

NOTE: A NAIL FIN MAY BE PLACED AROUND THE DOOR FRAME IN ADDITION TO THE ANCHORS SHOWN BUT MAY NOT ACT AS A SUBSTITUTE FOR THOSE ANCHORS SHOWN.

FRAME SCREWS OR INSTALLATION CLIPS WHERE SHOWN AT SIDES. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON THIS SHEET FOR REQUIREMENTS (CLIPS ARE NOT APPLICABLE AT HEAD AND SILL).

ALLOWABLE DESIGN PRESSURE
+30/-30 PSF

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.

FRAME ANCHOR REQUIREMENTS TABLE

OPENING TYPE (SUBSTRATE)	FRAME/CLIP TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
SIDE JAMB AND SILL SCREWS			
MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 10 SMS OR WOOD SCREW	1 1/4"	1"
MIN. 16 GA. 33 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"
(2) MIN. C-90 CMU OR 2500 PSI CONCRETE	(1) 1/4" F.H. CONCRETE SCREW	1 1/2"	2"
HEAD TRACK SCREWS			
MIN. TRIPLE 2X6 OR SINGLE 4X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	5/16" LAG SCREW	3"	1"
MIN. 1/8" THK A36 STEEL	5/16" GR. 5 SELF TAP/DRILL SCREW	FULL	3/4"
MIN. 1/4" THK 6063-T5 ALUM.	5/16" GR. 5 SELF TAP/DRILL SCREW	FULL	3/4"
MIN. 3000 PSI CONCRETE	(1) 5/16" HEX HEAD CONCRETE SCREW	2 1/2"	2 1/2"

LOCK STRIKE, JAMB PIVOT, AND HINGE SCREWS

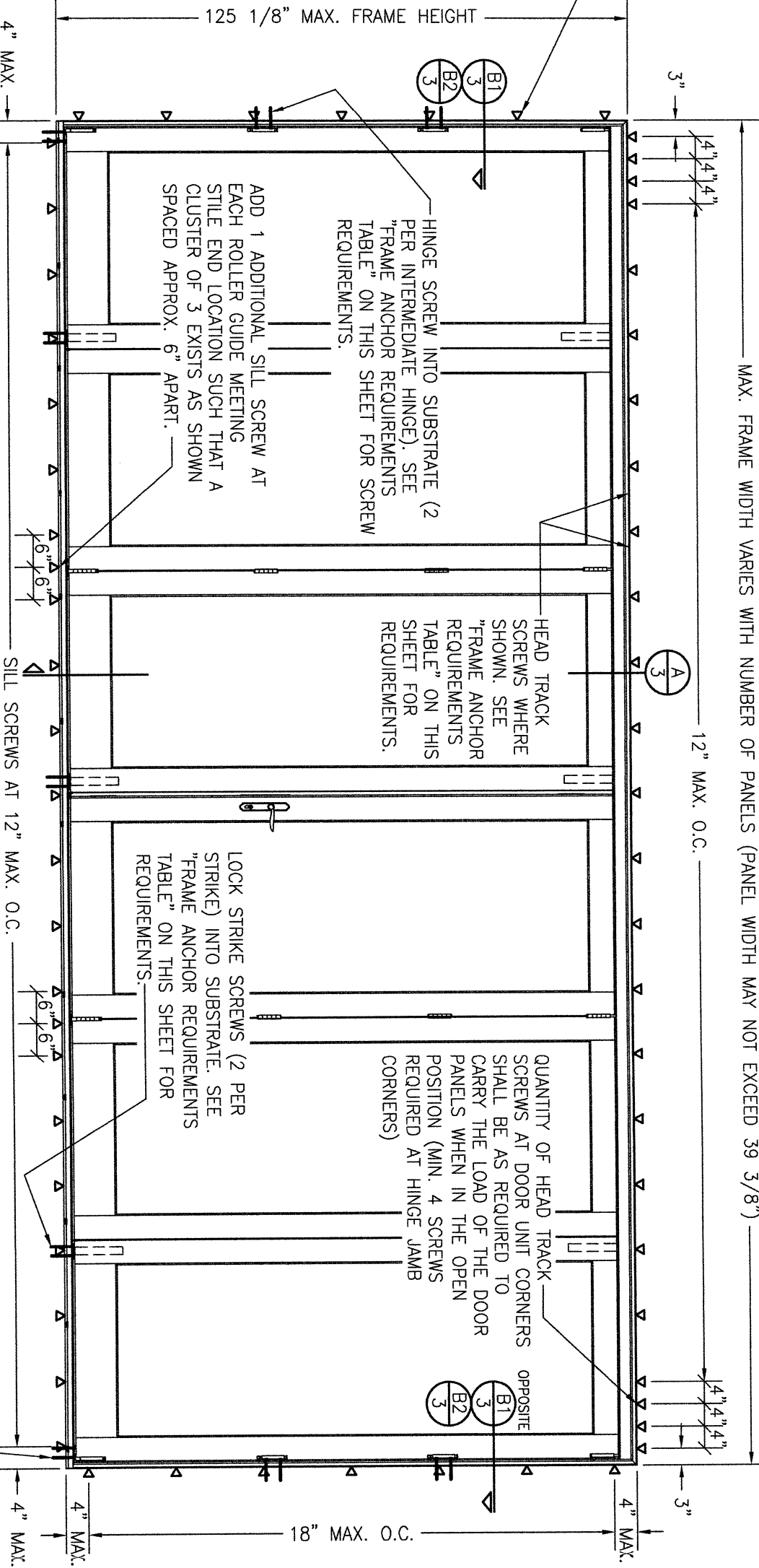
MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 9 SMS OR WOOD SCREW	1 1/4"	1"
MIN. 16 GA. 33 KSI METAL STUD	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
(2) MIN. C-90 CMU OR 2500 PSI CONCRETE	(1) 3/16" F.H. CONCRETE SCREW	1 1/2"	2"

