



BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

www.buildingcodeonline.com

NOTICE OF ACCEPTANCE (NOA)

K.D. Windows, Inc.
3705 Shares Place
Riviera Beach, FL 33404

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 400 Aluminum Casement Window - L.M.I.

APPROVAL DOCUMENT: Drawing No. **05-246**, titled "Series 400 Casement Window- Large Missile Impact Resistant", sheets 1 through 4 of 4, dated 08/15/05, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit, 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 Division.

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 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 supersedes** NOA # **04-0317.02** consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

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



NOA No **05-0921.06**
Expiration Date: **June 02, 2008**
Approval Date: **April 13, 2006**
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **05-246**, titled "Series 400 Casement Window- Large Missile Impact Resistant", sheets 1 through 4 of 4, dated 08/15/05, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit, 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 20294
3) Water Resistance Test, per FBC, TAS 202-94
4) Forced Entry Test, per FBC, TAS 202-94
along with marked-up drawings and installation diagram of an aluminum casement window, prepared by Hurricane Engineering & Testing Inc., Test Report No. **HETI-96-1075**, dated 10/30/96, signed and sealed by Hector M. Medina, P.E.
"Submitted under NOA#04-0317.02"
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 casement window, prepared by American Test Lab of South Florida, Test Report No. **ATL-0109.01-04**, dated 01/19/04, signed and sealed by Henry Hattem, P.E.
"Submitted under NOA#04-0317.02"
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 casement window, prepared by Hurricane Engineering & Testing Inc., Test Report No. **HETI-03-1791** dated 01/17/03, signed and sealed by Rafael E. Droz-Seda, P.E.
"Submitted under NOA#04-0317.02"

C. CALCULATIONS

1. Anchor verification calculations, complying with FBC 2004, dated 07/08/05, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit, P.E.
Complies with ASTM E 1300-98

D. QUALITY ASSURANCE BY:

1. Miami Dade Building Code Compliance Office (BCCO)

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **01-1204.01** issued to E.I. DuPont DeNemours for their "Sentry ® Plus" dated 1/17/02, expiring on 1/14/07.


