(ENGINEER'S) SUBMITTAL DATA

MODEL WLF-DA15: 6" DEEP FIXED HURRICANE LOUVER

MIAMI-DADE, FLORIDA, NOA NO. 15-0218.08 EXPIRATION DATE: JUNE 30, 2020 APPROVAL DATE: JUNE 25, 2015

MAXIMUM DESIGN PRESSURE RATING

SINGLE UNIT: +/- 140.0 PSF MULTIPLE UNIT: +/- 140.0 PSF

PRODUCT APPROVAL IS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AS OF 6/10/2010. DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTIONS 1619 AND 1620 OF 2007 FLORIDA BUILDING CODE AND ALSO SHALL BE IN ACCORDANCE WITH ASCE-7.

APPLICATIONS

THE MODEL WLF-DA15 IS A STATIONARY LOUVER DESIGNED TO PROTECT EITHER EXHAUST OR INTAKE OPENINGS IN A BUILDINGS EXTERIOR WALLS. THIS LOUVER HAS BEEN REVIEWED BY THE MIAMI-DADE COUNTY FLORIDA PRODUCT CONTROL DIVISION AND ACCEPTED BY THE BOARD OF RULES AND APPEALS (BORA) TO BE USED IN HIGH VELOCITY HURRICANE ZONES (HVHZ) AS WELL AS OTHER REGIONS AS LONG AS THEY DO NOT EXCEED THE \pm 140 PSF RATING. THE LOUVER HAS ALSO BEEN TESTED TO PROVIDE LARGE MISSLE IMPACT RESISTANCE AND IS CONSTRUCTED OF ALUMINUM TO RESIST OXIDATION.

STANDARD CONSTRUCTION

FRAME:

6063T5 EXTRUDED ALUMINUM NOMINAL WALL THICKNESS OF 0.081" UNIVERSAL 1.5" FLANGE WITH A 4" DEEP FRAME CAULKING SURFACE PROVIDED

6063T5 EXTRUDED ALUMINUM NOMINAL WALL THICKNESS OF 0.081" BLADES ARE POSITIONED AT 45 DEG. ANGLE SPACED AT APPROX. 4" CENTERS

BIRD SCREEN: 3/4" X .051" EXPANDED ALUMINUM BIRD SCREEN RÉMOVABLE FRAME REAR (INSIDE) MOUNTING POSITION

FINISH:

MILL ALUMINUM (STANDARD) SKY WHITE POWDER COAT (100% POLYESTER) AVAILABLE FOR ADDITIONAL FEE

MINIMUM SIZE**: 10"W X 10"H

MAXIMUM SIZE**:

- •60"W X 96"H SINGLE SECTION
- •60"W X 192"H TWO SINGLE SECTION STACKED WITH A HORIZONTAL MULLION
- ·LARGER SIZES CAN BE MADE USING UP TO THREE 60"W X 96"H SECTIONS WITH VERTICLE MULLIONS

APPROXIMATE SHIPPING WEIGHT: 10 LBS/SQ. FT. (49 KG/SQ. M.)

OPTIONS: (AT ADDITIONAL COST)

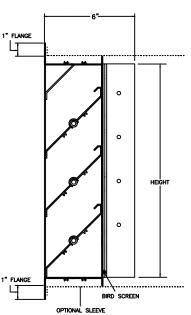
□ INSECT SCREEN SKY WHITE POWDER COAT BY DUPONT (100% POLYESTER)

□ 11" DEEP X .125 ALUMINUM SLEEVE

INSTALLATION:

MUST COMPLY WITH INSTRUCTIONS TO MEET MIAMI-DADE PRODUCT STANDARDS.

**NOTE: ACTUAL WIDTH AND HEIGHT DIMENSIONS ARE APPROXIMATELY 1/4" LESS THAN LISTED TO ALLOW FOR CLEARANCE



MIDTH.

FEATURES

HEAVY EXTRUDED ALUMINUM PROVIDES SUPERIOR PROTECTION FROM LARGE, WIND-BOURNE MISSILE IMPACT.

ONE VERTICLE CENTER REINFORCEMENT ADDED AFTER 30"W TO PROVIDE ADDITIONAL SUPPORT.

