



City of Belle Isle Job Site Permit Card **ROOF** 2021-04-064

Class: Residential

Site Address: 2912 Flowertree Rd - Belle Isle, FL 32812

Parcel Number: 29-23-30-1880-02-140 . Municipality Belle Isle

INSPECTIONS CANNOT BE SCHEDULED IF A NOC IS PENDING FOR THIS PROJECT

Description of Work: ROOF for SFR

Number of Stories:

MODIFIED BITUMEN (Flintlastic) Square Footage: 4400.

Issued: BUILDERS 360 INC- VARELA, L C

License # CCC1332008

Contact# 786 333-6144

Payment/ Issued Date & Method: 4 / 20 / 2021

Picked up by _____ Sent by mail to the mailing address Emailed

Visa Master Card Amex Discover Check / Money Order#

4175 | | | | | | | | | | | | | | | | | | | | | |

Inspection requests & inquiries regarding results are to be emailed to: BDscheduling@UniversalEngineering.com

ROOF	INSPECTOR	DATE	COMMENTS
NEW ROOFS ONLY Code 700 Deck Nailing, Dry-In, Flashing			This inspection only applies for a NEW roof only!
Both new & re-roof Code 710 In - Progress			Underlayment & Dry-in COMPLETE with UP TO 25% shingle coverage.
Both new & re-roof Code 720 Final			Schedule when roof is COMPLETE.

PLEASE NOTE: In order to schedule any inspections, the PERMIT / plans-specs. must be issued and POSTED on the JOB SITE! THIS WILL AVOID ANY FAILED INSPECTIONS & RE-INSPECTION FEES. A permit expires in 6 months if approved inspections are not recorded /scheduled within that time frame. You are responsible for scheduling and keeping track all of your inspections - ☆ Inspection requests are to be emailed to BDscheduling@UniversalEngineering.com; a confirmation email will be sent back to you upon scheduling. Next-Day Inspection requests must be made by 3:00 p.m. Please include the following requirements in your request:

- Project Address
- Corresponding Permit Number
- Type of Inspection (Please reference your permit card for inspection codes)
- Date of Inspection (If no date is specified, the inspection will be scheduled for the next business day)
- Contact Name
- Contact Phone Number
- Gate / Entry code (If applicable)
- AM, PM, or Any Time (We do our best to accommodate time requests but cannot guarantee an exact arrival)

Universal Engineering Sciences - 3532 Maggie Blvd., Orlando, FL 32811407-581-8161 * Fax 407-581-0313 www.universalengineering.com

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."



City of Belle Isle
 Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
 Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

RECEIVED
 APR 13 2021

APPLICATION FOR ROOFING PERMIT

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

DATE OF APPLICATION: 4/9/21

ROOF PERMIT NUMBER 2021-04-064

PLEASE PRINT. The undersigned hereby applies for a permit to make installations as indicated below:

Project Address 2912 Flowertree Rd

Property Owner Durlin, Jesse Belle Isle, FL 32809^X 32812

Property Owner's Mailing Address 2912 Flowertree Rd Phone 407-415-2976

State FL Zip Code 32812 City Belle Isle

Parcel Id Number: 29-23-30-1880-02-140

REQUIRED! To obtain this information, please visit <http://www.ocpafi.org/Searches/ParcelSearch.aspx>

Class of Building: Old New Type of Building: Residential Commercial Other
 Type of Work: New Roof ReRoof

- REQUIRED! Florida Product Approval Form – NOTE: installation instructions must be posted on-site before your first inspection!
- OSHA Approved Access to the Roof must be made Available to the Inspector

Please indicate the nature of work by completing the information below:

Roof Square Footage: 4400

Number of Stories: 1

Job Valuation: \$ 18000

Type: Asphalt Shingles Metal

Modified Bitumen

Other: CAP SHEET

I hereby certify that the above is true and correct to the best of my knowledge and make Application for Permit as outlined above, and if same is granted I agree to conform to all Florida Building Code Regulations and City Ordinances regulating same and in accordance with plans submitted. The issuance of this permit does not grant permission to violate any applicable Town and/or State of Florida codes and/or ordinances. By signing below, I recognize JJ's Waste & Recycling is by legal contract the sole authorized provider of garbage, recycling, yard waste, and commercial garbage and construction debris collection and disposal services with the city limits of the City. Contractors, homeowners and commercial businesses may JJ's Waste & Recycling at 407 298-3932 setup accounts for Commercial, Construction Roll Off, or other services needed. Rates are fixed by contract and are available at City Hall or from JJ's Waste & Recycling. The City enforces the contract through its code enforcement office. Failure to comply will result in a stop work order.

LICENSE HOLDER SIGNATURE [Signature]

LICENSE # CCC1332008

LICENSE HOLDER NAME LILIAN VARELA

COMPANY NAME BUILDERS 360 INC

Street Address 12811 NSUGARWOOD LN

City CLERMONT

State FL

Zip Code 34715

Phone Number 786-333-6144

Email Address BUILDERS360INC@GMAIL.COM

Zoning Fee \$ 30.-

Building Fee \$ 110.-

Review Fee \$ 0

1% BCAIB Fee \$ 2 min

1.5% DCA Fee \$ 2 min

Total Permit Fee \$ 144.00

Building Official: OTC Date 4.13.21
PENDING - DTR
 Verified Contractor's Licenses & Insurance are on file [Signature] Date 4-13-21

NOCV

NOTE: The Building Permit Number is required if the Roof Installation is associated with any construction or alteration where a Building Permit has been issued. 15711
5X17

PAID
APR 20 2021 10
USA 4775

DOC # 20210205103
 04/08/2021 08:49 AM Page 1 of 1
 Rec Fee: \$10.00
 Deed Doc Tax: \$0.00
 Mortgage Doc Tax: \$0.00
 Intangible Tax: \$0.00
 Phil Diamond, Comptroller
 Orange County, FL
 Ret To: SIMPLIFILE LC

Permit Number: _____
 Folio/Parcel ID #: 24-23-30-1880-02-140
 Prepared by: BUILDERS 360 INC Lilian Varela
 Return to: builders360inc@gmail.com
Builders 360 INC / 12811 sugarwood Ln
Clermont, FL 34715

NOTICE OF COMMENCEMENT

State of Florida, County of Orange
 The undersigned hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

1. Description of property (legal description of the property, and street address if available)
Doctwylic Shores 1st Addition v/103 Lot 14 BLK B
2. General description of improvement
Re - E209
3. Owner information or Lessee information if the Lessee contracted for the improvement
 Name Dustin Tease
 Address 2412 Hawthorne Rd Orlando FL 32812
 Interest in Property Owner
 Name and address of fee simple titleholder (if different from Owner listed above)
 Name _____
 Address _____
4. Contractor
 Name Builders 360 INC Telephone Number 786.333.6144
 Address 12811 Sugarwood Ln Clermont fl 34715
5. Surety (if applicable, a copy of the payment bond is attached)
 Name _____ Telephone Number _____
 Address _____ Amount of Bond \$ _____
6. Lender
 Name _____ Telephone Number _____
 Address _____
7. Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by §713.13(1)(a)7, Florida Statutes.
 Name _____ Telephone Number _____
 Address _____
8. In addition to himself or herself, Owner designates the following to receive a copy of the Lienor's Notice as provided in §713.13(1)(b), Florida Statutes.
 Name _____ Telephone Number _____
 Address _____
9. Expiration date of notice of commencement (the expiration date will be 1 year from the date of recording unless a different date is specified) _____

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

[Signature]
 Signature of Owner or Lessee, or Owner's or Lessee's Authorized Officer/Director/Partner/Manager Signatory's Title/Office _____

The foregoing instrument was acknowledged before me this 6 day of 4/21 by Dustin Tease
 as _____ for _____
 Type of authority, e.g., officer, trustee, attorney in fact Name of party on behalf of whom instrument was executed

[Signature]
 Signature of Notary Public - State of Florida
 Personally Known _____ OR Produced ID
 Type of ID Produced DE 45-43282-0680

Print, type, or stamp commissioned name of Notary Public



Form content revised: 01/23/14

State of FLORIDA, County of ORANGE.
 Per §668.50, F.S., which defines and permits electronic signatures, I certify that this is a true copy of the document as reflected in the Official Records.
PHIL DIAMOND, COUNTY COMPTROLLER
Janet Gonzalez 04/09/2021
 Deputy Comptroller Date





ORANGE COUNTY PROPERTY APPRAISER

[Sign up for e-Notify...](#)

Please visit our new mobile-friendly and ADA accessible website.

[CLICK HERE](#)

- [🔍 Searches](#)
- [🔗 Sales Search](#)
- [📄 Results](#)
- [📄 Property Record Card](#)
- [🔖 My Favorites](#)

2912 Flowertree Rd < 29-23-30-1880-02-140 >

Name(s)	Physical Street Address
Durlin Jesse	2912 Flowertree Rd
Mailing Address On File	Postal City and Zipcode
2912 Flowertree Rd	Orlando, FL 32812
Belle Isle, FL 32812-4812	Property Use
Incorrect Mailing Address?	0103 - Single Fam Class III
	Municipality
	Belle Isle



View 2020 Property Record Card

- [Property Features](#)
- [Values, Exemptions and Taxes](#)
- [Sales Analysis](#)
- [Location Info](#)
- [Market Stats](#)
- [🔄 Update Information](#)

2021 values will be available in August of 2021.

Property Description

[View Plat](#)

DAETWYLER SHORES 1ST ADDITION U/107 LOT 14 BLK B

Total Land Area 12,290 sqft (+/-) | 0.28 acres (+/-) [GIS Calculated](#) [Notice](#)

Land

Land Use Code	Zoning	Land Units	Unit Price	Land Value	Class Unit Price	Class Value
0100 - Single Family	R-1-A	1 LOT(S)	working...	working...	working...	working...

Page 1 of 1 (1 total records)

Buildings

Important Information		Structure				
	Model Code:	01 - Single Fam Residence	Actual Year Built:	1960	Gross Area:	3570 sqft
	Type Code:	0103 - Single Fam Class III	Beds:	5	Living Area:	2745 sqft
	Building Value:	working...	Baths:	3.0	Exterior Wall:	Concrete/Cinder Block
	Estimated New Cost:	working...	Floors:	1	Interior Wall:	Plastered

Page 1 of 1 (1 total records)

Extra Features

Description	Date Built	Units	XFOB Value
PL2 - Pool 2	01/01/1977	1 Unit(s)	working...
SCR2 - Scrn Enc 2	01/01/1997	1 Unit(s)	working...
FPL1 - Fireplace 1	01/01/1960	1 Unit(s)	working...
PT1 - Patio 1	01/01/2001	1 Unit(s)	working...

Page 1 of 1 (4 total records)

This Data Printed on 04/13/2021 and System Data Last Refreshed on 04/12/2021



City of Belle Isle
 Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
 Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

Product Approval Form

DATE: 4/9/12

PERMIT # 2021-04-064

PROJECT ADDRESS 290 Flowertree Rd, Belle Isle, FL 32809 32812

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72m, please provide the information and approval numbers of the building components listed below if they will be utilized on the building or structure. FL Approved products are listed online at www.floridabuilding.org or can be obtained from the local product supplier. The following information must be turned in with permit application and available onsite for inspections:

• **NOTE: The installation instructions must be posted on-site before your first inspection!**

Product Type	Manufacturer	Model/Series	FL Product Approval #	Product Type	Manufacturer	Model/Series	FL Product Approval #
EXTERIOR DOORS				WALL PANELS			
Swinging				Sliding			
Sliding				Soffits			
Sectional/Rollup				Storefront			
Other				Glass Block			
				Other			
WINDOWS				ROOFING PRODUCTS			
Single/Dbf Hung				Asphalt Shingles			
Horizontal Slider				Non Struct Metal			
Casement				Roofing Tiles			
Fixed				Single Ply Roof			
Mullion				Underlayment	<u>Removal of</u>		<u>FL# 15216</u>
Skylights				Other	<u>Cap Sheet</u>	<u>Centered</u>	<u>FL# 2533</u>
Other							
STRUCTURAL COMPONENTS				OTHER			
Wood Connectors							
Wood Anchors							
Truss Plates							
Insulation Forms							
Lintels							
Other							

It is the applicant's responsibility to verify that specific products have been installed in accordance with their limitations and with the minimum required design pressures for the structure. Specific compliance will be verified during field inspection

Applicant Signature 

Date 4/9/12



Product Approval
USER: Public User

[Product Approval Menu](#) > [Product or Application Search](#) > [Application List](#) > [Application Detail](#)

OFFICE OF THE
SECRETARY

FL #	FL2533-R24
Application Type	Revision
Code Version	2020
Application Status	Approved
Comments	
Archived	<input type="checkbox"/>
Product Manufacturer	CertainTeed, LLC (Roofing)
Address/Phone/Email	20 Moores Road Malvern, PA 19355 (610) 893-5400 mark.d.harner@saint-gobain.com
Authorized Signature	Mark Harner mark.d.harner@saint-gobain.com
Technical Representative	Mark D. Harner
Address/Phone/Email	18 Moores Road Malvern, PA 19355 (610) 651-5847 Mark.D.Harner@saint-gobain.com
Quality Assurance Representative	
Address/Phone/Email	
Category	Roofing
Subcategory	Modified Bitumen Roof System
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer <input type="checkbox"/> Evaluation Report - Hardcopy Received
Florida Engineer or Architect Name who developed the Evaluation Report	Robert Nieminen
Florida License	PE-59166
Quality Assurance Entity	UL LLC
Quality Assurance Contract Expiration Date	09/15/2023
Validated By	John W. Knezevich, PE <input type="checkbox"/> Validation Checklist - Hardcopy Received
Certificate of Independence	FL2533 R24 COI 2020 01 COI NIEMINEN.pdf

Referenced Standard and Year (of Standard)	Standard	Year
	ASTM D1970	2015
	ASTM D2178	2015
	ASTM D4601	2012
	ASTM D4897	2009
	ASTM D6163	2015
	ASTM D6164	2011
	ASTM D6222	2011
	ASTM D6509	2015
	ASTM G155	2013
	FM 4470	2016

Equivalence of Product Standards
Certified By

Sections from the Code

Product Approval Method Method 1 Option D

Date Submitted 07/30/2020
Date Validated 08/04/2020
Date Pending FBC Approval 08/08/2020
Date Approved 10/13/2020

Summary of Products

FL #	Model, Number or Name	Description
2533.1	Flintlastic Modified Bitumen Roof Systems	Modified Bitumen Roof Systems
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: +N/A/-635 Other: 1.) Refer to ER Section 5 for Limits of Use. 2.) The design pressure noted in this application relates to one specific system. Refer to the ER Appendix for all systems and max design pressures.		Installation Instructions FL2533 R24 II 2020 07 20 FINAL A1 ER CERTAINTEED MODBIT FL2533-R24.pdf Verified By: Robert Nieminen, PE PE-59166 Created by Independent Third Party: Yes Evaluation Reports FL2533 R24 AE 2020 07 20 FINAL ER CERTAINTEED MODBIT FL2533-R24.pdf Created by Independent Third Party: Yes

[Back](#) [Next](#)

Contact Us :: [2601 Blair Stone Road, Tallahassee FL 32399 Phone: 850-487-1824](#)

The State of Florida is an AA/EEO employer. [Copyright 2007-2013 State of Florida](#). :: [Privacy Statement](#) :: [Accessibility Statement](#) :: [Refund Statement](#)

Under Florida law, email addresses are public records. If you do not want your e-mail address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact the office by phone or by traditional mail. If you have any questions, please contact 850.487.1395. *Pursuant to Section 455.275(1), Florida Statutes, effective October 1, 2012, licensees licensed under Chapter 455, F.S. must provide the Department with an email address if they have one. The emails provided may be used for official communication with the licensee. However email addresses are public record. If you do not wish to supply a personal address, please provide the Department with an email address which can be made available to the public. To determine if you are a licensee under Chapter 455, F.S., please click [here](#).

