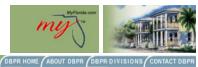
# **Business & Professional Regulation**



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Product Approval Menu > Product or Application Search > Application List > Application Detail

FL# FL17726-R4 Application Type Revision Code Version 2017 **Application Status** Approved

Comments

Archived

Product Manufacturer La Finestra, LC Address/Phone/Email 2790 NW 104th Court Miami, FL 33172 (305) 599-8093

brunosalvoni@lafinestra.us

Authorized Signature Bruno Salvoni

brunosalvoni@lafinestra.us

Technical Representative Address/Phone/Email

Quality Assurance Representative

Address/Phone/Email

Category **Exterior Doors** 

Sliding Exterior Door Assemblies Subcategory

Compliance Method Evaluation Report from a Florida Registered Architect or a Licensed

Florida Professional Engineer ☐ Evaluation Report - Hardcopy Received

Florida Engineer or Architect Name who developed

the Evaluation Report

Florida License

Quality Assurance Entity

Quality Assurance Contract Expiration Date

Validated By

Frank L. Bennardo, P.E.

PE-0046549

National Accreditation and Management Institute

04/30/2018 Troy Bishop, P.E.

☑ Validation Checklist - Hardcopy Received

FL17726 R4 COI Indep.pdf Certificate of Independence

Referenced Standard and Year (of Standard)

**Standard** <u>Year</u> **ASTM E1300** 2004 **ASTM E1886** 2013 **ASTM E1996** 2014 2014 ASTM E330 TAS 201 1994 TAS 202 1994 TAS 203 1994

Equivalence of Product Standards Certified By

Sections from the Code

**Product Approval Method** Method 1 Option D

Date Submitted 12/18/2017 Date Validated 12/29/2017 Date Pending FBC Approval 12/29/2017 02/13/2018 Date Approved

#### Summary of Products

FL # Model, Number or Name		Description			
17726.1 Series EKU-9000 Sliding Glass Door		Series EKU-9000 Sliding Glass Door Large & Small Missile Impact Resistant			
Limits of Use Approved for use in I Approved for use out Impact Resistant: Ye Design Pressure: +10 Other:	side HVHZ: Yes	Installation Instructions FL17726 R4 II Dwg.pdf Verified By: Frank L. Bennardo, P.E. PE0046549 Created by Independent Third Party: Yes Evaluation Reports FL17726 R4 AE Eval .pdf Created by Independent Third Party: Yes			



Contact Us :: 2601 Blair Stone Road, Tallahassee FL 32399 Phone: 850-487-1824

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### **Product Approval Accepts:**













### **Product Evaluation Report**

December 29, 2017

Application Number:

FL#17726.1-R4

EX Project Number:

15-2257

Product Manufacturer:

La Finestra, LC

Manufacturer Address:

2790 NW 104TH Court.

Miami, FL 33172

Product Name & Description:

Series EKU-9000 Sliding Glass Door Large & Small Missile Impact Resistant

### Scope of Evaluation:

This Product Evaluation Report is being issued in accordance with the requirements of the Florida Department of Business and Professional Regulation (Florida Building Commission) Rule Chapter 61G20-3.005, F.A.C., for statewide acceptance per Method 1(d). The product noted above has been tested and/or evaluated as summarized herein to show compliance with the Florida Building Code Sixth Edition (2017) and is, for the purpose intended, at least equivalent to that required by the Code. Re-evaluation of this product shall be required following pertinent Florida Building Code modifications or revisions.

### Substantiating Data:

### PRODUCT EVALUATION DOCUMENTS

EX drawing #15-2257 titled "Series EKU-9000 Sliding Glass Door", sheets 1-28, prepared by Engineering Express, signed & sealed by Frank L. Bennardo, P.E. is an integral part of this Evaluation Report.

### **TEST REPORTS**

Uniform static structural performance has been tested in accordance with TAS 202 & ASTM E330-14 test standards per test report(s) HETI-14-5042, HETI-15-5044, HETI-15-5128, HETI-15-5120 by Hurricane Engineering and Testing, Inc. Signed and sealed by Rafael E. Droz-Seda, P.E.

Large missile impact resistance and cyclic loading performance have been tested in accordance with TAS 201 & 203 and ASTM E 1886-13a & ASTM E 1996-14 test standards per test report(s) HETI-15-5046, HETI-14-5050, HETI-15-5129, HETI-15-5121 by Hurricane Engineering and Testing, Inc. Signed and sealed by Rafael E. Droz-Seda, P.E.

### STRUCTURAL ENGINEERING CALCULATIONS

Structural engineering calculations have been prepared which evaluate the product based on comparative and/or rational analysis to qualify the following design criteria:

- 1. Anchor Spacing
- 2. Maximum Allowable Size/Pressure Combinations
- Glass Capacity
- 4. Anchor Capacity

No 33% increase in allowable stress has been used in the design of each product.

Raised Engineer's Seal Valid for I Pages 1 through \ Frank L. Bennardo, P.E. # PE0046549 G.A. #9885

La Finestra, LC - Series EKU-9000 Sliding Glass Door

Page 2 of 2

The following are approved for use in the HVHZ as specified in their corresponding NOAs:

SentryGlas Interlayer by Kuraray America , Inc. (NOA #14-0916.11)

### Impact Resistance:

Large and Small Missile Impact Resistance has been demonstrated as evidenced in previously listed test reports, and is accounted for in the engineering design of this product.

### Wind Load Resistance

Each product has been designed to resist wind loads as indicated in the design schedule(s) on its respective Product Evaluation Document (i.e. engineering drawing).

### Installation

Each product listed above shall be installed in strict compliance with its respective Product Evaluation Document (i.e. engineering drawing), along with all components noted therein.

Each product component shall be of the material specified in that product's respective Product Evaluation Document (i.e. engineering drawing).

### Limitations & Conditions of Use:

Use of each product shall be in strict accordance with its respective Product Evaluation Document (i.e. engineering drawing) as noted herein.

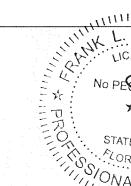
All supporting host structures shall be designed to resist all superimposed loads and shall be of a material listed in each product's respective anchor schedule. Host structure conditions which are not accounted for in each product's respective anchor schedule shall be designed for on a site-specific basis by a registered professional engineer.

All components which are permanently installed shall be protected against corrosion, contamination, and other such damage at all times.

Each product has been designed for use within and outside of the High Velocity Hurricane Zone (HVHZ).

# LA FINESTRA, LC SERIES EKU-9000 SLIDING GLASS DOOR

LARGE AND SMALL MISSILE LEVEL "D" IMPACT RESISTANT



VAPESS®

ORATE OFFICE:
h AVE, SUITE 106
BEACH, FL 33442

OGO F. (95) 354-043
anneemingExpress.com

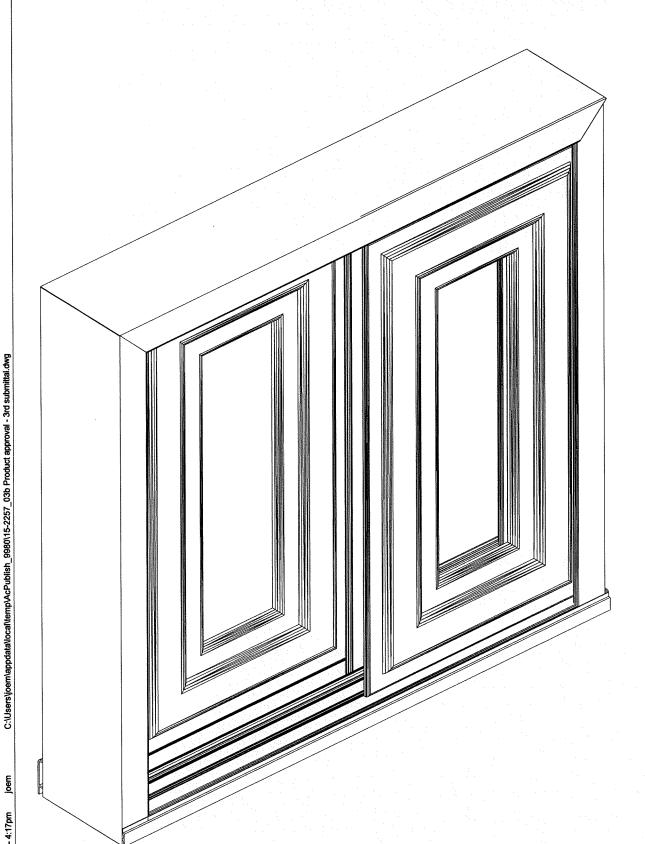
CORPORATE
CORPORATE
160 SW 12th AVE
DEERFIELD BEAC
P: (954) 354-060 F: (E: HELO@ENGINEERIN
ENGINEERINGEX

FINESTRA, LC 790 NW 104TH COURT DORAL, FL (305) 599-8093

20PYRIGHT ENGINEERING EX

SCALE: NTS

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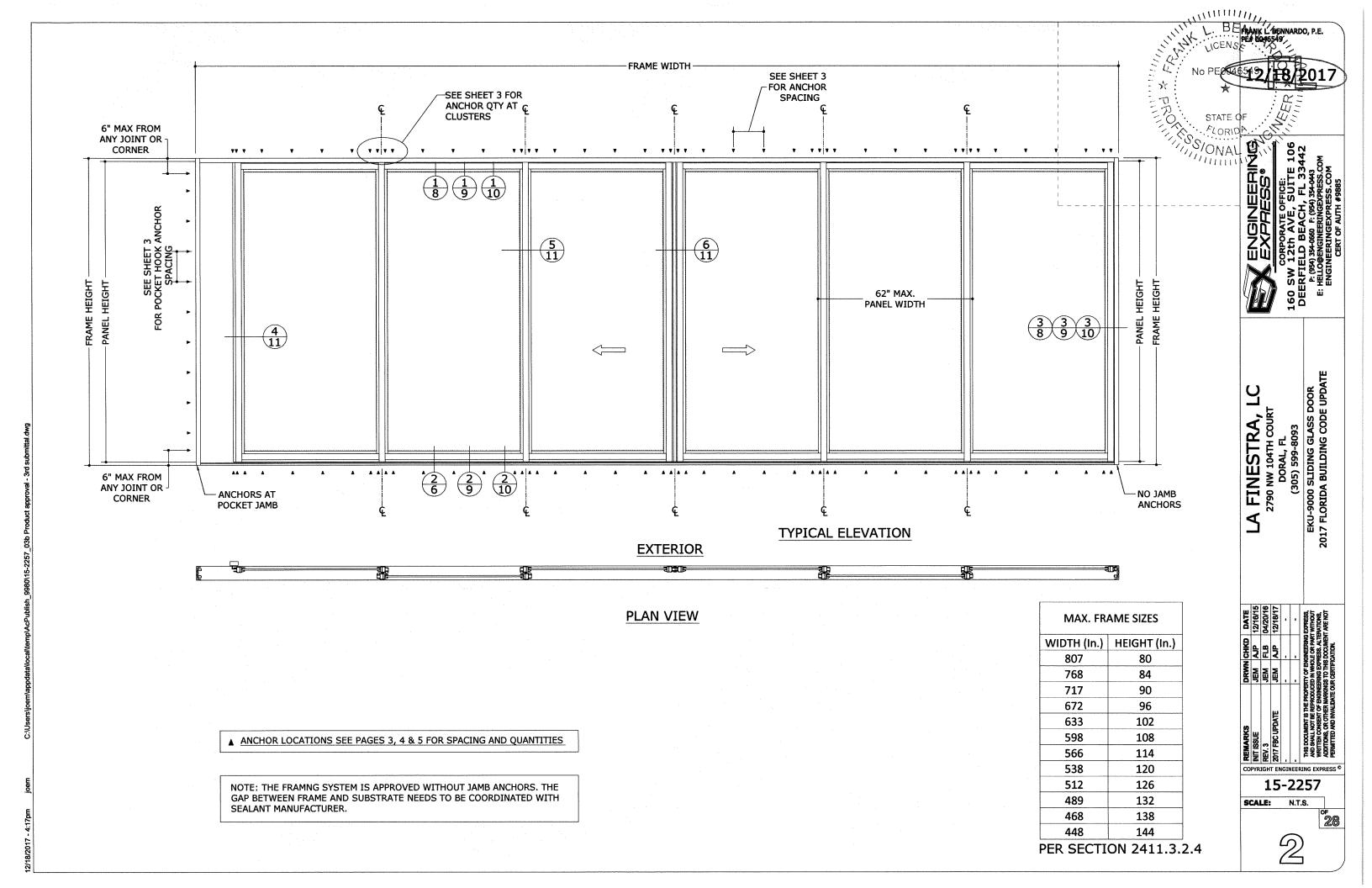


SHEET INDEX				
# SHEET	DESCRIPTION			
1	COVER SHEET			
2	ELEVATION			
3-5	LOADING TABLES			
6	ANCHOR LAYOUTS			
7	GLASS TYPES			
8	2 TRACK SECTIONS			
9	3 TRACK SECTIONS			
10	4 TRACK SECTIONS			
11	2,3 & 4 TRACK SECTIONS			
12-14	2 TRACK ANCHORING			
15-17	3 TRACK ANCHORING			
18-21	4 TRACK ANCHORING			
22	TRACK CONFIGURATIONS			
23	FRAME ASSEMBLY			
24-27	EXTRUSIONS			
28	BILL OF MATERIALS			
28	TOTAL			

### **GENERAL NOTES**

- 1. THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE, PER ASTM E1300-04 & TAS 201/202/203 STANDARDS AS QUALIFIED IN TEST REPORTS HETI-15-5044, HETI-14-5050, HETI-14-5042, HETI-15-5046, HETI-15-5120, HETI-15-5121, HETI-15-5128 & HETI-15-5129 BY HURRICANE ENGINEERING & TESTING INC.
- 2. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
- 3. POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE. SITE SPECIFIC WIND LOAD REQUIREMENTS SHALL BE DETERMINED IN ACCORDANCE WITH ASCE 7-10 AND THE FLORIDA BUILDING CODE BY SEPARATE ENGINEERING CERTIFICATION AND SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUE LISTED HEREIN FOR ANY ASSEMBLY WITHIN THE LIMITATIONS STATED HEREIN.
- 4. THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
- 5. PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.
- 6. MULTIPLE UNITS MUST BE INSTALLED USING STRUCTURAL MULLIONS APPROVED BY OTHERS OR UNDER SEPARATE CERTIFICATION.
- 7. ALL EXTRUSIONS SHALL BE 6063-T5 ALUMINUM ALLOY, UNLESS NOTED OTHERWISE.
- 8. EXTERIOR SEAM OF FRAME CORNERS SHALL BE SEALED WITH PECORA 895 SEALANT.
- 9. ALL FASTENERS & WASHERS SHALL BE ZINC COATED STEEL, GALVANIZED STEEL, OR STAINLESS STEEL WITH A MINIMUM ULTIMATE TENSILE STRENGTH Fu=74 KSI, UNLESS NOTED OTHERWISE. ULTRACONS AND DRIL-FLEX FASTENERS REFERENCED HEREIN SHALL BE BY ELCO CONSTRUCTION PRODUCTS WITH A MINIMUM ULTIMATE TENSILE STRENGTH OF Fu=177 KSI & Fu=120 KSI, RESPECTIVELY.
- 10. ALL DISSIMILAR MATERIALS SHALL BE PAINTED OR PLATED TO PREVENT CORROSION OR ELECTROLYSIS.
- 11. GLAZING ILLUSTRATED HEREIN UTILIZES SENTRYGLAS INTERLAYER BY KURARAY AMERICA INC. (NOA# 14-0916.11).
- 12. THIS PRODUCT IS APPROVED FOR LARGE MISSILE & SMALL MISSILE IMPACT APPLICATIONS. SEE GLASS TYPES FOR ANY RESTRICTIONS.
- 13. MEANS OF EGRESS AND SAFEGUARD REQUIREMENTS ARE NOT ADDRESSED IN THIS APPROVAL AND SHALL BE CERTIFIED BY OTHERS.
- 14. ENGINEER SEAL AFFIXED HERE TO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
- 15. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- 16. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.

