

PELLA CORPORATION

SERIES 350 4-1/2" VINYL CASEMENT WINDOW

INSTALLATION ANCHORAGE DETAILS

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN EVALUATED AND IS DESIGNED TO COMPLY WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE AND FLORIDA RESIDENTIAL CODE BASED ON TESTING TO THE PERFORMANCE STANDARDS LISTED BELOW AT THE DESIGN PRESSURE(S) STATED HEREIN. THE PRODUCT DETAILS CONTAINED HEREIN ARE BASED UPON SIGNED AND SEALED TEST REPORTS AND ASSOCIATED LABORATORY STAMPED DRAWINGS AS CERTIFIED BY WDMA AND DOCUMENTED IN THEIR HALLMARK CERTIFICATE OF CONFORMANCE AND LICENSE (CCL).

1.1. AAMA/WDMA/CSA 101/I.S. 2/A440-08

1.2. AAMA/WDMA/CSA 101/I.S. 2/A440-11
2. THIS PRODUCT EVALUATION DOCUMENT IS NOT FOR USE IN THE HIGH VELOCITY HURRICANE ZONE (HVHZ).

3. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE / MASONRY, 2X FRAMING AND METAL FRAMING 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.

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 LICENSED PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT ACTING AS THE DESIGN PROFESSIONAL OF RECORD FOR THE PROJECT OF INSTALLATION.

5. WHEN INSTALLED IN LOCATIONS WHERE WINDBORNE DEBRIS PROTECTION REQUIREMENTS EXIST, THIS PRODUCT SHALL USE AN IMPACT PROTECTIVE SYSTEM COMPLYING WITH THE FBC REQUIREMENTS FOR WINDBORNE DEBRIS REGIONS.

6. SITE CONDITIONS NOT COVERED IN THIS PRODUCT EVALUATION DOCUMENT ARE SUBJECT TO ADDITIONAL ENGINEERING ANALYSIS BY A LICENSED PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT.

7. BOUNDING BOX DIMENSIONS FOR GEOMETRIC FIXED WINDOW SHAPES MUST BE EQUAL TO OR LESS THAN RECTANGULAR DIMENSIONS SHOWN HEREIN.

8. WINDOW FRAME MATERIAL: VINYL (PVC)

9. GLASS MEETS THE REQUIREMENTS OF ASTM E1300-04e1.

10. DESIGNATIONS "X" AND "O" STAND FOR THE FOLLOWING (AS APPLICABLE):

10.1. X: OPERABLE LITE, SASH OR PANEL

10.2. O: FIXED LITE, SASH OR PANEL

11. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE CURRENT EDITION OF THE FLORIDA BUILDING AND RESIDENTIAL CODES.

12. THE LEAST DESIGN PRESSURE SPECIFIED EITHER IN THIS DRAWING OR IN THE PRODUCT'S CERTIFICATION SHALL CONTROL FOR THE INSTALLED WINDOW ASSEMBLY.

13. THESE DRAWINGS CERTIFY THE WINDOW INSTALLATION ONLY. WATER PROOFING OF THE INSTALLED WINDOW IS NOT PART OF THIS INSTALLATION CERTIFICATION. THAT RESPONSIBILITY SHALL BE THAT OF THE MANUFACTURER AND/OR THE INSTALLER.
- INSTALLATION NOTES:
1. PRODUCT ANCHORS SHALL BE AS DESIGNATED AND LOCATED AS SHOWN IN THIS PRODUCT EVALUATION DOCUMENT. ANCHOR EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER AND SIDING.

2. SEE INSTALLATION ANCHOR SCHEDULE ON SHEET 2 FOR TYPE AND GRADE OF ANCHOR, AND/OR MANUFACTURER'S ANCHOR SPECIFICATIONS, INCLUDING MINIMUM NOMINAL SIZE, MINIMUM EMBEDMENT INTO SUBSTRATE AND MINIMUM EDGE DISTANCES.

2.1. EDGE DISTANCES SHALL BE MEASURED FROM CENTERLINE OF ANCHOR TO EDGE OF STRUCTURAL SUBSTRATE EITHER TO THE INTERIOR OR EXTERIOR OF THE FENESTRATION PRODUCT.

2.2. MINIMUM EMBEDMENT SHALL BE BASED ON PENETRATION INTO MAIN WIND FORCE RESISTING SYSTEM SUBSTRATE.

3. SEE SHEETS 4, 5 AND 6 FOR SPECIFIC ANCHOR INSTALLATION DETAILS.

4. ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN.

5. THE NUMBER OF INSTALLATION ANCHORS IS BASED ON THE MAXIMUM END DISTANCE (ED) AND THE MAXIMUM ON CENTER (O.C.) SPACING PLACEMENT OF ANCHORS IN ACCORDANCE WITH THE TABLES ON SHEET 2. END DISTANCES AND O.C. SPACINGS LESS THAN THAT SHOWN IN THE TABLES ON SHEET 2 ARE ACCEPTABLE.

6. MAXIMUM ALLOWABLE SHIM THICKNESS IS 1/4 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF WOOD COMPOSITE, HIGH DENSITY PLASTIC OR SIMILAR LOAD BEARING MATERIAL.

6.1. FOR BLOCK & FLANGE FRAME INSTALLATIONS, SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR

6.2. FOR FIN FRAME INSTALLATIONS, SHIM 1/2" FROM EACH INTERIOR CORNER OF THE WINDOW, BENEATH INTEGRAL MULLION(S), AND 18" O.C. THEREAFTER.

