CITIZENS PROPERTY INSURANCE CORPORATION

BUILDING TYPE II AND III MITIGATION INSPECTION FORM

This Mitigation Inspection Form must be completed to capture mitigation features applicable to a Type II (4 to 6 story) or Type III (7 or more story) building. This Inspection Form is required for either residential condominium unit owners or commercial residential applicants requesting mitigation credits in such buildings.

WIND LOSS MI	IIGA	House Tower Two Condominium Association			
PREMISES #:		SUBJECT OF INSURANCE:	POLICY #:		
BUILDING #:		STREET ADDRESS: West Building - 2170 Gulf Shore Boule	evard N., Naples, FL 34102		
# STORIES:	8	BLDG DESCRIPTION: Reinforced concrete walls with Rein	forced concrete roof deck		
BUILDING TY	PE:	☐ II (4 to 6 stories) 🗶 III (7 or more stories)	Year Built: 1968		
I hereby certify Florida Building Certification be	Terrain Exposure Category must be provided for each insured location. I hereby certify that the building or unit at the address indicated above TERRAIN EXPOSURE CATEGORY as defined under the Florida Building Code is (Check One): Exposure C or ☐ Exposure B Certification below for purposes of TERRAIN EXPOSURE CATEGORY above does not require personal inspection of the				
premises.	5 NA.C				
Built On or After		Id Speed is required to establish the basic wind speed of the location 2002).	(Complete for Terrain B only if Year		
	I hereby certify that the basic WIND SPEED of the building or unit at the address indicated above based upon county wind speed lines defined under the Florida Building Code (FBC) is (Check One): ☐ ≥100 or ☐ ≥110 or ☑ ≥120				
	Certification of Wind Design is required when the buildings is constructed in a manner to exceed the basic wind speed design established for the structure location (Complete for Terrain B only if Year Built On or After Jan.1, 2002).				
	I hereby certify that the building or unit at the address indicated above is designed and mitigated to the Florida Building Code (FBC) WIND DESIGN of (Check One): ☐ ≥100 or ☐ ≥110 or ☑ ≥120				
Certification for the purpose of establishing the basic WIND SPEED or WIND SPEED DESIGN above does not require personal inspection of the premises.					
NOTE: Any docun	nentat m. At	nation device(s) installed: on used in validating the compliance or existence of each co least one photo documenting the existence of each visible and ns 1 through 4 must accompany this form.			

attribute marked in Sections 1 through 4 must accompany this form.							
1.	Roof Coverings	Naples Re-Roof Permit Attached To This Report					
Roof Co	Roof Covering Material: Thermoplastic (TPO) Membrane Date of Installation: Application Date: 11-01-2024						
	Level A (Non FBC Equivalent) – Type II or III One or more roof coverings that do not meet the FBC Equivalent definition requirements below.						
☑ Level B (FBC Equivalent) – Type II or III							
	other roof covering member	en, Sprayed Polyurethane foam, Metal, Tile, Built-up, Asphalt Shingle or Rolled Roofing, or ranes/products that at a minimum meet the 2001 or later Florida Building Code or the 1994 de and have a Miami-Dade NOA or FBC 2001 Product Approval listing that is/was current					
	winds. Any flat roof coveri	must be adequately tied to the roof deck to resist overturning and sliding during high ng with flashing or coping must be mechanically attached to the structure with face stems), and asphalt roof coverings on flat roofs must be 10 years old or less.					

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2.	Roof Deck Attachment		
	Level A – Wood or Other Deck Type II only		
	Roof deck composed of sheets of structural panels (plywood or OSB).		
	Or Architectural (non-structural) metal panels that require a solid decking to support weight and loads.		
	Or		
	Other roof decks that do not meet Levels B or C below.		
	Level B – Metal Deck Type II or III Metal roof deck made of structural panels fastened to open-web steel bar joists and integrally attached to the wall.		
	★ Level C – Reinforced Concrete Roof Deck Type, II or III		
	A roof structure composed of cast-in-place or pre-cast structural concrete designed to be self-supporting and integrally attached to wall/support system.		
3.	Secondary Water Resistance See Attached Re-Roof Permit & NOA		
	Underlayment A self-adhering polymer modified bitumen roofing underlayment (thin rubber sheets with peel and stick underside located beneath the roof covering and normal felt underlayment) with a minimum width of 6" meeting the requirements of ASTM D 1970 installed over all plywood/OSB joints to protect from water intrusion. All secondary water resistance products must be installed per the manufacturer's recommendations. Roofing felt or similar paper based products are not acceptable for secondary water resistance.		
	Foamed Adhesive A foamed polyurethane sheathing adhesive applied over all joints in the roof sheathing to protect interior from water intrusion.		
4.	Opening Protection N/A - Some of the common area glazed openings are not rated or protected		
	Class A (Hurricane Impact) – All glazed openings (windows, skylights, sliding glass doors, doors with windows, etc) less than 30 feet above grade must be protected with impact resistant coverings (e.g. shutters), impact resistant doors, and/or impact resistant glazing that meet the Large Missile (9 lb.) impact requirements of:		
	□SSTD12;		
	☐ASTM E 1886 and ASTM E 1996;		
	☐Miami-Dade PA 201, 202, and 203;		
	☐Florida Building Code TAS 201, 202 and 203.		
	All glazed openings less than 30 feet above grade shall meet the Large Missile Test standard referenced above. All glazed openings between 30 and 60 feet above grade must meet the Small Missile Test of the respective standard. For buildings located in the HVHZ (High Velocity Hurricane Zone) all glazed openings greater than 60 feet above grade must also meet the Small Missile Test of the respective standard.		
	Class B (Basic Impact) – All glazed openings (windows, skylights, sliding glass doors, doors with windows, etc) less than 30 feet above grade must be protected with impact resistant coverings (e.g. shutters), impact resistant doors, and/or impact resistant glazing that meet the Large Missile (4.5 lb.) impact requirements of:		
	☐ASTM E 1886 and ASTM E 1996		
	All glazed openings less than 30 feet above grade shall meet the Large Missile Test standard referenced above. All glazed openings between 30 and 60 feet above grade must meet the Small Missile Test of the respective standard. For buildings located in the HVHZ (High Velocity Hurricane Zone) all glazed openings greater than 60 feet above grade must also meet the Small Missile Test of the respective standard.		

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CITIZENS PROPERTY INSURANCE CORPORATION

BUILDING TYPE II AND III MITIGATION INSPECTION FORM

CERTIFICATION

i certify that I hold	an active license as a: (CHEC)	K ONE OF THE FOLLOWING	3)			
🗶 General or build	☑ General or building contractor licensed under Section 489.111, Florida Statutes.					
☐ Building code i	☐ Building code inspector certified under Section 468.607, Florida Statutes.					
☐ Professional are	☐ Professional architect licensed under Section 481.213, Florida Statutes.					
☐ Professional en	gineer licensed under Section	471.015, Florida Statutes.				
,	sonally inspected the premises at th Form. In my professional opinion, b d correct.		•	•		
structural or physical of to receive a property other purpose. The ur nothing in this Form s	tion Form and the information set haracteristics exist at the Location A insurance premium discount on insurance premium discount on insured resigned does not make a health hall be construed to impose on the any nature to the named insured or	ddress listed above and for the purance provided by Citizens Pro or safety certification or warran undersigned or on any entity to	ourpose of permoperty Insurance ty, express or i	itting the Named Insured e Corporation and for no mplied, of any kind, and		
Name of Company:	R3 of Florida, LLC		Phone:	239-810-7793		
Name of Inspector	Richard Verblaauw	License Type CGC	License #	CGC1505916		
Inspection Date:	01-22-2025					
Signature:	Quen.		Date:	01-22-2025		
Applicant /Insured's Signature *:			Date:			

^{*}Applicant /Insured's signature must be from the Board President and another member of the board for condo and homeowner's associations or an officer of the named insured for all other business entities.

[&]quot;Any person who knowingly and with intent to injure, defraud, or deceive any insurer files a statement of claim or an application containing any false, incomplete, or misleading information is guilty of a felony of the third degree."

^{*}This verification form is valid for up to five (5) years provided no material changes have been made to the structure or inaccuracies found on the form.

