

Nemo etc.

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ENGINEER EVALUATE TEST CONSULT

EVALUATION REPORT

SFS Group USA, Inc. 1045 Spring Street Wyomissing, PA 19610 **(610) 790-0237** Evaluation Report 10110.04.16-R5 FL20311-R5

Date of Issuance: 04/12/2016

Revision 5: 02/16/2021

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 **7**th **Edition (2020) Florida Building Code** sections noted herein.

DESCRIPTION: SFS Intec 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 such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our Evaluation Reports by the named client constitutes agreement to notify NEMO ETC, LLC of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO ETC, LLC requires a complete review of its Evaluation Report relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Florida Product Approval Number (FL#) 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 4.

Prepared by:

Robert J.M. Nieminen, P.E.

Florida Registration No. 59166, Florida DCA ANE1983

NO SOLES

The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 02/16/2021. 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, 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.

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ROOFING COMPONENT EVALUATION:

1. SCOPE:

Product Category: Roofing

Sub-Category: Roofing Fasteners

Compliance Statement: SFS Intec Roof Fastening Components, as produced by SFS Intec, have demonstrated compliance with the following sections of the **7**th Edition (2020) 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>	<u>Standard</u>	<u>Year</u>
1506.6, 1513.1, 1520.4	Corrosion Resistance	TAS 114(E)	2011
1520.4	Withdrawal & Rupture	TAS 117(A), (B), (C)	1995

3. REFERENCES:

Entity	Examination	Reference	Date
ERD (TST 6049)	Withdrawal & Rupture	SFS-SC5790.04.14	04/30/2014
ERD (TST 6049)	Rupture	SFS-SC10010.02.16	02/29/2016
ERD (TST 6049)	Withdrawal & Rupture	SFS-SC12250.10.17	10/23/2017
FM (TST 1867)	Corrosion Resistance	3003689	09/22/1999
FM (TST 1867)	Corrosion Resistance	3038211	06/30/2010
FM (TST 1867)	Withdrawal & Rupture	3012588	12/28/2004
FM (TST 1867)	Withdrawal & Rupture	3055227	05/21/2015
FM (TST 1867)	Quality Assurance	RRF	05/25/2018
FM (TST1867)	Withdrawal & Corrosion	PR456960 LTR	02/09/2021
FM (CER 1840)	Corrosion Resistance	RoofNav Listings	Current
FM (QUA 1860)	Quality Assurance	Inspection Report	01/28/2020
FM (QUA 1860)	Quality Assurance	Florida BCIS	Current

4. PRODUCT DESCRIPTION:

4.1 Fasteners:

Part Name	<u>Substrates</u>	<u>Head Style</u>	<u>Drive</u>
Dekfast DF-#12-PH3	Wood, Steel	Truss	#3 Phillips
Dekfast DF-#12-HW1/4	Wood, Steel	Hex Washer	¼" Hex
Dekfast DF-#14-PH3	Wood, Steel, Concrete	Truss	#3 Phillips
Dekfast DF-S4-#14-PH3	Wood, Steel, Concrete	Truss (flat top)	#3 Phillips
Dekfast DF-#15-PH3	Wood, Steel, Concrete	Truss	#3 Phillips
Dekfast DF-#21-PH3	Steel	Pancake	#3 Phillips
Dekfast DL-SQ1/4	CWF, Gypsum	Round	¼" Square
BS-6.1	Steel	Countersunk	T25
isofast DF-#12-PH3-BL	Wood, Steel	Truss	#3 Phillips
isofast DF-#15-PH3-BL	Wood, Steel	Truss	#3 Phillips
DEKFAST DF-#12-PC-SQ3	Steel purlin	Truss	#3 Square

4.2 Plates and Bars:

Part Name	<u>Dimensions</u>
Dekfast PLT-P-R-3	3" round plastic
Dekfast PLT-R-3	0.017" x 3" round Galvalume®
Dekfast PLT-H-2-7/8	0.018" x 2 7/8" hexagonal Galvalume®
Dekfast PLT-DL-R-3-4B	0.017" x 3" round Galvalume®, 4-barbs
Dekfast PLT-R-2-4B	0.030" 2" round Galvalume®, 4-barbs
Dekfast PLT-R-2-3/8-6B	0.036" 2.38" round Galvalume®, 6-barbs



4.2 Plates and Bars:

Part Name <u>Dimensions</u>

Dekfast PLT-O2-3/4-12B 0.047" x 1.5" x 2.75" oval/oblong Galvalume®, 12 barbs

Dekfast PLT-DL-R-2-4B 0.032" x 2" round Galvalume®, 4-barbs

ISO-TAK R-75 Plus 0.59" diameter sleeve, 3" diameter plate, plastic fastening plus (use with BS-6.1)

isofast PLT-R-2-3/8-BL 0.042" x 2.38" round Galvalume®, 6-barbs isofast PLT-S-2-3/4x2-3/4 0.030" x 2.75" x 2.75" square Galvalume® isoweld FI-P-6.8-PVC 0.030" x 3" round, coated G-90 Galvanized isoweld FI-P-6.8-TPO 0.030" x 3" round, coated G-90 Galvanized