FL #17726.1



	AL DIMS	OR CAPACI			NCHORS AT CLU	
	T	L		WOOD	H SIDE OF VERT	META
PANEL WIDTH	PANEL HEIGHT	(+) P.S.F	(-) P.S.F	(WA)	(CA)	(MA)
24"		100	135	3	2	2
30"	]	100	135	3	2	2
36"	80"	100	135	4	2	2
42"	00	100	135	4	2	3
48"		100	135	4	2	3
52"		100	135	5	2	3
60"	1	100	135	5	2	3
66"		-	_	-	-	-
72"		-	-	-	-	-
24"		100	135	3	2	2
30"		100	135	3	2	2
36"	0.411	100	135	4	2	2
42"	84"	100	135	4	2	3
48"	1	100	135	5	2	3
52"	1	100	135	5	2	3
60"	1	100	135	5	2	3
66"	1	-	-	-	-	
72"	1	_	_	_	_	_
24"		100	135	3	2	2
30"		100	135	4	2	2
36"	1	100	135	4	2	3
42"	- 88"	100	135	5	2	3
48"		100	135	5	2	3
52"		100	135	5	2	3
60"		100	135	6	3	3
66"		-	-	_	-	-
72"				_	-	_
24"		100	135	3	2	2
30"		100	135	4	2	2
36"		100	135	4	2	3
42"	92"	100	135	5	2	3
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	-	100	135	6	3	3
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72"	-	-	_	-	<b>+</b>	-
		100	135	-	2	2
24" 30"		100	135	3	2	2
36"	-	100	135	5	2	3
	96"	100	135		2	3
42"	-	100	135*	5		
48"	4		135*	5	3	3
52"	-	100		6	3	4
60"	4	70	80	6	3	4
66"	4	-	-	-	-	-
72"		70		_	-	
24"	4	70	80	2	2	2
30"	4	70	80	3	2	2
36"		70	80	3	2	2
42"		70	80	3	2	2
48"	100"	70	80	4	2	2
52"	]	70	80	4	2	2
60"	1	70	80	4	2	3
66"		-	-	-	-	
72"	1			_	_	_

NOMINAL DIMS				REQ'D ANCHORS AT CLUSTERS ON EACH SIDE OF VERTICAL		
PANEL WIDTH	PANEL HEIGHT	(+) P.S.F	(-) P.S.F	WOOD (WA)	CONC. (CA)	METAL (MA)
24"		70	80	2	2	2
30"		70	80	3	2	2
36"		70	80	3	2	2
42"		70	80	3	2	2
48"	104"	70	80	4	2	2
52"		70	80	4	2	2
60"		70	80	4	2	3
66"		-	-	-	-	-
72"		-	-	-	-	_
24"		70	80	2	2	2
30"	ľ	70	80	3	2	2
36"		70	80	3	2	2
42"	4000	70	80	4	2	2
48"	108"	70	80	4	2	2
52"		70	80	4	2	3
60"		70	80	5	2	3
66"		-	-	-	-	-
72"		-	-	-	_	-
24"	112"	70	80	3	2	2
30"		70	80	3	2	2
36"		70	80	3	2	2
42"		70	80	4	2	2
48"		70	80	4	2	3
52"		70	80	4	2	3
60"		70	80	5	2	3
66"		-	-	-	-	-
72"		-	-	-	_	-
24"		70	80	3	2	2
30"		70	80	3	2	2
36"		70	80	4	2	2
42"		70	80	4	2	2
48"	116"	70	80	4	2	3
52"		70	80	5	2	3
60"		70	80	5	2	3
66"		-	-	-	-	_
72"		-	_	-	_	_
24"		70	80	3	2	2
30"		70	80	3	2	2
36"		70	80	4	2	2
42"		70	80	4	2	2
48"	119 <sup>1</sup> / <sub>4</sub> "	70	80	4	2	3
52"		70	80	5	2	3
60"		70	80	5	2	3
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72"		-	-	-	_	-

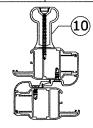
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EQ'D MAX SPACING BETWEEN CLUSTERS ( HEAD/SILL ) WOOD CONC. METAL (WA) (CA) (MA) RESSURES JP TO 80 PSF 12" 12" 80 PSF TO 135 PSF

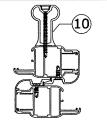
REQ'D MAX SPACING FOR POCKET HOOK STRIP ANCHORS					
ALL SIZES	WOOD (WA)	CONC. (CA)	METAL (MA)		
	6"	6"	6"		

\* LIMITED TO 120 PSF WHEN ANCHORING IS THRU THRESHOLD RISER AREA

NOTE: SIZES ON CHARTS ARE PANEL DIMENSIONS ADD 2  $\frac{1}{4}$ " TO HEIGHT OF PANEL FOR OVERALL FRAME HEIGHT

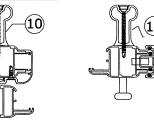


REINFORCEMENT 1



12" 10"

AT INTERLOCK



REINFORCEMENT 1 AT MEETING STILES

SILL RISERS

+70 PSF MAX +100 PSF MAX

0.6377

BEN FRANKL BENNARDO, P.E. STATE OF

LA FINESTRA, LC 2790 NW 104TH COURT DORAL, FL (305) 599-8093

15-2257

N.T.S. SCALE:

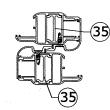
NOMIN	AL DIMS				NCHORS AT CLU H SIDE OF VER	
PANEL WIDTH	PANEL HEIGHT	(+) P.S.F	(-) P.S.F	WOOD (WA)	CONC. (CA)	META (MA
24"		75	75	2	2	2
30"	1	75	75	2	2	2
36"		75	75	2	2	2
42"	80"	75	75	2	2	2
48"		75	75	3	2	2
52"	-	75	75	3	2	2
60"				3		t
66"	4	-	-	-	-	
72"	-	-	-	-	-	<del>-</del>
		-	-	-	-	-
24"	1	75	75	2	2	2
30"	4	75	75	2	2	2
36"	84"	75	75	2	2	2
42"	4	75	75	3	2	2
48"		75	75	3	2	2
52"		75	75	3	2	2
60"		-	-	-	-	
66"			-	-	-	_
72"		-	<u>-</u>	-	-	
24"		75	75	2	2	2
30"	]	75	75	2	2	2
36"	00"	75	75	3	2	2
42"	- 88"	75	75	3	2	2
48"		75	75	3	2	2
52"		75	75	3	2	2
60"	1	-	_	_	_	_
66"	1	_	_	-	-	_
72"	1	-	-	-	-	_
24"		75	75	2	2	2
30"	1	75	75	2	2	2
36"		75	75	3	2	2
42"	92"	75	75	3	2	2
48"	-	75	75	3	2	2
52"	-	75	75	3	2	2
60"	-	-	- 73		_	-
66"	4	-	_	<u>-</u>	_	<del>                                     </del>
72"	-				1	
24"		75	75	2	2	2
	-	75	75	<del>-</del>		2
30" 36"	-	75	<del> </del>	2	2	+
	96"	75	75	3	2	2
42"	4	75	75	3	2	2
48"	4	75	75	3	2	2
52"	4	75	75	3	2	2
60"	4	-	-	-	-	-
66"	4		-	-	-	-
72"		-	-	-	-	-
24"	_	75	75	2	2	2
30"	4	75	75	3	2	2
36"		75	75	3	2	2
42"		75	75	3	2	2
48"	100"	75	75	3	2	2
52"		75	75	4	2	2
60"	]	-	-	-	-	
66"		-	-	-	-	_
72"	7	_	_	-	-	_

NOMINAL DIMS		ļ		REQ'D ANCHORS AT CLUSTERS ON EACH SIDE OF VERTICAL		
PANEL WIDTH	PANEL HEIGHT	(+) P.S.F	(-) P.S.F	WOOD (WA)	CONC. (CA)	META (MA
24"		75	75	2	2	2
30"	1	75	75	3	2	2
36"	1	75	75	3	2	2
42"	1	75	75	3	2	2
48"	104"	75	75	4	2	2
52"		75	75	4	2	2
60"	1	-	_	-	-	_
66"		-	-	-	-	_
72"	1	-	-	-	-	_
24"		75	75	2	2	2
30"		75	75	3	2	2
36"		75	75	3	2	2
42"	1	75	75	3	2	2
48"	108"	75	75	4	2	2
52"	1	75	75	4	2	2
60"	1	-	_	_	-	<del>                                     </del>
66"	İ		-	_	-	_
72"		-	-	_	-	1 -
24"		75	75	2	2	2
30"		75	75	3	2	2
36"	1	75	75	3	2	2
42"	112"	75	75	4	2	2
48"		75	75	4	2	2
52"		75	75	4	2	3
60"		-	-	_	-	
66"		_	-	_	<del>                                     </del>	<del>-</del>
72"		_	_	_	_	<del> </del>
24"		75	75	3	2	2
30"		75	75	3	2	2
36"	†	75	75	3	2	2
42"	1	75	75	4	2	2
48"	116"	75	75	4	2	2
52"		75	75	4	2	3
60"	1				<del>-</del>	-
66"	1	-	_	_	-	-
72"	1	-	-	_	-	_
24"		75	75	3	2	2
30"	1	75	75	3	2	2
36"	1	75	75	3	2	2
42"	1	75	75	4	2	2
48"	119 1/4"	75	75	4	2	3
52"	1	75	75	4	2	3
60"	1	-	-		-	-
66"	1	-	_	_	_	_
72"	-		<del> </del>	<b></b>	<del> </del>	+

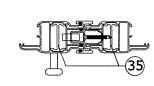
REQ'D MAX SPACING E	SE I WEEN C	LUSIERS(F	1EAD/SILL
PRESSURES	WOOD (WA)	CONC. (CA)	METAL (MA)
UP TO 80 PSF	12"	12"	12"
80 PSF TO 135 PSF	9"	10"	10"

REQ'D MAX SPACI	NG FOR PC		STRIP
ALL SIZES	WOOD (WA)	CONC. (CA)	METAL (MA)
	6"	6"	6"

NOTE: SIZES ON CHARTS ARE PANEL DIMENSIONS ADD 2 <sup>1</sup>/<sub>4</sub>" TO HEIGHT OF PANEL FOR OVERALL FRAME HEIGHT



REINFORCEMENT 2
AT INTERLOCK



+70 PSF MAX +100 PSF MAX

SILL RISERS

3.897"

REINFORCEMENT 2 AT MEETING STILES



LA FINESTRA, LC 2790 NW 104TH COURT DORAL, FL (305) 599-8093

EKU-9000 SLIDING GLASS DOOR 2017 FLORIDA BUILDING CODE UPDATE

15-2257

SCALE: N.T.S.



ſ	24"		70	100	2	2	2
Ī	30"		70	100	3	2	2
Ī	36"	00"	70	100	3	2	2
ľ	42"	80"	70	100	3	2	2
	48"		70	100	3	2	2
	52"		70	95	3	2	2
l	62"		69	79	3	2	2
İ	66"		65	75	3	2	2
Ì	72"		60	68	3	2	2
Ì	24"		70	100	2	2	2
l	30"		70	100	3	2	
	36"	0.48	70	100	3	2	2
	42"	84"	70	100	3	2	2
	48"		70	100	4	2	2
	52"		70	95	4	2	
	62"		69	79	3	2	2
	66"		65	75	3	2	2
	72"		60	68	3	2	- 2
	24"		70	100	2	2	2
	30"		70	100	3	2	2
	36"	00"	70	100	3	2	2
	42"	88"	70	100	4	2	- 2
	48"		70	100	4	2	- 2
	52"		70	95	4	2	- 2
	62"		70	80	4	2	
	66"		65	75	3	2	
	72"		60	68	3	2	-
	24"		70	100	3	2	
	30"		70	100	3	2	
	36"		70	100	3	2	
	42"	92"	70	100	4	2	
	48"	1	70	100	4	2	
	52"		70	95	4	2	
	62"		70	80	4	2	
	66"		65	75	4	2	:
	72"	1	60	68	3	2	
	24"		70	100	3	2	
	30"	1	70	100	3	2	
	36"	00"	70	100	4	2	
	42"	96"	70	100	4	2	:
	48"		70	100	4	2	:
	52"	1	70	95	4	2	
	62"	1	70	80	4	2	
	66"	1	65	75	4	2	
	72"	1	60	68	4	2	
	24"		70	100	3	2	
	30"	1	70	100	3	2	
	36"	1	70	100	4	2	
	42"		70	100	4	2	
	48"	100"	70	100	4	2	
	52"	1	70	95	4	2	
	62"	1	69	79	4	2	
	66"	1	65	75	4	2	
	701	1			<del>                                     </del>	<del>                                     </del>	<del>                                     </del>

LOADING & ANCHOR CAPACITY (PSF)

(+) P.S.F (-) P.S.F

NOMINAL DIMS

**PANEL** 

WIDTH

72"

PANEL HEIGHT

REQ'D ANCHORS AT CLUSTERS

CONC.