LOUVER DESIGNED FOR LOCATIONS THAT DRAIN WATER WHICH HAS PENETRATED THE ROOM. THE ROOM SHOULD HOUSE WATER RESITANT OR WATER PROOF EQUIPMENT, COMPONENTS AND/OR SUPPLIES.

FLANGED FACE ALLOWS FOR INSTALLATION IN ANY WALL THICKNESS, AND ANY MATERIAL SUBSTRATE.

2" EXTENDED JAM WITH PREDRILLED HOLES TO ALLOW MULTIPLE ANCHORAGE LOCATIONS.

MAXIMUM SINGLE UNIT DIMENSIONS ARE 60"W X 96"H. FOR LARGER OPENINGS, LOUVERS CAN BE COMBINED USING OUR APPROVED ALUMINUM MULLIONS.

PERFORMANCE RATINGS BASED ON TESTING IN ACCORDANCE WITH FLORIDA BUILDING CODES TAS 201, 202, AND 203.

JOB NAME:	_
LOCATION:	
ARCHITECT:	
ENGINEER:	
CONTRACTOR:	
CONTACT GRILLE TECH INC. FOR ADDITIONAL INFORMATION OR WITH	

5101 NW 36TH AVE MIAMI, FL 33142 PHONE: 305-537-0053 FAX: 305-577-0064

WEB: WWW.GRILLETECHINC.COM EMAIL: SALES@GRILLETECHINC.COM

WLF-DA15

ALUMINUM WALL LOUVER SYSTEM **ENGINEER'S SUBMITTAL DATA**

्रितिते Grille tech inc.									
DRAWN BY: CG	DATE 06/30/10	NOT TO SCALE	DRAWING ND. $M = D \Delta 15$						
CHECKED BY:	DATE 06/29/15	REVISION 03	WLF-DAIS						

NOTE: ALL DRAWINGS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



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 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

Grille Tech, Inc. 5101 NW 36 Avenue Miami, FL 33142

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: Model WLF-DA15 Aluminum Louver

APPROVAL DOCUMENT: Drawing No. **0551-0402-10**, titled "WLF-DA15 Aluminum Wall Louver", sheets 1 through 6 of 6, dated 04/30/09, with revision 1 dated 02/10/2015, prepared by Wolters Engineering, Inc, signed and sealed by Scott Wolters, 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, and the 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 renews and revises NOA # 10-0518.05 and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by Carlos M. Utrera, P.E.

MIAMI-DADE COUNTY
APPROYED

106/16/2015

NOA No. 15-0218.08 Expiration Date: June 30, 2020 Approval Date: June 25, 2015

Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **0551-0402-10**, titled "WLF-DA15 Aluminum Wall Louver", sheets 1 through 6 of 6, dated 04/30/09, with revision 1 dated 02/10/2015, prepared Wolters Engineering, Inc, signed and sealed by Scott Wolters, P.E.

B. TESTS "Submitted under NOA # 10-0518.05"

- 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 WLF-DA15 Aluminum Louver Systems", prepared by Hurricane Test Laboratory, Inc., Report No. **0551-0204-10**, dated 04/30/2010, signed and sealed by Vinu J. Abraham, P.E.

C. CALCULATIONS "Submitted under NOA # 10-0518.05"

1. Anchor verification calculations and structural analysis prepared by Wolters Engineering, Inc, dated 05/12/2010, signed and sealed by Scott Wolters, P.E.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Statement letter of code conformance with 2010 and 5th edition (2014) FBC issued by Wolters Engineering, Inc, dated 05/20/2015, signed and sealed by Scott Wolters, P.E.

