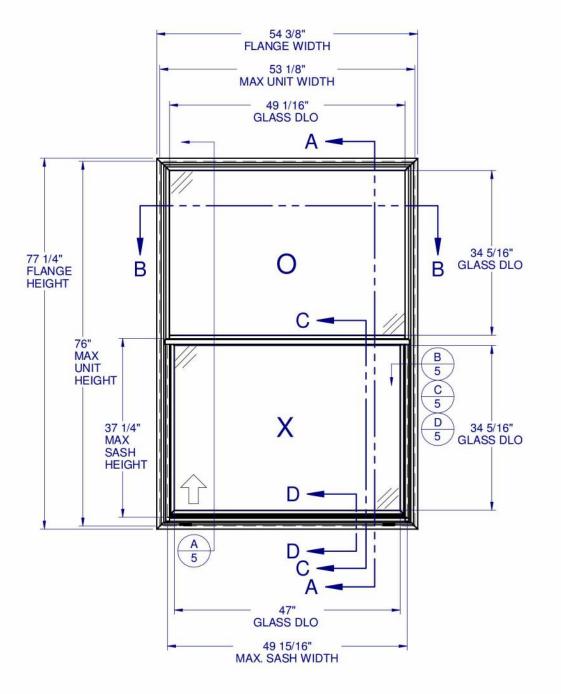
# SINGLE HUNG - LARGE MISSILE IMPACT

(SHOWN w/DIFFERENT OPTIONS)



#### **GENERAL NOTES:**

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE FLORIDA BUILDING CODE (FBC), CURRENT EDITION AND IS RATED FOR MISSILE LEVEL D IMPACT USE IN WIND ZONE 3 AREAS AS DEFINED IN ASTM E 1996 PER THE FBC.

THIS PRODUCT MAY NOT BE USED IN THE HIGH VELOCITY HURRICANE ZONE (HVHZ) OR IN ASTM E 1996 WIND ZONE 4 AREAS.

- 2. GLAZING OPTIONS: (SEE SHEET 2)
- 3. CONFIGURATIONS: "O/X".
- 4. DESIGN PRESSURE RATING:
  -NEGATIVE DESIGN LOADS BASED ON, TESTED PRESSURE AND

GLASS TABLES ASTM E-1300-04.
-POSITIVE DESIGN LOADS BASED ON, TESTED PRESSURE, WATER

INFILTRATION TEST PRESSURE AND GLASS TABLES
ASTM E-1300-04.

- 5. ANCHORAGE: THE 33 1/3% STRESS INCREASE HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. SEE SHEET 5 FOR ANCHOR DETAILS. WINDLOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
- PRODUCT APPROVED FOR IMPACT RESISTANCE. SHUTTERS ARE NOT REQUIRED.
- 7. ALL FRAMES AND VENTS FULLY WELDED. SMALL JOINT SEAM SEALANT USED AT FIXED MEETING RAIL AND JAMB.
- 8. SERIES / MODEL DESIGNATION SH-6100.
- 9. THE DESIGNATION X AND O STAND FOR THE FOLLOWING: X = OPERABLE SASH, O = FIXED SASH
- 10. SECTION CALLOUTS APPLY TO ALL ELEVATIONS IN A SIMILAR LOCATION.
- 11. EXTERNAL WEEP SLOT = 1/4 x 1-1/2" LOCATED 5" FROM BOTH ENDS.

