

MILLWORKS PLUS, INC.
NON-IMPACT O/S & I/S GLAZED & OPAQUE DOUBLE WOOD DOORS
INSTALLATION ANCHORAGE DETAILS

GENERAL NOTES:

1. THIS PRODUCT IS DESIGNED TO COMPLY WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC) REQUIREMENTS AT THE DESIGN PRESSURE(S) STATED HEREIN. THE PRODUCT DETAILS CONTAINED HEREIN ARE BASED UPON SIGNED AND SEALED TEST REPORTS # CTLA 1836W AND CTLA 1836W-1 DATED 01/28/09 AND ASSOCIATED LABORATORY STAMPED DRAWINGS. THIS PRODUCT IS NOT APPROVED FOR USE THE THE HIGH VELOCITY HURRICANE ZONE.
2. 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.
3. 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.
4. IN AREAS WHERE WIND-BORNE DEBRIS PROTECTION REQUIREMENTS EXIST, USE OF AN APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED. SEE NOTE 8.
5. DOOR FRAME AND PANEL MATERIAL: VERTICAL GRAIN DOUGLAS FIR.
6. GLASS MEETS THE REQUIREMENTS OF ASTM E1300-04E1.
7. DESIGNATIONS "X" AND "O" STAND FOR THE FOLLOWING:
X: OPERABLE PANEL
O: FIXED PANEL
8. LAMINATED GLAZING MAY BE COMPRISED OF EASTMAN CHEMICAL CO. SAFEFLEX OR KURARAY AMERICA, INC. TROSOFIL OR SENTRYGLAS INTERLAYERS. LAMINATED GLAZING MEETS SAFETY-GLAZING REQUIREMENTS OF THE FLORIDA BUILDING CODE. LAMINATED GLAZED PRODUCTS SHOWN IN THIS PRODUCT APPROVAL DOCUMENT HAVE NOT BEEN TESTED FOR OPENING PROTECTION (IMPACT) REQUIREMENTS.

INSTALLATION NOTES:

1. ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN.
2. THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION. IN ADDITION TO THE INSTALLATION ANCHORS SHOWN, FOUR (4) INSTALLATION ANCHORS ARE REQUIRED IN EACH HINGE. 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 IS 7/8 INCH.
5. FOR INSTALLATION THROUGH 1X BUCK TO CONCRETE / MASONRY, OR DIRECTLY INTO CONCRETE / MASONRY, USE 1/4 INCH ITW TAPCONS (ADVANCED THREADFORM TECHNOLOGY) OF SUFFICIENT LENGTH TO ACHIEVE 1 INCH MINIMUM EMBEDMENT IN CMU AND 1-1/2 INCH MINIMUM EMBEDMENT IN CONCRETE. MINIMUM EDGE DISTANCE IS 2 INCHES IN CMU AND 1-1/2 INCHES IN CONCRETE.
6. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES (INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER AND SIDING).
7. FOR CONCRETE 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.
8. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
 - A. WOOD - MINIMUM SPECIFIC GRAVITY OF 0.42.
 - B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 2500 psi
 - C. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90
9. HINGES: 4" X 4" BUTT TYPE
LATCH LOCK: KEYED
DEAD BOLT: SINGLE CYLINDER

TABLE OF CONTENTS	
SHEET	SHEET DESCRIPTION
1	GENERAL NOTES, INSTALLATION NOTES & D.P. TABLE
2	ELEVATION AND ANCHOR LAYOUT
3	ELEVATION AND ANCHOR LAYOUT
4	VERTICAL SECTIONS & GLAZING DETAIL
5	VERTICAL SECTIONS & GLAZING DETAIL
6	VERTICAL SECTIONS
7	HORIZONTAL SECTIONS

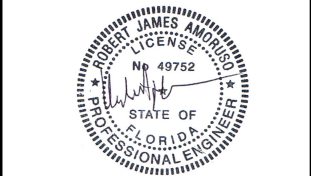
DESIGN PRESSURE RATING (PSF)				IMPACT RATING
SWING	TYPE	WHERE WATER INFILTRATION REQUIREMENT IS NEEDED	WHERE WATER INFILTRATION REQUIREMENT IS NOT NEEDED	NONE
OUTSWING	OPAQUE	+90.0 / -80.0 **	+90.0 / -80.0	
OUTSWING	GLAZED	±60.0 **	±60.0	
INSWING	OPAQUE	±80.0 **	±80.0	
INSWING	GLAZED	±60.0 **	±60.0	

**** NOT TESTED FOR WATER PENETRATION. MUST BE INSTALLED BENEATH AN OVERHANG MEETING FBC REQUIREMENTS.**

PROJECT NO. 417-0709				
B	UPDATE TO 6TH EDITION (2017) FBC	10/3/17	RJA	
A	UPDATE TO 5TH EDITION (2014) FBC	10/2/15	RJA	
REV	DESCRIPTION	DATE	BY	

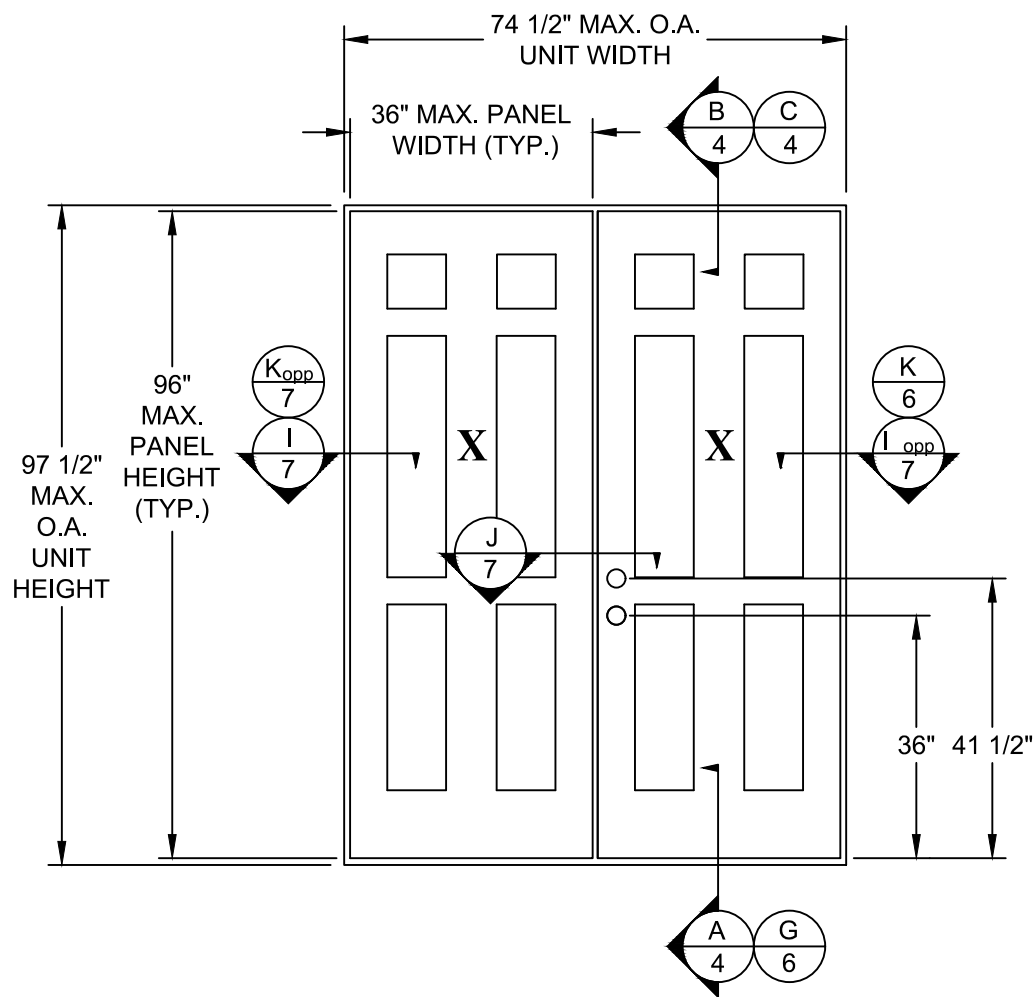
MILLWORK PLUS, INC. 262 HUMMER WAY TAVERES, FLORIDA 32778	
TITLE: N.I. O/S & I/S GLAZED & OPAQUE DOUBLE WOOD DOORS GENERAL NOTES, INSTALLATION NOTES & D.P. TABLE	
PREPARED BY:	
DRAWN BY:	RJA
DATE:	10/15/12
SCALE:	N.T.S.
DRAWING NO.:	MILLP0002
REV:	B
PTC Product Design Group, LLC Phone 321.690.1788 Fax 321.690.1789	

