



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

Oldcastle BuildingEnvelope™
803 Airport Road
Terrell, TX 75160

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "RW-5000 Ribbon" Aluminum Fixed Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **RW-5000LM**, titled "Product Approval Drawings - RW-5000 Ribbon Window System – Large Missile Impact", sheets 1 through 7 of 7, dated 09/17/12, prepared by manufacturer, signed and sealed by William D. Cook, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises and renews** NOA# **12-0120.08** and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**



MP
2/15/13

NOA No. 12-1126.06
Expiration Date: February 27, 2018
Approval Date: February 28, 2013
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **RW-5000LM**, Sheets 1 through 7 of 7, titled "Product Approval Drawings - RW-5000 Ribbon Window System – Large Missile Impact", dated 09/17/12, prepared by manufacturer, signed and sealed by William D. Cook, P.E.

B. TESTS

1. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of an aluminum fixed window (specimen 4), prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0105-0210-04**, dated 2/9/04, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under previous NOA # 04-0601.01)
2. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of an aluminum fixed window (specimen 1), prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0105-0117-02**, dated 1/23/02, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under previous NOA # 02-1202.01)
3. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of an aluminum fixed window (specimen 1), prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0105-0403-02**, dated 4/1/02, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under previous NOA # 02-1202.01)
4. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of an aluminum fixed window (specimen 4), prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0105-0403-02**, dated 4/3/02, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under previous NOA # 02-1202.01)



Manuel Perez, P.E.
Product Control Examiner
NOA No. 12-1126.06

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B. TESTS (CONTINUED)

5. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of an aluminum fixed window (specimen 2), prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0105-0403-02**, dated 4/11/02, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under previous NOA # 02-1202.01)
6. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
2) Small Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of an aluminum fixed window (specimen 5), prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0105-0403-02**, dated 4/5/02, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under previous NOA # 02-1202.01)
7. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
2) Water Resistance Test, per FBC, TAS 202-94
3) Large Missile Impact Test per FBC, TAS 201-94
4) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of an aluminum fixed window (specimen 1), prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0105-0525-02**, dated 5/24/02, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under previous NOA # 02-1202.01)

C. CALCULATIONS:

1. Anchor verification calculations and structural analysis, complying with FBC-2010, dated 07/07/08, revised on 10/20/08, 01/11/09, 01/18/11 and updated on 01/09/12, prepared, signed and sealed by William D. Cook, P.E.
(Submitted under previous NOA# 12-0120.08)
2. Glazing complies with ASTM E1300-04.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)


Manuel Perez, P.E.
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NOA No. 12-1126.06
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E. MATERIAL CERTIFICATIONS

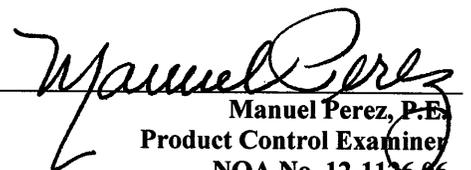
1. Notice of Acceptance No. **12-1213.041** issued to **SAF-GLAS, LLC** for their “**SAF-GLAS Polycarbonate Glass Interlayer**”, dated 01/17/13, expiring on 12/16/13.
2. Notice of Acceptance No. **10-0201.01** issued to **Viracon, Inc.** for their “**Viracon HRG-2 Glass Interlayer**”, dated 03/24/10, expiring on 02/12/14.
3. Notice of Acceptance No. **11-1102.11** issued to **Solutia, Inc.** for their “**Saflex Clear and Color Glass Interlayers**” dated 06/14/12, expiring on 05/21/16.
4. Notice of Acceptance No. **08-1118.07** issued to **Oldcastle Glass Inc.** for their “**StormGlass Glass Interlayer**”, dated 03/05/09, expiring on 12/11/13.

F. STATEMENTS

1. Statement letter of conformance complying with FBC-2010, dated November 15, 2012, signed and sealed by William D. Cook, P.E.
2. Statement letter of no financial interest, dated November 15, 2012, signed and sealed by William D. Cook, P.E.

