



BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1107
MIAMI, FLORIDA 33130-1563
(305) 375-2902 FAX (305) 372-6339

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/buildingcode

Oldcastle Glass Engineered Products
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 by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) 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 Division (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. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division 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 "ZS-2750" Aluminum Casement/ Project Out Window - L.M.I.

APPROVAL DOCUMENT: Drawing No. 10-010, titled Series "ZS-2750" Aluminum Project Out Window System Large Missile Impact Resistant, sheets 1 through 4 of 4, dated 01/19/10, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit, Jr., P. E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and Approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large Missile Impact Resistant Only.

LIMITATIONS: Miami-Dade County Product Control Approved Shutters Or Protection Devices Shall Be Required.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state 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 consists of this page 1 and evidence page E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Jaime D. Gascon, P. E.**



J. Gascon
4/20/10

NOA No. 10-0224.03
Expiration Date: May 05, 2015
Approval Date: May 12, 2010
Page 1

Oldcastle Glass Engineered Products

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **10-010**, titled Series "**ZS-2750**" **Aluminum Project Out Window System Large Missile Impact Resistant**, sheets 1 through 4 of 4, dated 01/19/10, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit, Jr., P. E.

B. TESTS

1. 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
6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94
along with marked-up drawings and installation diagram of aluminum projected window system, prepared by Architectural Testing, Inc., Test Report No. **ATI 94443.02-801-18**, dated December 16, 2009, signed and sealed by Joseph A. Reed, P. E.

C. CALCULATIONS

1. Anchor calculations and structural analysis, complying with FBC-2007, prepared by Tilteco, Inc., dated 02/05/10, signed and sealed by Walter A. Tillit, Jr., P. E.
Complies with ASTM E1300-98/ 04

D. QUALITY ASSURANCE

1. Miami-Dade Building Code Compliance Office (BCCO).

E. MATERIAL CERTIFICATIONS

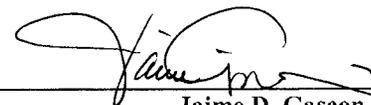
1. Notice of Acceptance No. **08-0520.08** issued to Solutia Inc. for their "**Vanceva Composites Glass Interlayer**" dated 7/17/08, expiring on 12/11/13.
2. Notice of Acceptance No. **08-0508.02** issued to Viracon, Inc. for their "**StormGuard Glass Interlayer**", dated 06/13/08, expiring on 04/14/13.

E. STATEMENTS

1. Statement letter of conformance and no financial interest, dated February 05, 2010, both signed and sealed by Walter A. Tillit, P. E.
2. Laboratory compliance letter for Test Report No. **ATI 94443.02-801-18**, issued by Architectural Testing, Inc., dated, signed and sealed by Joseph A. Reed, P. E.

