

New Erra Doors Corp DBA Custom Door and Millworks

Florida Impact Approval:

FL #11436-R5

FBC VERSION: 2020

# **Equivalency Evaluation Report**

#### Rule 61G20-3 F.A.C. | Report No. 2071-EER, , Rev. 3 | Project No. 420-0611 | 1/24/21 | Page 1 of 2

#### Product Manufacturer

New Era Door Corp. dba Custom Door and Millwork 2787 N. Airport Rd., Unit No. 410 Fort Myers, Florida 33907

#### Product Name, Model and/or Description

Impact Double Glazed Doors with Transom – Outswing and Inswing Impact Double Opaque Entry Door – Outswing and Inswing

Code: Current Edition of the Florida Building Code including the 7th Edition (2020) Florida Building Code

Compliance Methods: Product Approval Rule 61G20-3.015(5)(d) – Equivalency of Standards

- Impact Double Glazed Doors with Transom Outswing and Inswing
  - CDM0003, Rev. D, dated 1/24/21, signed and sealed by Robert J. Amoruso, Custom Door and Millworks, Impact Double Glazed O.S. Door with Transom – Outswing and Inswing – Installation Anchorage Details
  - CTLA 1850W-1, dated September 09, 2008
- Impact Double Opaque Entry Door Outswing and Inswing
  - CDM0004, Rev. D, dated 1/24/21, signed and sealed by Robert J. Amoruso, Custom Door and Millworks, Impact Double Opaque Entry Door – Outswing and Inswing – Installation Anchorage Details
  - CTLA 1850W, dated September 09, 2008

#### Performance Standards (used in testing):

- ASTM E330-02, Test Method for Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.
- ASTM E547-00, Water Penetration of Exterior Windows and Doors by Static Air Pressure Difference.
- ASTM E283-04, Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
- ASTM E1886-05, Standard Test Method for Performance of Exterior Windows, Glazed Curtain Walls, Doors and Storm Shutters Impacted by Missiles and Exposed to Cyclic Pressure Differentials.
- ASTM E1996-05, Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors and Storm Shutters Impacted by Windborne Debris in Hurricanes.

#### Equivalency Evaluation:

The current Edition of the Florida Building Code including the 7th Edition (2020) Florida Building Code – Building and Residential require the following revision levels for the product testing standards listed above.

- ASTM E330-02 & 14
- ASTM E547; not referenced in the FBC or FRC.
- ASTM E283- 04 (2012)
- ASTM E1886-12
- ASTM E1996-12a

The above code-referenced performance standards were reviewed against the revision level of the standards employed in testing and found to be equivalent. Therefore, all testing is in conformance with the current edition of the Florida Building Code including the 7th Edition (2020) Florida Building Code – Building and Residential Volumes and Test Protocols.



# **Equivalency Evaluation Report**

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#### Certificate of Independence per Product Approval Rule 61G20-3.009

PTC Product Design Group, LLC and Robert J. Amoruso, P.E. does not have, nor will acquire, any financial interest in the company manufacturing or distributing product(s) covered by this Product Evaluation Report. PTC Product Design Group, LLC and Robert J. Amoruso, P.E. do not have, nor will acquire any financial interest in any other entity involved in the approval process or testing of the product(s) covered by this Product Evaluation Report.

> Evaluated by: Robert J. Amoruso, P.E. FL PE License No. 49752



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**Code:** Current Edition of the Florida Building Code including the 7th Edition (2020) Florida Building Code

**Compliance Method:** Product Approval Rule 61G20-3.005(1)(d) – Product Evaluation Report by a Licensed Professional Engineer

#### Product Name, Model and/or Designation; Test Report No.; and Installation Drawing No.:

- Impact Double Glazed Doors with Transom Outswing and Inswing
  - CDM0003, Rev. D, dated 1/24/21 signed and sealed by Robert J. Amoruso, Custom Door and Millworks, Impact Double Glazed O.S. Door with Transom – Outswing and Inswing – Installation Anchorage Details
  - o CTLA 1850W-1, dated September 09, 2008
- Impact Double Opaque Entry Door Outswing and Inswing
  - CDM0004, Rev. D, dated 1/24/21, signed and sealed by Robert J. Amoruso, Custom Door and Millworks, Impact Double Opaque Entry Door – Outswing and Inswing – Installation Anchorage Details
  - o CTLA 1850W, dated September 09, 2008

#### Component Approvals:

• Laminate Glass Interlayer: Uvekol Laminated Glass Interlayer by Allnex USA Inc. per current Miami-Dade Notice of Acceptance found <u>here</u>.