Robert J. Amoruso
Florida P.E. No. 49752



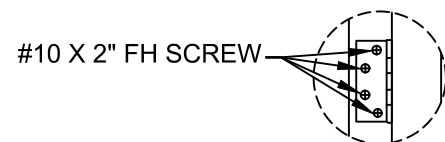
Digitally signed by
Robert J Amoruso
Date: 2017.10.03
14:57:13 -04'00'

PTC Product Design Group, LLC
PO Box 520775
Longwood, FL 32752-0775
info@ptc-corp.com
FBPE Cert. of Authorization NO. 25935



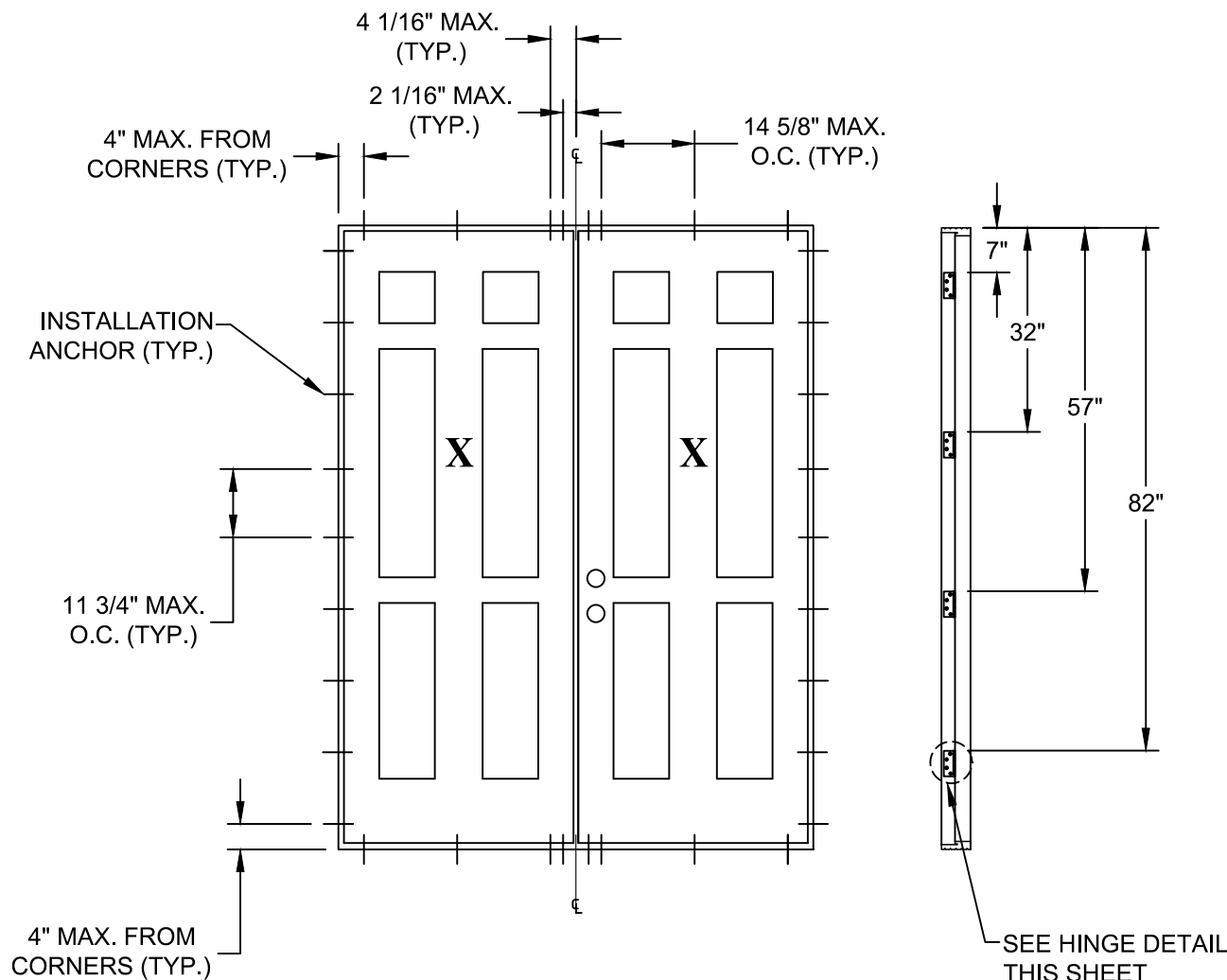
ELEVATION

EXTERIOR VIEW
OPAQUE DOORS
OUTSWING / INSWING



HINGE DETAIL

4" X 4" X 0.147" THICK



ANCHOR LAYOUT

EXTERIOR VIEW
OPAQUE DOORS
OUTSWING / INSWING

PROJECT NO. 417-0709			
		RJA	BY
	UPDATE TO 6TH EDITION (2017) FBC	10/3/17	DATE
B			
	UPDATE TO 5TH EDITION (2014) FBC	10/2/15	DATE
A			
REV	DESCRIPTION		