Product Approval Accepts:



Credit Card
Safe





APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

TABLE	DECK	APPLICATION	TYPE	DESCRIPTION	PAGE
1A	Wood	New or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	5
1B	Wood	New or Reroof (Tear-Off)	A-2	Mech. Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	6-8
1C	Wood	New, Reroof (Tear-Off) or Recover	B	Mech. Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	8
1D	Wood	New, Reroof (Tear-Off) or Recover	C	Mech. Attached Insulation, Bonded Roof Cover	9-10
1E	Wood	New, Reroof (Tear-Off) or Recover	D	Insulated, Mech. Attached Base Sheet, Bonded Roof Cover	11-13
1F-1	Wood	New, Reroof (Tear-Off)	E	Non-Insulated, Mech. Attached Base Sheet, Bonded Roof Cover	13-16
1F-2	Wood	New, Reroof (Tear-Off) or Recover	E	Non-Insulated, Mech. Attached Base Sheet, Bonded Roof Cover	16-18
1G	Wood	New or Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover	18
2A	Steel or Structural concrete	New, Reroof (Tear-Off) or Recover	B	Mech. Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	19-21
2B	Steel or Structural concrete	New, Reroof (Tear-Off) or Recover	C	Mech. Attached Insulation, Bonded Roof Cover	22-26
2C	Steel or Structural concrete	New, Reroof (Tear-Off) or Recover	D	Insulated, Mech. Attached Base Sheet, Bonded Roof Cover	27-29
3A	Structural concrete	New or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	30-39
3B	Structural concrete	New or Reroof (Tear-Off)	A-3	Bonded Temp Roof/Vapor Barrier, Bonded Insulation, Bonded Roof Cover	40
3C	Structural concrete	New or Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover	40
4A	LWIC / steel	New or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	41-42
4B	LWIC / structural concrete	New or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	43-46
4C	LWIC / structural concrete	New, Reroof (Tear-Off)	A-1	Bonded Vapor Barrier, Bonded Insulation, Bonded Roof Cover	47-48
4D	LWIC / steel	New or Reroof (Tear-Off)	A-2	Mech. Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	49-51
4E	LWIC / steel or struct. conc.	New or Reroof (Tear-Off)	E	Non-Insulated, Mech. Attached Base Sheet, Bonded Roof Cover	52-57
4F	LWIC / steel	Reroof (Tear-Off) or Recover	E	Non-Insulated, Mech. Attached Base Sheet, Bonded Roof Cover	57
4G	LWIC / steel	Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover	58
5A	Cementitious wood fiber	New or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	59
5B	Cementitious wood fiber	New or Reroof (Tear-Off) or Recover	A-2	Mech. Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	60
5C	Cementitious wood fiber	Reroof (Tear-Off) or Recover	C	Mech. Attached Insulation, Bonded Roof Cover	61
5D	Cementitious wood fiber	New, Reroof (Tear-Off) or Recover	E	Non-Insulated, Mech. Attached Base Sheet, Bonded Roof Cover	61
6A	Existing gypsum	Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	62-64
6B	Existing gypsum	Reroof (Tear-Off)	A-2	Mech. Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	64-65
6C	Existing gypsum	Reroof (Tear-Off)	C	Mech. Attached Insulation, Bonded Roof Cover	65
6D	Existing gypsum	Reroof (Tear-Off)	E	Non-Insulated, Mech. Attached Base Sheet, Bonded Roof Cover	66
7A	Various	Recover	A-1	Bonded Insulation, Bonded Roof Cover	67-74
7B	Various	Recover	F	Non-Insulated, Bonded Roof Cover	74



NEMO | etc.

9. For mechanically attached components or partially-bonded insulation, the maximum design pressure 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, Roofing Application Standard RAS 1.17 and Roofing Application Standard RAS 1.37. Assemblies marked with an asterisk* carry the limitations set forth in Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29 (February 2020) for Zone 2/3 enhancements.

10. For assemblies with all components fully bonded, the maximum design pressure for the selected assembly shall meet or exceed critical design pressure determined in accordance with FBC Chapter 16. No rational analysis is permitted for these systems.

11. For mechanically attached components over existing decks, fasteners shall be tested in the existing deck 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.

12. For bonded insulation or membrane over existing substrates in a re-roof (tear off) or recover installation, the existing deck or existing roof surface 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 shall be conducted on mock-ups of the proposed new roof assembly. For bonded insulation or membrane over existing substrates in a recover installation, the existing roof system shall be capable of resisting project design pressures on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing. Field uplift testing shall be in accordance with ASTM E907, FM Loss Prevention Data Sheet 1-52 or Testing Application Standard TAS 124.

13. Refer to FBC 1511 for requirements and limitations regarding recover installations. For Structural Concrete Deck or Recover Applications using System Type D, the insulation is optional. Alternatively, an FBC Approved insulation board or coverboard may be used as a separation layer. Board products shall be preliminarily attached prior to roof cover installation (Note 5 herein). 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.

14. 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 Product Approval 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.

15. Unless otherwise noted, refer to the following references for bonded applications.

MEMBRANE / ADHESIVE COMBINATIONS			APPLICATION
REFERENCE	LAYER	MATERIAL	
SBS-CA1	Base Ply:	Flintlastic Base 20, Flintlastic Poly SMS Base, Flintlastic Ultra Poly SMS Base	FlintBond Brush or Karnak No. 81 Cold Process Modified Bitumen Adhesive Brush Grade at 1 gal/square
	Note:	Base ply cures overnight prior to application of the ply or cap ply.	
	Ply:	Flintlastic Base 20, Flintlastic Poly SMS Base, Flintlastic Ultra Poly SMS Base	
BP-CA2	Cap Ply:	Flintlastic FR Cap 30, Flintlastic FR Cap 30 CoolStar, Flintlastic FR-P, Flintlastic FR-P CoolStar, Flintlastic Premium FR-P CoolStar, Flintlastic GMS, Flintlastic GMS CoolStar	Henry #903 Adhesive at 1.5 gal/square.
	Base Ply:	Glasbase, All Weather/Empire Base, Flexiglas Base, Flintlastic Base 20	
	Base Ply:	Flintlastic Base 20, Flintlastic Poly SMS Base, Flintlastic Ultra Poly SMS Base	
SBS-CA2	Ply:	Flintlastic Base 20, Flintlastic Poly SMS Base, Flintlastic Ultra Poly SMS Base	Millennium Hurricane Force Membrane Adhesive, beads spaced 6-inch o.c.
	Cap Ply:	Flintlastic FR Cap 30, Flintlastic FR Cap 30 CoolStar, Flintlastic FR-P, Flintlastic FR-P CoolStar, Flintlastic Premium FR-P, Flintlastic Premium FR-P CoolStar, Flintlastic GMS, Flintlastic GMS CoolStar	
	Base Ply:	Glasbase, All Weather/Empire Base, Flexiglas Base, Flintlastic Base 20	
BP-CA3	Base Ply:	Flintlastic Base 20, Flintlastic Poly SMS Base, Flintlastic Ultra Poly SMS Base	Millennium Hurricane Force Membrane Adhesive, beads spaced 6-inch o.c.
	Ply:	Flintlastic Base 20, Flintlastic Poly SMS Base, Flintlastic Ultra Poly SMS Base	
	Cap Ply:	Flintlastic FR Cap 30, Flintlastic FR Cap 30 CoolStar, Flintlastic FR-P, Flintlastic FR-P CoolStar, Flintlastic Premium FR-P, Flintlastic Premium FR-P CoolStar, Flintlastic GMS, Flintlastic GMS CoolStar	



NEMO | etc.

TABLE 1A: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

Sys. No.	Deck (Note 1)	Base Insulation		Top Insulation		Primer	Roof Cover (Note 15)			MDP (psf)
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)		Base Ply	Ply	Cap Ply	
SELF-ADHERING SYSTEMS:										
W-1	Min. 15/32-inch APA rated CDX plywood; 24-inch span	Min. 1.5-inch FlintBoard ISO, AC Foam II, FlintBoard H ISO, H-Shield	M-OSFA or M-PG1	(Optional) Additional layer(s) of base insulation and/or min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.	M-OSFA or M-PG1	FlintPrime or FlintPrime SA	SBS-SA	(Optional) SBS-SA	SBS-SA	-60.0
W-2	Min. 15/32-inch APA rated CDX plywood; 24-inch span; blocked 48-inch o.c.	Min. 1.5-inch FlintBoard ISO, AC Foam II, FlintBoard H ISO, H-Shield	M-OSFA or M-PG1, 6-inch o.c.	(Optional) Additional layer(s) of base insulation and/or min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.	M-OSFA or M-PG1, 6-inch o.c.	FlintPrime or FlintPrime SA	SBS-SA	(Optional) SBS-SA	SBS-SA	-97.5
HYBRID SYSTEMS:										
W-3	Min. 15/32-inch APA rated CDX plywood; 24-inch span	Min. 1.5-inch FlintBoard ISO, AC Foam II, FlintBoard H ISO, H-Shield	M-OSFA or M-PG1	(Optional) Additional layer(s) of base insulation and/or min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.	M-OSFA or M-PG1	None	SBS-SA-H	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-60.0
W-4	Min. 15/32-inch APA rated CDX plywood; 24-inch span; blocked 48-inch o.c.	Min. 1.5-inch FlintBoard ISO, AC Foam II, FlintBoard H ISO, H-Shield	M-OSFA or M-PG1, 6-inch o.c.	(Optional) Additional layer(s) of base insulation and/or min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.	M-OSFA or M-PG1, 6-inch o.c.	None	SBS-SA-H	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-97.5
CONVENTIONAL SYSTEMS:										
W-5	Min. 15/32-inch APA rated CDX plywood; 24-inch span	Min. 1.5-inch FlintBoard ISO, AC Foam II, FlintBoard H ISO, H-Shield	M-OSFA or M-PG1	Optional additional layers of base insulation, followed by min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA or M-PG1	None	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-60.0
W-6	Min. 15/32-inch APA rated CDX plywood; 24-inch span; blocked 48-inch o.c.	Min. 1.5-inch FlintBoard ISO, AC Foam II, FlintBoard H ISO, H-Shield	M-OSFA or M-PG1, 6-inch o.c.	Optional additional layers of base insulation, followed by min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.	M-OSFA or M-PG1, 6-inch o.c.	None	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-97.5



NEMO | etc.

TABLE 18: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)														
SYSTEM TYPE A-2: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER														
Sys. No.	Deck (Note 1)	Anchor Sheet				Base Insulation			Top Insulation			Roof Cover (Note 15)		
		Type	Fasteners	Attach	Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Primer	Base Ply	Ply	Cap Ply
W-12	Min. 19/32-inch plywood; 24-inch span	Glasbase, All Weather Empire, Flexiglas Base, Flintlastic Base 20; Poly SMS; Ultra Poly SMS; Yosemite Venting Base	32 ga., 1-5/8-inch dia. tin caps with 11 ga. annular ring shank nails	9-inch o.c. in 4-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY-3, H-Shield or Multi-Max FA3	HA	None	N/A	None	None	SBS-SA-H	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
W-13	Min. 19/32-inch plywood at max. 24-inch span	Glasbase; Flimglas Premium Ply 6; Yosemite Venting Base	32 ga., 1-5/8-inch dia. tin caps with 11 ga. annular ring shank nails	8-inch o.c. in 3-inch lap and 8-inch o.c. in three (3), equally spaced, staggered center rows	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY-3, H-Shield or Multi-Max FA3	HA	None	N/A	None	None	SBS-SA-H	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-60.0
CONVENTIONAL SYSTEMS:														
W-14	Min. 19/32-inch plywood; 24-inch span	Glasbase, All Weather Empire, Flexiglas Base, Flintlastic Base 20; Poly SMS; Ultra Poly SMS; Yosemite Venting Base	32 ga., 1-5/8-inch dia. tin caps with 11 ga. annular ring shank nails	9-inch o.c. in 4-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY-3, H-Shield or Multi-Max FA3	HA	Min. 0.25-inch DensDeck	HA	FlintPrime	FlintPrime	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
W-15	Min. 19/32-inch plywood; 24-inch span	Glasbase, All Weather Empire, Flexiglas Base, Poly SMS or Ultra Poly SMS	32 ga., 1-5/8-inch dia. tin caps with 11 ga. annular ring shank nails	8-inch o.c. in 3-inch lap and 8-inch o.c. in three (3), equally spaced, staggered center rows	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY-3, H-Shield or Multi-Max FA3	HA full coverage or OB500, M-OSFA, A-PD, D-IS, ICP BOARD-MAX or CR-20, 4-inch o.c.	Min. 0.25-inch DensDeck	HA full coverage or OB500, M-OSFA, A-PD, D-IS, ICP BOARD-MAX or CR-20, 6-inch o.c.	FlintPrime	FlintPrime	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-52.5
W-16	Min. 19/32-inch plywood; 24-inch span	Yosemite Venting Base Sheet	32 ga., 1-5/8-inch dia. tin caps with 11 ga. annular ring shank nails	8-inch o.c. in 3-inch lap and 8-inch o.c. in three (3), equally spaced, staggered center rows	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY-3, H-Shield or Multi-Max FA3	HA	Min. 0.25-inch DensDeck	HA	FlintPrime	FlintPrime	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-52.5
W-17	Min. 19/32-inch plywood; 24-inch span	Glasbase, All Weather Empire, Flexiglas Base, Poly SMS or Ultra Poly SMS	32 ga., 1-5/8-inch dia. tin caps with 11 ga. annular ring shank nails	8-inch o.c. in 3-inch lap and 8-inch o.c. in three (3), equally spaced, staggered center rows	(Optional) Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY-3, H-Shield or Multi-Max FA3	HA full coverage or OB500, M-OSFA, A-PD, D-IS, ICP BOARD-MAX or CR-20, 4-inch o.c.	Min. 0.25-inch SECURROCK Gypsum-Fiber Roof Board	HA full coverage or OB500, M-OSFA, A-PD, D-IS, ICP BOARD-MAX or CR-20, 6-inch o.c.	None	None	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-60.0



NEMO | etc.

