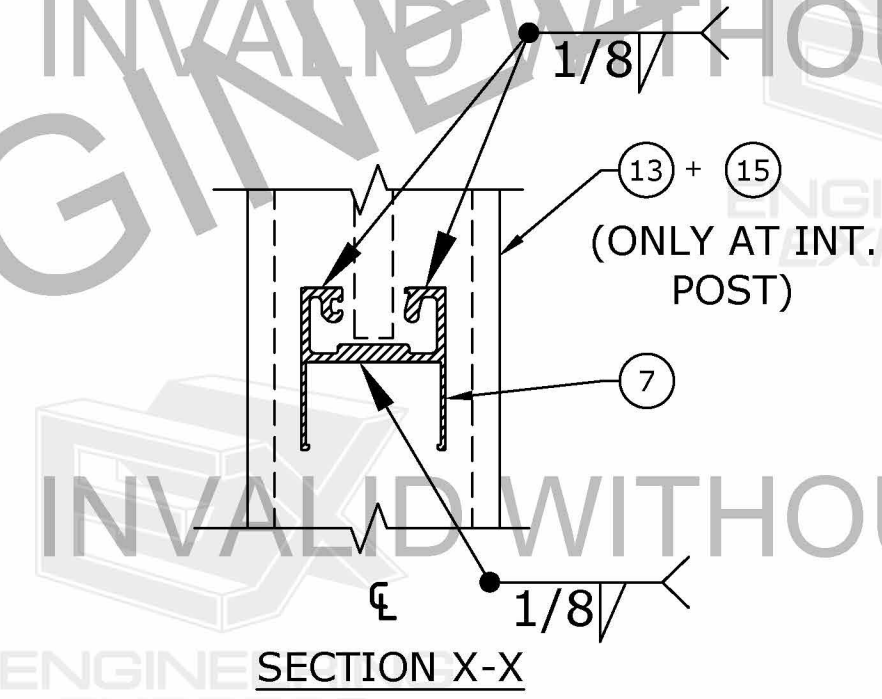
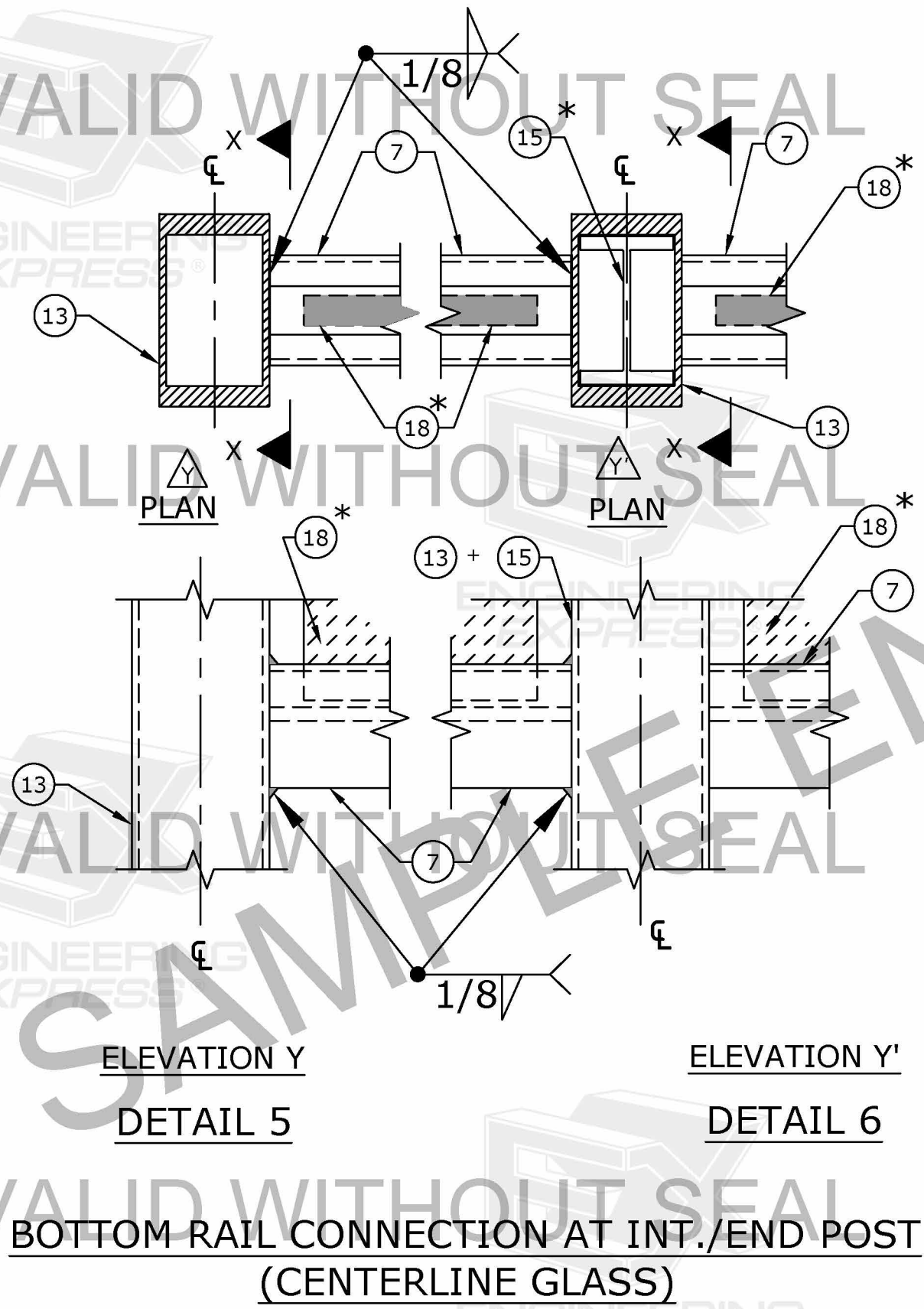
**EASTERN METAL SUPPLY**  
 4268 WESTROADS DRIVE  
 WEST PALM BEACH, FL 33407  
 PH: (800) 432-2204  
 3-1/2" POST GLASS RAIL SYSTEM  
 WELDED AT BOTTOM