INSTALLATION CLIP SCREWS

MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 SMS SCREW	1 3/8"	N/A
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(1) CONCRETE SCREWS SHALL BE ELCO ULTRAcons (C.S.), ELCO CRETE-FLEX (S.S.), ITW RAMSEY/RED HEAD TAPCONS (C.S. OR S.S.), HILTI Kwik-CON II (C.S OR S.S.) OR OTHER SIMILAR MADE CONCRETE SCREWS.

(2) CMU SHALL BE CONCRETE FILLED AND IS APPLICABLE AT THE SIDES ONLY.



EXTERIOR ELEVATION:
6-PANEL BI-FOLDING DOOR

SCALE: 1/2" = 1'-0"

3 + 3 CONFIGURATION SHOWN. SEE SHEET 2 FOR OTHER APPLICABLE CONFIGURATIONS.

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, BUCKING & 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/CA ENTRY & 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 ENTRY'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 PRODUCT'S 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.



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.

Digitally signed

by Warren W

Schaefer

Date:

2026.07.07

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NO.	REVISION	DESCRIPTION	BY	DATE
A1	UPDATE TO CURENT STANDARDS	W.W.S.	10/13/22	
B1	UPDATE BOARDER INFORMATION	W.W.S.	06/27/24	
C1	INCREASED FRAME HEIGHT	W.W.S.	07/07/26	

