

Nemo etc.

Certificate of Authorization #32455 353 Christian Street, Unit #13 Oxford, CT 06478 (203) 262-9245

ENGINEER EVALUATE TEST CONSULT

EVALUATION REPORT

Altenloh, Brinck & Co. U.S., Inc. 02105 Williams County Road 12-C Bryan, OH 43506

Evaluation Report A32570.05.12-R2

FL4500-R5

Date of Issuance: 05/15/2012

Revision 2: 05/27/2020

SCOPE:

This Evaluation Report is issued under **Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code. The product described herein has been designed to comply with the **6th Edition (2017) Florida Building Code** sections noted herein.

DESCRIPTION: Trufast Roof Fastening Components

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein.

CONTINUED COMPLIANCE: This Evaluation Report is valid until the named product(s) changes, the referenced Quality Assurance documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. of any changes to the product(s), the Quality Assurance, or the production facility location(s). NEMO|etc. requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Evaluation Report number preceded by the words "NEMO|etc. Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

INSPECTION: Upon request, a copy of this entire Evaluation Report 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 Evaluation Report consists of pages 1 through 8.

Prepared by:

Robert J.M. Nieminen, P.E.

Florida Registration No. 59166, Florida DCA ANE1983

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The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 05/27/2020. This does not serve as an electronically signed document.

CERTIFICATION OF **I**NDEPENDENCE:

- 1. NEMO ETC, LLC does not have, nor does it intend to acquire, or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
- 2. NEMO ETC, LLC is not owned, operated, or controlled by any company manufacturing or distributing products it evaluates.
- 3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the evaluation reports are being issued.
- 4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
- 5. This is a building code evaluation. Neither NEMO | etc. nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

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ROOFING COMPONENT EVALUATION:

1. SCOPE:

Product Category: Roofing

Sub-Category: Roofing Fasteners

Compliance Statement: Trufast Roof Fastening Components, as produced by Altenloh, Brinck & Co. U.S., Inc., have demonstrated compliance with the Florida Building Code through testing in accordance with the Standards set forth herein. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

Sections	<u>Property</u>	Standard	<u>Year</u>
1506.6, 1513.1, 1520.4	Corrosion Resistance	TAS 114(E)	1995
1520.4	Withdrawal & Rupture	TAS 117(A), (B), (C)	1995

3. REFERENCES:

<u>Entity</u>	<u>Examination</u>	<u>Reference</u>	<u>Date</u>
ERD (TST 6049)	Withdrawal & Rupture	4670.10.95-1	10/01/1995
ERD (TST 6049)	Withdrawal & Rupture	4670.07.97-1	07/01/1997
ERD (TST 6049)	Withdrawal & Rupture	4670.03.01-1	09/20/2001
ERD (TST 6049)	Withdrawal	E1060.03.06	03/14/2006
ERD (TST 6049)	Rupture	EO8950.03.08-1	03/28/2008
ERD (TST 6049)	Withdrawal & Rupture	A35880.04.12	04/03/2012
FM (TST 1867)	Withdrawal	0V7A4.AM	06/10/1992
FM (TST 1867)	Corrosion Resistance	0W4A1.AM	01/07/1993
FM (TST 1867)	Withdrawal	3030926	08/07/2007
FM (TST 1867)	Corrosion Resistance	3031797	05/19/2008
FM (TST 1867)	Corrosion Resistance	3061446	03/22/2018
FM (TST 1867)	Corrosion Resistance	PR449339	06/01/2018
FM (TST 1867)	Corrosion Resistance	3040205	06/08/2010
FM (TST 1867)	Corrosion Resistance	PR451159	05/09/2019
FM (TST 1867)	Corrosion Resistance	PR451160	03/12/2020
NEMO (TST 6049)	Withdrawal & Rupture	4-AB-18-001.05.18	05/08/2018
FM (QUA 1860)	Quality Assurance	Inspection Report	11/12/2019