Manny Perez, P.E.
Product Control Examiner

NOA No 05-0921.06

Expiration Date: June 02, 2008

Approval Date: April 13, 2006

K.D. Windows, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS

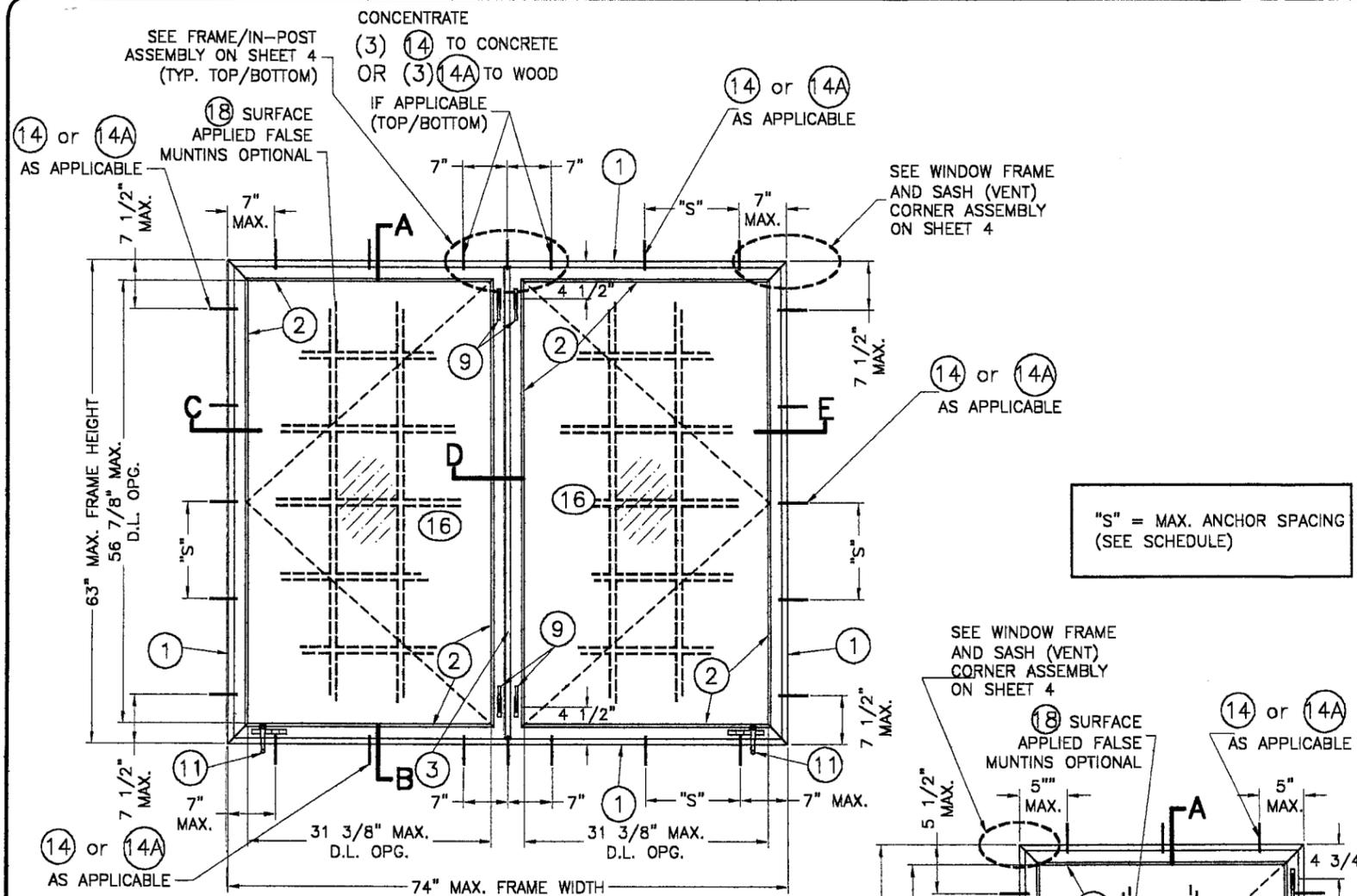
1. Statement letter of conformance, dated 08/16/05, signed and sealed by Walter A. Tillit, P.E.
"Submitted under NOA#04-0317.02"

G. OTHER

1. Notice of Acceptance No. **04-0317.02**, issued to K.D. Window, Inc., for their Series 625 Casement Window-Impact, approved on 08/12/04 and expiring on 06/02/08.



Manny Perez, P.E.
Product Control Examiner
NOA No 05-0921.06
Expiration Date: June 02, 2008
Approval Date: April 13, 2006



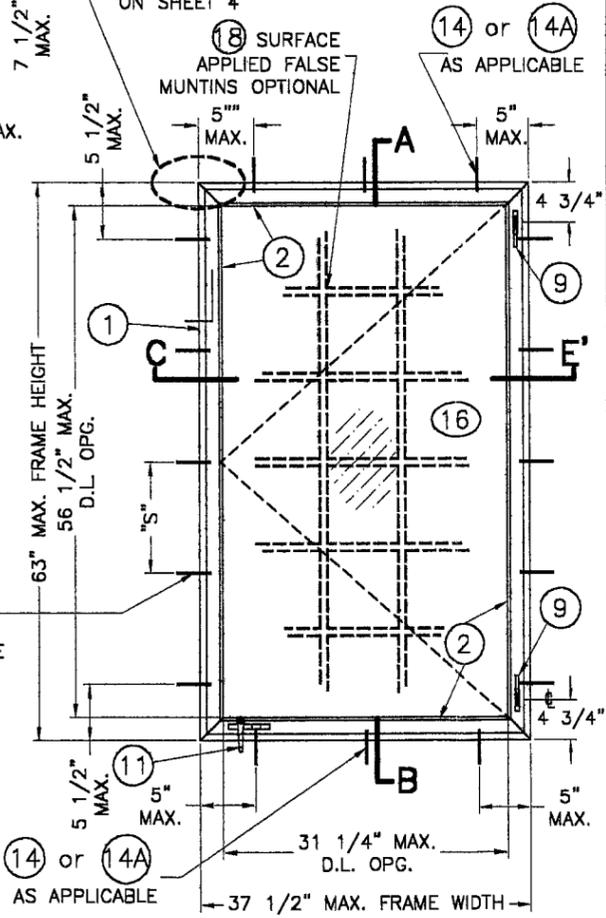
SERIES 400 DOUBLE CASEMENT WINDOW-LARGE MISSILE IMPACT RESISTANT (INTERIOR ELEVATION)
SCALE: NTS.