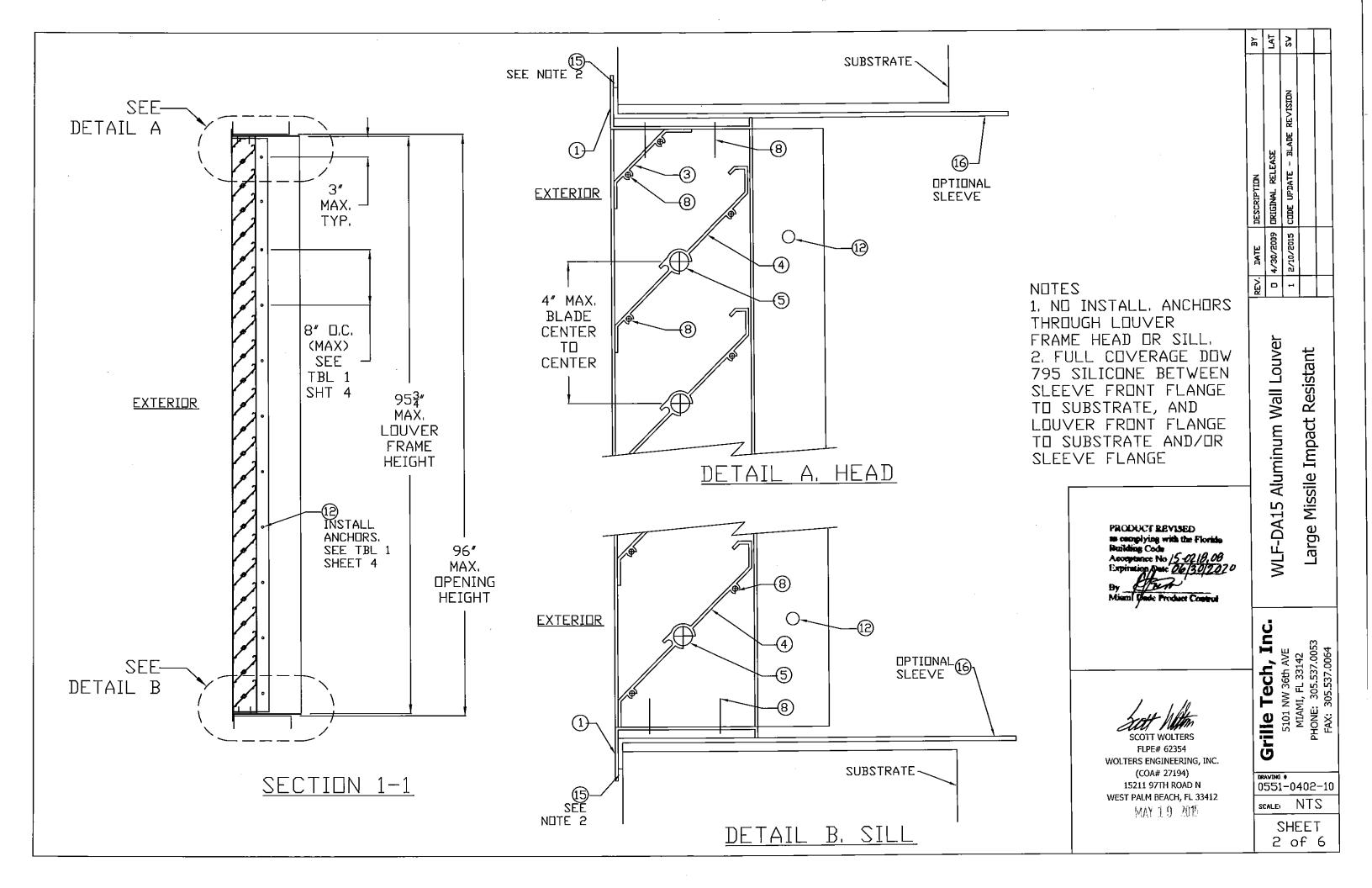
"Submitted under NOA # 10-0518.05"