#### Engineering Analysis & Evaluation:

- Anchorage engineering (Report No. 1133-Calc & 1119-Calc) in accordance with the current edition of the Florida Building Code, signed and sealed by Robert J. Amoruso, P.E., FL License Number 49752.
- Report No. 2568, Rev. 0, dated 7/3/18, signed and sealed by Robert J. Amoruso, P.E. FL No. 49752, Title: Product Evaluation of Door Lock Component Interchangeability to Custom Door & Millworks Wood Entry Doors
  - Von Duprin (Allegion) WS9827/9927 and/or WS9857/9957 Multi-Point exit device can be used as a replacement for the Emtek 8450 Cylinder Lock with single cylinder dead bolt & steel surface bolts with strike plates used in testing.
- Report No. 2597, Rev. 0, dated 6/4/19, signed and sealed by Robert J. Amoruso, P.E. FL No. 49752, Title: Product Evaluation of Custom Door & Millwork Inswing Wood Entry Doors

#### Performance Standards (used in testing):

- ASTM E330-02, Test Method for Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.
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# **Product Evaluation Report**

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#### Limitations & Conditions of Use:

- The following product has been evaluated for outside the High Velocity Hurricane Zone (HVHZ).
  - $\circ$  ~ Impact Double Glazed Doors with Transom Outswing and Inswing
  - Impact Double Opaque Entry Door Outswing and Inswing
- The following product will not require an approved impact protective system when used in wind borne debris regions including the HVHZ.
  - Impact Double Glazed Doors with Transom Outswing and Inswing
  - Impact Double Opaque Entry Door Outswing and Inswing
  - Refer to Product Installation Instructions noted above for:
    - Maximum allowable wind loads at related maximum allowable size(s).
    - Overall dimensions and material/grade of main product components, accessories, etc.
    - o Illustrated diagrams of the attachment of the product to substrate structure.
    - Anchor type(s), size(s), substrate(s), embedment, edge distance, and spacing/locations.
- Site wind pressures shall be determined by a licensed professional engineer in accordance with the current edition of the Florida Building Code (and/or ASCE 7 as referenced in the current edition of the Florida Building Code) for components and cladding based on allowable stress design.
- Site conditions not covered in this product evaluation document are subject to additional engineering analysis by a licensed professional engineer or registered architect as required by the authority having jurisdiction.
- Adequacy of the existing structural substrates as a main wind force resisting system capable of withstanding and transferring applied product loads to the foundation is the responsibility of the licensed professional engineer or registered architect acting as the design professional of record for the project of installation.

#### Certificate of Independence per Product Approval Rule 61G20-3.009

PTC Product Design Group, LLC and Robert J. Amoruso, P.E. does not have, nor will acquire, any financial interest in the company manufacturing or distributing product(s) covered by this Product Evaluation Report.

PTC Product Design Group, LLC and Robert J. Amoruso, P.E. do not have, nor will acquire any financial interest in any other entity involved in the approval process or testing of the product(s) covered by this Product Evaluation Report.

> Evaluated By: Robert J. Amoruso, P.E. FL P.E. License Number 49752



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**Code:** Current Edition of the Florida Building Code including the 7<sup>th</sup> Edition (2020) Florida Building Code **Compliance Method:** Product Approval Rule 61G20-3.009 – Certification of Independence

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> Robert J. Amoruso, P.E. FL P.E. License Number 49752



# **CERTIFICATION OF PARTICIPATION**

National Accreditation and Management Institute, Inc. confirms that:

# New Erra Doors, LLC dba Custom Door and Millwork 2787 N. Airport Road #410 Fort Myers, Florida 33907

Participates within a Quality Assurance Program that complies with ISO/IEC 17020 and Guide 53

New Erra Doors, LLC dba Custom Door and Millwork's Quality Assurance ID # 1345-1

Quality Assurance Program for products manufactured or assembled at referenced location.

