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# Product Evaluation Report

***of***

**Andersen Corporation**
**Renewal by Andersen Casement Windows**

***for***

**Florida Product Approval**

**FL# FL19560**

**Report No. 5897**

**Current Florida Building Code**

| | |
|---|---|
| **Method:** | **1 – D (Engineering Evaluation)** |
| **Category:** | **Windows** |
| **Sub – Category:** | **Casement Window** |
| **Product:** | ***Renewal By Andersen Casement Windows*** |
| **Material:** | ***Fibrex® & PVC*** |
| **Product Dimensions:** | ***See installation instructions, AWD242*** |

**Prepared For:**
**Andersen Corporation**
**100 4th Ave. N**
**Bayport, Minnesota 55003**

**Prepared by:**
**Hermes F. Norero, P.E.**
Florida Professional Engineer # 73778
Date: 12/15/18

Contents:



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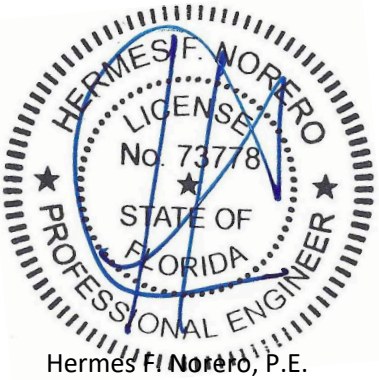
Reason: I am approving this document
Date: 2018.12.16 18:09:34 -05'00'




Hermes F. Norero, P.E.
Florida No. 73778

| | |
|---|---|
| **Manufacturer:** | **Andersen Corporation** |
| **Product Category:** | Windows |
| **Product Sub-Category:** | Casement Window |
| **Compliance Method:** | State Product Approval Method (1)(d) |
| **Product Name:** | Renewal Casement Windows |

**Scope:** This is a Product Evaluation Report issued by Hermes F. Norero, P.E. (FL # 73778) for **Andersen Corporation** based on Method 1d of the State of Florida Product Approval, Florida Department of Business and Professional Regulation - Florida Building Commission.

Hermes F. Norero, P.E. does not have nor will acquire financial interest in the company manufacturing or distributing the product or in any other entity involved in the approval process of the product named herein.

This product has been evaluated for use in locations adhering to the Current Florida Building Code.

See Installation Instructions **AWD242**, signed and sealed by Hermes F. Norero, P.E. (FL # 73778) for specific use parameters.

**Limits of Use:**

1. This product has been evaluated and is in compliance with the Current Florida Building Code, excluding the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment into substrate material shall be beyond wall dressing or stucco.
3. When used in areas requiring wind borne debris protection this product complies with Chapter 16 of the Current Florida Building Code and does require an impact resistant covering.
4. Site conditions that deviate from the details of drawing **AWD242** require further engineering analysis by a licensed engineer or registered architect.
5. See Installation Instructions **AWD242** for size and design pressure limitations.

**Quality Assurance:** The manufacturer has demonstrated compliance of products in accordance with the Florida Building Code for manufacturing under a quality assurance program audited by an approved quality assurance entity through **Window and Door Manufacturers Association** (FBC Organization #: QUA2515).

**Performance Standards:** The product described herein has been tested per:

- AAMA/WDMA/CSA 101/I.S.2/A440-08/11

**Referenced Data:**

1. Product Testing performed by **Architectural Testing**
   (FBC Organization # TST1795)

| | |
|---|---|
| Report: E8358.01-201-47-R0 | Dated: 05/29/15 |
| Report: D4714.01-201-47-R0 | Dated: 05/05/14 |
| Report: D6879.01-201-47-R0 | Dated: 05/05/14 |
| Report: D4712.01-201-47-R1 | Dated: 09/12/14 |
| Report: D6877.01-201-47-R0 | Dated: 04/15/14 |
| Report: D4710.01-201-47-R0 | Dated: 09/19/14 |
| Report: D4710.02-201-47-R0 | Dated: 09/19/14 |
| Report: E8357.01-201-47-R0 | Dated: 05/29/15 |
| Report: D6906.01-201-47-R0 | Dated: 08/19/14 |
| Report: D6911.01-201-47-R0 | Dated: 08/19/14 |
| Report: D7659.01-201-47-R0 | Dated: 09/02/14 |
| Report: D7660.01-201-47-R0 | Dated: 09/02/14 |
| Report: D7661.01-201-47-R0 | Dated: 09/02/14 |
| Report: D7662.01-201-47-R0 | Dated: 09/02/14 |
| Report: D6890.01-201-47-R0 | Dated: 05/05/14 |
| Report: D6894.01-201-47-R0 | Dated: 05/05/14 |
| Report: D6898.01-201-47-R0 | Dated: 05/08/14 |
| Report: D6902.01-201-47-R0 | Dated: 05/08/14 |
| Report: D7664.01-201-47-R0 | Dated: 09/02/14 |
| Report: D7665.01-201-47-R0 | Dated: 09/02/14 |
| Report: D7666.01-201-47-R0 | Dated: 09/02/14 |
| Report: D7667.01-201-47-R0 | Dated: 09/02/14 |

2. Product Testing performed by **Intertek**
   (FBC Organization # TST1795)

| | |
|---|---|
| Report: I9385.01-201-47 | Dated: 12/07/18 |
| Report: I9387.01-201-47 | Dated: 12/10/18 |

3. Quality Assurance
**Window and Door Manufacturers Association**
(FBC Organization #: QUA2515)

**Installation:**

Refer to Installation Instructions (**AWD242**) for anchor type, embedment, edge distance and anchor spacing details.

**Design Pressure:**

Refer to Installation Instructions (**AWD242**) for design pressures based on unit construction, size, and configuration.