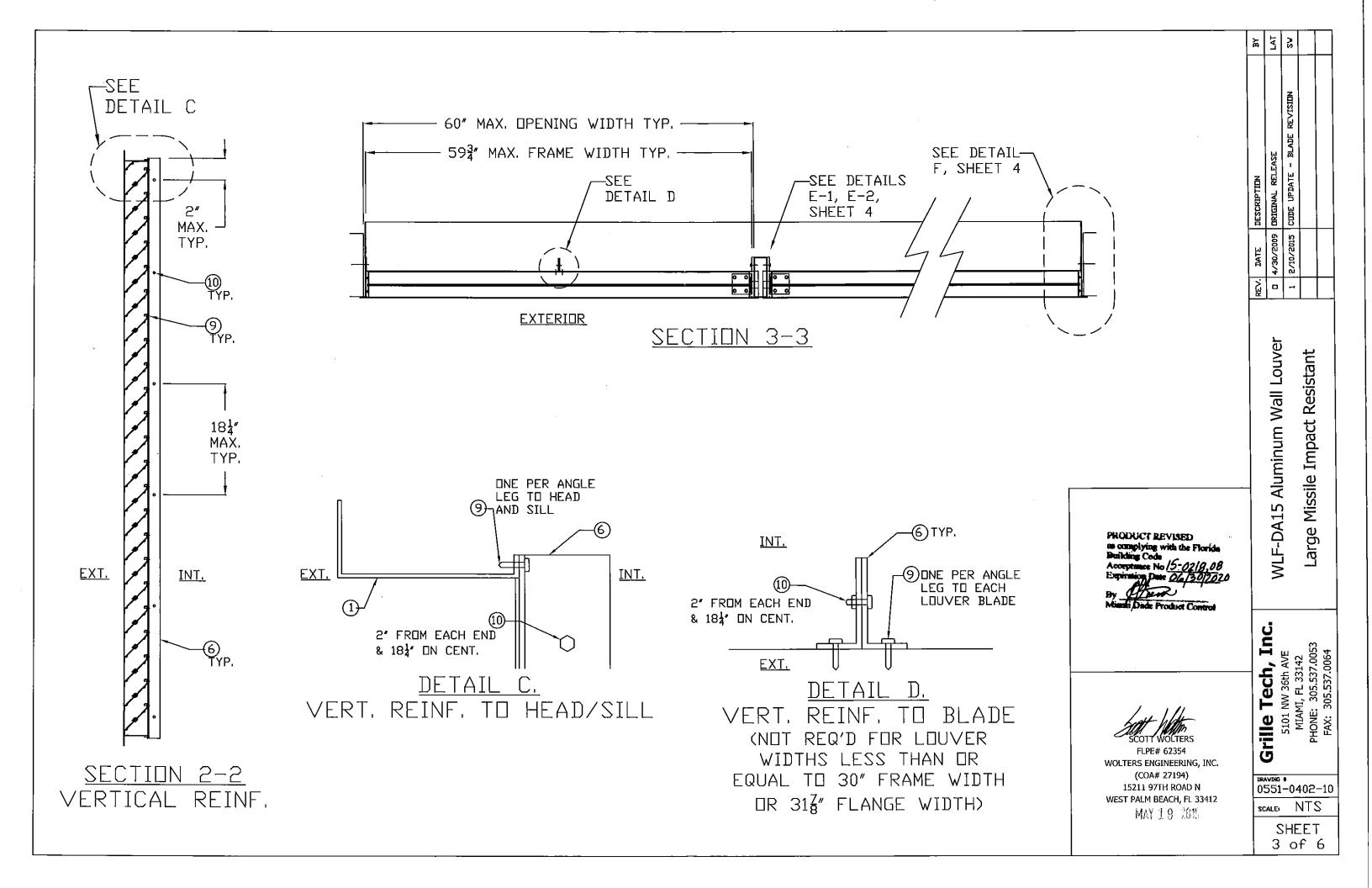
- 2. No financial interest letter issued by Wolters Engineering, Inc, dated 10/13/2009, signed and sealed by Scott Wolters, P.E.
- 3. Code compliance letter issued by Hurricane Test Laboratory, Inc., dated 04/29/2010, signed and sealed by Vinu J. Abraham, P.E.