Thomas D. Wix, Quality Assurance Manager

Certificate Valid From 12/21/2020 to 12/31/2021

The NAMI Program is recognized as an approved quality assurance entity within the State of Florida # QUA1789.

# **NOTICE OF PRODUCT CERTIFICATION**

CERTIFICATION NO:	<u>NI009645-R6</u>
DATE:	<u>10/02/2008</u>
CERTIFICATION PROGRAM:	<u>Structural</u>
COMPANY:	<u>New Erra</u>
CODE:	<u>1345-1</u>
REVISION DATE:	<u>08/28/2020</u>

To verify that the "Notice of Product Certification" is valid, please visit <u>www.NAMICertification.com</u> to assure that the product is active and currently listed. This certification represents product conformity to the applicable specification and that certification criteria has been satisfied. A NAMI approved certification label must be applied to the product to claim certification status. Please review and advise NAMI if any corrections are required to this document.

COMPANY NAME AND ADDRESS	<b>PRODUCT DESCRIPTION</b>			
New Erra Doors, LLC	"Mara Macho" Mahogany Out-Swing			
dba Custom Door & Millworks	<b>Double Opaque Entry Door</b>			
2787 N. Airport Road, #410	One Active Panel/One Inactive Panel			
Fort Myers, FL 33907				
	Configuration: XX			
	Frame:	W-7'3"	H-10'2"	
	Panel:	W-3'6"	H-10'0"	

SPECIFICATION	PRODUCT RATING
ASTM E283-04/E330-02/E547-00	Design Pressure: +55/-55 psf
ASTM E1886-05/E1996-05	Wind Zone 4 - Missile Level D

Product Tested By: Report No: Expiration Date: Certified Testing Laboratories CTLA-1850W September 30, 2021

Administrator's Signature:

A ...

### NATIONAL ACCREDITATION AND MANAGEMENT INSTITUTE, INC.

4794 George Washington Memorial Highway Hayes, VA 23072 Tel: (804) 684-5124 Fax: (804) 684-5122

# **NEW ERRA DOORS CORP, dba CUSTOM DOOR AND MILLWORK IMPACT DOUBLE OPAQUE ENTRY DOOR OUTSWING AND INSWING INSTALLATION ANCHORAGE DETAILS**

#### GENERAL NOTES:

- 1. THE PRODUCT SHOWN HEREIN IS DESIGNED TO COMPLY WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE, BUILDING AND RESIDENTIAL VOLUMES EXCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ) AT THE DESIGN PRESSURES STATED HEREIN.
- 2. THE PRODUCT DETAILS CONTAINED HEREIN ARE BASED UPON SIGNED AND SEALED TEST REPORT(S) NO. CTLA 1850W AND ASSOCIATED LABORATORY DRAWINGS.
- 3. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE / MASONRY AND 2X FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE STRUCTURE IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD.
- 4.1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD
- 5. THIS PRODUCT DOES NOT REQUIRE AN IMPACT PROTECTIVE SYSTEM THAT COMPLIES WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE, BUILDING AND RESIDENTIAL VOLUMES IN THE WIND BORNE DEBRIS REGION. THE PRODUCT IS IMPACT-RESISTANT TO WIND ZONE 4, MISSILE LEVEL D.
- 6. DOOR FRAME AND PANEL MATERIAL: MAHOGANY.
- 7. DESIGNATION "X" STANDS FOR OPERABLE PANEL SEE ELEVATION ON SHEET 2.
- 8. HARDWARE TESTED:
- 9.1 EMTEK 8450 CYLINDER LOCK WITH SINGLE CYLINDER DEAD BOLT.
- 9.2 STEEL SURFACE BOLTS WITH STRIKE PLATES. TWO HANDLE STYLES SHOWN FOR OUTSWING VS. INSWING, OTHER STYLES ACCEPTABLE.