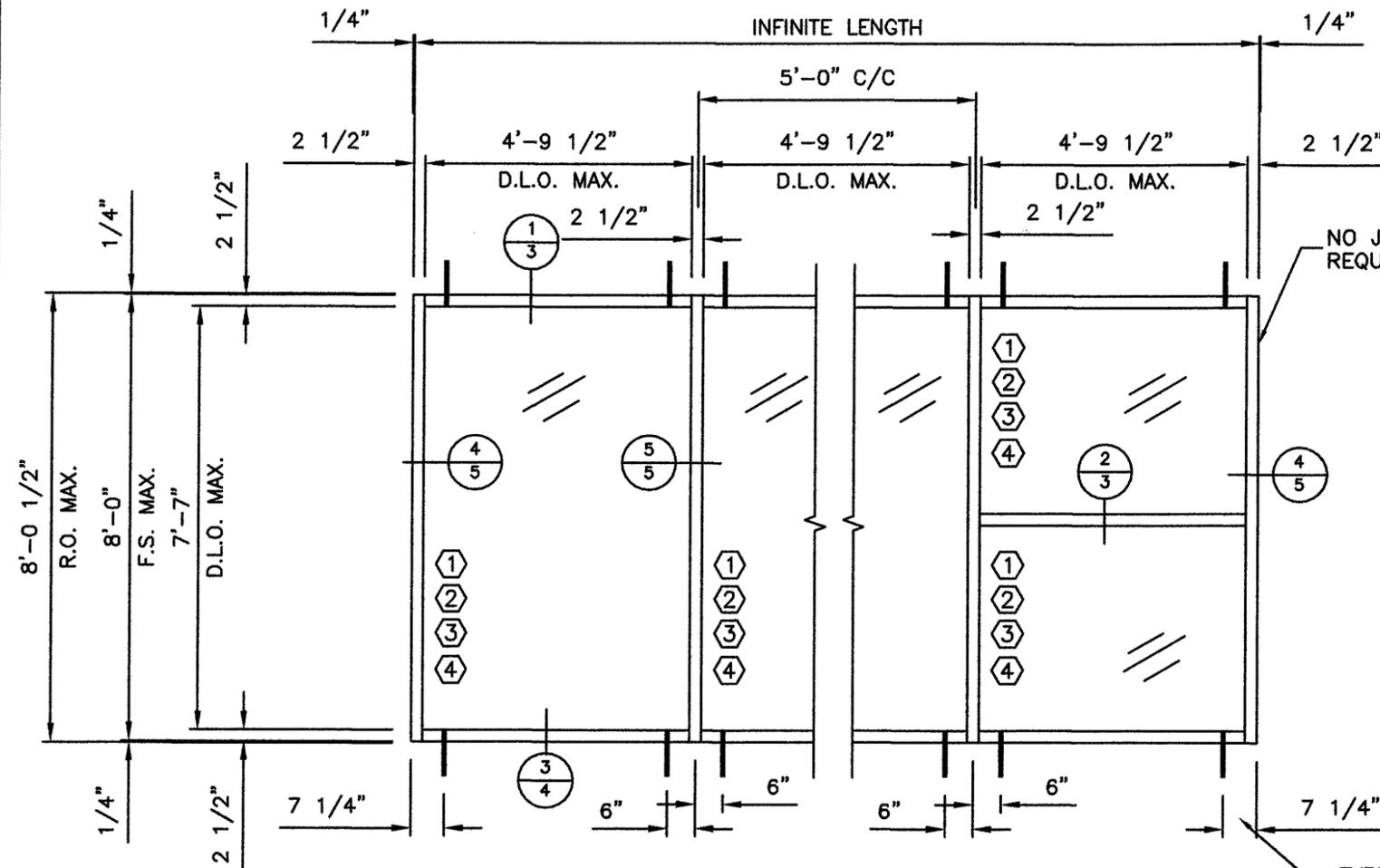
G. OTHER

1. Notice of Acceptance No. **12-0120.08**, issued to Oldcastle BuildingEnvelope™ for their Series “**RW-5000 Ribbon**” Aluminum Fixed Window – L.M.I., approved on 03/22/12 and expiring on 02/27/13.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 12-1126.06

Expiration Date: February 27, 2018
Approval Date: February 28, 2013

OLDCASTLE BUILDING ENVELOPE SERIES RW-5000 RIBBON WINDOW SYSTEM



MAX. DESIGN PRESSURES (P.S.F.) FOR VARIOUS GLASS TYPES					
GLASS WD. D.L.O.	GLASS HGT. D.L.O.	GLASS TYPES (MONOLITHIC LAMINATED - LARGE MISSILE IMPACT)			
		①	②	③	⑤
42"	55"	+70, -80	+70, -80	+50, -58	+70, -80
45.5"		+70, -80	+70, -80	+50, -58	+70, -80
48"		+70, -80	+70, -80	+50, -58	+70, -80
52"		+70, -80	+70, -80	+50, -58	+70, -80
54"		+70, -80	+70, -80	+50, -58	+70, -80
57.5"		+70, -80	+70, -80	+50, -58	+70, -80
42"	91"	+70, -80	+70, -80		+70, -80
45.5"		+70, -80	+70, -80		+70, -80
48"		+70, -80	+70, -80		+70, -80
52"		+70, -80	+70, -80		+70, -80
54"		+70, -80	+70, -80		+70, -80
57.5"		+70, -80	+70, -80		+70, -80

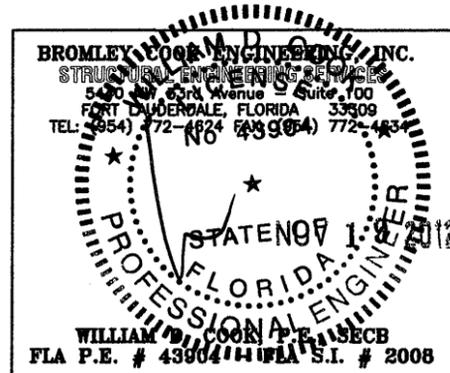
EXTERIOR ELEVATION

TYPICAL ANCHOR LOCATIONS AT HEAD AND SILL OF ALL UNITS

NO JAMB ANCHORS REQUIRED

GLASS SCHEDULE (LARGE MISSILE IMPACT)			
	MANUFACTURER	DESCRIPTION	GASKETS
①	SECURITY IMPACT GLASS	1/4" H.S. GLASS AT INNER AND OUTER FACES .070 POLYCARBONATE, .015 POLYURETHANE LAMINATE; TOTAL = .536	FG-5126 INT FG-5125 EXT
②	VIRACON HRG2	1/4" H.S. GLASS AT INNER AND OUTER FACES, .080 POLYCARBONATE, .050 URETHANE LAMINATE; TOTAL = .616	FG-5126 INT FG-1133 EXT
③	SOLUTIA SAFLEX PVB	1/4" H.S. GLASS AT INNER AND OUTER FACES, .090 SAFLEX PVB; TOTAL = .526	FG-5126 INT FG-5125 EXT
④	OLDCASTLE STORMGLASS	1/4" H.S. GLASS AT INNER AND OUTER FACES, .075 VANCEVA INTERLAYER; TOTAL = .511	FG-5126 INT FG-5125 EXT