DRWN	CHKD	DATE
JEM	FLB	04/05/16
TAE	AJP	02/16/21

REMARKS  
 INIT ISSUE  
 FEB 2020 UPDATE

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS.  
 AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT  
 WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS,  
 ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT  
 PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®  
 21-37035  
 SCALE: NTS UNLESS NOTED  
 S12 OF 14



BOTTOM RAIL CONNECTION AT INT./END POST  
(CENTERLINE GLASS)

\* SEE SCHEDULE ON SHEET 14.



COPIES NOT VALID FOR PERMIT

COPIES NOT VALID FOR PERMIT

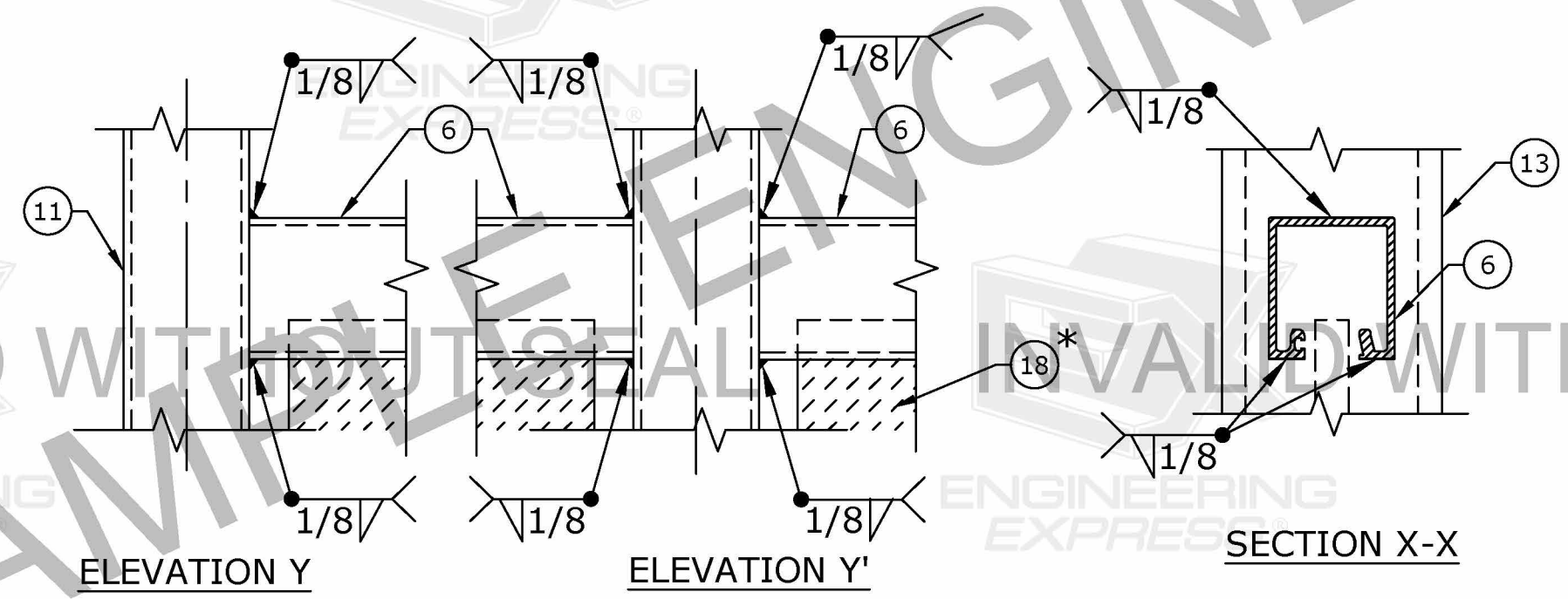
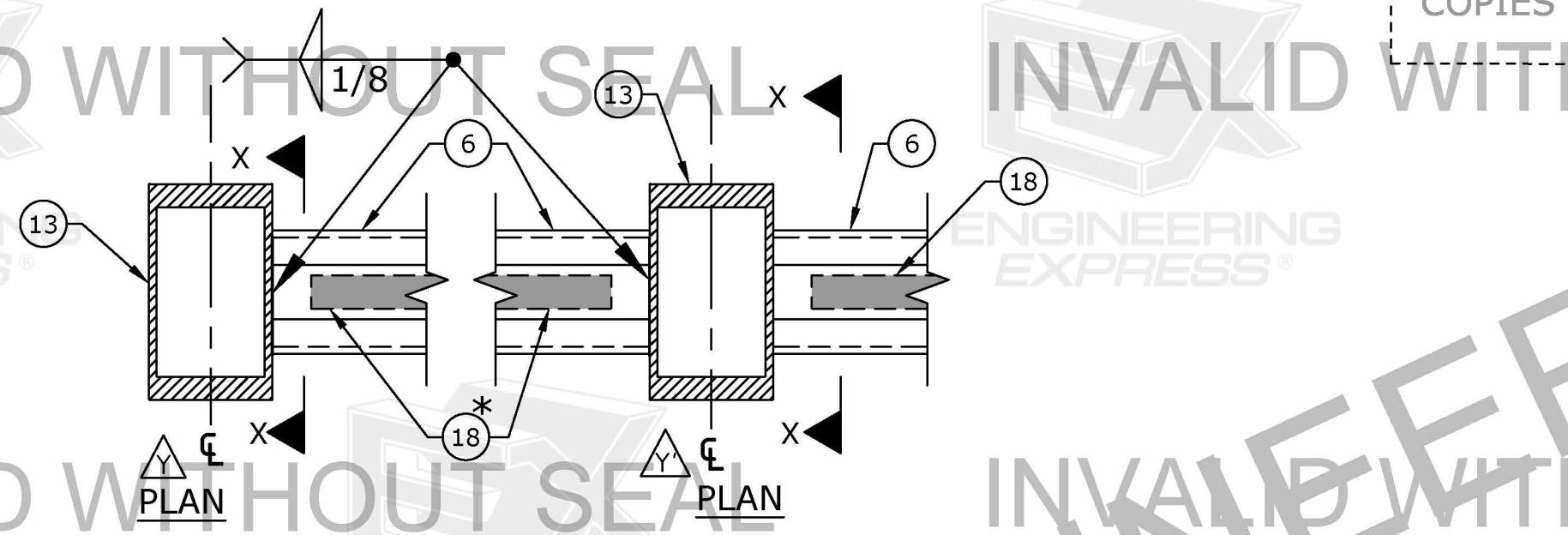
PE SEAL  
REQUIRED