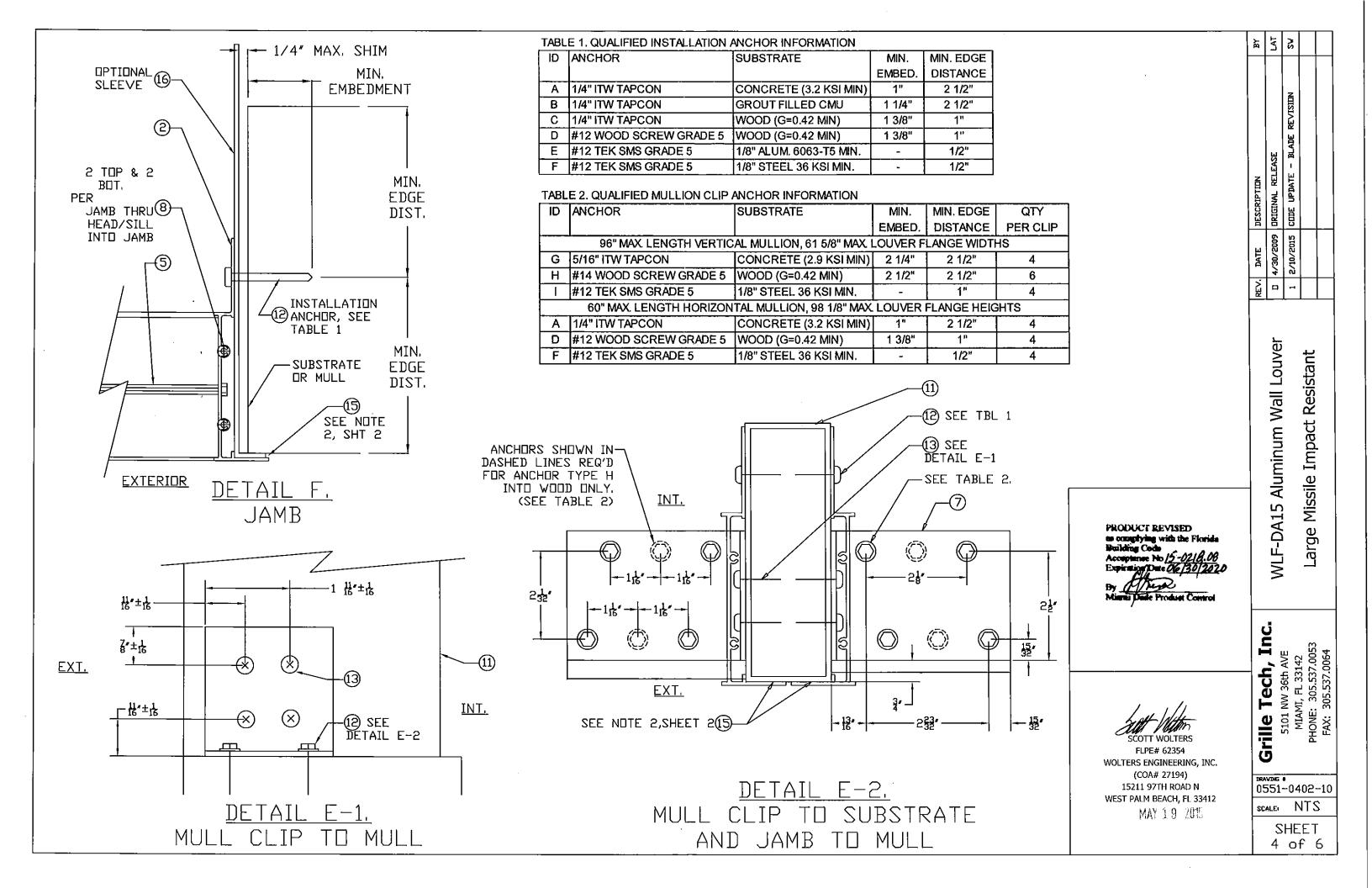
Carlos M. Utrera, P.E. Product Control Examiner NOA No. 15-0218.08 Expiration Date: June 30, 2020