Uniform Mitigation Verification Inspection Form

Maintain a copy of this form and any documentation provided with the insurance policy

Inspection Date: 01-22-2025						
Owner Information						
Owner Name: (BHC, Inc., A Condominium Association) Beacon House Tower Two Condominium Association Contact Person:						
Address: West Building - 2170 Gulf Shore	Boulevard N.	Home Phone:				
City: Naples	Zip: 34102	Work Phone:				
County: Collier		Cell Phone:				
Insurance Company:		Policy #:				
Year of Home: 1968	# of Stories: 8	Email:				
NOTE: Any documentation used in validating the compliance or existence of each construction or mitigation attribute must accompany this form. At least one photograph must accompany this form to validate each attribute marked in questions 3 though 7. The insurer may ask additional questions regarding the mitigated feature(s) verified on this form.						
the HVHZ (Miami-Dade or Broward cou ☐ A. Built in compliance with the FBC a date after 3/1/2002: Building Perm ☐ B. For the HVHZ Only: Built in con	in compliance with the Florida Building Code (anties), South Florida Building Code (SFBC-94: Year Built For homes built in 2 it Application Date (MM/DD/YYYY)//	4)? 2002/2003 provide a pern . For homes built in 199	nit application with 94, 1995, and 1996			
	•					
OR Year of Original Installation/Replace	types in use. Provide the permit application date ment OR indicate that no information was available.	ite OR FBC/MDC Production illable to verify complian	ct Approval number ce for each roof			
•	Re-Roof Permit Attached To This Report		No Information			
	Application FBC or MDC Date Product Approval #	Year of Original Installation or Replacement	Provided for Compliance			
1. Asphalt/Fiberglass Shingle /						
2. Concrete/Clay Tile/_						
☐ 4. Built Up						
5 5. Membrane 11/0	1/2024 Thermoplastic (TPO) Membrane	2025				
6. Other						
	eet the FBC with a FBC or Miami-Dade Produ t application date on or after 3/1/02 OR the ro					
	Dade Product Approval listing current at time 1994 and before 3/1/2002 OR the roof is origin					
\Box C. One or more roof coverings do no	ot meet the requirements of Answer "A" or "B"					
\Box D. No roof coverings meet the require	rements of Answer "A" or "B".					
3. Roof Deck Attachment : What is the we	akest form of roof deck attachment?					
A. Plywood/Oriented strand board (by staples or 6d nails spaced at 6" a	OSB) roof sheathing attached to the roof truss/ llong the edge and 12" in the fieldOR- Batt s, nails, adhesives, other deck fastening systen	en decking supporting w	ood shakes or wood			
24"inches o.c.) by 8d common nails other deck fastening system or truss.	th a minimum thickness of 7/16" inch attached spaced a maximum of 12" inches in the field. (rafter spacing that is shown to have an equiva or has a mean uplift resistance of at least 103	-OR- Any system of scre lent or greater resistance	ws, nails, adhesives,			
24"inches o.c.) by 8d common nails decking with a minimum of 2 nails j	th a minimum thickness of 7/16" inch attached spaced a maximum of 6" inches in the field. per board (or 1 nail per board if each board is ves, other deck fastening system or truss/rafte	-OR- Dimensional lumber equal to or less than 6 inc	er/Tongue & Groove ches in width)OR-			
Inspectors Initials RD Property Address	s_West Building - 2170 Gulf Shore Boulevard N					

*This verification form is valid for up to five (5) years provided no material changes have been made to the structure. OIR-B1-1802 (Rev. 01/12) Adopted by Rule 69O-170.0155 Page 1 of 4

		or greater resistance than 8d common nails spaced a maximum of 6 inches in the field or has a mean u 182 psf.	plift resistance of at least
	V		
		F. Unknown or unidentified.	
4.		Roof to Wall Attachment: What is the <u>WEAKEST</u> roof to wall connection? (Do not include attachment of the inside or outside corner of the roof in determination of WEAKEST type)	of hip/valley jacks within
		A. Toe Nails	
		☐ Truss/rafter anchored to top plate of wall using nails driven at an angle through the truthe top plate of the wall, or	uss/rafter and attached to
		☐ Metal connectors that do not meet the minimal conditions or requirements of B, C, or D	
	Mir	linimal conditions to qualify for categories B, C, or D. All visible metal connectors are:	
		Secured to truss/rafter with a minimum of three (3) nails, and	
		Attached to the wall top plate of the wall framing, or embedded in the bond beam, with I the blocking or truss/rafter and blocked no more than 1.5" of the truss/rafter, and free o corrosion.	
		1	
		☐ Metal connectors that do not wrap over the top of the truss/rafter, or	
		☐ Metal connectors with a minimum of 1 strap that wraps over the top of the truss/rafter a position requirements of C or D, but is secured with a minimum of 3 nails.	nd does not meet the nail
		C. Single Wraps	
		Metal connectors consisting of a single strap that wraps over the top of the truss/raft minimum of 2 nails on the front side and a minimum of 1 nail on the opposing side.	er and is secured with a
		D. Double Wraps	
		Metal Connectors consisting of 2 separate straps that are attached to the wall frame, or e beam, on either side of the truss/rafter where each strap wraps over the top of the truss/ra a minimum of 2 nails on the front side, and a minimum of 1 nail on the opposing side, or	after and is secured with
		☐ Metal connectors consisting of a single strap that wraps over the top of the truss/rafter, is both sides, and is secured to the top plate with a minimum of three nails on each side.	s secured to the wall on
	•	E. Structural Anchor bolts structurally connected or reinforced concrete roof.	
		F. Other:	
		G. Unknown or unidentified	
		H. No attic access	
5.	_	Roof Geometry: What is the roof shape? (Do not consider roofs of porches or carports that are attached on the host structure over unenclosed space in the determination of roof perimeter or roof area for roof geometry.)	•
		A. Hip Roof Hip roof with no other roof shapes greater than 10% of the total roof system perime	ter.
	/		s a roof slope of
		less than 2:12. Roof area with slope less than 2:12 100% sq ft; Total roof area 1 C. Other Roof Any roof that does not qualify as either (A) or (B) above.	<u>100%</u> sq ft
_	C	down Water Bretatenes (CWD) (standard and described as the standard and described as the standar	IVD)
6.		 econdary Water Resistance (SWR): (standard underlayments or hot-mopped felts do not qualify as an SY A. SWR (also called Sealed Roof Deck) Self-adhering polymer modified-bitumen roofing underlayments sheathing or foam adhesive SWR barrier (not foamed-on insulation) applied as a supplemental mean dwelling from water intrusion in the event of roof covering loss. 	ent applied directly to the
		B. No SWR. C. Unknown or undetermined.	
		C. Olikilowii of undetermined.	
Ins	spec	ectors Initials RD Property Address West Building - 2170 Gulf Shore Boulevard N.	
*T	his v	s verification form is valid for up to five (5) years provided no material changes have been made to	the structure or

inaccuracies found on the form.

7. Opening Protection: What is the weakest form of wind borne debris protection installed on the structure? First, use the table to determine the weakest form of protection for each category of opening. Second, (a) check one answer below (A, B, C, N, or X) based upon the lowest protection level for ALL Glazed openings and (b) check the protection level for all Non-Glazed openings (.1, .2, or .3) as applicable.

Opening Protection Level Chart Place an "X" in each row to identify all forms of protection in use for each opening type. Check only one answer below (A thru X), based on the weakest form of protection (lowest row) for any of the Glazed openings and indicate the weakest form of protection (lowest row) for Non-Glazed openings.			Glazed Openings				Non-Glazed Openings	
			Garage Doors	Skylights	Glass Block	Entry Doors	Garage Doors	
N/A	Not Applicable- there are no openings of this type on the structure		×	×	X		×	
Α	Verified cyclic pressure & large missile (9-lb for windows doors/4.5 lb for skylights)					×		
В	Verified cyclic pressure & large missile (4-8 lb for windows doors/2 lb for skylights)							
С	Verified plywood/OSB meeting Table 1609.1.2 of the FBC 2007							
D	Verified Non-Glazed Entry or Garage doors indicating compliance with ASTM E 330, ANSI/DASMA 108, or PA/TAS 202 for wind pressure resistance							
N	Opening Protection products that appear to be A or B but are not verified							
IN IN	Other protective coverings that cannot be identified as A, B, or C							
Х	No Windborne Debris Protection	×						

A. Exterior Openings Cyclic Pressure and 9-lb Large Missile (4.5 lb for skylights only) All Glazed openings are protected at
a minimum, with impact resistant coverings or products listed as wind borne debris protection devices in the product approval
system of the State of Florida or Miami-Dade County and meet the requirements of one of the following for "Cyclic Pressure
and Large Missile Impact" (Level A in the table above).