# ANDERSEN CORPORATION

## *RENEWAL BY ANDERSEN SERIES CASEMENT WINDOW (NON-IMPACT) (NON-HVHZ)*

GENERAL NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT EDITION FLORIDA BUILDING CODE (FBC), EXCLUDING HVHZ AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
   - AAMA/WDMA/CSA 101/I.S.2/A440-08/11
2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY, 2X FRAMING, AND METAL FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
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 FOR THE PROJECT OF INSTALLATION.
4. INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF ±1/4 INCH OF THE DEPICTED LOCATION IN THE ANCHOR LAYOUT DETAIL (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
5. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT IN NON-HVHZ AREAS.
6. APPROVED IMPACT PROTECTIVE SYSTEM **IS REQUIRED** ON THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
7. WINDOW FRAME MATERIAL: FIBREX & PVC
8. IN ACCORDANCE WITH THE CURRENT EDITION FBC, WOOD COMPONENTS SHALL HAVE BEEN PRESERVATIVE TREATED OR SHALL BE OF A DURABLE SPECIES AS DEFINED IN CHAPTER 23.
9. GLASS SHALL MEET THE REQUIREMENTS OF ASTM E 1300 GLASS CHARTS. SEE SHEET 1 FOR GLAZING DETAILS.

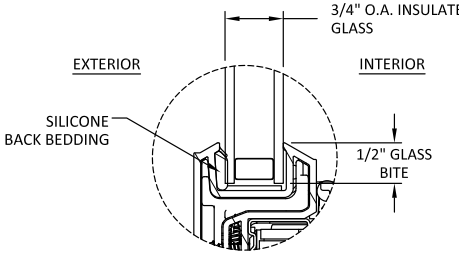
| DESIGN PRESSURE RATING | | | |
|---|---|---|---|
| SIZE | CONFIGURATION | DESIGN PRESSURE | SASH WIDTH RATIO |
| 32" X 80" | X | +40.0 / -40.0 PSF | --- |
| 40" X 72" | X | +40.0 / -40.0 PSF | --- |
| 70.5" X 71.5" | XX | +35.0 / -35.0 PSF | 1:1 |
| 79" X 72" | XX | +30.0 / -30.0 PSF | 1:1 |
| 70.5" X 60" | XX | +40.0 / -40.0 PSF | 1:1 |
| 71" X 80" | XX | +25.0 / -25.0 PSF | 1:1 |
| 105" X 66" | XOX | +35.0 / -35.0 PSF | 1:1:1 |
| 105" X 80" | XOX | +25.0 / -25.0 PSF | 1:1:1 |
| 118" X 72" | XOX | +25.0 / -25.0 PSF | 1:1:1 |
| 90" X 60" | XOX | +40.0 / -40.0 PSF | 1:1:1 |
| 105" X 66" | XOX | +35.0 / -35.0 PSF | 1:2:1 |
| 105" X 80" | XOX | +25.0 / -25.0 PSF | 1:2:1 |
| 120" X 72" | XOX | +30.0 / -30.0 PSF | 1:2:1 |
| 90" X 60" | XOX | +40.0 / -40.0 PSF | 1:2:1 |

NOTE: CUSTOM SASH RATIOS MAY BE ACHIEVED BY LOCATION OF MULL POST SUCH THAT MAXIMUM SASH D.L.O. DIMENSIONS ON SHEET 2 & 3 ARE NOT EXCEEDED

| DESIGN PRESSURE UPGRADE RATING | | | |
|---|---|---|---|
| SIZE | CONFIGURATION | DESIGN PRESSURE | SASH WIDTH RATIO |
| 32" X 26.99" | X | +59.0 / -77.0 PSF | --- |
| 26.99" X 34.99" | X | +59.0 / -77.0 PSF | --- |
| 32" X 78" | X | +50.0 / -65.0 PSF | --- |
| 40" X 72" | X | +50.0 / -50.0 PSF | --- |

NOTES:
1. DP UPGRADE PRODUCT POSITIVE RATING IS DRIVEN BY STRUCTURAL ONLY. WATER IS NOT INCLUDED.
2. DP UPGRADE PRODUCT MUST BE INSTALLED THROUGH FRAME ONLY.

| TABLE OF CONTENTS | | |
|---|---|---|
| SHEET | REVISION | SHEET DESCRIPTION |
| 1 | - | GENERAL NOTES & GLAZING DETAIL |
| 2 | - | ELEVATIONS |
| 3 | - | ELEVATIONS |
| 4 | - | ANCHOR LAYOUTS |
| 5 | - | ANCHOR LAYOUTS |
| 6 | - | VERTICAL SECTIONS |
| 7 | - | HORIZONTAL SECTIONS |
| 8 | - | ANCHOR DETAILS |
| 9 | - | INSTALLATION NOTES & ANCHOR SCHEDULE |




GLAZING DETAIL

GLAZING NOTES:
1. GLASS TYPE & THICKNESS SHALL COMPLY WITH ASTM E1300 REQUIREMENTS AS WELL AS APPLICABLE SAFETY GLAZING REQUIREMENTS PER THE FBC. TEMPER AND SAFETY GLAZING REQUIREMENTS SHALL BE REVIEWED ON A SITE SPECIFIC BASIS.
2. SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN FBC CHAPTER 24.
3. SETTING BLOCKS TO BE LOCATED AT 1/4 SPAN LENGTH FOR GLASS WIDER THAN 36" AS PER FBC CHAPTER 24.
4. D.L.O. AND DESIGN PRESSURES MAY NOT EXCEED MAX VALUES IN GLASS CHARTS.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BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485


TITLE: RENEWAL SERIES CASEMENT WINDOW (NON-IMPACT) (NON-HVHZ)
GENERAL NOTES & GLAZING DETAIL


PREPARED BY: BUILDING DROPS, INC.
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| REMARKS | BY | DATE |
|---|---|---|
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FL #: FL19560