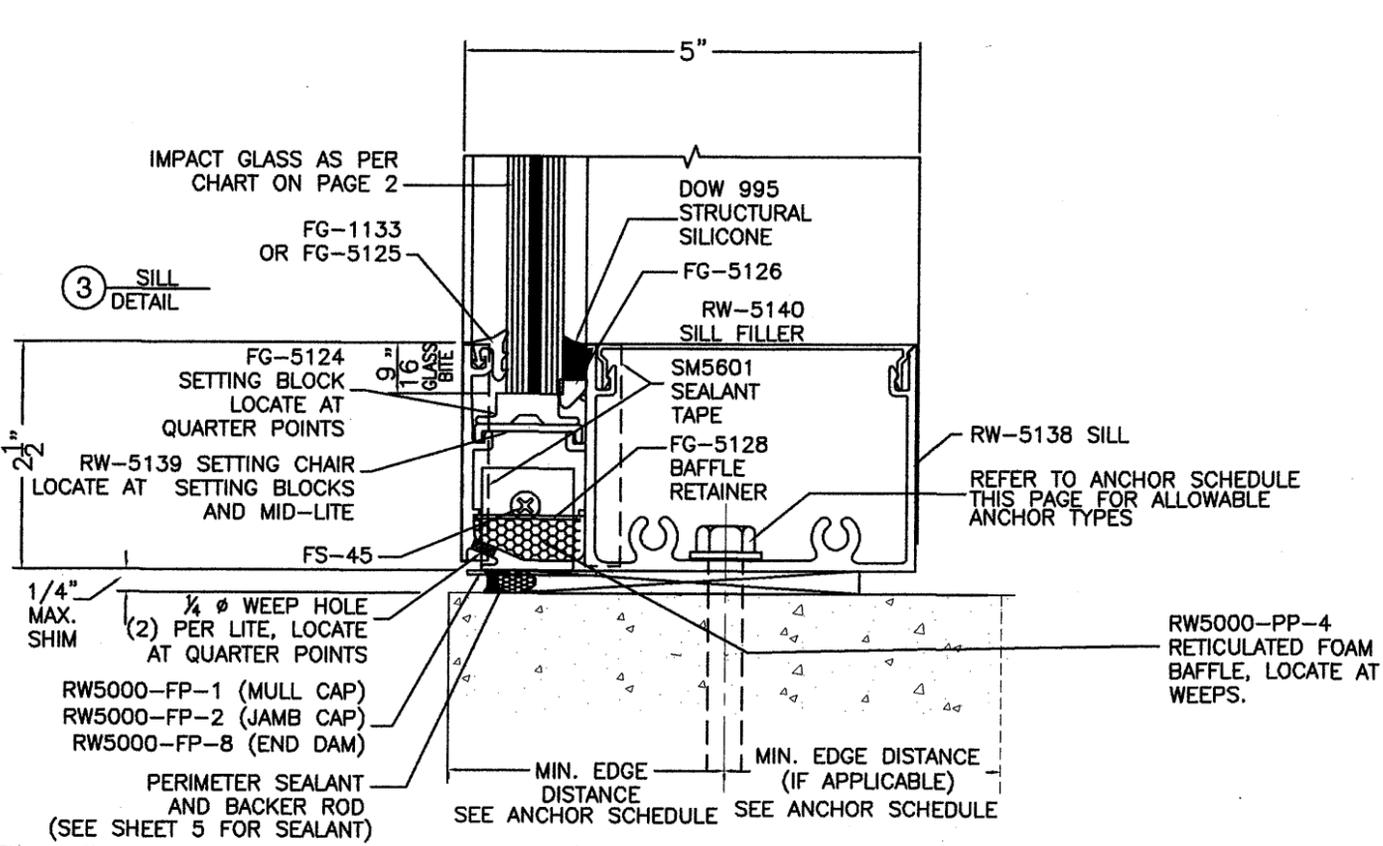
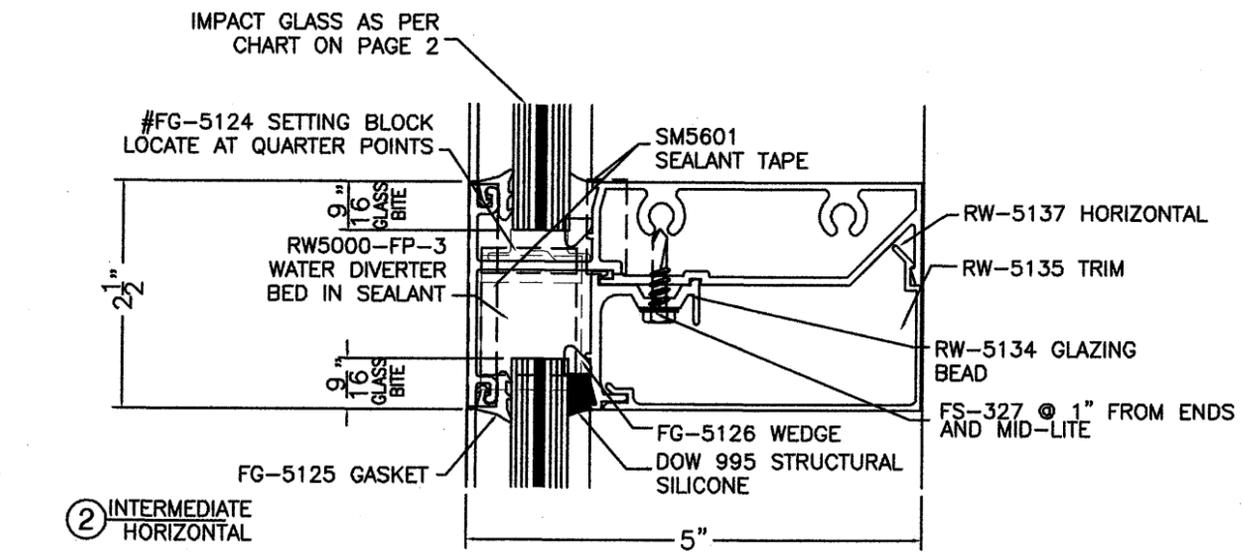
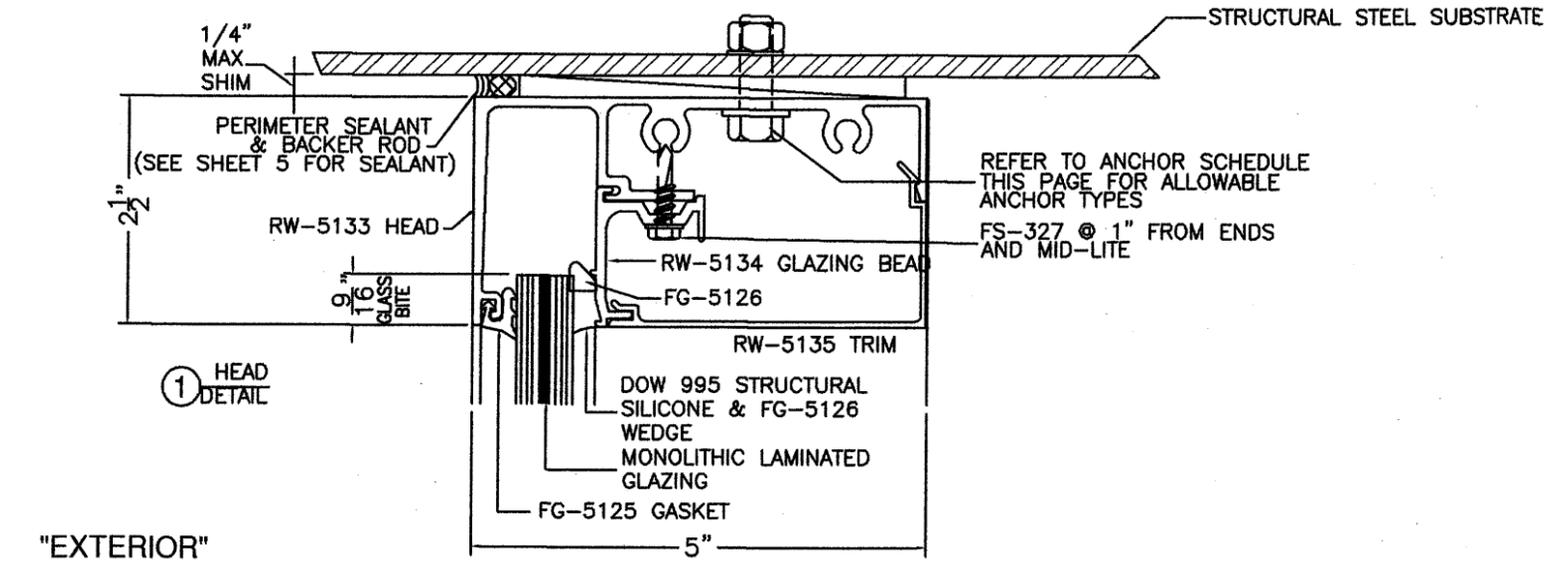
SEE GLAZING DETAIL ON SHEET - 4