4. PRODUCT DESCRIPTION:

4.1 Fasteners:

Part Name	<u>Substrates</u>	<u>Head Style</u>	<u>Drive</u>
Trufast #12 DP	Wood, Steel	Truss	#3 Phillips
Trufast #12 DPH	Wood, Steel	Hex Washer	¼" Hex
Trufast #14 HD	Wood, Steel, Concrete	Truss	#3 Phillips
Trufast #14 HD Stainless Steel Bi-Metal Fastener	Wood, Steel	Truss	#3 Phillips
Trufast #14 Stainless Steel HD	Wood, Steel, Concrete	Truss	#3 Phillips
Trufast #15 EHD	Wood, Steel	Truss	#3 Phillips
Trufast #21 SHD	Wood, Steel	Truss	#3 Phillips
Trufast #12 Purlin Fastener (square drive)	Steel	Pancake	#3 Square
Trufast Fluted Concrete Nail	Concrete	Pan	N/A
Trufast SIP TP Fastener	Wood	Pancake	T-30 6 Lobe
Trufast SIP LD Fastener	Wood, Steel, Concrete	Pancake	T-30 6 Lobe
Trufast SIP HD Fastener	Steel	Pancake	T-30 6 Lobe
Trufast TL	CWF, Gypsum	Round	#4 Square
Trufast Versa-Fast Fastener	Wood, LWC, Gypsum	Lathe	#2 Phillips



4.2 Plates & Bars:

Part Name **Dimensions** Trufast 2" Metal Seam Plate 0.030" x 2" diameter Galvalume® Trufast 2" Barbed Metal Seam Plate 0.030" x 2" diameter Galvalume® Trufast 2.4" Barbed Metal Seam Plate 0.040" x 2.4" diameter Galvalume® Trufast 2.4" Barbed Metal Seam Plate (14 Barb) 0.040" x 2.4" diameter Galvalume® Trufast 2.4" Scoop Seam Plate 0.040" x 2.4" diameter Galvalume® Trufast 2-3/4" Barbed Metal Seam Plate (EHD) 0.040" x 2.75" diameter Galvalume® Trufast 2-3/4" Barbed Metal Seam Plate (SHD) 0.040" x 2.75" diameter Galvalume® Trufast 3" Metal Insulation Plate 0.018" x 3" diameter Galvalume® Trufast 3" Recessed Metal Insulation Plate 0.018" x 3" diameter Galvalume® Trufast TL 3 in. Insulation Plate 0.017" x 3" diameter Galvalume® Trufast PVC IW Plate 0.030" x 3.36" diameter AZ-50 Galvanized steel with a proprietary heatactivated adhesive coating; for use with PVC and KEE membranes. Trufast TPO IW Plate 0.030" x 3.36" diameter AZ-50 Galvanized steel with a proprietary heatactivated adhesive coating; for use with TPO membranes Trufast Versa-Fast Metal Plate 0.017" x 3" diameter Galvalume®; The plate has one center hole and 8 radially placed holes, each having a minimum 0.255-inch diameter. The plate is intended for use with one or more Trufast Versa-Fast Fasteners. Trufast Flat Batten Bar 0.047" x 121" long bar or 220 ft long coil; Galvalume[®]; holes at 6 or 12" o.c. Trufast Recessed Batten Bar 0.047" x 121" long bar; Galvalume[®]; holes at 6 or 12" o.c., recessed 1/8"