CERTIFYING ENGINEER AND CERT  
OF AUTH AS LISTED ON STAMP  
VALID FOR 1 PERMIT ONLY U.N.O.

**DIGITAL SEAL NOTICE:**  
IF THIS DOCUMENT IS DIGITALLY  
SIGNED, THIS SHEET IS PART OF A  
DIGITALLY SIGNED FILE. IT SHALL  
REMAIN IN DIGITAL FORMAT, SHALL  
BE VERIFIED BY ELECTRONIC MEANS,  
& PRINTED COPIES OF THIS  
DOCUMENT ARE NOT CONSIDERED  
SIGNED AND SEALED.

**PRINTED DOCUMENT NOTICE:**  
IF THIS DOCUMENT IS PRINTED &  
DOES NOT CONTAIN AN ENGINEER'S  
ORIGINAL SIGNATURE & SEAL, THIS  
DOCUMENT IS VOID & NOT VALID FOR  
USE. PHOTOCOPIES ARE NOT  
PERMITTED FOR USE.

**ENGINEERING  
EXPRESS®**  
CORPORATE OFFICE:  
160 SW 12th AVE, SUITE 106  
DEERFIELD BEACH, FL 33442  
(954) 354-0660 | (866) 396-9999  
TEAM@ENGINEERINGEXPRESS.COM  
ENGINEERINGEXPRESS.COM



**DETAIL 7**  
**INTERMEDIATE RAIL CONNECTION**  
**(CENTERLINE GLASS)**

\* SEE SCHEDULE ON SHEET 14.

**EASTERN METAL SUPPLY**  
4268 WESTROADS DRIVE  
WEST PALM BEACH, FL 33407  
PH: (800) 432-2204  
3-1/2" POST GLASS RAIL SYSTEM  
WELDED AT BOTTOM

DRWN	CHKD	DATE
JEM	FLB	04/05/16
TAE	AJP	02/16/21

REMARKS  
INIT ISSUE  
FBC 2020 UPDATE

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS,  
AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT  
WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS,  
ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT  
PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®  
21-37035

SCALE: NTS UNLESS NOTED

S13 OF 14

C:\Users\thayer\Engineering\Express\Production - Documents\Projects\21-37035\3.5' Post Welded Glass Rail System\WP\Drawings\21-37035 3.5in GRS\_weld.dwg  
thayer  
05/10/2021 - 9:06am



COPIES NOT VALID FOR PERMIT

COPIES NOT VALID FOR PERMIT

INVALID WITHOUT SEAL

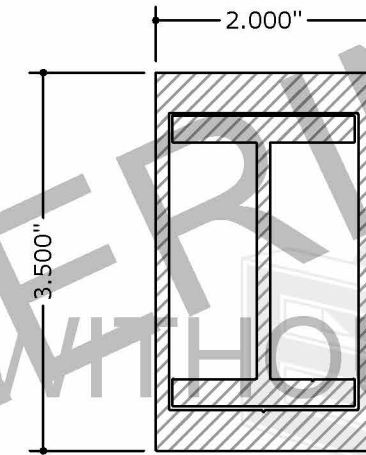
INVALID WITHOUT SEAL

PE SEAL  
REQUIRED

CERTIFYING ENGINEER AND CERT  
OF AUTH AS LISTED ON STAMP  
VALID FOR 1 PERMIT ONLY U.N.O.