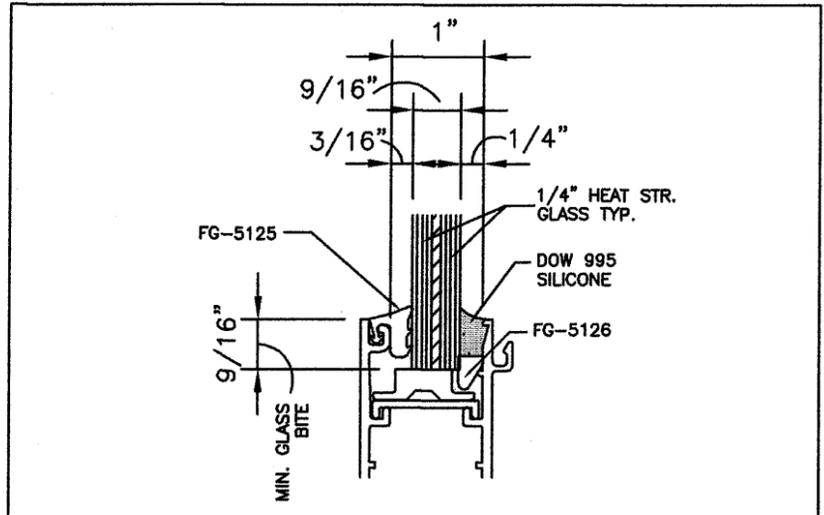
FOR MIAMI-DADE CO. B.C.C.O.