G. OTHERS

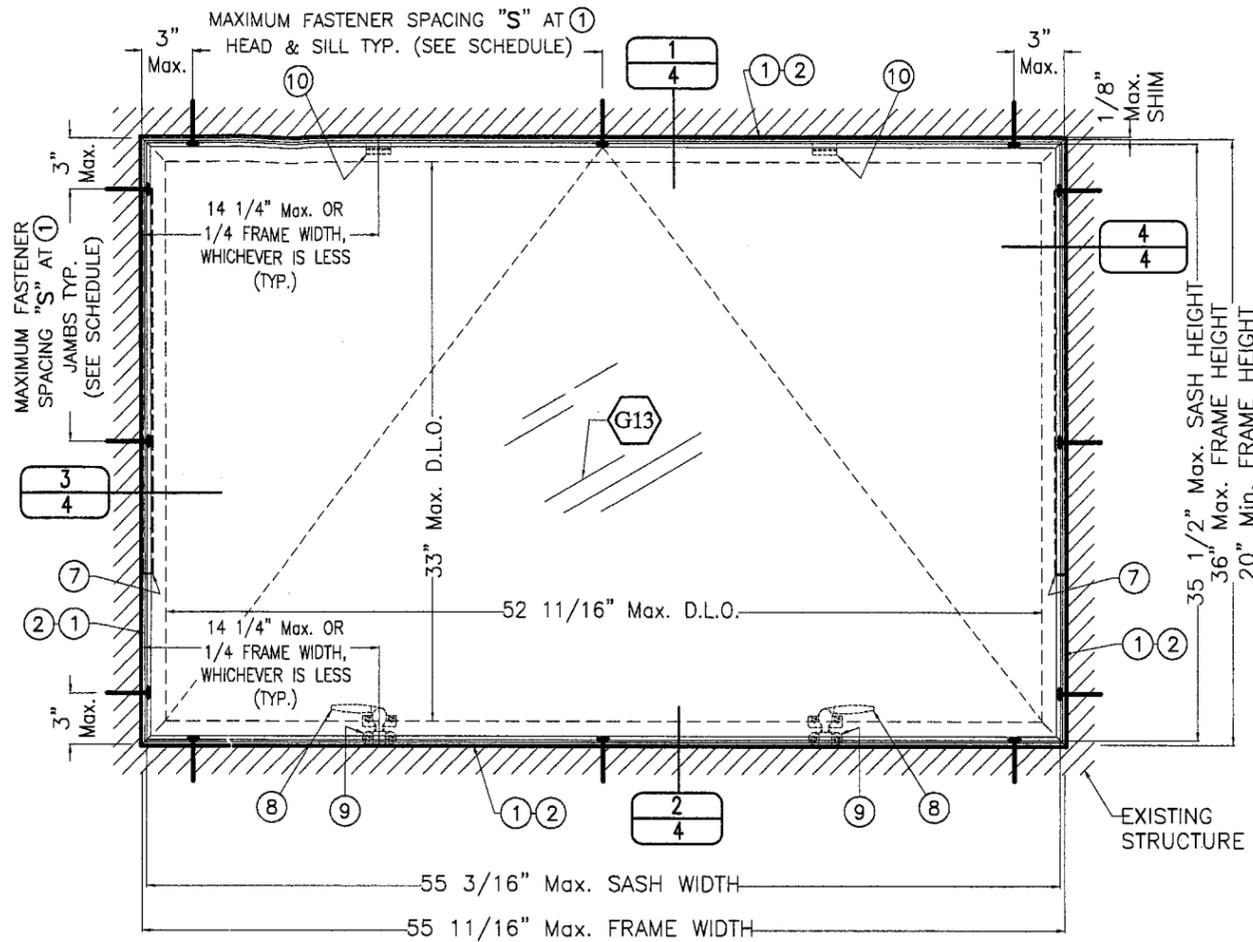
1. None.



Jaime D. Gascon, P. E.
Chief, Product Control Division
NOA No. 10-0224.03
Expiration Date: May 05, 2015
Approval Date: May 12, 2010

GENERAL NOTES AND SPECIFICATIONS:

- SERIES ZS-2750 PROJECT OUT ALUMINUM WINDOW SYSTEM, SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2007 EDITION OF THE FLORIDA BUILDING CODE.
PRODUCT MAY BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES (MIAMI-DADE/BROWARD COUNTIES). DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1620 OF THE ABOVE MENTIONED CODE. IN ORDER TO VERIFY THAT ANCHORS ON THIS P.A.D., AS TESTED, WERE NOT OVERSTRESSED, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS WAS **NOT** USED IN THEIR ANALYSIS.
THIS PRODUCT'S ADEQUACY FOR IMPACT AND WIND RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1626 OF THE ABOVE MENTIONED CODE AS PER PROTOCOLS TAS-201, TAS-202, TAS-203 AS PER ARCHITECTURAL TESTING LAB REPORT # 94443.02-801-18 AND AS PER SUBMITTED STRUCTURAL CALCULATIONS, PERFORMED AS PER SECTION 1612 OF THE FLORIDA BUILDING CODE. THIS PRODUCT IS ALSO APPROVED FOR WATER AND AIR INFILTRATION AS PER PROTOCOL TAS-202, PER SECTION 2411.3.2 OF THE FLORIDA BUILDING CODE.
- MAXIMUM DESIGN PRESSURE RATING FOR THIS PRODUCT SHALL BE +60 psf. -60 psf.**
- ALL ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ASSOCIATION 6063-T6 ALLOY AND TEMPER (UNLESS OTHERWISE NOTED), PER ASTM B221, WITH $F_y = 25.0$ ksi MINIMUM. THE THICKNESS OF ALL EXTRUSIONS SHALL BE AS SHOWN ON THIS DRAWING.
- ALL ALUMINUM IN CONTACT WITH DISSIMILAR MATERIALS MUST BE PAINTED PER SECTIONS 2003.8.4.2., 2003.8.4.4, 2003.8.4.5 AND 2003.8.4.6 OF THE FLORIDA BUILDING CODE AS APPLICABLE.
- ALL SCREWS USED FOR ASSEMBLY CONNECTIONS (METAL TO METAL) TO BE STAINLESS STEEL 304 OR 316 AISI SERIES OR CORROSION RESISTANT COATED CARBON STEEL AS PER DIN 50018 AND SECTION 2411.3.3.4 OF THE FLORIDA BUILDING CODE WITH 50 ksi YIELD STRENGTH AND 90 ksi TENSILE STRENGTH.
- ANCHORS NOTES, ANCHOR'S TYPE TO SUBSTRATE SHALL BE AS FOLLOWS:
(a) TO EXISTING 1/8" MIN. THICK METAL, ALUMINUM (6063-T6 ALLOY) OR STEEL ($F_y \geq 33$ KSI):
- #12-14x1" HWH DRIL-FLEX® STRUCTURAL SELF-DRILLING FASTENER AND #12x1" PHILLIPS FLAT HEAD HD A POINT FASTENER AT HINGE LOCATION W/ MIN. 1" EDGE DISTANCE, AS MANUFACTURED BY ELCO CONSTRUCTION PRODUCTS.
- ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE FASTENER'S MANUFACTURER.
- PRODUCT INSTALLATION SHALL ONLY BE PERFORMED INTO EXISTING STRUCTURE CONSISTING OF 1/8" MIN. THICK ALUMINUM OR STEEL FRAME STRUCTURE AND SHALL COMPLY WITH SECTIONS 2411.4.1 & 2411.4.2 OF THE FLORIDA BUILDING CODE AND WITH SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.
- PROVIDE 1/8" MAX. BEARING SHIM SPACE (TYP.).
- THIS PRODUCT SYSTEM WILL NOT REQUIRE A HURRICANE PROTECTION DEVICE.**
- PROVIDE DOW CORNING 795 & 995 SEALANT TYPICAL AT ALL FRAME AND GLASS JOINTS PER BILL OF MATERIALS, SHEET 3 OF 4.
- REMAINING COMPONENTS FOR THIS PRODUCT SHALL BE AS INDICATED ON BILL OF MATERIALS, SHEET 3 OF THIS DRAWING.
- PRODUCT'S MANUFACTURER LABEL SHALL BE PLACED ON A READILY VISIBLE LOCATION. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABEL SHALL READ AS FOLLOWS:
Oldcastle Glass®
Engineered Products
TERRELL TX.
MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED.
- (a) THIS P.A.D. PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.A.D.
(b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT, BASED ON THIS P.A.D., PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.
(c) THIS P.A.D. WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.
(d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.A.D.
(e) ORIGINAL P.A.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.