MILLWORK PLUS, INC.
262 HUMMER WAY
TAVERES, FLORIDA 32778

TITLE: N.I. O/S & I/S GLAZED & OPAQUE DOUBLE WOOD DOORS
ELEVATION & ANCHOR LAYOUT

DRAWN BY: RJA
SCALE: N.T.S.
REV: B

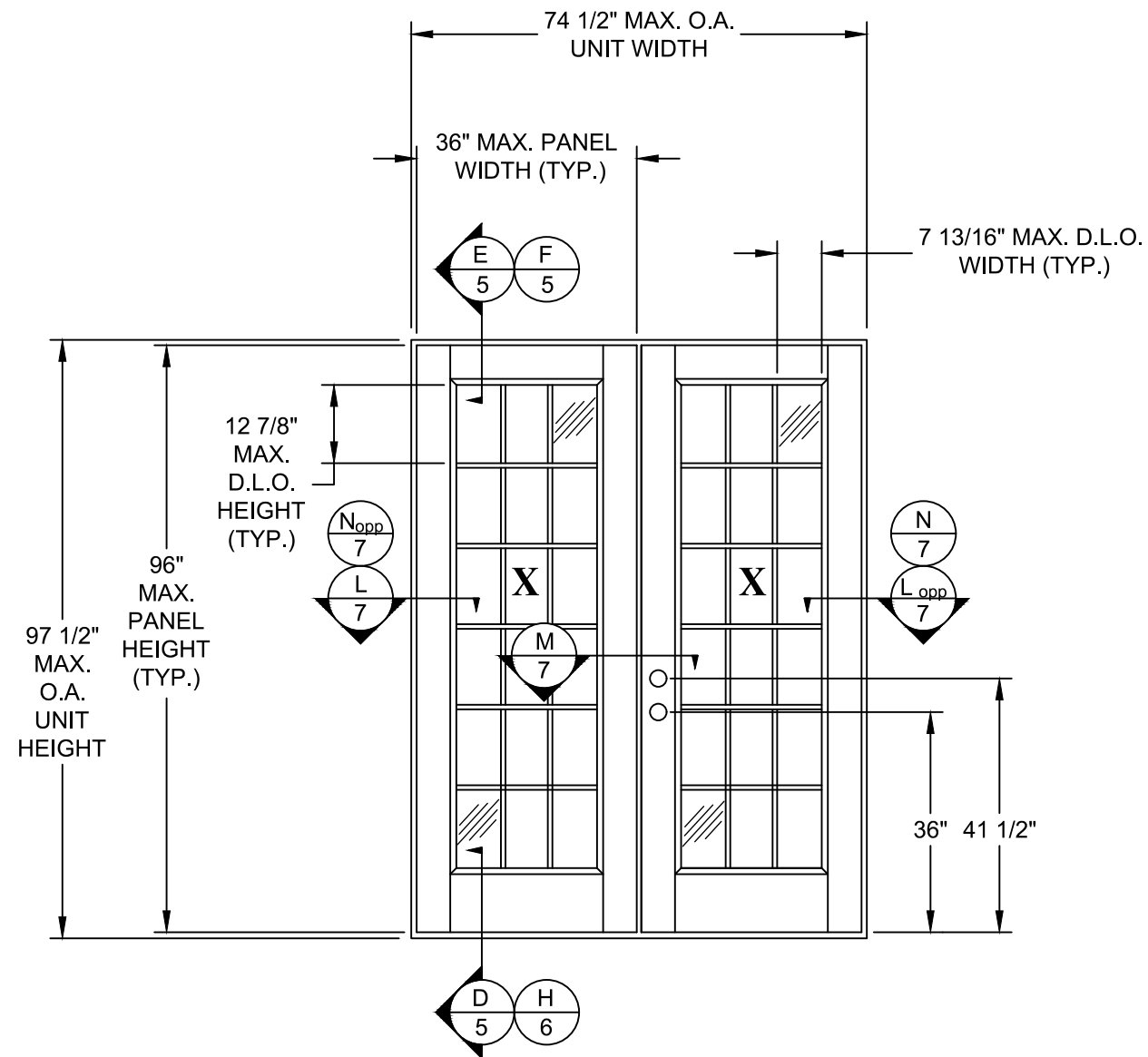
DATE: 10/15/12
DRAWING NO: MILLP0002
SHEET: 2 OF 7

PREPARED BY:

PTC Product Design Group, LLC
Phone 321.690.1788
Fax 321.690.1789

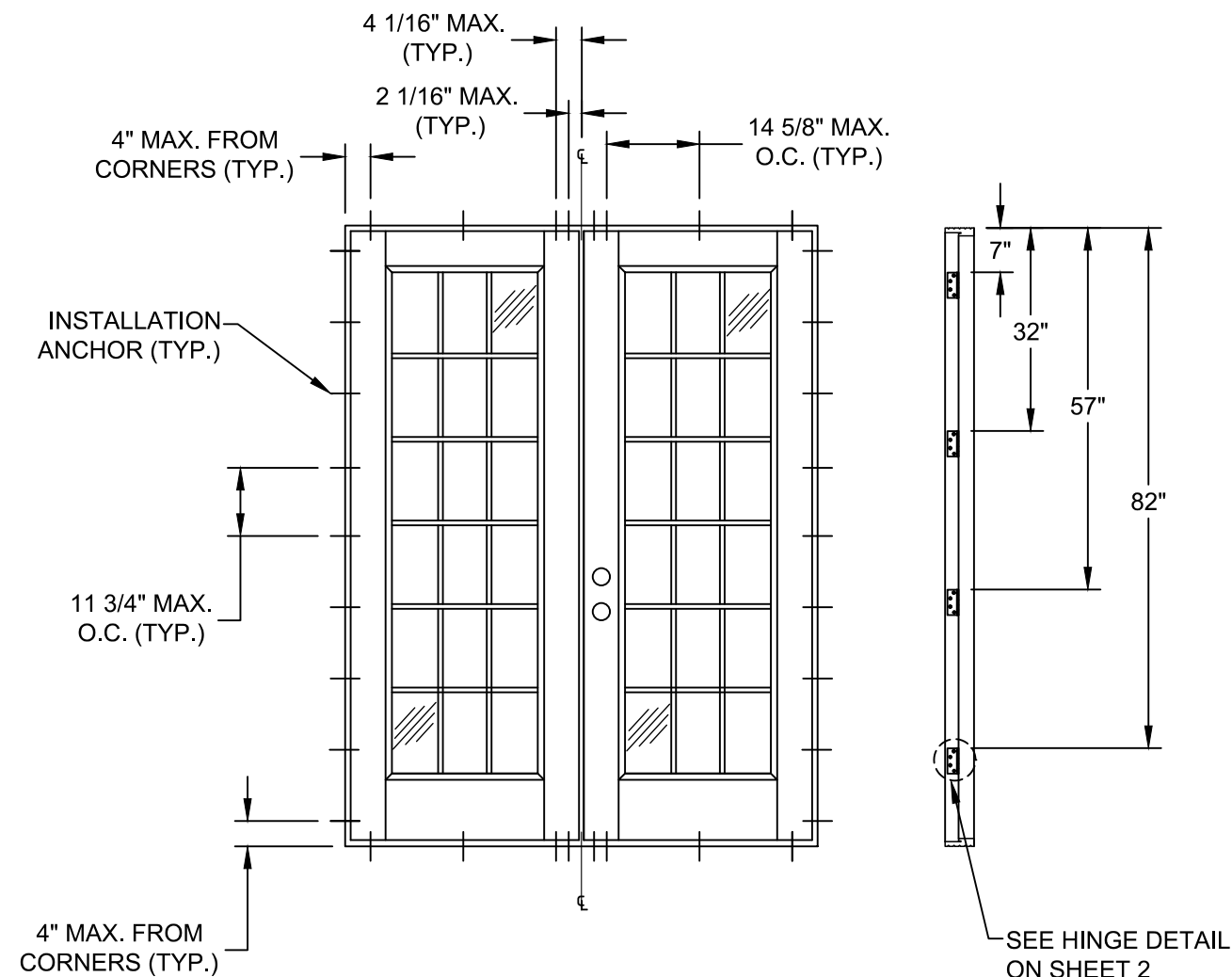
Robert J. Amoruso
Florida P.E. No. 49752

Digitally signed by Robert J Amoruso®
Date: 2017.10.03 14:57:30 -04'00'
PTC Product Design Group, LLC
PO Box 520775
Longwood, FL 32752-0775
info@ptc-corp.com
FBPE Cert. of Authorization NO. 25935



ELEVATION

EXTERIOR VIEW
GLAZED DOORS
OUTSWING / INSWING



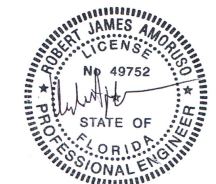
ANCHOR LAYOUT

EXTERIOR VIEW
GLAZED DOORS
OUTSWING / INSWING

PROJECT NO. 417-0709			
		RJA	BY
	UPDATE TO 6TH EDITION (2017) FBC	10/3/17	DATE
B	UPDATE TO 5TH EDITION (2014) FBC	10/2/15	
REV	DESCRIPTION		