7. FOR CONCRETE BLOCK APPLICATIONS DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS.

8. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED IN THE INSTALLATION ANCHOR SCHEDULE ON SHEET 2.
- SEE SHEET 2
FOR DESIGN
PRESSURES.
SEE GENERAL
NOTE 12 FOR
ADDITIONAL
REQUIREMENTS
- | TABLE OF CONTENTS | |
|-------------------|---|
| SHEET | SHEET DESCRIPTION |
| 1 | GENERAL NOTES, INSTALLATION NOTES & TABLE OF CONTENTS |
| 2 | ANCHOR SCHEDULES AND DP CHART |
| 3 | ELEVATIONS & ANCHOR LAYOUTS |
| 4 TO 6 | INSTALLATION CROSS SECTIONS |
| 7 | BILL OF MATERIALS |
- PROJECT # 417-0804

PELLA CORPORATION
102 MAIN STREET
PELLA, IA 50219

TITLE: SERIES 350 4-1/2" VINYL CASEMENT WINDOW
GENERAL NOTES, INSTALLATION NOTES & TABLE OF CONTENTS

PREPARED BY: TJH
DATE: 06/16/11
DRAWING NO: PELL0010
SHEET: 1 OF 7

PTC PRODUCT DESIGN GROUP, LLC
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Rev. B

GENERAL UPDATE

8/28/18

RJA

DESCRIPTION

02/16/15

RJA

DATE

8/28/18

REV

02/16/15

BY

DATE

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

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Robert J.
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P.E.
Date:
2018.09.05
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INSTALLATION ANCHOR SCHEDULE							
WINDOW FRAME TYPE	FASTENER HEAD TYPE	FASTENER SIZE	SUBSTRATE	MANUFACTURER AND/OR SPECIFICATION	EMBEDMENT (IN) (2)	EDGE DISTANCE (IN) (2)	ANCHOR CAPACITIES BASED ON
NAILING FIN	ROOFING NAIL	11 GAUGE	WOOD	11 GAUGE ROOFING NAIL x 1-1/2" LONG	approximately 1-1/2"	3/8"	WOOD WITH A MINIMUM SPECIFIC GRAVITY OF 0.42
FLANGE FRAME AND BLOCK FRAME USING THROUGH FRAME ANCHOR OR CLIP ANCHOR	FLAT OR HEX HEAD	3/16"	CONCRETE	ITW TAPCONS (1)	1-1/2"	1-1/8"	MIN. 2000 PSI CONCRETE
				ELCO ULTRACONS	1-3/8"	1"	MIN. 2500 PSI CONCRETE
				ELCO CRETE-FLEX SS4	2"	1-7/8"	MIN. 2500 PSI CONCRETE
				HILTI KWIK-CON II	1-1/2"	1-1/8"	MIN. 2000 PSI CONCRETE
			MASONRY (BLOCK/CMU)	ITW TAPCONS (1)	1"	2"	STRENGTH CONFORMANCE TO ASTM C-90, MEDIUM WEIGHT
				ELCO ULTRACONS	1-1/4"	1"	
				ELCO CRETE-FLEX SS4	1-1/4"	1-7/8"	
				HILTI KWIK-CON II	1"	1-1/8"	
	FLAT OR PAN HEAD	NO. 10	WOOD	ANSI B18.6.1 (WOOD SCREW) (2)	1-1/2"	1"	WOOD WITH A MINIMUM SPECIFIC GRAVITY OF 0.42
				ASME B18.6.4 (TAPPING SCREW) (2)			
			20 GAUGE (0.0346" MIN. THK.) STEEL INCLUDING STEEL STUDS	ASME B18.6.4 (TAPPING SCREW) (2)	FULLY PENETRATE SUBSTRATE WITH 3 THREADS PROTRUDING INTERNALLY	1"	ASTM A-653 STEEL, 33 KSI YIELD STRENGTH STEEL OR BETTER
				ASME B18.6.4 (TAPPING SCREW) (2)		1"	ASTM A-36 STEEL, 36 KSI YIELD STRENGTH STEEL OR BETTER
			1/8" MIN. THK. STEEL	ASME B18.6.4 (TAPPING SCREW) (2)		1"	6063-T5 ALUMINUM OR BETTER
			0.060" MIN. THK. ALUMINUM	ASME B18.6.4 (TAPPING SCREW) (2)		1"	6063-T5 ALUMINUM OR BETTER

NOTES:
1) WHEN ITW TAPCONS ARE USED FOR CONCRETE/MASONRY INSTALLATION, THEY SHALL BE THE ADVANCED THREADFORM TECHNOLOGY TYPE.
2) FOR WOOD AND TAPPING SCREWS IF SPLITTING IS A CONCERN, DRILL 7/64" PILOT HOLE FOR FLANGE/BLOCK FRAME INSTALLATION OR 3/32" PILOT HOLE FOR NAILING FIN INSTALLATION.