MAXIMUM DESIGN PRESSURE RATING VERSUS WINDOW SIZE VERSUS GLASS TYPE SCHEDULE

DESIGN PRESSURE RATING	MAX. FRAME WIDTH		MAX. FRAME HEIGHT		GLASS TYPE
	SINGLE CASEMENT	DOUBLE CASEMENT	SINGLE CASEMENT	DOUBLE CASEMENT	
+65, -75	37 1/2"	74"	63"	63"	(16)

MAX. ANCHOR SPACING SCHEDULE

LOCATION	ANCHOR TYPE	DOUBLE CASEMENT			SINGLE CASEMENT		
		"S"			"S"		
		CONCRETE	BLOCK	WOOD	CONCRETE	BLOCK	WOOD
SILL & HEAD	14	11 1/2"	11 1/2"	-	13 1/2"	13 1/2"	-
	14A	-	-	11 1/2"	-	-	13 1/2"
JAMBS	14	13"	13"	-	13"	13"	-
	14A	-	-	13"	-	-	13"



SERIES 400 SINGLE CASEMENT WINDOW-LARGE MISSILE IMPACT RESISTANT (INTERIOR ELEVATION)
NTS.

GENERAL NOTES AND SPECIFICATIONS:

- SERIES 400 DOUBLE & SINGLE CASEMENT WINDOW-LARGE MISSILE IMPACT RESISTANT, SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P. A. D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2004 EDITION OF THE FLORIDA BUILDING CODE. WINDOW MAY BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES. 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. A DURATION FACTOR $C_d = 1.60$ WAS USED TO VERIFY FASTENERS IN WOOD. THIS WINDOW'S ADEQUACY FOR IMPACT AND CYCLIC RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1609.1.4 OF THE ABOVE MENTIONED CODE AS PER TAS-201, TAS-202, TAS-203 AS PER LAB REPORTS # HETI 03-1791, HETI 96-1075 & ATL 0109.01-04 AND AS PER SUBMITTED STRUCTURAL CALCULATIONS, PERFORMED AS PER SECTION 1612 OF THE FLORIDA BUILDING CODE.
- ALL ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ASSOCIATION 6063-T6 ALLOY AND TEMPER (UNLESS OTHERWISE NOTED), WITH $F_y = 25.0$ ksi MINIMUM. THE THICKNESS OF ALL EXTRUSIONS SHALL BE AS SHOWN ON THIS DRAWING.
- 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 WITH 50 ksi YIELD POINT AND 90 ksi TENSILE STRENGTH.
- WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE BUILDING STRUCTURE. WOOD BUCKS MUST BE SOUTHERN PINE, $G = 0.55$. WOOD BUCKS NOT BY K.D. WINDOWS, INC., MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.
- ANCHOR NOTES: ANCHORS TO WALL SHALL BE AS FOLLOWS:
 (A) TO EXISTING POURED CONCRETE: (Min. $f'_c = 3$ ksi)
 - 1/4" TAPCON ANCHORS 1 1/4" MIN. EMBEDMENT, AS MANUFACTURED BY ELCO TEXTRON (COMPONENT (14)), THRU 1" P.T. WOOD BUCK.
 (B) TO EXISTING CONCRETE BLOCK WALL:
 - 1/4" TAPCON ANCHORS W/ 1 1/4" MIN. EMBEDMENT, AS MANUFACTURED BY ELCO TEXTRON (COMPONENT (14)), THRU 1" P.T. WOOD BUCK.
 (C) TO EXISTING 2" P.T. WOOD BUCK:
 - #14 WOOD SCREWS (NON CORROSIVE) W/ 1 1/2" MIN. EMBEDMENT (COMPONENT (14A))
- PROVIDE 1/4" MAX. SHIM SPACE (TYP.).
- THIS WINDOW WILL NOT REQUIRE A HURRICANE PROTECTION DEVICE.**
- PROVIDE SCHNEE MOREHEAD SEAM SEALER SM5504 SEALANT (TYP.) AT ALL FRAME AND SASH (VENT) JOINTS.
- REMAIN COMPONENTS FOR THIS WINDOW'S SYSTEM SHALL BE AS INDICATED ON BILL OF MATERIALS, SHEET 3 OF THIS DRAWING.
- WINDOW'S MANUFACTURER LABEL SHALL BE PLACED ON THE EXPOSED SURFACE OF PROFILES (1) OR (2). ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABEL SHALL READ AS FOLLOWS:
 K.D. WINDOWS, INC.
 RIVIERA BEACH, FLORIDA
 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) THIS P.A.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