**ZS-2750 PROJECT OUT ALUMINUM WINDOW SYSTEM
TYPICAL EXTERIOR ELEVATION**

SCALE : 3/32" = 1"

MAXIMUM FASTENERS SPACING "S" SCHEDULE		
LOCATION	DESIGN PRESSURE (p.s.f.)	1/8" MIN. THICK METAL, ALUMINUM (6063-T6 ALLOY) OR STEEL ($F_y \geq 33$ KSI)
		SELF DRILLING FASTENERS (SEE NOTE #6 (a))
JAMBS	$\leq \pm 48.0$	15" o.c.
	$\leq \pm 55.0$	15" o.c.
	$\leq \pm 60.0$	14" o.c.
HEAD & SILL	$\leq \pm 30.0$	24" o.c.
	$\leq \pm 35.0$	24" o.c.
	$\leq \pm 42.0$	20" o.c.
	$\leq \pm 60.0$	14" o.c.

Florida Building Code (High Velocity Hurricane Zone)

SERIES ZS-2750 PROJECT OUT ALUMINUM WINDOW SYSTEM
LARGE & SMALL IMPACT RESISTANT
Ref: 04/12/10



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

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EB-0006719
WALTER A. TILLIT, Jr., P.E.
FLORIDA Lic. # 44167

P.E. STAMP
2/5/10

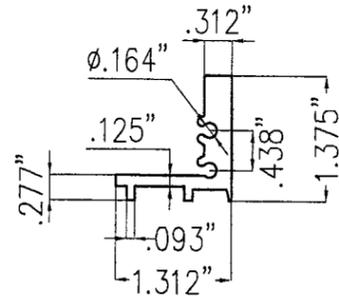
MIAMI-DADE STAMP
Approved as complying with the Florida Building Code
Date 05/17/2010
NOA# 10-0224-03
Miami Dade Product Control
By [Signature]

DRAWN BY L.G.
DATE 1/19/10
DRAWING NO 10-010
SHEET 1 OF 4

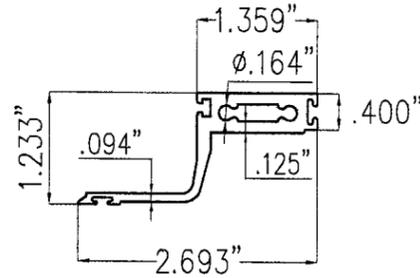
REV. No	DESCRIPTION	DATE	DESCRIPTION	DATE

ZS-2750 PROJECT OUT ALUMINUM WINDOW SYSTEM COMPONENTS

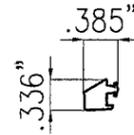
SCALE : 1/2" = 1"



