

GENERAL NOTES:

1. ALL FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
2. OPENINGS, BLOCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. THESE NON-IMPACT RATED PRODUCT INSTALLATIONS ARE IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC).
4. ALL ANCHORS SECURING PRODUCT FRAMES TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
5. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE CHAPTER 20.
6. TO THE BEST OF OUR KNOWLEDGE, THE PRODUCT SHOWN HEREIN IS CERTIFIED & QUALITY ASSURED BY A FLORIDA STATE APPROVED CERTIFICATION/QA ENTITY & SHALL BE LABELED IN ACCORDANCE WITH THE FBC AND THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION SPECIFICATIONS. PRODUCT ASSEMBLY IS NOT PART OF THIS DRAWING AND SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S QUALITY ASSURANCE SPECIFICATIONS & TESTING REPORTS.
7. CERTIFICATION OF THESE PRODUCT INSTALLATIONS SHALL BE CONSIDERED VOID IF ANY OF THE FOLLOWING APPLY: 1) PRODUCT IS INSTALLED WITHOUT A BUILDING PERMIT FROM THE APPLICABLE LOCAL BUILDING DEPARTMENT. 2) PRODUCT IS INSTALLED BY ANYONE OTHER THAN A LICENSED CONTRACTOR EXPERIENCED WITH INSTALLATIONS OF THIS TYPE OF PRODUCT. 3) IF CHANGES HAVE OCCURRED TO THE PRODUCT'S CERTIFICATION ENTITY'S CERTIFICATE THAT CAUSE THESE INSTALLATIONS TO BE INCORRECT OR INCONSISTENT WITH WHAT HAS BEEN TESTED.
8. THE LEAST DESIGN PRESSURE SPECIFIED EITHER IN THIS DRAWING OR IN THE PRODUCTS CERTIFICATION SHALL CONTROL FOR THE INSTALLED PRODUCT.
9. THESE DRAWINGS CERTIFY THE PRODUCT INSTALLATION ONLY. WATER PROOFING OF THE INSTALLED PRODUCT IS NOT PART OF THIS INSTALLATION CERTIFICATION. THAT RESPONSIBILITY SHALL BE THAT OF THE MANUFACTURER &/OR INSTALLER.

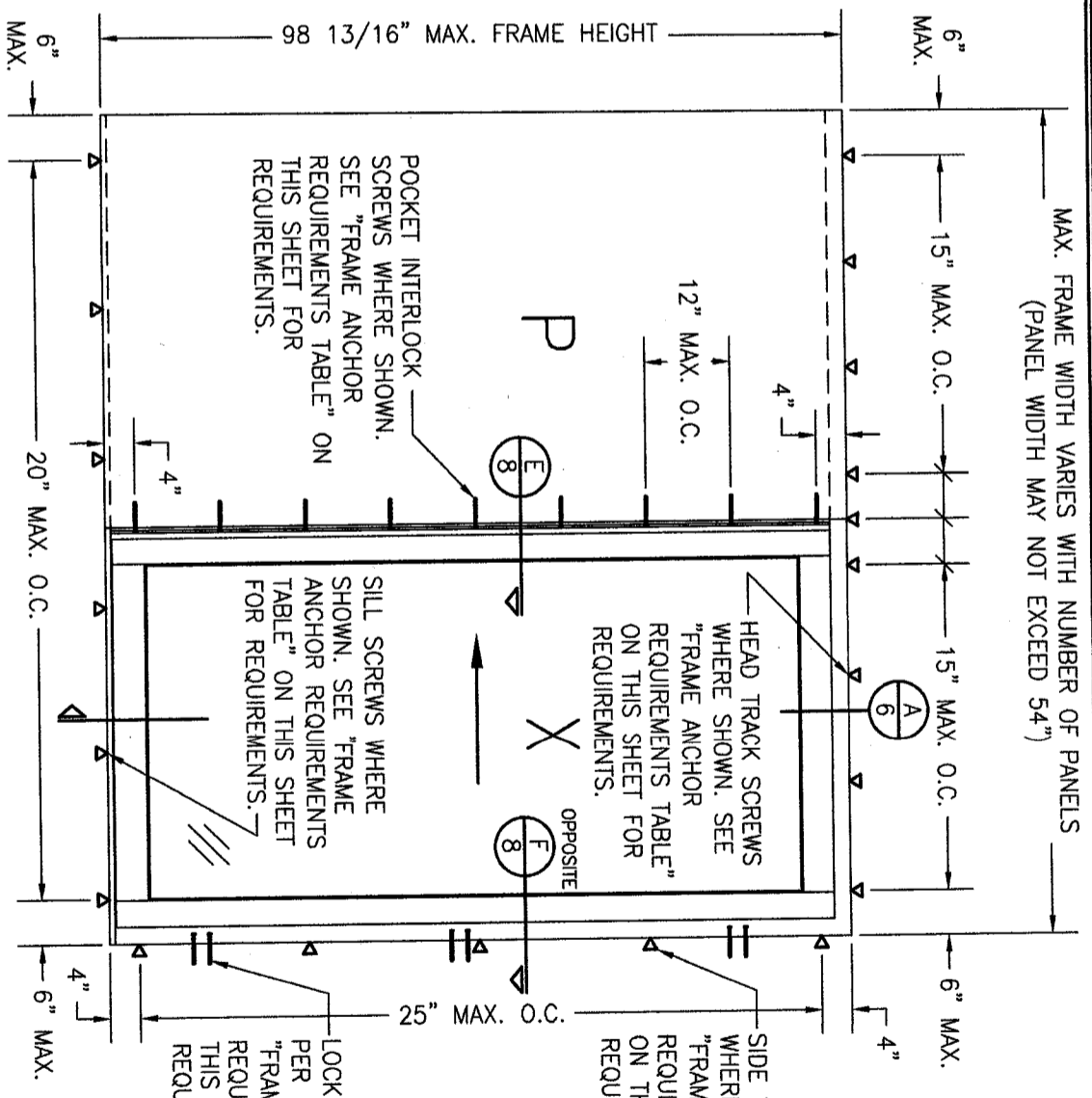
INSTALLATION EVALUATION IS BASED ON APPLICABLE ANCHOR STANDARDS AND/OR INFORMATION & RESULTS FROM APPLICABLE TEST REPORTS. THE FLORIDA BUILDING CODE VERSION CONSIDERED WITH THE EVALUATION WAS THAT IN FORCE AT THE TIME OF THE EVALUATION. IN THE EVENT OF CODE VERSION CHANGES/UPDATES OR IN THE EVENT THAT NEW OR ADDITIONAL TESTING IS COMPLETED ON THE REFERENCED PRODUCT, PRIOR TO STATING CODE COMPLIANCE WITH THE STATE, THE MANUFACTURER SHALL CONFIRM WITH THE INSTALLATION EVALUATION ENGINEER OF RECORD THAT THE INSTALLATIONS SPECIFIED HERE-IN ARE CURRENT WITH THE THEN CURRENT TESTING, CODE AND APPLICABLE STANDARDS.

ANCHOR/SUBSTRATE EVALUATION NOTE:
ALL ANCHORS IN THEIR SPECIFIED SUBSTRATES HAVE BEEN ANALYZED IN ACCORDANCE WITH THEIR APPLICABLE STANDARD(S) AND ARE FOUND TO BE CAPABLE OF SUPPORTING ALL LOADS IMPOSED ON THEM UNDER THE GUIDELINES OF THIS DOCUMENT. ANY SUBSTRATES OR CONDITIONS OUTSIDE OF WHAT IS SHOWN HERE-IN SHALL BE SUBJECT TO JOB SPECIFIC ENGINEER'S REVIEW & CERTIFICATION.

FRAME ANCHOR REQUIREMENTS TABLE

| (2) OPENING TYPE (SUBSTRATE) | FRAME/CLIP TO OPENING FASTENER TYPE | MINIMUM | MINIMUM |
|--|-------------------------------------|---------|------------|
| | | EMBED | EDGE DIST. |
| LOCKING LUG & JAMB JACK SCREWS | | | |
| (4) MIN. 2X WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55) | NO. 10 SMS OR WOOD SCREW | 1 1/4" | 3/4" |
| (4) MIN. 16 GA. 50 KSI METAL STUD | NO. 10 GR. 5 SELF TAP/DRILL SCREW | FULL | 1/2" |
| MIN. 1/8" THK A36 STEEL | NO. 10 GR. 5 SELF TAP/DRILL SCREW | FULL | 1/2" |
| MIN. 1/8" THK 6063-T5 ALUM. | NO. 10 GR. 5 SELF TAP/DRILL SCREW | FULL | 1/2" |
| (3) MIN. C-90 CMU OR 2500 PSI CONCRETE | (1) 3/16" CONCRETE SCREW | 1 1/2" | 2" |
| HEAD TRACK, SIDE TRACK & SILL SCREWS | | | |
| (4) MIN. 2X WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55) | 1/4" LAG OR NO. 14 SMS SCREW | 1 3/8" | 3/4" |
| (4) MIN. 16 GA. 50 KSI METAL STUD | 1/4" GR. 5 SELF TAP/DRILL SCREW | FULL | 1/2" |
| MIN. 1/8" THK A36 STEEL | 1/4" GR. 5 SELF TAP/DRILL SCREW | FULL | 3/4" |
| MIN. 1/4" THK 6063-T5 ALUM. | 1/4" GR. 5 SELF TAP/DRILL SCREW | FULL | 3/4" |
| MIN. 3000 PSI CONCRETE | (1) 1/4" HEX HEAD CONCRETE SCREW | 1 1/2" | 2" |
| POCKET INTERLOCK SCREWS | | | |
| (4) MIN. 2X WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55) | NO. 8 SMS OR WOOD SCREW | 1 1/2" | N/A |
| MIN. 1/8" THK A36 STEEL | NO. 8 GR. 5 SELF TAP/DRILL SCREW | FULL | 1/2" |
| MIN. 1/8" THK 6063-T5 ALUM. | NO. 8 GR. 5 SELF TAP/DRILL SCREW | FULL | 1/2" |