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1=24	DATE: 08/12/14

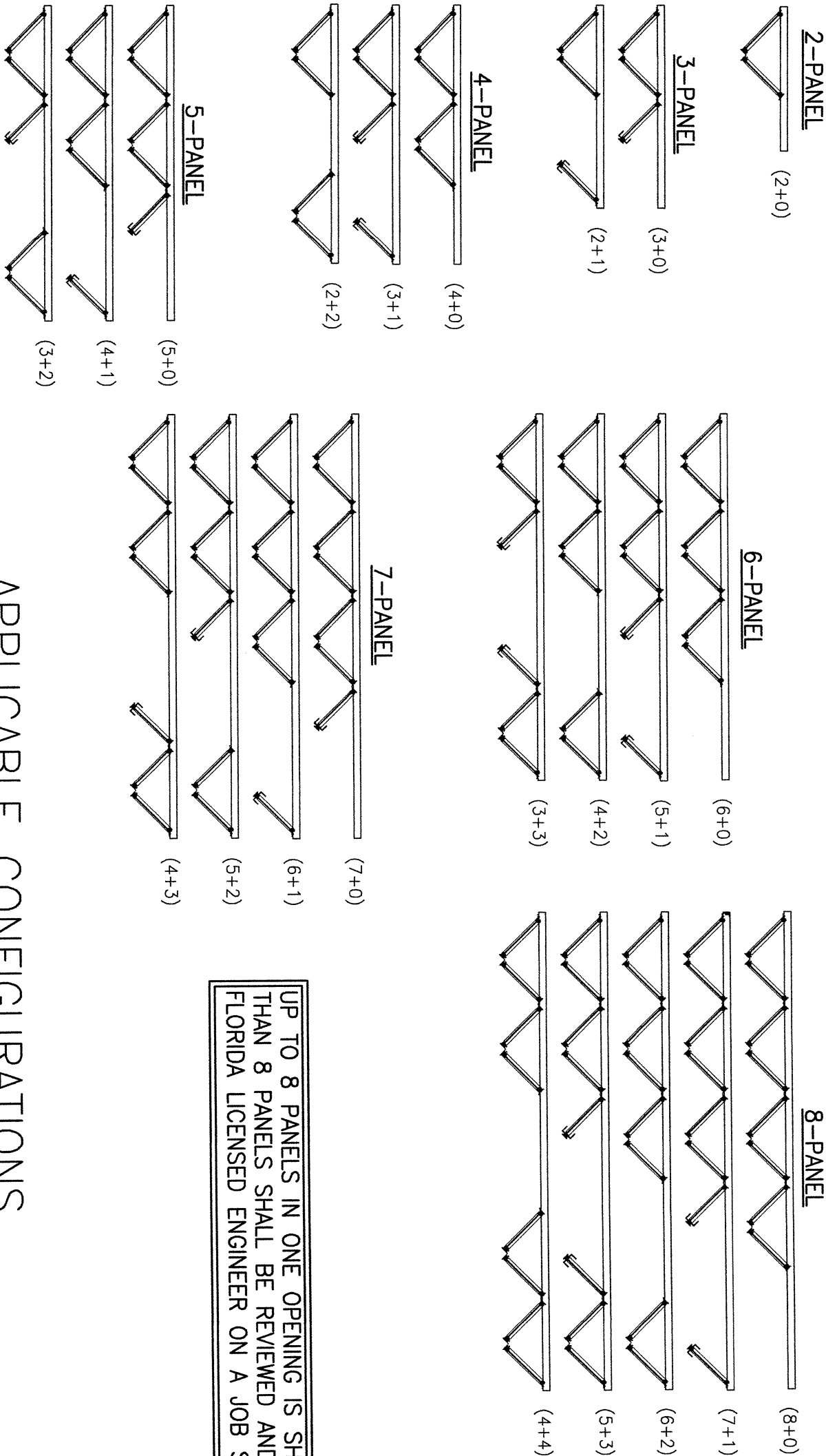
DRAWING TITLE ULTRA 8 FT. TALL NON-IMPACT BI-FOLDING STANDARD PERFORMANCE DOORS	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983	MANUFACTURER KOLBE & KOLBE MILLWORK CO., INC. 1323 SOUTH 11TH AVE. WAUSAU, WI 54401 715-842-5666

CERTIFICATION

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

DRAWING NO. 1886	REV. C
SHEET NO. 1	OF 4

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.



APPLICABLE CONFIGURATIONS

NOTE: ALL CONFIGURATIONS SHOWN ON THIS SHEET ARE APPLICABLE BASED ON COMPARISON TO THOSE CONFIGURATIONS TESTED. ANY CONFIGURATIONS NOT SHOWN HERE-IN ARE NOT CONSIDERED TO BE PART OF THIS CERTIFICATION/APPROVAL.