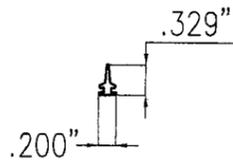
① WINDOW FRAME
ZS-8



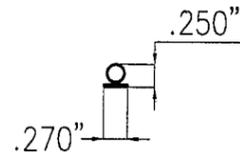
② WINDOW SASH
ZS-22



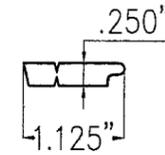
③ INTERIOR GLAZING GASKET
GP-132



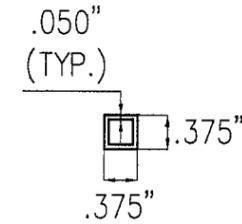
④ GASKET
ZS-9



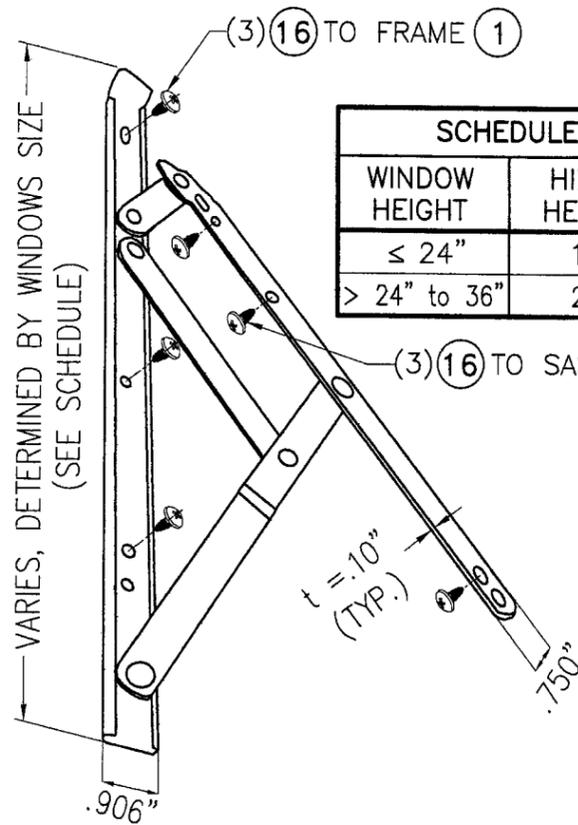
⑤ BULB GASKET
CW-998



⑥ SETTING BLOCK
CW-1245



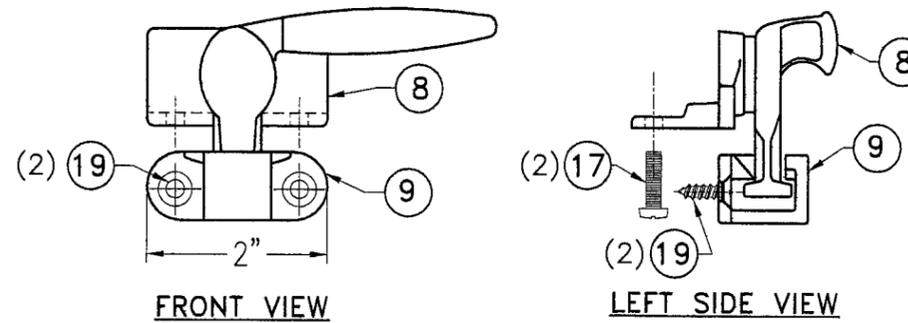
⑮ BOX ALUMINUM SPACER



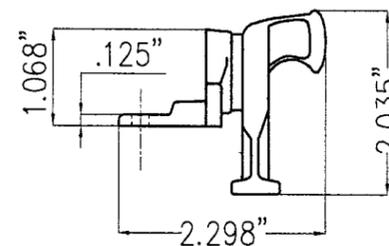
⑦ "STORM" 4-BAR HINGE
852-008

WINDOW HARDWARE COMPONENTS

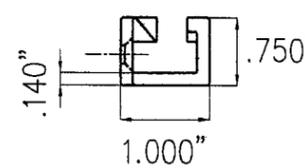
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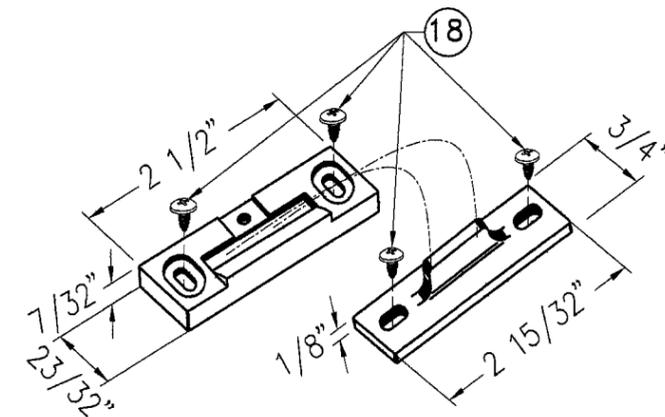
LOCKING CAM HANDLE & KEEPER ASSEMBLY



⑧ LOCKING CAM HANDLE
166-102



⑨ KEEPER
208-043



⑩ SASH SNUBBERS
AMC616 & AMC617-127

SCHEDULE	
WINDOW HEIGHT	HINGE HEIGHT
≤ 24"	16"
> 24" to 36"	20"

Florida Building Code (High Velocity Hurricane Zone)

SERIES ZS-2750 PROJECT OUT ALUMINUM WINDOW SYSTEM
LARGE & SMALL WINDOW IMPACT RESISTANT