(CA)

**METAL** 

(MA)

ON EACH SIDE OF VERTICAL

WOOD

(WA)

		·				107500
NOMINA	AL DIMS				NCHORS AT CLU H SIDE OF VER	TICAL
PANEL WIDTH	PANEL HEIGHT	(+) P.S.F	(-) P.S.F	WOOD (WA)	CONC. (CA)	METAL (MA)
24"		70	100	3	2	2
30"		70	100	3	2	2
36"	104"	70	100	4	2	2
42"		70	100	4	2	3
48"		70	100	5	2	3
52"		70	95	5	2	3
62"		70	80	4	2	3
66"		65	75	4	2	2
72"		60	68	4	2	2
24"		70	100	3	2	2
30"		70	100	3	2	3
36"	108"	70	100	4	2	3
42"		70	100	4	2	3
48"	100	70	100	5	2	3
52"		70	95	5	2	3
62"		70	80	5	2	3
66"		65	75	4	2	3
72"		60	68	4	2	3
24"		70	100	3	2	2
30"		70	100	4	2	2
36"	112"	70	100	4	2	3
42"		70	100	5	2	3
48"		70	100	5	2	3
52"		70	95	5	2	3
62"		69	79	5	2	3
66"		65	75	5	2	3
72"		60	68	4	2	3
24"		70	100	3	2	2
30"		70	100	4	2	2
36"	ļ	70	100	4	2	3
42"	116"	70	100	5	2	3
48" 52"	110	70	100		2	3
62"	-	70	95 80	5	2	3
66"		65	75	5	2	3
72"		60	68	5	2	3
24"		70	100	3	2	2
30"	-	70	100	4	2	2
36"	1	70	100	4	2	3
42"	1	70	100	5	2	3
48"	119 ½"	70	100	5	3	3
52"	1	70	95	5	3	3
62"	1	70	80	5	2	3
66"	1	65	75	5	2	3
72"	1	60	68	5	2	3
24"		70	100	3	2	2
30"	1	70	100	4	2	2
36"	1	70	100	5	2	3
42"	]	70	100	5	2	3
48"	126	70	99	6	3	3
52"	]	70	93	6	3	3
62"		70	80	6	3	3
66"		65	75	5	3	3
72"		60	68	5	2	3
			•			

LOADIN	LOADING & ANCHOR CAPACITY (PSF)					
NOMINA	NOMINAL DIMS			REQ'D ANCHORS AT CLUSTERS ON EACH SIDE OF VERTICAL		
PANEL WIDTH	PANEL HEIGHT	(+) P.S.F	(-) P.S.F	WOOD (WA)	CONC. (CA)	METAL (MA)
24"		70	100	4	2	2
30"		70	100	4	2	3
36"		70	100	5	2	3
42"	]	70	100	5	3	3
48"	132"	70	98	6	3	4
52"		70	92	6	3	4
62"		70	80	6	3	3
66"		65	75	6	3	3
72"		-	-	-	-	-
24"	4001	70	100	4	2	2
30"		70	100	4	2	3
36"		70	100	5	2	3
42"		70	100	6	2	3
48"	138"	70	97	6	3	4
52"		70	91	6	3	4
62"		69	80	6	3	4
66"		-	-	-	•	-
72"		-	-	-	-	-
24"		70	100	4	2	2
30"	141½"	70	100	5	2	3
36"		70	100	5	2	3
42"		70	100	6	2	4
48"		70	97	6	3	4
52"		70	91	6	3	4
62"		69	80	6	3	4
66"		-	-	-	-	-
72"		-	-	<u>-</u>	-	-

REQ'D MAX SPACING E	BETWEEN C	LUSTERS ( H	HEAD/SILL)
PRESSURES	WOOD (WA)	CONC. (CA)	METAL (MA)
UP TO 80 PSF	12"	12"	12"
80 PSF TO 135 PSF	9"	10"	10"

	0.6377
0.6377 + +	3.897"

SILL RISERS

	REQ'D MAX SPACING FOR POCKET HOOK STRIP ANCHORS			
	ALL SIZES	WOOD (WA)	CONC. (CA)	METAL (MA)
		6"	6"	6"

COULD BE PLACED INSIDE OR OUT\_

**NOTE: SIZES ON CHARTS** ARE PANEL DIMENSIONS ADD 2 1 TO HEIGHT OF PANEL FOR OVERALL FRAME HEIGHT

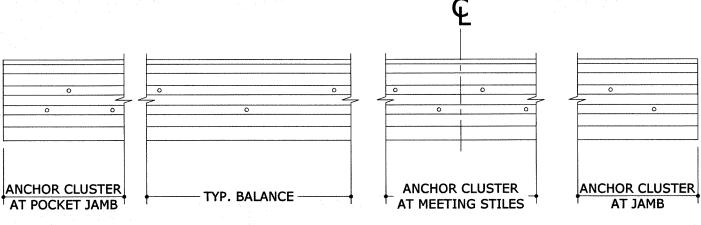
REINFORCEMENT 3 AT INTERLOCK

**REINFORCEMENT 3** AT MEETING STILES

A FINESTRA, I 2790 NW 104TH COURT DORAL, FL (305) 599-8093

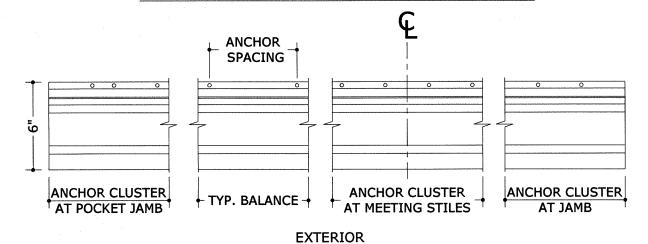
COPYRIGHT ENGINEERING EXPRESS 15-2257

SCALE: N.T.S.

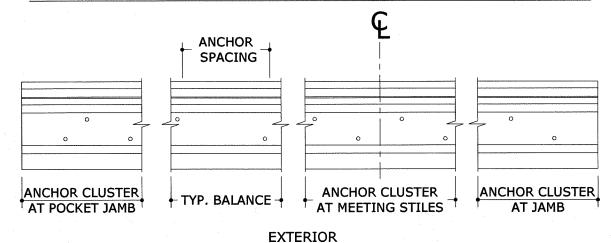


### **EXTERIOR**

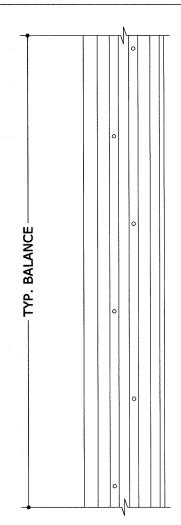
## DOOR SILL ANCHOR LAYOUT



### ALTERNATE DOOR SILL ANCHOR LAYOUT



## POCKET HOOK ANCHOR LAYOUT



#### ANCHOR TYPES:

"CA":  $\frac{1}{4}$ " ELCO ULTRACON, 1  $\frac{3}{4}$ " EMBEDMENT INTO 2846PSI CONCRETE MIN. WITH 2  $\frac{1}{2}$ " EDGE DISTANCE AND 3" MIN SPACING BETWEEN ANCHORS.

"WA":  $\frac{1}{4}$ " ELCO ULTRACON, 1  $\frac{1}{2}$ " MIN EMBEDMENT INTO SOUTHERN YELLOW PINE #2 WOOD WITH 1" MIN EDGE DISTANCE AND 1" MIN SPACING BETWEEN ANCHORS.

"MA":  $\frac{1}{4}$ "-14 ELCO DRILLFLEX, INTO  $\frac{1}{8}$ " ALUMINUM (6063-T5 MIN) OR  $\frac{1}{8}$ " STEEL (A36 MIN),  $\frac{7}{8}$ " MIN EDGE DISTANCE AND 1" MIN SPACING BETWEEN ANCHORS.

AAC, SUITE 106

SEACH, FL 33442

SEACH, FL 33442

SE FRUNCERPRESS.COM

NO BENNERSPRESS.COM

NO FAUTH #98885

OF AUTH #98885

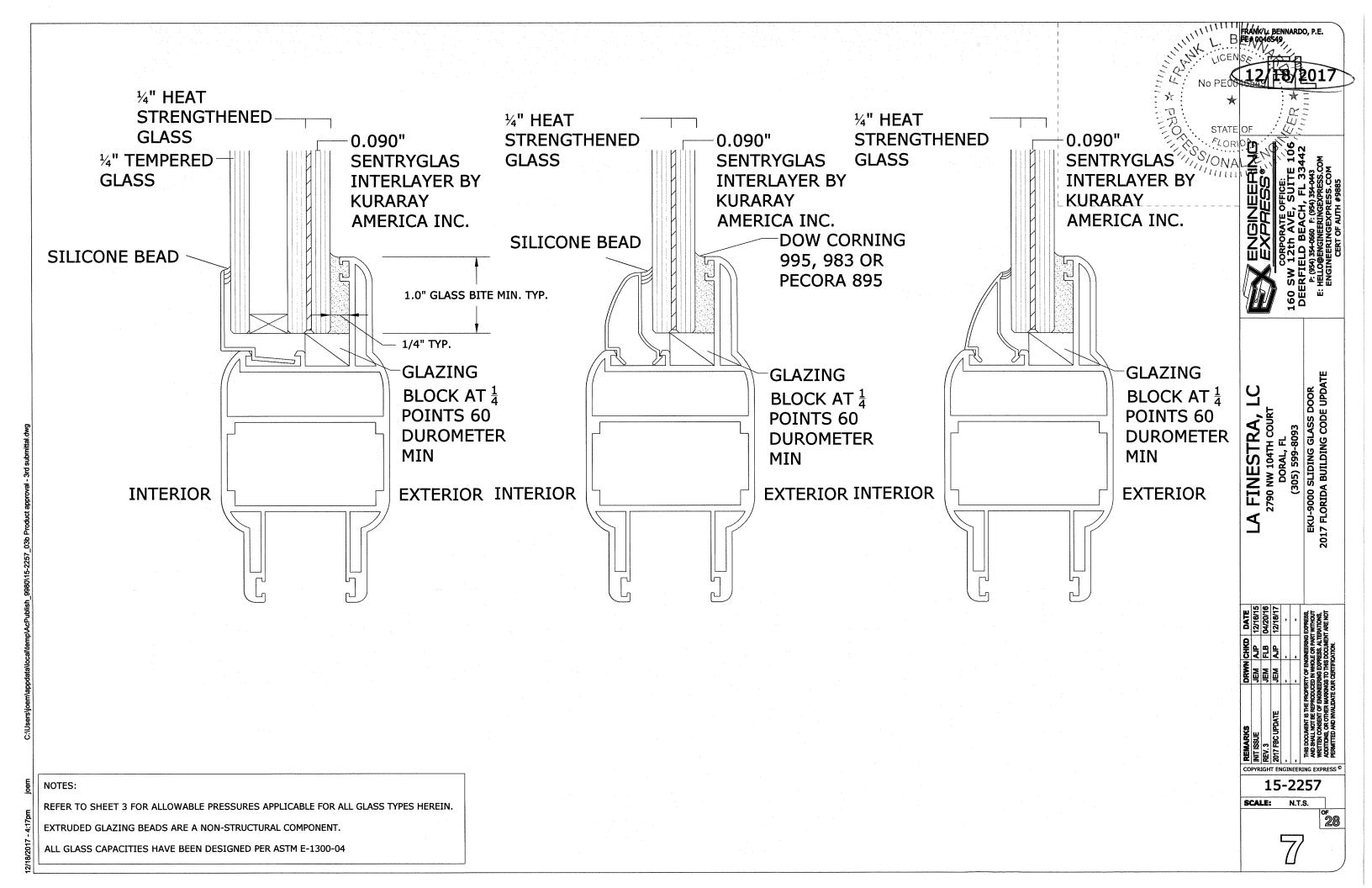
CORPORATE OFFIC
CORPORATE OFFIC
160 SW 12th AVE, SL
DEERFIELD BEACH, F
P. (954) 354-060 F. (954) 35
E: HELLO@ENGINEERINGEXPR
ENGINEERINGEXPRESS