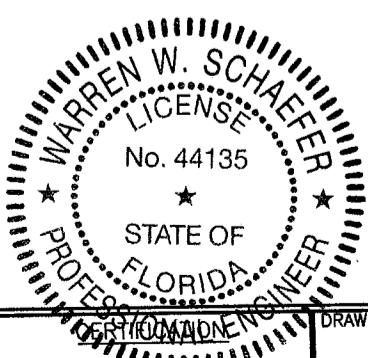
- (1) CONCRETE SCREWS SHALL BE ELO ULTRACONS (C.S.), ELO CRETE-FLEX (S.S.), TM RAMSET/RED HEAD TAPCONS (C.S. OR S.S.) OR HILTI KMK-CON II (C.S. OR S.S.).
- (2) OR GREATER PANEL DEEP FRAMES AND SILLS SHALL HAVE FULL BEARING ON ALL SUBSTRATES MINUS NO MORE THAN 3/4" AT EITHER THE INSIDE OR OUTSIDE EDGE. SINGLE PANEL DEEP FRAMES & SILLS MUST HAVE FULL BEARING MINUS NO MORE THAN 1/4" AT THE EXTERIOR EDGE.
- (3) CMU SHALL BE CONCRETE FILLED AND IS APPLICABLE AT THE SIDES ONLY.
- (4) WOOD AND METAL STUD SUBSTRATES SHALL NOT BE LESS THAN 3 1/2" DEEP.



PX SINGLE PANEL DEEP DOOR

SCALE: 1/2" = 1'-0"
PX DOOR SHOWN. SEE CONFIGURATIONS ON SHEET 5 FOR OTHER APPLICABLE SINGLE PANEL DEEP CONFIGURATIONS.

| ALLOWABLE DESIGN PRESSURE | |
|----------------------------|-----------|
| 1-PANEL DEEP DOORS | +/-40 PSF |
| 2 OR MORE PANEL DEEP DOORS | +/-35 PSF |



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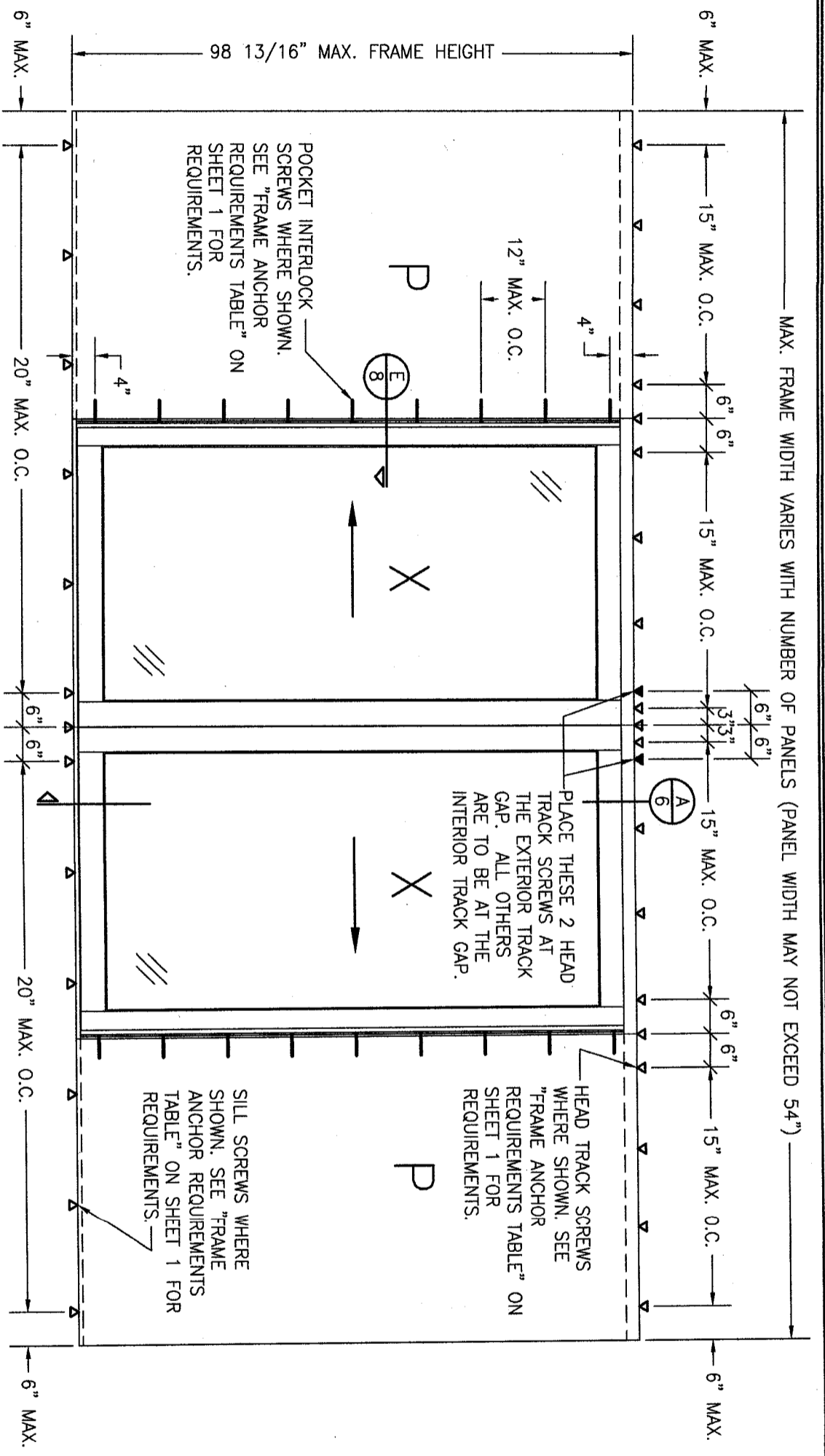
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

| | |
|---|---|
| DRAWING TITLE ULTRA TERRA SPAN LIFT & SLIDE NON-IMPACT DOORS | |
| CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-744-3424 | MANUFACTURER KOLBE & KOLBE MILLWORK CO., INC. 1323 SOUTH 11TH AVE. WAUSAU, WI 54401 715-842-5666 |

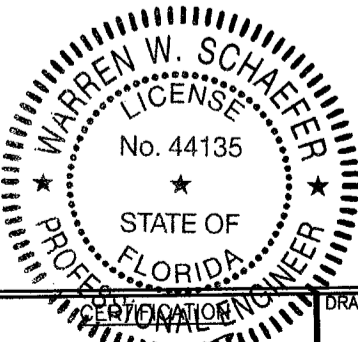
| NO. | REVISION DESCRIPTION | BY | DATE |
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| A1 | UPDATE TO CURENT STANDARDS | W.W.S. | 10/13/22 |

THESE DRAWINGS ARE APPLICABLE ONLY TO THE PRODUCT SPECIFIED. THEY MAY NOT BE USED FOR THE ASSEMBLY AND/OR INSTALLATION OF ANY OTHER PRODUCT NOR MAY THEY BE USED FOR RATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

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| DRAWING NO. | 1890 |
| SHEET NO. | 1 OF 9 |