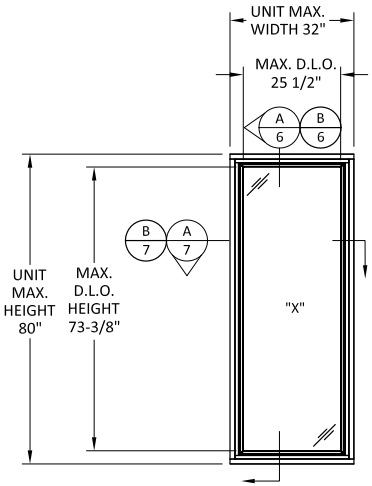
DATE: 11.06.18

DWG. BY: HR | CHK. BY: HFN

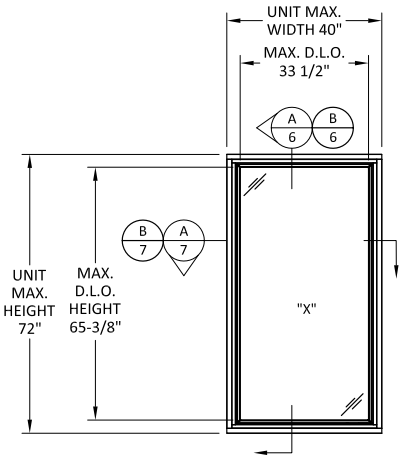
SCALE: NTS

DWG. #: AWD242

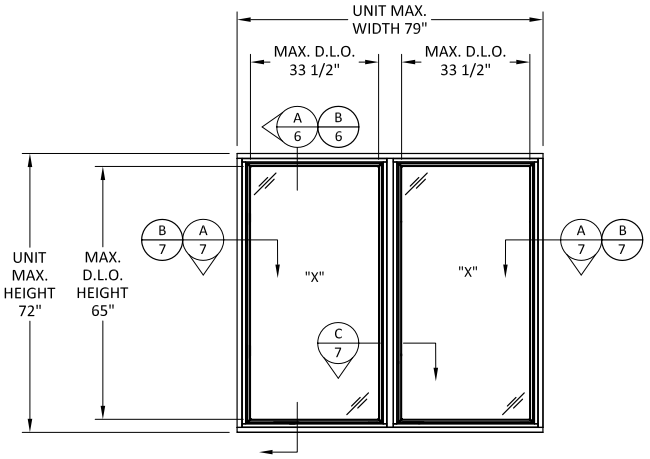
SHEET: 1 OF 9




## ELEVATION
SINGLE CASEMENT
32" X 80" UNIT

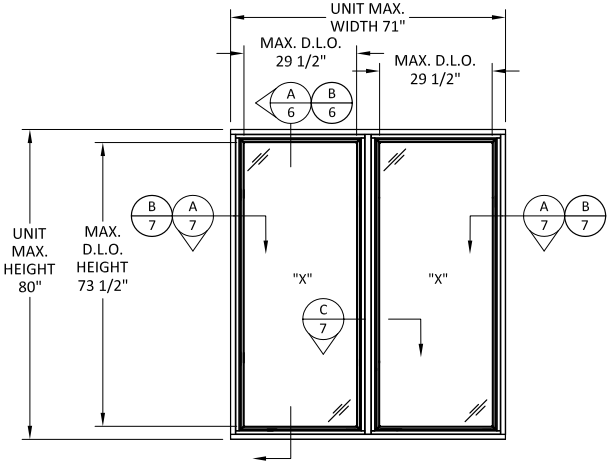



## ELEVATION
SINGLE CASEMENT
40" X 72" UNIT




## ELEVATION
DOUBLE CASEMENT
79" X 72" UNIT

QUALIFIED DOUBLE CASEMENT CONFIGURATIONS
XO, OX, AND OO




## ELEVATION
DOUBLE CASEMENT
71" X 80" UNIT

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TITLE: RENEWAL SERIES CASEMENT WINDOW (NON-IMPACT) (NON-HVHZ) ELEVATIONS

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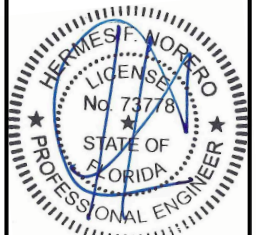


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FBPE CERT. OF AUTHORIZATION No. 29578

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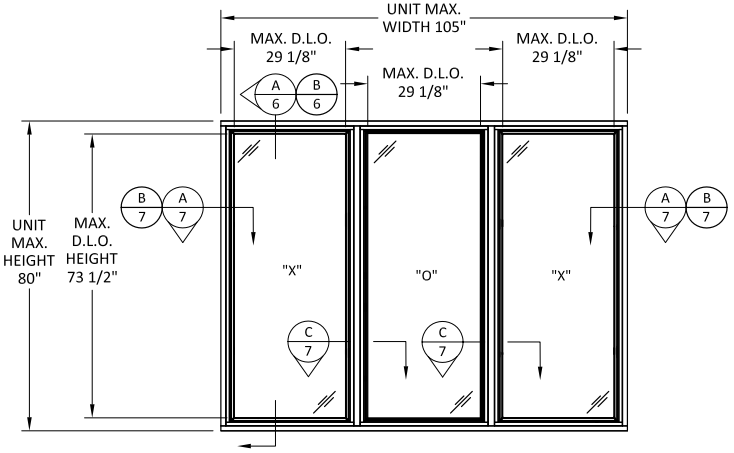
SCALE: NTS