REV. 04/20/10

Oldcastle Glass
Engineered Products
803 AIRPORT RD. TERRELL TX 75160
PHONE: (972) 551-6100

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE

DRAWN BY L.G.
1/19/10 DATE
10-010 DRAWING No
SHEET 2 OF 4

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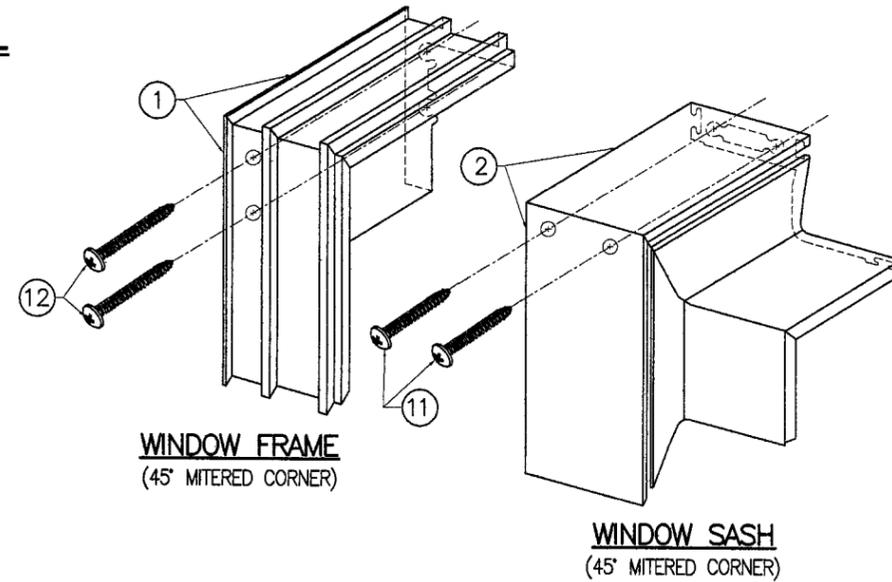
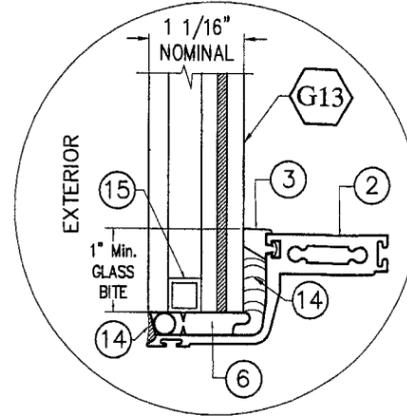
P.E. STAMP

[Signature]
2/5/10

MIAMI-DADE STAMP

Approved as complying with the Florida Building Code
Date 05/12/2010
NOA# 10-0724-03
Miami Dade Product Control Division
By *[Signature]*

TYPICAL GLAZING DETAIL



CORNER ASSEMBLY DETAILS
(SEE NOTE 5, SHEET 1)

GLASS SCHEDULE				
GLASS LABEL	GLASS COMPOSITION	MANUFACTURER NAME	MAXIMUM D.L.O.	NOA'S #
G13	1 1/16" NOMINAL INSULATED GLASS CONSISTING OF 1/4" H.S. GLASS AT EXTERIOR - 3/8" AIR SPACE - (2) 3/16" H.S. GLASS W/ 0.075" THICK VANCEVA™/STORMGLASS™ COMPOSITE INTERLAYER	SOLUTIA, INC./ OLDCASTLE GLASS, INC.	52 11/16" WIDE x 33" HIGH	08-0520.08/ 08-1118.07