- Miami-Dade County PA 201, 202, and 203
- Florida Building Code Testing Application Standard (TAS) 201, 202, and 203
- American Society for Testing and Materials (ASTM) E 1886 and ASTM E 1996
- Southern Standards Technical Document (SSTD) 12
- For Skylights Only: ASTM E 1886 and ASTM E 1996
- For Garage Doors Only: ANSI/DASMA 115

☐ A.1 All Non-Glazed openings classified as A in the table above, or no Non-Glazed openings exist
☐ A.2 One or More Non-Glazed openings classified as Level D in the table above, and no Non-Glazed openings classified as Level B, C, N, or X in the table above
☐ A.3 One or More Non-Glazed Openings is classified as Level B, C, N, or X in the table above
B. Exterior Opening Protection- Cyclic Pressure and 4 to 8-lb Large Missile (2-4.5 lb for skylights only) All Glazed openings are protected, at a minimum, with impact resistant coverings or products listed as windborne debris protection devices in the product approval system of the State of Florida or Miami-Dade County and meet the requirements of one of the following for "Cyclic Pressure and Large Missile Impact" (Level B in the table above):
• ASTM E 1886 <u>and</u> ASTM E 1996 (Large Missile – 4.5 lb.)
• SSTD 12 (Large Missile – 4 lb. to 8 lb.)
• For Skylights Only: ASTM E 1886 and ASTM E 1996 (Large Missile - 2 to 4.5 lb.)
☐ B.1 All Non-Glazed openings classified as A or B in the table above, or no Non-Glazed openings exist
☐ B.2 One or More Non-Glazed openings classified as Level D in the table above, and no Non-Glazed openings classified as Level C, N, or X in the table above
☐ B.3 One or More Non-Glazed openings is classified as Level C, N, or X in the table above
C. Exterior Opening Protection- Wood Structural Panels meeting FBC 2007 All Glazed openings are covered with plywood/OSB meeting the requirements of Table 1609.1.2 of the FBC 2007 (Level C in the table above).
C.1 All Non-Glazed openings classified as A, B, or C in the table above, or no Non-Glazed openings exist
C.2 One or More Non-Glazed openings classified as Level D in the table above, and no Non-Glazed openings classified as Level N or X in

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☐ C.3 One or More Non-Glazed openings is classified as Level N or X in the table above

Inspectors Initials RD Property Address West Building - 2170 Gulf Shore Boulevard N.

the table above

N. Exterior Opening Protection (unverified shutted protective coverings not meeting the requirements of th	f Answer "A", "B", or C" or system	n) All Glazed openings are protected with ns that appear to meet Answer "A" or "B"	
with no documentation of compliance (Level N in the	,		
N.1 All Non-Glazed openings classified as Level A, B,		, ,	
 N.2 One or More Non-Glazed openings classified as Le table above 	vel D in the table above, and no Non-C	Jazed openings classified as Level X in the	
☐ N.3 One or More Non-Glazed openings is classified as			
X. None or Some Glazed Openings One or more G	lazed openings classified as Level	X in the table above.	
MITIGATION INSPECTIONS MUS Section 627.711(2), Florida Statutes, p	rovides a listing of individuals who	o may sign this form.	
Qualified Inspector Name: Richard Verblaauw	License Type: Certified General Contracto	License or Certificate #: CGC1505916	
Inspection Company: R3 of Florida, LLC		239.810.7793	
Qualified Inspector – I hold an active license a	s a: (check one)		
 ☐ Home inspector licensed under Section 468.8314, Florida Statraining approved by the Construction Industry Licensing Bo ☐ Building code inspector certified under Section 468.607, Flo 	atutes who has completed the statutory pard and completion of a proficiency ex		
General, building or residential contractor licensed under Sec			
Professional engineer licensed under Section 471.015, Florid			
Professional architect licensed under Section 481.213, Florid			
Any other individual or entity recognized by the insurer as preverification form pursuant to Section 627.711(2), Florida Sta	ossessing the necessary qualifications t	o properly complete a uniform mitigation	
(print name) contractors and professional engineers only) I had my en and I agree to be responsible for his/her work.	or and I personally performed the apployee (Richard Davis (print name of inspector) Date: 01-22-202 s negligence provides a false or france Fraud and may be subject to (Section 627.711(4)-(7), Florida duct of employees as if the author	e inspection or (licensed) perform the inspection 5 audulent mitigation verification form is administrative action by the Statutes) The Qualified Inspector who rized mitigation inspector personally	
Signature: Date: <u>01-22-2025</u>			
An individual or entity who knowingly provides or utter obtain or receive a discount on an insurance premium to the first degree. (Section 627.711(7), Florida Statutes)	o which the individual or entity is		
The definitions on this form are for inspection purposes as offering protection from hurricanes.	only and cannot be used to certi	fy any product or construction feature	
Inspectors Initials RD Property Address West Building	g - 2170 Gulf Shore Boulevard N.		
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OIR-B1-1802 (Rev. 01/12) Adopted by Rule 69O-170.0155



City of Naples

Building Department 295 Riverside Circle Naples, FL 34102 239 213-5020

Building Permit

ISSUED DATE: November 19, 2024 EXPIRATION: May 19, 2025

PERMIT NUMBER: PRRF2406245

APPLICATION DATE: November 01, 2024

PERMIT TYPE: Roof

BUILDING CODE EDITION: FBC 8th Edition 2023

DESCRIPTION OF WORK: Remove existing single ply roof system and install New Fibertite Roof System on main

upper roof. Replace small beacon roof with Standing Seam Metal Roof System.

FLOOD ZONE:

FOLIO: 03230000000:2170 GULF SHORE BLVD N;

JOB ADDRESS: 2170 GULF SHORE BLVD N, Bld-Unit:WEST, NAPLES, FL

LEGAL DESCRIPTION: LEGAL DESCRIPTION NOT AVAILABLE

COST OF CONSTRUCTION: \$124,314.00

CONTACT INFORMATION:

Owner: Applicant: Contractor:

BEACON HOUSE TOWER TWO A

CONDOMINIUM2170 GULF SHORE

BLVD N

NAPLES, FL 34102

Richard McCanna ROOF DESIGN & SHEET METAL, LLC 221 27th Street NW 221 27TH STREET NW Naples, FL 34120 Naples, FL 34120

CONI	CONDITION HOLDS:			
#	Type of Hold:	Condition Description		
1	Informational	All new and replaced mechanical equipment must be screened from view to the full height of the equipment consistent with all applicable fencing and landscaping requirements and manufacturer's specifications. Screening walls and fences around replacement equipment may exceed the allowable height limitations provided the height is the minimum required to screen from view to the full height of the equipment and the projection into the required yard is the minimum encroachment necessary per manufacturers' specifications.		

NOTICE: PRIOR TO THE REMOVAL OF ASBESTOS PRODUCTS OR THE DEMOLITION OF A STRUCTURE, FEDERAL AND STATE LAWS REQUIRE THE PERMITEE (EITHER THE OWNER OR THE CONTRACTOR) TO SUBMIT A NOTICE OF THE INTENDED WORK TO THE STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP). FOR MORE INFORMATION, CONTACT DEP AT (239) 344-5600.

IN ADDITION TO THE CONDITIONS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS CITY, AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES OR FEDERAL AGENCIES.

FL4930-R23

Report No.: NER-SMN-001.R2 Revision 2: 2024-02-29

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NEMO EVALUATION REPORT (NER)



Seaman Corporation 1000 Venture Blvd. Wooster, OH 44691 (800) 927-8578

SUBJECT: **FiberTite Roof Systems**

SCOPE: This NEMO Evaluation Report (henceforth 'NER') is issued under F.A.C. Rule 61G20-3 and the applicable

> rules and regulations governing Product Approval of construction materials in the State of Florida and ISO/IEC 17065 via Nemo cert. Nemo Evaluations has evaluated the product described herein for

compliance with the Code sections noted herein.