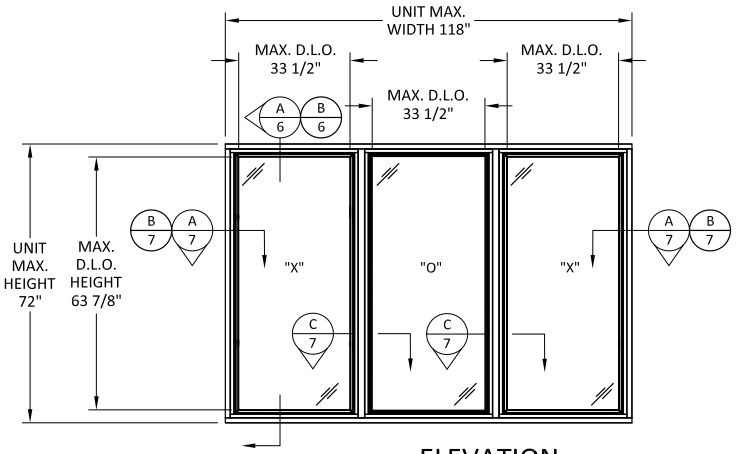
DWG. #: AWD242

SHEET: 2 OF 9




## ELEVATION

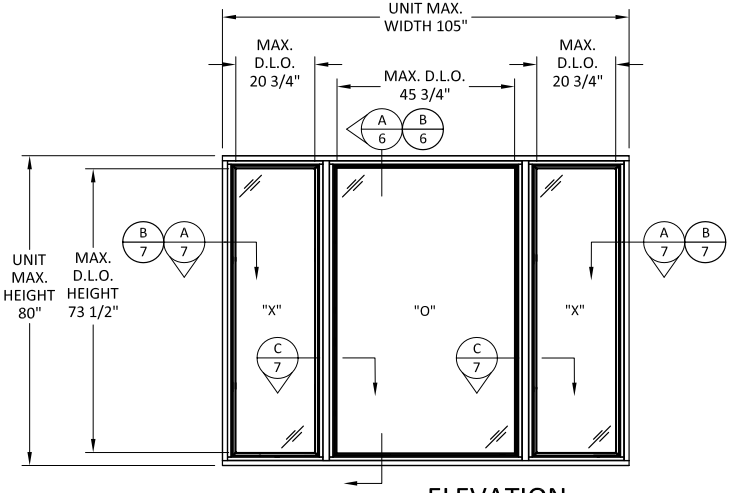
TRIPLE CASEMENT XOX
EQUAL RATIO
105" X 80" UNIT




## ELEVATION

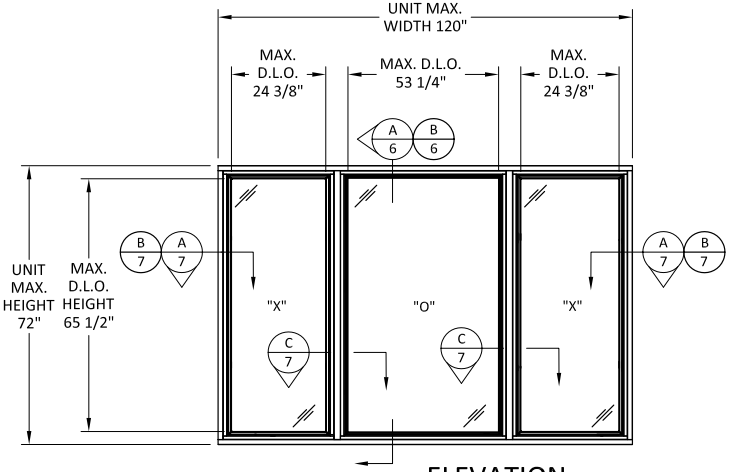
TRIPLE CASEMENT XOX
EQUAL RATIO
118" X 72" UNIT

QUALIFIED TRIPLE
CASEMENT CONFIGURATIONS
OOX, XOO, AND OOO




## ELEVATION

TRIPLE CASEMENT XOX
UNEQUAL RATIO
105" X 80" UNIT




## ELEVATION

TRIPLE CASEMENT XOX
UNEQUAL RATIO
120" X 72" UNIT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TITLE: RENEWAL SERIES CASEMENT WINDOW (NON-IMPACT) (NON-HVHZ) ELEVATIONS


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SCALE: NTS

DWG. #: AWD242

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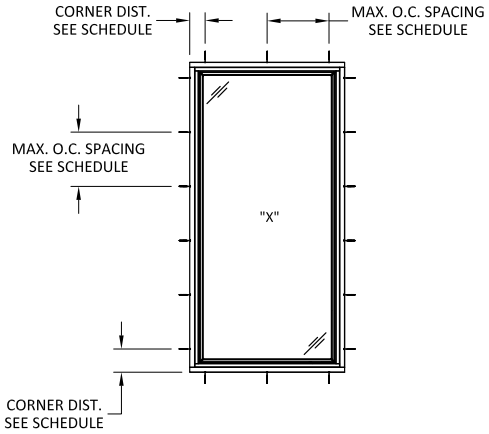
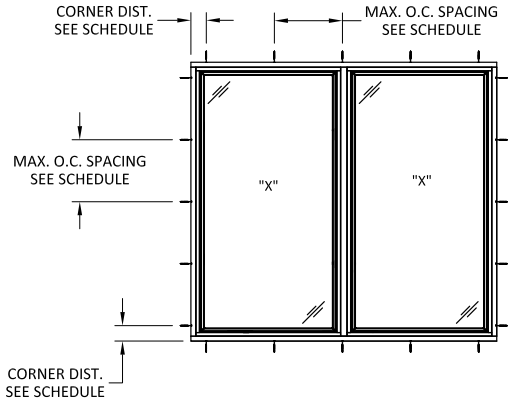