4.3 Pre-Assembled Components:

Fie-Assembled Compone	:iit3.	
Part Name	<u>Substrates</u>	Description
Trufast 3" Pre-Assembled	Wood, Steel	Trufast #12 DP with Trufast 3" Metal Insulation Plate or Trufast #12 DPH with
Insulation Plate		Trufast 3" Recessed Metal Insulation Plate
Trufast FM-75 Base Sheet	Aggregate	Two piece factory assembled fastener and plate formed from stamped and
Fastener	lightweight	folded steel. The fastener consists of dual 1.2 in. long rectangular gripping
	concrete, gypsum	legs and a square cap that is formed from 0.013 in. thick G-90 hot dipped
		galvanized steel or cold rolled steel that is coated with a black urethane
		coating. The 2.7 in. diameter plate is formed from 0.013 in. thick Galvalume
		steel. The fasteners are designed for use in minimum 1 in. thick lightweight
		vermiculite, perlite or cellular concrete decks but may be used in sound
		existing poured gypsum decks if they can be driven without damage to the
		fastener or deck. The fasteners are designed to be installed through a base
		sheet into roof decks using a Magnetic Driver or Twin Loc Driver.
Trufast FM-90 Base Sheet	Cellular or	Two piece factory assembled fastener and plate formed from stamped and
Fastener	aggregate	folded steel. The fastener consists of dual 1.7 in. long rectangular gripping
	lightweight	legs and a square cap that is formed from 0.013 in. thick G-90 hot dipped
	concrete, gypsum	galvanized steel or cold rolled steel that is coated with a black urethane
		coating. The 2.7 in. diameter plate is formed from 0.013 in. thick Galvalume
		steel. The fasteners are designed for use in minimum 2 in. thick lightweight
		vermiculite, perlite or cellular concrete decks but may be used in sound
		existing poured gypsum decks if they can be driven without damage to the
		fastener or deck. The fasteners are designed to be installed through a base
		sheet into roof decks using a Magnetic Driver or Twin Loc Driver.

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Pre-Assembled Components:

Part Name Substrates Description Trufast FM-290 Base Two piece factory assembled fastener and plate formed from stamped and Cellular or Sheet Fastener aggregate folded. The fastener consists of tandem dual 1.7 in. long rectangular gripping lightweight legs and a square cap that is formed from 0.013 in. thick G-90 hot dipped concrete, gypsum galvanized steel or cold rolled steel that is coated with a black urethane coating. The rectangular plate is formed from 0.013 in. thick Galvalume steel. The fasteners are designed for use in minimum 2 in. thick lightweight vermiculite, perlite or cellular concrete decks but may be used in sound existing poured gypsum decks if they can be driven without damage to fastener or deck. The fasteners are designed to be installed through a base sheet into roof decks using a Magnetic Driver or Twin Loc Driver. Cementitious Two piece factory assembled fastener and plate formed from stamped and Trufast Insuldeck Loc-Nail

Base Sheet Fastener

wood fiber

Trufast Twin Loc-Nail Assembled Fastener

Cementitious wood fiber. cellular or aggregate lightweight concrete, gypsum folded steel. The fastener consists of a 1-7/8 in. long dual shank and integral head that are formed from 0.022 in, thick Galvalume coated steel. The round 2.7 in. diameter plate is stamped from 0.013 in. thick Galvalume coated steel. The fasteners are designed to be installed through a base sheet or thin insulation into cementitious wood fiber roof decks using an Insuldeck Driver. Two piece factory assembled fastener and plate formed from stamped and folded steel. The fastener consists of a 1.4 in., 1.8 in., 2.8 in., 3.8 in. or 4.8 in. long tapered oval Galvalume or G-90 galvanized steel tube factory assembled to a 2.7 in. diameter Galvalume steel plate and a 0.080 in. diameter carbon or stainless steel locking staple. The fasteners are driven with a Twin Loc-Nail Driver by placing a fastener on the face of the driver with the exposed locking staple positioned in the slot in the face of the driver and driving the fastener into the roof deck with a single impact. A second impact drives the locking staple through the tube/plate assembly until it is flush with the top of the plate, forcing the legs of the locking staple out of the bottom of the tube and into the deck.