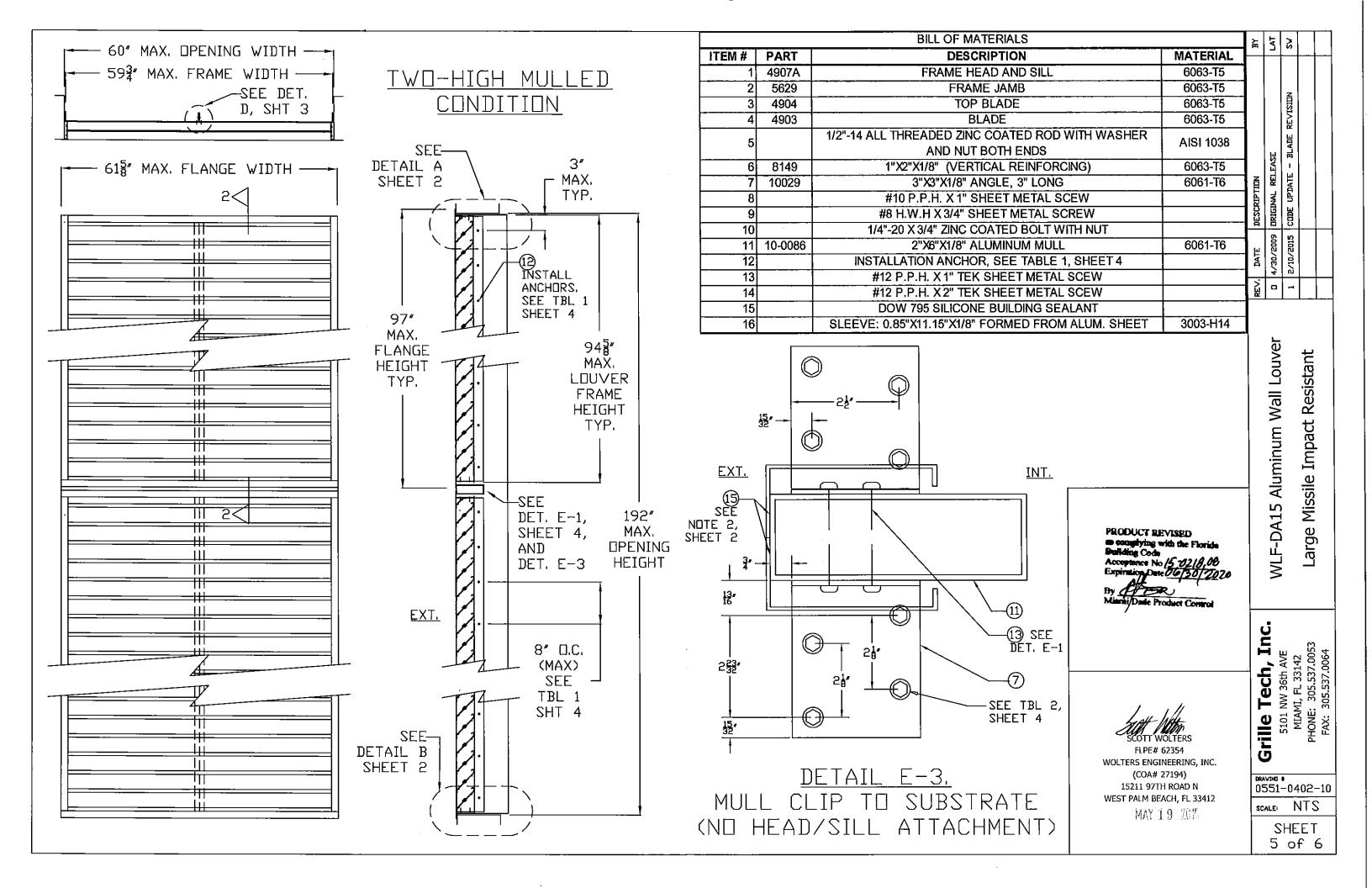
Approval Date: June 25, 2015

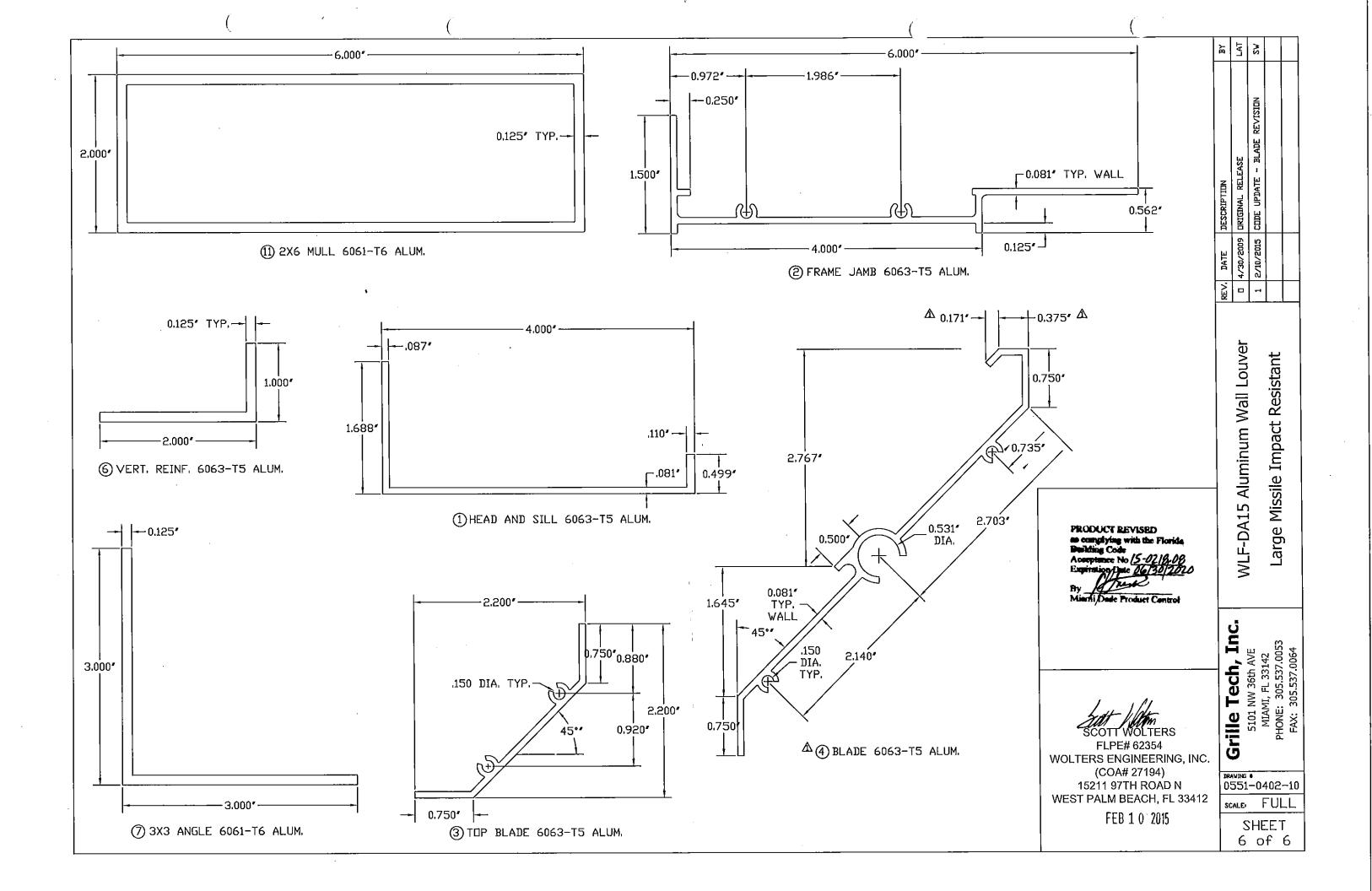
GENERAL NOTES	INDEX FIGURE SHEET DESCRIPTION							
GENERAL NOTES 1. THIS ALUMINUM WALL LOUVER PRODUCT IS LARGE MISSILE IMPACT RESISTANT AND DOES NOT REQUIRE 1. THIS ALUMINUM WALL LOUVER PRODUCT IS LARGE MISSILE IMPACT RESISTANT AND DOES NOT REQUIRE 1. THIS ALUMINUM WALL LOUVER PRODUCT IS LARGE MISSILE IMPACT RESISTANT AND DOES NOT REQUIRE 2. SECTIONS, DETAILS 2. SECTIONS, DETAILS 4. DETAILS, ANCHOR TABLE 5. TWO-HIGH DETAILS, BOMN 5. THIS LOUVER PRODUCT IS NOT TESTED FOR WATER INFILTRATION RESISTANCE. THESE LOUVERS ARE 10. BE INSTALLED IN A LOCATION WHERE THE ROOM BEHIND THE LOUVER IS DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM, AND THE ROOM WILL HOUSE WATER RESISTANT / WATER PROOF EQUIPMENT, COMPONENTS, OR SUPPLIES. 4. THE STRUCTURAL ADEQUACY AND SUITABLITY OF THE WOOD BUCKS OR OTHER SUBSTRATES TO WHICH THE LOUVER SYSTEM IS TO BE INSTALLED SHALL BE VERIFIED BY A LICENSED ENGINEER OR REGISTERED ARCHITECT OR AS APPROVED BY THE AUTHORITY HAVING JURISDICTION. 