## TYPICAL ANCHOR LAYOUT
SINGLE CASEMENT




## TYPICAL ANCHOR LAYOUT
DOUBLE CASEMENT

| RENEWAL SERIES CASEMENT ANCHOR SPACING | | | | | |
|---|---|---|---|---|---|
| CONFIG. | INSTALLATION METHOD | FROM CORNERS (IN) | MAX. O.C. HEAD (IN) | MAX. O.C. SILL (IN) | MAX. O.C. JAMBS (IN) |
| SINGLE CASEMENTS | NAIL FIN | 4 | 4 | 4 | 4 |
| | INSTALLATION CLIP | 4 | 18 | 18 | 18 |
| | THROUGH FRAME | 4 | 18 | 18 | 18 |
| DOUBLE CASEMENTS | NAIL FIN | 4 | 4 | 4 | 4 |
| | INSTALLATION CLIP | 4 | 18 | 18 | 18 |
| | THROUGH FRAME | 4 | 12.625 | 12.625 | 18 |

| DP UPGRADE RENEWAL SERIES CASEMENT ANCHOR SPACING | | | | | |
|---|---|---|---|---|---|
| CONFIG. | INSTALLATION METHOD | FROM CORNERS (IN) | MAX. O.C. HEAD (IN) | MAX. O.C. SILL (IN) | MAX. O.C. JAMBS (IN) |
| SINGLE CASEMENT | THROUGH FRAME | 4 | 8 | 8 | 8 |

1) ANY TYPICAL SUBSTRATE SHOWN HEREIN MAY BE USED AT THE HEAD, JAMBS, OR SILL. EDGE DISTANCE AND EMBEDMENT SHALL BE AS SPECIFIED IN TYPICAL DETAILS. SEE TABLE ON SHEET 9 FOR ANCHOR SPECIFICATIONS FOR EACH INSTALLATION METHOD.

| Casement Double | | | |
|---|---|---|---|
| Unit Height | Quantity Sash Clips Mull Post (Side of Stationary Sash) | Unit Width | Quantity Sash Clips Head & Sill (Each Stationary Sash) |
| < 32 | 1 | < 67 | 1 |
| < 44 | 2 | ≥ 67 | 2 |
| < 57 | 3 | | |
| ≥ 57 | 4 | | |

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TITLE: RENEWAL SERIES CASEMENT WINDOW (NON-IMPACT) (NON-HVHZ) ANCHOR LAYOUTS

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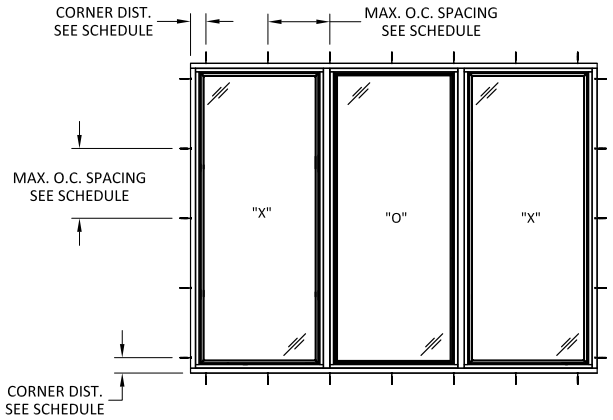
SCALE: NTS

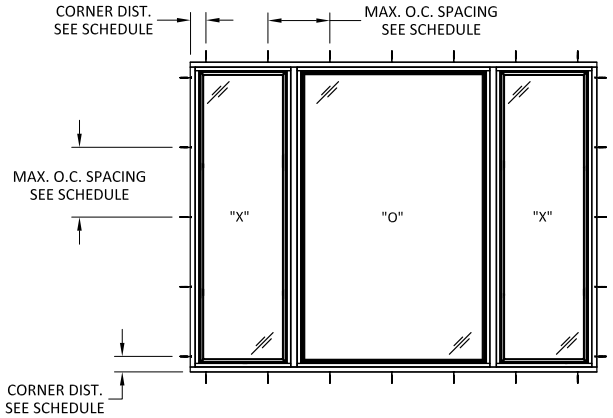
DWG. #: AWD242

SHEET: 4 OF 9




## TYPICAL ANCHOR LAYOUT

TRIPLE CASEMENT
EQUAL RATIO




## TYPICAL ANCHOR LAYOUT

TRIPLE CASEMENT
UNEQUAL RATIO

| RENEWAL SERIES CASEMENT ANCHOR SPACING | | | | | |
|---|---|---|---|---|---|
| CONFIG. | INSTALLATION METHOD | FROM CORNERS (IN) | MAX. O.C. HEAD (IN) | MAX. O.C. SILL (IN) | MAX. O.C. JAMBS (IN) |
| TRIPLE CASEMENTS EQUAL RATIO | NAIL FIN | 4 | 4 | 4 | 4 |
| | INSTALLATION CLIP | 4 | 16 | 16 | 18 |
| | THROUGH FRAME | 4 | 12 | 12 | 18 |
| TRIPLE CASEMENTS UNEQUAL RATIO | NAIL FIN | 4 | 4 | 4 | 4 |
| | INSTALLATION CLIP | 4 | 16 | 16 | 18 |
| | THROUGH FRAME | 4 | 11.75 | 11.75 | 18 |

1) ANY TYPICAL SUBSTRATE SHOWN HEREIN MAY BE USED AT THE HEAD, JAMBS, OR SILL. EDGE DISTANCE AND EMBEDMENT SHALL BE AS SPECIFIED IN TYPICAL DETAILS. SEE TABLE ON SHEET 9 FOR ANCHOR SPECIFICATIONS FOR EACH INSTALLATION METHOD.