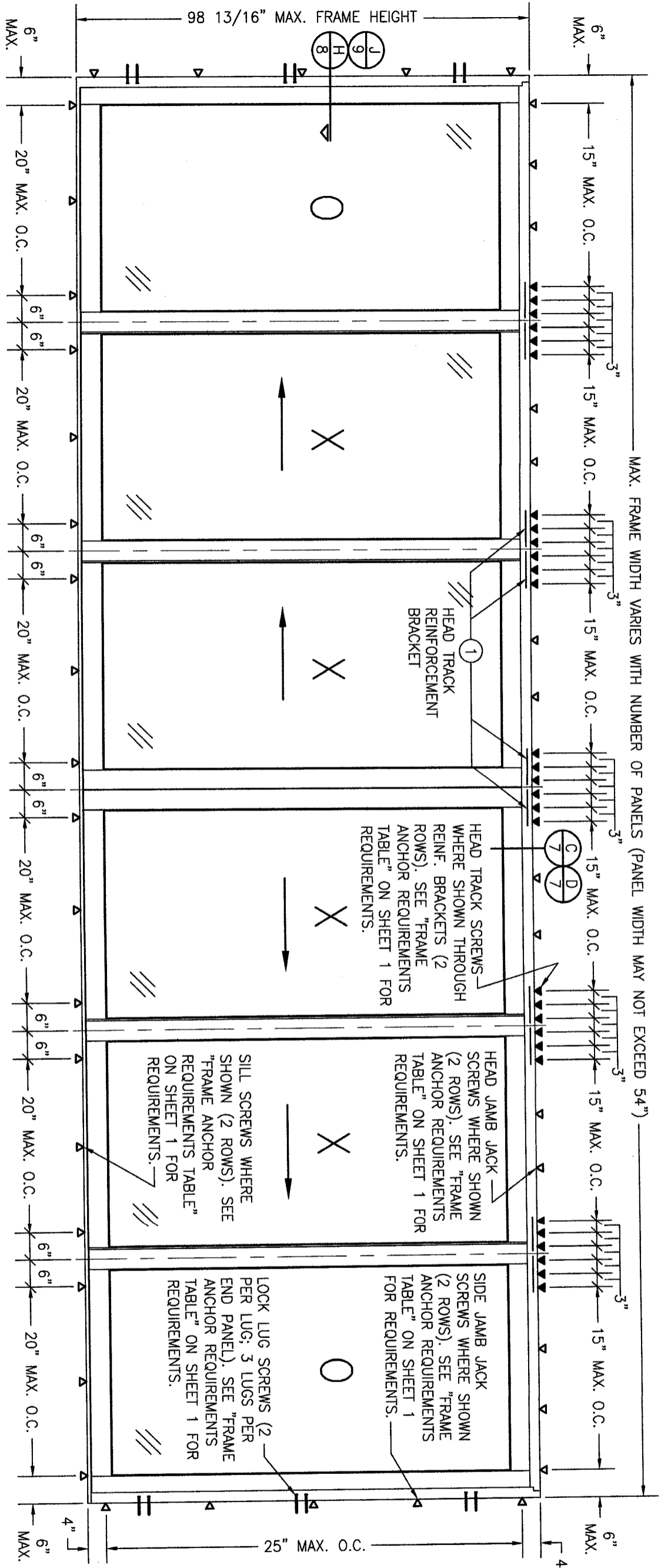


PXXP SINGLE PANEL DEEP DOOR
 SCALE: 1/2" = 1'-0"
 PXXP DOOR SHOWN. SEE CONFIGURATIONS ON SHEET 5 FOR OTHER APPLICABLE SINGLE PANEL DEEP CONFIGURATIONS.



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|----------------------------|------------------|-----------------------------------|---|---|-----|----------------------|----|------|---------------------|-----------------------|
| DRAWING NO. 1890 | REV. A | SHEET NO. 2 OF 9 | DRAWING TITLE ULTRA TERRA SPAN LIFT & SLIDE NON-IMPACT DOORS | | NO. | REVISION DESCRIPTION | BY | DATE | DRAWN BY: W.W.S. | CHECKED BY: W.W.S. |
| | | | CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-744-3424 | MANUFACTURER KOLBE & KOLBE MILLWORK CO., INC. 1323 SOUTH 11TH AVE. WAUSAU, WI 54401 715-842-5666 | | | | | DATE: 09/08/14 | |

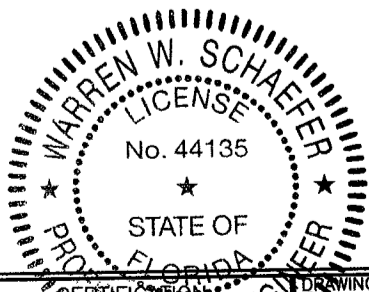
WARREN W. SCHAEFER, P.E.
 P.E. NO. 44135



OXXXXXO 3-PANEL DEEP DOOR
 SCALE: 1/2" = 1'-0"
 OXXXXXO DOOR SHOWN. SEE CONFIGURATIONS ON SHEET 5 FOR OTHER APPLICABLE 3-PANEL DEEP CONFIGURATIONS.

SEE OXXXXXO 3-PANEL DEEP DOOR ELEVATION ABOVE FOR ALL DETAIL & REQUIREMENTS. OXXXXXO 4-PANEL DEEP DOOR IS THE SAME EXCEPT THAT THE NUMBER OF HEAD TRACK SCREW ROWS AT THE HEAD IS 3 VS. 2. SEE SECTIONS D/7 & J/9 FOR 4-PANEL DEEP DOOR INSTALLATION REQUIREMENTS.

OXXXXXO 4-PANEL DEEP DOOR
 SCALE: 1/2" = 1'-0"
 OXXXXXO DOOR SPECIFIED. SEE CONFIGURATIONS ON SHEET 5 FOR OTHER APPLICABLE 4-PANEL DEEP CONFIGURATIONS.



DRAWING TITLE: **ULTRA TERRA SPAN LIFT & SLIDE NON-IMPACT DOORS**

CONSULTANTS: **W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)**
 26376 NADIR ROAD; UNIT 309
 PUNTA GORDA, FL 33983
 PHONE: 561-744-3424

MANUFACTURER: **KOLBE & KOLBE MILLWORK CO., INC.**
 1323 SOUTH 11TH AVE.
 WAUSAU, WI 54401
 715-842-5666

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DRAWING NO. **1890**
 REV. **A**
 SHEET NO. **4** OF **9**

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 P.E. NO. 44135

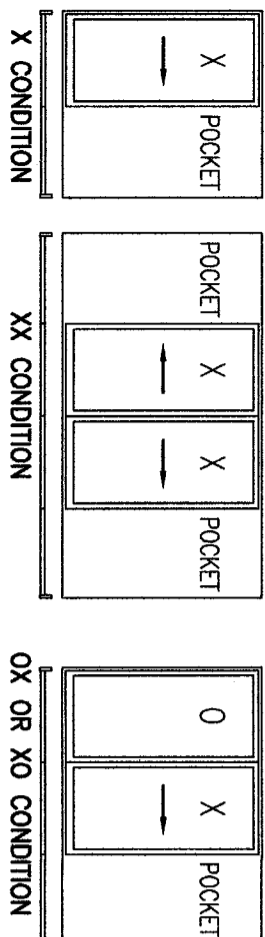
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 DATE: 09/08/14

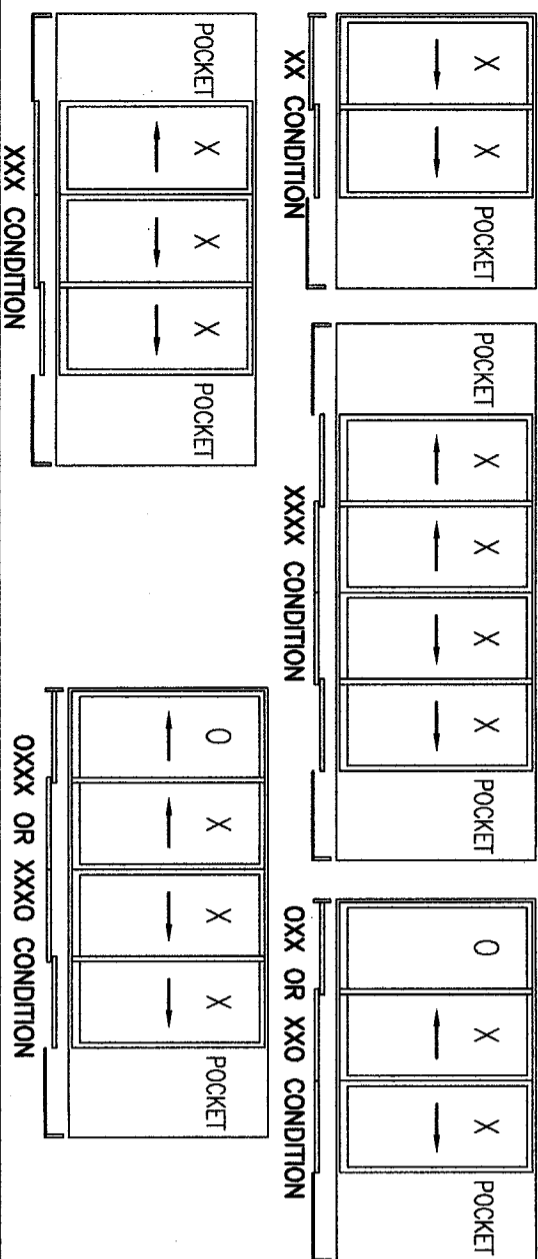
APPROVED CONFIGURATIONS

CONFIGURATIONS WITH POCKETS

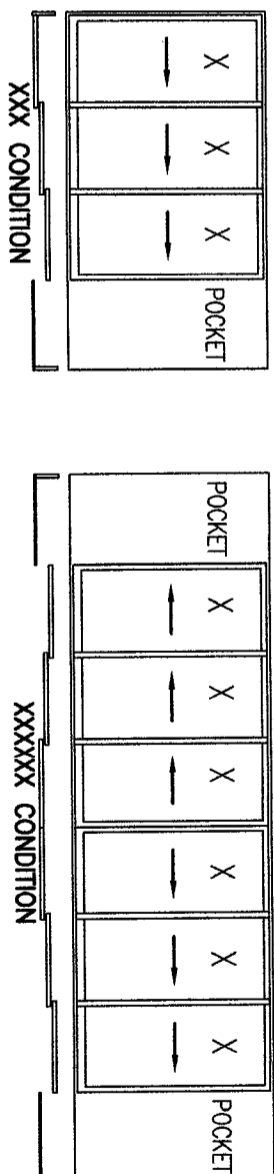
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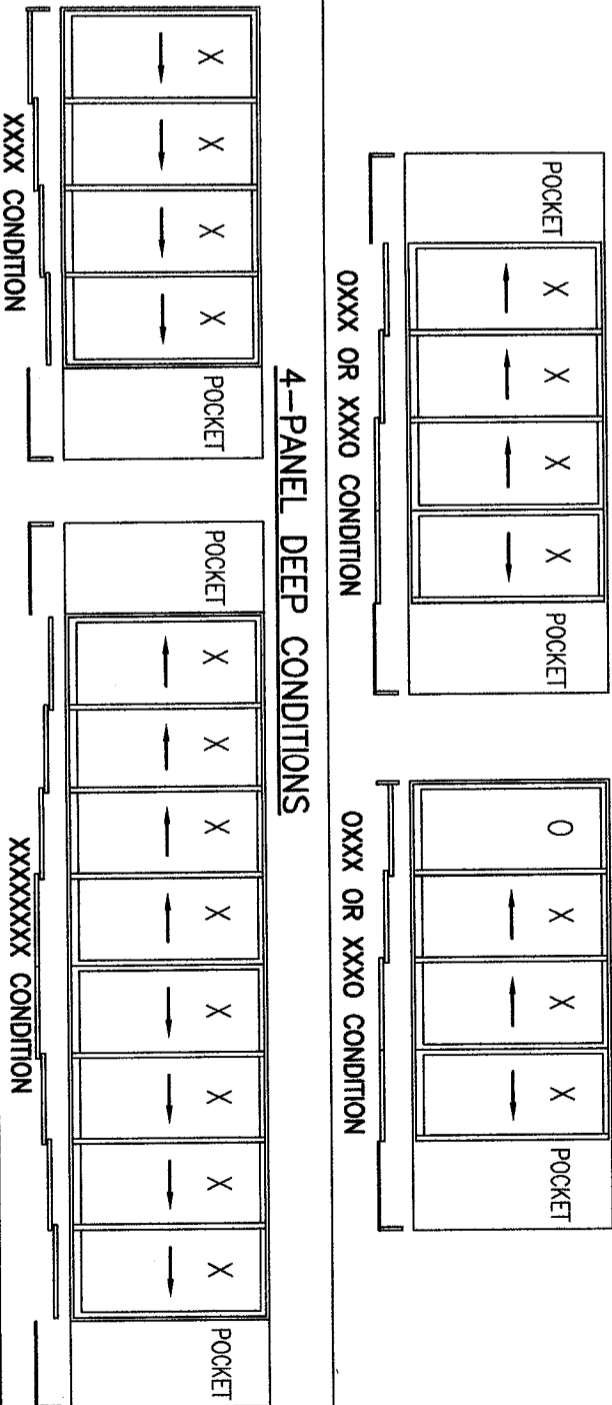
2-PANEL DEEP CONDITIONS