TYPICAL WINDOW GLASS SIZE = D.L.O. + 1"

BILL OF MATERIALS

ITEM No.	PART NUMBER	DESCRIPTION	DIMENSIONS	MATERIAL	MANUFACTURER	NOTES
1.	ZS-8	WINDOW FRAME	1.312" x 1.375"	6063 - T6 ALUMINUM	OGEP	
2.	ZS-22	WINDOW SASH	2.693" x 1.233"	6063 - T6 ALUMINUM	OGEP	
3.	GP-132	INTERIOR GLAZING GASKET	.385" x .336"	EPDM	TREMCO	LOCATED AT WINDOW SASH
4.	ZS-9	GASKET	.200" x .329"	SANTOPRENE	EPG/TRELLBORG	LOCATED AT WINDOW SASH
5.	CW-998	BULB GASKET	.270" x .250"	FOAM FILLED-TITE BULB	AMESBURY	LOCATED AT WINDOW SASH
6.	CW-1245	SETTING BLOCK	1.125" x .250" x 4"	EPDM	EPG/TRELLBORG	LOCATED AT WINDOW SASH
7.	852-008	"STORM" 4-BAR HINGE	.10" THK. TYPICAL & HEIGHT DETERMINED BY WINDOW'S SIZE (SEE SHEET 2 OF 4)	304 STAINLESS STEEL	BRONZE CRAFT	ONE HINGE (FITS .625" Min. - .708" Max. WINDOW CAVITY) LOCATED AT EACH JAMB, CHANNEL FASTENED TO WINDOW'S FRAME & BAR FASTENED TO WINDOW'S SASH AS INDICATED ON SHEET 2 OF 4.
8.	166-102	LOCKING CAM HANDLE	2.00" x 2.035" x 2.298" DEPTH	420 MANGANESE BRONZE	BRONZE CRAFT	AT SASH, LOCATED @ 14 1/4" o.c. Max. OR 1/4 FRAME WIDTH, WHICHEVER IS LESS
9.	208-043	KEEPER	2.00" x .750" x 1.00" DEPTH	415 ALUMINUM BRONZE	BRONZE CRAFT	AT FRAME, LOCATED @ 14 1/4" o.c. Max. OR 1/4 FRAME WIDTH, WHICHEVER IS LESS
10.	AMC616 & AMC617-127	SASH SNUBBERS	2.50" x .750" x .125" THK.	STEEL	ADVANTAGE	AT SASH & FRAME, LOCATED @ 14 1/4" o.c. Max. OR 1/4 FRAME WIDTH, WHICHEVER IS LESS
11.	FS-115	PHILLIPS PAN HEAD A POINT FASTENER	#10 x 1"	STEEL	VARIES	SASH ASSEMBLY SCREW
12.	FS-328	PHILLIPS PAN HEAD B POINT FASTENER	#10 x 1 1/2"	STEEL	VARIES	FRAME ASSEMBLY SCREW
13.	795	STRUCTURAL SILICONE	CONT. ALL AROUND	SILICONE	DOW CORNING	PERIMETER SEALANT AT FRAME
14.	995	STRUCTURAL SILICONE	CONT. ALL AROUND	SILICONE	DOW CORNING	SASH (.25" SPACE TO GLASS) FILL SEALANT & SASH PERIMETER SEALANT
15.	-	BOX ALUMINUM GLASS SPACER	.375" x .375" x .05"	ALUMINUM		LOCATED AT GLASS EDGES
16.	FS-53	PHILLIPS ROUND HEAD A POINT FASTENER	#10 x 3/8"	STEEL	VARIES	ATTACH HINGE LEG (BAR) TO SASH & TO FRAME
17.	476	PHILLIPS PAN HEAD MACHINE SCREW	#10-24 x 5/8"	STEEL	VARIES	ATTACH LOCKING CAM HANDLES
18.	FS-109	PHILLIPS PAN HEAD A POINT FASTENER	#10 x 1/2"	STEEL	VARIES	ATTACH FRAME SNUBBER
19.	FS-56	PHILLIPS PAN HEAD B POINT CAD FASTENER	#10 x 1/2"	STEEL	VARIES	ATTACH KEEPER

Florida Building Code (High Velocity Hurricane Zone)

DRAWN BY L.G.