2023 Florida Building Code, 8th Edition CODE:

Non-HVHZ and HVHZ JURISDICTION:

NEMO CATEGORY: Single Ply Roofing **FBC CATEGORY:**

FBC Sub-Category: Single Ply Roof Systems

07 00 00 **CSI DIVISION:** Thermal and Moisture Protection

> 07 54 00 Thermoplastic Membrane Roofing 07 54 16 Ketone Ethylene Ester Roofing

METHOD: Method 1, Option C – Codified Material, Evaluation by Evaluation Entity

FiberTite Roof Systems, as produced by Seaman Corporation, have demonstrated compliance with the COMPLIANCE

STATEMENT: Code sections noted herein through testing in accordance with the referenced Standards, rational analysis

and an ongoing quality assurance program. Compliance is subject to the Installation Requirements and

Limitations of Use set forth herein.

QUALITY ASSURANCE: Evidence of current quality assurance shall be listing and labeling in accordance with the requirements of

NEMO cert.

CONTINUED This NER is valid until such time the named product(s) change, the referenced Quality Assurance changes,

COMPLIANCE: or the evaluated Code provisions change. Nemo Evaluations requires, at minimum, a complete review of

this NER with each 3-year Code Cycle.

As required by the Building Official or Authority Having Jurisdiction to evaluate the installation of this **BUILDING PERMIT**

REQUIREMENTS: product.

INDEPENDENCE:

"NEMO Evaluated" may be displayed in advertising literature. If any portion of the NER is displayed, it shall **ADVERTISEMENT:**

be displayed in its entirety.

✓ NEMO ETC, LLC does not have, nor does it intend to acquire or will it acquire, a financial interest in any. **CERTIFICATION OF**

✓ NEMO ETC, LLC is not owned, operated or controlled by any company manufacturing or distributing.

products it evaluates.

company manufacturing or distributing products it evaluates.

✓ This is a building code evaluation. NEMO ETC, LLC is not, in any way, the Designer of Record for any project on which this NER, or previous versions thereof, is/was used for permitting or design guidance.

FL4930-R23

Report No.: NER-SMN-001.R2 Revision 2: 2024-02-29

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CODES. PROPERTIES AND STANDARDS:

CODES, PROPERTIES AND STANDARD	5:		
<u>Code</u>	<u>Section</u>	Property	<u>Standard</u>
2023 Florida Building Code, 8 th Edition	1504.3.1	Wind resistance	FM 4474
	1504.3.1	Wind resistance	UL 1897
	1504.6	Physical properties	ASTM G154
	1504.6	Physical properties	ASTM G155
	1504.7	Impact resistance	FM 4470
	1507.11.2, TAS 110	Material standard	ASTM D6163
	1507.11.2, TAS 110	Material standard	ASTM D6164
	1507.12.2, TAS 110	Material standard	ASTM D6754
	TAS 110	Resistance to Foot Traffic	TAS 114, Section 8.9
	TAS 110	Wind resistance	TAS 114, Appendix C, D or J
	TAS 110	Susceptibility Hail Damage	TAS 114, Appendix F
	TAS 110	Susceptibility to Leakage	TAS 114, Appendix G

PRODUCTS:

TABLE 1: EVALUATED MEMBRANES								
	F	PRODUCT	Material Stand	Material Standard				
Түре	Name	THICKNESS	Reference	Түре	LOCATION			
	FiberTite	36-mil						
D C 1	FiberTite-SM	45, 60-mil			Bristol, TN			
ROOF COVER ¹	FiberTite-XT	50, 60-mil			Wooster, OH			
ROOF COVER OR CAP PLY ¹ VAPOR BARRIER OR BASE PLY	FiberTite-Xtreme	60-mil	ACTM DG754	NI/A				
	FiberTite-FB	36-mil	ASTM D6754	N/A				
	FiberTite-SM FB	45, 60-mil			Wasster Oll			
	FiberTite-XT FB	50, 60-mil			Wooster, OH			
	FiberTite-Xtreme FB	60-mil						
	FiberTite-SBS Base		ASTM D6163	1				
	FiberTite-SBS TG Base		ASTM D6163	1				
	FiberTite-SBS 190 Base		ASTM D6164	1	Arkadelphia, AR			
	FiberTite-SBS 190 TG Base		ASTM D6164					
	FTR SBS Poly 3.0		ASTM D6164	I	Winter Haven, FL			
	FTR SBS Poly 3.7		ASTM D6164	ı	Little Rock, AR			
	FTR SBS Poly 4.0		ASTM D6164	ı	Hazleton, PA			

	TABLE	2: COMPONENTS BY OTHERS (4.1.))			
Түре	FIBERTITE PRODUCT	Acceptable Alternate	FBC	NOA	
	FiberTite #12	Dekfast DF-#12-PH3	200	71.0	
	FiberTite #14	Dekfast DF-#14-PH3	I Dog		
ROOFING FASTENERS & PLATES:	FiberTite Magnum Fastener	Dekfast DF-#15-PH3	T-C'L	0	
	N/A	Dekfast DL-SQ1/4		10	
	N/A	Dekfast PTL-DL-R-2-48	- L	700	
	FiberTite Magnum Stress Plate	Dekfast PLT-0-2-1/2-88	Ft20311	22-0913.02	
	FiberTite Magnum-Plus Plate	Dekfast PLT-O-2-3/4-12B	+11-	0	
	FTR Magnum2S	Dekfast PLT-R-2-3/8-6B	HE		
	N/A	Dekfast PLT-H-2-7/8	U.E.	700	
	FiberTite 3-in Steel Plate	Dekfast PLT-R-3	7-1	-	
	FTR-IW isoweld	isoweld F1-P-6.8-PVC	0		
	N/A	isoweld FI-P-16.0-PVC	1110	- file	
	N/A	isoweld FI-R-20 Sleeve ²	N/A	N/A	
	N/A	OMG #12 Standard		0	
	N/A	OMG #14 Heavy Duty	FL699	23-0718.03	
	N/A	0000	- 5/		

 $^{^{1}}$ Certified by ISO/IEC 17065 Certification Entity <u>NEMO | cert.</u> for physical properties. **BACK TO TOP**

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	Таві	LE 2: COMPONENTS BY OTHERS (4.1.3)			
Түре	FIBERTITE PRODUCT	ACCEPTABLE ALTERNATE	FBC	<u>NOA</u>	
	FTR Magnum O Fastener	OMG XHD screw			
	FTR Retro-Driller OMG RetroDriller N/A OMG Polymer GypTec Fastener		1		
	N/A				
	N/A	F1.600	22 0740 0		
	N/A	OMG RhinoBond Insulation Plate (PVC)	FL699	23-0718.03	
	N/A	OMG RhinoBond TreadSafe Plate (PVC)	1		
	N/A	OMG RhinoBond TreadSafe Insert ²	1		
	N/A	OMG 2 in. Polymer GypTec Metal Barbed Plate	1		
ROOFING FASTENERS	N/A	Trufast #12 DP			
& PLATES:	N/A	Trufast #14 HD	1		
	FTR MagnumT Fastener	Trufast #15 EHD	†		
	FTR PurlinT Fastener	Trufast #12 Purlin Fastener	1		
	N/A	Trufast ¼" Concrete Spike	FL4500	22-1214.02	
	N/A	Trufast TL Fastener	1		
	N/A	Trufast 2" TL Seam Plate	†		
	FiberTite FTR Magnum-R275	Trufast 2-3/4" Barbed Metal Seam Plate (EHD)	†		
	N/A	Trufast 3" Metal Insulation Plate	1		
	FTR-VALUE A	ACFoam II			
Insulations:	FTR-Value-III-A	ACFoam III	FL17989	23-0207.03	
	FTR-VALUE H	H-Shield			
	FTR-VALUE H Glass Facer	H-Shield CG	FL5968	19-0521.0	
			FI 420F	22.0500.0	
	FTR-VALUE	ENRGY 3	FL4205	23-0509.0	
	N/A	Insulfoam IX	FL29563	22-0628.1	
	N/A	DensDeck	FL1250	22-1223.0	
	N/A	DensDeck Prime			
	N/A	DEXcell FA Glass Mat Roof Board	FL17840	20-0212.0	
	N/A	DEXcell Cement Roof Board			
	N/A	SECUROCK Gypsum-Fiber Roof Board	FL4264	21-0923.0	
	N/A	SECUROCK Cement Roof Board			
	N/A	Celcore Cellular Concrete	FL2037	23-0718.0	
	N/A	Concrecel Lightweight Insulating Concrete	FL5584	21-1229.0	
	N/A	Elastizell Lightweight Insulating Concrete	None	23-0817.0	
	N/A	Mearlcrete	FL13492	19-0729.0	
	Alpha-Tite Bonding Adhesive	N/A	None	None	
	FTR-190e	N/A	None	None	
INSULATIONS:	FTR-290	N/A	None	None	
	FTR-390	N/A	None	None	
	FTR-490	N/A	None	Nane	
Adhesives:	FTR SBS Adhesive	N/A	None -	None	
	FiberTite FTR 601	Millennium One Step Foamable Adhesive	-	On	
	FTR-601 PG	Millennium PG-1 Pump Grade Adhesive	-F(1800	21-1018.0	
	N/A	Millennium PG-1 EF ECQ	1 1	1	
	N/A	OlyBond 500	FL1608	22-0519.0	
	N/A	Polyset Board-Max	FL22256	4	
	N/A	Polyset Commercial Roof Adhes ve	FL1365	22-0614.1	
PRIMERS:	FTR SA Primer	ELASTOCOL Stick Zero	FL9779	22-0706.0	
	N/A	ELASTOCOL Stick		47	
Roll Goods:	VaporTite	SOPRAVAP'R	None	19-0828	