3-PANEL DEEP CONDITIONS

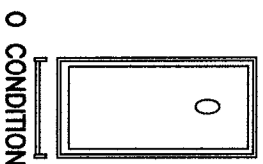


4-PANEL DEEP CONDITIONS

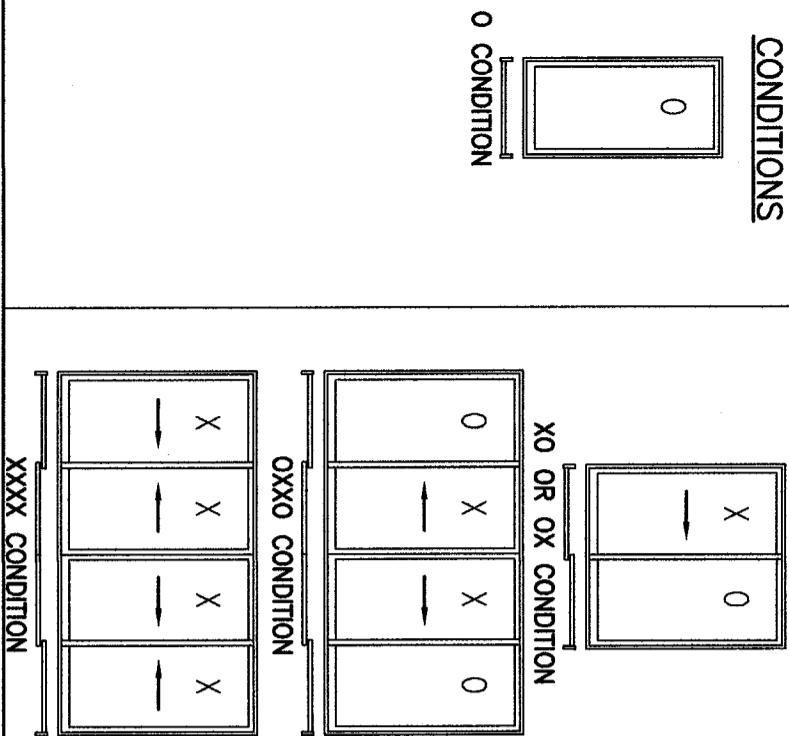


CONFIGURATIONS WITHOUT POCKETS

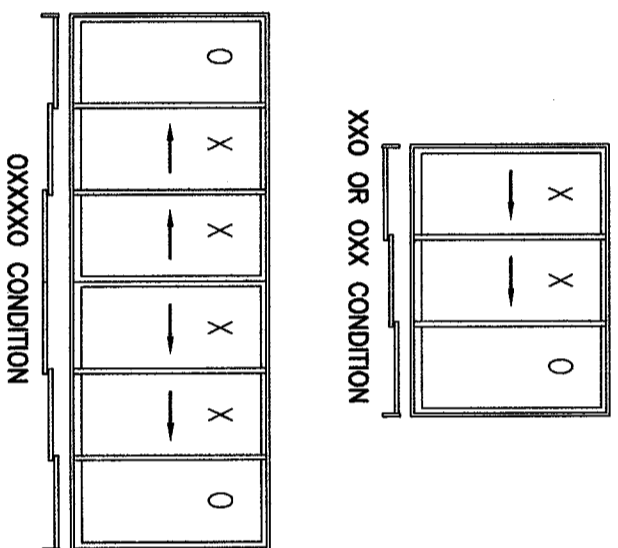
1-PANEL DEEP CONDITIONS



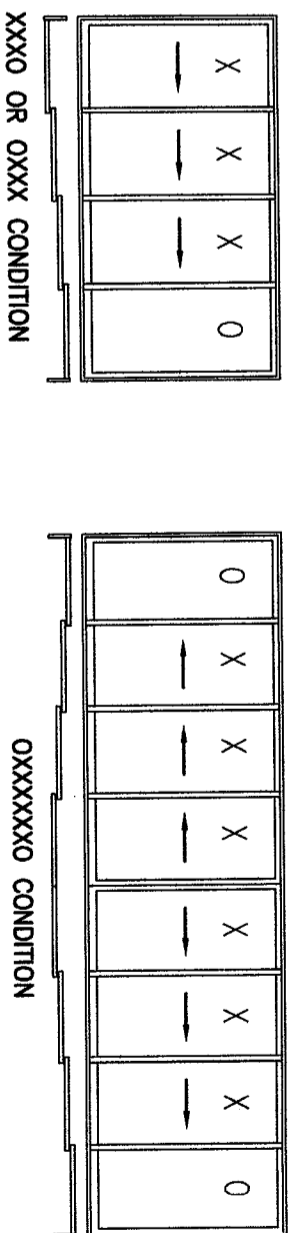
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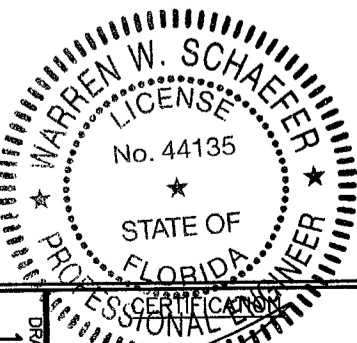
3-PANEL DEEP CONDITIONS



4-PANEL DEEP CONDITIONS



NOTE: WHILE ONLY UP TO 4-PANEL DEEP DOORS ARE SHOWN, MORE THAN 4-PANEL DEEP DOORS MAY APPLY PROVIDING THE DOORS ARE REVIEWED AND CERTIFIED BY A FLORIDA CERTIFIED ENGINEER FOR JOB SPECIFIC USE. IT SHALL BE NOTED THAT ADDITIONAL ROWS OF FRAME ANCHORS MAY BE REQUIRED OVER AND ABOVE THOSE SPECIFIED FOR A 4-PANEL DEEP DOOR.



OCT 13 2022

DRAWING TITLE
ULTRA TERRA SPAN LIFT & SLIDE NON-IMPACT DOORS

CONSULTANTS
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26376 NADIR ROAD, UNIT 309
PUNTA GORDA, FL 33983
PHONE: 561-744-3424

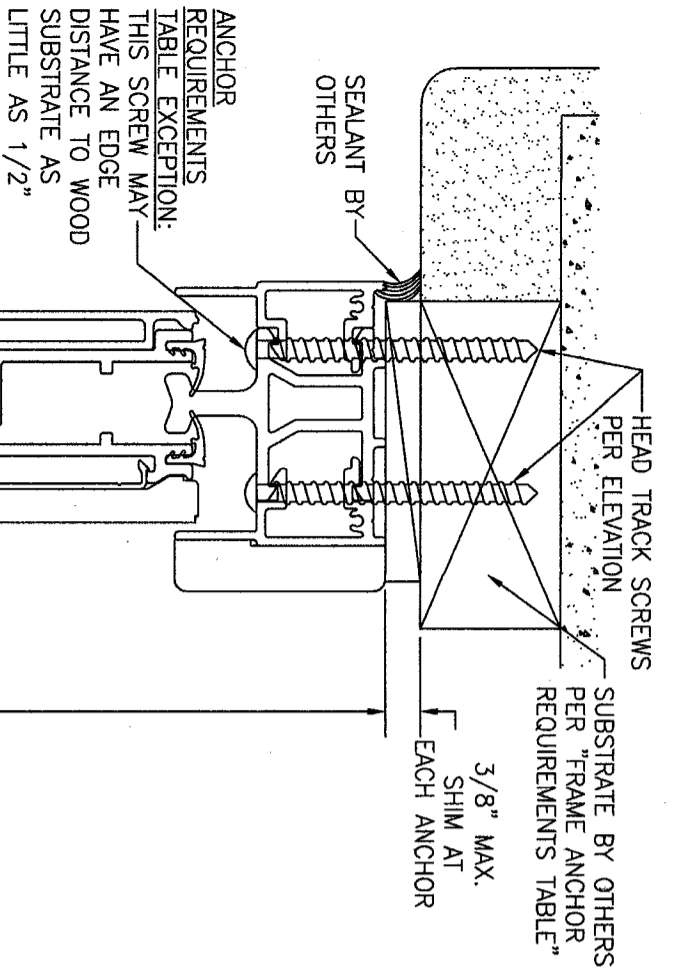
MANUFACTURER
KOLBE & KOLBE MILLWORK CO., INC.
1323 SOUTH 11TH AVE.
WAUSAU, WI 54401
715-842-5666

| NO. | REVISION DESCRIPTION | BY | DATE |
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| DATE: 10/24 | DATE: 09/08/14 |