| Casement Triple 1:1:1 | | | | |
|---|---|---|---|---|
| Unit Height | Quantity Sash Clips Mull Post (Side of Stationary Sash) | Unit Width | Quantity Sash Clips Head & Sill (Each Stationary "Flanker" Sash) | Quantity Sash Clips Sill (Center Stationary Sash) |
| < 32 | 1 | < 99 | 1 | 2 |
| < 44 | 2 | ≥ 99 | 2 | 3 |
| < 57 | 3 | | | |
| ≥ 57 | 4 | | | |

| Casement Triple 1:2:1 | | | | |
|---|---|---|---|---|
| Unit Height | Quantity Sash Clips Mull Post (Side of Stationary Sash) | Unit Width | Quantity Sash Clips Head & Sill (Each Stationary "Flanker" Sash) | Quantity Sash Clips Sill (Center Stationary Sash) |
| < 32 | 1 | < 67 | 1 | 2 |
| < 44 | 2 | < 93 | 1 | 3 |
| < 57 | 3 | ≥ 93 | 1 | 4 |
| ≥ 57 | 4 | | | |

| Casement Triple Custom Mull Post | | | | | |
|---|---|---|---|---|---|
| Unit Height | Quantity Sash Clips Mull Post (Side of Stationary Sash) | "Flanker" Sash Width | Quantity Sash Clips Head & Sill (Each Stationary "Flanker" Sash) | Center Sash Width | Quantity Sash Clips Sill (Center Stationary Sash) |
| < 32 | 1 | ≤ 31.1745 | 1 | ≤ 31.1745 | 2 |
| < 44 | 2 | > 31.1745 | 2 | ≤ 41.1745 | 3 |
| < 57 | 3 | | | > 41.1745 | 4 |
| ≥ 57 | 4 | | | | |

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ANCHOR LAYOUTS

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398 E. DANIA BEACH BLVD. STE. 338
DANIA BEACH, FL 33004
PH: (954)709-8478
FAX: (954)744-4738
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| REMARKS | BY | DATE |
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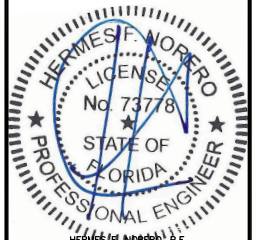


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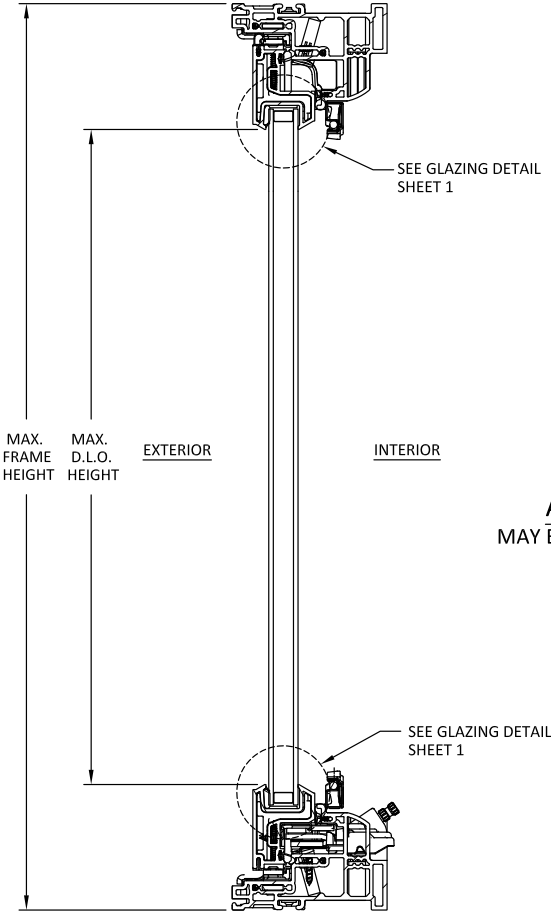
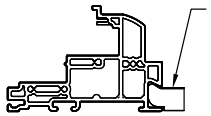
FBPE CERT. OF AUTHORIZATION No. 29578

FL #: FL19560
DATE: 11.06.18
DWG. BY: HR
CHK. BY: HFN
SCALE: NTS
DWG. #: AWD242
SHEET: 5 OF 9



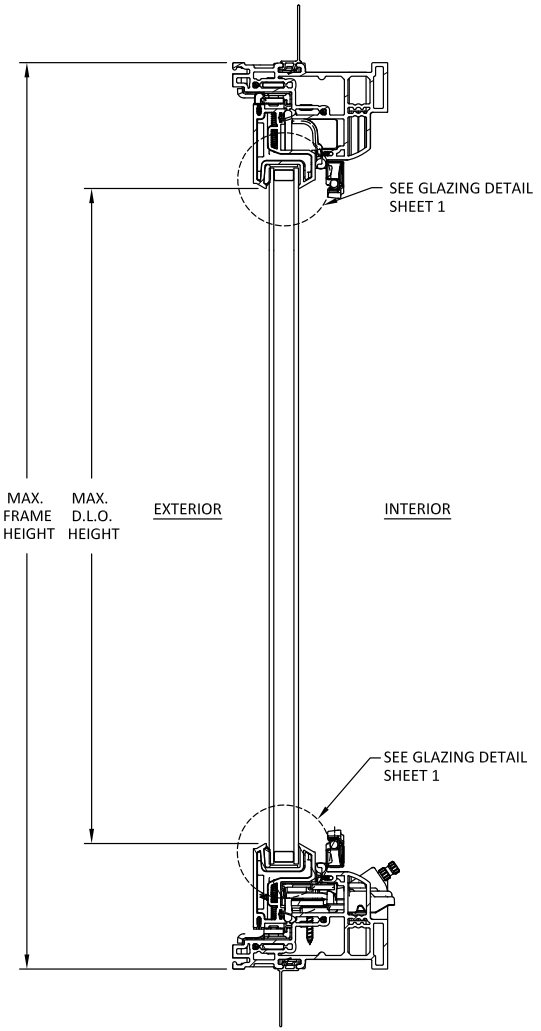

A/6 VERTICAL SECTION

THROUGH FRAME AND THROUGH CLIP INSTALLATION




## ALTERNATE EJ FRAME DETAIL

MAY BE USED AS EQUAL ALTERNATE FRAME TYPE




B/6 VERTICAL SECTION

NAIL FIN INSTALLATION

NAIL FIN/FLANGE IS REVERSIBLE, SEE ORIENTATION DIFFERENCE IN DETAIL A AND B

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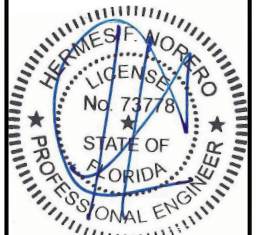