4.3 Pre-Assembled Components:

Part Name	<u>Substrates</u>	<u>Description</u>
Dekfast DF-#12-PH3-P3	Wood, Steel	Dekfast DF-#12-PH3 with Dekfast PLT-P-R-3
Dekfast DF-#14-PH3-P3	Wood, Steel, Concrete	Dekfast DF-#14-PH3 with Dekfast PLT-P-R-3
Dekfast DF-#12-PH3-G3	Wood, Steel	Dekfast DF-#12-PH3 with Dekfast PLT-R-3
Dekfast DF-#14-PH3-G3	Wood, Steel, Concrete	Dekfast DF-#14-PH3 with Dekfast PLT-R-3
Dekfast DF-#14-PH3-G2	Wood, Steel, Concrete	Dekfast DF-#14-PH3 with Dekfast PLT-R-2-4B
Dekfast DF-#15-PH3-O2-3/4	Wood, Steel, Concrete	Dekfast DF-#15-PH3 with Dekfast PLT-O2-3/4-12B

Table 1: Typical Performance, Static Withdrawal, Ultimate Load (lbf)									
	Substrate								
Fastener	15/32" plywood	19/32" plywood	22 ga., 33 ksi steel	22 ga., 40 ksi steel	22 ga., 80 ksi steel	16 ga., 50 ksi purlin	2,500- 3,000 psi concrete	Tectum®	poured gypsum
Dekfast DF-#12-PH3 Dekfast DF-#12-HW1/4 isofast DF-#12-PH3-BL	494	492	386	406	564	N/A	N/A	N/A	N/A
Dekfast DF-#14-PH3	418	601	370	326	457	N/A	795 (1" embed)	N/A	N/A
Dekfast DF-S4-#14-PH3	No data	552	No data	428	568	N/A	827 (1" embed)	N/A	N/A
Dekfast DF-#15-PH3	No data	582	530	511	683	N/A	798 (1" embed)	N/A	N/A
Dekfast DF-#21-PH3	N/A	N/A	No data	No data	973	N/A	N/A	N/A	N/A
BS-6.1	N/A	N/A	438	No data	593	N/A	N/A	N/A	N/A
DEKFAST DF-#12-PC- SQ3	N/A	N/A	N/A	N/A	N/A	724	N/A	N/A	N/A
Dekfast DL-SQ1/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	246 (1.5" embed)	312 (1.5" embed)

TABLE 2: TYPICAL PERFORMANCE, RUPTURE (PULL-THROUGH), ULTIMATE LOAD (LBF) (WITH ASPHALT-APPLIED SHEET OVERTOP)					
		Rupture (lbf) Dekfast Dekfast isofast			
Manufacturer	Base Sheet	PLT-H-2-7/8	PLT-R-3	PLT-S-2-3/4x2-3/4	
CertainTeed Corporation	Glasbase Base Sheet	132	184	188	
Dorbigum Americas	PRS GLASS BASE	176	225	182	
Derbigum Americas	DERBIBASE	229	176	265	
Firestone Building Products	MB Base M	165	169	197	
GAF	GAFGLAS #75 Base Sheet	165	165	183	



TABLE 2: TYPICAL PERFORMANCE, RUPTURE (PULL-THROUGH), ULTIMATE LOAD (LBF) (WITH ASPHALT-APPLIED SHEET OVERTOP)					
		Rupture (lbf)			
		Dekfast	Dekfast	isofast	
Manufacturer	Base Sheet	PLT-H-2-7/8	PLT-R-3	PLT-S-2-3/4x2-3/4	
The Garland Company	HPR Glasbase Sheet	187	187	234	
Johns Manville	PermaPly 28	161	160	195	
Mid-States Asphalt	Arrowglass Base	161	194	186	
Polyglass USA, Inc.	Polyglass G2 Base	212	190	212	
	Elastobase (sand/sand)	234	250	222	
	Elastobase (sand/poly)	364	387	325	
Siplast	Parabase	169	192	180	
Soprema	Modified SOPRA-G	171	171	138	
Tamko	Glass-Base	169	172	178	
T	BURmastic Glas Ply	200	178	234	
Tremco	BURmastic Composite Ply HT	421	404	408	
U.S. Ply, Inc.	USP Base Sheet	161	168	189	

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 High Velocity Hurricane Zone jurisdictions (i.e., Broward and Miami-Dade Counties).
- 5.3 This Evaluation Report pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction.
- 5.4 **SFS Intec 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.
- For use 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.
- 5.6 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 Florida Statewide or Local Product Approval of the roof system.

7. BUILDING PERMIT REQUIREMENTS:

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

8. Manufacturing Locations:

Wyomissing, PA

9. QUALITY ASSURANCE ENTITY:

FM Approvals - QUA1860; (781) 255-4783

- END OF EVALUATION REPORT -

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