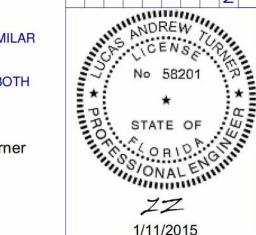
Lucas A. Turner 2016-01-11 16:00-05:00



1900 SW 44TH AVE. OCALA, FLORIDA 34474 WWW.CWS.CC

## 6100 PVC SINGLE HUNG IMPACT

EMK 12/17/15	EMK 08/10/15	DATE:	
EMK	EMK	BY:	
NEW MTG RAIL & SILL	REMOVED EXT. REINF.	NO.: DESCRIPTION:	REVISIONS
В	A	NO.:	



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SHEET DESCRIPTION:

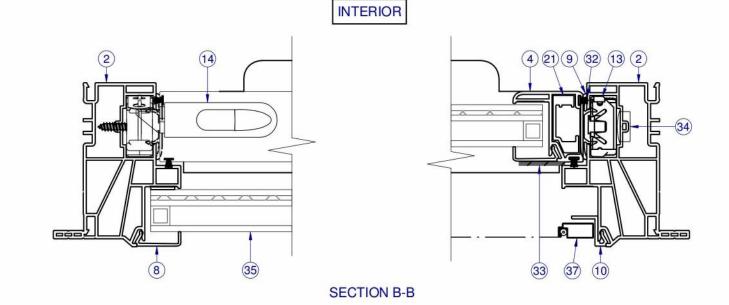
GENERAL NOTES AND ELEVATIONS

DRAWN BY:	DATE:
EMK	05/26/15
DWG #:	REV.:
CWS-1068	В
SCALE:	SHEET
1:20	1 OF 5

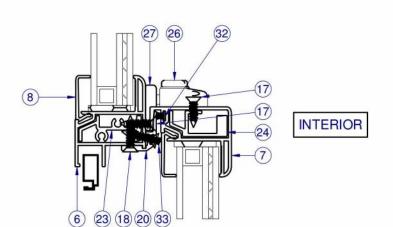
#### TABLE OF CONTENTS

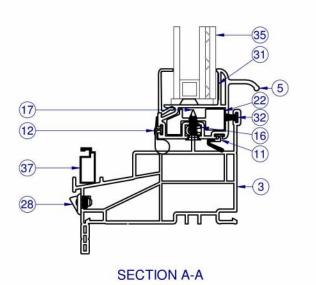
GENERAL NOTES & ELEVATIONS	1
SECTION VIEWS & GLAZING	2
EXTRUSIONS & B.O.M	3
ANCHOR SCHEDULE & NOTES	4
INSTALLATION DETAIL	5

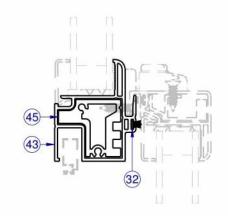
MAX. UNIT SIZE	DESIGN PRESSURE RATING	IMPACT RATING
53-1/8" x 76"	+/- 50 PSF	LARGE MISSILE IMPACT

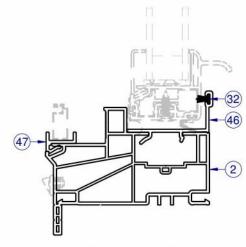


NOTE: LEFT SIDE SHOWS FIXED SECTION VIEW, RIGHT SIDE SHOWS SASH SECTION VIEW.

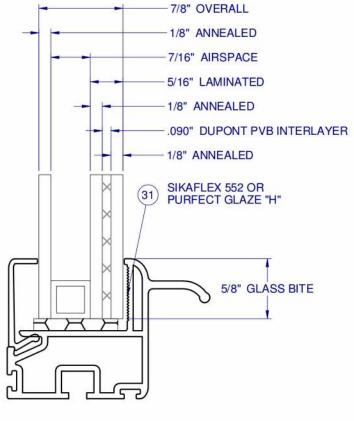




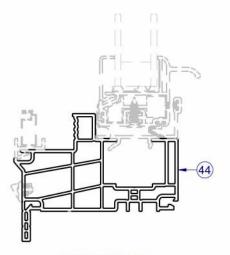




SECTION C-C ALTERNATE HD MEETING RAIL AND UNI-FRAME



**GLASS TYPE A** 1:1



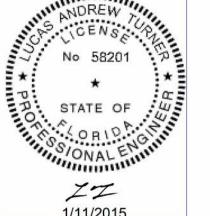
SECTION D-D DEEP POCKET UNI-FRAME

- FIN FRAME AVAILABLE FOR BOTH UNI-FRAME AND STANDARD FRAME TYPES.
  - 880 BALANCERS AND DEEP POCKET UNI-FRAME (H-6193) REQUIRED FOR LARGER SASHES. (NOT SHOWN IN SECTION B-B)