² When using OMG RhinoBond TreadSafe Insert or SFS isoweld FI-R-20 Sleeve, the insulation shall be of sufficient thickness to accommodate the length of the insert/sleeve without damage thereto during installation.

Reviewed for Code Compilance

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Installation:

3.1 **FiberTite Roof Systems** shall be installed in accordance with **Seaman Corporation** published installation instructions, subject to the Limitations of Use noted herein.

3.1.1 <u>Fasteners</u>: Unless otherwise noted, fasteners and stress plates shall be as follows, used in any combination. Fasteners shall be of sufficient length for the following engagements.

		FASTENER REFERENCES						
ROOF DECK		Parts						
Wood, engineered sheathing or	·	FiberTite #12, FiberTite #14, FiberTite Magnum Fastener, FTR Magnum O Fastener, FTR MagnumT Fastener, OMG #12 Standard, OMG #14 Heavy Duty or OMG XHD, SFS Dekfast DF-#12-PH3, Dekfast DF-#14-PH3 or Dekfast DF-#15-PH3, Trufast #12 DP, Trufast #14 HD or Trufast #15 EHD	Min. 0.75-inch penetration (engineered sheathing) or min. 1-inch					
plank	Plate Options:	FiberTite 3-in Steel Plate, OMG 3" Galvalume Plate, SFS Dekfast PLT-R-3 or Trufast 3" Metal Insulation Plate	embedment (plank)					
Steel			Min. 0.75-inch penetration					
	Plate Options:	FiberTite 3-in Steel Plate, OMG 3" Galvalume Plate, SFS Dekfast PLT-R-3 or Trufast 3" Metal Insulation Plate						
Structural	Fastener Options:	FiberTite #14, OMG #14 Heavy Duty or OMG CD-10, SFS Dekfast DF-#14-PH3, Trufast #14 HD or Trufast ¼" Concrete Spike	Non-HVHZ: Min. 1-inch embedment					
Concrete	Plate Options:	FiberTite 3-in Steel Plate, OMG 3" Galvalume Plate, SFS Dekfast PLT-R-3 or Trufast 3" Metal Insulation Plate	HVHZ: Min. 1.25-inch embedment					

3.1.2 Insulation:

- (a) Unless otherwise noted, insulation may be any one layer or combination of FBC Approved (Local or Statewide) board(s) that meet FBC 1505 and, for foam plastic, FBC Chapter 26, when installed with the roof cover.
- (b) For Structural Concrete Deck or Recover Applications using System Type C-1 the base insulation layer is optional and using System Type C-2, D-1 or D-2, the insulation is optional. Alternatively, an FBC Approved (Local or Statewide) insulation board or coverboard may be used as a separation layer. Board products shall be preliminarily attached prior to roof cover installation, see Section 3.1.2(d). The separator component shall be documented as meeting FBC 1505 and, for foam plastic, FBC Chapter 26, when installed with the roof cover in Recover applications.
- (c) Minimum 200 psi, minimum 2-inch thick FBC Approved (Local or Statewide) lightweight insulating concrete may be substituted for, or installed below, rigid insulation board for System Types B-1, C-1, C-2, D-1 or D-2, whereby fasteners are installed through the lightweight insulating concrete to engage the structural deck. The structural deck shall be of equal or greater type, thickness and strength to the steel and structural concrete deck listings. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction. This is a wind uplift resistance allowance and does not purport to address non-wind-uplift-related issues, such as deck venting or moisture levels within the LWIC and the potential effect on overlying components.
- (d) Preliminary insulation attachment:
 - Non-HVHZ: Unless otherwise noted, use FBC Approved (Local or Statewide) roofing fasteners and plates and refer to Section 2.2.10.1.3 of FM Loss Prevention Data Sheet 1-29.
 - HVHZ: Unless otherwise noted, use FBC HVHZ Approved roofing fasteners and plates minimum four fasteners per 4 x 8 ft board or minimum two fasteners per 4 x 4 ft board.
- (e) Lightweight insulating concrete (LWIC) shall be cast in accordance with FBC Section 1917 to the satisfaction of the Authority Having Jurisdiction. For systems where specific LWIC is referenced, refer to current LWIC Florida Product Approval or NOA for specific deck construction and limitations. Unless otherwise noted, for systems where specific LWIC is not referenced, the minimum design mix shall be 300 psi. In all cases, the minimum top-coat thickness is 2-inches. For LWIC over structural concrete, reference is made to FBC Section 1917.4.1, Point 1. For "pre-existent" LWIC references, listings were established through testing over lightweight concrete cast using only foaming agent (ASTM C896), water and Portland cement (ASTM C150), with no proprietary additives, in accordance with procedures adopted by Miami-Dade BCCO (FBC CER1592). Use of these listings in new construction or re-roof (tear-off) applications is at the discretion of the Designer or Record and Authority Having Jurisdiction.

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3.1.3 Insulation Adhesives:

(a) Unless otherwise noted, insulation adhesive application rate is continuous ribbons, maximum 12-inch o.c. Ribbons shall be applied and insulation boards shall be set in accordance with the manufacturer's published instructions. When multiple layers(s) of insulation and/or coverboard are installed in ribbon-applied adhesive, boards shall be staggered from layer-to-layer. The maximum edge distance from the adhesive ribbon to the edge of the insulation board shall be not less than one-half the specified ribbons spacing. Concrete deck shall be primed with ASTM D41 primer prior to asphalt-application.

Insulation Adhesive References							
Ву	Adhesive	Reference	Rate				
Coomen Corneration	Fibertite FTR 601	FTR 601	Continuous ribbons, max. 12-inch o.c.				
Seaman Corporation	FTR-601 PG	FTR-601 PG	Continuous ribbons, max. 12-inch o.c.				
HB Fuller	Millennium PG-1 EF ECO	M-PG1-EF-ECO	Continuous 1 to 1.5-inch ribbons, 12-inch o.				
OMG	OlyBond 500	OB500	Continuous ribbons, max. 12-inch o.c.				
ICP Construction	Polyset Board-Max	Board-Max	Continuous ribbons, max. 12-inch o.c.				
	Polyset Commercial Roof Adhesive	Polyset CRA	Continuous ribbons, max. 12-inch o.c.				
Generic	ASTM D312, Type IV asphalt hot asphalt Full-coverage at 25-30 lbs/sq						

(b) Unless otherwise noted, all adhered insulations are flat-stock or taper board of the minimum thickness noted. Tapered polyisocyanurate at the following thickness limitations may be substituted with the following Maximum Design Pressure (MDP) limitations. In no case shall these values be used to 'increase' the MDP listings in the tables; rather if MDP listing below meets or exceeds that listed for a particular system in the tables, then the thinner board listed below may be used as a drop-in for the equivalent thicker material listed in the selected assembly.