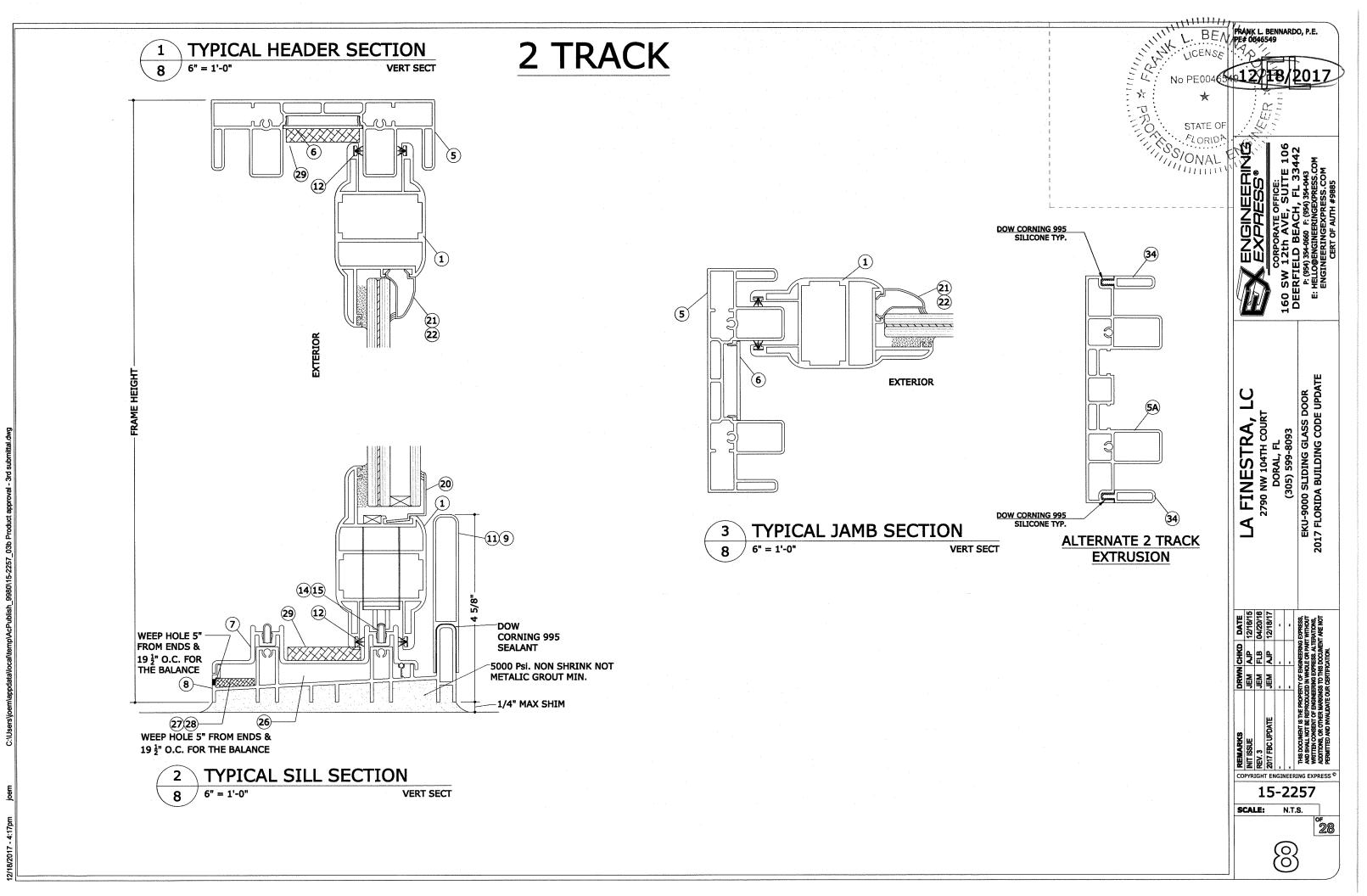
NW 104TH COURT
DORAL, FL
305) 599-8093

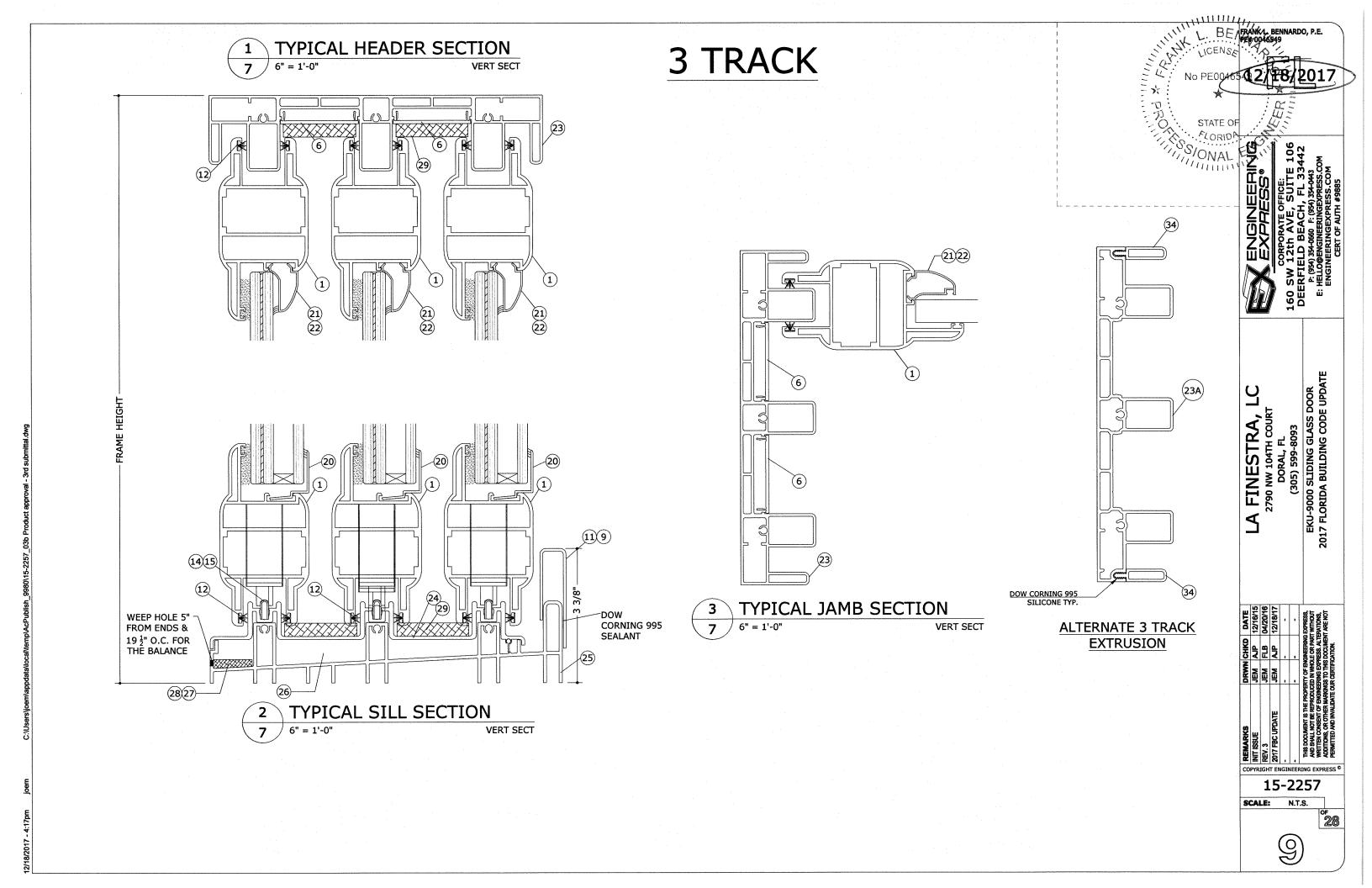
(305) 599-EKU-9000 SLIDING 2017 FLORIDA BUILDIP

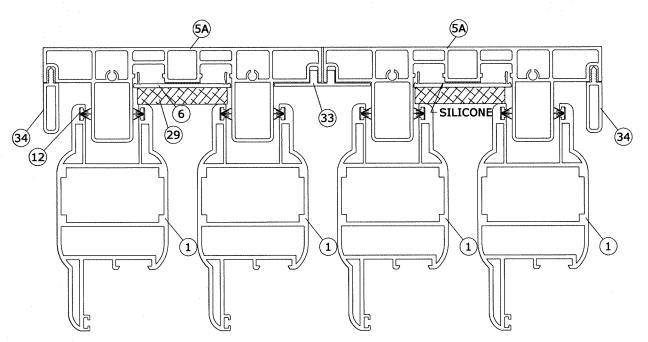
15-2257
scale: N.T.S.



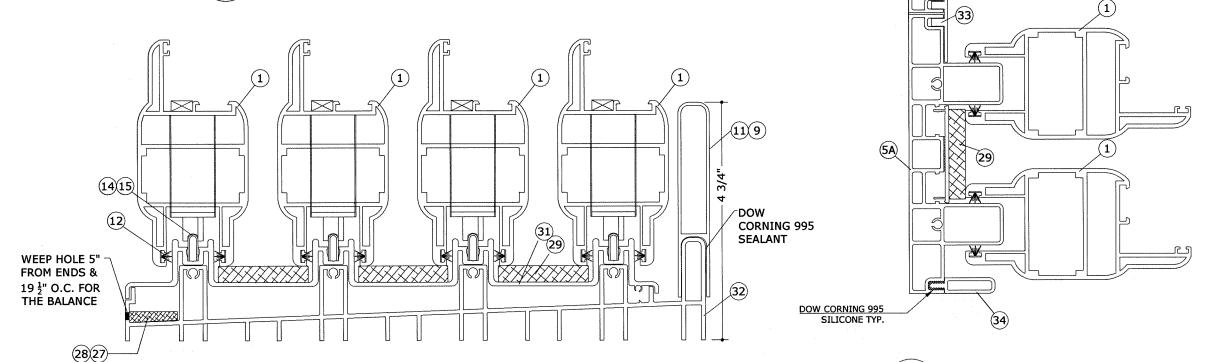








TYPICAL HEADER SECTION VERT SECT 10



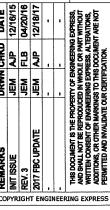
TYPICAL SILL SECTION VERT SECT

TYPICAL JAMB SECTION VERT SECT 10

SILICONE

BEN FRANKL BENNARDO, P.E. CE# 0045549

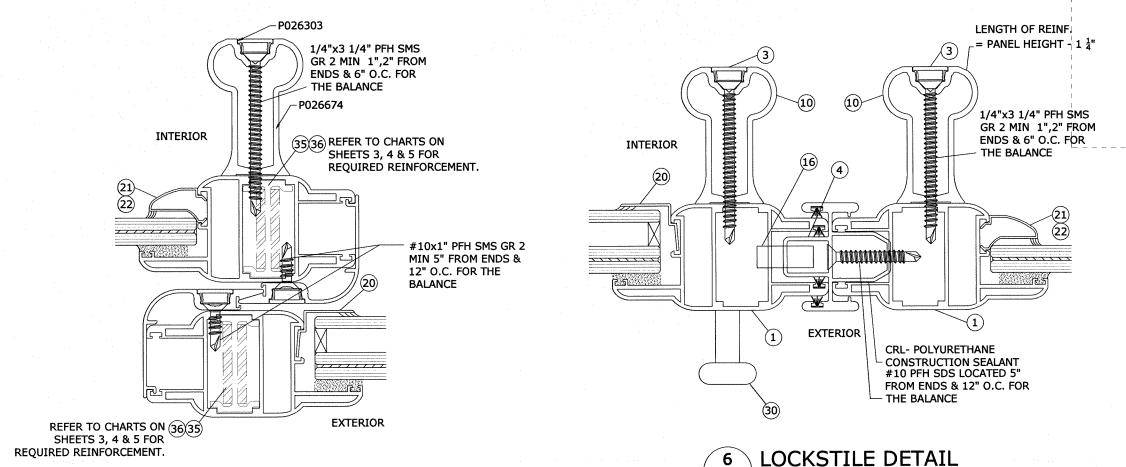
No PEnnardo FLORIDA SONAL EKU-9000 SLIDING GLASS DOOR 2017 FLORIDA BUILDING CODE UPDATE LA FINESTRA, LC 2790 NW 104TH COURT DORAL, FL (305) 599-8093



15-2257

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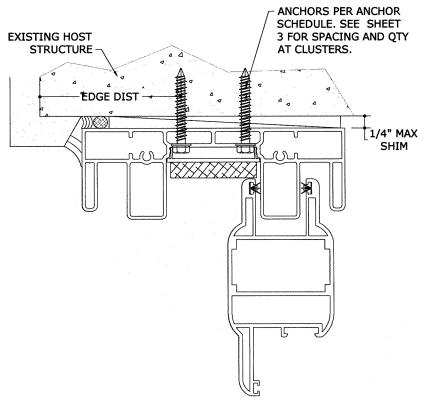
# 2, 3 & 4 TRACK SECTIONS

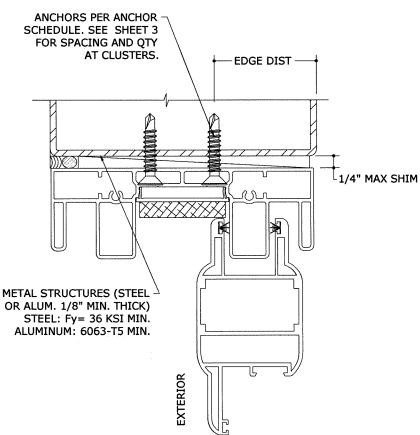


TYPICAL INTERLOCKING STILE

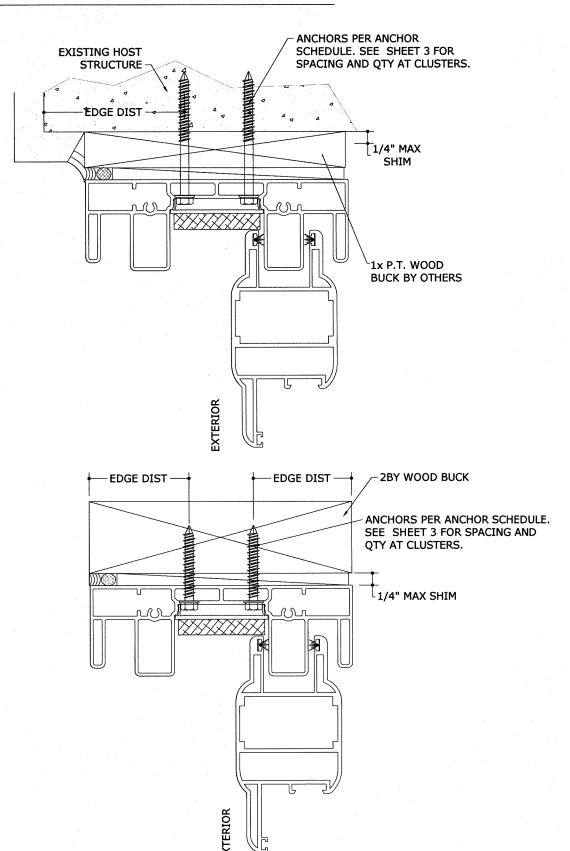
HOST STRUCTURE BY OTHERS SEE SHEET 3 FOR ANCHOR TYPE & SPACING #10x 1" FLAT PHILLIPS SELF DRILLING SCREWS. SEE SHEET 3 SPACING. GLÁSS POCKET JAMB DETAIL BENNARDO, P.E.