4-1/2" FRAME - NAILING FIN INSTALLATION - SINGLE CONFIGURATION								
FRAME CONFIGURATION	ANCHOR (SEE ANCHOR SCHEDULE)	MAX. WINDOW SIZE		DP (psf)	END DISTANCE (ED) (in)		MAX. O.C. (in)	
		W (in)	H (in)		HEAD/SILL	JAMBS	HEAD/SILL	JAMBS
NAILING FIN	11 GAUGE ROOFING NAIL	35.5	71.5	40	4.6	4.6	8	8
				60				

4-1/2" FRAME - BLOCK/FLANGE FRAME INSTALLATION - SINGLE CONFIGURATION								
FRAME CONFIGURATION	ANCHOR (SEE ANCHOR SCHEDULE)	MAX. WINDOW SIZE		DP (psf)	END DISTANCE (ED) (in)		MAX. O.C. (in)	
		W (in)	H (in)		HEAD ONLY	JAMBS	HEAD ONLY	JAMBS
FLANGE FRAME AND BLOCK FRAME USING THROUGH FRAME ANCHOR OR CLIP ANCHOR	3/16" CONCRETE SCREW OR NO. 10 WS (ANSI B18.6.1) OR NO. 10 TAPPING SCREW (ASME B18.6.4)	35.5	71.5	40	4.6	4.6	13.2	15.6
				60				

NOTES:

1. **INSTALLATION ANCHOR SCHEDULE** TABLE LISTS APPROVED ANCHOR SPECIFICATIONS BASED ON THE WINDOW FRAME TYPE AND SUBSTRATE.
2. **4-1/2" FRAME - NAILING FIN & BLOCK/FLANGE FRAME INSTALLATION - SINGLE CONFIGURATION** TABLE LISTS THE FOLLOWING INFORMATION.