Handwritten signature and date: 8/16/05

PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No 05-0921.06
 Expiration Date JUNE 2, 2008
 By *Manuel Perez*
 Miami-Dade Product Control Division

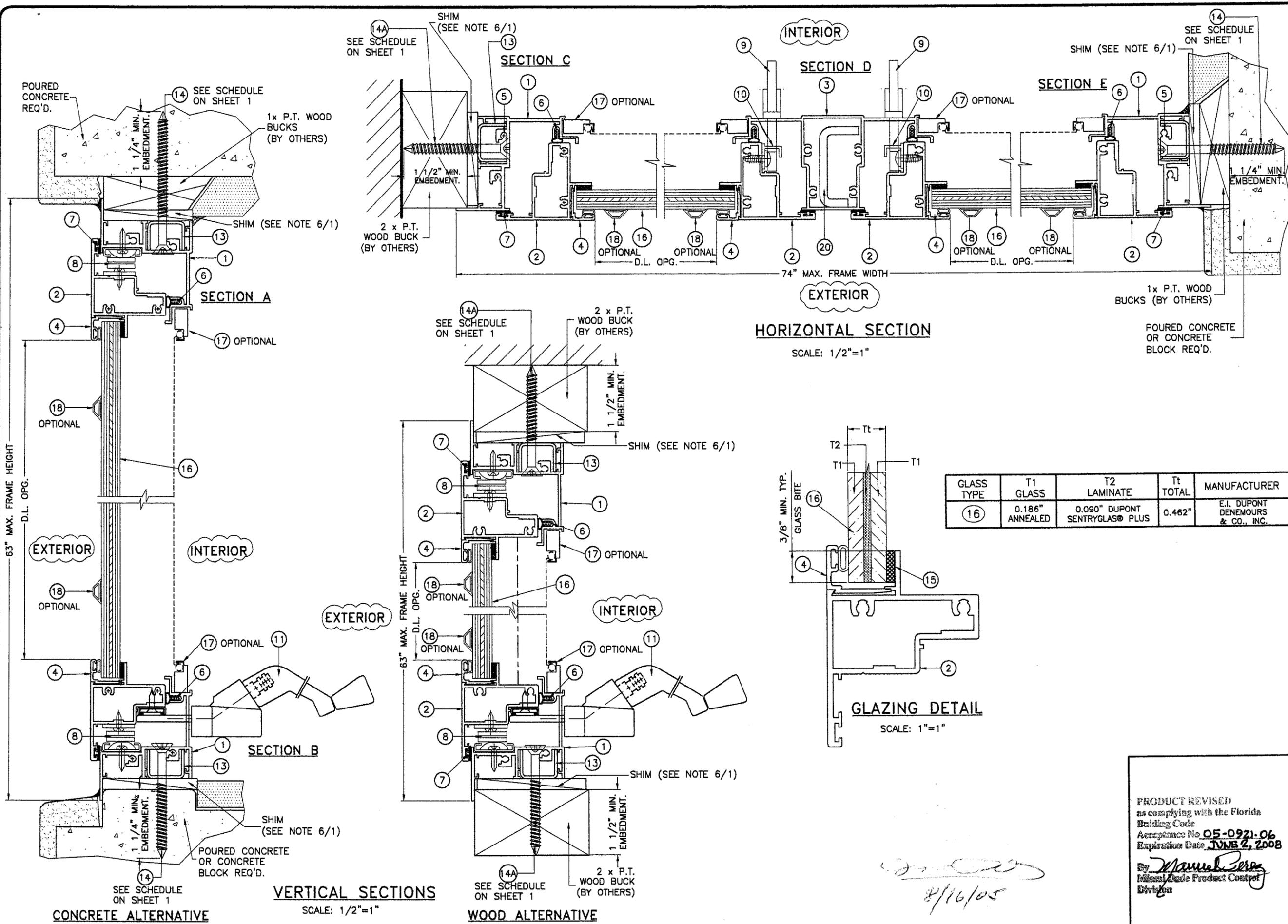
K.D.WINDOWS, INC.
 3705 SHARES PLACE
 RIVIERA BEACH, FLORIDA 33404

SERIES 400 CASEMENT WINDOW-LARGE MISSILE IMPACT RESISTANT

TILECO INC.
 TILLIT TESTING & ENGINEERING COMPANY
 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
 Phone : (305)871-1530 Fax : (305)871-1531
 EB-0006719
 WALTER A. TILLIT, Jr., P. E.
 FLORIDA LIC. # 44167

NO.	DATE	REVISION
1	8/15/05	
2		

DATE: 8/15/05
 DRAWN BY: J.J.V.
 DWG. No.: 05-246
 SHEET 1 OF 4



GLASS TYPE	T1 GLASS	T2 LAMINATE	Tt TOTAL	MANUFACTURER
(16)	0.186" ANNEALED	0.090" DUPONT SENTRYGLAS® PLUS	0.462"	E.I. DUPONT DENEMOURS & CO., INC.