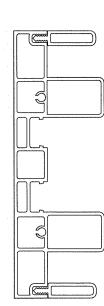
15-2257 SCALE:





WOOD BUCKS AND METAL STRUCTURE NOT BY LA FINESTRA. MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

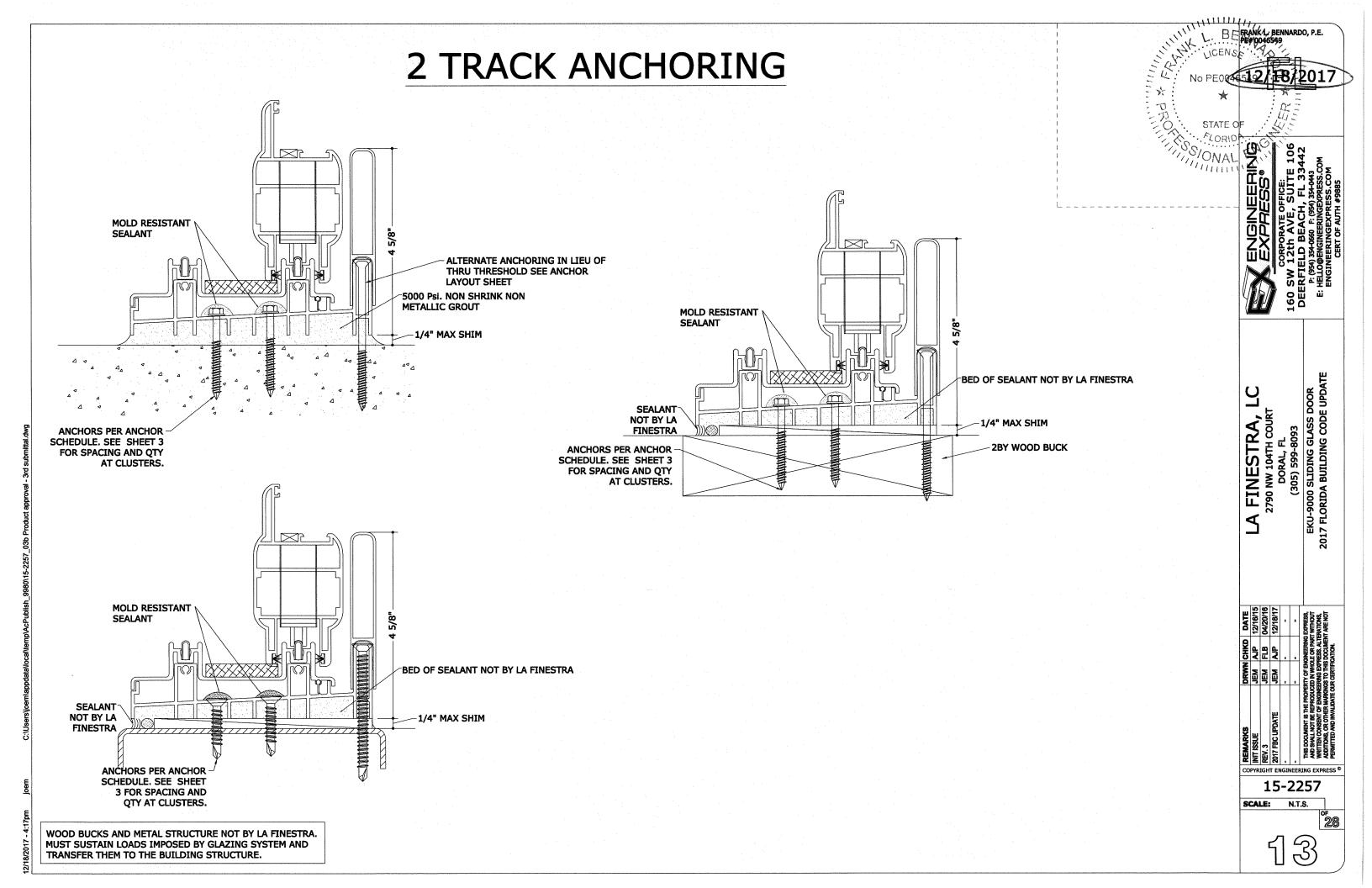


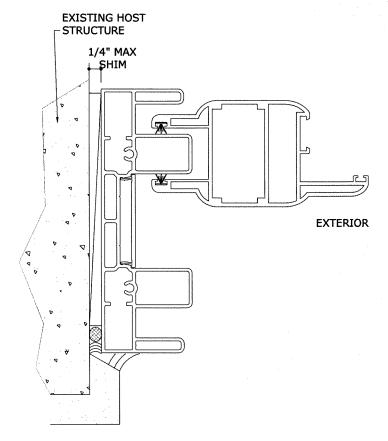


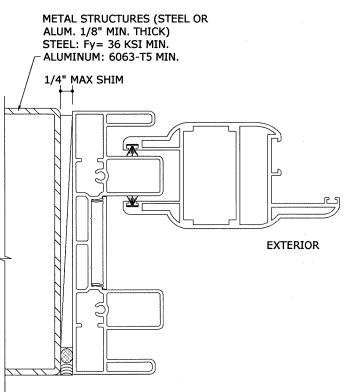
ALTERNATE 2 TRACK EXTRUSION

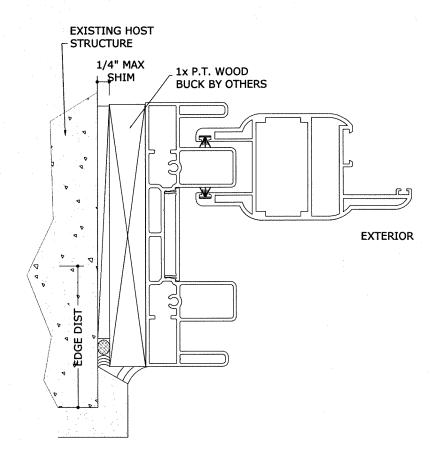
FRANK L BENNARDO, P.E.
BE
VICENS 15-2257 SCALE:

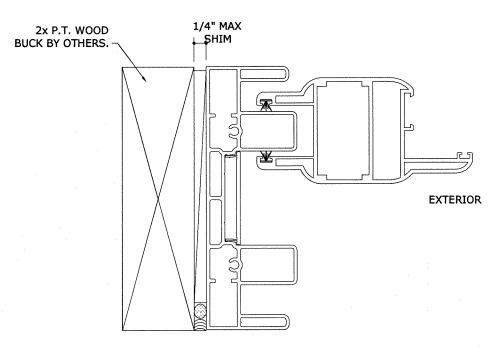
2017 - 4-17nm



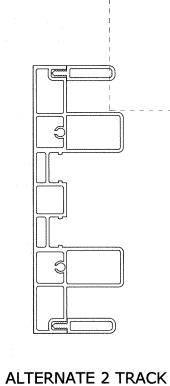








\* SEALANT ON JAMBS WITH NO ANCHORS SHALL BE DESIGNED BY OTHERS.



**EXTRUSION** 

ENGINEERINGS

CORPORATE OFFICE:

160 SW 12th AVE, SUITE 106

DEERFIELD BEACH, FL 33442

P. (954) 354-043

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BENERAL BENNARDO, P.E.

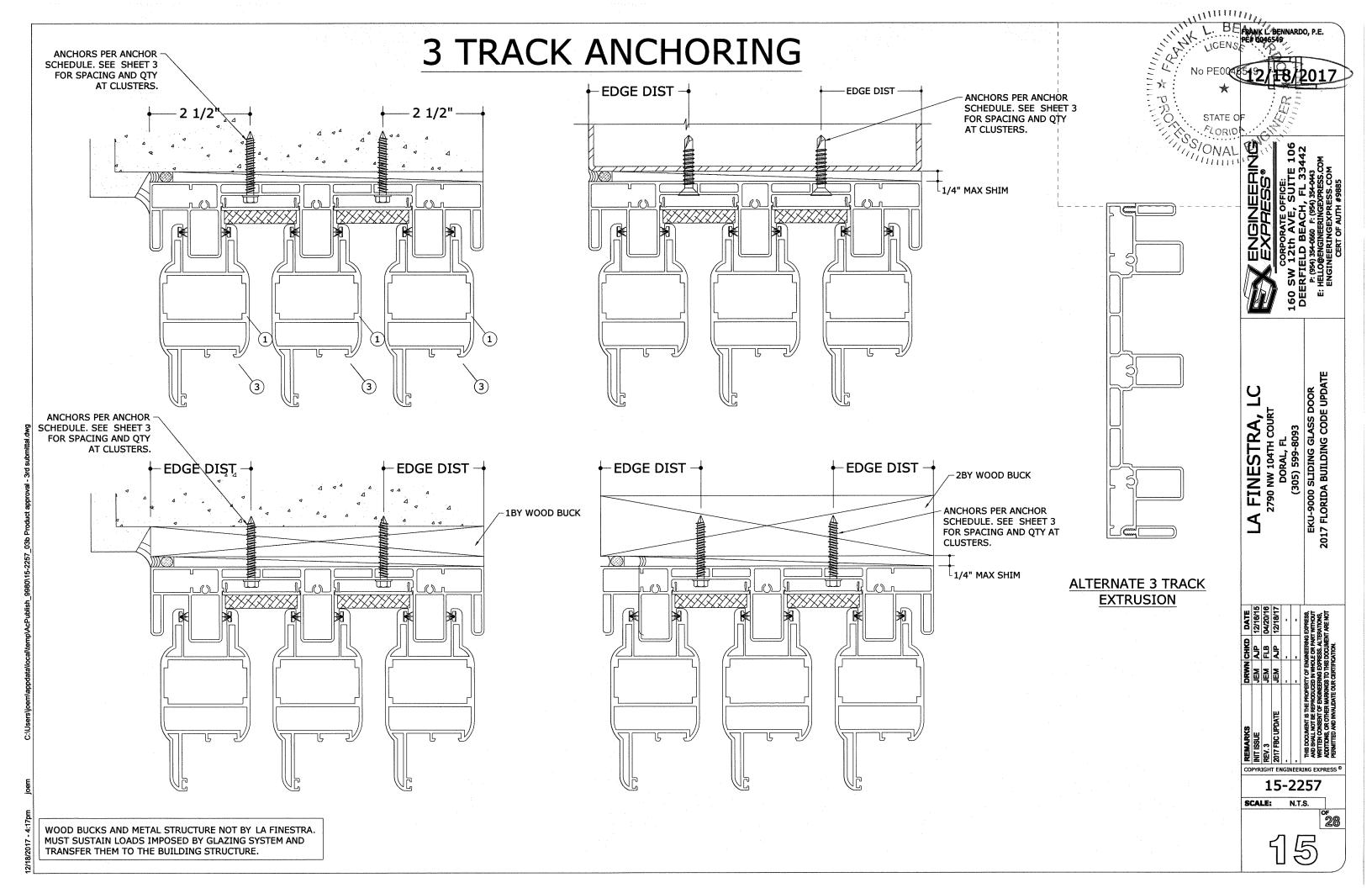
NO PET

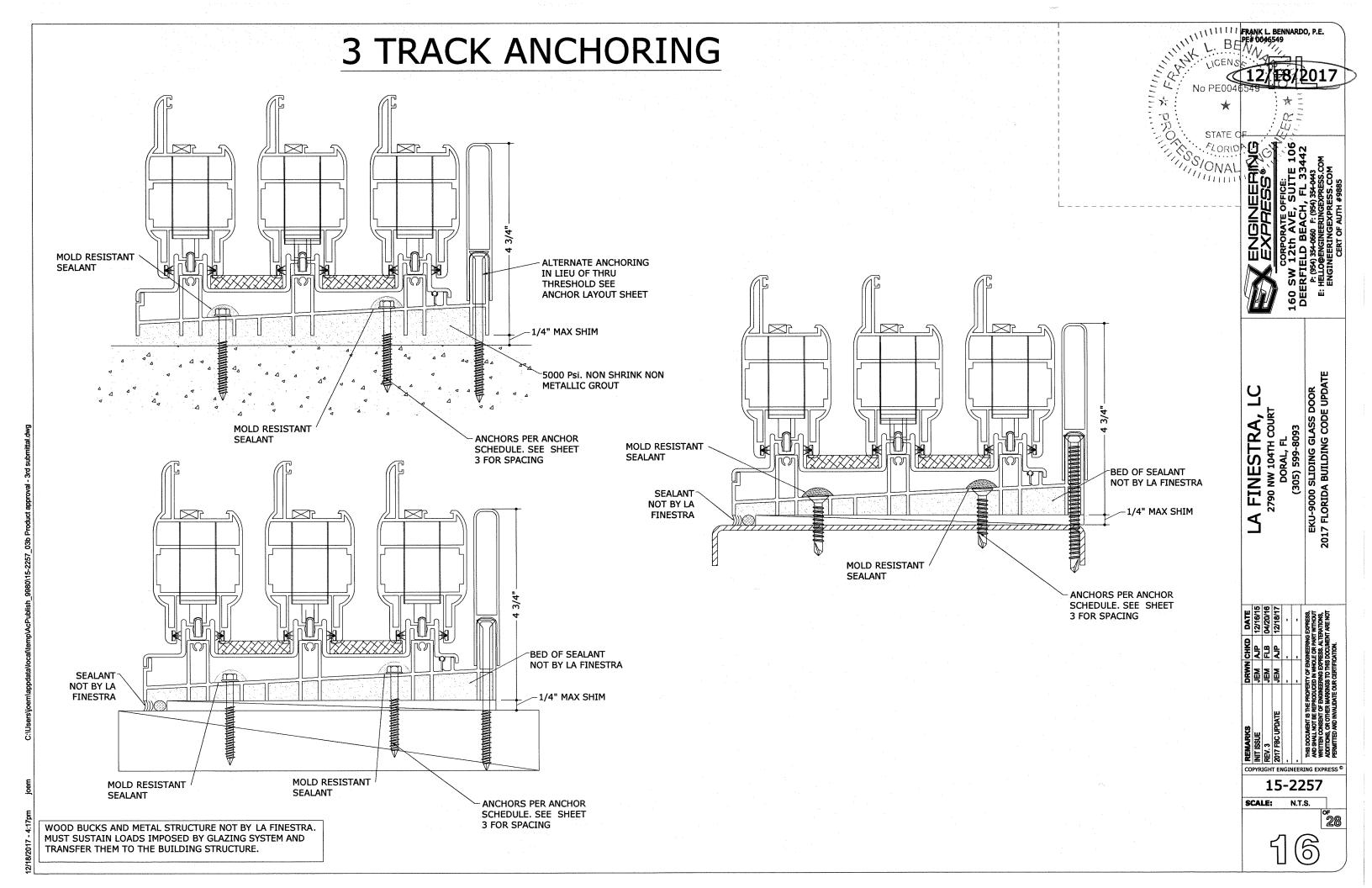
LA FINESTRA, I 2790 NW 104TH COURT DORAL, FL (305) 599-8093 EKU-9000 SLIDING GLASS DC