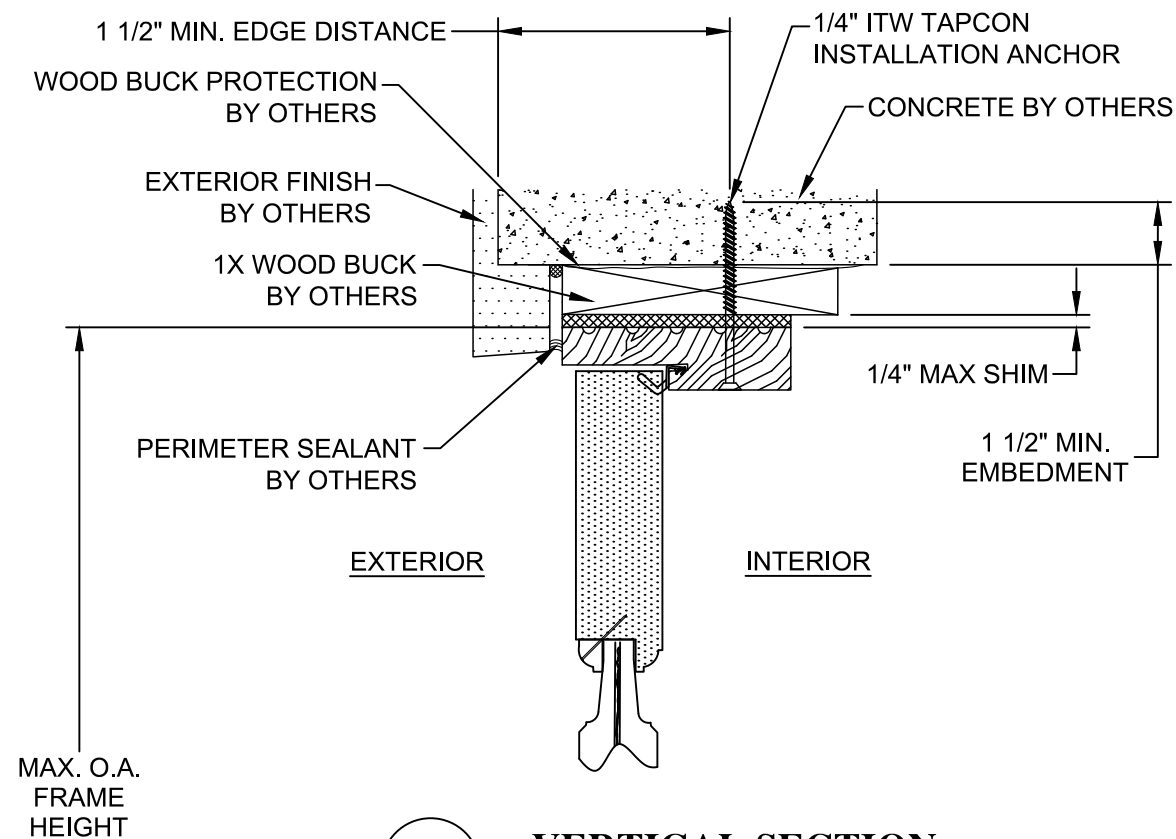
MILLWORK PLUS, INC. 262 HUMMER WAY TAVERES, FLORIDA 32778			
TITLE: N.I. O/S & I/S GLAZED & OPAQUE DOUBLE WOOD DOORS ELEVATION & ANCHOR LAYOUT			
DATE:	10/15/12	DRAWN BY:	RJA
DRAWING NO:	MILLP0002	SCALE:	N.T.S.
SHEET:	3 OF 7	REV:	B
PTC Product Design Group, LLC Phone 321.690.1788 Fax 321.690.1789			

Robert J. Amoruso
Florida P.E. No. 49752

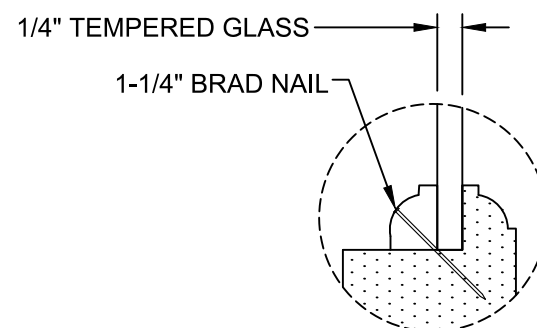


Digitally signed by
Robert J Amoruso
Date: 2017.10.03
14:57:44 -04'00'

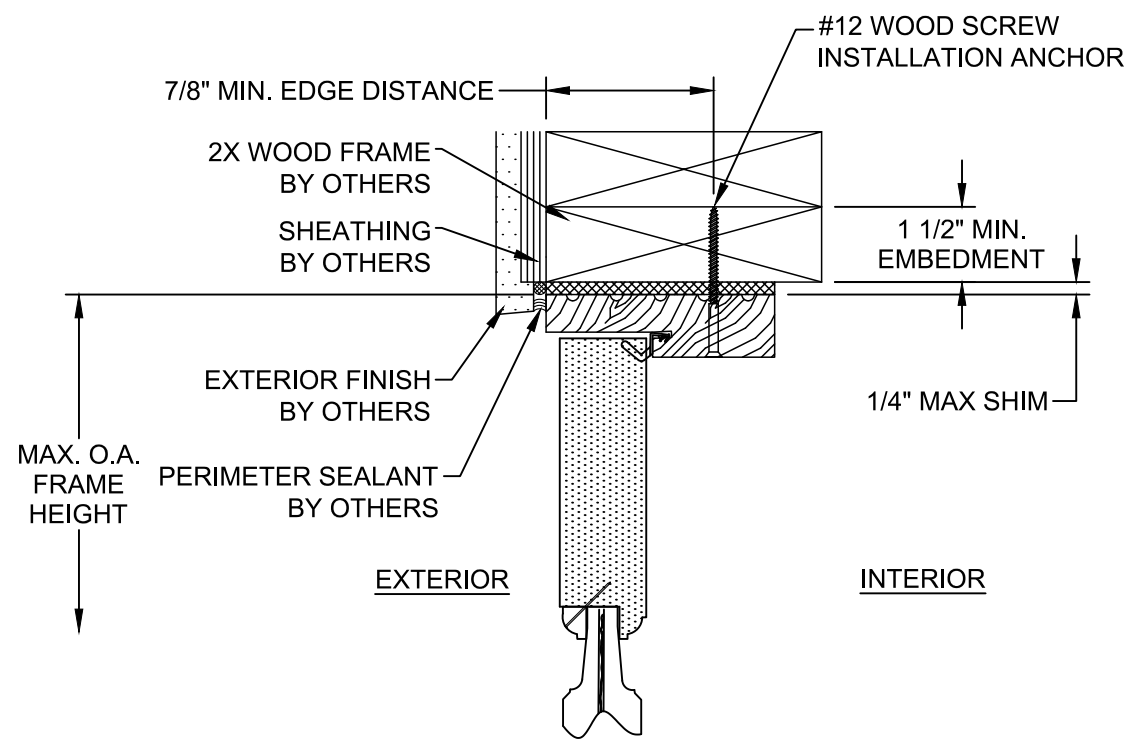
PTC Product Design Group, LLC
PO Box 520775
Longwood, FL 32752-0775
info@ptc-corp.com
FBPE Cert. of Authorization NO. 25935