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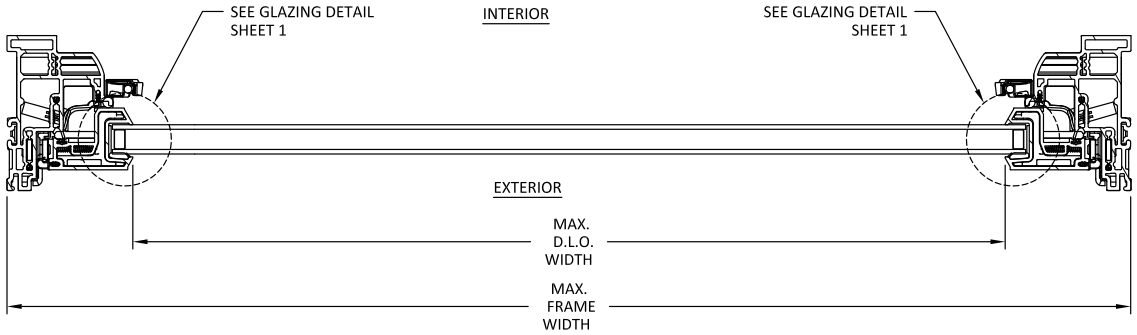
DATE: 11.06.18

DWG. BY: HR | CHK. BY: HFN

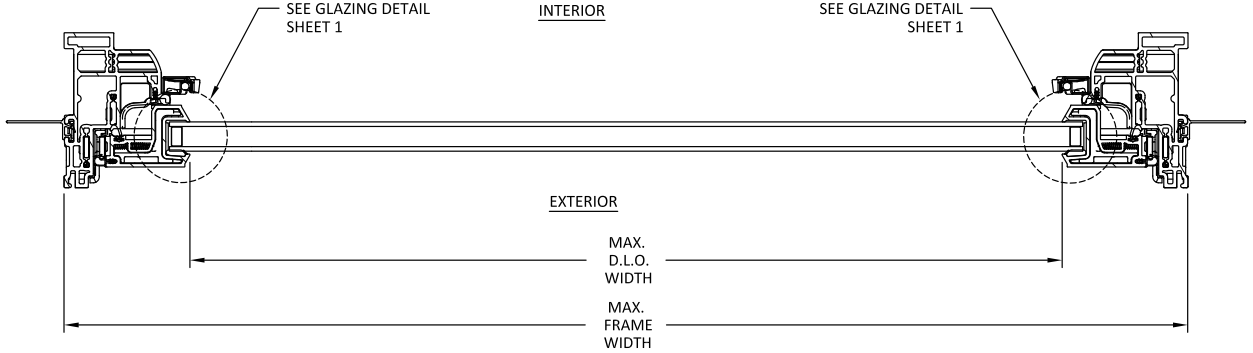
SCALE: NTS

DWG. #: AWD242

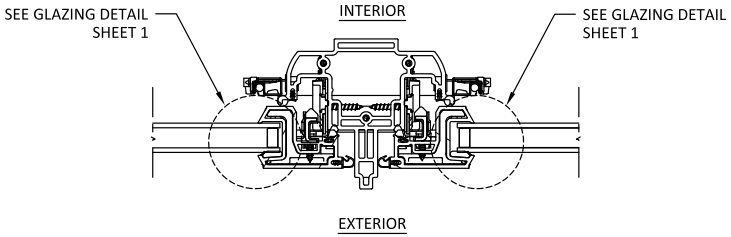
SHEET: 6 OF 9




A/7 HORIZONTAL SECTION
THROUGH FRAME AND THROUGH CLIP INSTALLATION




B/7 HORIZONTAL SECTION
NAIL FIN INSTALLATION




C/7 HORIZONTAL SECTION
MULL POST

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DANIA BEACH, FL 33004
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FL #: FL19560

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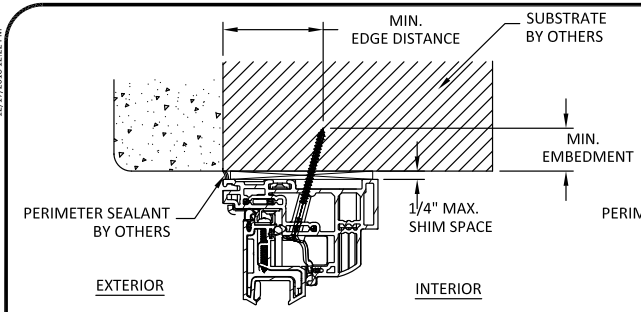
SCALE: NTS

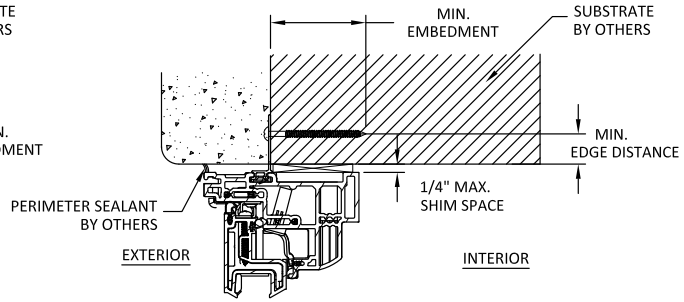
DWG. #: AWD242

SHEET: 7 OF 9



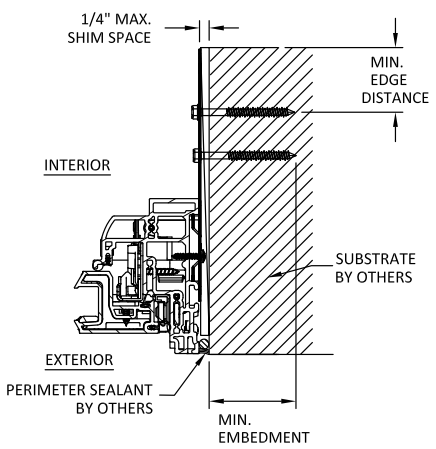

NOTE:
SILL & JAMB DETAIL SIMILAR.