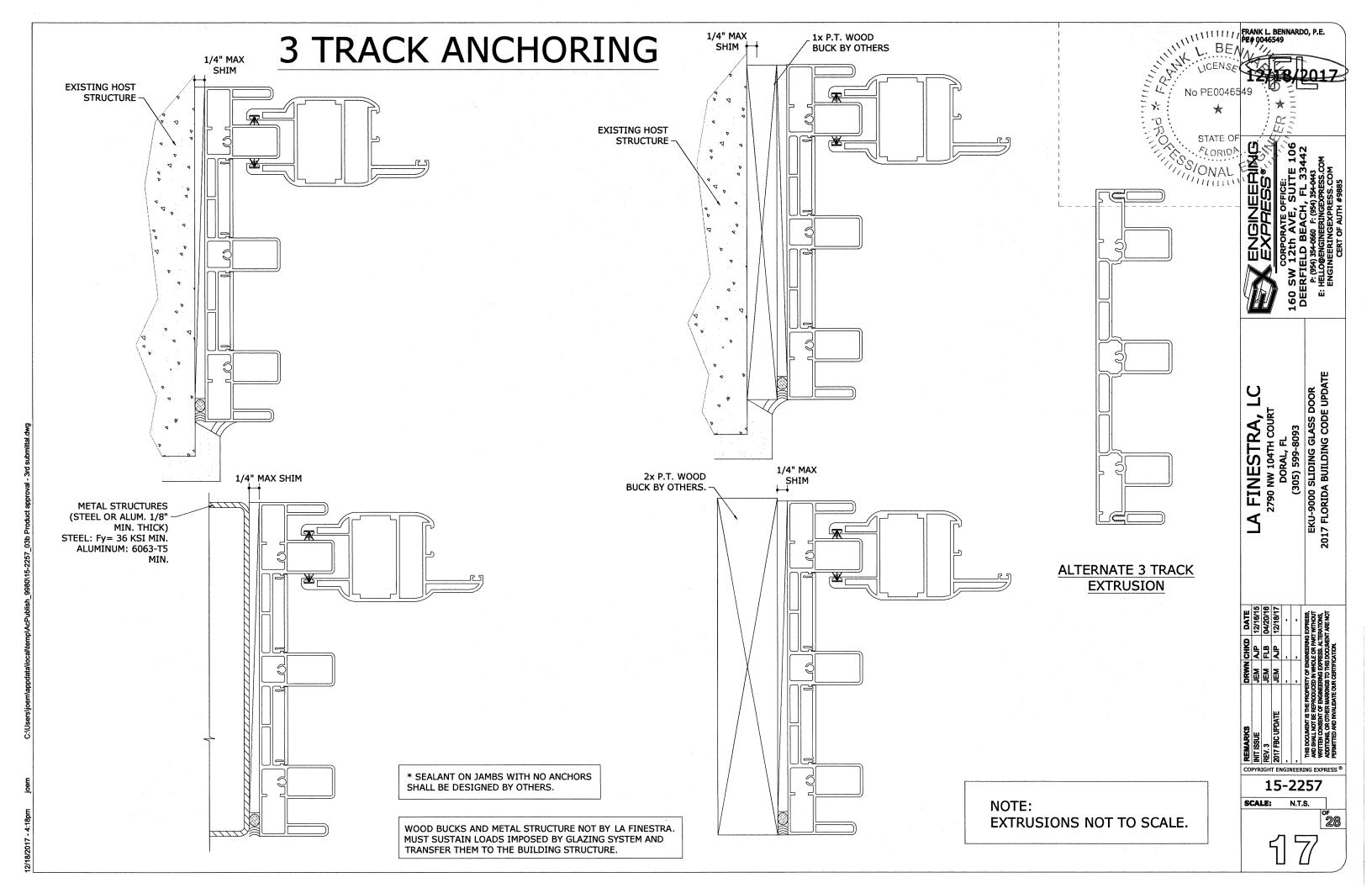
15-2257

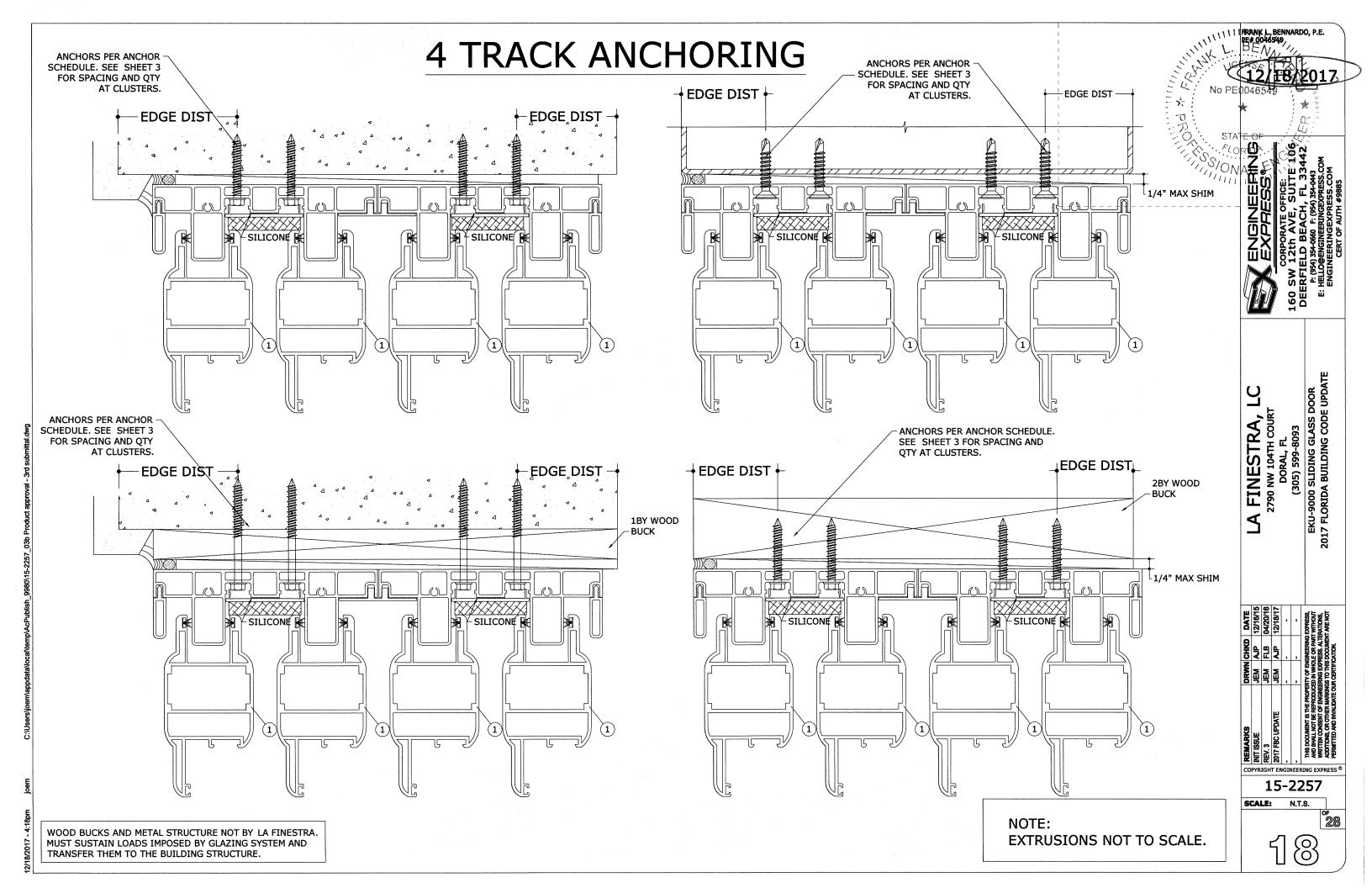
[<u>\*</u>28

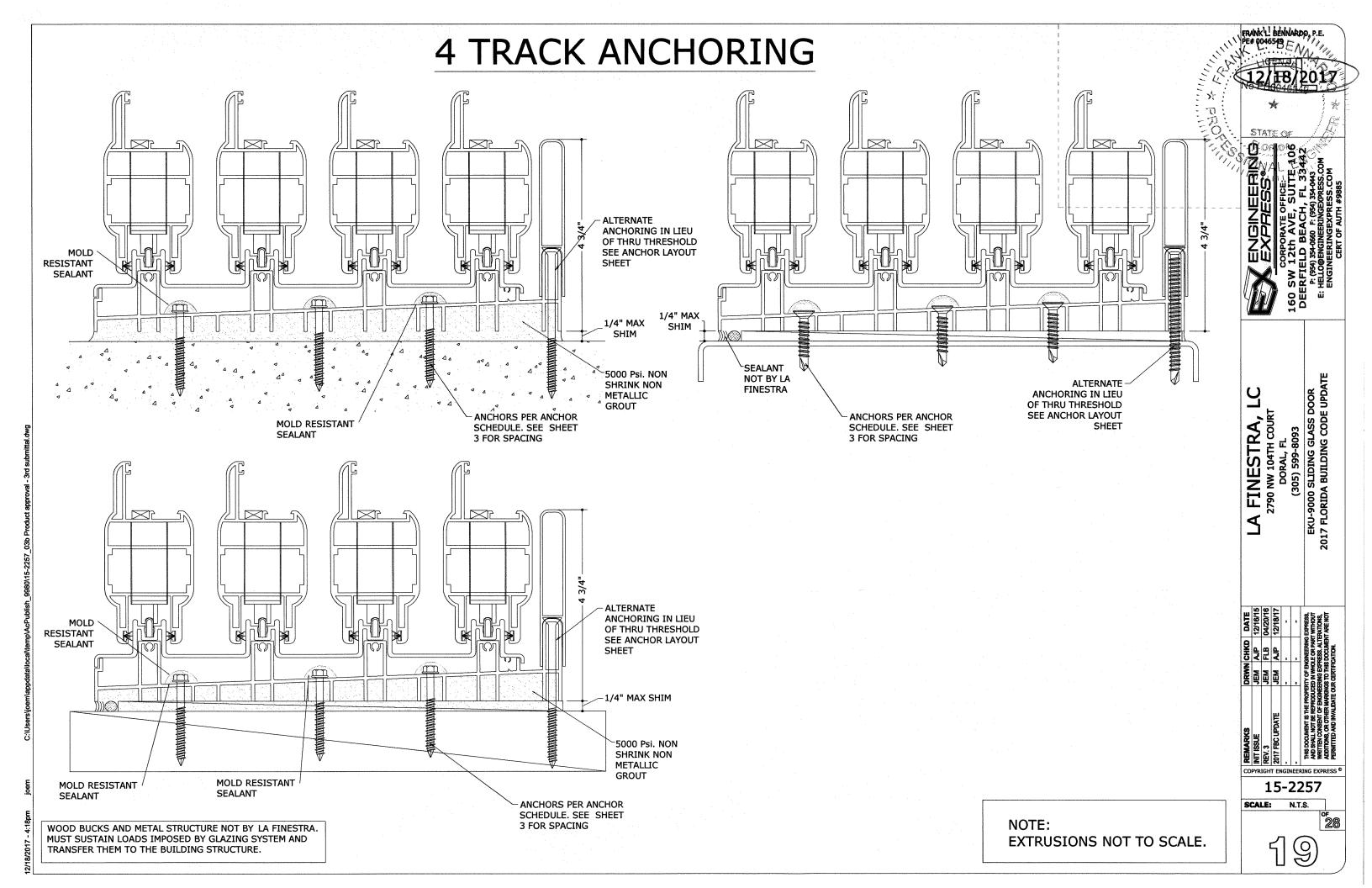
WOOD BUCKS AND METAL STRUCTURE NOT BY LA FINESTRA. MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

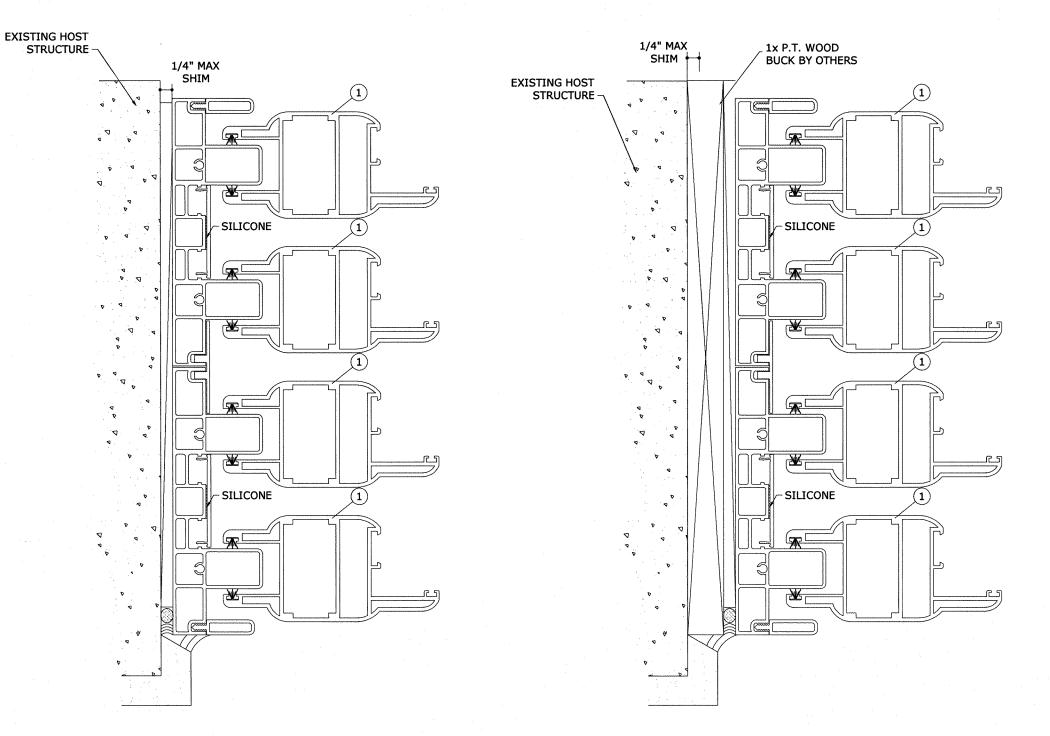












SUE JEM AJP 12/16/15
SUE JEM AJP 12/16/15
BC UPDATE JEM FLB 04/20/16
BC UPDATE JEM AJP 12/18/17
COUMBIT IS THE PROPERTY OF BOUNEERING SPRESS, WILL MOT BE REPROUCED IN WHOLE OF PREY WITHOUT EN CONSENT OF BOUNEERING SOFTESS, ALTERATIONS, TIED AND INVALDATE OUR CERTIFICATION.

15-2257

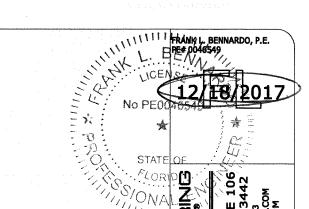
SCALE: N.T.S.