Substrate								
Fastener	Min. 19/32" plywood	Min. 22 ga., Grade 50 Steel	Min. 2,500 psi concrete	Min. ¹ / ₈ " thick steel	Min. ¼" thick steel	Tectum®	Poured Gypsum	Cellular Lightweight Concrete
Trufast #12 DP or DPH	556	463	N/A	N/A	N/A	N/A	N/A	N/A
Trufast #14 HD	546	522	760	N/A	N/A	N/A	N/A	N/A
Trufast #14 HD Stainless Steel Bi-Metal Fastener	608	408	N/A	N/A	N/A	N/A	N/A	N/A
Trufast #14 Stainless Steel HD	N/A	527	563	N/A	N/A	N/A	N/A	N/A
Trufast #15 EHD	628	706	834	N/A	N/A	N/A	N/A	N/A
Trufast #21 SHD	N/A	870	N/A	N/A	N/A	N/A	N/A	N/A
Trufast #12 Purlin Fastener (square drive)	N/A	N/A	N/A	1,975	3,753	N/A	N/A	N/A
Trufast Fluted Concrete Nail	N/A	N/A	1621	N/A	N/A	N/A	N/A	N/A
Trufast SIP TP Fastener	512	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Trufast SIP LD Fastener	540	490	899	N/A	N/A	N/A	N/A	N/A
Trufast SIP HD Fastener	N/A	N/A	N/A	2,043	5,320	N/A	N/A	N/A
Trufast TL	N/A	N/A	N/A	N/A	N/A	505 (1.5" embedment)	400 (7/16" pilot, 1.5" embedment)	N/A
Trufast FM-75 Base Sheet Fastener	N/A	N/A	N/A	N/A	N/A	N/A	60	60



Table 1: Typical Performance, Static Withdrawal, Ultimate Load (LBF)								
	TABLE I. ITI	Substrate						
Fastener	Min. 19/32" plywood	Min. 22 ga., Grade 50 Steel	Min. 2,500 psi concrete	Min. ¹ / ₈ " thick steel	Min. ¼" thick steel	Tectum°	Poured Gypsum	Cellular Lightweight Concrete
Trufast FM-90 Base Sheet Fastener	N/A	N/A	N/A	N/A	N/A	N/A	60	107
Trufast FM-290 Base Sheet Fastener	N/A	N/A	N/A	N/A	N/A	N/A	N/A	164 (200 psi LWC)
Trufast Insuldeck Loc-Nail Base Sheet Fastener	N/A	N/A	N/A	N/A	N/A	64	N/A	N/A
Trufast Twin Loc-Nail Assembled Fastener (1.8-inch)	N/A	N/A	N/A	N/A	N/A	137	263 (260 psi gypsum)	No data
Trufast Versa-Fast Fastener through Versa-Fast Metal Plate [one (1) 2.25" long screw per plate]	N/A	N/A	N/A	N/A	N/A	N/A	143 (514 psi gypsum)	216 (340 psi Celcore MF Cellular Concrete)

Table 2: Typical Performance, Rupture (Pull-Through), Ultimate Load (lbf) Trufast 3" Metal Insulation Plate or Trufast TL 3 in. Insulation Plate with Base Sheets				
Manufacturer	Base Sheet	Overlying Application	Rupture (lbf)	
Generic	ASTM D226, Type II Felt	Hot-asphalt	224	
	Glasbase	Hot-asphalt	155	
	Flexiglas Base	Hot-asphalt	253	
	All Weather/Empire Base	Hot-asphalt	215	
CertainTeed, LLC	Flintlastic 20 Base	Hot-asphalt	303	
	Flintlastic Poly SMS Base	Hot-asphalt	372	
	Yosemite Venting Base	Hot-asphalt	248	
	Flintlastic SA NailBase	Self-adhering	278	
	MB Base M	Hot-asphalt	202	
Firestone Building Products Company	Venting Base	Hot-asphalt	227	
	SBS Base	Hot-asphalt	270	
	GAFGLAS #75 Base Sheet	Hot-asphalt	184	
	GAFGLAS #80 Ultima Base Sheet	Hot-asphalt	152	
GAF	GAFGLAS Stratavent Eliminator (Nailable)	Hot-asphalt	155	
	GAFGLAS FlexPly 6	Hot-asphalt	209	
	Liberty MA Mechanically Attached Base Sheet	Self-adhering	300	
	HPR Glasbase	Hot-asphalt	204	
The Garland Company	HPR Premium Glasbase	Hot-asphalt	224	
	HPR Tri-Base Plus	Hot-asphalt	463	
	PermaPly 28	Hot-asphalt	185	
	Ventsulation	Hot-asphalt	258	
Johns Manville	GlasPly Premier	Hot-asphalt	216	
	DynaBase	Hot-asphalt	266	
	JM APP Base	Torch-applied	208	
	PRS Glass Base	Hot-asphalt	228	
	PRS Modified Base Sheet	Hot-asphalt	230	
Derbigum USA	PRS Vented Base	Hot-asphalt	202	
	Derbibase	Torch-applied	241	
	Derbibase Ultra	Torch-applied	232	