PRODUCT REVISED as complying with the Florida Building Code
Acceptance No. 12-1126-D6
Expiration Date Feb 27, 2018
By *Manuel*
Miami Dade Product Control

<p style="text-align: center; font-size: small;">803 AIRPORT RD. TERRELL TX 75160 (972) 551-6100</p>	<p style="font-weight: bold; font-size: small;">PROJECT APPROVAL DRAWINGS RW-5000 RIBBON WINDOW SYSTEM LARGE MISSILE IMPACT</p>
<p style="font-size: x-small;">MANUAL COMP</p>	<p style="font-size: x-small;">PROJECT NO. _____</p> <p style="font-size: x-small;">DRAWN BY GRG DATE 9/17/12</p> <p style="font-size: x-small;">SCALE NOTED</p> <p style="font-size: x-small;">DRAWING NO. RW-5000LM</p> <p style="font-size: x-small;">SHEET 2 OF 7</p>
<p style="font-size: x-small;">REV BY _____</p> <p style="font-size: x-small;">DATE _____</p> <p style="font-size: x-small;">DESCRIPTION _____</p>	



GLAZING DETAIL



GLASS TYPES:
 (1)(2)(3)(4)
 REFER TO GLASS SCHEDULE ON SHEET 2 FOR GLASS DESCRIPTION

ANCHOR SCHEDULE

<p>IN CONCRETE (2000 psi):</p> <ul style="list-style-type: none"> + 3/8" HILTI KWIKBOLT TZ WITH 2-1/2" MIN. EMBED MIN EDGE DISTANCE = 3-1/2" MIN ANCHOR SPACING = 4-1/2" <p>+ 3/8" POWERS WEDGE BOLT W/ 3-1/2" MIN. EMBED</p> <ul style="list-style-type: none"> MIN EDGE DISTANCE = 3-1/2" MIN ANCHOR SPACING = 4-1/2"
<p>IN STEEL (1/8" THICK)</p> <ul style="list-style-type: none"> + 3/8"-16 GRADE-5 HEX HEAD BOLT

BROMEY & COOK ENGINEERING, INC.
 STRUCTURAL ENGINEERING SERVICES
 540 NW 33rd Avenue - Suite 300
 FORT LAUDERDALE, FLORIDA 33309
 TEL: (954) 772-4624 FAX: (954) 772-4634

WILLIAM D. COOK, P.E., SECB
 FLA P.E. # 43904 - FLA S.I. # 2008

STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 2012

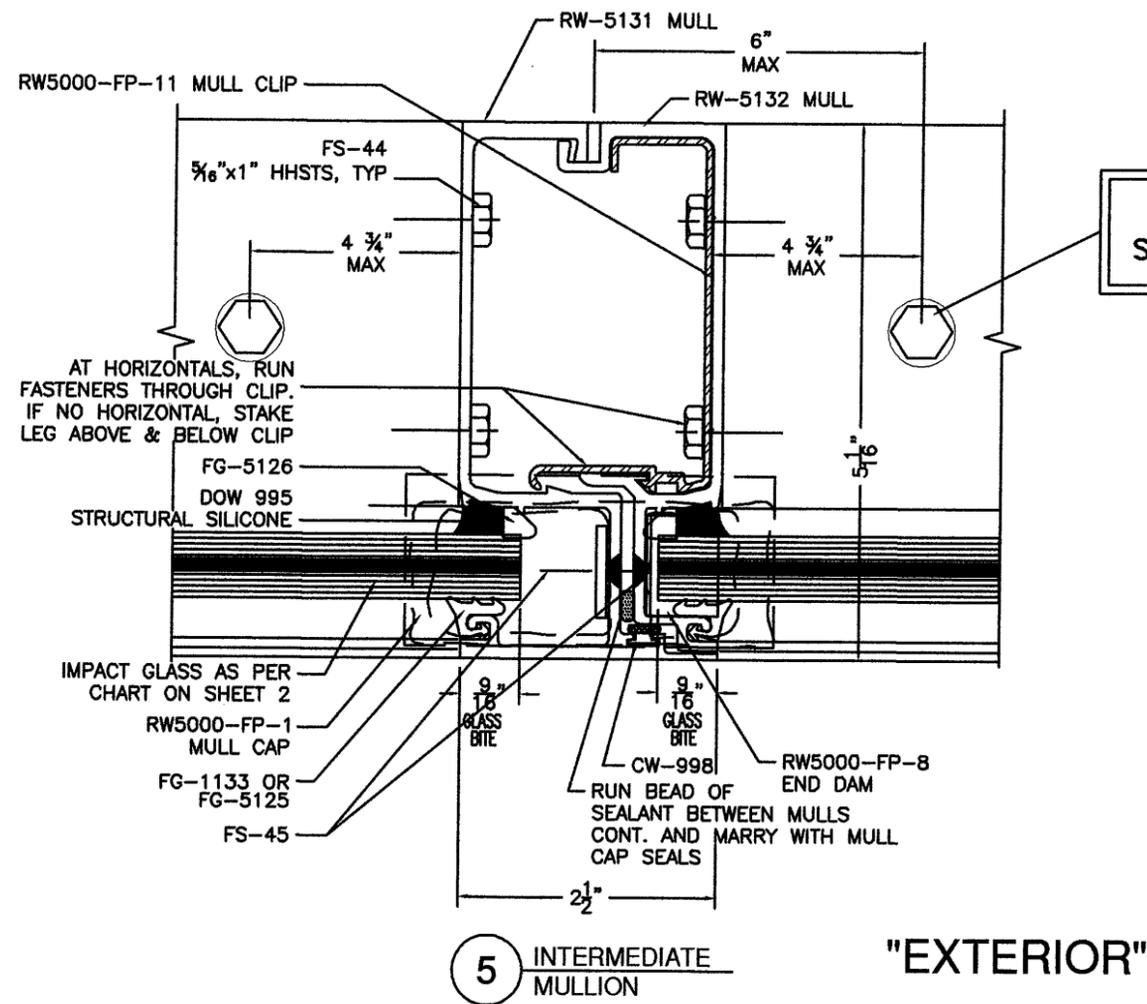
FOR MIAMI-DADE CO. B.C.C.O.

PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No 12-1126-06
 Expiration Date Feb 27, 2018

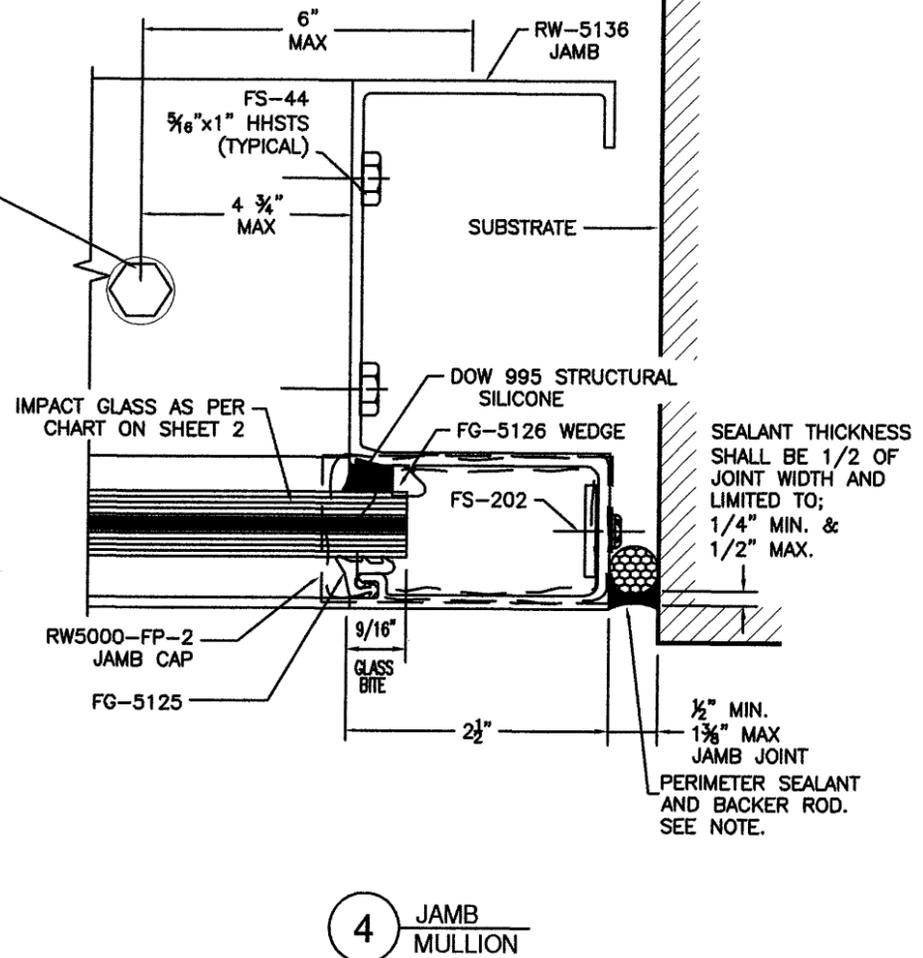
By *Manuel*
 Miami Dade Product Control

PROJECT	PRODUCT APPROVAL DRAWINGS	DESCRIPTION
PROJECT NO.	RW-5000 RIBBON WINDOW SYSTEM	DATE
DRAWN	GRG	REV BY
DATE	9/17/12	MANUAL COMP
SCALE	NOTED	REV
DRAWING NO.	RW-5000LM	DATE
SHEET	4 OF 7	DESCRIPTION

Oldcastle BuildingEnvelope™
 803 AIRPORT RD. TERRELL TX 75160
 (972) 551-6100



ANCHOR PER ANCHOR SCHEDULE ON SHEET #4



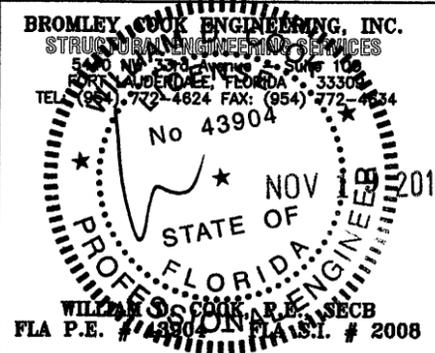
GLAZING NOTE:
 REFERENCE SHEET 2 FOR GLASS SCHEDULE, AND SHEET 4 FOR GLAZING DETAIL

SEE SHEET 6 FOR ADDITIONAL MULLION CAP INSTALLATION INFORMATION

JAMB SEALANT NOTES:

PERIMETER SEALANT OPTIONS:
 DOW 795 (SILICONE)
 TREMCO SPECTREM 1 & 2 (SILICONE)
 TREMCO DYMONIC FC (URETHANE)
 SONNEBORN SOLOLASTIC 150 (ELASTOMERIC)

ALTERNATE SEALANTS & ALTERNATE JAMB GAPS:
 TO BE APPROVED BY DESIGN PROFESSIONAL OF RECORD AND SEALANT MANUFACTURER.



FOR MIAMI-DADE CO. B.C.C.O.

PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No 12-1126-06
 Expiration Date Feb. 21, 2018