2.1. REQUIRED ANCHOR TYPE BASED ON SUBSTRATE.

2.2. END DISTANCE (ED) OF ANCHORS AT FRAME ENDS AS DIMENSIONED ON ELEVATION DRAWINGS.

2.3. MAXIMUM O.C. (ON CENTER) SPACING FOR ANCHORS BETWEEN THE FRAME END ANCHORS DIMENSIONED ON ELEVATION DRAWINGS.

2.3.1. QUANTITY OF ANCHORS BASED ON MEETING THE O.C. SPACING REQUIREMENTS.

2.4. MAXIMUM WINDOW SIZES (W x H)

2.5. MAXIMUM DESIGN PRESSURE (DP)

PROJECT # 417-0804

PELLA CORPORATION
102 MAIN STREET
PELLA, IA 50219

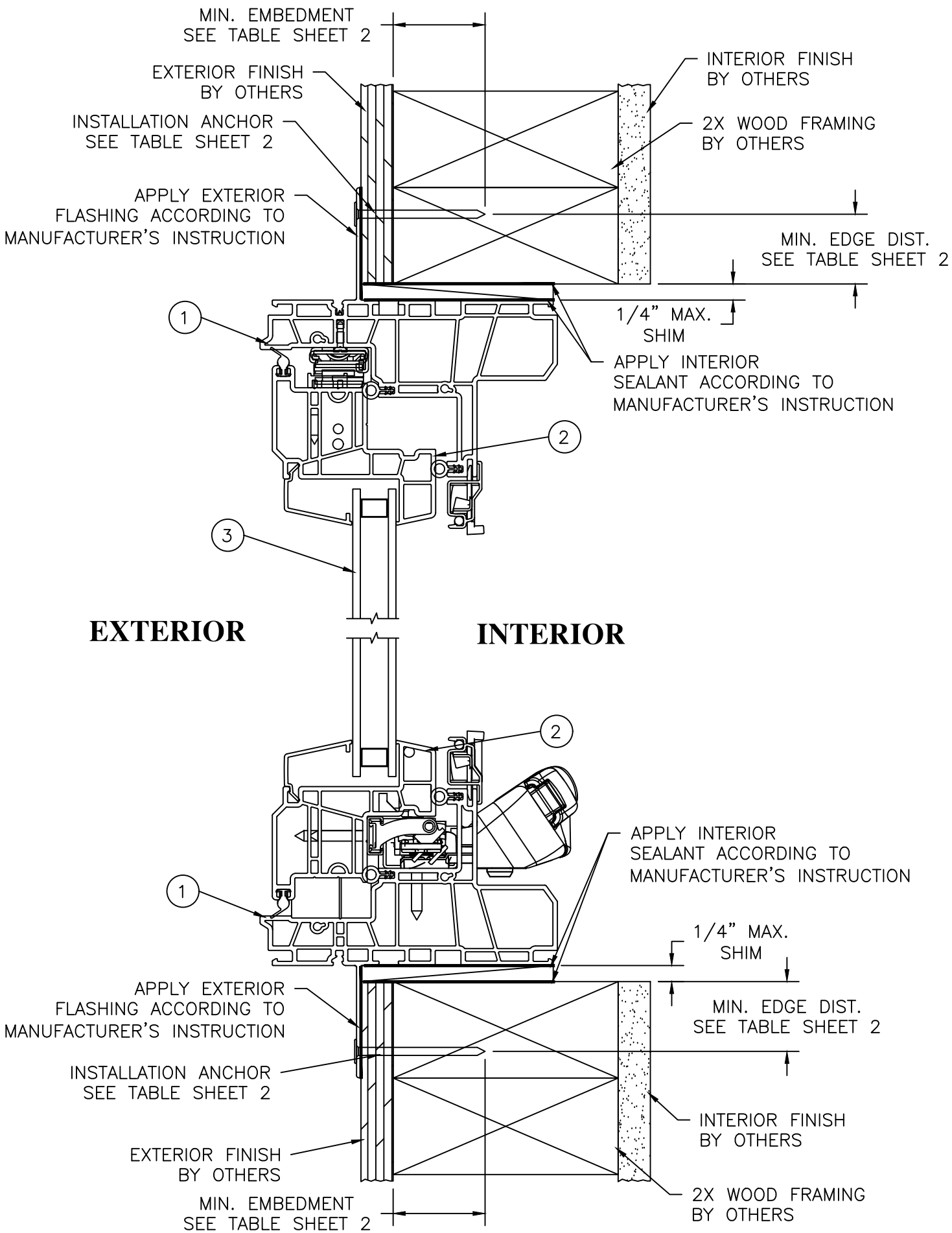
TITLE:
SERIES 350 4-1/2" VINYL CASEMENT WINDOW ANCHOR SCHEDULES AND DP CHART

PREPARED BY:
DRAWN BY: TJH
DATE: 06/16/11
SCALE: N.T.S.
SHEET: 2 OF 7

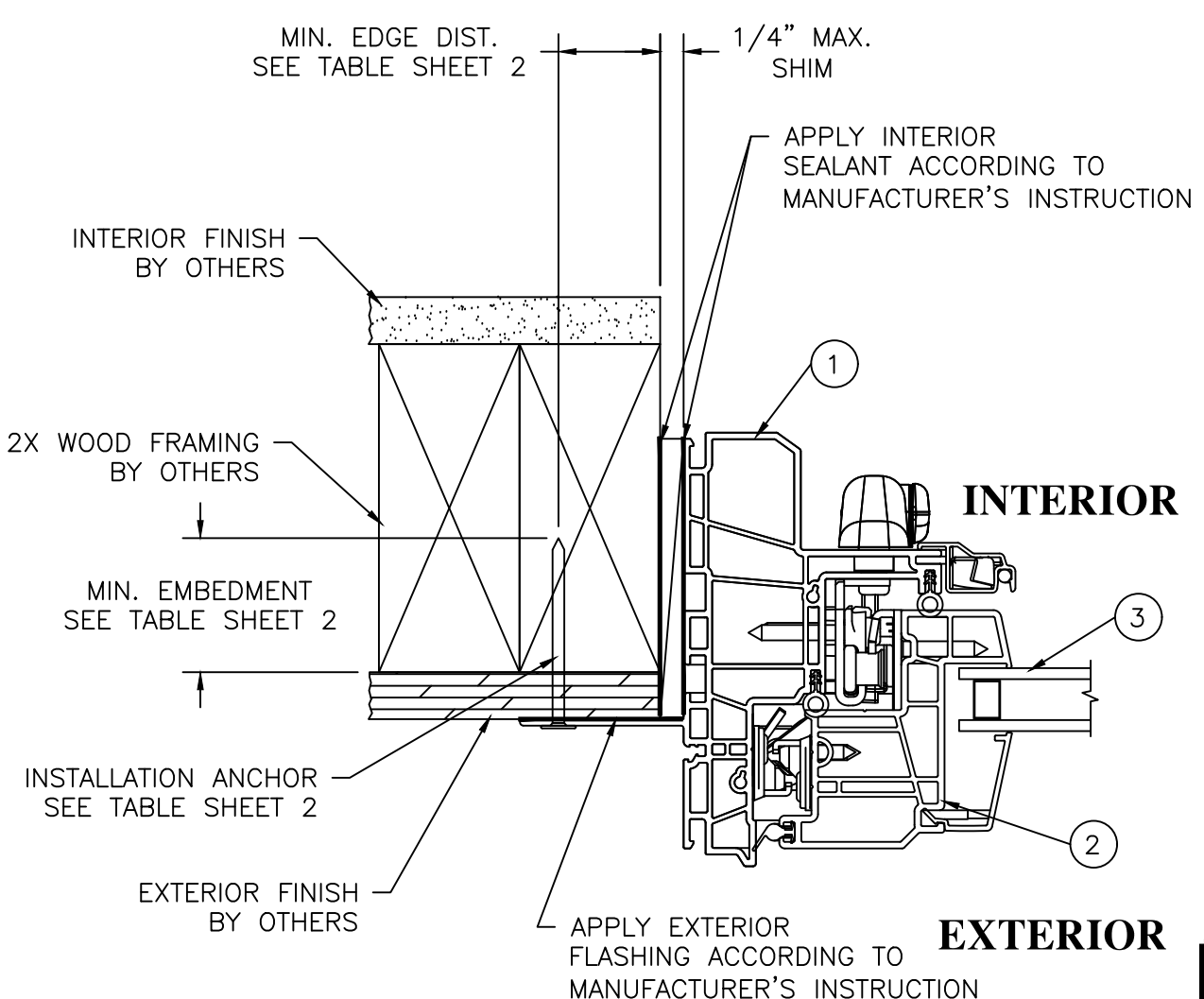
PTC PRODUCT DESIGN GROUP, LLC
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Robert J. Amoruso, P.E.
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Date: 2018.09.05 08:43:43 -04'00'