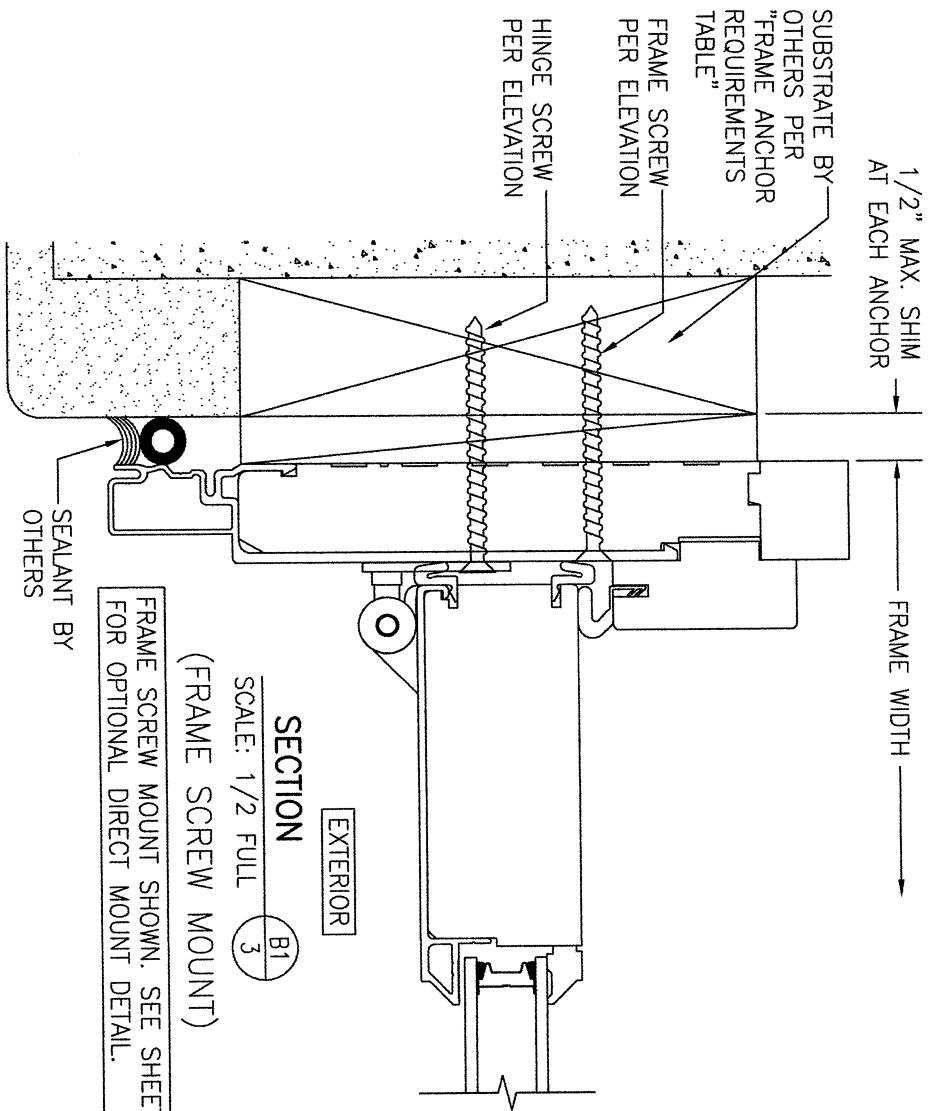
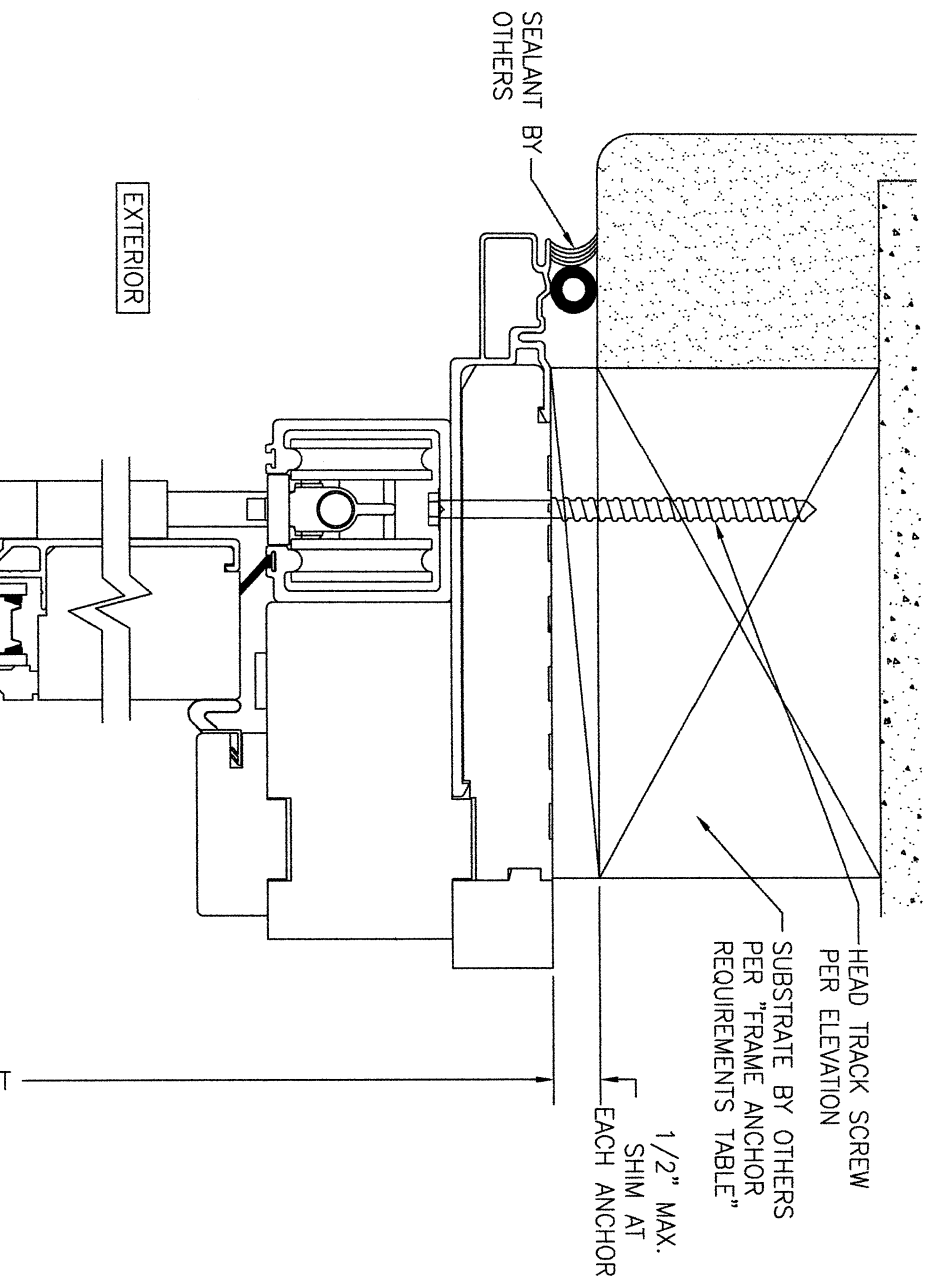
UP TO 8 PANELS IN ONE OPENING IS SHOWN. USE OF MORE THAN 8 PANELS SHALL BE REVIEWED AND CERTIFIED BY A FLORIDA LICENSED ENGINEER ON A JOB SPECIFIC BASIS.