## 6100 PVC SINGLE HUNG **IMPACT**

EMK 12/17/15	EMK 08/10/15	DATE:	
EMK	EMK	BY:	
NEW MTG RAIL & SILL	REMOVED EXT. REINF.	NO.: DESCRIPTION:	REVISIONS
В	A	NO.:	



1/11/2015

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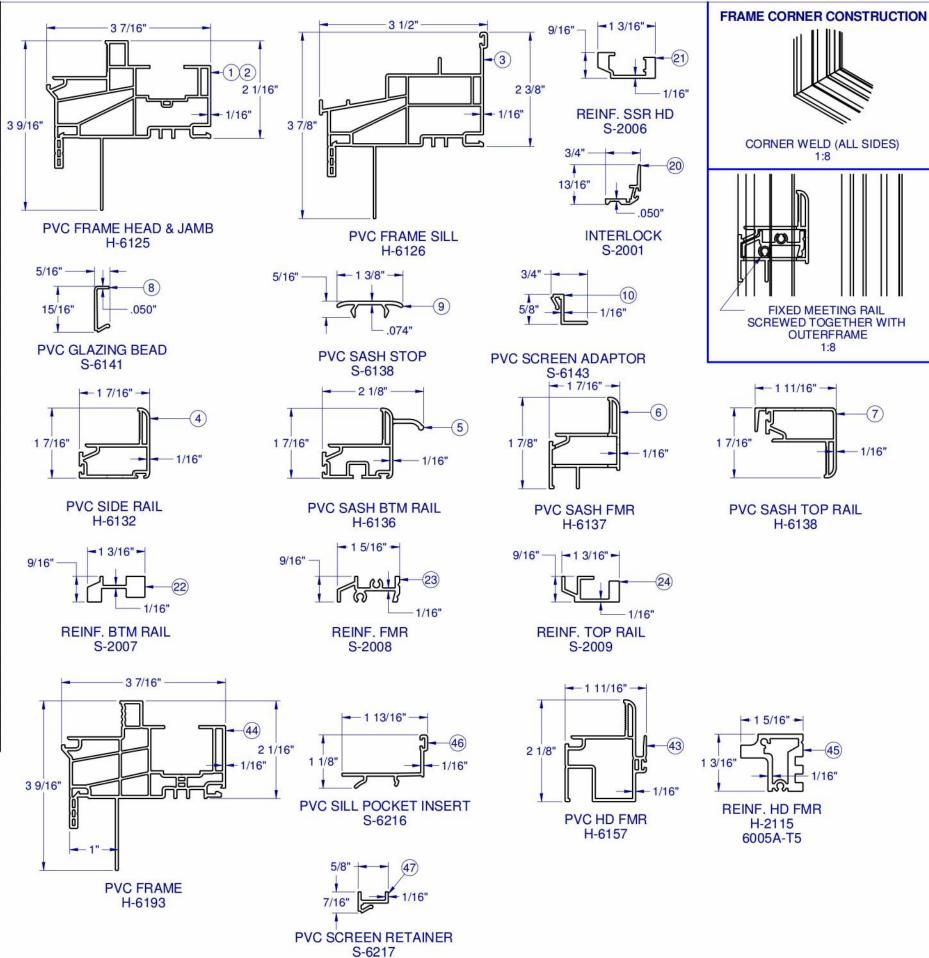
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**SECTION VIEWS AND GLAZING DETAIL** 