5. AN ALLOWABLE STRESS INCREASE HAS NOT BEEN USED IN THE ANCHOR ANALYSIS FOR THIS SYSTEM. 4. WHERE DISSIMILAR MATERIALS OF ANY TYPE (LOUVER SYSTEM, ANCHORAGE, OR SUBSTRATE) COME IN CONTACT, THE MATERIALS MUST BE PROPERLY COATED OR OTHERWISE PROTECTED AS REQUIRED BY FBC AND ADM-1-2010 TO PREVENT GALVANIC REACTIONS. SPECIAL WITH PROPER COATING OR MATERIAL TYPES TO PREVENT REACTIONS WITH LOUVERS OR SUBSTRATES. 7. MINIMUM LOUVER SIZE IS 10' X 10' 8. LOUVERS MAY BE USED IN SINGLE UNIT CONFIGURATION, DOUBLE WIDE OR TRIPLE WIDE MULLED, OR DOUBLE HIGH MULLED CONFIG. 9. THE MAXIMUM DESIGN PRESSURE OF THIS LOUVER SYSTEM IS + / - 140.0 P.S.F.								
PRES +/-12 3	Acceptance No./5*07.10, 08 Expiration/Date 06/30/2020							
MAX. FLANGE HEIGHT HEIGHT ANCHORS, SEE TABLE SHEET 4 3" MAX. FRO CORNERS TYP. 1 2 2 HORIZONTAL MULLED CONDITION (SEE NOTE 8)	ITIE Technology Stoll NW 36th MIAMI, FL 33 PHONE: 305.537 FAX: 305.537							