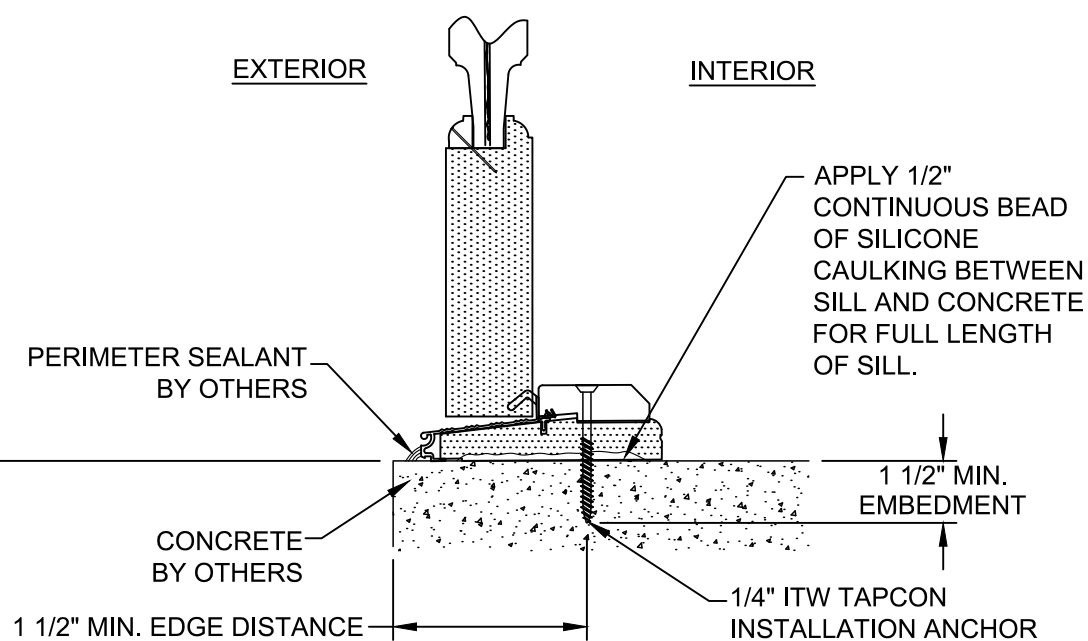
B **VERTICAL SECTION**
CONCRETE SUBSTRATE
OPAQUE DOOR
(OUTSWING SHOWN, INSWING OPPOSITE)



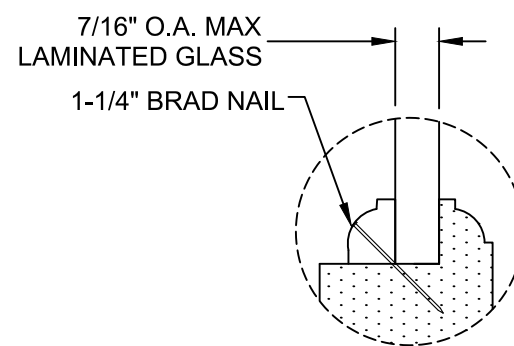
GLAZING DETAIL 1
(GLAZED USING DOW CORNING 999A SILICONE)



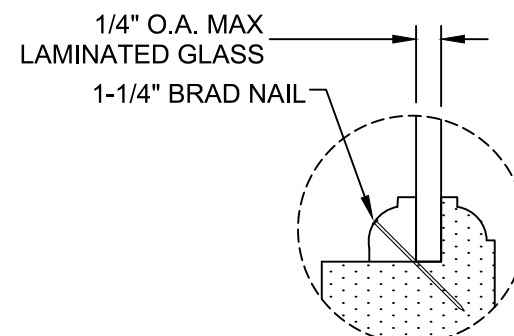
C **VERTICAL SECTION**
WOOD FRAME SUBSTRATE
OPAQUE DOOR
(OUTSWING SHOWN, INSWING OPPOSITE)



A **VERTICAL SECTION**
CONCRETE SUBSTRATE
OPAQUE DOOR
(OUTSWING)



GLAZING DETAIL 2
(COMPRISED OF 3/16" ANNEALED GLASS X 0.090" INTERLAYER X 3/16" ANNEALED GLASS AND GLAZED USING DOW CORNING 999A SILICONE)



GLAZING DETAIL 3
(COMPRISED OF 1/8" ANNEALED GLASS X 0.030" INTERLAYER X 1/8" ANNEALED GLASS AND GLAZED USING DOW CORNING 999A SILICONE)

PROJECT NO. 417-0709		RJA		BY
UPDATE TO 6TH EDITION (2017) FBC		10/3/17	RJA	DATE
UPDATE TO 5TH EDITION (2014) FBC		10/2/15	RJA	DATE
DESCRIPTION		REV		