DRAWN BY:	DATE:
<b>EMK</b>	05/26/15
DWG #:	REV.:
CWS-1068	В
SCALE:	SHEET
1:2	2 OF 5

NOTE: ITEMS NOT SHOWN FOR CLARITY: 38-41

ITEM	PART	DESCRIPTION	MATERIAL	VENDOR
1		HEAD, OUTERFRAME	PVC	ATN
2	7	JAMBS, OUTERFRAME	PVC	ATN
3	TOTAL TOTAL CONTRACTOR OF THE PARTY OF THE P	SILL, OUTERFRAME	PVC	ATN
4		SASH SIDE RAIL	PVC	ATN
5		SASH BOTTOM RAIL	PVC	ATN
6	7,000,000,000,000,000	FIXED MEETING RAIL.	PVC	ATN
7		SASH TOP RAIL	PVC	ATN
8		GLAZING BEAD	PVC	ATN
9		SASH STOP	PVC	ATN
10		SCREEN ADAPTOR	PVC	ATN
11		WSTP, QLON BULB VINYL		AMESBURY
12	The state of the s	WSTP, QLON BULB VINYL		AMESBURY
13		BALANCERS - CONSTANT FORCE RT 562		CALDWELL
14	P-5392	SASH TILT LATCH	NYLON	CALDWELL
16		PIVOT BAR	SS	CALDWELL
17		#8 x 5/8 PHIL FLAT WHITE SMS	STEEL	FASTENAL
18		#8 X 3/4 PHIL FLAT tek	STEEL	FASTENAL
19	_	SETTING BLOCK	RUBBER	FRANK LOWE
20	91 95 91	INTERLOCK RAIL	ALUM	ASCEND
21		REINF, SASH SIDE RAIL, HD	ALUM	ASCEND
22		REINF, BOTTOM RAIL	ALUM	ASCEND
23		REINF, FMR	ALUM	ASCEND
24	-	REINF, TOP RAIL	ALUM	ASCEND
26		IMPACT LOCKS	NYLON	LAWRENCE
27		IMPACT KEEPERS	NYLON	LAWRENCE
28		WEEP COVER	NYLON	M&M
31		HOTMELT	SILICONE	TRUSEAL
32	P-3305	WSTP., .270 X 187, SOFT TOUCH FIN		ULTRAFAB
33		WSTP, .200 X 5/8" X 5/8" DUST PLUG		ULTRAFAB
34	Character and the control of the	HOLE PLUG	NYLON	
35	GLASS	SEE SHEET 2		
36	P-4638	#8 X 2-1/2 PHIL TRUSS tek	STEEL	FASTENAL
37		SCREEN FRAME	ALUM	FLA SCREEN
38	P-4754	SCREEN CORNER KEY	NYLON	FLA SCREEN
39		SCREEN SPLINE		DAPA
40	P-3029	SCREEN LIFTS		SUMMIT
41	P-3033	SCREEN SPRINGS		FLA SCREEN
42	lt.	BALANCERS - CONSTANT FORCE RT 880		9
43	H-6157	HD FIXED MEETRING RAIL	PVC	VISION
44	H-6193	UNI-FRAME, 880 BALANCERS	PVC	VISION
45	H-2115	REINF, HD FMR	ALUM	KEYMARK
46	S-6216	UNI-FRAME SILL POCKET INSERT	PVC	VISION
47	S-6217	UNI-FRAME SCREEN RETAINER	PVC	VISION

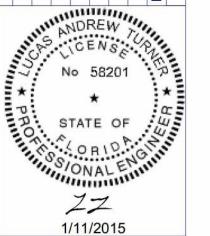




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## 6100 PVC SINGLE HUNG IMPACT