A/8 VERTICAL SECTION
THROUGH FRAME (HEAD)



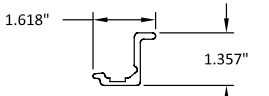

NOTE:
SILL & JAMB DETAIL SIMILAR.

B/8 VERTICAL SECTION
NAIL FIN (HEAD)




NOTE:
HEAD & SILL DETAIL SIMILAR.

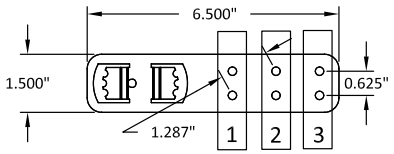
C/8 HORIZONTAL SECTION
THROUGH CLIP (JAMB)




HINGE-SIDE STILE FIBERGLASS
REINFORCEMENT DETAIL

| SASH REINFORCEMENT REQUIREMENTS | |
|---|---|
| SIZE | REINFORCING |
| UNIT HEIGHT > 44" | REQUIRES FIBERGLASS REINFORCEMENT INSERTED INTO HINGE-SIDE STILE |
| UNIT HEIGHT ≤ 44" | NOT REQUIRED |

| DP UPGRADE SASH REINFORCEMENT REQUIREMENTS | |
|---|---|
| SIZE | REINFORCING |
| UNIT WIDTH > 32" | REQUIRES FIBERGLASS REINFORCEMENT INSERTED INTO TOP RAIL |
| UNIT WIDTH ≤ 32" | NOT REQUIRED |




INSTALLATION CLIP DETAIL

INSTALLATION CLIP ANCHOR REQUIREMENTS:

WOOD SUBSTRATE: USE TWO #8 PAN HEAD WOOD SCREWS PER CLIP, IN ROW NUMBER ONE OF PREDRILLED HOLES SHOWN BELOW.

METAL SUBSTRATE: USE TWO #8 HWH SMS ANCHORS PER CLIP, IN ROW NUMBER ONE OF PREDRILLED HOLES SHOWN BELOW.

CONCRETE/MASONRY: USE TWO 3/16" ITW TAPCON ANCHORS, WITH ONE ANCHOR PLACED IN ROW NUMBER ONE AND ONE ANCHOR PLACED IN ROW NUMBER TWO OF PREDRILLED HOLES SHOWN BELOW. ANCHORS MUST BE PLACED DIAGONALLY ACROSS THE CLIP.

DO NOT INSTALL ANCHORS THROUGH ROW NUMBER THREE.

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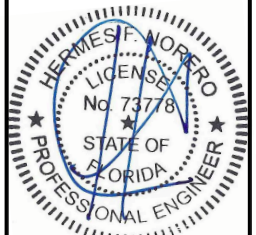


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DWG. BY: HR | CHK. BY: HFN

SCALE: NTS

DWG. #: AWD242

SHEET: 8 OF 9

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s:\projects\andersen windows\fbc-18-0822 - fbc submittal - ria fixed casement, awning, & gliding window - high performance\dwg\ca\awd242.dwg

INSTALLATION NOTES:

1. ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION, UNLESS OTHERWISE SHOWN.
2. THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION OF THE MAXIMUM SIZE LISTED.
3. INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF ±1/4 INCH THE DEPICTED LOCATION & SPACING IN THE ANCHOR LAYOUT DETAILS (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
4. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM(S). MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER.
5. FOR MASONRY OR CONCRETE OPENINGS, A 1X WOOD BUCK MAY BE USED (OPTIONAL) AS LONG AS THE MINIMUM EMBEDMENT AND EDGE DISTANCE REQUIREMENTS ARE STILL MET WITHIN THE CORRESPONDING HOST SUBSTRATE. SEE GENERAL NOTE #3 ON SHEET 1 FOR MORE INFORMATION.
6. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
7. INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
8. 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.
9. 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 BY THE ANCHOR MANUFACTURER.

ANCHOR SCHEDULE

| METHOD | SUBSTRATE | ANCHOR SCHEDULE | MIN EMBEDMENT | MIN. EDGE DISTANCE |
|---|---|---|---|---|
| THROUGH FRAME | WOOD: MIN. SG = 0.55 | #10 WOOD SCREW FLAT HEAD | 1.5" | 0.75" |
| | METAL: 18 GAUGE Steel, MIN. Fy = 33KSI | #10 TEK SCREW FLAT HEAD | 3 THREADS MIN PENETRATION BEYOND METAL | 0.5" |
| THROUGH FRAME & THROUGH CLIP | CONCRETE: MIN. f'c=3000PSI | 3/16" ITW TAPCON FLATHEAD | 1.25" | 2.5 |
| | MASONRY: CMU per ASTM C90 MIN. 2000 PSI | 3/16" ITW TAPCON FLATHEAD | 1" | 2.25 |
| NAIL FIN & THROUGH CLIP | WOOD: MIN. SG = 0.55 | #8 WOOD SCREW FLAT HEAD | 1.5" | 0.75" |
| | METAL: 18 GAUGE Steel, MIN. Fy = 33KSI | #8 TEK SCREW FLAT HEAD | 3 THREADS MIN PENETRATION BEYOND METAL | 0.5" |


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INSTALLATION NOTES & ANCHOR SCHEDULE


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