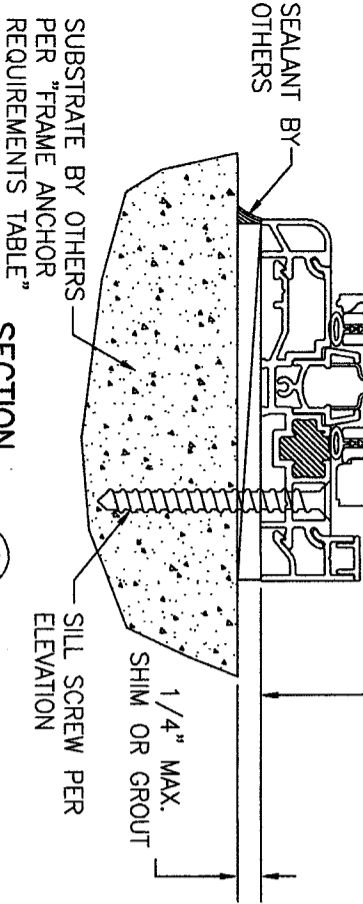
DRAWING NO. 1890
SHEET NO. 5 OF 9

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135



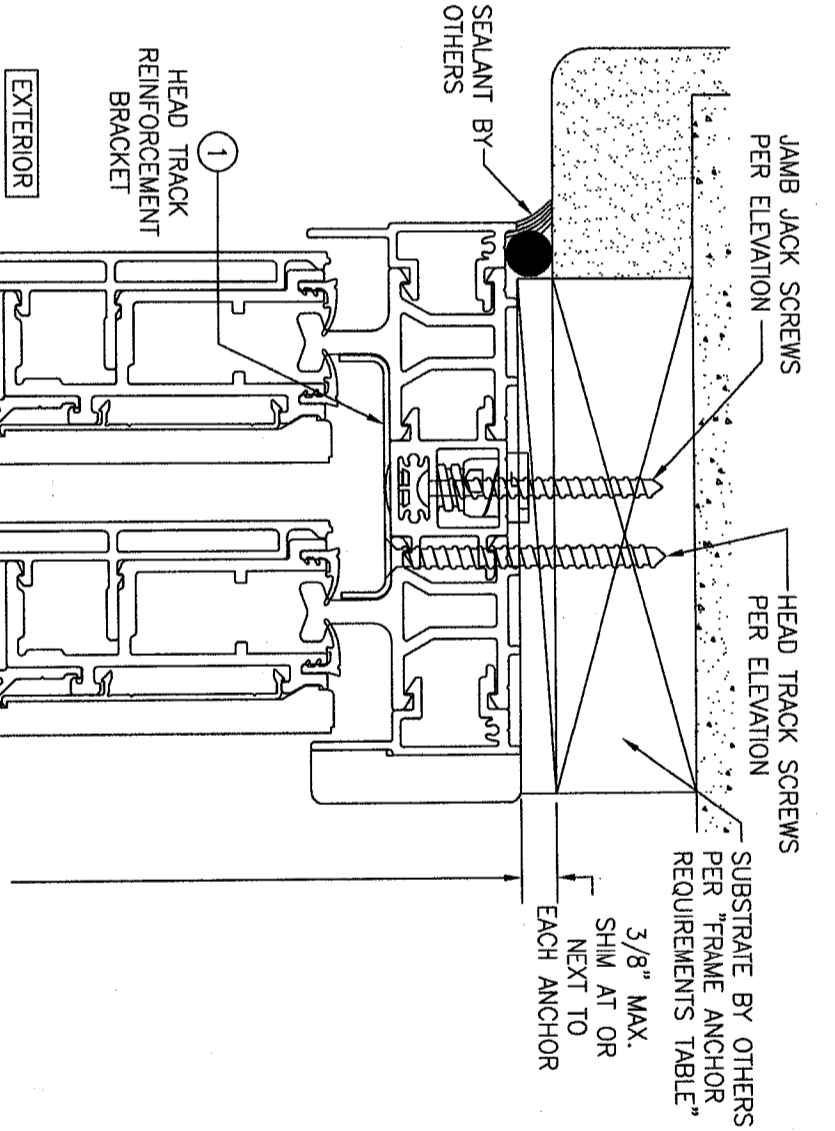
EXTERIOR

ANCHOR REQUIREMENTS TABLE EXCEPT: THIS SCREW MAY HAVE AN EDGE DISTANCE TO WOOD SUBSTRATE AS LITTLE AS 1/2"



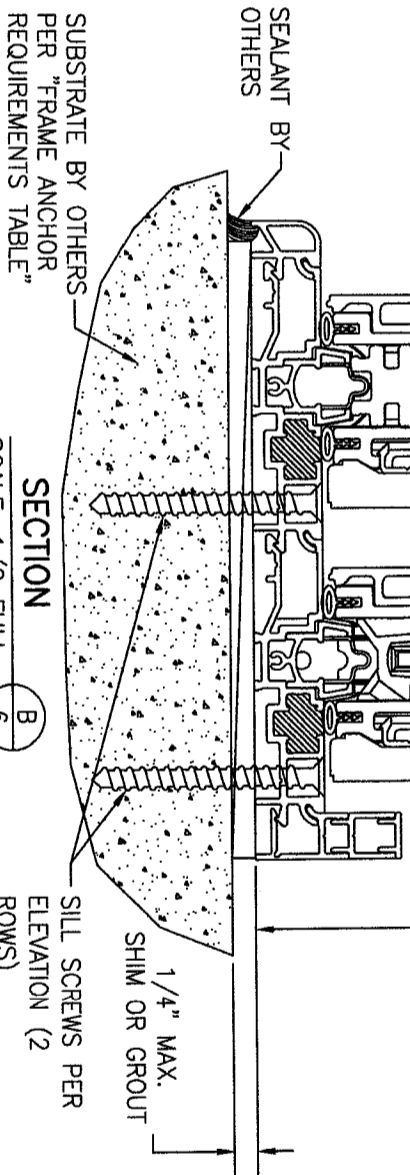
SECTION A
SCALE: 1/2 FULL

TYPICAL FRAME SCREW MOUNT CONDITIONS SHOWN. SEE DETAIL ON SHEET 9 FOR DIRECT MOUNT DETAILS.



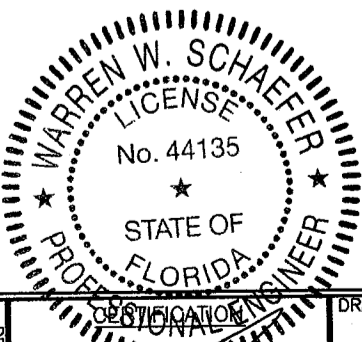
EXTERIOR

HEAD TRACK REINFORCEMENT BRACKET



SECTION B
SCALE: 1/2 FULL

TYPICAL FRAME SCREW MOUNT CONDITIONS SHOWN. SEE DETAIL ON SHEET 9 FOR DIRECT MOUNT DETAILS.



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WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