**DIGITAL SEAL NOTICE:**  
IF THIS DOCUMENT IS DIGITALLY  
SIGNED, THIS SHEET IS PART OF A  
DIGITALLY SIGNED FILE. IT SHALL  
REMAIN IN DIGITAL FORMAT, SHALL  
BE VERIFIED BY ELECTRONIC MEANS,  
& PRINTED COPIES OF THIS  
DOCUMENT ARE NOT CONSIDERED  
SIGNED AND SEALED.  
**PRINTED DOCUMENT NOTICE:**  
IF THIS DOCUMENT IS PRINTED &  
DOES NOT CONTAIN AN ENGINEER'S  
ORIGINAL SIGNATURE & SEAL, THIS  
DOCUMENT IS VOID & NOT VALID FOR  
USE. PHOTOCOPIES ARE NOT  
PERMITTED FOR USE.

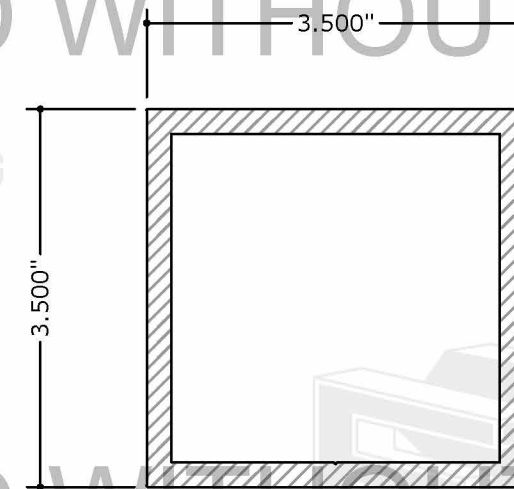
MAX. ASD DESIGN PRESSURE RATING	REQ'D INTERIOR & END POST	REQ'D HOLE FOR POST AT CONCRETE		REQ'D GLASS	MAX. POST SPACING	E.D.
		f'c=3 Ksi	f'c=6 Ksi			
+ 90,-90 psf OR LESS	F, G	D=6"Ø d=5 1/2"	D=6"Ø d=4 1/2"	18	48"	6"
	F, G	D=6"Ø d=5"	D=6"Ø d=4"	18	42"	6"
	F, G	D=6"Ø d=4 3/4"	D=6"Ø d=4"	18	36"	6"
+ 91,-91 psf TO + 120, -120 psf	F, G	D=6"Ø d=6 1/2"	D=6"Ø d=5"	18	48"	6"
	F, G	D=6"Ø d=6"	D=6"Ø d=4 3/4"	18	42"	6"
	F, G	D=6"Ø d=5 1/2"	D=6"Ø d=4 1/4"	18	36"	6"



⑬ 3 1/2" BASIC  
INTERIOR END POST  
6005-T5 ALLOY  
28-60-760  
K-FH08966

⑮ 3 1/2" POST 12  
INSERT  
6005-T5 ALLOY  
28-60-745  
K-FS08968

POST F



⑫ 3 1/2" CORNER POST  
6005-T5 ALLOY  
28-60-765  
K-FH08965

POST G

**ENGINEERING EXPRESS**  
CORPORATE OFFICE:  
160 SW 12th AVE, SUITE 106  
DEERFIELD BEACH, FL 33442  
(954) 354-0660 | (866) 396-9999  
TEAM@ENGINEERINGEXPRESS.COM  
ENGINEERINGEXPRESS.COM

**EASTERN METAL SUPPLY**  
4268 WESTROADS DRIVE  
WEST PALM BEACH, FL 33407  
PH: (800) 432-2204  
3-1/2" POST GLASS RAIL SYSTEM  
WELDED AT BOTTOM

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	FLB	04/05/16
FBC 2020 UPDATE	TAE	AJP	02/16/21

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS.  
AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT  
WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS,  
ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT  
PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®  
21-37035

SCALE: NTS UNLESS NOTED

S14 14

C:\Users\thayer\Engineering\Express\Production - Documents\Projects\21-37035 3.5" Post Welded Glass Rail System\WP\Drawings\21-37035 3.5in GRS\_weld.dwg  
thayer  
05/10/2021 - 9:06am