TABLE 2: TYPICAL PERFORMANCE, RUPTURE (PULL-THROUGH), ULTIMATE LOAD (LBF) TRUFAST 3" METAL INSULATION PLATE OR TRUFAST TL 3 IN. INSULATION PLATE WITH BASE SHEETS						
Manufacturer	Manufacturer Base Sheet Overlying Application Rupture (lbf)					
Cinloct	Parabase	Hot-asphalt	251			
Siplast	Parabase Plus	Hot-asphalt	254			
_	Modified Sopra-G	Hot-asphalt	216			
Soprema	Soprabase	Hot-asphalt	380			
	USP Base	Hot-asphalt	230			
	USP NVB	Hot-asphalt	202			
U.S. Ply, Inc.	DuraFlex 30 SBS Base	Hot-asphalt	199			
	DuraFlex 60 SBS Base	Hot-asphalt	330			
	DuraFlex SBS PolyBase	Hot-asphalt	368			

TABLE 3: TYPICAL PERFORMANCE, RUPTURE (PULL-THROUGH), ULTIMATE LOAD (LBF) TRUFAST FM-75, FM-90 OR INSULDECK LOC-NAIL BASE SHEET FASTENER WITH BASE SHEETS					
Manufacturer Base Sheet Overlying Application Rupture (lbf)					
Cortain Tood IIC	Glasbase	Hot-asphalt	212		
CertainTeed, LLC	Flintlastic Poly SMS Base	Hot-asphalt	222		
Firestone Building Products Company	MB Base	Hot-asphalt	175		
0.15	GAFGLAS #75 Base Sheet	Hot-asphalt	206		
GAF	GAFGLAS Stratavent Eliminator (Nailable)	Hot-asphalt	178		
Johns Manville	Ventsulation	Hot-asphalt	218		
C'alast	Parabase	Hot-asphalt	202		
Siplast	Parabase Plus	Hot-asphalt	200		
Soprema	Sopralene 180 Sanded 2.2	Hot-asphalt	214		
Turana la composita d	BURMastic Glass Ply	Hot-asphalt	228		
Tremco Incorporated	BURMastic Composite Ply	Hot-asphalt	228		

TABLE 4: TYPICAL PERFORMANCE, RUPTURE (PULL-THROUGH), ULTIMATE LOAD (LBF) TRUFAST TWIN LOC-NAIL ASSEMBLED FASTENER WITH BASE SHEETS					
Manufacturer Base Sheet Overlying Application Rupture (lbf)					
	Glasbase	Hot-asphalt	179		
CertainTeed, LLC	Flexiglas Base	Hot-asphalt	240		
	All Weather / Empire Base	Hot-asphalt	249		
Firestone Building Products Company	MB Base	Hot-asphalt	256		
CAF	GAFGLAS #75 Base Sheet	Hot-asphalt	234		
GAF	GAFGLAS Stratavent Eliminator (Nailable)	Hot-asphalt	238		
	PermaPly 28	Hot-asphalt	275		
Johns Manville	Ventsulation	Hot-asphalt	228		
	DynaBase	Hot-asphalt	302		
Siplast	Parabase	Hot-asphalt	217		
	Parabase Plus	Hot-asphalt	279		
Soprema	Modified Sopra-G	Hot-asphalt	206		