By *Manuel Sorez*
 Miami Dade Product Control

PROJECT	DESCRIPTION
PROJECT NO.	
DRAWN	DATE
GRG	9/17/12
SCALE	NOTED
DRAWING NO.	RW-5000LM
SHEET	5 OF 7

MANUAL COMP

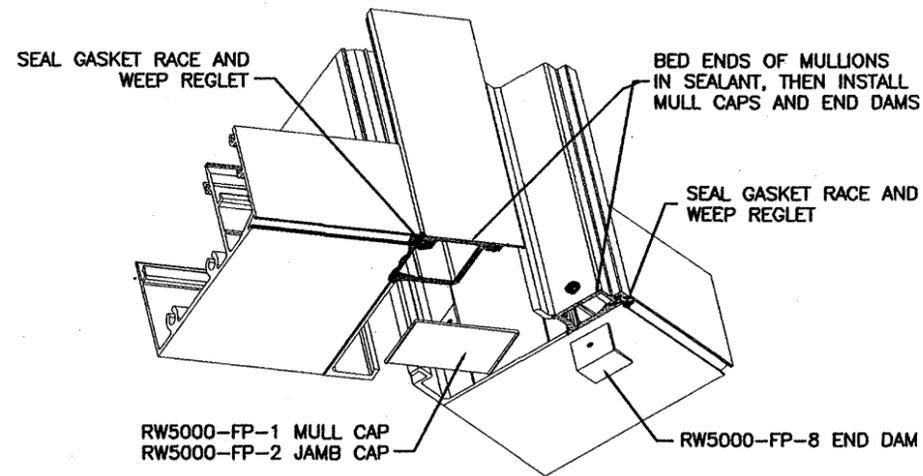
REV BY DATE

803 AIRPORT RD. TERRELL TX 75160
 (972) 551-6100

Oldcastle BuildingEnvelope™

PRODUCT APPROVAL DRAWINGS
 RW-5000 RIBBON WINDOW SYSTEM
 LARGE MISSILE IMPACT

RW-5000 MULL CAP SEALANT DETAILS AND INSTALLATION INSTRUCTIONS



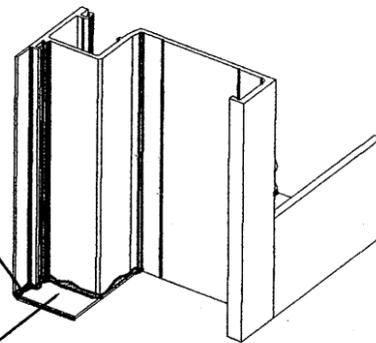
DETAIL A

INSTALL MULL CAPS AND END DAMS USING FS-45 (#8 X 1/2" PFH), INSTALL JAMB CAPS USING FS-202 (#8 X 1/2" PPH). (CAP SEAL ALL FASTENERS)

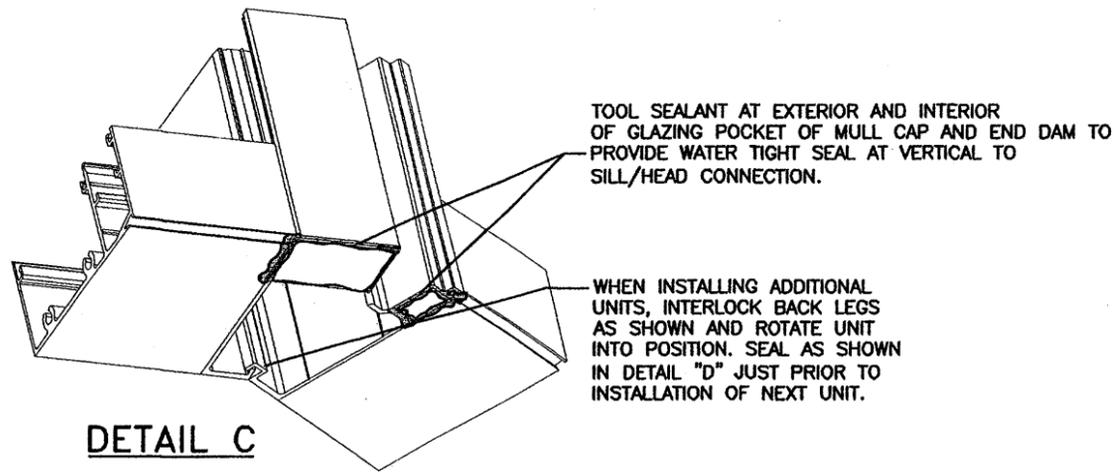
MULL CAP AND END DAM REQUIRED AT HEAD AND SILL TYPICAL. (SILL SHOWN)

TOOL THE SEALANT ALONG INTERIOR OF THE MULL DURING INSTALLATION OF THE MULL CAP.

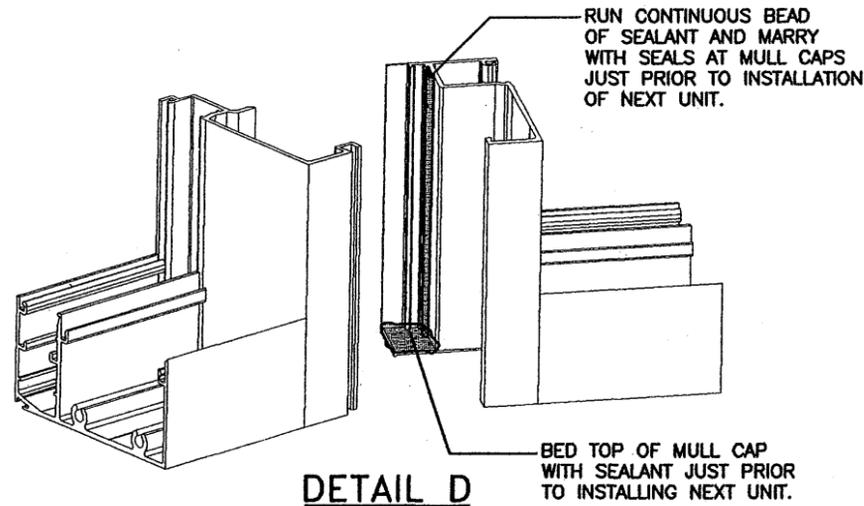
WHEN INSTALLING THE RW5000-FP1 MULL CAP, KEEP THIS AREA CLEAR OF SEALANT TO ALLOW FOR INSTALLATION OF NEXT UNIT.