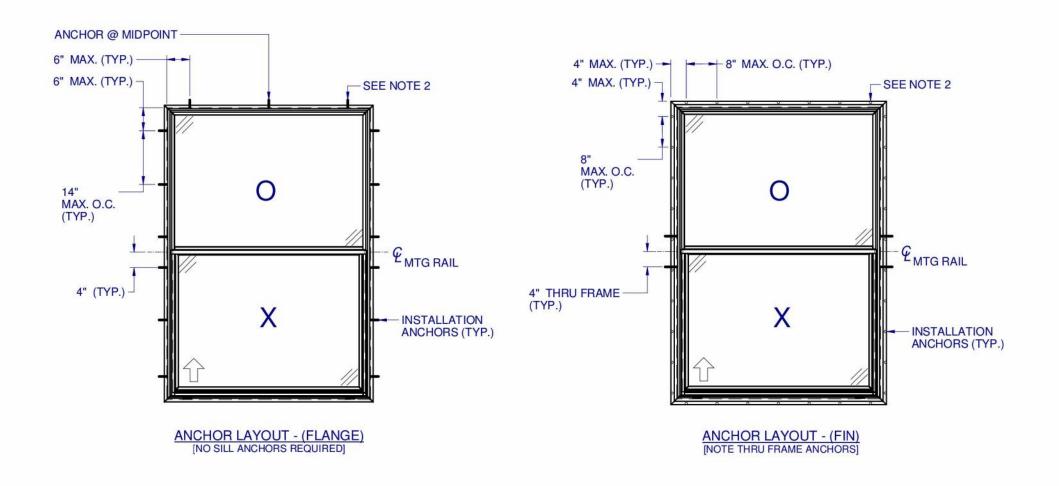


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SHEET DESCRIPTION:

#### BOM AND EXTRUSIONS

DRAWN BY:	DATE:
<b>EMK</b>	05/26/15
DWG #:	REV.:
CWS-1068	В
SCALE:	SHEET
1:2	3 OF 5



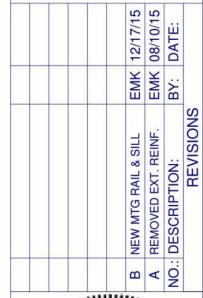
### NOTES:

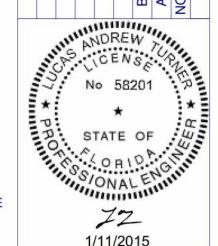
- 1. INSTALL ONE ANCHOR AT EACH INSTALLATION LOCATION.
- 2. SHIM AS REQ AT EACH INSTALLATION ANCHOR USING LOAD BEARING SHIMS. MAX. ALLOWABLE SHIM STACK TO BE 1/4". USE SHIMS WHERE SPACE GREATER THAN 1/16" IS PRESENT. LOAD BEARING SHIMS SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER. WOOD SHIMS ARE NOT ALLOWED.
- 3. ANCHOR TYPE, SIZE, SPACING AND EMBEDMENT SHALL BE AS SPECIFIED IN THESE DRAWINGS, SEE TABLE 1, SHEET 5.
- 4. ALL INSTALLATION ANCHORS MUST BE MADE OF OR PROTECTED WITH A CORROSION RESISTANT MATERIAL OR COATING. DISSIMILAR METALS OR MATERIALS IN CONTACT WITH PRESSURE TREATED WOOD MUST BE PROTECTED TO PREVENT REACTION.
- 5. INSTALLATION ANCHORS SHALL BE IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM SPECIFIED IN TABLE 1, SHEET 5.
- 6. ANCHOR EMBEDMENT TO SUBSTRATE SHALL BE BEYOND WALL DRESSING OR STUCCO. FOR CONCRETE/CMU OPENINGS, EMBEDMENT SHALL BE BEYOND WOOD BUCKS, IF USED, INTO SUBSTRATE. INSTALLATIONS INTO SOLID CONCRETE OR GROUT-FILLED CMU MAY INCLUDE BUT DO NOT REQUIRE 1X WOOD BUCKS BETWEEN THE PRODUCT AND SUBSTRATE. INSTALLATIONS INTO HOLLOW CMU REQUIRE THE USE OF 1X WOOD BUCKS BETWEEN THE PRODUCT AND SUBSTRATE.
- 7. A MINIMUM CENTER-TO-CENTER SPACING SHALL BE MAINTAINED BETWEEN ALL FASTENERS: 3-9/16" FOR MASONRY, 1" FOR WOOD AND METAL.
- 8. WOOD OR MASONRY OPENINGS, BUCKS AND BUCK FASTENERS SHALL BE PROPERLY DESIGNED BY THE ARCHITECT OR ENGINEER OF RECORD AND INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE. SUBSTRATES SHALL MEET THE MINIMUM STRENGTH REQUIREMENTS AS SHOWN IN TABLE1, SHEET 5. CONCRETE AND MASONRY SUBSTRATES MAY NOT BE CRACKED.
- 9. SEALING AND FLASHING STRATEGIES FOR OVERALL WATER RESISTANCE OF INSTALLATION SHALL BE DONE BY OTHERS FOLLOWING THE CURRENT VERSION OF THE REFERENCE DOCUMENTS: FMA/AAMA 100(FIN WINDOWS), FMA/AAMA 200(FLANGE WINDOWS), FMA/WDMA 250(BOX WINDOWS), FMA/AAMA/WDMA 300(EXTERIOR DOORS)