TABLE 1D: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Insulation Layer		Top Insulation Layer		Primer	Roof Cover (Note 15)			MDP (psf)
		Type	Fasteners	Attach	Base Ply		Ply	Cap Ply		
SELF-ADHERING SYSTEMS:										
W-23	Min. 15/32-inch plywood; 24-inch span	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	FlintFast 3 in. Insulation Plates with FlintFast #12 or #14	1 per 3.2 ft ²	None	SBS-SA	(Optional) SBS-SA	SBS-SA	-30.0*
W-24	Min. 19/32-inch plywood; 24-inch span	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch DensDeck	Note 2	1 per 1.3 ft ²	FlintPrime or FlintPrime SA	SBS-SA	(Optional) SBS-SA	SBS-SA	-45.0
W-25	Min. 19/32-inch plywood; 24-inch span	(Optional) One or more layers, any combination, loose laid	Min. 3/8-inch SECUROCK Gypsum-Fiber Roof Board	FlintFast 3 in. Insulation Plates with FlintFast #12 or #14	1 per 2.7 ft ²	None	SBS-SA	(Optional) SBS-SA	SBS-SA	-45.0*
W-26	Min. 19/32-inch plywood; 24-inch span	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ACFoam II, ENRGY 3, H-Shield, Multi-Max FA3 or FlintBoard ISO	FlintFast 3 in. Insulation Plates with FlintFast #12 or #14	1 per 2.0 ft ²	FlintPrime or FlintPrime SA	SBS-SA	(Optional) SBS-SA	SBS-SA	-45.0*
W-27	Min. 15/32-inch plywood; 24-inch span	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch FlintBoard ISO	FlintFast #14 HD with FlintFast 3" Insulation Plates or Trufast HD with Trufast 3" Metal Insulation Plates	1 per 1.6 ft ²	FlintPrime or FlintPrime SA	SBS-SA	(Optional) SBS-SA	SBS-SA	-52.5
W-28	Min. 19/32-inch plywood; 24-inch span	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ACFoam II, ENRGY 3, H-Shield, Multi-Max FA3 or FlintBoard ISO	Note 2	1 per 1.5 ft ²	FlintPrime or FlintPrime SA	SBS-SA	(Optional) SBS-SA	SBS-SA	-60.0
HYBRID SYSTEMS:										
W-29	Min. 15/32-inch plywood; 24-inch span	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch DensDeck; DensDeck Prime	FlintFast 3 in. Insulation Plates with FlintFast #12 or #14	1 per 2.0 ft ²	None	SBS-SA-H	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-30.0*
W-30	Min. 15/32-inch plywood; 24-inch span	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch FlintBoard ISO	FlintFast #14 HD with FlintFast 3" Insulation Plates or Trufast HD with Trufast 3" Metal Insulation Plates	1 per 1.6 ft ²	None	SBS-SA-H	(Optional) SBS-TA or APP-TA	SBS-TA or APP-TA	-52.5
W-31	Min. 15/32-inch plywood; 24-inch span	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ACFoam II, FlintBoard ISO, ENRGY 3 or Multi-Max FA3	Note 2	1 per 1.3 ft ²	None	SBS-SA-H	(Optional) BP-AA or SBS-AA	SBS-AA	-52.5
W-32	Min. 19/32-inch plywood; 24-inch span	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ACFoam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	Note 2	1 per 1.5 ft ²	None	SBS-SA-H	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-60.0



NEMO | etc.

TABLE 1E: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Insulation Layer(s) (Note 13)		Base Sheet		Primer	Roof Cover (Note 15)		MDP (psf)
		Type	Attach	Type	Fasteners		Attach	Base Ply	
SELF-ADHERING SYSTEMS:									
W-40	Min. 19/32-inch plywood; 24-inch span	Min. 1.5-inch, One or more layers, any combination	Prelim. Attach	Flintlastic SA NailBase	Note 2	8-inch o.c. at min. 3-inch lap and 8-inch o.c. in two (2), equally spaced, staggered center rows	FlintPrime or FlintPrime SA at plates	(Optional) SBS-SA	-82.5*
W-41	Min. 15/32-inch plywood; 24-inch span	Min. 1.5-inch, One or more layers, any combination	Prelim. Attach	Flintlastic SA NailBase	FlintFast 3 in. Insulation Plates with FlintFast #12 or #14; Trufast 3" Metal Insulation Plates with DP or HD; OMG 3 in. Round Metal Plates with OMG #14 HD	6-inch o.c. at min. 2-inch lap and 6-inch o.c. in three (3), equally spaced, staggered center rows	FlintPrime or FlintPrime SA at plates	(Optional) SBS-SA	-97.5*
W-42	Min. 15/32-inch plywood; 24-inch span	Min. 1.5-inch, One or more layers, any combination	Prelim. Attach	Flintlastic SA NailBase	FlintFast 3 in. Insulation Plates with FlintFast #12 or #14; Trufast 3" Metal Insulation Plates with DP or HD; OMG 3 in. Round Metal Plates with OMG #14 HD	6-inch o.c. at min. 2-inch lap and 6-inch o.c. in four (4), equally spaced, staggered center rows	FlintPrime or FlintPrime SA at plates	(Optional) SBS-SA	-127.5*
HYBRID SYSTEMS:									
W-43	Min. 15/32-inch plywood; 24-inch span	Min. 1.5-inch, One or more layers, any combination	Prelim. Attach	Glasbase; Flexiglas; Flintlastic Base 20; Poly SMS Base; Ultra Poly SMS Base	FlintFast 3 in. Insulation Plates with FlintFast #12 or #14; Trufast 3" Metal Insulation Plates with DP or HD; OMG 3 in. Round Metal Plates with OMG #14 HD	6-inch o.c. at 4-inch lap and 6-inch o.c. in three (3), equally spaced, staggered center rows	FlintPrime or FlintPrime SA at plates	SBS-AA, SBS-TA or APP-TA	-97.5
W-44	Min. 19/32-inch plywood; 24-inch span	Min. 1.5-inch, One or more layers, any combination	Prelim. Attach	Glasbase; Flexiglas; Flintlastic Base 20; Poly SMS Base; Ultra Poly SMS Base	Note 2	7-inch o.c. at 3-inch lap and 7-inch o.c. in three (3), equally spaced, staggered center rows	None	SBS-AA, SBS-TA or APP-TA	-105.0
W-45	Min. 15/32-inch plywood; 24-inch span	Min. 1.5-inch, One or more layers, any combination	Prelim. Attach	Glasbase; Flexiglas; Flintlastic Base 20; Poly SMS Base; Ultra Poly SMS Base	FlintFast 3 in. Insulation Plates with FlintFast #12 or #14; Trufast 3" Metal Insulation Plates with DP or HD; OMG 3 in. Round Metal Plates with OMG #14 HD	6-inch o.c. at 4-inch lap and 6-inch o.c. in four (4), equally spaced, staggered center rows	FlintPrime or FlintPrime SA at plates	SBS-AA, SBS-TA or APP-TA	-127.5
CONVENTIONAL SYSTEMS:									



NEMO | etc.

TABLE 1E: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Insulation Layer(s) (Note 13)			Base Sheet			Attach	Primer	Roof Cover (Note 15)		MDP (psf)
		Type	Type	Type	Fasteners	Attach	Base Ply			Cap Ply		
W-53	Min. 19/32-inch plywood; 24-inch span	Min. 1.5-inch, One or more layers, any combination	Flintlastic APP Base T	OMG 3 in. Round Metal Plates with OMG #14 HD or Dekfast Hex Plate with Dekfast #14	7-inch o.c. at 3-inch lap and 7-inch o.c. in three (3), equally spaced, staggered center rows	None	APP-TA	APP-TA	APP-TA	APP-TA	-105.0	
W-54	Min. 15/32-inch plywood; 24-inch span	Min. 1.5-inch, One or more layers, any combination	Glasbase; Flexiglas; Flintlastic Base 20; Poly SMS Base; Ultra Poly SMS Base; Yosemite Venting Base	FlintFast 3 in. Insulation Plates with FlintFast #12 or #14; Trufast 3" Metal Insulation Plates with DP or HD; OMG 3 in. Round Metal Plates with OMG #14 HD	6-inch o.c. at 4-inch lap and 6-inch o.c. in four (4), equally spaced, staggered center rows.	None	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-127.5		
W-55	Min. 15/32-inch plywood; 24-inch span	Min. 1.5-inch, One or more layers, any combination	Flintlastic APP Base T	OMG 3 in. Round Metal Plates with OMG #14 HD	6-inch o.c. at 4-inch lap and 6-inch o.c. in four (4), equally spaced, staggered center rows.	None	APP-TA	APP-TA	APP-TA	-127.5		
COLD-APPLIED SYSTEMS:												
W-56	Min. 15/32-inch plywood; 24-inch span	Min. 1-inch, One or more layers, any combination	Loose-laid	Glasbase; Flexiglas Base; Flintlastic Base 20; All Weather / Empire Base; Yosemite Venting Base; Flintlastic Poly SMS Base; Flintlastic Ultra Poly SMS Base	FlintFast 3 in. Insulation Plates with FlintFast #12 or #14; Trufast 3" Metal Insulation Plates with DP or HD	None	(Optional) SBS-CA1	(Optional) SBS-CA1	(Optional) SBS-CA1	SBS-CA1	-52.5	

TABLE 1F-1: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Sheet			Attach	Primer	Roof Cover (Note 15)		MDP (psf)
		Base	Fasteners	Base Ply			Cap Ply		
W-57	Min. 15/32-inch plywood; 24-inch span	Flintlastic SA NailBase	Simplex MAXX Cap	9-inch o.c. at min. 3-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	FlintPrime at plates	(Optional) SBS-SA	SBS-SA	-45.0*	
W-58	Min. 15/32-inch plywood; 24-inch span	Flintlastic SA NailBase	Min. 1-inch long, 12 ga. Simplex Metal Cap Nails	6-inch o.c. at min. 2-inch lap and 6-inch o.c. in four (4), equally spaced, staggered center rows	None	(Optional) SBS-SA	SBS-SA	-52.5	
W-59	Min. 19/32-inch plywood; 24-inch span	Flintlastic SA NailBase	32 ga., 1-5/8-inch dia. tin caps with 11 ga. annular ring shank nails	8-inch o.c. at min. 2-inch lap and 8-inch o.c. in three (3), equally spaced, staggered center rows	None	(Optional) SBS-SA	SBS-SA	-52.5	



NEMO | etc.

**TABLE 1F-1: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER**

System No.	Deck (Note 1)	Base Sheet		Attach	Primer	Roof Cover (Note 15)		MDP (psf)
		Base	Fasteners			Base Ply	Cap Ply	
CONVENTIONAL SYSTEMS:								
W-72	Min. 19/32-inch plywood; 24-inch span	Glasbase; Flexiglas; Flintlastic Base 20; All Weather / Empire Base; Poly SMS Base; Ultra Poly SMS Base; Yosemite Venting Base	32 ga., 1-5/8-inch dia. tin caps with 11 ga. annular ring shank nails	9-inch o.c. at 4-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	None	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
W-73	Min. 15/32-inch plywood; 24-inch span	Glasbase; Flexiglas; Flintlastic Base 20; All Weather / Empire Base; Poly SMS Base; Yosemite Venting Base	Simplex MAXX Cap	9-inch o.c. at 2-inch lap and 18-inch o.c. in two (2), equally spaced, staggered center rows	None	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
W-74	Min. 15/32-inch plywood; 24-inch span	Flintlastic APP Base T	Simplex MAXX Cap	9-inch o.c. at 2-inch lap and 18-inch o.c. in two (2), equally spaced, staggered center rows	None	(Optional) APP-TA	APP-TA	-45.0*
W-75	Min. 15/32-inch plywood; 24-inch span	Glasbase; Flexiglas; Flintlastic Base 20; All Weather / Empire Base; Poly SMS Base; Ultra Poly SMS Base; Yosemite Venting Base	Min. 1-inch long, 12 ga. Simplex Metal Cap Nails	6-inch o.c. at 3-inch lap and 6-inch o.c. in four (4), equally spaced, staggered center rows	None	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-52.5
W-76	Min. 19/32-inch plywood; 24-inch span	Glasbase; Flexiglas; Flintlastic Base 20; All Weather / Empire Base; Poly SMS Base; Ultra Poly SMS Base; Yosemite Venting Base	32 ga., 1-5/8-inch dia. tin caps with 11 ga. annular ring shank nails	8-inch o.c. at 4-inch lap and 8-inch o.c. in three (3), equally spaced, staggered center rows	None	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-52.5
W-77	Min. 15/32-inch plywood; 24-inch span	Glasbase; Flexiglas; Flintlastic Base 20; All Weather / Empire Base; Poly SMS Base; Ultra Poly SMS Base; Yosemite Venting Base	Simplex MAXX Cap	9-inch o.c. at 2-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	None	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-52.5
W-78	Min. 15/32-inch plywood; 24-inch span	Flintlastic APP Base T	Simplex MAXX Cap	9-inch o.c. at 2-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	None	(Optional) APP-TA	APP-TA	-52.5
W-79	Min. 19/32-inch plywood; 24-inch span	Glasbase; Flexiglas; Flintlastic Base 20; All Weather / Empire Base; Poly SMS Base; Ultra Poly SMS Base; Yosemite Venting Base	32 ga., 1-5/8-inch dia. tin caps with 11 ga. annular ring shank nails	8-inch o.c. at 4-inch lap and 8-inch o.c. in three (3), equally spaced, staggered center rows	None	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-60.0
W-80	Min. 15/32-inch plywood; 24-inch span	Glasbase; Flexiglas; Flintlastic Base 20; All Weather / Empire Base; Poly SMS Base; Ultra Poly SMS Base; Yosemite Venting Base	Cap nails: 1-inch diameter, 0.032-inch thick metal cap with 0.120-inch shank diameter, annular ring shank nails.	6-inch o.c. at 4-inch lap and 6-inch o.c. at five (5) equally spaced, staggered center rows	None	(Optional) BP-AA, SBS-AA or SBS-TA	SBS-AA or SBS-TA	-67.5
W-81	Min. 19/32-inch plywood; 24-inch span	Glasbase; Flexiglas; Flintlastic Base 20; All Weather / Empire Base; Poly SMS Base; Ultra Poly SMS Base; Yosemite Venting Base	32 ga., 1-5/8-inch dia. tin caps with 11 ga. annular ring shank nails	6-inch o.c. at 4-inch lap and 6-inch o.c. in four (4), equally spaced, staggered center rows	None	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-82.5



NEMO | etc.