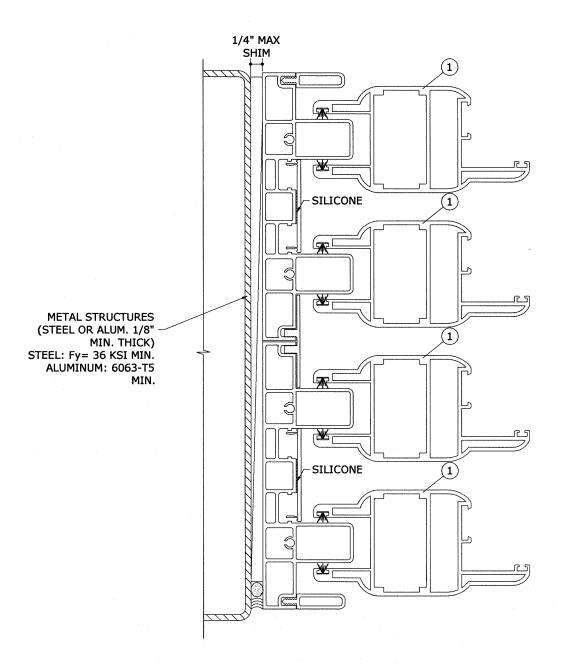
NOTE:

EXTRUSIONS NOT TO SCALE.

20

\* SEALANT ON JAMBS WITH NO ANCHORS SHALL BE DESIGNED BY OTHERS.





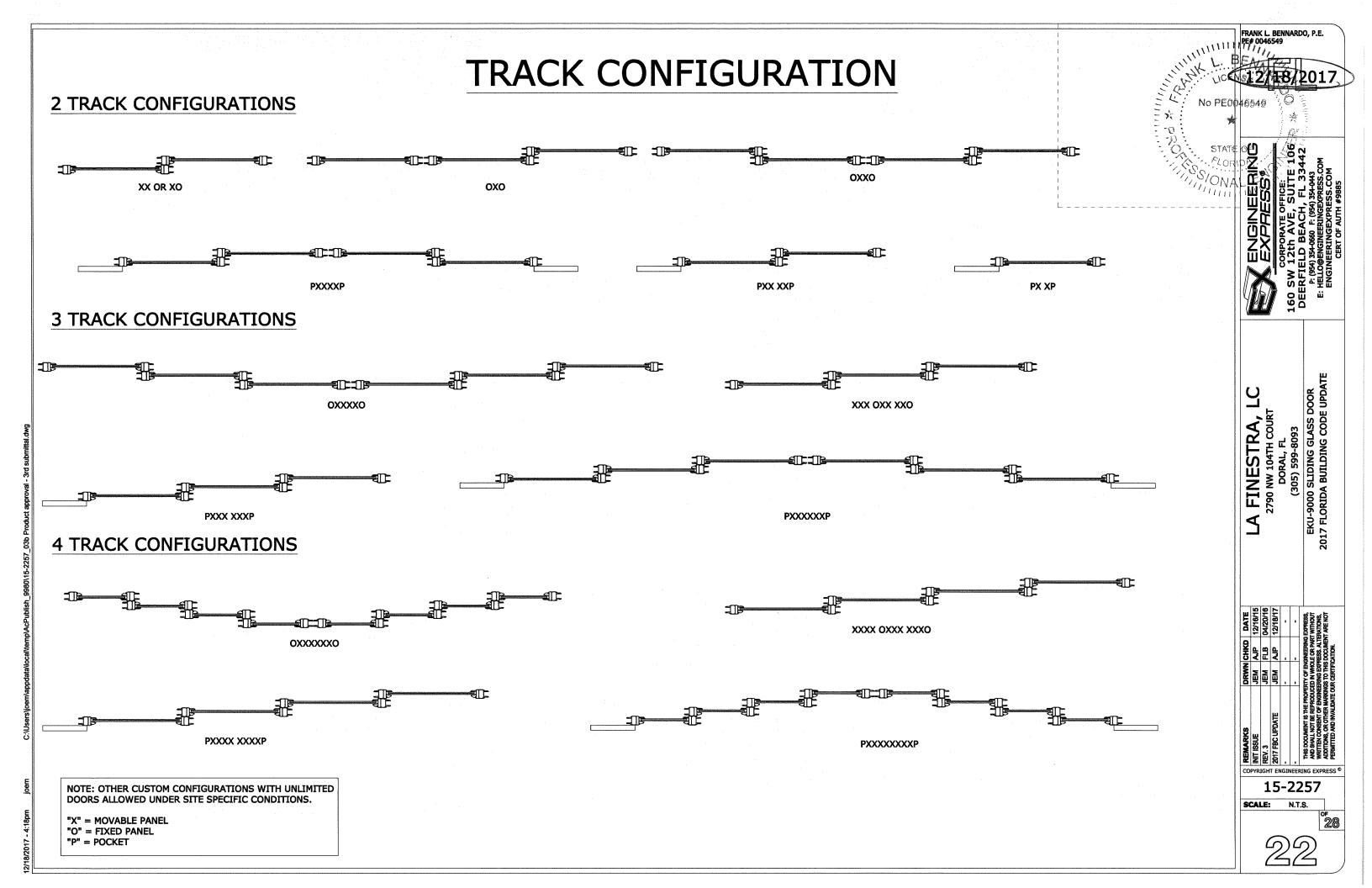
1/4" MAX SHIM SILICONE 2x P.T. WOOD BUCK BY OTHERS. SILICONE (1)

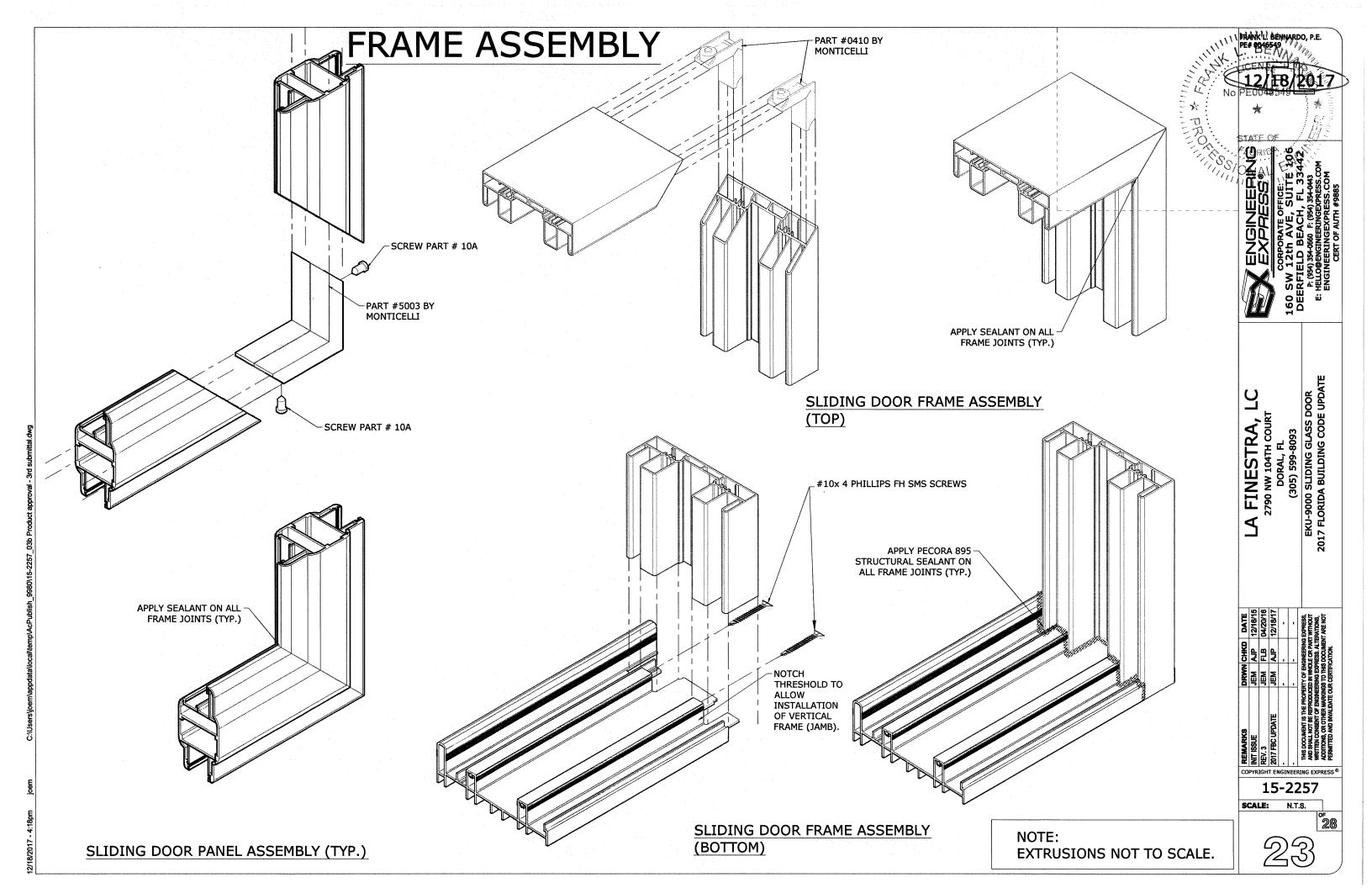
\* SEALANT ON JAMBS WITH NO ANCHORS SHALL BE DESIGNED BY OTHERS.

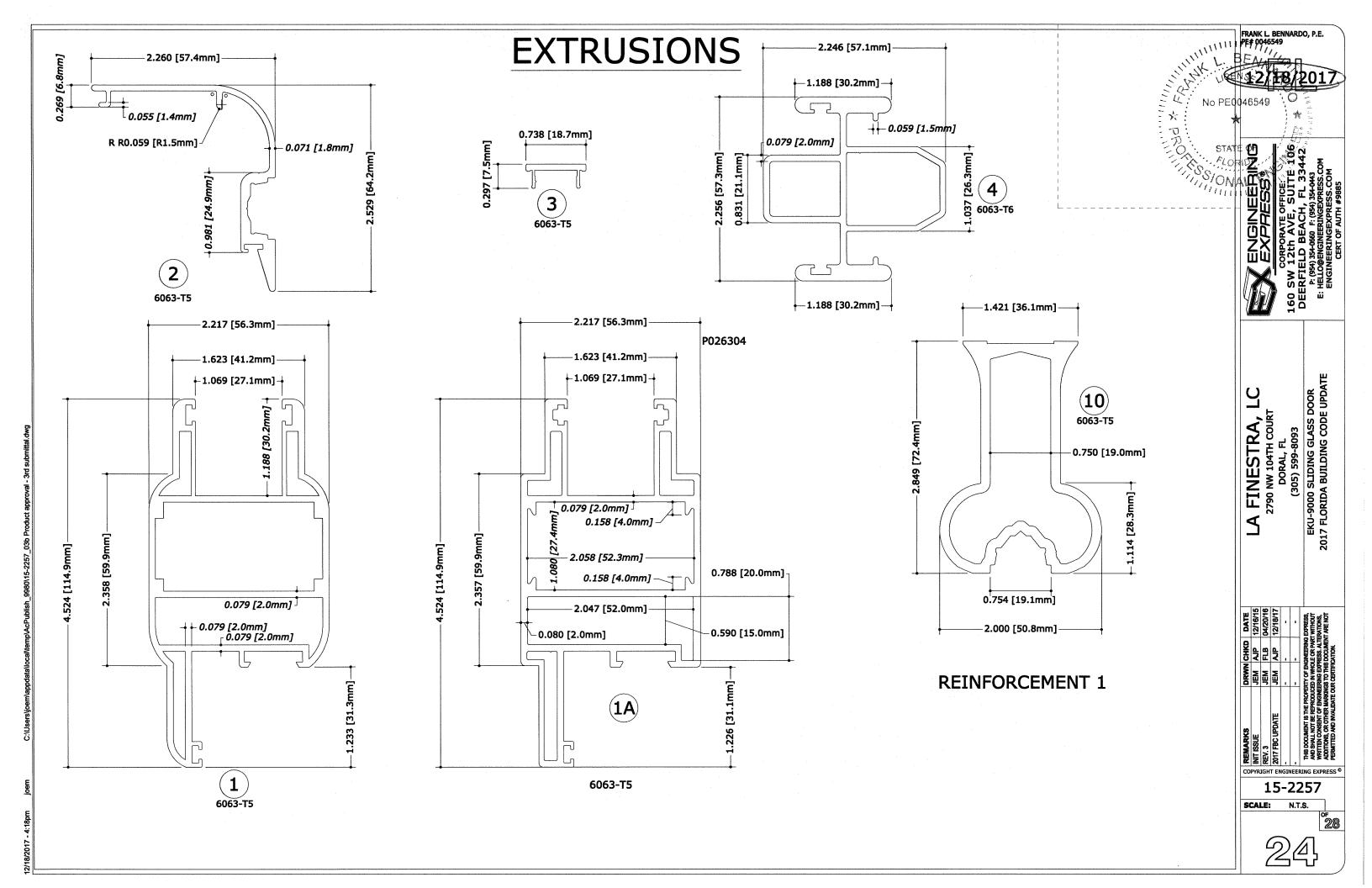
> NOTE: EXTRUSIONS NOT TO SCALE.