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## 6100 PVC SINGLE HUNG IMPACT



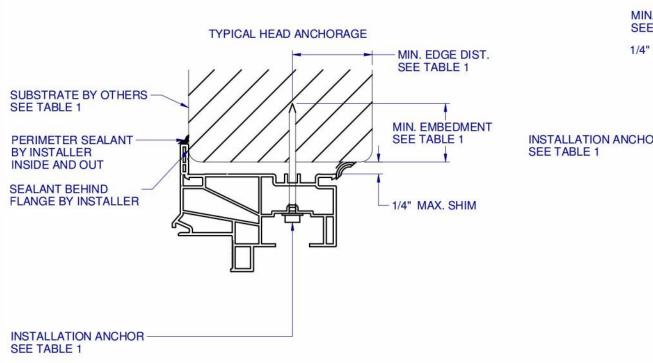


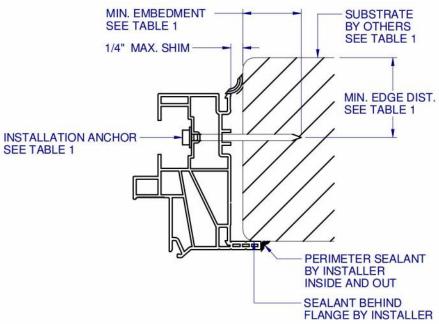
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SHEET DESCRIPTION:

ANCHOR SCHEDULE AND NOTES

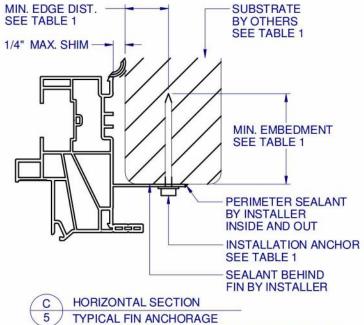
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EMK	05/26/15
DWG #:	REV.:
CWS-1068	В
SCALE: 1:25	SHEET 4 OF 5





HORIZONTAL SECTION

TYPICAL JAMB ANCHORAGE



NOTE: ADDTIONAL THRU-FRAME ANCHORS (AS SHOWN IN DET. B/5) REQ'D AT MTG RAIL. SEE SHEET 4 ANCHOR LAYOUT.