MDP Limitations for Tapered Polyisocyanurate Insulations							
Adhesive	Insulation	Min. Tapered Thickness (in)	MDP(psf)				
FTR 601 or FTR-601 PG	Any listed polyisocyanurate herein	0.5	-157.5				
OB500	FTR-VALUE or FTR-VALUE H	0.5	-315.0				
OB500	FTR-VALUE A	0.5	-487.5				
Board-Max or CRA	Any listed polyisocyanurate herein	1.0	-117.5				

- (c) Adhered Insulation, Board Size:
 - > Non-HVHZ: Unless otherwise noted, refer to Section 2.2.10.6.2 of FM Loss Prevention Data Sheet 1-29.
 - > HVHZ: Bonded polyisocyanurate insulation boards shall be maximum 4 x 4 ft.

3.1.4 Roof Covers:

(a) For bonded membrane applications, unless otherwise noted, refer to the following.

1		Membrane / Adhesive Co	ombinations				
Reference Layer Material		Material		Application			
		Adhesive 6	Method	Rate			
BB1-190E	Roof Cover:	FiberTite or FiberTite XT	FTR-190e	Contact	0,5 gallon/aquare per		
BB2-190E	Roof Cover:	FiberTite-SM or FiberTite XTrem€	TINCISCO P	application	sufface S		
BB3-ATBA	Roof Cover:	FiberTite or FiberTite XT	Alpha-Tite Bonding	Contact	0.83 to 1.0 gallon/square		
BB4-ATBA	Roof Cover:	FiberTite-SM or FiberTite XTreme	Adhesive	application	per surface, depending on substrate perosity		
FBI-290	Roof Cover:	FiberTite-FB, -SM FB, -XT FB or -XTreme FB	FTR-290	Wet lay	1.0 gallon/square		
FB2-390	Roof Cover or Cap Ply:	FiberTite-FB, -SM FB, -XT FB or -XTreme FB	ETR-390	DW-I layT I-	1.67 to 2.5 gallor/square, depending on substrate peronity		
FB3-490	Roof Cover:	FiberTite-FB, -SM FB, -XT FB or -XTreme FB	FTR-190	Wet lay	0.85 to 1.8 gallon/square, depending on substrate porosity		
FB4-HA	Root Cover or Cap Ply:	FiberTite-FB, -SM FB, -XT FB or -XTrame FB	hot asphalt	Wet lay	25-30 lbs/aquare		
FB5-CR20	Roof Cover or Cap Ply:	FiberTite-FB, -SM FB, -XT FB or -XTrame FB	"Polyset Commercial Roof Adhesive"	Wet lay	Spatter-applied, full coverage		
FB6-601PG	Roof Cover or Cap Ply:	FiberTite-FB, -SM FB, -XT FB or -XTrame FB	FTR 601-PG	Wet lay	Spatter-applied, 4.0 lbs/square		

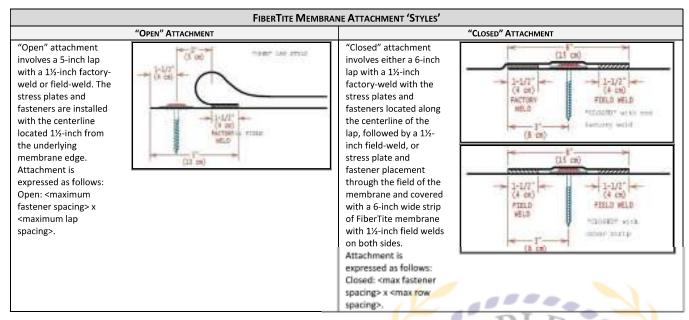
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	Membrane / Adhesive Combinations								
REFERENCE	LAYER	MATERIAL		Application	N				
REFERENCE	LAYER	IVIATERIAL	Adhesive	METHOD	RATE				
FB7-CEFA	Roof Cover or Cap Ply:	FiberTite-FB, -SM FB, -XT FB or -XTreme FB	SOPREMA "COLPLY EF Adhesive"	Wet lay	2.0 gallon/square				
BP1-HA	Vapor Barrier, Base Ply or Ply:	FiberTite-SBS Base, FiberTite-SBS 190 Base, FTR SBS Poly 3.0, FTR SBS Poly 3.7 or FTR SBS Poly 4.0	Hot asphalt	Wet lay (substrate)	25-30 lbs/square				
BP2-FTRSBSA	Vapor Barrier, Base Ply or Ply:	FiberTite-SBS Base, FiberTite-SBS 190 Base, FTR SBS Poly 3.0, FTR SBS Poly 3.7 or FTR SBS Poly 4.0	FTR SBS Adhesive	Wet lay (substrate)	1.5-2.0 gallon/square, depending on substrate porosity				
BP3-CEFA	Vapor Barrier, Base Ply or Ply:	FiberTite-SBS Base, FiberTite-SBS 190 Base, FTR SBS Poly 3.0, FTR SBS Poly 3.7 or FTR SBS Poly 4.0	SOPREMA "COLPLY Wet lay EF Adhesive" (substrate)		1.5-2.0 gallon/square, depending on substrate porosity				
BP4-TA	Vapor Barrier FiberTite-SBS TG Base, FiberTite-SBS 190 TG		torch-applied	torch- applied	full-bond				

(b) For single-ply membranes in System Type D-1 steel deck applications, the roof membrane shall be run with its length perpendicular to the steel deck flutes. Seaman Corporation offers two (2) 'styles' of attachment; "Open" and "Closed", as detailed below.



(c) For System Type C-2 (induction weld), care shall be taken to ensure that the plates do not line-up with membrane seams. This condition may preclude proper induction welding of the membrane to the plates.

3.1.5 Vapor Barriers:

- (a) For System Types C-1, C-2, D-1 or Type D-2, an optional thermal barrier and/or VaporTite (self-adhering) vapor barrier membrane may be installed atop the roof deck prior to installation of the insulation and roof cover. Refer to FM Loss Prevention Data Sheet 1-29 for design and installation recommendations and limitations.
- (b) FiberTite VBX Air and Vapor Barrier Membrane, mechanically attached using FiberTite #14 Heavy Duty Fasteners or FiberTite Magnum Fasteners (steel only) with FiberTite Magnum-Plus Seam Plates spaced 24-in. o.c. within the 8-in. wide side laps; laps sealed with 1.5-in. heat weld, may be optionally installed over wood, steel or structural concrete deck or over lightweight concrete over steel or structural concrete deck (attached through the LWC to engage the structural deck) in the following system types, to a MDP of -82.5 psf.
 - ✓ System Types B-1 and C-1.
 - ✓ System Type C-2 with any grid pattern, or with row spacing not to exceed 60-inch o.c.
 - ✓ System Type D-1 with row spacing not to exceed 60-inch o.c.

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(c) Vapor barrier options for use over structural concrete deck followed by bonded insulation carry the following MDP limitations. The lesser of the MDP listings below vs. that for the selected assembly applies.