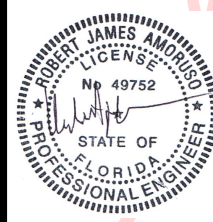
A VERTICAL CROSS SECTION
FIN INSTALLATION



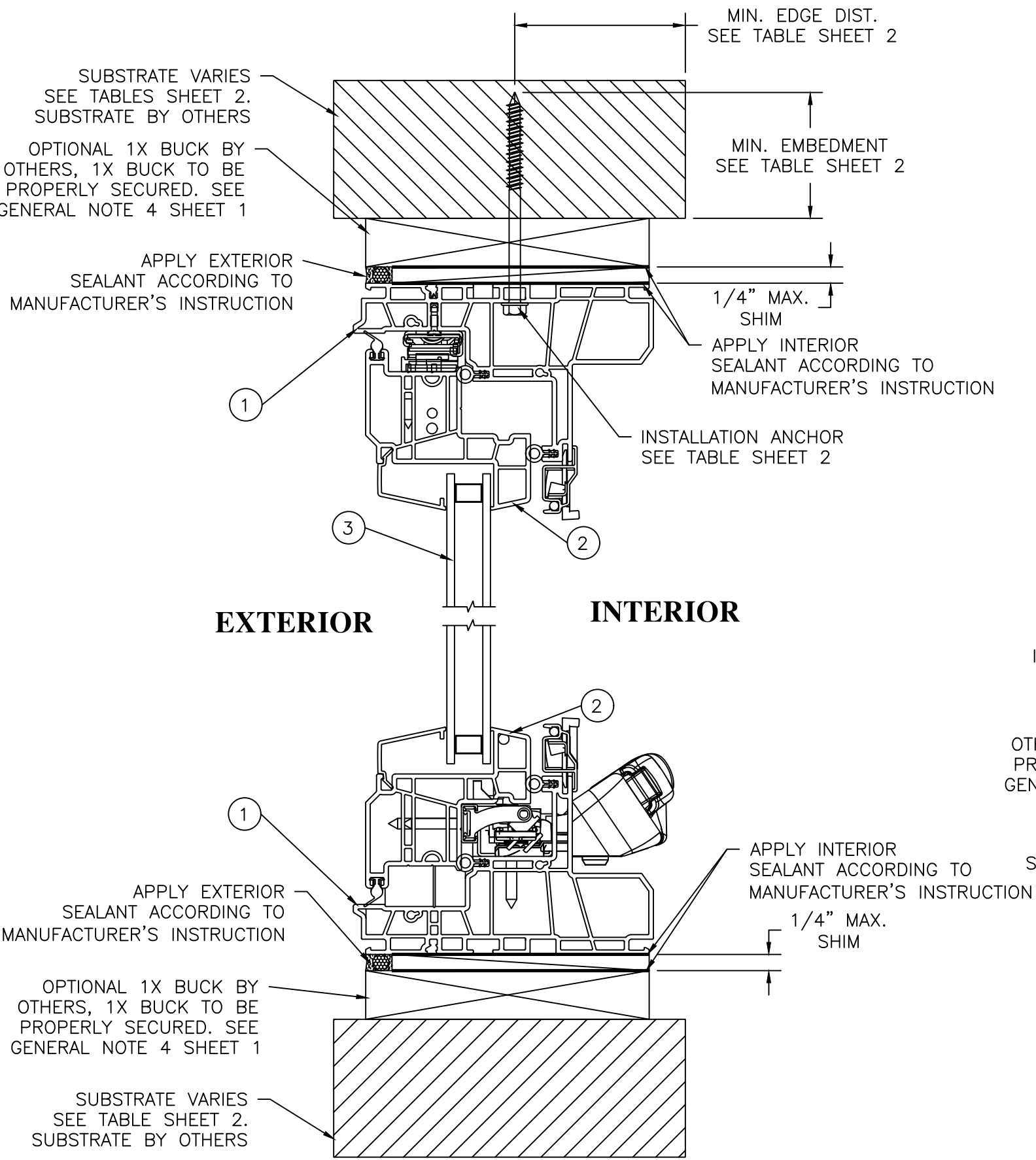
B HORIZONTAL CROSS SECTION
FIN INSTALLATION

PROJECT # 417-0804			RJA	RJA	BY
			8/28/18	02/16/15	DATE
			B	A	REV
PELLA CORPORATION 102 MAIN STREET PELLA, IA 50219		SERIES 350 4-1/2" VINYL CASEMENT WINDOW FIN INSTALLATION CROSS SECTIONS		DATE: 06/16/11	DESCRIPTION
DRAWN BY: TJH		SCALE: N.T.S.		DRAWING NO: PELL0010	
REVISIONS		REV: B		SHEET: 4 OF 7	
PTC PRODUCT DESIGN GROUP, LLC PO BOX 520775 LONGWOOD, FLORIDA 32752 FBPE C.A. NO. 25935		Phone: 321.690.1788 Fax: 321.690.1789 Email: info@ptc-corp.com			