MILLWORK PLUS, INC.
262 HUMMER WAY
TAVERES, FLORIDA 32778

TITLE: N.I. O/S & I/S GLAZED & OPAQUE DOUBLE WOOD DOORS
VERTICAL SECTIONS & GLAZING DETAILS

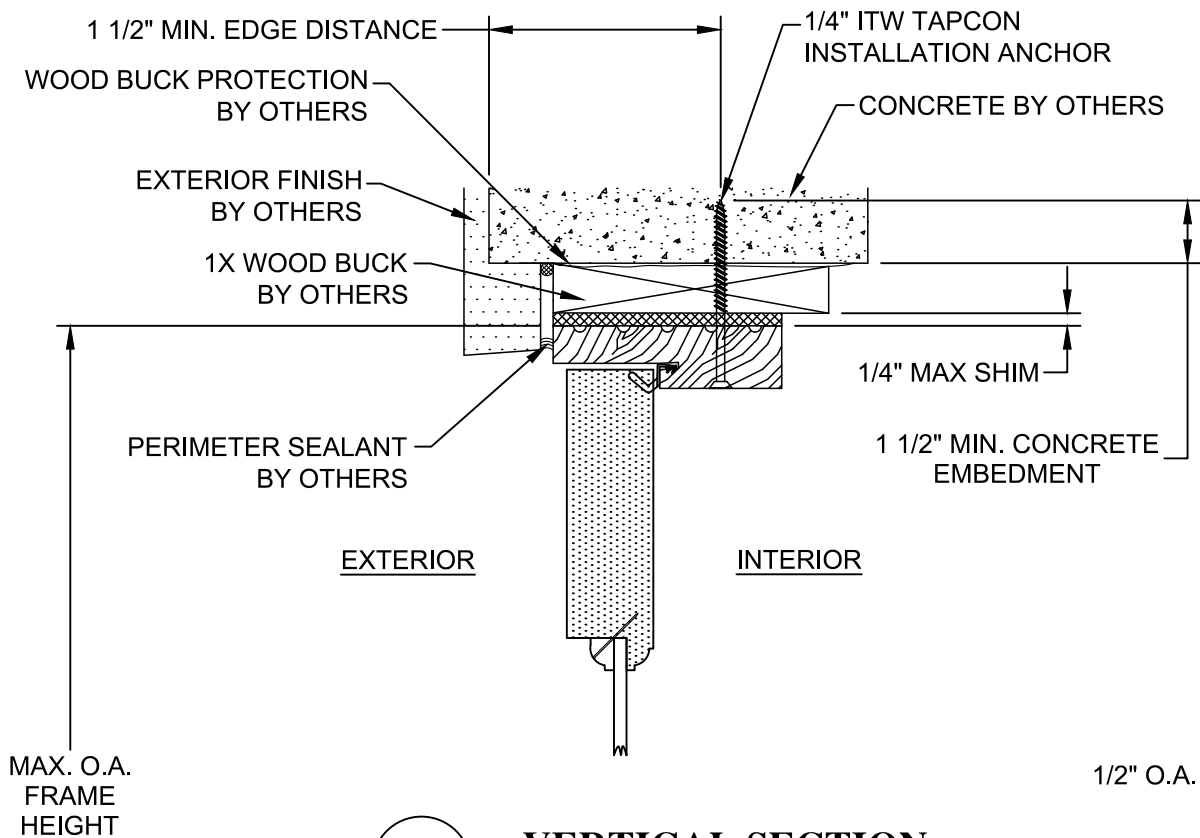
PREPARED BY: RJA
DATE: 10/15/12
SCALE: N.T.S.
SHEET: 4 OF 7

PTC Product Design Group, LLC
Phone 321.690.1788
Fax 321.690.1789

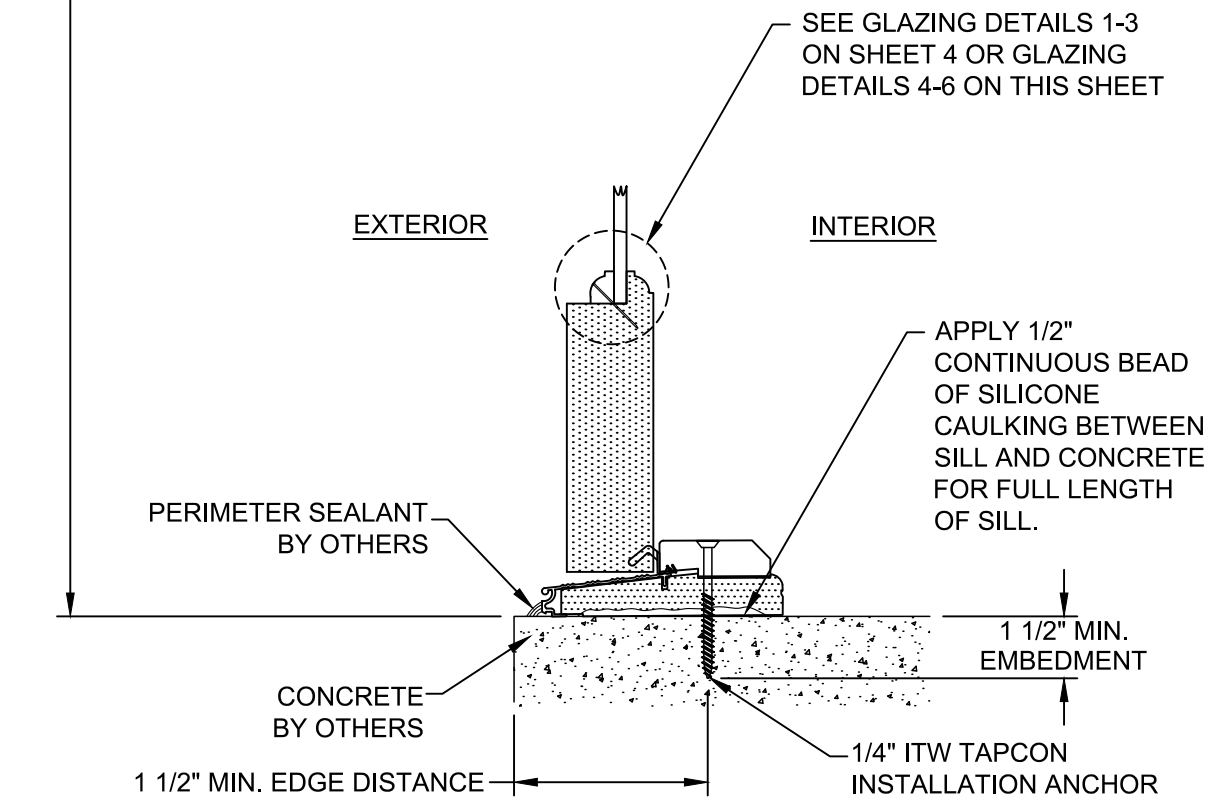
Robert J. Amoruso
Florida P.E. No. 49752

Digitally signed by Robert J Amoruso
Date: 2017.10.03 14:57:57 -04'00'

PTC Product Design Group, LLC
PO Box 520775
Longwood, FL 32752-0775
info@ptc-corp.com
FBPE Cert. of Authorization NO. 25935

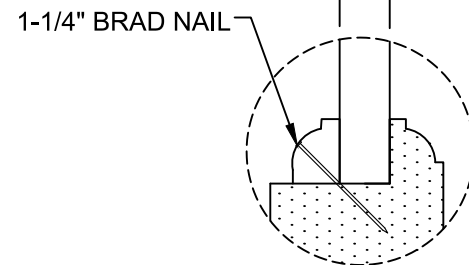


E **VERTICAL SECTION**
CONCRETE SUBSTRATE
GLAZED DOOR
(OUTSWING SHOWN, INSWING OPPOSITE)

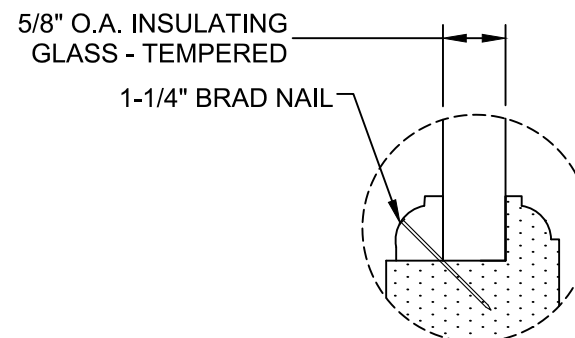


D **VERTICAL SECTION**
CONCRETE SUBSTRATE
GLAZED DOOR
(OUTSWING)