**TABLE 1F-2: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER**

System No.	Deck (Note 1)	Base Sheet			Attach	Primer	Roof Cover (Note 15)		MDP (psf)
		Base	Fasteners				Base Ply	Cap Ply	
W-90	Min. 15/32-inch plywood; 24-inch span	Flintlastic SA NailBase	FlintFast 3 in. Insulation Plates with FlintFast #12 or #14; Trufast 3" Metal Insulation Plates with DP or HD; OMG 3 in. Round Metal Plates with OMG #14 HD		6-inch o.c. at min. 2-inch lap and 6-inch o.c. in four (4), equally spaced, staggered center rows	FlintPrime or FlintPrime SA at plates	(Optional) SBS-SA	SBS-SA	-127.5*
HYBRID SYSTEMS:									
W-91	Min. 15/32-inch plywood; 24-inch span	Glasbase; Flexiglas; Flintlastic Base 20; Poly SMS Base; Ultra Poly SMS Base	FlintFast 3 in. Insulation Plates with FlintFast #12 or #14; Trufast 3" Metal Insulation Plates with DP or HD; OMG 3 in. Round Metal Plates with OMG #14 HD		6-inch o.c. at 4-inch lap and 6-inch o.c. in three (3), equally spaced, staggered center rows	FlintPrime or FlintPrime SA at plates	SBS-SA-H	SBS-AA, SBS-TA or APP-TA	-97.5
W-92	Min. 19/32-inch plywood; 24-inch span	Glasbase; Flexiglas; Flintlastic Base 20; Poly SMS Base; Ultra Poly SMS Base	Note 2		7-inch o.c. at 3-inch lap and 7-inch o.c. in three (3), equally spaced, staggered center rows	None	SBS-SA-H	SBS-AA, SBS-TA or APP-TA	-105.0
W-93	Min. 15/32-inch plywood; 24-inch span	Glasbase; Flexiglas; Flintlastic Base 20; Poly SMS Base; Ultra Poly SMS Base	FlintFast 3 in. Insulation Plates with FlintFast #12 or #14; Trufast 3" Metal Insulation Plates with DP or HD; OMG 3 in. Round Metal Plates with OMG #14 HD		6-inch o.c. at 4-inch lap and 6-inch o.c. in four (4), equally spaced, staggered center rows	FlintPrime or FlintPrime SA at plates	SBS-SA-H	SBS-AA, SBS-TA or APP-TA	-127.5
CONVENTIONAL SYSTEMS:									
W-94	Min. 23/32-inch plywood; 24-inch span	Glasbase; All Weather/Empire Base; Flexiglas Base; Flintlastic Base 20; Yosemite Venting Base	Note 2		12-inch o.c. at 4-inch lap and 36-inch o.c. in two (2), equally spaced, staggered center rows	None	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-30.0*
W-95	Min. 23/32-inch plywood; 24-inch span	Glasbase; All Weather/Empire Base; Flexiglas Base; Flintlastic Base 20; Yosemite Venting Base	Note 2		12-inch o.c. at 4-inch lap and 24-inch o.c. in two (2), equally spaced, staggered center rows	None	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
W-96	Min. 23/32-inch plywood; 24-inch span	Poly SMS Base; Ultra Poly SMS Base	Note 2		12-inch o.c. at 4-inch lap and 36-inch o.c. in two (2), equally spaced, staggered center rows	None	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
W-97	Min. 15/32-inch plywood; 24-inch span	Glasbase; Flexiglas; Flintlastic Base 20; Poly SMS Base; Ultra Poly SMS Base; Yosemite Venting Base	FlintFast 3 in. Insulation Plates with FlintFast #12 or #14; Trufast 3" Metal Insulation Plates with DP or HD; OMG 3 in. Round Metal Plates with OMG #14 HD		6-inch o.c. at 4-inch lap and 6-inch o.c. in three (3), equally spaced, staggered center rows	None	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-97.5
W-98	Min. 15/32-inch plywood; 24-inch span	Flintlastic APP Base T	OMG 3 in. Round Metal Plates with OMG #14 HD		6-inch o.c. at 4-inch lap and 6-inch o.c. in three (3), equally spaced, staggered center rows.	None	APP-TA	APP-TA	-97.5
W-99	Min. 15/32-inch plywood; 24-inch span	Glasbase; Flexiglas; Flintlastic Base 20; All Weather / Empire Base; Poly SMS Base; Ultra Poly SMS Base; Yosemite Venting Base	FlintFast 3 in. Insulation Plates with FlintFast #14; Trufast 3" Metal Insulation Plates with Trufast HD		8-inch o.c. at 4-inch lap and 8-inch o.c. at three (3) equally spaced, staggered center rows	None	(Optional) BP-AA, SBS-AA or SBS-TA	SBS-AA or SBS-TA	-97.5



NEMO | etc.

TABLE 2A: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE B: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer			Roof Cover (Note 15)			MDP (psf)
		Type	Fasteners	Attach	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply		
SELF-ADHERING SYSTEMS:											
S-1	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch ACFoam II, FlintBoard, ENRGY 3 or H-Shield	Note 2	1 per 4.0 ft ²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	HA, D-IS, M-OSFA, OBS500, ICP BOARD-MAX or CR-20	SBS-SA	(Optional) SBS-SA	SBS-SA	-37.5*	
S-2	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ACFoam II, FlintBoard, ENRGY 3 or H-Shield	Note 2	1 per 2.0 ft ²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	HA, D-IS, M-OSFA, OBS500, ICP BOARD-MAX or CR-20	SBS-SA	(Optional) SBS-SA	SBS-SA	-45.0*	
HYBRID SYSTEMS:											
S-3	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ACFoam II, FlintBoard, ENRGY 3 or H-Shield	Note 2	1 per 1.5 ft ²	Additional layer(s) base insulation	HA, D-IS, M-OSFA, OBS500, ICP BOARD-MAX or CR-20	Flintlastic Ultra Glass SA	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-37.5	
S-4	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ACFoam II, FlintBoard, ENRGY 3 or H-Shield	Note 2	1 per 1.5 ft ²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	HA, D-IS, M-OSFA, OBS500, ICP BOARD-MAX or CR-20	Flintlastic Ultra Glass SA	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-52.5	
S-5	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ACFoam II, FlintBoard ISO, H-Shield or FlintBoard ISO _H	FlintFast #12 or #14 with FlintFast 3" Insulation Plates	1 per 1.5 ft ²	Min. 1.5-inch ACFoam II, FlintBoard ISO, H-Shield or FlintBoard ISO _H	HA, D-IS, M-OSFA, M-PG1 or OBS500	SBS-SA-H	(Optional) APP-TA	APP-TA	-67.5	
S-6	Min. 22 ga., type B, Grade 40 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ACFoam II, FlintBoard ISO, H-Shield or FlintBoard ISO _H	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates or Trufast #12 (steel only) or HD with Trufast 3" Metal Insulation Plates	1 per 1.6 ft ²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	D-IS, M-OSFA, M-PG1 or OBS500	SBS-SA-H	(Optional) SBS-TA or APP-TA	SBS-TA or APP-TA	-75.0	
S-7	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ENRGY 3	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates or HD with Trufast 3" Metal Insulation Plates	1 per 1.0 ft ²	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	OBS500, 4-inch o.c.	SBS-SA-H	(Optional) SBS-TA or APP-TA	SBS-TA or APP-TA	-90.0*	
CONVENTIONAL SYSTEMS:											



NEMO | etc.

TABLE 2A: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE B: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Insulation Layer				Top Insulation Layer				Roof Cover (Note 15)			MDP (psf)
		Type	Fasteners	Attach	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply				
S-16	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch AC Foam II, FlintBoard, ENRGY 3 or Multi-Max FA3	Note 2	1 per 1.3 ft ²	Min. 0.5-inch Structodek High Density Fiberboard	HA	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-67.5			
S-17	Min. 22 ga., type B, Grade 40 steel or min. 2,500 psi structural concrete	Min. 1.5-inch AC Foam II, FlintBoard ISO, H- Shield or FlintBoard ISO _H	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates or Trufast #12 (steel only) or HD with Trufast 3" Metal Insulation Plates	1 per 1.6 ft ²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	D-IS, M- OSFA, M- PG1 or OB500	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-75.0			
S-18	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ENRGY 3	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates or Trufast #12 (steel only) or HD with Trufast 3" Metal Insulation Plates	1 per 1.0 ft ²	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	OB500, 4-inch o.c.	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-90.0*			
COLD-APPLIED SYSTEMS:													
S-19	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch AC Foam II, FlintBoard ISO, H- Shield or FlintBoard ISO _H	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates or Trufast #12 (steel only) or HD with Trufast 3" Metal Insulation Plates	1 per 2.0 ft ²	Min. 1.5-inch AC Foam III, FlintBoard Iso Cold, H- Shield CG or FlintBoard Iso Cold _H	OB500, ICP BOARD-MAX or CR-20	SBS-CA1	None	SBS-CA1	-45.0*			
S-20	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch AC Foam II, FlintBoard ISO, H- Shield or FlintBoard ISO _H	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates or Trufast #12 (steel only) or HD with Trufast 3" Metal Insulation Plates	1 per 2.0 ft ²	Optional min. 1.5-inch additional layer(s) base insulation, followed by min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	D-IS, M- OSFA, M- PG1, OB500, ICP BOARD-MAX or CR-20	SBS-CA1	None	SBS-CA1	-45.0*			
S-21	Min. 22 ga., type B, Grade 40 steel or min. 2,500 psi structural concrete	Min. 1.5-inch AC Foam II, FlintBoard ISO, H- Shield or FlintBoard ISO _H	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates or Trufast #12 (steel only) or HD with Trufast 3" Metal Insulation Plates	1 per 1.6 ft ²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	D-IS, M- OSFA, M- PG1 or OB500	SBS-CA1	None	SBS-CA1	-75.0			
S-22	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ENRGY 3	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates or Trufast #12 (steel only) or HD with Trufast 3" Metal Insulation Plates	1 per 1.0 ft ²	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	OB500, 4-inch o.c.	SBS-CA1	None	SBS-CA1	-90.0*			



NEMO | etc.

TABLE 2B: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Insulation Layer(s)		Top Insulation Layer			Primer	Roof Cover (Note 15)			MDP (psf)
		Type	Fasteners	Attach	Type	Fasteners		Attach	Base Ply	Ply	
S-31	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates or Trufast #12 (steel only) or HD with Trufast 3" Metal Insulation Plates	1 per 2.7 ft ²	None	SBS-SA-H	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-37.5*	
S-32	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 3/8-inch SECUROCK Gypsum-Fiber Roof Board	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates or Trufast #12 (steel only) or HD with Trufast 3" Metal Insulation Plates	1 per 2.7 ft ²	None	SBS-SA-H	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*	
S-33	Min. 22 ga., type B, Grade 40 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch FlintBoard ISO	FlintFast #14 HD with FlintFast 3" Insulation Plates or Trufast HD with Trufast 3" Metal Insulation Plates	1 per 1.8 ft ²	None	SBS-SA-H	(Optional) SBS-TA or APP-TA	SBS-TA or APP-TA	-67.5	
S-34	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield or FlintBoard ISO _{II}	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates	1 per 1.5 ft ²	None	SBS-SA-H	(Optional) SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-75.0	
S-35	Min. 22 ga., type B, Grade 40 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	FlintFast #14 HD with FlintFast 3" Insulation Plates or Trufast HD with Trufast 3" Metal Insulation Plates	1 per 1.6 ft ²	None	SBS-SA-H	(Optional) SBS-TA or APP-TA	SBS-TA or APP-TA	-82.5	
S-36	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates or Trufast #12 (steel only) or HD with Trufast 3" Metal Insulation Plates	1 per 1.5 ft ²	None	SBS-SA-H	(Optional) SBS-TA or APP-TA	SBS-TA or APP-TA	-82.5	
S-37	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY 3 or Multi-Max FA3	Note 2	1 per 1.3 ft ²	None	SBS-SA-H	(Optional) SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-82.5	
S-38	Min. 22 ga., type B, Grade 40 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch FlintBoard ISO, FlintBoard H ISO, AC Foam II or H-Shield	FlintFast #15 EHD (steel only) or FlintFast #14 HD (concrete only) with FlintFast 3" Insulation Plates or Trufast EHD (steel only) or Trufast HD (concrete only) with Trufast 3" Metal Insulation Plates	1 per 1.0 ft ²	None	SBS-SA-H	(Optional) SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-97.5	



NEMO | etc.

TABLE 2B: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Insulation Layer(s)	Top Insulation Layer			Primer	Roof Cover (Note 15)			MDP (psf)
			Type	Fasteners	Attach		Base Ply	Ply	Cap Ply	
S-48	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch Structodek, GP HD Roof Fiberboard or Temple HD1 or HD6	Note 2	1 per 2.0 ft ²	None	BP-AA2	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
S-49	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ACFoam I, FlintBoard	Note 2	1 per 1.5 ft ²	None	BP-AA3, 24-inch grid	(Optional) BP-AA or SBS-AA	SBS-AA	-52.5
S-50	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ACFoam II, FlintBoard	Note 2	1 per 1.5 ft ²	None	BP-AA3, 24-inch grid	BP-AA or SBS-AA	SBS-TA	-52.5
S-51	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional for Concrete or Recover) Min. 1.5-inch, One or more layers, any combination, loose laid	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates	1 per 1.5 ft ²	None	APP-TA	(Optional) APP-TA	APP-TA	-60.0
S-52	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional for Concrete or Recover) Min. 2-inch ACFoam II, FlintBoard, H-Shield or ENRGY 3, loose laid.	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.8 ft ²	None	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-60.0
S-53	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates or Trufast #12 (steel only) or HD with Trufast 3" Metal Insulation Plates	1 per 1.5 ft ²	None	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-82.5
S-54	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional for Concrete or Recover) Min. 1.5-inch ACFoam II, FlintBoard, H-Shield	Min. 0.5-inch DensDeck Prime	Trufast HD with Trufast 3" Metal Insulation Plates or FlintFast #14 with FlintFast 3" Insulation Plates	1 per 1.3 ft ²	None	BP-AA, SBS-AA	(Optional) BP-AA, SBS-AA	SBS-AA	-112.5
S-55	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	FlintFast #12 (steel only) or #14 HD with FlintFast 3" Insulation Plates or Trufast #12 (steel only) or HD with Trufast 3" Metal Insulation Plates	1 per 1.0 ft ²	None	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-135.0
S-56	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional for Concrete or Recover) Min. 1.5-inch ACFoam II, FlintBoard, H-Shield	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Trufast HD with Trufast 3" Metal Insulation Plates or FlintFast #14 with FlintFast 3" Insulation Plates	1 per 1.3 ft ²	None	BP-AA, SBS-AA	(Optional) BP-AA, SBS-AA	SBS-AA	-157.5



NEMO | etc.