CONFIGURATION	PERFORMANC	CE RATING		
CONFIGURATION				
	DESIGN PRESSURE RATING	IMPACT RATING	WATER PENTRATION RATING	
OUTSWING	+/-55 PSF	WIND ZONE 4 MISSILE LEVEL D	YES (Note 1)	
INSWING	+/-55 PSF	WIND ZONE 4 MISSILE LEVEL D	NONE (Note 2)	
	WATER PENETRATION	N TESTING NOTES		
1) OUTSWING CONFIGURATION TESTED FOR WATER PENETRATION IN ACCORDANCE WITH ASTM E547. THEREFORE, INSTALLATION APPROVED FOR ALL LOCATIONS WHERE WATER PENETRATION RESISTANCE IS REQUIRED.				
2) INSWING CONFIGURATION NOT TESTED FOR WATER PENETRATION IN ACCORDANCE WITH ASTM E547. THEREFORE, INSTALLATION APPROVED ONLY FOR LOCATIONS WHERE WATER PENETRATION RESISTANCE IS NOT REQUIRED OR WHERE A OVERHANG MEETING THE REQUIREMENTS OF THE FBC HAVE BEEN MET. SEE BELOW FOR OVERHANG REQUIREMENTS				
In accordance with 7th Edition (2020) Florida Building Code Section 1709.5.2, Exception 1 & 2 & 7th Edition (2020) Florida Residential Code Section R609.3, Exception 1 & 2. Door assemblies may be installed where the overhang (OH) ratio is equal to or more than 1 need not be tested for water infiltration. The overhang ratio shall be calculated by the following equation: OH ratio = OH Length/OH Height where: OH Length = The horizontal measure of how far an overhang over a door projects out from the door's surface.				

#### INSTALLATION NOTES:

- 1. ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN
- 2. THE INSTALLATION ANCHOR SPACING DEPICTED DICTATES THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION, ANCHORS ARE TO MATCH TYPE, SIZE, AND EMBEDMENT OF THOSE SHOWN HEREIN FOR RESPECTIVE SUBSTRATE.
- 3. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM(S). MAXIMUM ALLOWABLE SHIM SIZE IS 1/4 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER.
- 4. FOR INSTALLATION INTO WOOD FRAMING, USE #12 WOOD SCREWS OF SUFFICIENT LENGTH TO ACHIEVE 1 1/2 INCH MINIMUM EMBEDMENT. MINIMUM EDGE DISTANCE SHALL BE 7/8 INCH TO EDGE OF SUPPORTING WOOD SUBSTRATE.
- 5. FOR INSTALLATION THROUGH 1X BUCK TO CONCRETE / MASONRY, OR DIRECTLY INTO CONCRETE / MASONRY, USE 3/16 INCH ITW TAPCONS (ADVANCED THREADFORM TYPE) OF SUFFICIENT LENGTH TO ACHIEVE 1 1/2 INCH MINIMUM EMBEDMENT INTO CONCRETE AND 1 INCH MINIMUM EMBEDMENT INTO MASONRY (CMU). MINIMUM EDGE DISTANCES SHALL BE 1-1/8 INCH IN CONCRETE AND 2 INCHES INTO MASONRY (CMU).
- 6. ALTERNATE CONCRETE / MASONRY / WOOD INSTALLATION ANCHORS OF EQUIVALENT PERFORMANCE CHARACTERISTICS CAN BE USED UPON APPROVAL BY THE ARCHITECT OR ENGINEER OF RECORD.
- 7. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES (INCLUDING BUT NOT LIMITED TO STUCCO. FOAM, BRICK VENEER, AND SIDING).
- 8. INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING DISSIMILAR METALS OR MATERIALS IN CONTACT WITH PRESSURE TREATED WOOD MUST BE PROTECTED TO PREVENT REACTION.
- 9. FOR HOLLOW BLOCK AND GROUT FILLED BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS. EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.
- INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION 10 INSTRUCTIONS AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER AND/OR AS REQUIRED BELOW IN NOTE 11.
- 11. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
- 11.1. WOOD MINIMUM SPECIFIC GRAVITY OF 0.42.
- 11.2. CONCRETE MINIMUM COMPRESSIVE STRENGTH OF 2500 psi
- 11.3. MASONRY STRENGTH CONFORMANCE TO ASTM C-90, MEDIUM WEIGHT WITH DENSITY > 117 PCF.