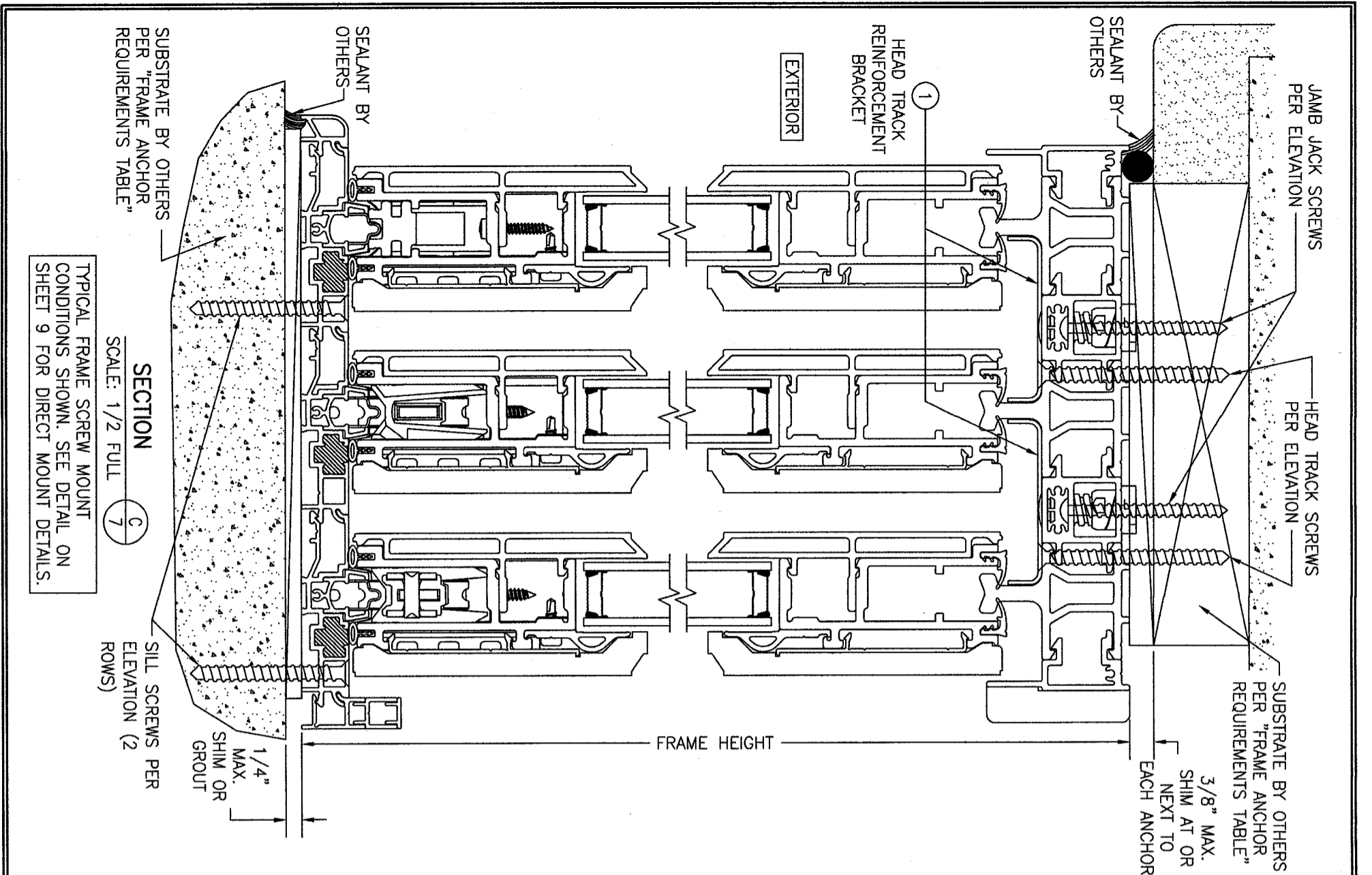
DRAWING TITLE
ULTRA TERRA SPAN LIFT & SLIDE NON-IMPACT DOORS

CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)
26376 NADIR ROAD; UNIT 309
PUNTA GORDA, FL 33983
PHONE: 561-744-3424

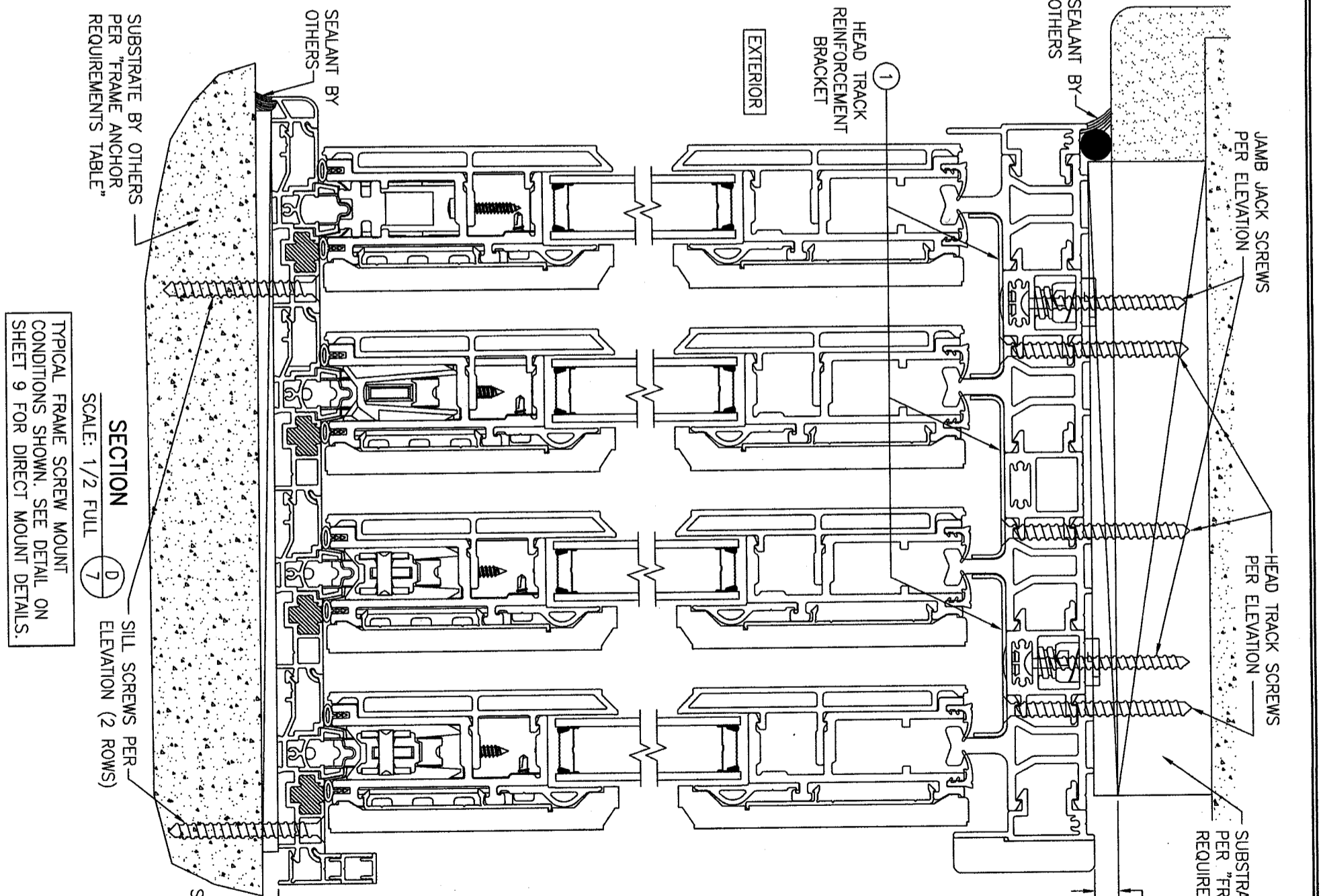
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DRAWING NO. 1890
SHEET NO. 6 OF 9