NO.	REVISION	DESCRIPTION	BY	DATE

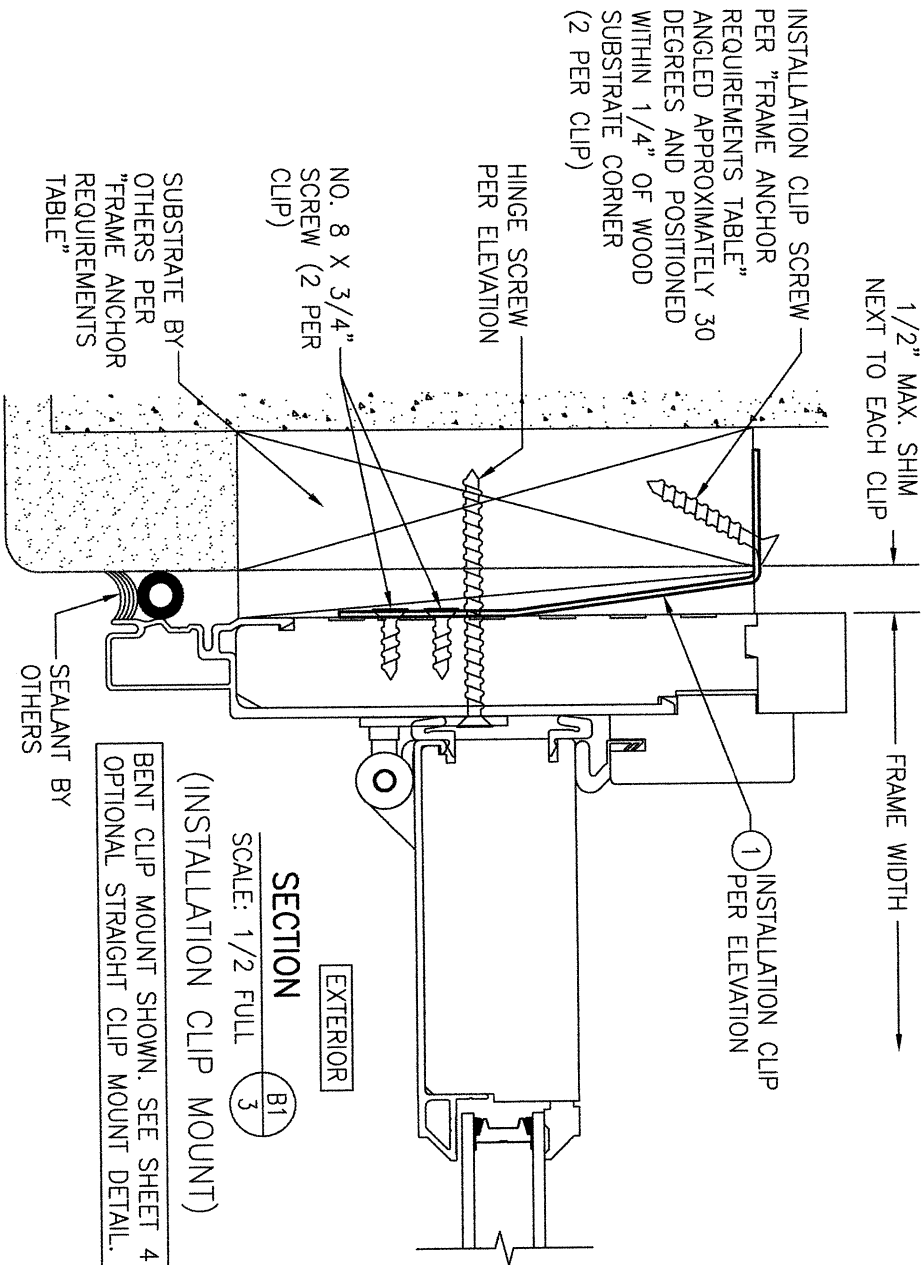
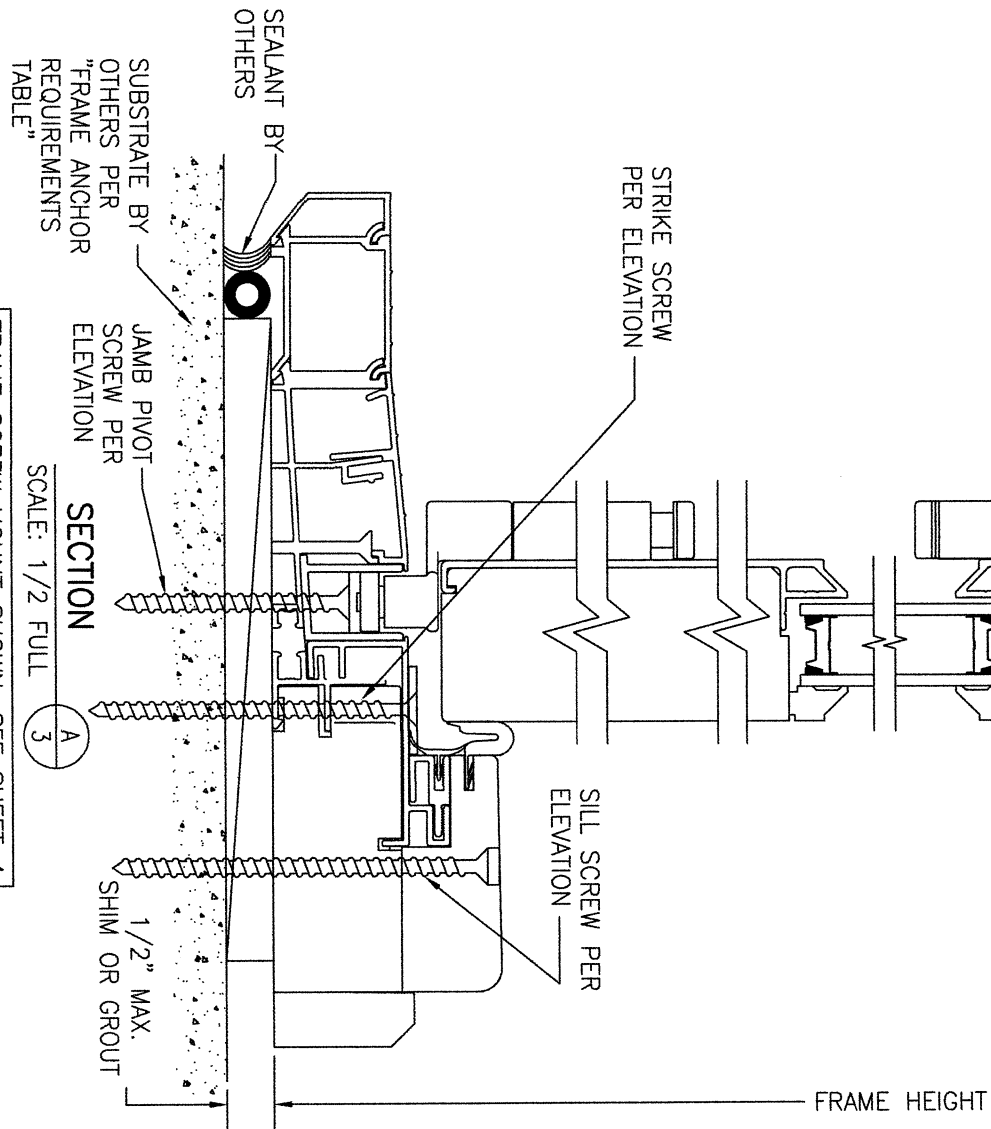
DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
DATE: 08/12/14	
1-24	

DRAWING TITLE ULTRA 8 FT. TALL NON-IMPACT BI-FOLDING STANDARD PERFORMANCE DOORS	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983	MANUFACTURER KOLBE & KOLBE MILLWORK CO., INC. 1323 SOUTH 11TH AVE. WAUSAU, WI 54401 715-842-5666

CERTIFICATION WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1886	REV. C
SHEET NO. 2	OF 4