	DRAWING SHEET I
SHEET	DESCR
1	GENERAL AND INS
2	ELEVATION AND
3	ADDITIONAL APPROV
4	OUTSWING INSTALLATIO
5	INSWING INSTALLATION
6	OUTSWING INSTALLATION
7	INSWING INSTALLATION -

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RIPTION

STALLATION NOTES

ANCHOR LAYOUT

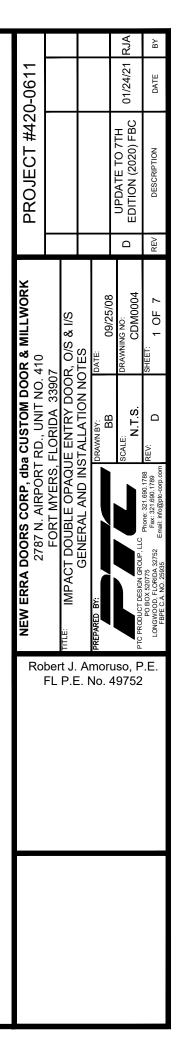
ED CONFIGURATIONS

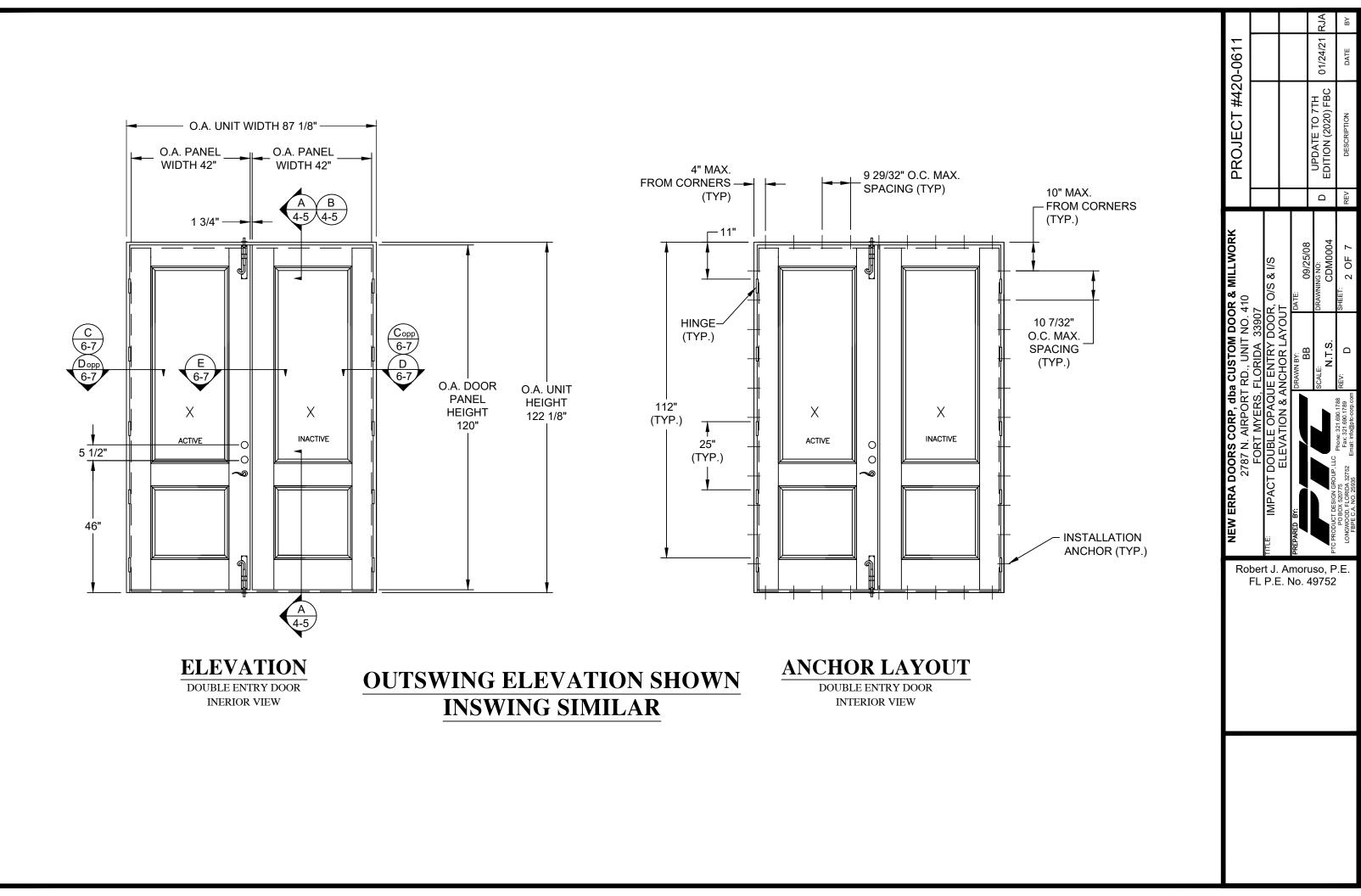