K.D.WINDOWS, INC.
 3705 SHARES PLACE
 RIVIERA BEACH, FLORIDA 33404

SERIES 400 CASEMENT WINDOW—LARGE MISSILE IMPACT RESISTANT

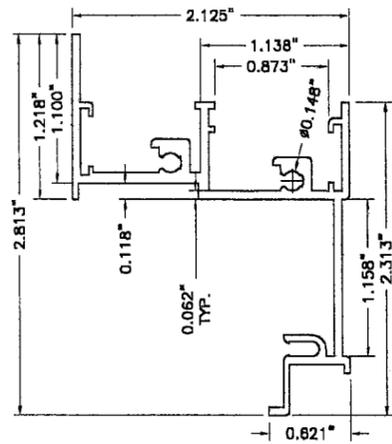
TILECO INC.
 TILLIT TESTING & ENGINEERING COMPANY
 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
 Phone : (305)871-1530 . Fax : (305)871-1531
 EB-0006719
 WALTER A. TILLIT JR., P. E.
 FLORIDA Lic. # 44167

PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No. **05-0921-06**
 Expiration Date **JUNE 2, 2008**
 By *Manuel Perez*
 Miami Code Product Control Division

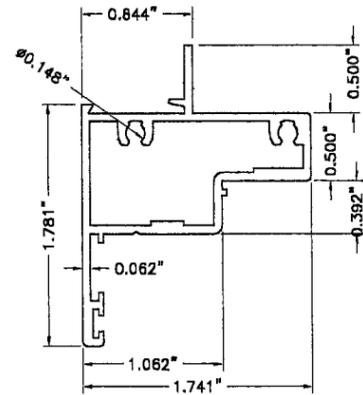
8/16/05

NO.	DATE	REVISION
1	8/15/05	
2		

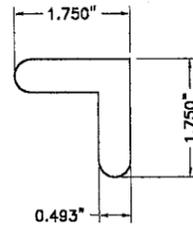
DATE: 8/15/05
 DRAWN BY: J.J.V.
 DWG. No.: 05-246
 SHEET 2 OF 4