TABLE 2C: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Insulation Layer(s) (Note 13)			Base Sheet		Roof Cover (Note 15)		MDP (psf)
		Type	Attach	Type	Fasteners	Attach	Base Ply	Cap Ply	
SELF-ADHERING SYSTEMS:									
S-63	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Flintlastic SA NailBase	Note 2	9-inch o.c. at min. 2-inch lap and 18-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) SBS-SA	SBS-SA	-45.0*
S-64	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Flintlastic SA NailBase	Note 2	12-inch o.c. at min. 2-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) SBS-SA	SBS-SA	-52.5*
S-65	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Flintlastic SA NailBase	Note 2	12-inch o.c. at min. 4-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) SBS-SA	SBS-SA	-60.0*
S-66	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Flintlastic SA NailBase (laid parallel to deck flutes)	Note 2	8-inch o.c. at min. 4-inch lap and 8-inch o.c. in two (2), equally spaced, staggered center rows; FlintPrime or FlintPrime SA at plates	(Optional) SBS-SA	SBS-SA	-82.5*
CONVENTIONAL SYSTEMS:									
S-67	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase; All Weather/Empire Base; Flexiglas Base; Flintlastic Base 20; Yosemite Venting Base	Note 2	12-inch o.c. at 4-inch lap and 36-inch o.c. in two (2), equally spaced, staggered center rows	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-30.0*
S-68	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase; All Weather/Empire Base; Flexiglas Base; Flintlastic Base 20; Yosemite Venting Base	Note 2	12-inch o.c. at 4-inch lap and 24-inch o.c. in two (2), equally spaced, staggered center rows	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
S-69	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Poly SMS Base; Ultra Poly SMS Base	Note 2	12-inch o.c. at 4-inch lap and 36-inch o.c. in two (2), equally spaced, staggered center rows	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
S-70	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Poly SMS Base; Ultra Poly SMS Base	Note 2	18-inch o.c. at 4-inch lap and 18-inch o.c. in one (1) staggered center row	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
S-71	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Poly SMS Base; Ultra Poly SMS Base	Dekfast IF-2-SB plates with #14 Dekfast	12-inch o.c. within the min. 4-inch wide, heat-welded side lap	SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
S-72	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase; Flexiglas Base; Flintlastic Base 20; All Weather / Empire Base; Poly SMS Base; Yosemite Venting Base	Note 2	12-inch o.c. at 3-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-52.5



NEMO | etc.

TABLE 2C: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Insulation Layer(s) (Note 13)		Attach	Type	Base Sheet		Roof Cover (Note 15)		MDP (psf)
		Type	Attach			Fasteners	Attach	Base Ply	Cap Ply	
S-82	Min. 22 ga., type B, 40 ksi steel or min. 2,500 psi structural concrete	Min. 2-inch, One or more layers, any combination	Prelim. Attached	Ultra Poly SMS Base	Trufast 2.4" Scoop Seam Plates with Trufast #15 EHD (steel only) or Trufast #14 HD (concrete only)	6-inch o.c. within the min. 4-inch wide, heat-welded side laps and 6-inch o.c. in one (1) center row, stripped-in with 6-inch side strips of torch-applied Poly SMS Base or Ultra Poly SMS Base.	(Optional) SBS-TA or APP-TA	SBS-TA or APP-TA	-165.0	
COLD-APPLIED SYSTEMS:										
S-83	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase; All Weather/Empire Base; Flexiglas Base; Flintlastic Base 20	Note 2	6-inch o.c. at 4-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	SBS-CA1	SBS-CA1	-45.0*	
S-84	Min. 22 ga., type B, Grade 40 steel or min. 2,500 psi structural concrete	Min. 1-inch, One or more layers, any combination	Loose-laid	Glasbase; Flexiglas Base; Flintlastic Base 20; All Weather / Empire Base; Yosemite Venting Base; Flintlastic Poly SMS Base; Flintlastic Ultra Poly SMS Base	FlintFast #14 HD with FlintFast 3" Insulation Plates or Trufast HD with Trufast 3" Metal Insulation Plates	6-inch o.c. at 4-inch lap and 12-inch o.c. in three (3), equally spaced, staggered center rows	(Optional) SBS-CA1	SBS-CA1	-75.0	



NEMO | etc.

**TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**

SEE NOTE 16 FOR VAPOR BARRIER OPTIONS

Sys. No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Primer	Roof Cover (Note 15)			MDP (psf)	
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)		Base Ply	Ply	Cap Ply		
C-16.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO or ENRGY 3	OB500	Min. 0.25-inch DensDeck	OB500	FlintPrime or FlintPrime SA	SBS-SA	(Optional) SBS-SA	SBS-SA	-150.0	
C-17.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard, ENRGY 3 or H-Shield	OB500	Min. 0.25-inch SECURROCK Gypsum-Fiber Roof Board	OB500	None	SBS-SA	(Optional) SBS-SA	SBS-SA	-172.5	
C-18.	Structural concrete	None	Min. 1.0-inch ISO 95+ GL, H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch AC Foam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	ICP BOARD-MAX or CR-20	Min. 0.25-inch SECURROCK Gypsum-Fiber Roof Board	ICP BOARD-MAX or CR-20	None	SBS-SA	(Optional) SBS-SA	SBS-SA	-172.5	
C-19.	Structural concrete	None	Min. 1.0-inch ISO 95+ GL, H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch AC Foam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	ICP BOARD-MAX or CR-20	Min. 0.25-inch DensDeck	ICP BOARD-MAX or CR-20	FlintPrime or FlintPrime SA	SBS-SA	(Optional) SBS-SA	SBS-SA	-192.5	
HYBRID SYSTEMS:												
C-20.	Structural concrete	FlintPrime	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	HA	(Optional) Additional layer(s) base insulation	HA	None	Flintlastic Ultra Glass SA	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-322.5	
C-21.	Structural concrete	FlintPrime	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	HA	(Optional) Additional layer(s) base insulation	HA	None	Black Diamond Base Sheet	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-375.0	
C-22.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	A-PD	(Optional) Additional layer(s) base insulation	A-PD	None	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-180.0	
C-23.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	A-PD	Min. 0.25-inch SECURROCK Gypsum-Fiber Roof Board	A-PD	None	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-117.5	
C-24.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	A-PD, 6-inch o.c.	Min. 0.25-inch SECURROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.	None	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-217.5	
C-25.	Structural concrete	None	Min. 0.25-inch SECURROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.	None	N/A	None	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-195.0	
C-26.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	D-IS	(Optional) Additional layer(s) base insulation	D-IS	None	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-135.0	



NEMO | etc.

**TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**
SEE NOTE 16 FOR VAPOR BARRIER OPTIONS

Sys. No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Primer	Roof Cover (Note 15)			MDP (psf)	
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)		Base Ply	Ply	Cap Ply		
C-38.	Structural concrete	None	Min. 1.5-inch ACFoam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	None	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-217.5	
C-39.	Structural concrete	None	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	None	N/A	None	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-195.0	
C-40.	Structural concrete	None	Min. 1.5-inch ACFoam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	ICP BOARD-MAX or CR-20	(Optional) Additional layer(s) base insulation	ICP BOARD-MAX or CR-20	None	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-270.0	
C-41.	Structural concrete	None	Min. 1.5-inch ACFoam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	ICP BOARD-MAX or CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	ICP BOARD-MAX or CR-20	None	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-217.5	
C-42.	Structural concrete	None	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	ICP BOARD-MAX or CR-20	None	N/A	None	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-195.0	
CONVENTIONAL SYSTEMS:												
C-43.	Structural concrete	FlintPrime	Min. 1.5-inch ACFoam II, ENERGY 3, H-Shield, FlintBoard ISO	HA	(Optional) Additional layer(s) of base insulation	HA	None	BP-AA3, 24-inch grid	(Optional) BP-AA, SBS-AA	SBS-AA	-37.5	
C-44.	Structural concrete	FlintPrime	Min. 1.5-inch ACFoam II or FlintBoard ISO	HA	Min. 0.25-inch DensDeck, DensDeck Prime	HA	None	SBS-TA	(Optional) SBS-TA	SBS-TA	-180.0	
C-45.	Structural concrete	FlintPrime	(Optional) Min. 1.5-inch ACFoam II or FlintBoard ISO	HA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	HA	None	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-180.0	
C-46.	Structural concrete	FlintPrime	(Optional) Min. 2-inch ACFoam II, FlintBoard ISO, ENERGY 3 or H-Shield	HA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	HA	None	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-225.0	
C-47.	Structural concrete	FlintPrime	(Optional) Min. 1.5-inch ACFoam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	HA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	HA	None	APP-TA	(Optional) APP-TA	APP-TA	-252.5	
C-48.	Structural concrete	FlintPrime	Min. 1.5-inch ACFoam II, FlintBoard ISO, ENERGY 3 or H-Shield	HA	Min. 0.5-inch Structodek High Density Fiberboard	HA	None	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-227.0	



NEMO | etc.

**TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**
SEE NOTE 16 FOR VAPOR BARRIER OPTIONS

Sys. No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Primer	Roof Cover (Note 15)			MDP (psf)
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)		Base Ply	Ply	Cap Ply	
C-59.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	A-PD	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	A-PD	None	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-117.5
C-60.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	A-PD, 6-inch o.c.	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.	None	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-217.5
C-61.	Structural concrete	None	0.5-inch Structodek High Density Fiberboard	A-PD, 6-inch o.c.	None	N/A	None	BP-AA, SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-195.0
C-62.	Structural concrete	None	Min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.	None	N/A	None	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-195.0
C-63.	Structural concrete	None	Min. 1.5-inch AC Foam II or FlintBoard ISO.	D-IS	Min. 0.25-inch DensDeck	D-IS	None	SBS-TA	(Optional) SBS-TA	SBS-TA	-112.5
C-64.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	D-IS	Min. 0.25-inch DensDeck Prime	D-IS	None	BP-AA, SBS-AA	(Optional) BP-AA, SBS-AA or SBS-TA	SBS-AA or SBS-TA	-297.5
C-65.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	D-IS	Min. 0.25-inch DensDeck Prime	D-IS	None	SBS-TA	(Optional) SBS-TA	SBS-TA	-302.5
C-66.	Structural concrete	None	Min. 2-inch AC Foam II, FlintBoard ISO, ENERGY 3 or H-Shield	D-IS	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	D-IS	None	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-225.0
C-67.	Structural concrete	None	Min. 2-inch AC Foam II, FlintBoard ISO, ENERGY 3 or H-Shield	D-IS	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	D-IS	None	SBS-TA or APP-TA	(Optional) SBS-TA or APP-TA	SBS-TA or APP-TA	-232.5
C-68.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	D-IS	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	D-IS	None	APP-TA	(Optional) APP-TA	APP-TA	-252.5
C-69.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	D-IS	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	D-IS	None	BP-AA, SBS-AA or SBS-TA	(Optional) BP-AA, SBS-AA or SBS-TA	SBS-AA or SBS-TA	-297.5



NEMO | etc.

**TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**
SEE NOTE 16 FOR VAPOR BARRIER OPTIONS

Sys. No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Primer	Roof Cover (Note 15)			MDP (psf)
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)		Base Ply	Ply	Cap Ply	
C-80.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	M-OSFA or M-PG1	Min. 0.25-inch SECURROCK Gypsum-Fiber Roof Board	M-OSFA or M-PG1	None	APP-TA	(Optional) APP-TA	APP-TA	-252.5
C-81.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	M-OSFA or M-PG1	Min. 0.25-inch SECURROCK Gypsum-Fiber Roof Board	M-OSFA or M-PG1	None	BP-AA, SBS-AA or SBS-TA	(Optional) BP-AA, SBS-AA or SBS-TA	SBS-AA or SBS-TA	-297.5
C-82.	Structural concrete	None	0.5-inch Structodek High Density Fiberboard	M-PG1	None	N/A	None	BP-AA, SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-195.0
C-83.	Structural concrete	None	Min. 0.25-inch DensDeck Prime or SECURROCK Gypsum-Fiber Roof Board	M-PG1	None	N/A	None	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-195.0
C-84.	Structural concrete	None	(Optional) Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	M-OSFA or M-PG1, 6-inch o.c.	Min. 0.25-inch DensDeck Prime or SECURROCK Gypsum-Fiber Roof Board	M-OSFA or M-PG1, 6-inch o.c.	None	SBS-AA or SBS-TA	(Optional) SBS-AA or SBS-TA	SBS-AA or SBS-TA	-315.0
C-85.	Structural concrete	None	(Optional) Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	M-OSFA or M-PG1, 6-inch o.c.	Min. 0.25-inch DensDeck Prime or SECURROCK Gypsum-Fiber Roof Board	M-OSFA or M-PG1, 6-inch o.c.	None	Flintlastic STA or Flintlastic STA Plus	(Optional) APP-TA	APP-TA	-315.0
C-86.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY 3 or H-Shield	OB500	Min. 0.5-inch Structodek High Density Fiberboard	OB500	None	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-120.0
C-87.	Structural concrete	None	Min. 1.5-inch AC Foam II or FlintBoard ISO.	OB500	Min. 0.25-inch DensDeck or DensDeck Prime	OB500	None	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-150.0
C-88.	Structural concrete	None	Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	OB500	Min. 0.25-inch DensDeck Prime	OB500	None	BP-AA, SBS-AA or SBS-TA	(Optional) BP-AA, SBS-AA or SBS-TA	SBS-AA or SBS-TA	-297.5
C-89.	Structural concrete	None	Min. 2-inch AC Foam II, FlintBoard ISO, ENRGY 3 or H-Shield	OB500	Min. 0.25-inch SECURROCK Gypsum-Fiber Roof Board	OB500	None	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-225.0



NEMO | etc.

**TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**

SEE NOTE 16 FOR VAPOR BARRIER OPTIONS

Sys. No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Primer	Roof Cover (Note 15)			MDP (psf)	
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)		Base Ply	Ply	Cap Ply		
C-100.	Structural concrete	None	Min. 0.25-inch SECURROCK Gypsum-Fiber Roof Board	ICP BOARD-MAX or CR-20	None	N/A	None	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-195.0	
COLD-APPLIED SYSTEMS:												
C-101.	Structural concrete	None	(Optional) Min. 0.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	OB500, ICP BOARD-MAX or CR-20	Min. 1.5-inch AC Foam III, FlintBoard Iso Cold, H-Shield CG or FlintBoard Iso Cold _H	OB500, ICP BOARD-MAX or CR-20	None	SBS-CA1	None	SBS-CA1	-82.5	
C-102.	Structural concrete	None	(Optional) Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	M-OSFA or M-PG1	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	M-OSFA or M-PG1	None	Flintlastic Poly SMS Base in FlintBond	(Optional) Flintlastic Poly SMS Base in FlintBond	SBS-CA1	-90.0	
C-103.	Structural concrete	None	(Optional) Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	M-OSFA or M-PG1	Min. 0.5-inch AC Foam HD Coverboard or H-Shield HD	M-OSFA or M-PG1	None	SBS-CA1	None	SBS-CA1	-97.5	
C-104.	Structural concrete	None	Min. 0.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	A-PD, D-IS, M-OSFA, M-PG1, OB500, ICP BOARD-MAX or CR-20	Min. 0.25-inch SECURROCK Gypsum-Fiber Roof Board	A-PD, D-IS, M-OSFA, M-PG1, OB500, ICP BOARD-MAX or CR-20	None	SBS-CA1	None	SBS-CA1	-105.0	
C-105.	Structural concrete	None	(Optional) Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	M-OSFA or M-PG1, 6-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	M-OSFA or M-PG1, 6-inch o.c.	None	Flintlastic Poly SMS Base in FlintBond	(Optional) Flintlastic Poly SMS Base in FlintBond	SBS-CA1	-112.5	
C-106.	Structural concrete	None	(Optional) Min. 1.5-inch AC Foam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	M-OSFA or M-PG1, 6-inch o.c.	Min. 0.25-inch SECURROCK Gypsum-Fiber Roof Board or min. 0.5-inch AC Foam HD Coverboard or H-Shield HD	M-OSFA or M-PG1, 6-inch o.c.	None	SBS-CA1	None	SBS-CA1	-315.0	



NEMO | etc.