DATE 1/19/10

SERIES ZS-2750-PROJECT OUT ALUMINUM WINDOW SYSTEM
LARGE & SMALL WINDOW IMPACT RESISTANT
REV. 04-10-10

Oldcastle Glass®
Engineered Products

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

DRAWING No 10-010

SHEET 3 OF 4

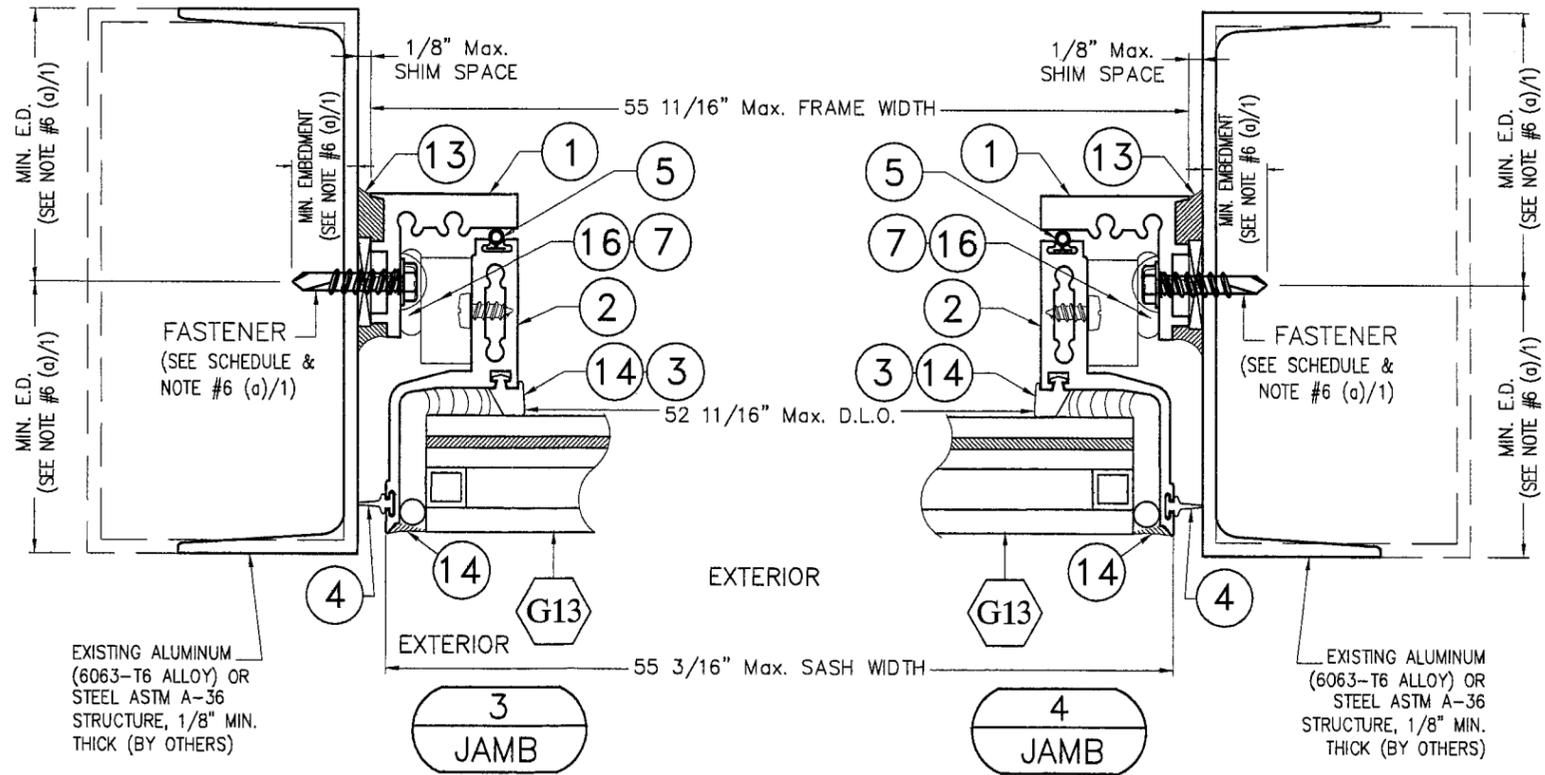
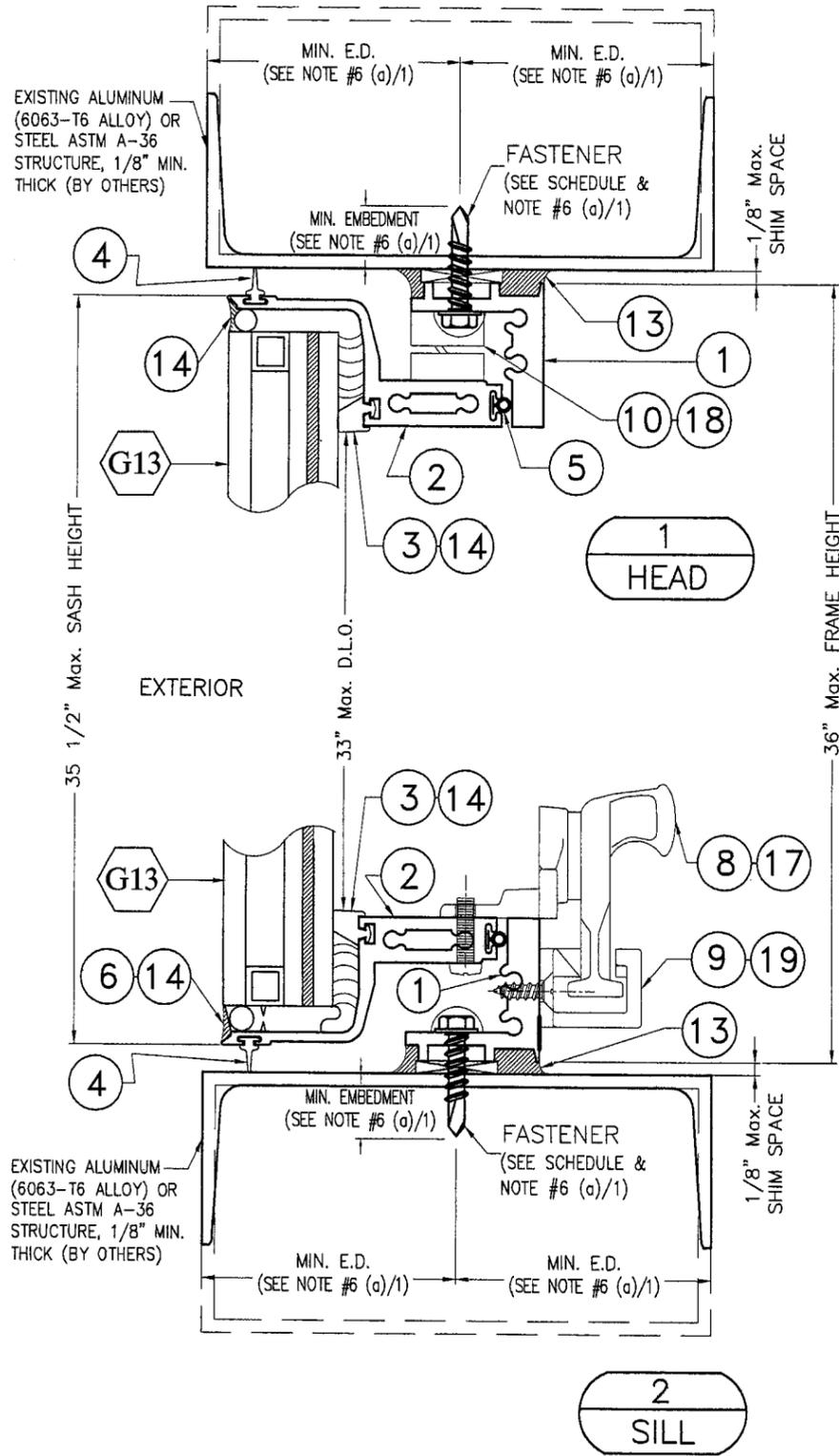
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EB-0006719
WALTER A. TILIT Jr., P.E.
FLORIDA Lic. # 44167

P.E. STAMP

MIAMI-DADE STAMP

Approved as complying with the
Florida Building Code
Date 05/12/2010
NOA# 10-0224-03
Miami-Dade Product Control
Division



Florida Building Code (High Velocity Hurricane Zone)

SERIES ZS-2750 PROJECT OUT ALUMINUM WINDOW SYSTEM
 LARGE GLASS IMPACT RESISTANT
 RCF 04170710



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 e-mail: tilteco@aol.com
 EB-0006719
 WALTER A. TILLIT JR., P.E.
 FLORIDA Lic. # 44167

P.E. STAMP

[Signature]
 2/5/10

MIAMI-DADE STAMP

Approved as complying with the
 Florida Building Code
 Date 05/13/2010
 NOA# 10-0224-03
 Miami Dade Product Control
 Division
 By *[Signature]*

REV. No.	DESCRIPTION	DATE	REV. No.	DESCRIPTION	DATE

DRAWN BY L.G.
 1/19/10 DATE
 10-010 DRAWING No
 SHEET 4 OF 4