TABLE 5	TYPICAL PERFORMANCE, RUPTURE (PULL-THRO	UGH), ULTIMATE LOAD (LBF)	
	TRUFAST FM-290 BASE SHEET FASTENER WIT	TH BASE SHEETS	
Manufacturer	Base Sheet	Overlying Application	Rupture (lbf)
	Glasbase	Hot-asphalt	256
CertainTeed, LLC	Flexiglas Base	Hot-asphalt	267
	Flintlastic Poly SMS Base	Hot-asphalt	372
	Flintlastic SA NailBase	Self-adhering	156
	APP 160	Torch-applied	364
Firestone Duilding Draduate Company	SBS Base	Hot-asphalt	326
Firestone Building Products Company	SBS Glass Torch Base	Torch-applied	255
	SBS Poly Torch Base	Torch-applied	346
	GAFGLAS #75 Base Sheet	Hot-asphalt	263
GAF	GAFGLAS #80 Ultima Base Sheet	Hot-asphalt	198
	GAFGLAS Stratavent Eliminator (Nailable)	Hot-asphalt	263
	Liberty MA Mechanically Attached Base Sheet	Self-adhering	163
The Code of Conserve	HPR Glasbase	Hot-asphalt	280
The Garland Company	HPR Tri-Base Plus	Torch-applied	451
	PermaPly 28	Hot-asphalt	273
Johns Manville	Ventsulation	Hot-asphalt	248
	DynaBase	Hot-asphalt	306
Derbigum USA	Derbibase	Torch-applied	260
Del elecelICA Lee	Elastobase V	Torch-applied	311
Polyglass USA, Inc.	Elastobase V (poly surface)	Self-adhering	177
Siplast	Parabase	Hot-asphalt	293
6	Modified Sopra-G	Hot-asphalt	254
Soprema	Soprabase	Self-adhering	235
Tarco Roofing	EasyBase	Self-adhering	185
	BURMastic Glass Ply	Hot-asphalt	283
Tremco Incorporated	BURMastic Composite Ply	Hot-asphalt	462
	USP Base	Hot-asphalt	287
U.S. Ply, Inc.	USP NVB	Hot-asphalt	280
	DuraFlex 30 SBS Base	Hot-asphalt	263

TABLE 6: TYPICAL PERFORMANCE, RUPTURE (PULL-THROUGH), ULTIMATE LOAD (LBF) TRUFAST VERSA-FAST FASTENER THROUGH VERSA-FAST METAL PLATE (1 SCREW PER PLATE)					
Manufacturer Base Sheet Overlying Application Rupture (lbf)					
GAF	GAFGLAS #75 Base Sheet	None	147		
Conromo	SOPRAFIX Base 613	None	329		
Soprema SOPRAFIX Base 613 Heat-welded 427					
Tremco Incorporated	POWERply Heavy Duty Base Sheet	None	467		

TABLE 7: TYPICAL PERFORMANCE, RUPTURE (PULL-THROUGH), ULTIMATE LOAD (LBF) TRUFAST 2" BARBED METAL SEAM PLATES WITHIN HEAT-WELDED SIDE LAP			
Manufacturer	Base Membrane	Overlying Application	Rupture (lbf)
CertainTeed, LLC	Flintlastic Poly SMS or Ultra Poly SMS Base	Heat-welded sidelap	330
Johns Manville	DynaLastic 180 S	Heat-welded sidelap	500
Soprema	SOPRAFIX Base 612	Heat-welded sidelap	515



5. LIMITATIONS:

- 5.1 This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- 5.2 This Evaluation Report is not for use in FBC HVHZ jurisdictions.
- 5.3 **Trufast Roof Fastening Components** are used within roofing systems holding Florida Statewide Product Approval. The products are for use in those roof assemblies that call-out the products listed herein by name. The performance data noted herein may be used by a qualified design professional in conjunction with system performance data for rational analysis and product substitution purposes on a project-by-project, Local Approval basis.
- 5.4 For mechanically attached insulation or membrane over existing roof substrates, fasteners shall be tested in the existing substrate for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing and analysis shall be in accordance with ANSI/SPRI FX-1 or Testing Application Standard TAS 105.
- 5.5 All products in the roof assembly shall have quality assurance audit in accordance with F.A.C. Rule 61G20-3.

6. INSTALLATION:

Fasteners, plates and batten bars shall be installed in accordance the manufacturer's published installation instructions and the roof assembly Florida Statewide or Local Product Approval.

7. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction in order to properly evaluate the installation of this product.

8. MANUFACTURING LOCATIONS:

Bryan, OH

9. QUALITY ASSURANCE ENTITY:

FM Approvals – QUA1860; (781) 255-4783

- END OF EVALUATION REPORT -