**TABLE 4A: LIGHTWEIGHT CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	LWIC (Note 14)	Base Insulation Layer		Coverboard			MDP (psf)		
			Type	Attach	Type	Attach	Base Ply		Ply	Cap Ply
SELF-ADHERING SYSTEMS:										
LWC-1	Min. 22 ga., Type BV, Grade 33 steel; 6 ft span	Min. 300 psi Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, ACFoam II, ACFoam III, H-Shield or H-Shield CG	M-OSFA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA	SBS-SA	(Optional) SBS-SA	SBS-SA	-52.5
LWC-2	Min. 22 ga., Type BV, Grade 33 steel; 6 ft span	Min. 300 psi Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, ACFoam II, ACFoam III, H-Shield or H-Shield CG	M-PG1	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-PG1	SBS-SA	(Optional) SBS-SA	SBS-SA	-52.5
LWC-3	Min. 22 ga., Type BV, Grade 33 steel; 6 ft span	Min. 300 psi Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, ACFoam II, ACFoam III, H-Shield or H-Shield CG	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	SBS-SA	(Optional) SBS-SA	SBS-SA	-52.5
LWC-4	Min. 22 ga., Type BV, Grade 33 steel; 6 ft span	Min. 300 psi Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, ACFoam II, ACFoam III, H-Shield or H-Shield CG	ICP BOARD-MAX	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	ICP BOARD-MAX	SBS-SA	(Optional) SBS-SA	SBS-SA	-52.5
LWC-5	Min. 22 ga., Type BV, Grade 33 steel; 6 ft span	Min. 300 psi Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, ACFoam II, ACFoam III, H-Shield or H-Shield CG	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	SBS-SA	(Optional) SBS-SA	SBS-SA	-52.5
HYBRID SYSTEMS:										
LWC-6	Min. 22 ga., Type BV, Grade 33 steel; 6 ft span	Min. 300 psi Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, ACFoam II, ACFoam III, H-Shield or H-Shield CG	M-OSFA, M-PG1, ICP BOARD-MAX, ICP CR-20 or OB500	(Optional) Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M-PG1, ICP BOARD-MAX, ICP CR-20 or OB500	SBS-SA-H	(Optional) SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-52.5
CONVENTIONAL SYSTEMS:										
LWC-7	Min. 22 ga., Type BV, Grade 33 steel; 6 ft span	Min. 300 psi Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, ACFoam II, ACFoam III, H-Shield or H-Shield CG	M-OSFA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA	BP-AA or SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-52.5
LWC-8	Min. 22 ga., Type BV, Grade 33 steel; 6 ft span	Min. 300 psi Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, ACFoam II, ACFoam III, H-Shield or H-Shield CG	M-PG1	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-PG1	BP-AA or SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-52.5



NEMO etc.

**TABLE 4B: LIGHTWEIGHT CONCRETE OVER STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	LWIC (Note 14)	Base Insulation Layer		Coverboard			Roof Cover (Note 15)				MDP (psf)
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Primer	Base Ply	Ply	Cap Ply		
CELCORE (FL2037):												
SELF-ADHERING SYSTEMS:												
LWC-14	Structural concrete	Min. 300 psi Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, AC Foam II, AC Foam III, H-Shield or H-Shield CG	M-OSFA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA	None	SBS-SA	(Optional) SBS-SA	SBS-SA	-172.5	
LWC-15	Structural concrete	Min. 300 psi Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, AC Foam II, AC Foam III, H-Shield or H-Shield CG	M-PG1	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-PG1	None	SBS-SA	(Optional) SBS-SA	SBS-SA	-172.5	
LWC-16	Structural concrete	Min. 300 psi Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, AC Foam II, AC Foam III, H-Shield or H-Shield CG	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	None	SBS-SA	(Optional) SBS-SA	SBS-SA	-172.5	
LWC-17	Structural concrete	Min. 200 psi, min. 2-inch Celcore Cellular Concrete	Min. 1.0-inch ISO 95+ GL, H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch AC Foam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	None	SBS-SA	(Optional) SBS-SA	SBS-SA	-172.5	
LWC-18	Structural concrete	Min. 300 psi Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, AC Foam II, AC Foam III, H-Shield or H-Shield CG	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	None	SBS-SA	(Optional) SBS-SA	SBS-SA	-172.5	
LWC-19	Structural concrete	Min. 200 psi, min. 2-inch Celcore Cellular Concrete	Min. 1.0-inch ISO 95+ GL, H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch AC Foam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	CR-20	Min. 0.25-inch DensDeck	CR-20	FlintPrime or FlintPrime SA	SBS-SA	(Optional) SBS-SA	SBS-SA	-180.0	
HYBRID SYSTEMS:												
LWC-20	Structural concrete	Min. 300 psi Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, AC Foam II, AC Foam III, H-Shield or H-Shield CG	M-OSFA, M-PG1, ICP BOARD-MAX, ICP CR-20 or OB500	(Optional) Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M-PG1, ICP BOARD-MAX, ICP CR-20 or OB500	None	SBS-SA-H	(Optional) SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-215.0	
CONVENTIONAL SYSTEMS:												



NEMO | etc.

**TABLE 4B: LIGHTWEIGHT CONCRETE OVER STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	LWIC (Note 14)	Base Insulation Layer		Coverboard			Roof Cover (Note 15)				MDP (psf)
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Primer	Base Ply	Ply	Cap Ply		
LWC-28	Structural concrete	Min. 200 psi, min. 2-inch Elastzell	Min. 1.5-inch AC Foam II, FlintBoard, ENRGY 3 or H-Shield	A-PD, 6-inch o.c.	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.	None	SBS-SA	(Optional) SBS-SA	SBS-SA	-172.5	
LWC-29	Structural concrete	Min. 200 psi, min. 2-inch Elastzell	Min. 1.5-inch AC Foam II, FlintBoard, ENRGY 3 or Multi-Max FA3	A-PD, 6-inch o.c.	Min. 0.25-inch DensDeck	A-PD, 6-inch o.c.	FlintPrime or FlintPrime SA	SBS-SA	(Optional) SBS-SA	SBS-SA	-187.5	
LWC-30	Structural concrete	Min. 200 psi, min. 2-inch Elastzell	Min. 1.5-inch AC Foam II, FlintBoard ISO or ENRGY 3	OB500	Min. 0.25-inch DensDeck	OB500	FlintPrime or FlintPrime SA	SBS-SA	(Optional) SBS-SA	SBS-SA	-150.0	
LWC-31	Structural concrete	Min. 200 psi, min. 2-inch Elastzell	Min. 1.5-inch AC Foam II, FlintBoard, ENRGY 3 or H-Shield	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	None	SBS-SA	(Optional) SBS-SA	SBS-SA	-172.5	
LWC-32	Structural concrete	Min. 200 psi, min. 2-inch Elastzell	Min. 1.0-inch ISO 95+ GL, H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch AC Foam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	None	SBS-SA	(Optional) SBS-SA	SBS-SA	-172.5	
LWC-33	Structural concrete	Min. 200 psi, min. 2-inch Elastzell	Min. 1.0-inch ISO 95+ GL, H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch AC Foam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	CR-20	Min. 0.25-inch DensDeck	CR-20	FlintPrime or FlintPrime SA	SBS-SA	(Optional) SBS-SA	SBS-SA	-180.0	
CONVENTIONAL SYSTEMS:												
LWC-34	Structural concrete	Min. 200 psi, min. 2-inch Elastzell	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY 3 or H-Shield	A-PD 6-inch o.c.	Min. 0.5-inch Structodek High Density Fiberboard or Min. 0.25-inch DensDeck	A-PD 6-inch o.c.	None	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-187.5	
LWC-35	Structural concrete	Min. 200 psi, min. 2-inch Elastzell	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY 3 or H-Shield	A-PD, 6-inch o.c.	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.	None	BP-AA or SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-217.5	
LWC-36	Structural concrete	Min. 200 psi, min. 2-inch Elastzell	Min. 1.5-inch AC Foam II or FlintBoard ISO.	OB500	Min. 0.25-inch DensDeck Prime	OB500	None	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-150.0	
LWC-37	Structural concrete	Min. 200 psi, min. 2-inch Elastzell	Min. 1.5-inch AC Foam II or FlintBoard ISO.	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	None	SBS-TA	(Optional) SBS-TA	SBS-TA	-180.0	

NEMO ETC, LLC
Certificate of Authorization #32455
© 2019 NEMO ETC, LLC

Evaluation Report 3520.03.04-R24 for FLZ533-R24
Revision 25: 07/20/2020
Appendix 1, Page 45 of 74

7TH EDITION (2020) FBC NON-HVHZ EVALUATION
CertainTeed Flintlastic® Modified Bitumen Roof Systems; (610) 893-5400



NEMO | etc.

TABLE 4C: LIGHTWEIGHT INSULATING CONCRETE OVER STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE A-1: LWC TO DECK, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	LWIC (Note 14)	Vapor Barrier	Base Insulation Layer		Coverboard		Roof Cover (Note 15)			MDP (psf)	
				Type	Attach (Notes 6&7)	Type	Attach (Notes 6&7)	Primer	Base Ply	Ply		Cap Ply
PRE-EXISTENT CELLULAR LWC:												
SELF-ADHERING SYSTEMS:												
LWC-43	Min. 22 g _s , Type BV, Grade 40 steel	Min. 400 psi, Min. 2-inch thick, existing (> 28 days old) cellular lightweight concrete; Repair LWC spalls with Celcore SBS (Sanded Bonding Surface)	Flintlastic Ultra Poly SMS Base Sheet applied in Millennium Hurricane Force Membrane Adhesive HS, ribbons max. 6-inch o.c., 3-inch wide side laps and 6-inch wide end laps are hot-air-welded, torch-welded or sealed with Millennium Hurricane Force Lap and Flashing Adhesive	One or more layers, min. 2-in. ACFoam II, FlintBoard ISO, H-Shield or FlintBoard H ISO	M-OSFA or M-PG1	(Optional) 0.5-in. DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA or M-PG1	FlintPrime or FlintPrime SA	SBS-SA (Optional)	SBS-SA	-67.5	
HYBRID SYSTEMS:												
LWC-44	Min. 22 g _s , Type BV, Grade 40 steel	Min. 400 psi, Min. 2-inch thick, existing (> 28 days old) cellular lightweight concrete; Repair LWC spalls with Celcore SBS (Sanded Bonding Surface)	Flintlastic Ultra Poly SMS Base Sheet applied in Millennium Hurricane Force Membrane Adhesive HS, ribbons max. 6-inch o.c., 3-inch wide side laps and 6-inch wide end laps are hot-air-welded, torch-welded or sealed with Millennium Hurricane Force Lap and Flashing Adhesive	One or more layers, min. 2-in. ACFoam II, FlintBoard ISO, H-Shield or FlintBoard H ISO	M-OSFA or M-PG1	0.5-in. DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA or M-PG1	(Optional) FlintPrime	SBS-SA-H (Optional)	SBS-TA or APP-TA	-67.5	
CONVENTIONAL SYSTEMS:												
LWC-45	Min. 22 g _s , Type BV, Grade 40 steel	Min. 400 psi, Min. 2-inch thick, existing (> 28 days old) cellular lightweight concrete; Repair LWC spalls with Celcore SBS (Sanded Bonding Surface)	Flintlastic Ultra Poly SMS Base Sheet applied in Millennium Hurricane Force Membrane Adhesive HS, ribbons max. 6-inch o.c., 3-inch wide side laps and 6-inch wide end laps are hot-air-welded, torch-welded or sealed with Millennium Hurricane Force Lap and Flashing Adhesive	One or more layers, min. 2-in. ACFoam II, FlintBoard ISO, H-Shield or FlintBoard H ISO	M-OSFA or M-PG1	0.5-in. DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA or M-PG1	(Optional) FlintPrime	SBS-TA or APP-TA (Optional)	SBS-TA or APP-TA	-67.5	
ELASTIZELL (FL4994):												
SELF-ADHERING SYSTEMS:												
LWC-46	Structural Concrete	Min. 420 psi, min. 2-inch Elastizell	All Weather / Empire Base Sheet applied in Millennium Hurricane Force Membrane Adhesive, ribbons max. 6-inch o.c., 3-inch wide side laps and 6-inch wide end laps are sealed with Millennium Hurricane Force Lap and Flashing Adhesive	One or more layers, min. 2-in. ACFoam II, FlintBoard ISO, H-Shield or FlintBoard H ISO	M-OSFA or M-PG1	(Optional) 0.5-in. DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA or M-PG1	FlintPrime or FlintPrime SA	SBS-SA (Optional)	SBS-SA	-67.5	



NEMO | etc.

**TABLE 4D: LIGHTWEIGHT CONCRETE OVER STEEL DECKS – NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-2: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	LWC (Note 14)			Anchor Sheet			Insulation			Roof Cover (Note 15)			MDP (psf)
		Deck Treatment	Type	Surface Treatment	Type	Fasteners	Attach	Base	Top	Attach	Base Ply	Ply	Cap Ply	
PRE-EXISTING CELLULAR LWC:														
CONVENTIONAL SYSTEMS:														
LWC-52	Min. 22 ga. steel or structural concrete deck.	None	Min 350 psi, min 2-inch pre-existent cellular LWC	None	Yosemite Venting Base	Trufast Twin-Loc Nails	9-inch o.c. at the 4-inch side lap and 9-inch o.c. at two, equally spaced, staggered rows in the center of the sheet	Min. 1.5-inch AC Foam II	(Optional) Additional layers base insulation	Hot asphalt	BP-AA4, 1.8-inch o.c.	(Optional) BP-AA, SBS-AA	SBS-AA	-60.0
<p>Note: To qualify the LWC under this assembly, the subject fastener shall achieve an average withdrawal of 88 lbf when tested per ANSI/SPRI FX-1 or TAS 105.</p>														
CELSCORE (FL2037):														
SELF-ADHERING SYSTEMS:														
LWC-53	Min. 22 ga., type BV, Grade 40 steel; 6 ft span	Celcore S-1 Deck Preparation	Min. 470 psi, min. 2-inch Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	Celcore PVA Curing Compound	All Weather/Empire Base Sheet, Flexiglas Base, Glasbase Base Sheet, Yosemite Venting Base or Flintlastic Base 20	Trufast FM-90 Base Sheet Fasteners	7-inch o.c. at the min. 4-inch side laps and 7-inch o.c. at two, equally spaced, staggered center rows	Min. 1.5" FlintBoard ISO or FlintBoard ISO-T	(Optional) Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board. Top surface shall be primed with FlintPrime or FlintPrime SA.	Hot asphalt	SBA-SA	(Optional) SBS-SA	SBS-SA	-60.0
HYBRID SYSTEMS:														
LWC-54	Min. 22 ga., type BV, Grade 40 steel; 6 ft span	Celcore S-1 Deck Preparation	Min. 470 psi, min. 2-inch Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	Celcore PVA Curing Compound	All Weather/Empire Base Sheet, Flexiglas Base, Glasbase Base Sheet, Yosemite Venting Base or Flintlastic Base 20	Trufast FM-90 Base Sheet Fasteners	7-inch o.c. at the min. 4-inch side laps and 7-inch o.c. at two, equally spaced, staggered center rows	Min. 1.5" FlintBoard ISO or FlintBoard ISO-T	(Optional) Min. 0.125-inch STURDY-DEK Asphaltic Cover Board or min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board. Top surface may be optionally primed with FlintPrime.	Hot asphalt	SBS-SA-H	(Optional) SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-60.0
CONVENTIONAL SYSTEMS:														



NEMO | etc.