HEAD AND SILL SIMILAR FOR FIN INSTALLATION

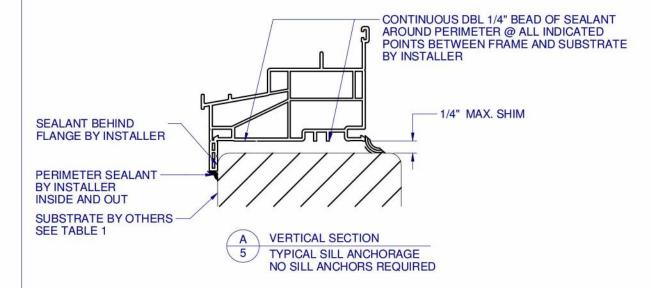
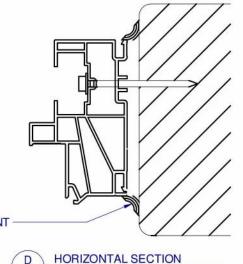


	TABLE 1: APPROVED INSTALLATION FASTENERS				
FRAME TYPE	SUBSTRATE TYPE	ANCHOR TYPE	MIN. EMBEDMENT	MIN. EDGE DIST.	
FLANGE	CONCRETE (2.0 KSI MIN.)	3/16" ITW TAPCON	1"	1-1/8"	
FLANGE	HOLLOW OR GROUT-FILLED CMU (117 PCF MIN.)	3/16" ITW TAPCON	1"	2"	
FLANGE	CONCRETE (2.85 KSI MIN.)	3/16" ELCO ULTRACON	1"	1"	
FLANGE	GROUT-FILLED CMU (ASTM C-90)	3/16" ELCO ULTRACON	1-3/4"	2-1/2"	
FLANGE	2X MIN. SOUTHERN PINE (G=0.55)	3/16" ITW TAPCON OR ELCO ULTRACON	1-3/8"	7/8"	
FLANGE	2X MIN. SOUTHERN PINE (G=0.55)	#10 WOOD SCREW	1-3/8"	7/8"	
FLANGE	16 GAUGE (0.060") MIN. STEEL STUD (33 KSI YIELD MIN)	#10-16 HILTI KWIK-FLEX OR ITW TEKS SELF-DRILLING SCREW	FULL THREAD THRU 0.060"	7/16"	
FLANGE	1/8" ALUM. (6063-T5 MIN.) OR 1/8" STEEL (33 KSI MIN.)	#10 GRADE 5 SELF-TAPPING / DRILLING SCREW	FULL THREAD THRU 0.125"	7/16"	
FIN	2X MIN. SOUTHERN PINE (G=0.55)	#10 WOOD SCREW	1-1/2"	1/2"	

NOTE: UNIF-FRAME OPTIONS NOT SHOWN.



PERIMETER SEALANT BY INSTALLER INSIDE AND OUT

> 5 BOX FRAME INSTALLATION SIMILAR FOR HEAD AND SILL FOR BOX INSTALLATION

FLANGE REMOVAL NOTE: PARTIALLY OR FULLY REMOVING THE FLANGE, UP TO AND INCLUDING A BOX-FRAME APPLICATION IS ACCEPTABLE PROVIDED:

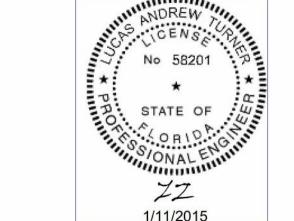
- MIN. 1/4" FILLET OF CONSTRUCTION-GRADE ADHESIVE CAULK IS APPLIED INSIDE AND OUT, FULL PERIMETER, BY INSTALLER.
- PRODUCT ANCHORAGE IS IN ACCORDANCE WITH REQUIREMENTS AS SHOWN FOR FLANGE WINDOWS.



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## 6100 PVC SINGLE HUNG IMPACT

 _		_	
EMK 12/17/15	EMK 08/10/15	DATE:	
EMK	EMK	BY:	
B NEW MTG RAIL & SILL	A REMOVED EXT. REINF.	NO.: DESCRIPTION:	REVISIONS
 		2	



LUCAS A. TURNER, P.E. FL PE # 58201 1239 JABARA AVE. NORTH PORT, FL 34288 PH. 941-380-1574

SHEET DESCRIPTION:

#### INSTALLATION DETAILS

DRAWN BY:	DATE:
EMK	05/26/15
DWG #:	REV.:
CWS-1068	В
SCALE:	SHEET
1.0	5 OF 5