SECTION C
SCALE: 1/2 FULL

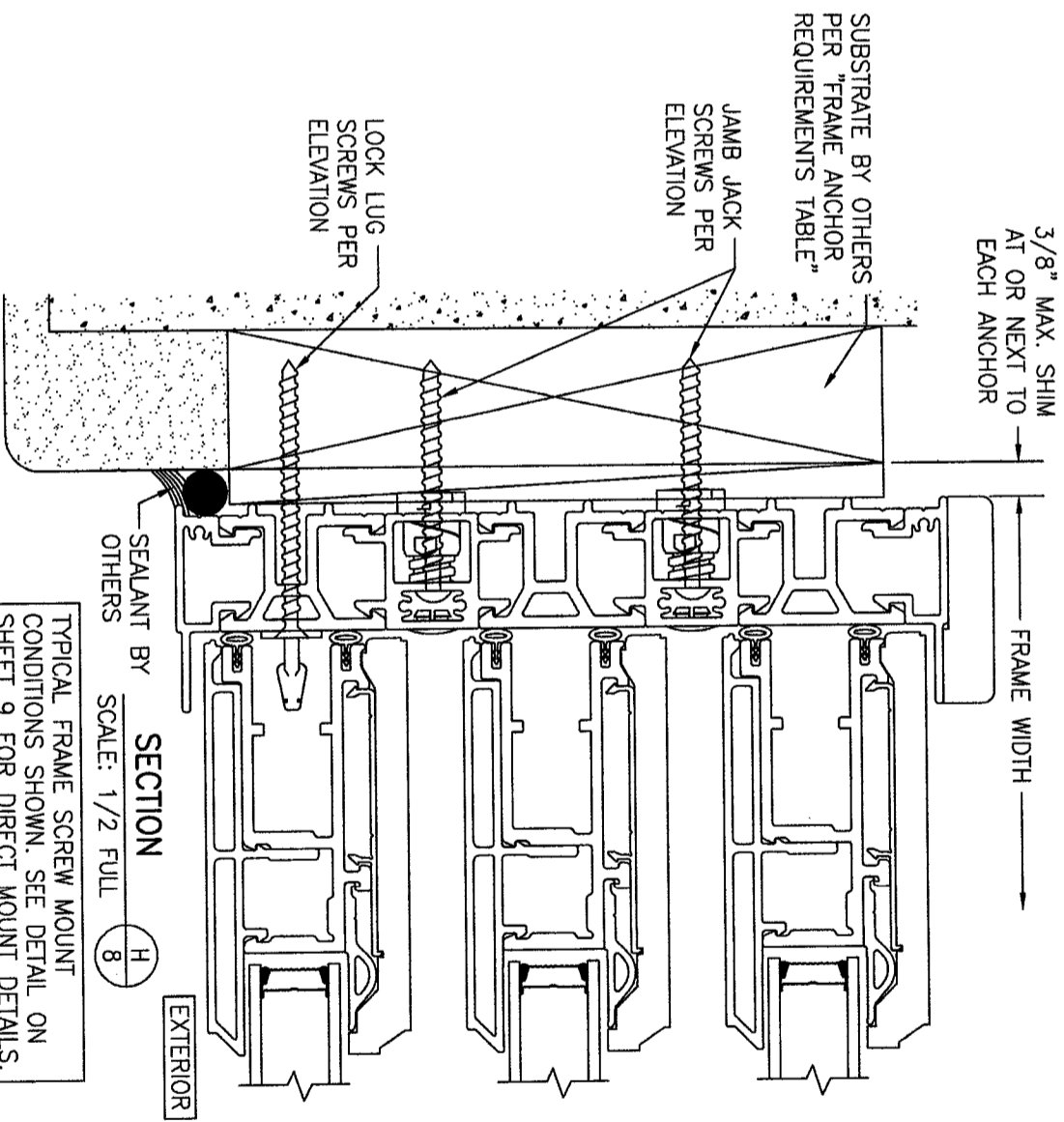
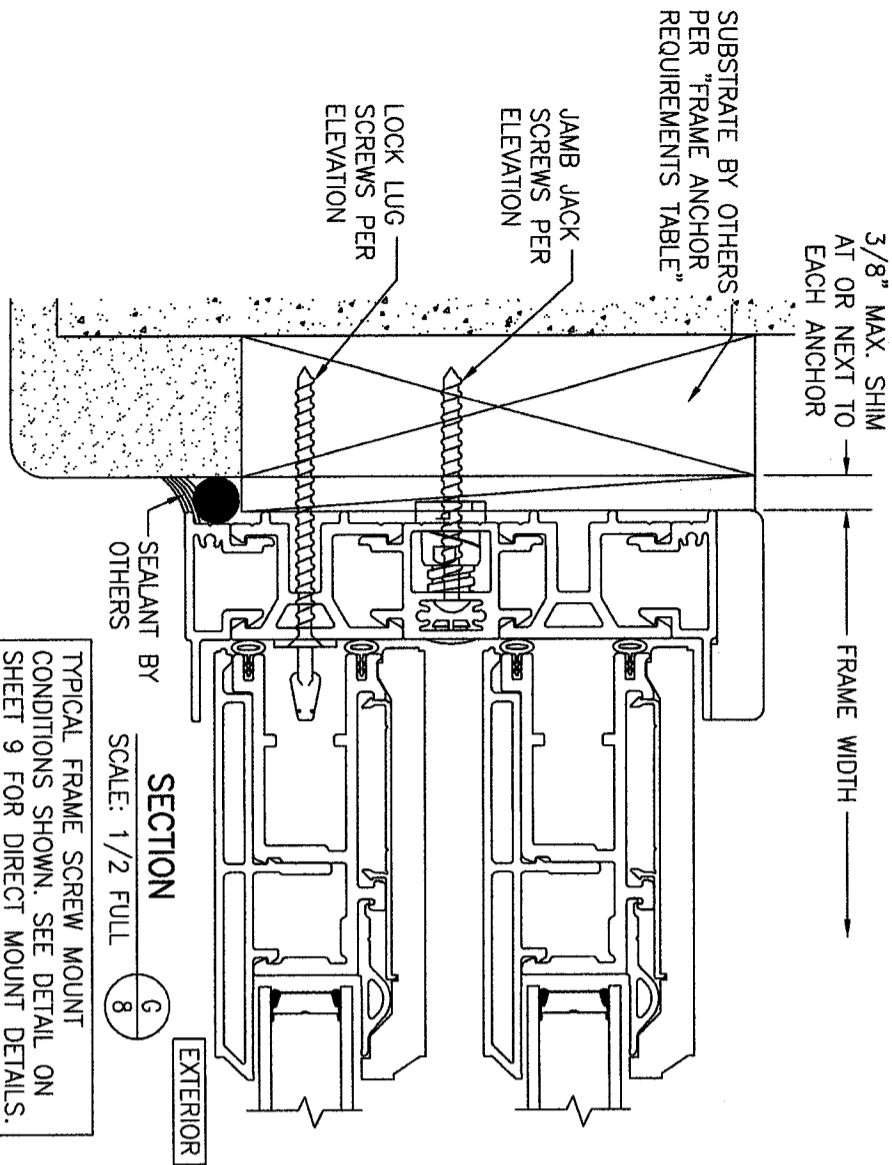
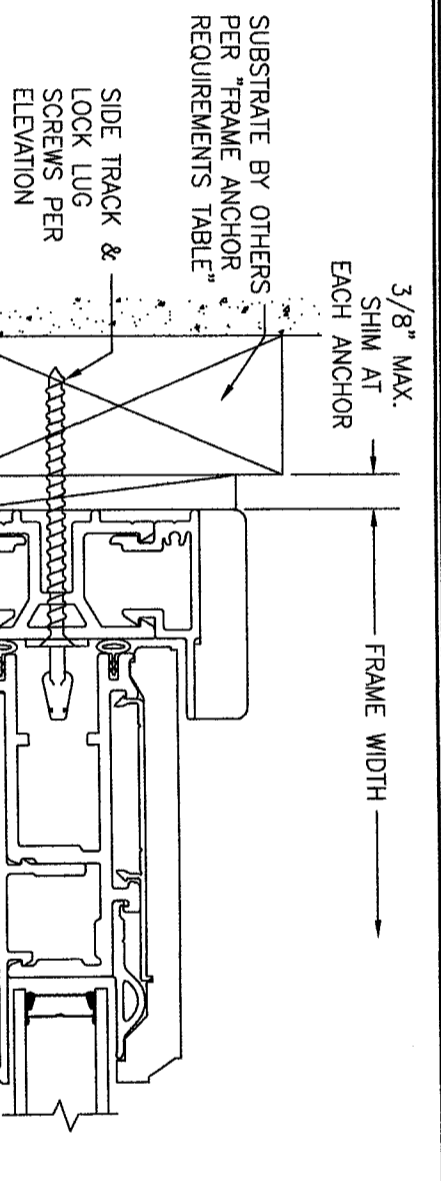
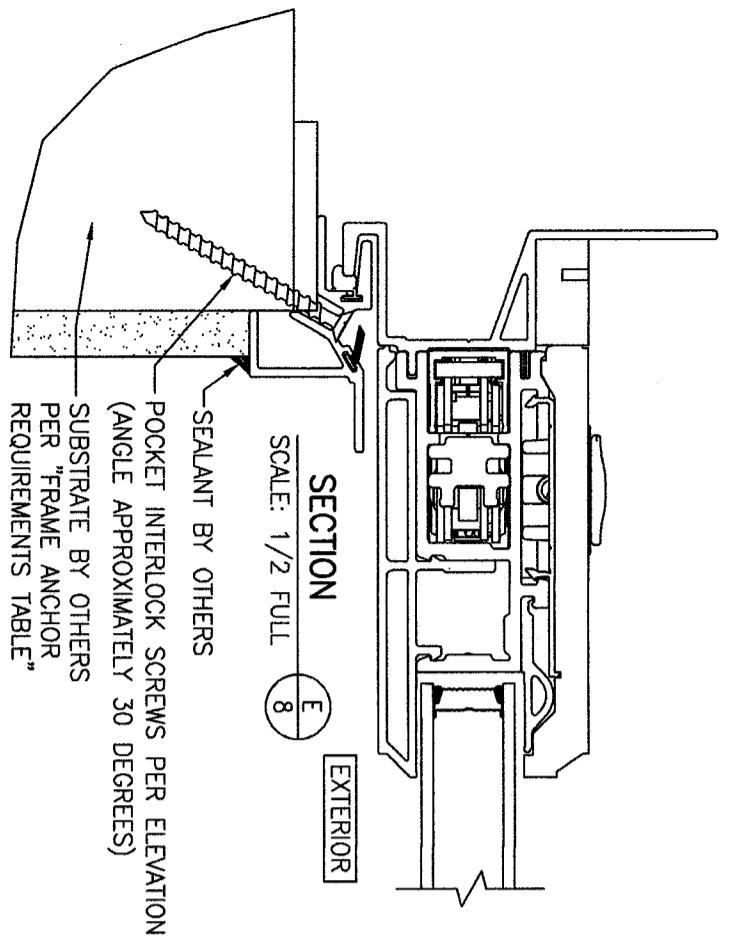


SECTION D
SCALE: 1/2 FULL

WARREN W. SCHAEFER
LICENSE
No. 44135
PROFESSIONAL ENGINEER
FLORIDA

| NO. | REVISION DESCRIPTION | BY | DATE |
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| DRAWING TITLE ULTRA TERRA SPAN LIFT & SLIDE NON-IMPACT DOORS | DRAWING NO. 1890 | REV. A |
| CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-744-3424 | MANUFACTURER KOLBE & KOLBE MILLWORK CO., INC. 1323 SOUTH 11TH AVE. WAUSAU, WI 54401 715-842-5666 | DRAWN BY: W.W.S. CHECKED BY: W.W.S. DATE: 09/08/14 |



WARREN W. SCHAEFER
LICENSE
No. 44135
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
CERTIFICATION
OCT 13 2022
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING TITLE
ULTRA TERRA SPAN LIFT & SLIDE NON-IMPACT DOORS