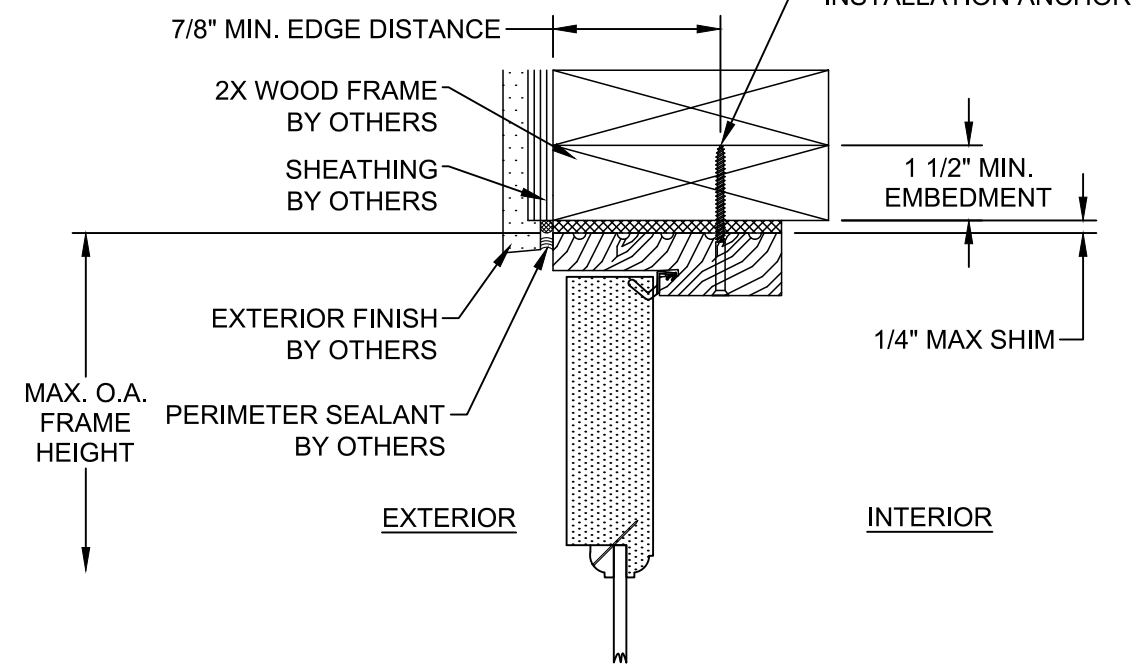
1/2" O.A. INSULATING GLASS - TEMPERED



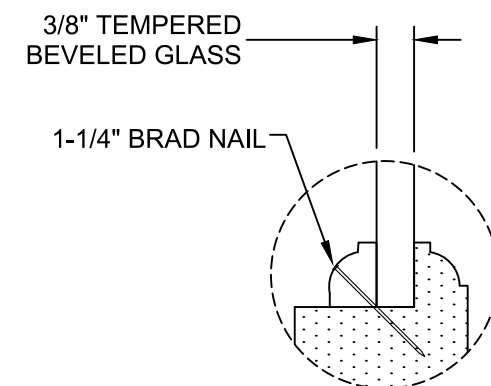
GLAZING DETAIL 4
(COMPRISED OF 1/8" TEMPERED X
1/4" AIR SPACE X 1/8" TEMPERED
GLAZED USING DOW CORNING 999A
SILICONE)



GLAZING DETAIL 5
(COMPRISED OF 3/16" TEMPERED X
1/4" AIR SPACE X 3/16" TEMPERED
GLAZED USING DOW CORNING 999A
SILICONE)



F **VERTICAL SECTION**
WOOD FRAME SUBSTRATE
GLAZED DOOR
(OUTSWING SHOWN, INSWING OPPOSITE)



GLAZING DETAIL 6
(GLAZED USING DOW CORNING 999A SILICONE)

PROJECT NO. 417-0709

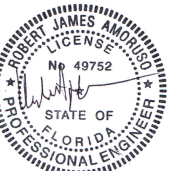
MILLWORK PLUS, INC.
262 HUMMER WAY
TAVERES, FLORIDA 32778

TITLE: N.I. O/S & I/S GLAZED & OPAQUE DOUBLE WOOD DOORS
VERTICAL SECTIONS & GLAZING DETAILS

DRAWN BY:	RJA	DATE:	10/15/12
SCALE:	N.T.S.	DRAWING NO:	MILLP0002
REV:	B	SHEET:	5 OF 7

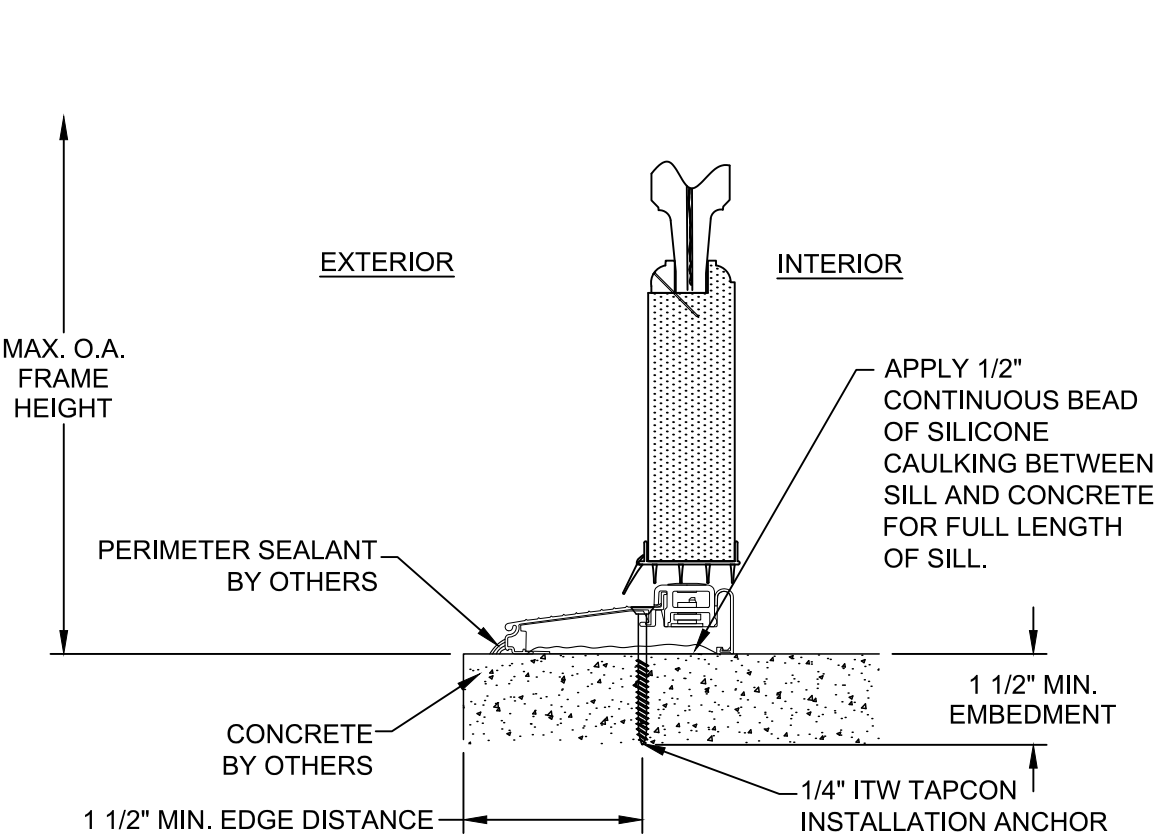
BY	RJA	DATE	10/2/15
DESCRIPTION	UPDATE TO 5TH EDITION (2014) FBC	DATE	10/2/15
DESCRIPTION	UPDATE TO 6TH EDITION (2017) FBC	DATE	10/3/17