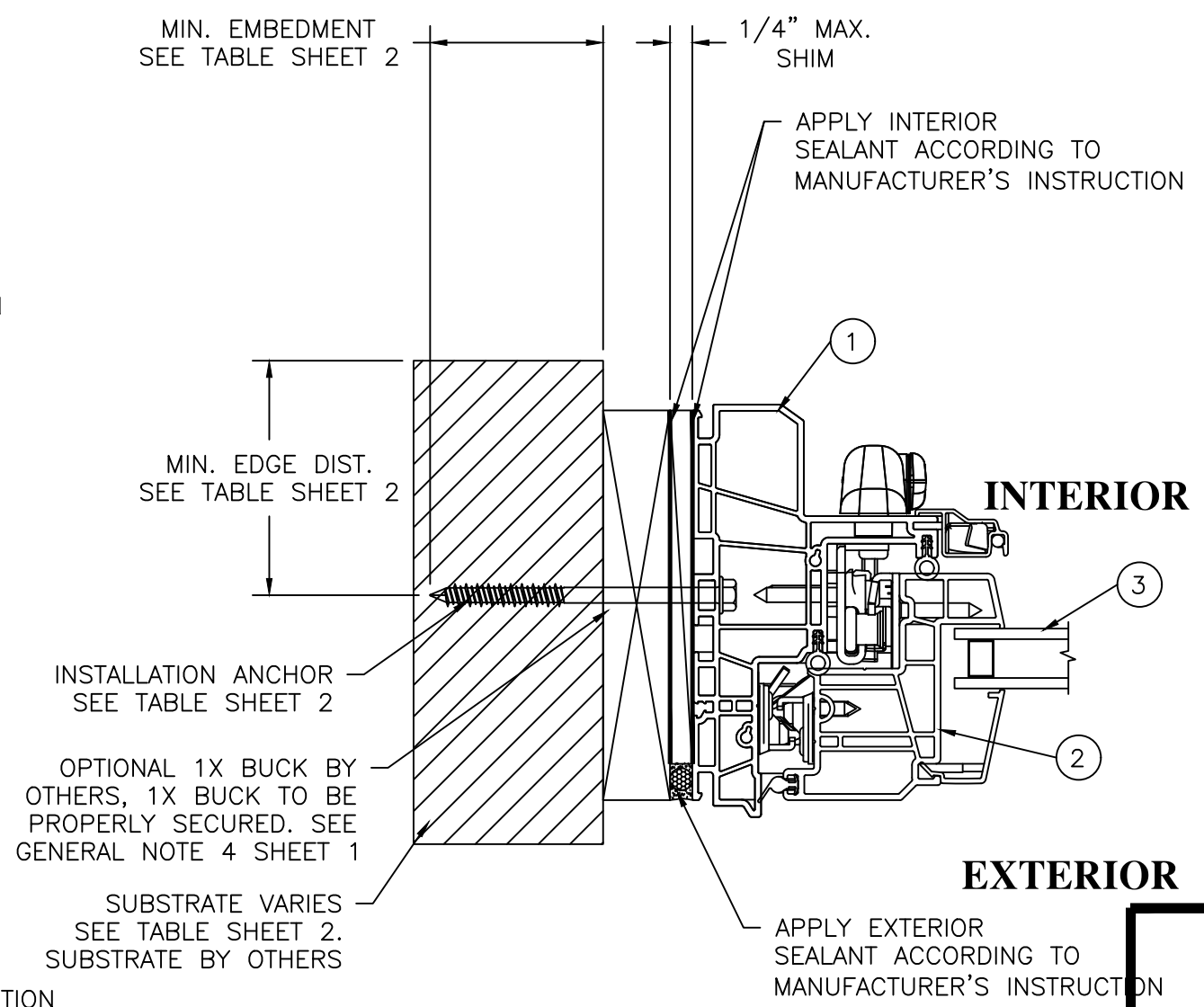
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Date:
2018.09.05
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C
5 **VERTICAL CROSS SECTION**
BLOCK/FLANGE FRAME THROUGH FRAME INSTALLATION