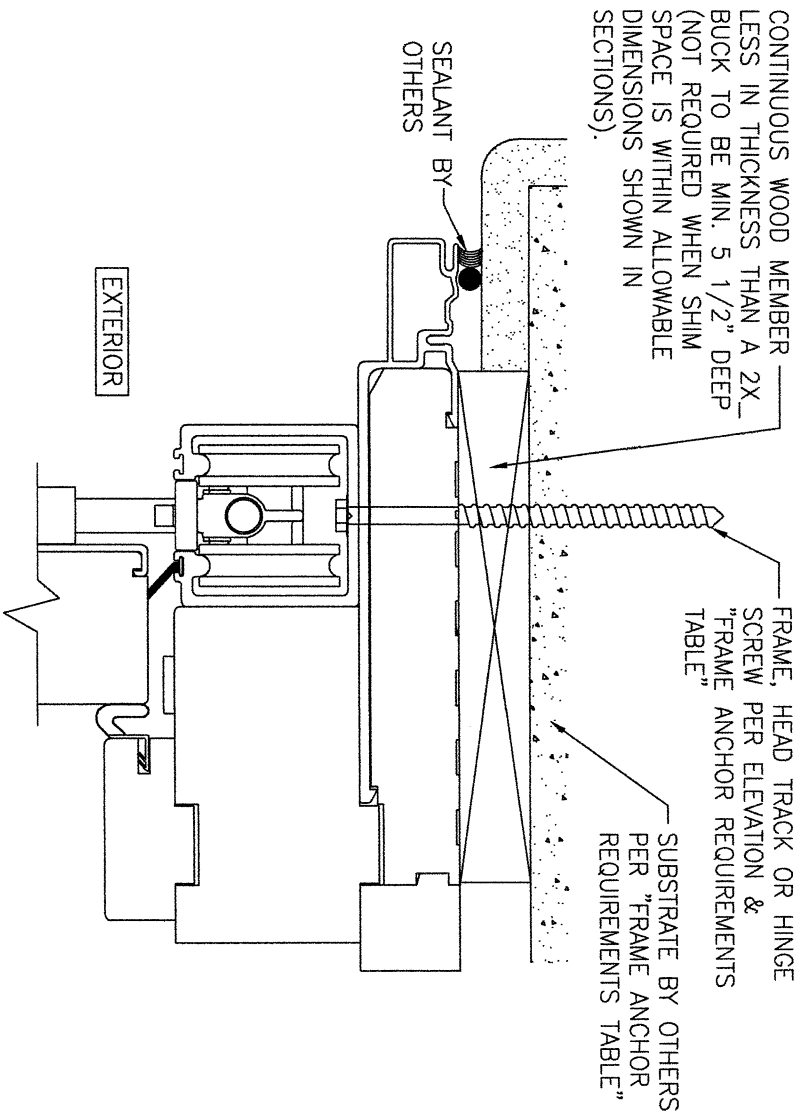
FRAME SCREW MOUNT SHOWN. SEE SHEET 4 FOR OPTIONAL DIRECT MOUNT DETAIL.



BENT CLIP MOUNT SHOWN. SEE SHEET 4 FOR OPTIONAL STRAIGHT CLIP MOUNT DETAIL.