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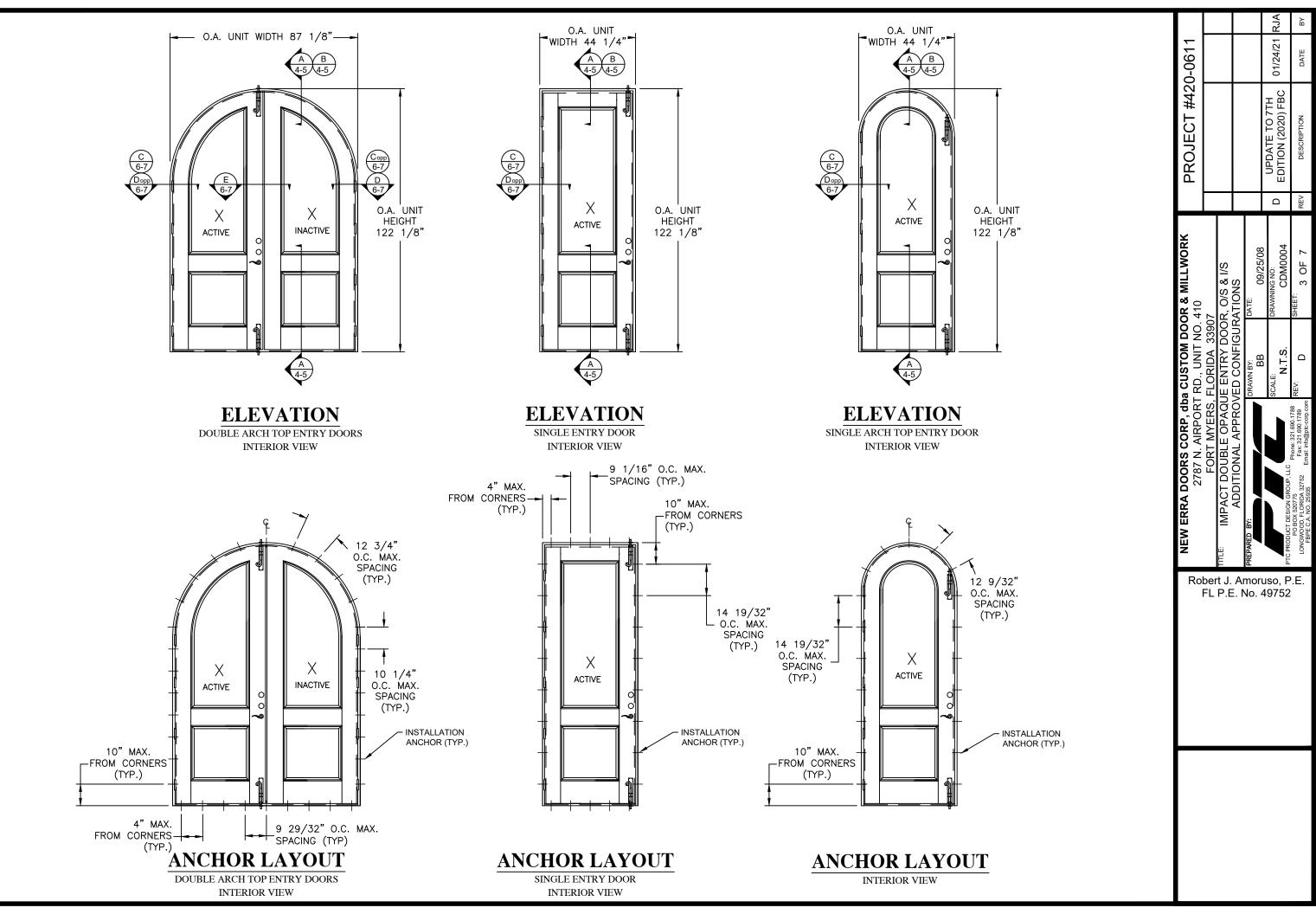
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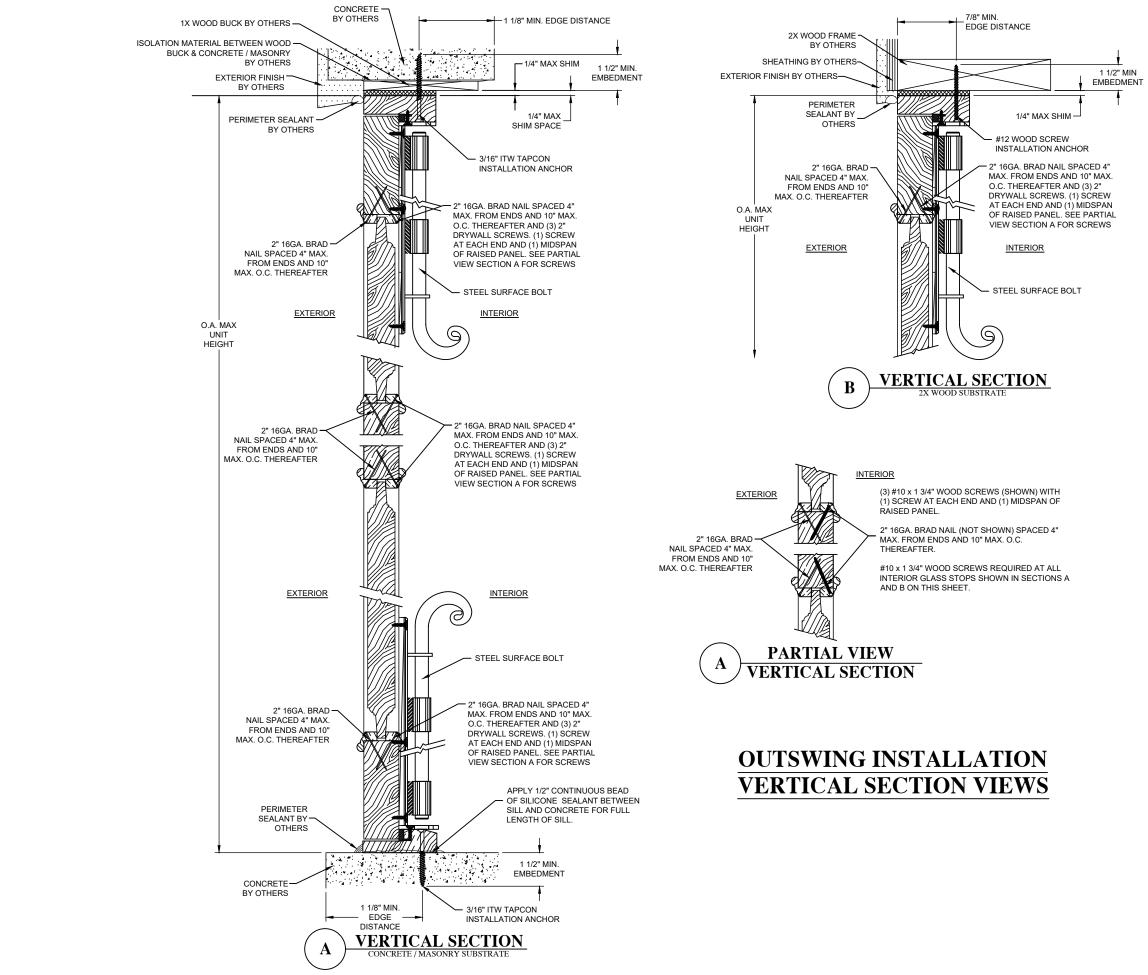
N - HORIZONTAL SECTIONS