TABLE 4D: LIGHTWEIGHT CONCRETE OVER STEEL DECKS – NEW CONSTRUCTION or REROOF (Tear-Off) SYSTEM TYPE A-2: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	LWC (Note 14)		Anchor Sheet				Insulation				Roof Cover (Note 15)			MDP (psf)
		Deck Treatment	Type	Surface Treatment	Type	Fasteners	Attach	Base	Top	Attach	Base Ply	Ply	Cap Ply		
LWC-58	Min. 22 ga., type BV, Grade 40 steel; 6 ft span	None	Min. 490 psi, min. 2-inch Elastizell with Zell-Crete Fibers	None	All Weather/Empire Base Sheet, Flexiglas Base, Glasbase Base Sheet, Yosemite Venting Base or Flintlastic Base 20	Trufast FM-90 Base Sheet Fasteners	7-inch o.c. at the min. 4-inch side laps and 7-inch o.c. at two, equally spaced, staggered center rows	Min. 1.5" FlintBoard ISO or FlintBoard ISO-T	(Optional) Min. 0.125-inch STURDY-DEK Asphaltic Cover Board or min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board. Top surface may be optionally primed with FlintPrime.	Hot asphalt	SBS-AA-H	(Optional) SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-67.5	
CONVENTIONAL SYSTEMS:															
LWC-59	Min. 22 ga. steel or structural concrete deck.	None	Min. 350 psi, min. 2-inch Elastizell cellular LWC	None	Yosemite Venting Base	Trufast FM-90 Base Ply Fasteners	7-inch o.c. at the 4-inch side lap and 7-inch o.c. at two, equally spaced, staggered rows in the center of the sheet	Min. 1.5-inch ACFoam II	(Optional) Additional layers base insulation	Hot asphalt	BP-AA3, 18-inch grid	(Optional) BP-AA, SBS-AA	SBS-AA	-37.5*	
LWC-60	Min. 22 ga., type BV, Grade 40 steel; 6 ft span	None	Min. 490 psi, min. 2-inch Elastizell with Zell-Crete Fibers	None	All Weather/Empire Base Sheet, Flexiglas Base, Glasbase Base Sheet, Yosemite Venting Base or Flintlastic Base 20	Trufast FM-90 Base Sheet Fasteners	7-inch o.c. at the min. 4-inch side laps and 7-inch o.c. at two, equally spaced, staggered center rows	Min. 1.5" FlintBoard ISO or FlintBoard ISO-T	Min. 0.125-inch STURDY-DEK Asphaltic Cover Board, min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, min. 0.5-inch Structodek High Density Fiberboard Roof Insulation or min. 0.75-inch Fesco Board (homogeneous)	Hot asphalt	BP-AA or SBS-AA	(Optional) SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-67.5	
LWC-61	Min. 22 ga., type BV, Grade 40 steel; 6 ft span	None	Min. 490 psi, min. 2-inch Elastizell with Zell-Crete Fibers	None	All Weather/Empire Base Sheet, Flexiglas Base, Glasbase Base Sheet, Yosemite Venting Base or Flintlastic Base 20	Trufast FM-90 Base Sheet Fasteners	7-inch o.c. at the min. 4-inch side laps and 7-inch o.c. at two, equally spaced, staggered center rows	Min. 1.5" FlintBoard ISO or FlintBoard ISO-T	Min. 0.125-inch STURDY-DEK Asphaltic Cover Board or min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board. Top surface may be optionally primed with FlintPrime.	Hot asphalt	SBS-TA or APP-TA	(Optional) SBS-TA or APP-TA	SBS-TA or APP-TA	-67.5	



NEMO | etc.

**TABLE 4E: LIGHTWEIGHT CONCRETE DECKS OVER STEEL OR STRUCTURAL CONCRETE DECK – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E: MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER**

System No.	Deck (Note 1)	LWIC (Note 14)				Base Sheet				Roof Cover (Note 15)		MDP (psf)
		Deck Treatment	LWC	Surface Treatment	Type	Fasteners	Attach	Base Ply	Cap Ply			
<p><i>Note: To qualify the LWIC under this assembly, a 1.8-inch Trufast Twin Loc-Nail Assembled Fastener shall achieve an average withdrawal of 110 lbf when tested per ANSI/SPRI FX-1 or TAS 105</i></p>												
CONVENTIONAL SYSTEMS:												
LWC-67	Min. 22 ga., Type BV, Grade 33 steel; 5 ft span or structural concrete	None	Min. 300 psi, min. 2-inch pre-existing cellular lightweight insulating concrete.	None	Glasbase; Flexiglas Base; Flintlastic Base 20; All Weather / Empire Base; Yosemite Venting Base	Trufast Twin Loc-Nail Assembled Fastener (min. 1.8")	9-inch o.c. at the 4-inch lap and 9-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-60.0		
LWC-68	Min. 22 ga., Type BV, Grade 33 steel; 5 ft span or structural concrete	None	Min. 300 psi, min. 2-inch pre-existing cellular lightweight insulating concrete.	None	Glasbase; Flexiglas Base; Flintlastic Base 20; All Weather / Empire Base; Yosemite Venting Base	Trufast Twin Loc-Nail Assembled Fastener (min. 1.8")	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two (2), equally spaced, staggered center rows	BP-AA or SBS-AA	SBS-AA, SBS-TA or APP-TA	-67.5		
LWC-69	Min. 22 ga., Type BV, Grade 33 steel; 5 ft span or structural concrete	None	Min. 350 psi, min. 3-inch pre-existing cellular lightweight insulating concrete.	None	Flexiglas Base; Flintlastic Base 20; Poly SMS Base; Yosemite Venting Base	Trufast FM-90 Base Sheet Fasteners	7-inch o.c. at the 4-inch lap and 10-inch o.c. in two (2), equally spaced, staggered center rows	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-67.5		
LWC-70	Min. 22 ga., Type BV, Grade 33 steel; 5 ft span or structural concrete	None	Min. 300 psi, min. 2-inch pre-existing cellular lightweight insulating concrete.	None	Poly SMS Base; Ultra Poly SMS Base	Trufast Twin Loc-Nail Assembled Fastener (min. 1.8")	9-inch o.c. at the 4-inch lap and 9-inch o.c. in two (2), equally spaced, staggered center rows	BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-75.0		
<p><i>Note: To qualify the LWIC under this assembly, a 1.8-inch Trufast Twin Loc-Nail Assembled Fastener shall achieve an average withdrawal of 110 lbf when tested per ANSI/SPRI FX-1 or TAS 105</i></p>												
CELCORE (FL2037):												
SELF-ADHERING SYSTEMS:												
LWC-71	Min. 22 ga., type BV, Grade 40 steel; 6 ft span	Celcore S-1 Deck Preparation	Min. 470 psi, min. 2-inch Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	Celcore PVA Curing Compound	Flintlastic SA NailBase	Trufast FM-90 Base Sheet Fasteners	7-inch o.c. at the min. 4-inch side laps and 7-inch o.c. at two, equally spaced, staggered center rows	SBS-SA	SBS-SA	-45.0		



NEMO | etc.

TABLE 4E: LIGHTWEIGHT CONCRETE DECKS OVER STEEL OR STRUCTURAL CONCRETE DECK – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE E: MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Deck Treatment	LWC (Note 14)		Surface Treatment	Type	Base Sheet		Attach	Roof Cover (Note 15)		MDP (psf)
			LWC				Fasteners	Base Ply		Cap Ply		
SELF-ADHERING SYSTEMS:												
LWC-78	Min. 22 ga., type BV, Grade 40 steel; 6 ft span	None	Min. 490 psi, min. 2-inch Elastizell with Zell-Crete Fibers	None	Flintlastic SA NailBase	Trufast FM-90 Base Sheet Fasteners	7-inch o.c. at the min. 4-inch side laps and 7-inch o.c. at two, equally spaced, staggered center rows	SBS-SA	SBS-SA		-45.0	
HYBRID SYSTEMS:												
LWC-79	Min. 26 ga. steel at max 5 ft spans or structural concrete	None	Min. 200 psi, min 2-inch Elastizell.	None	Glasbase; Flexiglas Base; Flintlastic Base 20; All Weather / Empire Base or Poly SMS Base	Trufast FM-90 Base Sheet Fasteners or Trufast Twin Loc-Nail Assembled Fasteners (1.8 inch)	7½-inch o.c. at the 4-inch lap and 7½-inch o.c. in two (2), equally spaced, staggered center rows	SBS-SA-H	SBS-AA, SBS-TA or APP-TA		-30.0	
LWC-80	Min. 22 ga., Type BV, Grade 33 steel; 5 ft span or structural concrete	None	Min. 200 psi, min 2-inch Elastizell.	None	Glasbase; Flexiglas Base; Flintlastic Base 20; All Weather / Empire Base or Poly SMS Base	Trufast FM-90 Base Sheet Fasteners or Trufast Twin Loc-Nail Assembled Fasteners (1.8 inch)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two (2), equally spaced, staggered center rows	SBS-SA-H	SBS-AA, SBS-TA or APP-TA		-45.0	
LWC-81	Min. 22 ga., type BV, Grade 40 steel; 6 ft span	None	Min. 490 psi, min. 2-inch Elastizell with Zell-Crete Fibers	None	All Weather/Empire Base Sheet, Flexiglas Base, Glasbase Base Sheet or Flintlastic Base 20	Trufast FM-90 Base Sheet Fasteners	7-inch o.c. at the min. 4-inch side laps and 7-inch o.c. at two, equally spaced, staggered center rows	SBS-SA-H	SBS-AA, SBS-TA or APP-TA		-45.0	
LWC-82	Min. 22 ga., type BV, Grade 40 steel; 6 ft span	None	Min. 490 psi, min. 2-inch Elastizell with Zell-Crete Fibers	None	Yosemite Venting Base primed with FlintPrime or FlintPrime SA	Trufast FM-90 Base Sheet Fasteners	7-inch o.c. at the min. 4-inch side laps and 7-inch o.c. at two, equally spaced, staggered center rows	SBS-SA-H	SBS-AA, SBS-TA or APP-TA		-45.0	
CONVENTIONAL SYSTEMS:												
LWC-83	Min. 26 ga. steel at max 5 ft spans or structural concrete	None	Min. 200 psi, min 2-inch Elastizell.	None	Glasbase; Flexiglas Base; Flintlastic Base 20; All Weather / Empire Base; Poly SMS Base; Yosemite Venting Base	Trufast FM-90 Base Sheet Fasteners or Trufast Twin Loc-Nail Assembled Fasteners (1.8 inch)	7½-inch o.c. at the 4-inch lap and 7½-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA		-30.0	
LWC-84	Min. 26 ga. steel at max 5 ft spans or structural concrete	None	Min. 200 psi, min 2-inch Elastizell.	None	Flintlastic APP Base T	Trufast FM-90 Base Sheet Fasteners	7½-inch o.c. at the 4-inch lap and 7½-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA		-30.0	



NEMO | etc.

TABLE 4E: LIGHTWEIGHT CONCRETE DECKS OVER STEEL OR STRUCTURAL CONCRETE DECK – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE E: MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	LWC (Note 14)			Base Sheet				Roof Cover (Note 15)		MDP (psf)
		Deck Treatment	LWC	Surface Treatment	Type	Fasteners	Attach	Base Ply	Cap Ply		
LWC-91	Min. 22 ga., Type BV, Grade 33 steel; 5 ft span or structural concrete	None	Min. 250 psi, min 2-inch Mearlcrete.	None	Glasbase; Flexiglas Base; Flintlastic Base 20; All Weather / Empire Base; Poly SMS Base; Yosemite Venting Base	OMG CR Base Ply Fasteners (1.7)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) BP-AA or SBS-AA	SBS-AA, SBS-TA or APP-TA	-45.0	
LWC-92	Min. 22 ga., Type BV, Grade 33 steel; 5 ft span or structural concrete	None	Min. 250 psi, min 2-inch Mearlcrete.	None	Poly SMS Base	OMG CR Base Ply Fasteners (1.7)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) BP-AA or SBS-AA	SBS-AA, SBS-TA or APP-TA	-52.5	
LWC-93	Min. 22 ga., Type BV, Grade 33 steel; 5 ft span or structural concrete	None	Min. 300 psi, min 2-inch Mearlcrete.	None	Glasbase; Flexiglas Base; Flintlastic Base 20; All Weather / Empire Base; Poly SMS Base; Yosemite Venting Base	OMG CR Base Ply Fasteners (1.7)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) BP-AA or SBS-AA	SBS-AA, SBS-TA or APP-TA	-52.5	

TABLE 4F: LIGHTWEIGHT CONCRETE DECKS – REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE E: MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	LWC (Note 14)			Base Sheet				Roof Cover (Note 15)		MDP (psf)
		Type	Surfacing	Base	Fasteners	Spacing	Base Ply	Cap Ply			
LWC-94	Min. 22 ga., Type BV, Grade 40 steel	Min. 470 psi, Min. 2-inch thick, existing (> 28 days old) cellular lightweight concrete	For reroof (tear-off), repair LWC spalls with Celcore SBS (Sanded Bonding Surface)	Flintlastic Ultra Poly SMS Base Sheet	Trufast Versa Fasteners (min. 2.25") & Plates; two (2) screws per plate at 180° from each other*	9-inch o.c. within the min. 5-inch wide, heat-welded side laps	(Optional) SBS-TA or APP-TA	SBS-TA or APP-TA	-75.0		
	Note:	*Field withdrawal resistance testing (Note 11) shall yield minimum 322 lbf. Additional Versa-Fast Fasteners within each Versa-Fast Plate may be utilized to produce minimum withdrawal resistance. For recover installations, screws shall be of sufficient length for minimum 2.25" embedment into the existing LWC assembly.									



NEMO | etc.