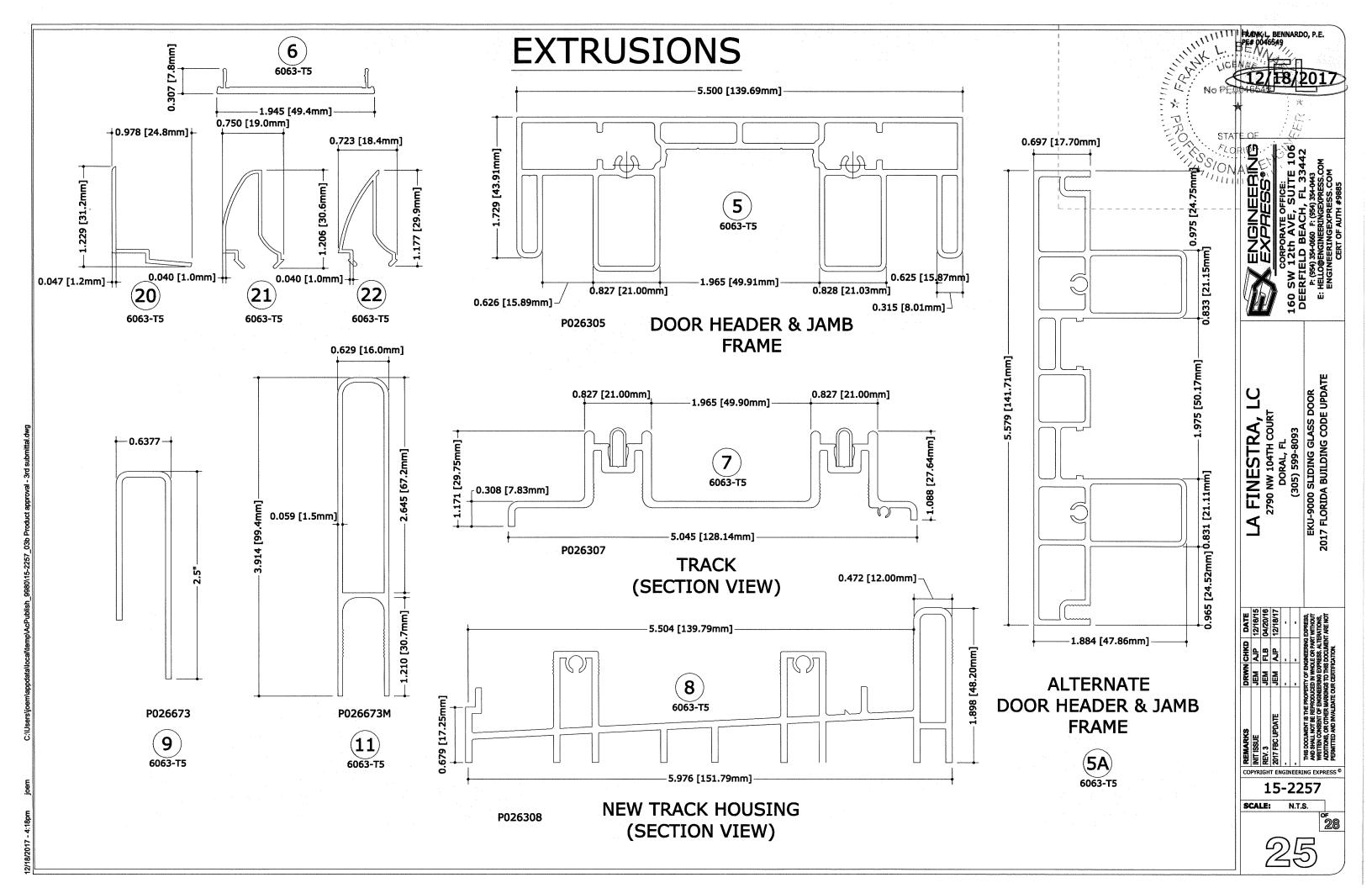
15-2257

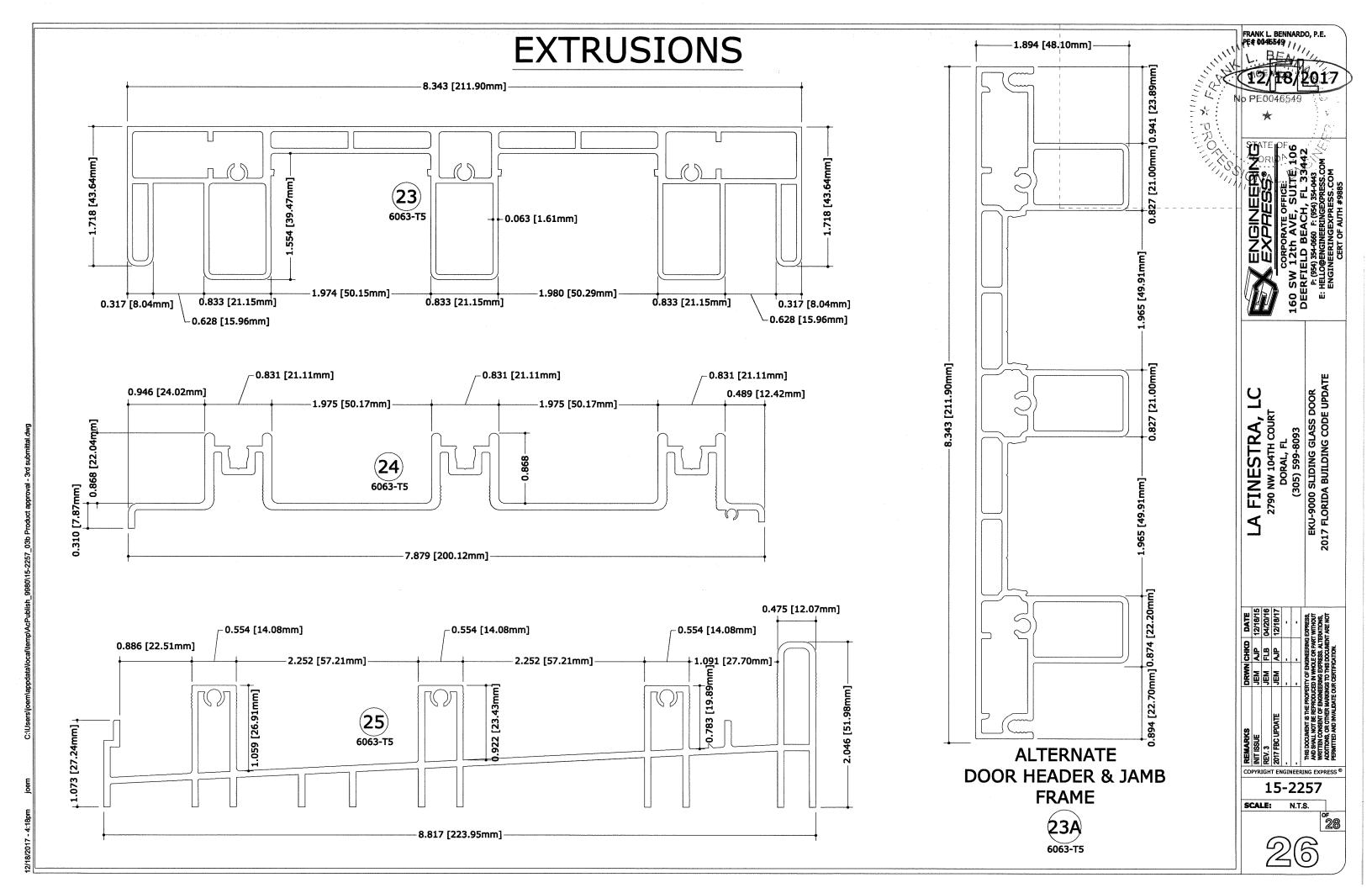
SCALE: N.T.S.

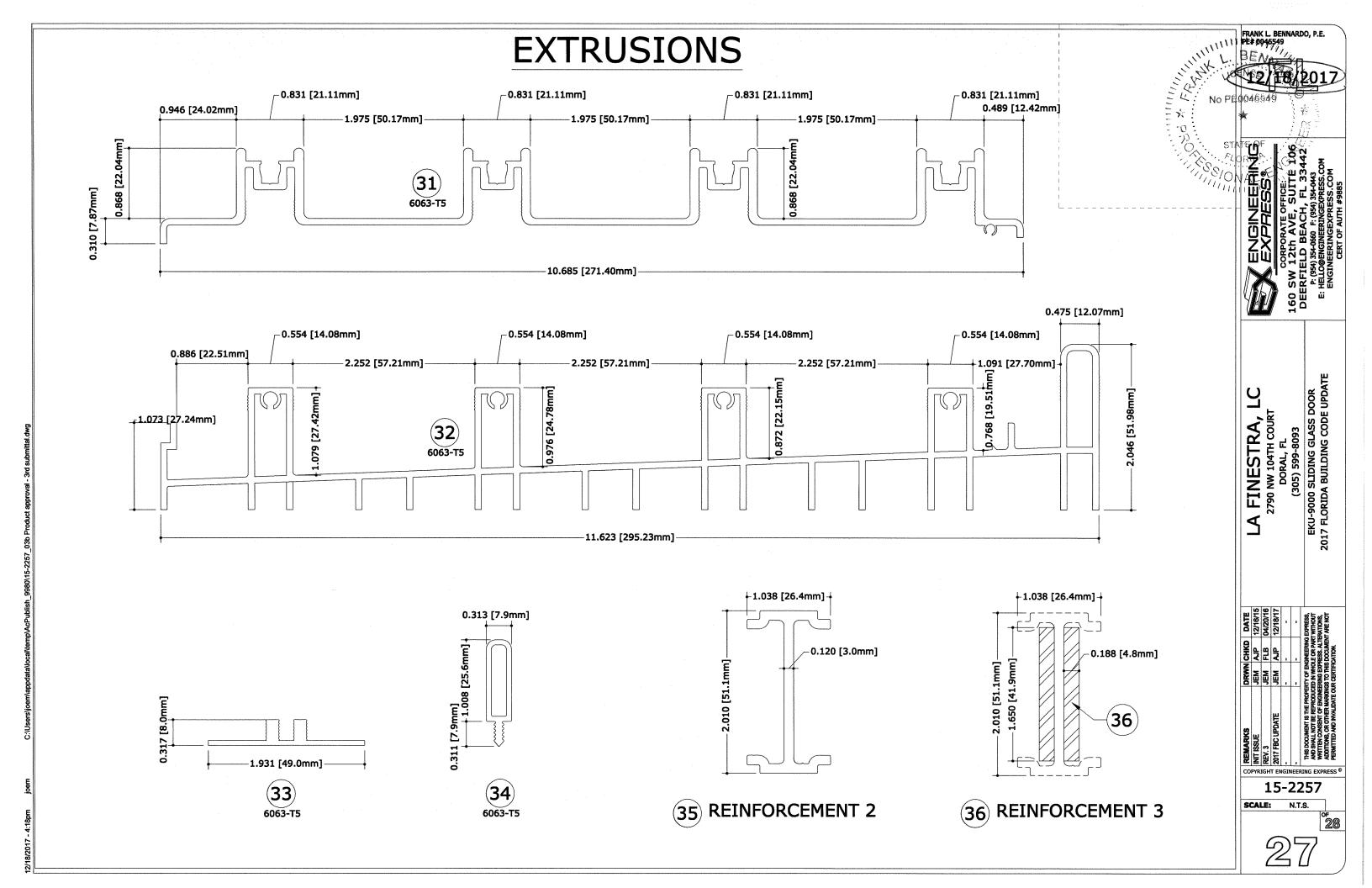












	PART #	DESCRIPTION	MATERIAL	REMARKS
1	P026301	SASH - MOBIL PANEL	6063-T5	GRUPPO PROFILATI
1A	P026301-SHARP	SASH - MOBIL PANEL	6063-T5	GRUPPO PROFILATI
2	P026302	JOINT - SASH JOINT	6063-T5	GRUPPO PROFILATI
3	P026303	CAP - SMALL COVER FOR SASH JT.	6063-T5	GRUPPO PROFILATI
4	P026304	CENTRAL MEETING ASTRAGAL	6063-T6	GRUPPO PROFILATI
5	P026305	FRAME - JAMB/HEAD	6063-T5	GRUPPO PROFILATI
5A	_	ALTERNATE FRAME - JAMB/HEAD	6063-T5	GRUPPO PROFILATI
6	P026306	COVER - LG COVER FOR FRAME	6063-T5	GRUPPO PROFILATI
7	P026307	TRACK COVER FOR BASE TRACK	6063-T5	GRUPPO PROFILATI
8	P026308	TRACK BASE (THRESHOLD)	6063-T5	GRUPPO PROFILATI
9	P026673	SILL RISER 65 MM (2.55")	6063-T5	GRUPPO PROFILATI
10	P026674	SASH REINFORCEMENT	6063-T5	GRUPPO PROFILATI
11	P026673 MODIFIED	SILL RISER 65 MM (4")	6063-T5	GRUPPO PROFILATI
12	5003	CORNER KEY FOR SASH	TBD ?	BY MONTICELLI
13	0410	CORNER KEY FOR FRAME	TBD ?	BY MONTICELLI OR EQUAL
	TA.81.1981.PRN.212.WSS	TANDEM ROLLER ITEM	S.S.	BY AMESBURY-
15	TA.81.1981.PRN.21.WN	TANDEM ROLLER ITEM	S.S.	BY AMESBURY
	SS.ADH.3006.84	LOCK - SLIDING DOOR LOCK	S.S.	BY AMESBURY
17	SS.ADH.3021.84	KEEPER	S.S.	BY AMESBURY
18	ULTRA FAB	WEATHER SEAL - TRIFIN	WEATHERING	BY TRIFIN
19	PECORA 895	SILICON FOR GLAZING	SILCONE	BY PECORA
20	P026309	INSULATED GLASS BEAD	6063-T5	GRUPPO PROFILATI
21	P026310	LAMINATED GLASS BEAD	6063-T5	GRUPPO PROFILATI
22	P026310 ALTERNATE	LAMINATED GLASS BEAD	6063-T5	GRUPPO PROFILATI
23	P026305-MOD	3-TRACK (HEAD/JAMB)	6063-T5	GRUPPO PROFILATI
23 <i>A</i>		ALTERNATE 3-TRACK (HEAD/JAMB)	6063-T5	GRUPPO PROFILATI
	P026307-MOD	3-TRACK SILL COVER	6063-T5	GRUPPO PROFILATI
	P026308-MOD	3-TRACK SILL BASE	6063-T5	GRUPPO PROFILATI
26	-	2"x2" 40 PPI FOAM	FOAM	AT ENDS & 6" FROM ENDS & 12" O.C. MAX - BALANCE
27	-	2 3/4"x1" 40 PPI FOAM	FOAM	ON ONE SIDE OF WEEP HOLE
28	-	2 3/4"x1/2" 40 PPI FOAM	FOAM	ON OPP. SIDE OF #26
29	<b>30</b>	2"x4" DUST PLUG		ULTRAFAB (UNDER EACH INTERLOCK AND LOCKSTILE)
30	=	DOOR HANDLE	**************************************	-
31	_	4-TRACK SILL COVER	6063-T5	GRUPPO PROFILATI
32	-	4-TRACK SILL BASE	6063-T5	GRUPPO PROFILATI
33	-	4-TRACK FRAME ADAPTOR	6063-T5	GRUPPO PROFILATI
34	-	DOOR FRAME STOP	6063-T5	GRUPPO PROFILATI
35	_	ALUMINUM REINFORCEMENT	6063-T5	
36	_	STEEL REINFORCEMENT ADD-ON	A-36	(2) 1.65"x 0.188" STEEL REINFORCEMENT BARS
50		CIEE INDITIONAL INTO ON	1	(-) -100 / 01200 0 / 11111 0 / 1011 1111 1111

LA FINESTRA, LC
2790 NW 104TH COURT
DORAL, FL
(305) 599-8093
EKU-9000 SLIDING GLASS DOOR
2017 FLORIDA BUILDING CODE UPDATE

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SCALE: N.T.S.