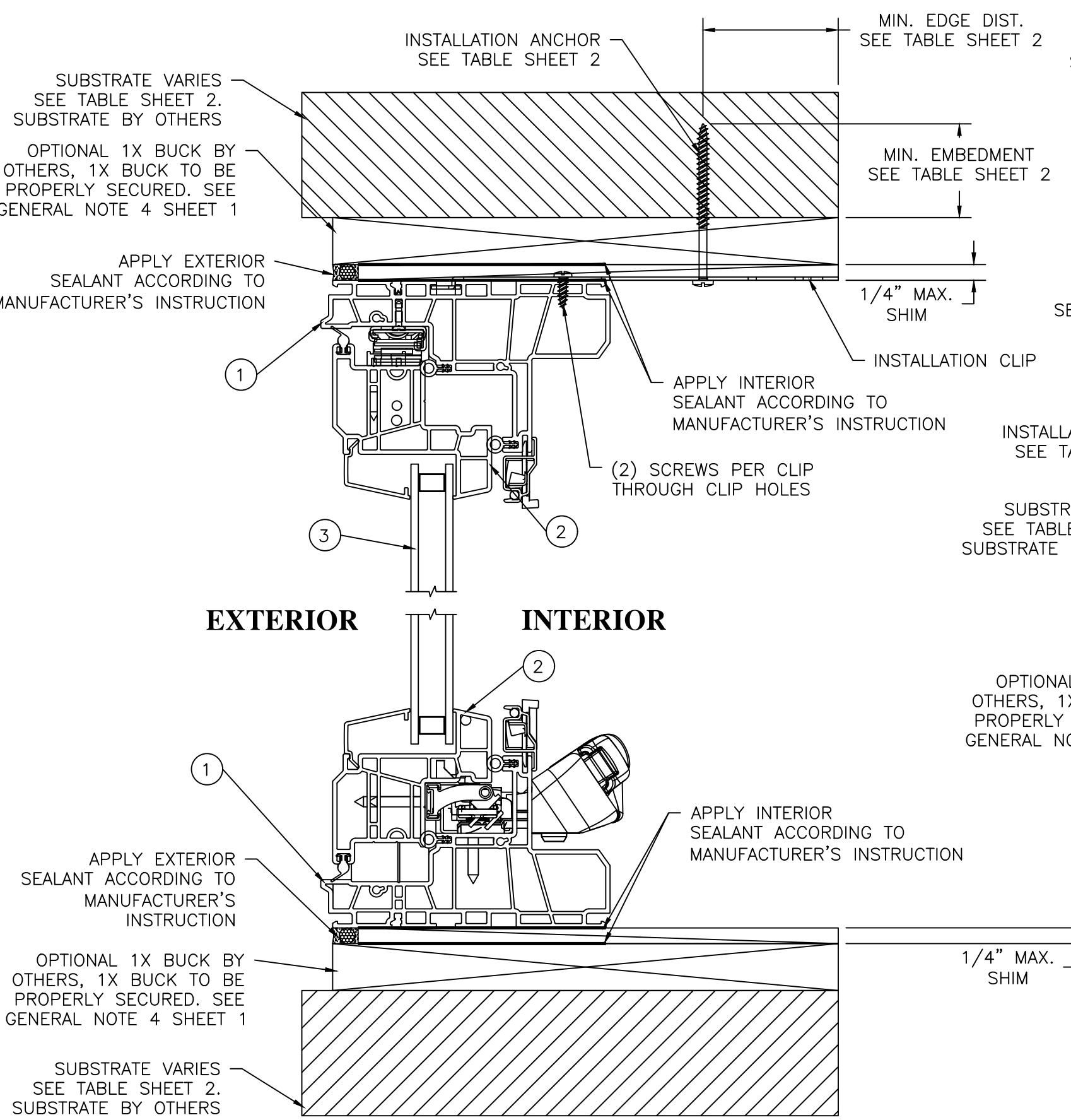


D
5 **HORIZONTAL CROSS SECTION**
BLOCK/FLANGE FRAME THROUGH FRAME INSTALLATION

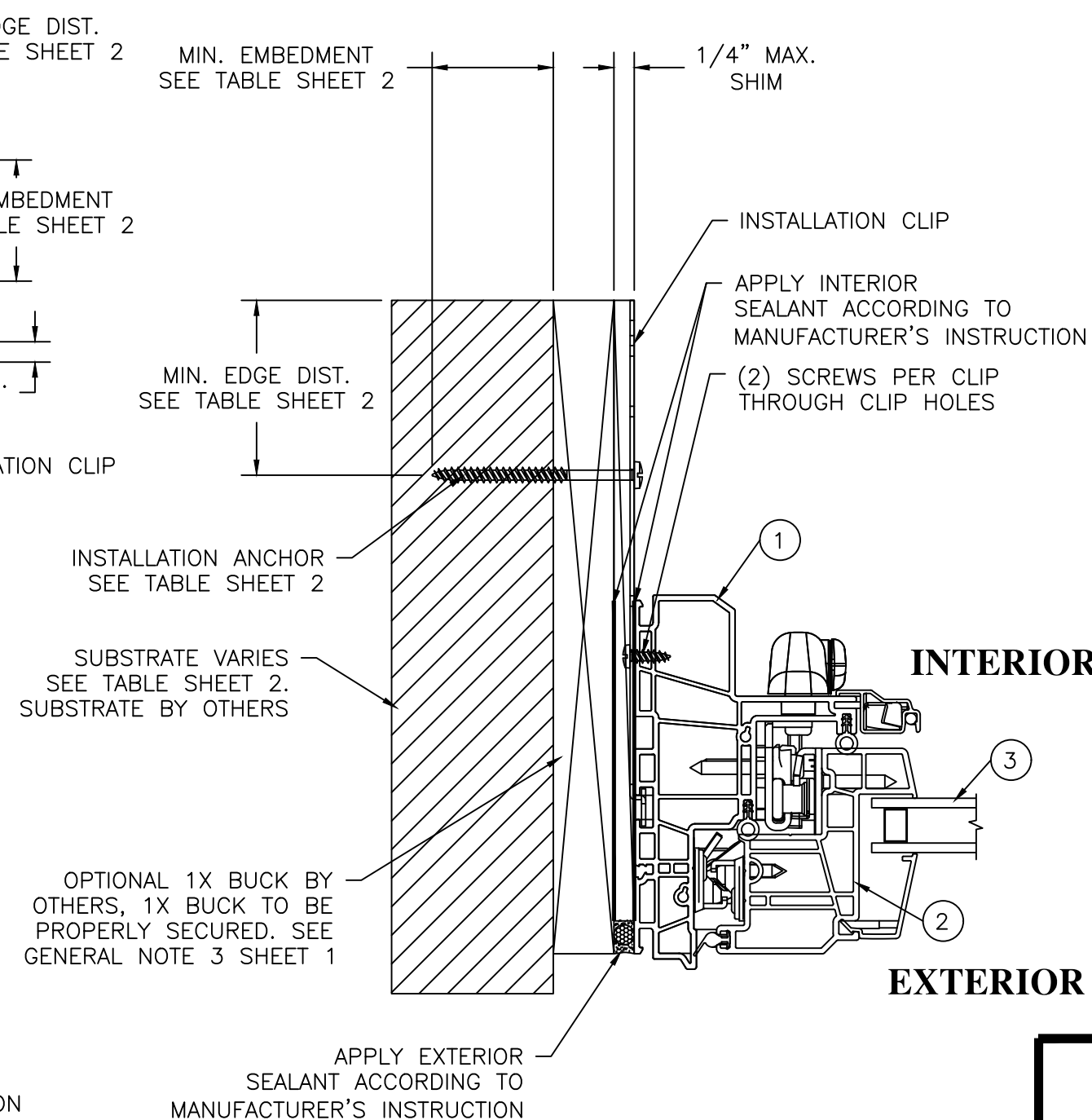
PROJECT # 417-0804				RJA	BY
				8/28/18	DATE
		GENERAL UPDATE		02/16/15	DESCRIPTION
		B	A	REV	
PELLA CORPORATION 102 MAIN STREET PELLA, IA 50219		TITLE: SERIES 350 4-1/2" VINYL CASEMENT WINDOW THROUGH FRAME INSTALLATION CROSS SECTIONS		DATE: 06/16/11	5 OF 7
		DRAWN BY: TJH	SCALE: N.T.S.	DRAWING NO: PELL0010	REV: B
		PREPARED BY: PTC PRODUCT DESIGN GROUP, LLC PO BOX 520775 LONGWOOD, FLORIDA 32752 FBPE C.A. NO. 25935		Phone: 321.690.1788 Fax: 321.690.1789 Email: info@ptc-corp.com	