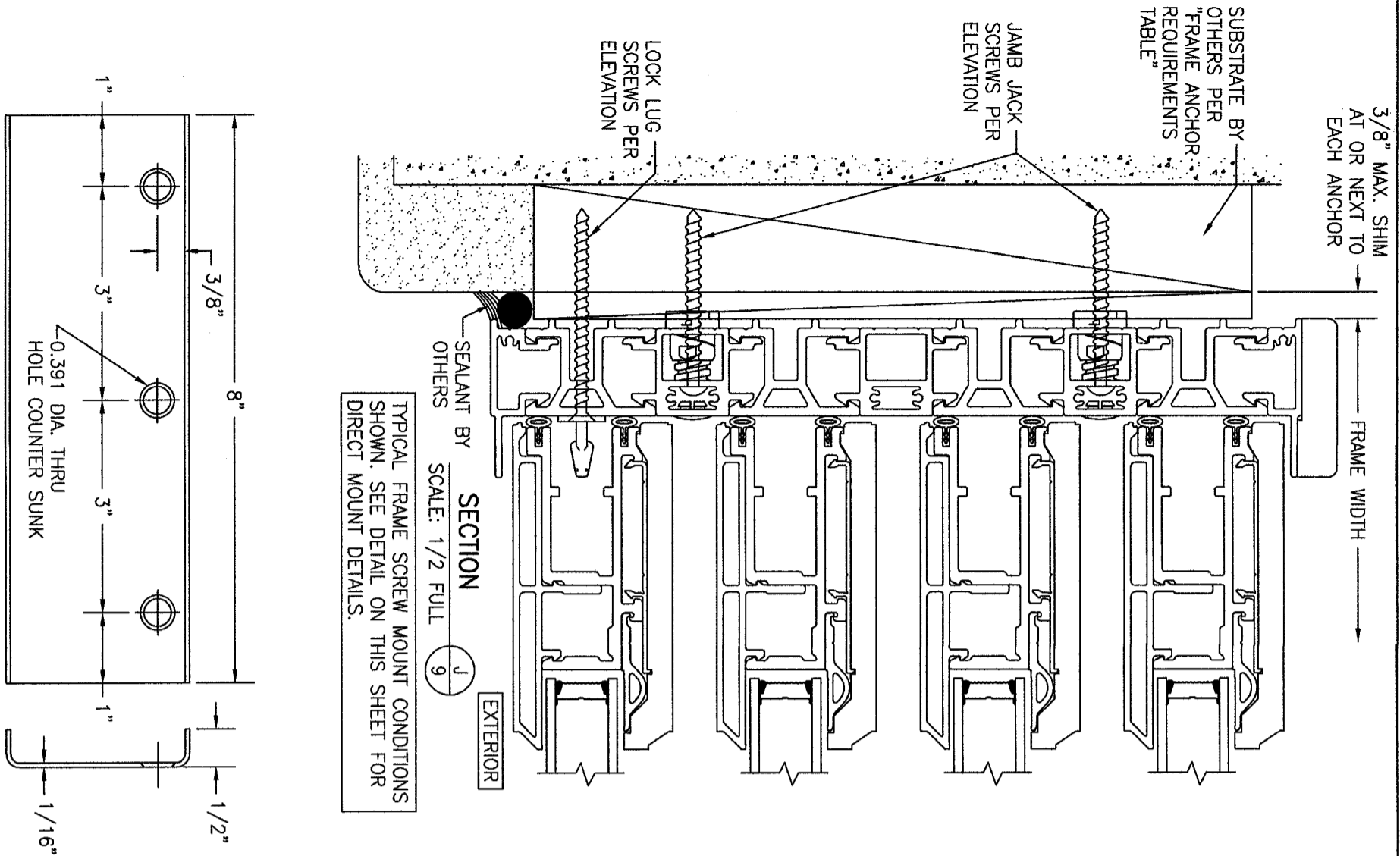
CONSULTANTS
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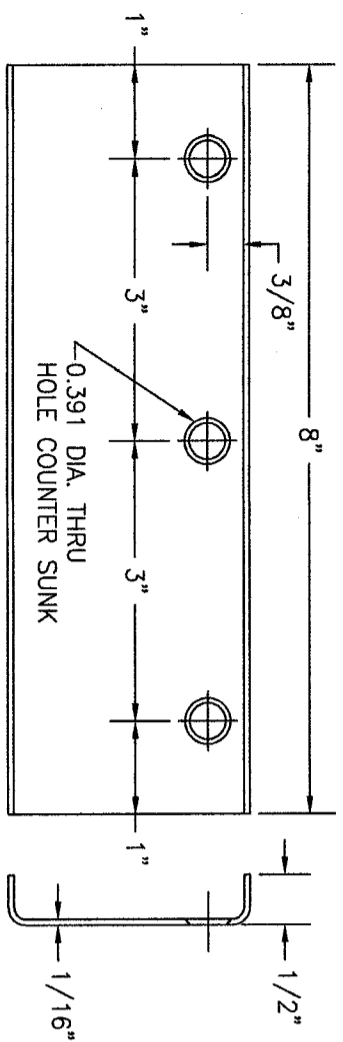
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DATE: 09/08/14

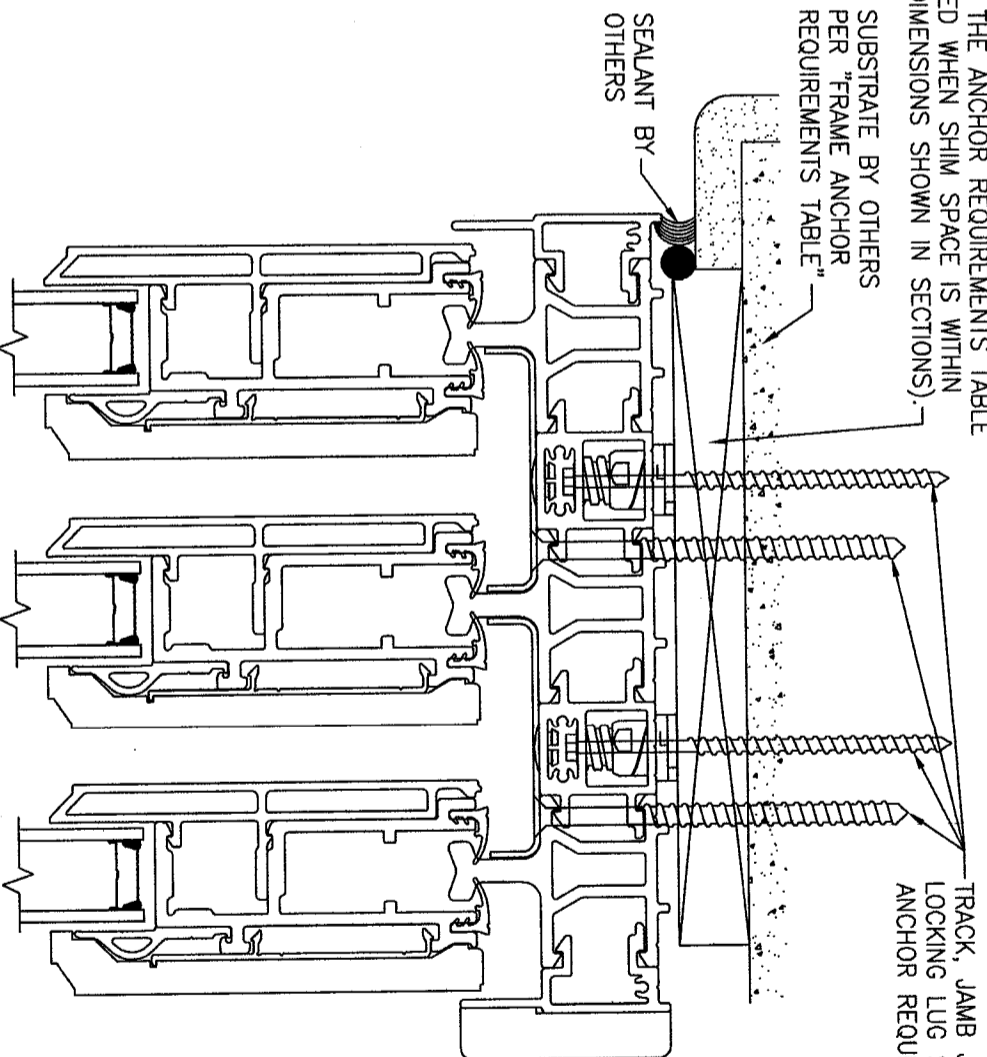
DRAWING NO. 1890
REV. A
SHEET NO. 8 OF 9



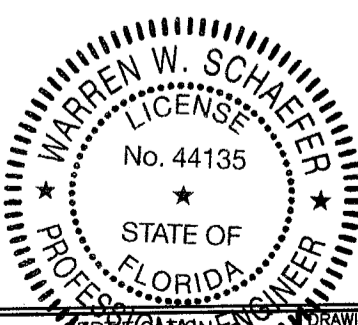
SECTION 9
 SCALE: 1/2 FULL
 TYPICAL FRAME SCREW MOUNT CONDITIONS SHOWN. SEE DETAIL ON THIS SHEET FOR DIRECT MOUNT DETAILS.



CONTINUOUS WOOD MEMBER LESS IN THICKNESS THAN A 2X. BUCK TO BE MIN. DEPTH AS SPECIFIED IN THE ANCHOR REQUIREMENTS TABLE (NOT REQUIRED WHEN SHIM SPACE IS WITHIN ALLOWABLE DIMENSIONS SHOWN IN SECTIONS).



OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER
 (HEAD SECTION SHOWN; SILL & SIDES ARE INSTALLED THE SAME)
 (FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)
 (3-PANEL DEEP CONDITION SHOWN. ALL OTHER PANEL DEPTHS APPLY)



OCT 18 2022

WARREN W. SCHAEFER, P.E.
 P.E. NO. 44135

| | |
|---|---|
| DRAWING TITLE ULTRA TERRA SPAN LIFT & SLIDE NON-IMPACT DOORS | |
| CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-744-3424 | MANUFACTURER KOLBE & KOLBE MILLWORK CO., INC. 1323 SOUTH 11TH AVE. WAUSAU, WI 54401 715-842-5666 |

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| DRAWING NO. 1890 | REV. A |
| SHEET NO. 9 | OF 9 |

DRAWN BY: W.W.S.
 CHECKED BY: W.W.S.
 DATE: 09/08/14