	VAPOR BARRIER OPTIONS, STRUCTURAL CONCRETE DECK, ADHERED INSULATION VAPOR BARRIER VAPOR BARRIER INSULATION ADHESIVE MDP								
OPTION	PRIMER	INSULATION ADHESIVE	MDP						
#	PRIMER	ТүрЕ	APPLICATION	PER TABLE 3A & 3B	(PSF)				
C-VB-1.	ASTM D41	FiberTite-SBS Base, FiberTite-SBS 190 Base, FTR SBS Poly 3.0, FTR SBS Poly 3.7 or FTR SBS Poly 4.0	hot asphalt	hot asphalt, 25-30 lbs/square	-210.0				
C-VB-2.	ASTM D41	FiberTite-SBS TG Base, FiberTite-SBS 190 TG Base, FTR SBS Poly 3.0, FTR SBS Poly 3.7 or FTR SBS Poly 4.0	torch-applied	hot asphalt, 25-30 lbs/square	-210.0				
C-VB-3.	ASTM D41	Smooth-surfaced asphalt huilt-up roof hot asphalt		hot-asphalt, 25-30 lbs/square	-375.0				
C-VB-4.	None	FiberTite-SBS Base or FiberTite-SBS 190 Base	FTR SBS Adhesive, continuous ribbons, 12-inch o.c.	FTR 601 or FTR-601 PG, ribbons 12-inch o.c.					
C-VB-5.	None	FTR SBS Poly 3.7	FTR SBS Adhesive, continuous ribbons, 12-inch o.c.	FTR 601 or FTR-601 PG, ribbons 12-inch o.c.	-105.0				
C-VB-6.	FTR SA Primer	VaporTite	self-adhering	FTR 601 or FTR-601 PG, ribbons 12-inch o.c.	-180.0				
C-VB-7.	ELASTOCOL Stick	VaporTite	self-adhering	FTR 601 or FTR-601 PG, ribbons 12-inch o.c.	-210.0				
C-VB-8.	ASTM D41	FiberTite-SBS Base, FiberTite-SBS 190 Base, FTR SBS Poly 3.0, FTR SBS Poly 3.7 or FTR SBS Poly 4.0	hot asphalt, FTR SBS Adhesive at 1.5- 2.0 gal/square or SOPREMA "COPLY EF Adhesive" at 1.5-2.0 gal/square.	FTR 601 or FTR-601 PG, ribbons 12-inch o.c.	-225.0				
C-VB-9.	ASTM D41	FiberTite-SBS TG Base, FiberTite-SBS 190 TG Base, FTR SBS Poly 3.0, FTR SBS Poly 3.7 or FTR SBS Poly 4.0	torch-applied	FTR 601 or FTR-601 PG, ribbons 12-inch o.c.	-225.0				
C-VB-10.	ASTM D41	FiberTite-SBS Base, FiberTite-SBS 190 Base, FTR SBS Poly 3.0, FTR SBS Poly 3.7 or FTR SBS Poly 4.0	hot asphalt, FTR SBS Adhesive at 1.5- 2.0 gal/square or SOPREMA "COPLY EF Adhesive" at 1.5-2.0 gal/square.	FTR 601 or FTR-601 PG, ribbons 6-inch o.c.	-372.3				
C-VB-11.	ASTM D41	FiberTite-SBS TG Base, FiberTite-SBS 190 TG Base, FTR SBS Poly 3.0, FTR SBS Poly 3.7 or FTR SBS Poly 4.0	torch-applied	FTR 601 or FTR-601 PG, ribbons 6-inch o.c.	-372.3				

LIMITATIONS OF USE:

4.1 General:

- 4.1.1 This is a building code evaluation. NEMO ETC, LLC is not, in any way, the Designer of Record for any project on which this NER, or previous versions thereof, is/was used for permitting or design guidance. NERs are not to be construed as representing any attributes not specifically listed, nor are NERs to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by NEMO ETC, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.
- This NER 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.
 - (a) Unless otherwise noted, reference to 'structural concrete' pertains to min. 2,500 psi structural concrete, and excludes 'structural lightweight concrete'.
- All components in the roof assembly shall have quality assurance surveillance in accordance with F.A.C. Rule 61620-3. 4.1.3 components listed herein that are produced by a manufacture other than the report holder on P the Florida Product Approval or NOA of the component manufacturer.

4.2 **Jurisdiction Specific:**

Non-HVHZ HVHZ This NER does not include evaluation of fire classification. 4.2.1 Refer to FBC 1505, UL TGFU.R10117 and the fire classification

certificate for the roof cover manufacturer for requirements and limitations regarding roof assembly fire classification. Refer to FBC 2603 for requirements and limitations concerning the use of foam plastic insulation.

This NER does not include evaluation of fire classification. Refer to FBC HVHZ 1516, UL TGFU.R10117 and the fire classification certificate for the roof cover manufacturer for requirements and limitations regarding roof assembly fire classification. Refer to FBC 2603 for requirements and limitations concerning the use of foam plastic insulation.

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Non-HVHZ

- 4.2.2 This NER does not include evaluation of roof edge termination. Refer to FBC 1504.5 for requirements and limitations regarding edge securement for low-slope roofs.
- 4.2.3 Refer to FBC 1511 for requirements and limitations regarding recover installations.
 - (a) For mechanical attachment to existing roof decks, fasteners shall be tested for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing shall be in accordance with ANSI/SPRI FX-1 or TAS 105.
 - (b) For adhered re-roof (tear off) installation, the existing substrate shall be examined for compatibility with the adhesive. If any surface conditions exist that bring system performance into question, field uplift testing in accordance with ANSI/SPRI IA-1, FM Loss Prevention Data Sheet 1-52 or TAS 124 shall be conducted on mock-ups of the proposed interface.
 - (c) For adhered recover installation, the existing roof system shall meet project design pressure requirements on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with FM Loss Prevention Data Sheet 1-52 or TAS 124.

HVHZ

This NER does not include evaluation of roof edge Refer to RAS 111 for requirements and termination. limitations regarding edge securement for low-slope roofs.

Refer to FBC HVHZ 1521 for requirements and limitations regarding recover installations.

For mechanical attachment to existing roof decks, fasteners shall be tested for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing shall be in accordance with TAS 105.

For adhered re-roof (tear off) installation, the existing substrate shall be examined for compatibility with the adhesive to be installed. If any surface conditions exist that bring system performance into question, field uplift testing in accordance with TAS 124 shall be conducted on mock-ups of the proposed interface.

For adhered recover installation, the existing roof system shall meet project design pressure requirements on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with **TAS 124**.

Wind Load Resistance: 4.2.4

- (a) Refer to Section 4.3 for a tabulated summary of assembly listings and maximum allowable design pressures.
- (b) "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per FBC 1504.9 has already been applied). Refer to FBC 1609 for determination of design wind loads.
- (c) The MDP for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with FBC Chapter 16. Elevated pressure zones shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Commonly used methods are ANSI/SPRI WD1, FM Loss Prevention Data Sheet 1-29, RAS 117 and RAS 137. Assemblies marked with an asterisk* carry the limitations set forth in Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29 for Zone 2/3 enhancements.
- (d) For fully-adhered installations, the maximum design pressure for the selected assembly shall meet or exceed the critical design pressure. Rational analysis is not permitted.

"MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per TAS 114 has already been applied). Refer to FBC HVHZ 1620 or RAS 128 for determination of design wind loads.

The MDP for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with FBC HVHZ 1620 or RAS 128. Elevated pressure zones shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Analysis shall be in accordance with RAS 117 or RAS 137

For assemblies marked with an asterisk*, the maximum design pressure (MDP) limitation shall be applicable to all roof pressure zones. Rational analysis is not permitted.



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System Listings and Allowable Design Pressures: See Section 4.2.4