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E
6 **VERTICAL CROSS SECTION**
BLOCK/FLANGE FRAME CLIP INSTALLATION



F
6 **HORIZONTAL CROSS SECTION**
BLOCK/FLANGE FRAME CLIP INSTALLATION

PROJECT # 417-0804				RJA	RJA	BY
				8/28/18	02/16/15	DATE
				GENERAL UPDATE	GENERAL UPDATE	DESCRIPTION
				B	A	REV
PELLA CORPORATION 102 MAIN STREET PELLA, IA 50219		SERIES 350 4-1/2" VINYL CASEMENT WINDOW CLIP INSTALLATION CROSS SECTIONS		DATE: 06/16/11	DRAWING NO: PELL0010	SHEET: 6 OF 7
DRAWN BY: TJH		SCALE: N.T.S.		REV: B		
PREPARED BY:		PTC PRODUCT DESIGN GROUP, LLC PO BOX 520775 LONGWOOD, FLORIDA 32752 FBPE C.A. NO. 25935		Phone: 321.690.1788 Fax: 321.690.1789 Email: info@ptc-corp.com		

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BILL OF MATERIALS			
ITEM NO	DESCRIPTION	QUANTITY	
		STD PERF.	HIGH PERF.
1	FRAME ASSEMBLY, 350 SERIES CASEMENT	1	-
2	SASH ASSEMBLY, 350 SERIES CASEMENT	1	-
3 (SEE NOTE BELOW)	11/16" IG ASSEMBLY (SHOWN)	1 (OPT)	-
	1" IG ASSEMBLY	1 (OPT)	-
	1-1/4" TRIPLE IG ASSEMBLY	1 (OPT)	-
	1-7/16" TRIPLE IG ASSEMBLY	1 (OPT)	-
4	11/16" FIXED GLAZING BEAD, BOTTOM RAIL, WITH WEEPS (SHOWN) (WHITE AND ALMOND)	1 (OPT)	-
	1" FIXED GLAZING BEAD, BOTTOM RAIL, WITH WEEPS (WHITE AND ALMOND)	1 (OPT)	-
	11/16" FIXED GLAZING BEAD, BOTTOM RAIL, WITH WEEPS (BROWN)	1 (OPT)	-
	1" FIXED GLAZING BEAD, BOTTOM RAIL, WITH WEEPS (BROWN)	1 (OPT)	-
	1-1/4" FIXED GLAZING BEAD, BOTTOM RAIL, WITH WEEPS (ALL COLORS)	1 (OPT)	-
	1-7/16" FIXED GLAZING BEAD, BOTTOM RAIL, WITH WEEPS (ALL COLORS)	1 (OPT)	-
	7/16" SINGLE LAMI FIXED GLAZING BEAD, BOTTOM RAIL, WITH WEEPS (ALL COLORS)	1 (OPT)	-
5	11/16" FIXED GLAZING BEAD, TOP RAIL (SHOWN) (WHITE/ALMOND)	1 (OPT)	-
	1" FIXED GLAZING BEAD, TOP RAIL (WHITE/ALMOND)	1 (OPT)	-
	11/16" FIXED GLAZING BEAD, TOP RAIL (BROWN)	1 (OPT)	-
	1" FIXED GLAZING BEAD, TOP RAIL (BROWN)	1 (OPT)	-
	1-1/4" FIXED GLAZING BEAD, TOP RAIL (ALL COLORS)	1 (OPT)	-
	1-7/16" FIXED GLAZING BEAD, TOP RAIL (ALL COLORS)	1 (OPT)	-
	7/16" SINGLE LAMINATED FIXED GLAZING BEAD, TOP RAIL (ALL COLORS)	1 (OPT)	-
6	11/16" FIXED GLAZING BEAD, STILE (SHOWN) (WHITE/ALMOND)	2 (OPT)	-
	1" FIXED GLAZING BEAD, STILE (WHITE/ALMOND)	2 (OPT)	-
	11/16" FIXED GLAZING BEAD, STILE (BROWN)	2 (OPT)	-
	1" FIXED GLAZING BEAD, STILE (BROWN)	2 (OPT)	-
	1-1/4" FIXED GLAZING BEAD, STILE (ALL COLORS)	2 (OPT)	-
	1-7/16" FIXED GLAZING BEAD, STILE (ALL COLORS)	2 (OPT)	-
	7/16" SINGLE LAMINATED FIXED GLAZING BEAD, STILE (ALL COLORS)	2 (OPT)	-
7	GLAZING SEALANT	-	-

NOTE:

1 GLASS THICKNESS IS BASED ON PERFORMANCE GRADE RATING AND SIZE OF WINDOW PER ASTM E1300.

PROJECT # 417-0804

PELLA CORPORATION
102 MAIN STREET
PELLA, IA 50219

TITLE: SERIES 350 4-1/2" VINYL CASEMENT WINDOW
BILL OF MATERIALS

PREPARED BY: 

DRAWN BY: TJH

DATE: 06/16/11

SCALE: N.T.S.

DRAWING NO: PELL0010

REV: B

SHEET: 7 OF 7

8/28/18

GENERAL UPDATE

B

RJA

02/16/15

GENERAL UPDATE

A

RJA

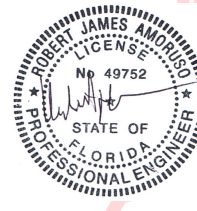
DATE

DESCRIPTION

REV

BY

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