Robert J. Amoruso
Florida P.E. No. 49752

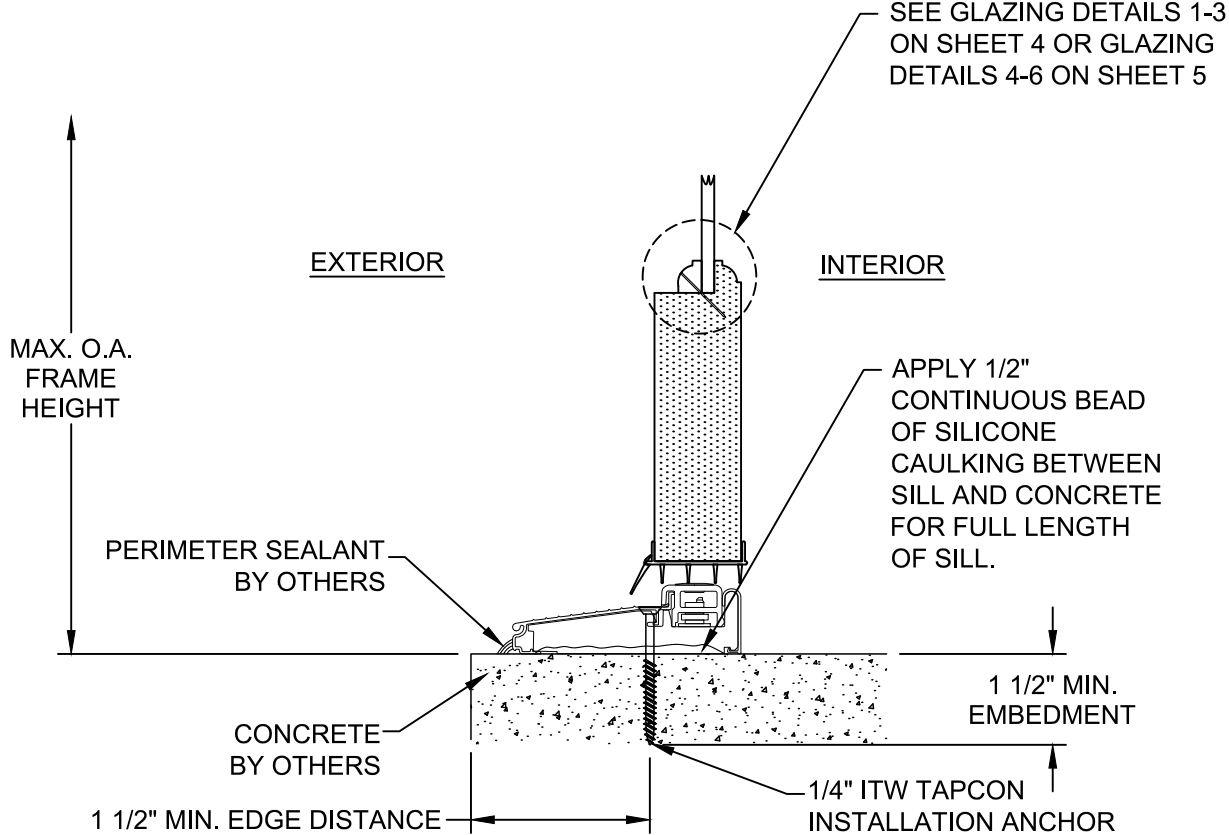


Digitally signed by
Robert J Amoruso
Date: 2017.10.03
14:58:12 -04'00'

PTC Product Design Group, LLC
PO Box 520775
Longwood, FL 32752-0775
info@ptc-corp.com
FBPE Cert. of Authorization NO. 25935



G **VERTICAL SECTION**
CONCRETE SUBSTRATE
OPAQUE DOOR
(IN SWING)



H **VERTICAL SECTION**
CONCRETE SUBSTRATE
GLAZED DOOR
(IN SWING)

PROJECT NO. 417-0709				RJA	BY
				10/3/17	DATE
B	UPDATE TO 6TH EDITION (2017) FBC			RJA	
A	UPDATE TO 5TH EDITION (2014) FBC			RJA	
REV	DESCRIPTION				

MILLWORK PLUS, INC.
262 HUMMER WAY
TAVERES, FLORIDA 32778

TITLE: N.I. O/S & I/S GLAZED & OPAQUE DOUBLE WOOD DOORS
VERTICAL SECTIONS

PREPARED BY: RJA

DATE: 10/15/12

SCALE: N.T.S.

DRAWING NO: MILLP0002

REV: B

SHEET: 6 OF 7

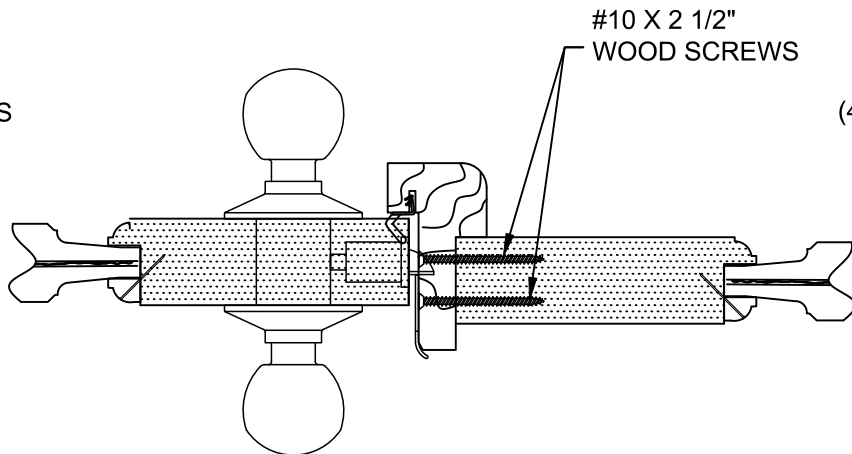
PTC

PTC Product Design Group, LLC
Phone 321.690.1788
Fax 321.690.1789

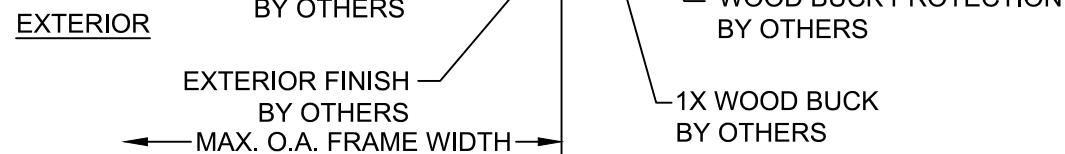
Robert J. Amoruso
Florida P.E. No. 49752

Digitally signed by
Robert J Amoruso
Date: 2017.10.03
14:58:28 -04'00'

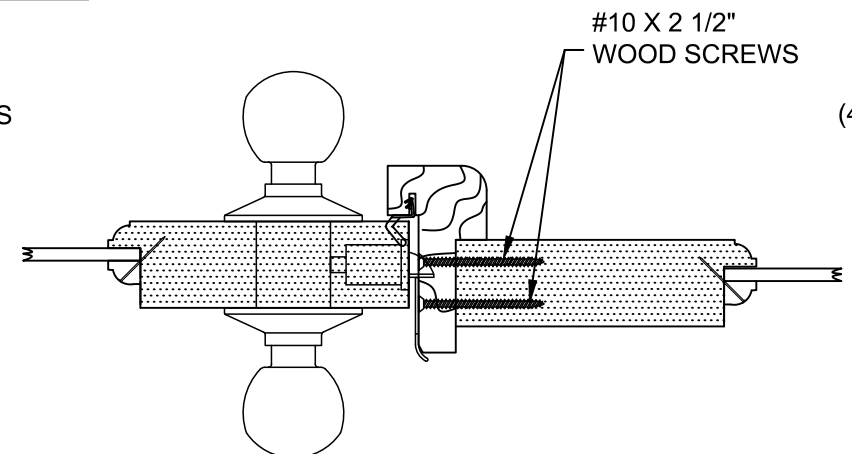
PTC Product Design Group, LLC
PO Box 520775
Longwood, FL 32752-0775
info@ptc-corp.com
FBPE Cert. of Authorization NO. 25935



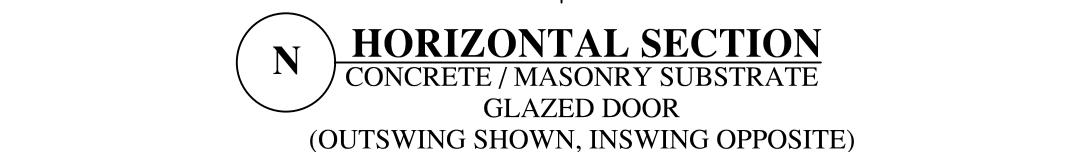
J **HORIZONTAL SECTION**
ASTRAGAL
OPAQUE DOOR
(OUTSWING SHOWN, INSWING OPPOSITE)



K HORIZONTAL SECTION
CONCRETE / MASONRY SUBSTRATE
OPAQUE DOOR
(OUTSWING SHOWN, INSIWNG OPPOSITE)



M HORIZONTAL SECTION
ASTRAGAL
GLAZED DOOR
(OUTSWING SHOWN, INSWING OPPOSITE)



N **HORIZONTAL SECTION**
CONCRETE / MASONRY SUBSTRATE
GLAZED DOOR
(OUTSWING SHOWN, INSWING OPPOSITE)

PTC Product Design Group, LLC
PO Box 520775
Longwood, FL 32752-0775
info@ptc-corp.com
FBPE Cert. of Authorization NO. 25935