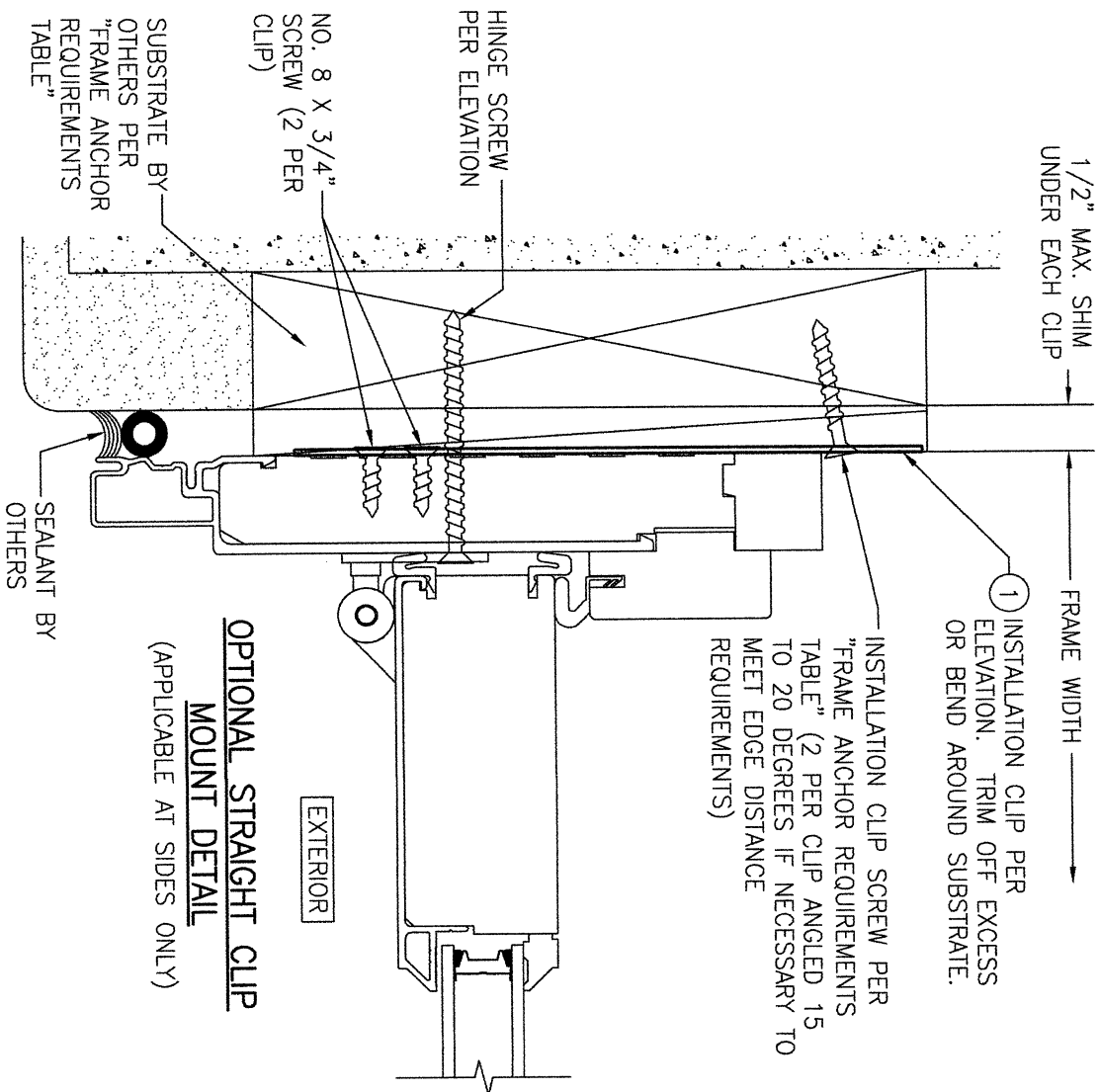
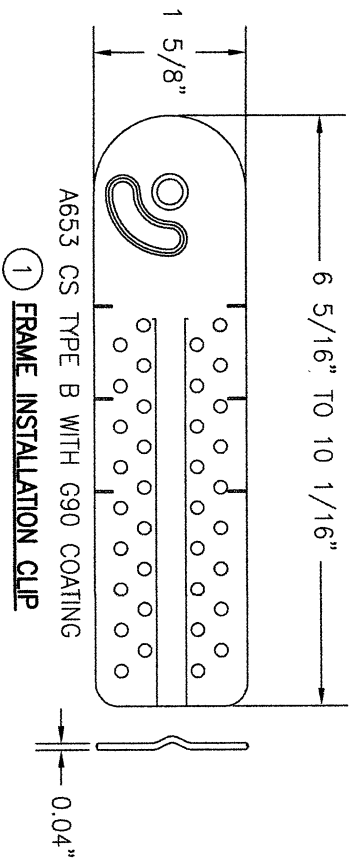
NO.	REVISION	DESCRIPTION	BY	DATE
1=2				

DRAWING TITLE ULTRA 8 FT. TALL NON-IMPACT BI-FOLDING STANDARD PERFORMANCE DOORS		MANUFACTURER KOLBE & KOLBE MILLWORK CO., INC. 1323 SOUTH 11TH AVE. WAUSAU, WI 54401 715-842-5666	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSAN DRIVE PUNTA GORDA, FL 33983		CHECKED BY: W.W.S.	
CERTIFICATION WARREN W. SCHAEFER, P.E. P.E. NO. 44135		DRAWING NO. 1886 REV. C	
SHEET NO. 3 OF 4		DATE: 08/12/14	



OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER

(HEAD SECTION SHOWN; SIDES ARE INSTALLED THE SAME)
(DIRECT MOUNT CONDITION IS NOT APPLICABLE AT SILL)



OPTIONAL STRAIGHT CLIP MOUNT DETAIL

(APPLICABLE AT SIDES ONLY)

NO.	REVISION	DESCRIPTION	BY	DATE
1	2			

DRAWING TITLE		MANUFACTURER	
ULTRA 8 FT. TALL NON-IMPACT BI-FOLDING STANDARD PERFORMANCE DOORS		KOLBE & KOLBE MILLWORK CO., INC.	
CONSULTANTS		1323 SOUTH 11TH AVE.	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		WAUSAU, WI 54401	
25601 AYSEN DRIVE		715-842-5666	
PUNTA GORDA, FL 33983			

CERTIFICATION

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

DRAWING NO.	REV.
1886	C
SHEET NO.	OF
4	4