WLC, WLF, and WLF-DA Wall Louvers

Free Area (Square Feet)

WIDTH

SIZE	12"	16"	20"	24"	28"	32"	36"	40"	44"	48"	52"	56"	60"
12"	.2	.3	.4	.4	.5	.6	.7	.8	.9	1.0	1.1	1.1	1.2
16"	.3	.4	.5	.7	.9	1.0	1.2	1.2	1.4	1.6	1.7	1.8	2.0
20"	.5	.6	.8	1.0	1.2	1.4	1.5	1.8	2.0	2.2	2.3	2.5	2.6
24"	.7	.9	1.1	1.3	1.5	1.7	1.9	2.3	2.5	2.8	3.0	3.2	3.5
28"	.8	1.0	1.3	1.6	1.9	2.2	2.5	2.8	3.1	3.6	3.7	4.0	4.2
32"	.8	1.2	1.5	1.9	2.2	2.6	2.9	3.3	3.6	3.9	4.3	4.6	5.0
36"	.9	1.4	1.8	2.2	2.6	2.9	3.3	3.7	4.1	4.5	5.0	5.3	5.7
40"	1.1	1.5	1.9	2.4	2.9	3.3	3.8	4.2	4.7	5.1	5.6	6.1	6.5
44"	1.2	1.6	2.2	2.7	3.2	3.7	4.3	4.8	5.6	5.7	6.2	6.9	7.2
48"	1.3	1.9	2.5	3.0	3.6	4.1	4.7	5.6	5.8	6.3	6.9	7.5	8.0
52"	1.5	2.1	2.7	3.3	3.9	4.5	5.1	5.7	6.3	6.9	7.5	8.1	8.7
56"	1.6	2.4	2.9	3.6	4.3	4.9	5.6	6.2	6.9	7.5	8.2	8.8	9.5
60"	1.7	2.5	3.2	3.9	4.6	5.3	6.0	6.7	7.4	8.1	8.8	9.6	10.3
64"	1.8	2.6	3.4	4.1	4.9	5.6	6.4	7.2	8.0	8.7	9.5	10.2	11.0
68"	1.9	2.8	3.6	4.4	5.2	6.1	6.9	7.7	8.5	9.3	10.1	10.9	11.8
72"	2.1	3.0	3.8	4.7	5.6	6.5	7.3	8.2	9.0	10.0	10.8	11.6	12.6
76"	2.2	3.2	4.1	5.0	5.9	6.8	7.7	8.7	9.6	10.5	11.4	12.3	13.3
80"	2.4	3.3	4.3	5.3	6.2	7.2	8.2	9.2	10.1	11.1	12.1	13.1	14.0
84"	2.5	3.5	4.5	5.5	6.6	7.6	8.6	9.6	10.7	11.7	12.7	13.7	14.7
88"	2.5	3.7	4.8	5.8	6.9	8.0	9.1	10.1	10.9	12.3	13.4	14.4	15.5
92"	2.7	3.9	5.0	6.2	7.3	8.4	9.5	10.6	11.8	12.9	14.0	15.1	16.4
96"	2.9	4.1	5.2	6.4	7.6	8.8	10.1	11.1	12.3	13.5	14.6	15.7	16.9

THUITH