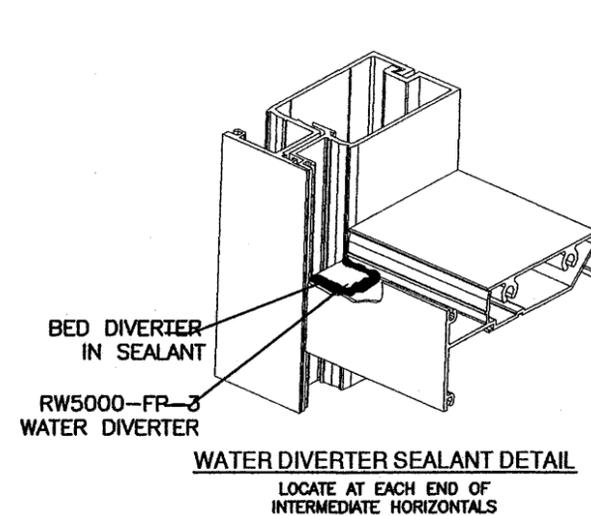
DETAIL B



DETAIL C



DETAIL D



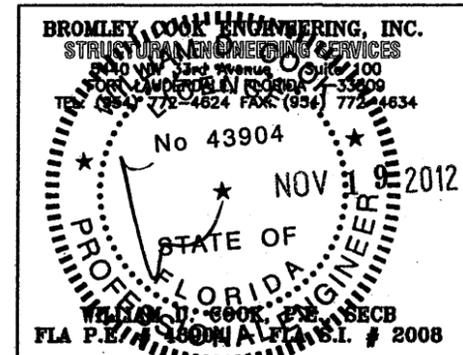
WATER DIVERTER SEALANT DETAIL

INSTALLATION NOTES:

- 1) ASSEMBLE UNITS AS SHOWN ON DETAIL SHEETS 3 THRU 5. INSTALL SEALANT TAPE BETWEEN VERTICALS AND HORIZONTALS AS SHOWN.
- 2) INSTALL AND SEAL MULL CAPS AS SHOWN IN DETAILS A, B & C ABOVE.
- 3) MULL CAPS SHOULD FORM A WATER TIGHT SEAL. A TEST MAY BE CONDUCTED TO CONFIRM THIS SEAL BY BLOCKING WEEP HOLES AND FILLING SILL CAVITY WITH WATER. AFTER TEST REMOVE PLUGS FROM WEEP HOLES, DRAIN WATER, INSTALL BAFFLES AND BAFFLE RETAINERS.
- 4) INSTALL FIRST UNIT INTO OPENING (UNITS WILL INSTALL FROM LEFT TO RIGHT AS VIEWED FROM EXTERIOR OF BUILDING), LEVEL, PLUMB AND ANCHOR FIRST UNIT. WHEN SHIMMING UNITS, SHIM AT ANCHOR POINTS UNDER SILL. DO NOT PLACE SHIMS BENEATH MULL OR MULL CAP.

- 5) RUN BEAD OF SEALANT CONTINUOUS FOR FULL HEIGHT OF MULLION AND BED MULL CAP WITH SEALANT AT HEAD AND SILL AS SHOWN IN DETAIL D.
- 6) INSTALL SECOND UNIT BY BRINGING INTO POSITION FROM INSIDE OF BUILDING, TILT HEAD OF UNIT BENEATH MULL CAP, ROTATE SILL OF UNIT OVER LOWER MULL CAP, THEN INTERLOCK BACK LEGS OF MULLION (SEE DETAIL C), PLACE APPROPRIATE SHIMS BENEATH SILL MEMBER TO ALLOW FOR BETTER ALIGNMENT, AND ROTATE UNIT INTO PLACE. PLUMB AND ANCHOR.
- 7) REPEAT STEP 6 FOR ALL ADDITIONAL UNITS. MINIMUM 1/4" CAULK JOINT AT JAMB IS REQUIRED FOR INSTALLATION OF FINAL UNIT.

- 8) SYSTEM MAY BE INSTALLED EITHER IN UN-GLAZED OR PREGLAZED FRAMES. WHEN INSTALLING UNITS AS UN-GLAZED FRAMES FOLLOW INSTRUCTIONS 4 THRU 8 AND THEN INSTALL GLASS, NEXT PLACE AN 1/8" SHIM AT MID-HEIGHT OF MULL AND CLAMP BACK OF MULL AT THE SHIM BEFORE RUNNING WEDGE TO HELP INSURE PROPER ALIGNMENT OF MULLS AT FACE OF SYSTEM. WHEN PREGLAZING FRAMES, MAKE SURE THAT UNITS ARE SQUARE AND THAT DAY LIGHT OPENINGS ARE HELD TO PROPER DIMENSIONS BEFORE RUNNING STRUCTURAL SILICONE. (REFERENCE SILICONE MANUFACTURER FOR PROPER CLEANING AND USE OF SILICONE.)



FOR MIAMI-DADE CO. B.C.C.O.

PRODUCT REVISED
complying with the Florida
Building Code
Acceptance No. 12-1126-06
Expiration Date Feb. 27, 2018
By *Manuel Perez*
Miami/Dade Product Control

REV	BY	DATE	DESCRIPTION

MANUAL COMP

Oldcastle BuildingEnvelope™
803 AIRPORT RD. TERRELL TX 75160
(972) 551-6100

PROJECT
**PRODUCT APPROVAL DRAWINGS
RW-5000 RIBBON WINDOW SYSTEM
LARGE MISSILE IMPACT**

PROJECT NO.
DRAWN
DATE
SCALE
DRAWING NO.
SHEET

GRG
9/17/12
NOTED
RW-5000LM
6 OF 7