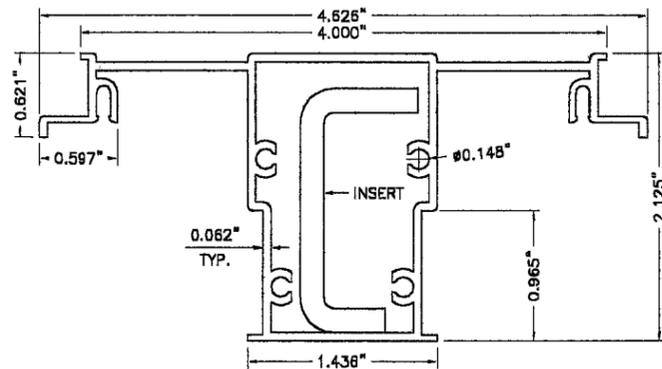
① WINDOW FRAME
(SILL, HEAD & JAMS)



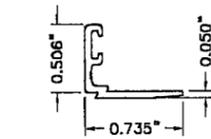
② SASH (VENT) FRAME
(BOTTOM RAIL, STILES & TOP RAIL)



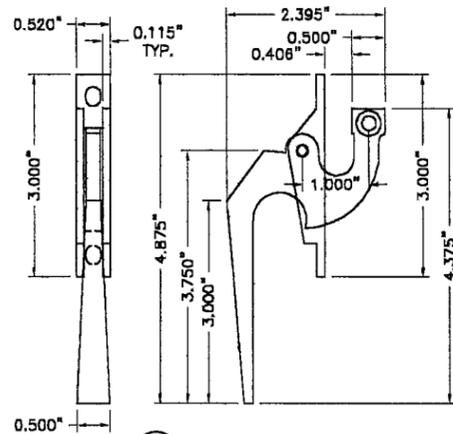
⑫ CORNER KEY
.057 THICK ST. STEEL



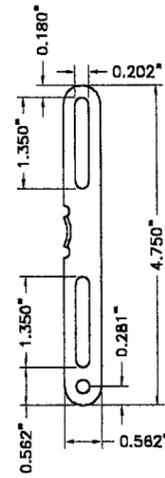
③ IN-POST



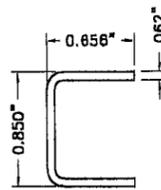
④ GLAZING STOP



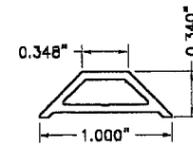
⑨ FACE MOUNT LOCK



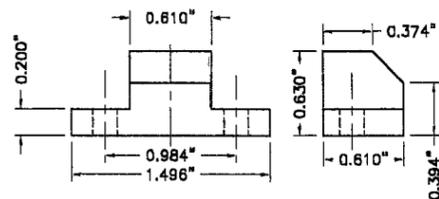
⑩ LOCK ENGAGEMENT
.078" THICK



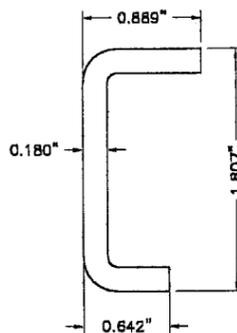
⑬ ANCHOR SHEAR CONNECTOR AT FRAME
2" LONG



⑮ FALSE MUNTIN



⑲ VINYL SNUBBER



⑳ STEEL CHANNEL
(INSERT TO IN-POST)