4.3

Attach	Attachment Requirements for Wind Uplift Resistance	Uplift Resistance				
Table	Deck	Application	Type	Description	Li .	Page
1A	Wood	New, Reroof (Tear-Off) or Recover	<code-block></code-block>	Mechanically Attached Insulation, Bonded Roof Cover		10
<u>B</u> I	Wood	New, Reroof (Tear-Off) or Recover	C-5	Mechanically Attached Insulation, Induction Welded Roof Cover	wer	11
lc	Wood	New, Reroof (Tear-Off) or Recover	<u>-</u>	Insulated, Mechanically Attached Roof Cover		12
P	Wood	New, Reroof (Tear-Off) or Recover	귭	Insulated, Bonded Vapor Barrier, Mechanically Attached Roof Cover	if Cover	13
Ш	Wood	New, Reroof (Tear-Off) or Recover	<u>-</u>	Non-Insulated, Mechanically Attached Roof Cover		13
2a	Steel or Structural Concrete	New, Reroof (Tear-Off) or Recover	<u>-</u>	Mechanically Attached Base Insulation, Bonded Top Insulation(s), Bonded Roof Cover	in(s), Bonded Roof Cover	14
2b	Steel or Structural Concrete	New, Reroof (Tear-Off) or Recover	<u>-</u>	Mechanically Attached Base Insulation, Bonded Top Insulation(s), Bonded Roof Cover	in(s), Bonded Roof Cover	23
2C	Steel	New or Reroof (Tear-Off)	B-2	Mechanically Attached Thermal Barrier, Bonded Vapor Barrier, Bonded Insulation(s), Bonded Roof Cover	er, Bonded Insulation(s), Bonded Roof Cover	24
2D	Steel	New or Reroof (Tear-Off)	B-2	Mechanically Attached Thermal Barrier, Bonded Vapor Barrier, Bonded Insulation(s), Bonded Roof Cover	er, Bonded Insulation(s), Bonded Roof Cover	34
2e	Steel or Structural Concrete	New, Reroof (Tear-Off) or Recover	고	Mechanically Attached Insulation, Bonded Roof Cover		38
2f	Steel or Structural Concrete	New, Reroof (Tear-Off) or Recover	강	Mechanically Attached Insulation, Bonded Roof Cover		44
29	Steel	New, Reroof (Tear-Off) or Recover	C-2	Mechanically Attached Insulation, Induction Welded Roof Cover	wer	45
2h	Steel	New, Reroof (Tear-Off) or Recover	<u>-</u>	Insulated, Mechanically Attached Roof Cover		52
3a	Structural Concrete	New or Reroof (Tear-Off)	4	Bonded Insulation(s), Bonded Roof Cover		55
3b	Structural Concrete	New or Reroof (Tear-Off)	4	Bonded Insulation(s), Bonded Base Ply(s), Bonded Roof Cover	,	61
3c	Structural Concrete	New, Reroof (Tear-Off) or Recover	C-2	Mechanically Attached Insulation, Induction Webset Roof Cover	WBF	69
3d	Structural Concrete	New, Reroof (Tear-Off) or Recover	<u>-</u>	Insulated, Mechanically Attached Roof Cover	100000000000000000000000000000000000000	69
3e	Structural Concrete	New or Reroof (Tear-Off)	ш	Non-Insulated, Bonded Roof Cover	- OF NULFOR	7.0
3f	Structural Concrete	New or Reroof (Tear-Off)	ტ	Perimeter Attached Roof Cover, Pressure Equalizing Vent	07:00	71
4a	Existing Lightweight Concrete	Reroof (Tear-Off)	-\f	Bonded Insulation(s), Bonded Roof Cover		71
4p	Lightweight Concrete	New or Reroof (Tear-Off)	ш	Non-Insulated, Bonded Roof Cover		17 4
5a	Cementitious Wood Fiber	New or Reroof (Tear-Off)	¥-	Bonded Insulation(s), Bonded Roof Cover	C	7.3
2p	Cementitious Wood Fiber	New or Reroof (Tear-Off)	Ŧ	Bonded Insulation(s), Bonded Roof Cover	(ON THE	7.5
2C	Cementitious Wood Fiber	Reroof (Tear-Off) or Recover	<u>-</u>	Insulated, Mechanically Attached Roof Cover	LIC	D 175
6a	Existing Gypsum	Reroof (Tear-Off)	-A	Bonded Insulation(s), Bonded Roof Cover	A COULT A	27
q9	Existing Gypsum	Reroof (Tear-Off)	A-I	Bonded Insulation(s), Bonded Roof Cover		78
99	Existing Gypsum	Reroof (Tear-Off)	ᆸ	Insulated, Mechanically Attached Roof Cover		79
<u>7a</u>	Various	Recover	Ŧ	Bonded Insulation(s), Bonded Roof Cover	A Course Of	79
4Z	Various	Recover	Ŧ	Bonded Insulation(s), Bonded Roof Cover	9	88
7C	Steel	Recover	C-2	Mechanically Attached Insulation, Induction Welded Roof Cover	wer	06
QZ	Steel	Recover	<u>-</u>	Insulated, Mechanically Attached Roof Cover	00000	25
7e	Various	Recover	ш	Non-Insulated, Bonded Roof Cover	1000	92



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	MDP	(bst)	F.7 F.	C.2C-	9 00	C.20-	000	0.08-	140 E	C.71 -
		Attachment	Closed: 6 × 144 inch	Closed: 0 × 1444-1101	O. 20 % 0. 10000	Closed: 0 x 94-11101	Clocod: 6 × 404 E inch	Closed: 0 × 104:3-11101	Clocod: 6 v 47 inch	Closed: 0 x 4/ - III cl
TABLE $3d$: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF ($Tear$ -Off) or RECOVER SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER	Roof Cover (3.1.4)	Fastener (3.1.1, 4.2.3)	FiberTite Magnum Fastener or OMG CD-10 with FTR	Magnum2S Plate	FiberTite Magnum Fastener or OMG CD-10 with FiberTite	Magnum Stress Plate or FiberTite Magnum-Plus Stress Plate	FiberTite Magnum Fastener or OMG CD-10 with FiberTite	Magnum Stress Plate or FiberTite Magnum-Plus Stress Plate	FiberTite, XT, SM FiberTite Magnum Fastener or OMG CD-10 with FiberTite	Magnum Stress Plate or FiberTite Magnum-Plus Stress Plate
: DECKS - NEW COI		Membrane	FiberTite, XT, SM	or Xtreme	FiberTite, XT, SM	or Xtreme	FiberTite, XT, SM	or Xtreme	FiberTite, XT, SM	or Xtreme
URAL CONCRETE M TYPE D-I: INS		Attach	Prelim.	attached	Prelim.	attached	Prelim.	attached	Prelim.	attached
TABLE 3d: STRUCTU	Insulation (3.1.2)	Type	Min. 1.5-inch thick, one or more	layers, any combination	Min. 1.5-inch thick, one or more	layers, any combination	Min. 1.5-inch thick, one or more	layers, any combination	Min. 1.5-inch thick, one or more	layers, any combination
	Dook (4.1.2)	Deck (4:1:4)	Strictural concrete	oli uctul al correrete	Oteración legitoria	ori uctural correrete	Oteriotiscal constrato	oli uciul al col loi ete	Otructural congreto	Oll detail all collecte
	System	V	C 102	C-132.	700	ر-133.	707		105	

	TABLE 30:	TABLE 3e: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER*	ION or REROOF (Tear-Off) OF COVER*		
System			Roof Cover [3.1.4]		MDP
No.	Deck (FTT)	Base Ply	Ply	Cap Ply	(bst)*
C-196.	Structural concrete	None	N/A	FB6-601PG	-112.5
C-197.	Structural concrete primed; ASTM D41	BP1-HA, BP2-FTRSBSA, BP3-CEFAor BP4-TA	(Optional) BP1-HA, BP2-FTRSBSA, BP3-CEFA or BP4-TA	FB4-HA, FB5-CR20, FB6-601PG or FB7-CEFA	-167.5
C-198.	Structural concrete	None	None	FB2-390	-237.5
C-199.	Structural concrete primed; ASTM D41	SOPREMA "Elastophene SP 2.2" or "Elastophene SP 3.0", torch-applied	None	Fee 390 LEG	-320.0
C-200.	Structural concrete sealed; PVA	None	N/A	FBL290	-377.0
C-201.	Structural concrete	None	N/A	FB3-490-	442.5
C-205.	Structural concrete	None	N/A	FB3-490 (FloerTab XTEB only)	495.0
C-203.	Structural concrete	None	N/A	F85-CR20	496.0
C-204.	Structural concrete primed; ASTM D41	None	N/A	FB4HA	-572.5





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FRONT ELEVATION VIEW

SIDE ELEVATION VIEW





REAR ELEVATION VIEW

SIDE ELEVATION VIEW



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ROOF COVERING SYSTEM – The roof covering system is fully functional with no observable deficiencies. The mechanical devices appear to be secured in a manner to resist high wind events.



ROOF COVERING SYSTEM – The roof covering system is fully functional with no observable deficiencies. The mechanical devices appear to be secured in a manner to resist high wind events.



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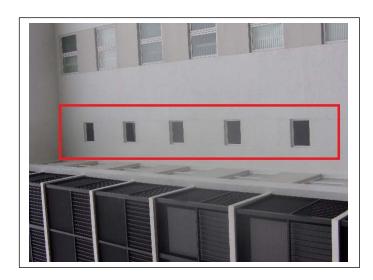
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REINFORCED CONCRETE ROOF DECK ON REINFORCED CONCRETE WALLS



REINFORCED CONCRETE ROOF DECK ON REINFORCED CONCRETE WALLS



OPENING PROTECTION – Although all the unit owner window & sliding door openings are large missile rated, the stairwell windows are not rated or protected. Approximately 95% of the building is protected.



OPENING PROTECTION – Although all the unit owner window & sliding door openings are large missile rated, the rear ground level glazed sliding glass doors are not rated or protected. Approximately 95% of the building is protected.