- HORIZONTAL SECTIONS

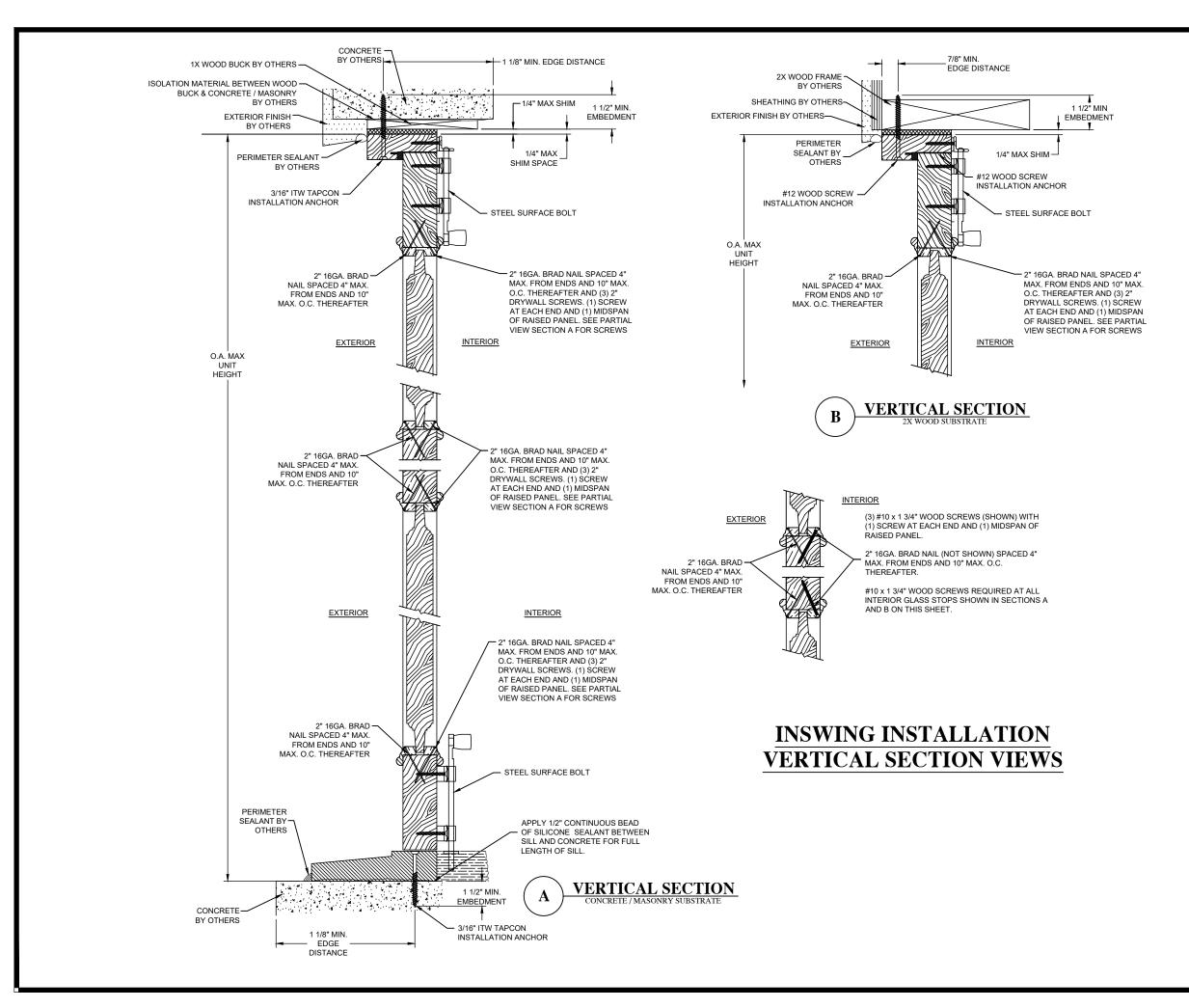












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<b>-0611</b>			01/24/21	DATE
PROJECT #420-0611			D UPDATE TO 7TH EDITION (2020) FBC	REV DESCRIPTION
	pert J	. A	SCALE: DRAWNIN N.T.S. 0	DEDUCTION CONTRACTOR FINANCE F