BILL OF MATERIALS

ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
①	AW-501	4	WINDOW FRAME	6063-T6	-
②	AW-502	4	SASH (VENT) FRAME	6063-T6	-
③	AW-503	1	CENTER POST	6063-T5	-
④	AW-372	AS REQD.	GLAZING STOP	6063-T6	-
⑤	-	AS REQD.	FRAME ASSEMBLY SCREWS	-	#8 x 1" PH S.S. S.M.S.
⑤A	-	AS REQD.	SASH VENT ASSEMBLY SCREWS	-	#10 x 2 1/2" F.H. S.S. S.M.S.
⑥	-	AS REQD.	FRAME WEATHERSTRIPPING	VINYL	-
⑦	-	AS REQD.	VENT WEATHERSTRIPPING	VINYL	-
⑧	-	2/ S. VENT	4 BAR HINGE, AT TOP & BOTTOM	STAINLESS STEEL	TRUTH 35-09 (4) BAR HINGE (4)#10x1/2" P.H. S.M.S. TO HEAD AND SILL & (3)#10x1/2" P.H. S.M.S. TO TOP & BOTTOM RAILS OF SASH (VENT).
⑨	-	2/ S. VENT	FACE MOUNT LOCK	STEEL	ATTACHED TO ③ W/ (2)#10x1/2" P.H. S.M.S.
⑩	-	2/ S. VENT	0.078" THICK LOCK ENGAGEMENT	STEEL	AT SASH VENT FACING LOCK, ATTACHED W/ (4) #10 x 1/2" PH SS SMS TO STILE.
⑪	-	1	CRANK OPERATOR	STEEL	TRUTH, 23-19 ATTACHED W/ (4)#10X1/2" SS SMS
⑫	-	2/CORNER	.057 THICK CORNER KEY	S.S.	AISI 304 SERIES
⑬	-	AS REQ'D	ANCHOR SHEAR CONNECTOR AT FRAME	ALUMINUM	AT IMPOST LOCATION ON XX WINDOWS ONLY
⑭	-	AS REQD.	1/4" Ø TAPCON ANCHORS (SEE NOTE 5A, 5B/1)	STEEL	USE TO CONCRETE, OR CONCRETE BLOCK WALL, THRU 1/4" MAX. SHIM + 1 x PT. WOOD BUCK W/ 1 1/4" MIN. EMBEDMENT.
⑭A	-	AS REQD.	#14 FH WOOD SCREWS (NON CORROSIVE)(SEE NOTE 5C/1)	STEEL	USE TO 2 x PT. WOOD BUCK (BY OTHERS), THRU 1/4" MAX. SHIM W/ 1 1/2" MIN. EMBEDMENT.
⑮	-	AS REQD.	DOW CORNING	SILICONE	# 899 OR 1199
⑯	-	AS REQD.	MIAMI-DADE COUNTY APPROVED GLASS	3/16" NOMINAL(0.188") ANNEALED GLASS 0.090" DUPONT SENTRYGLAS® PLUS INTERLAYER 3/16" NOMINAL(0.188") ANNEALED GLASS =7/16" (0.462") TOTAL THICKNESS.	7/16" NOMINAL LAMINATED GLASS E.I. DUPONT DENEMOURS & CO., INC. (SEE GLAZING DETAIL ON SHEET 2)
⑰	-	AS REQD.	SCREEN	-	-
⑱	-	AS REQD.	FALSE MUNTIN	6063-T6	-
⑲	-	3	VINYL SNUBBER @ 2 PER HINGE STILE & @ 2 PER JAMB MATCHING HINGE STILE	POLY VINYL	BY MM PLASTIC. INSTALLED 5" FROM TOP & BOTTOM OF FRAME W/(2)#12x1/2" P.H. S.M.S.
⑳	-	AS REQ'D	STEEL CHANNEL IN-POST REINFORCEMENT	STEEL	ASTM A-36, G-60 GALVANIZED OR ZINC PLATED

K.D.WINDOWS, INC.

3705 SHARES PLACE
RIVIERA BEACH, FLORIDA 33404

SERIES 400 CASEMENT
WINDOW-LARGE MISSILE
IMPACT RESISTANT

TILECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)971-1530 Fax : (305)971-1531
EB-0006719
WALTER A. TILLIT, JR., P. E.
FLORIDA Lic. # 44167

0.D. 03-086

NO.	DATE	REVISION
1	8/15/05	
2		

DATE: 8/15/05
DRAWN BY: J.J.V.
DWG. No.: 05-246
SHEET 3 OF 4

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 05-0921-06
Expiration Date JUNE 2, 2008
By *Manuel Perez*
Miami Trade Product Control
Division

8/16/05