TABLE 5A: CEMENTITIOUS WOOD FIBER DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Notes 1&12)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
SELF-ADHERING SYSTEMS:									
CWF-1.	Existing Tectum (re-roof only)	Min. 1.5-inch FlintBoard ISO, ACFoam II, ENRGY 3 or Multi-Max FA3	OB500	Min. 0.25-inch DensDeck primed with FlintPrime or FlintPrime SA, or SECUROCK Gypsum-Fiber Roof Board	OB500	SBS-SA	(Optional) SBS-SA	SBS-SA	-45.0*
CWF-2.	Tectum	Min. 1.0-inch ISO 95+ GL, H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	ICP BOARD-MAX or CR-20	Min. 0.25-inch DensDeck primed with FlintPrime or FlintPrime SA, or SECUROCK Gypsum-Fiber Roof Board	ICP BOARD-MAX or CR-20	SBS-SA	(Optional) SBS-SA	SBS-SA	-52.5
CONVENTIONAL SYSTEMS:									
CWF-3.	Existing Tectum (re-roof only)	Min. 1.5-inch FlintBoard ISO, ACFoam II, ENRGY 3 or Multi-Max FA3	OB500	Min. 0.5-inch Structodek High Density Fiberboard	OB500	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
CWF-4.	Existing Tectum (re-roof only)	Min. 1.5-inch FlintBoard ISO, ACFoam II, ENRGY 3 or Multi-Max FA3	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board or DensDeck or DensDeck Prime	OB500	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
CWF-5.	Tectum	Min. 1.0-inch ISO 95+ GL, H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-	ICP BOARD-MAX or CR-20	Min. 0.5-inch Structodek High Density Fiberboard or DuraBoard (homogeneous) or min. 1.5-inch FescoBoard (laminated)	ICP BOARD-MAX or CR-20	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-52.5
CWF-6.	Tectum	Min. 1.0-inch ISO 95+ GL, H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	ICP BOARD-MAX or CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board or DensDeck or DensDeck Prime	ICP BOARD-MAX or CR-20	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-52.5



NEMO | etc.

TABLE 5C: CEMENTITIOUS WOOD FIBER DECKS – REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Insulation Layer(s)	Top Insulation Layer				Roof Cover (Note 15)			MDP (psf)
			Type	Fasteners (Note 11)	Attach	Base Ply	Ply	Cap Ply		
CWF-11.	Existing Tectum	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch Structodek High Density Fiberboard Roof Insulation	OMG Polymer GypTec with 3" GypTec Plate (Field W/D > 180 lbf)	1 per 2.0 ft ²	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*	
CWF-12.	Existing Tectum	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch DensDeck or DensDeck Prime	OMG Polymer GypTec with 3" GypTec Plate (Field W/D > 160 lbf)	1 per 1.8 ft ²	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*	
CWF-13.	Existing Tectum	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch Structodek High Density Fiberboard Roof Insulation	Trufast Twin Loc-Nail Assembled Fasteners (Field W/D > 180 lbf)	1 per 2.0 ft ²	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*	
CWF-14.	Existing Tectum	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch DensDeck or DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Trufast Twin Loc-Nail Assembled Fasteners (Field W/D > 180 lbf)	1 per 2.0 ft ²	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*	

TABLE 5D: CEMENTITIOUS WOOD FIBER DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR REROOF SYSTEM TYPE E: MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Base	Base Sheet		Attach	Roof Cover (Note 15)		MDP (psf)
			Fasteners (Note 11)	Fasteners (Note 11)		Base Ply	Cap Ply	
SELF-ADHERING SYSTEMS:								
CWF-15.	Tectum	Flintlastic SA NailBase	Trufast Twin Loc-Nail Assembled Fastener (Field W/D > 80 lbf)	6-inch o.c. at the 4-inch lap and 10-inch o.c. in two (2), equally spaced, staggered center rows	SBS-SA	SBS-SA	SBS-SA	-60.0
CWF-16.	Tectum	Flintlastic SA NailBase	Trufast Twin Loc-Nail Assembled Fastener (Field W/D > 69 lbf)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two (2), equally spaced, staggered center rows	SBS-SA	SBS-SA	SBS-SA	-60.0
CONVENTIONAL SYSTEMS:								
CWF-17.	Existing Tectum (reroof only)	All Weather / Empire Base; Yosemite Venting Base	Trufast Insuldeck Loc-Nail Base Sheet Fastener (Field W/D > 53 lbf)	9-inch o.c. at the 4-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	BP-AA or SBS-AA	BP-AA or SBS-AA	SBS-AA	-30.0*
CWF-18.	Existing Tectum (reroof only)	All Weather / Empire Base; Yosemite Venting Base	Trufast Insuldeck Loc-Nail Base Sheet Fastener (Field W/D > 55 lbf)	7½-inch o.c. at the 4-inch lap and 7½-inch o.c. in two (2), equally spaced, staggered center rows	BP-AA or SBS-AA	BP-AA or SBS-AA	SBS-AA	-45.0*
CWF-19.	Tectum	Glasbase; Flexiglas Base; Flintlastic Base 20; All Weather / Empire Base or Yosemite Venting Base	Trufast Twin Loc-Nail Assembled Fastener (Field W/D > 80 lbf)	6-inch o.c. at the 4-inch lap and 10-inch o.c. in two (2), equally spaced, staggered center rows	BP-AA or SBS-AA	BP-AA or SBS-AA	SBS-AA, SBS-TA or APP-TA	-60.0
CWF-20.	Tectum	Glasbase; Flexiglas Base; Flintlastic Base 20 or All Weather / Empire Base; Yosemite Venting Base	Trufast Twin Loc-Nail Assembled Fastener (Field W/D > 77 lbf)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two (2), equally spaced, staggered center rows	BP-AA or SBS-AA	BP-AA or SBS-AA	SBS-AA, SBS-TA or APP-TA	-67.5

NEMO ETC, LLC

Certificate of Authorization #32455

©2019 NEMO ETC, LLC

7TH EDITION (2020) FBC NON-HVHZ EVALUATION

CertainTeed Flintlastic® Modified Bitumen Roof Systems; (610) 893-5400

Evaluation Report 3520.03.04-R24 for FL2533-R24

Revision 25: 07/20/2020

Appendix 1, Page 61 of 74



NEMO etc.

**TABLE 6A: GYPSUM DECKS – REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (Notes 1 & 12)	Base Insulation Layer			Top Insulation Layer			Roof Cover (Note 15)			MDP (psf)
		Type	Attach (Notes 6,7,8)	Type	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply		
G-10.	Existing sound gypsum or gypsum plank	Min. 1.5-inch ACFoam II, FlintBoard ISO, ENRGY 3 or H-Shield	M-OSFA	Min. 0.5-inch Structodek High Density Fiberboard	M-OSFA	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-127.5		
G-11.	Existing sound gypsum or gypsum plank	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, ACFoam II, ACFoam III, H-Shield or H-Shield CG	M-OSFA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA	BP-AA or SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-187.5		
G-12.	Existing sound gypsum or gypsum plank	Min. 1.5-inch ACFoam II, FlintBoard ISO, ENRGY 3 or H-Shield	M-OSFA	Min. 0.25-inch DensDeck	M-OSFA	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-232.5		
G-13.	Existing sound gypsum or gypsum plank	Min. 2-inch ACFoam II, FlintBoard ISO, ENRGY 3 or H-Shield	M-OSFA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA	BP-AA or SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-202.5		
G-14.	Existing sound gypsum or gypsum plank	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, ACFoam II, ACFoam III, H-Shield or H-Shield CG	M-PG1	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-PG1	BP-AA or SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-187.5		
G-15.	Existing sound gypsum or gypsum plank	Min. 1.5-inch ACFoam II, FlintBoard ISO, ENRGY 3 or H-Shield	OB500	Min. 0.5-inch Structodek High Density Fiberboard	OB500	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-120.0		
G-16.	Existing sound gypsum or gypsum plank	Min. 1.5-inch ACFoam II, FlintBoard ISO, ENRGY 3 or H-Shield	OB500	Min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-135.0		
G-17.	Existing sound gypsum or gypsum plank	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, ACFoam II, ACFoam III, H-Shield or H-Shield CG	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-187.5		
G-18.	Existing sound gypsum or gypsum plank	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, ACFoam II, ACFoam III, H-Shield or H-Shield CG	ICP BOARD-MAX	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	ICP BOARD-MAX	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-187.5		
G-19.	Existing sound gypsum or gypsum plank	Min. 1.0-inch ISO 95+ GL, H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	CR-20	Min. 0.25-inch DensDeck or DensDeck Prime	CR-20	SBS-TA	(Optional) SBS-TA	SBS-TA	-180.0		
G-20.	Existing sound gypsum or gypsum plank	Min. 1.0-inch ISO 95+ GL, H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	CR-20	Min. 0.5-inch Structodek High Density Fiberboard or DuraBoard (homogeneous) or min. 1.5-inch Fescoboard (laminated)	CR-20	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-180.0		
G-21.	Existing sound gypsum or gypsum plank	One or more layer(s), min. 1.5-inch thick FlintBoard ISO, FlintBoard H ISO, ACFoam II, ACFoam III, H-Shield or H-Shield CG	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-187.5		



NEMO | etc.

TABLE 6B: GYPSUM DECKS – REROOF (TEAR-OFF)

SYSTEM TYPE A-2: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Anchor Sheet			Base Insulation			Top Insulation				Roof Cover (Note 15)			MDP (psf)
		Type	Fasteners (Note 11)	Attach	Type	Attach	Type	Attach	Type	Attach	Base Ply	Ply	Cap Ply		
G-28.	Existing sound gypsum or gypsum plank	Glasbase; Flexiglas Base; Flintlastic Base 20; All Weather / Empire Base or Yosemite Venting Base	Trufast Twin Loc-Nail Assembled Fastener (Field W/D > 80 lbf)	6-inch o.c. at the 4-inch lap and 10-inch o.c. in two (2), equally spaced, staggered center rows	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENERGY 3 or Multi-Max FA3	HA	Min. 0.75-inch FescoBoard (homogeneous) or min. 0.5-inch Structodek High Density Fiberboard	HA	BP-AA or SBS-AA	(Optional) BP-AA or SBS-AA	SBS-AA, SBS-TA or APP-TA	-60.0			
G-29.	Existing sound gypsum or gypsum plank	Glasbase; Flexiglas Base; Flintlastic Base 20; All Weather / Empire Base; Yosemite Venting Base	Trufast Twin Loc-Nail Assembled Fastener (Field W/D > 69 lbf)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two (2), equally spaced, staggered center rows	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENERGY 3 or Multi-Max FA3	HA	Min. 0.75-inch FescoBoard (homogeneous) or min. 0.5-inch Structodek High Density Fiberboard	HA	BP-AA or SBS-AA	(Optional) BP-AA or SBS-AA	SBS-AA, SBS-TA or APP-TA	-60.0			

TABLE 6C: GYPSUM DECKS – REROOF (TEAR-OFF)

SYSTEM TYPE C: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Insulation Layer(s)	Top Insulation Layer			Roof Cover (Note 15)			MDP (psf)
			Type	Fasteners (Note 11)	Attach	Base Ply	Ply	Cap Ply	
G-30.	Existing sound gypsum or gypsum plank	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch Structodek High Density Fiberboard Roof Insulation	OMG Polymer GypTec with 3" GypTec Plate (Field W/D > 180 lbf)	1 per 2.0 ft ²	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
G-31.	Existing sound gypsum or gypsum plank	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch DensDeck or DensDeck Prime	OMG Polymer GypTec with 3" GypTec Plate (Field W/D > 160 lbf)	1 per 1.8 ft ²	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
G-32.	Existing sound gypsum or gypsum plank	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch Structodek High Density Fiberboard Roof Insulation	Trufast Twin Loc-Nail Assembled Fasteners (Field W/D > 180 lbf)	1 per 2.0 ft ²	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*
G-33.	Existing sound gypsum or gypsum plank	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch DensDeck or DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Trufast Twin Loc-Nail Assembled Fasteners (Field W/D > 180 lbf)	1 per 2.0 ft ²	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-45.0*



NEMO | etc.

System No.	Substrate (Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
SELF-ADHERING SYSTEMS:									
R-1	Existing fully bonded BUR or modified bitumen roof cover	Min. 0.25-inch DensDeck primed with FlintPrime or FlintPrime SA; or SECUROCK Gypsum-Fiber Roof Board.	HA	None	N/A	SBS-SA	(Optional) SBS-SA	SBS-SA	-105.0
R-2	Existing fully bonded BUR or modified bitumen roof cover	Min. 1.5-inch ACFoam II, FlintBoard ISO, ENRGY 3, H-Shield or Multi-Max FA3	HA	Min. 0.25-inch DensDeck primed with FlintPrime or FlintPrime SA; or SECUROCK Gypsum-Fiber Roof Board.	HA	SBS-SA	(Optional) SBS-SA	SBS-SA	-105.0
R-3	Existing fully bonded, smooth surface BUR or modified bitumen	Min. 0.25-inch DensDeck primed with FlintPrime or FlintPrime SA or SECUROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.	None	N/A	SBS-SA	(Optional) SBS-SA	SBS-SA	-105.0
R-4	Existing fully bonded, mineral surface modified bitumen	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.	None	N/A	SBS-SA	(Optional) SBS-SA	SBS-SA	-172.5
R-5	Existing fully bonded, mineral surface modified bitumen	Min. 0.25-inch DensDeck primed with FlintPrime or FlintPrime SA	A-PD, 6-inch o.c.	None	N/A	SBS-SA	(Optional) SBS-SA	SBS-SA	-180.0
R-6	Existing fully bonded, smooth surface BUR or modified bitumen	Min. 1.5-inch ACFoam II, FlintBoard, ENRGY 3 or Multi-Max FA3	A-PD, 6-inch o.c.	Min. 0.25-inch DensDeck primed with FlintPrime SA or SECUROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.	SBS-SA	(Optional) SBS-SA	SBS-SA	-52.5
R-7	Existing fully bonded, mineral surface BUR or modified bitumen	Min. 1.5-inch ACFoam II, FlintBoard, ENRGY 3 or Multi-Max FA3	A-PD, 6-inch o.c.	Min. 0.25-inch DensDeck primed with FlintPrime SA or SECUROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.	SBS-SA	(Optional) SBS-SA	SBS-SA	-172.5
R-8	Existing fully bonded BUR or modified bitumen roof cover	Min. 1.5-inch ACFoam II, FlintBoard, ENRGY 3 or H-Shield	M-OSFA	Min. 0.25-inch DensDeck primed with FlintPrime SA or SECUROCK Gypsum-Fiber Roof Board	M-OSFA	SBS-SA	(Optional) SBS-SA	SBS-SA	-157.5
R-9	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-PG1	None	N/A	SBS-SA	(Optional) SBS-SA	SBS-SA	-172.5
R-10	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 0.25-inch DensDeck primed with FlintPrime or FlintPrime SA	M-PG1	None	N/A	SBS-SA	(Optional) SBS-SA	SBS-SA	-180.0
R-11	Existing fully bonded BUR or modified bitumen roof cover	Min. 1.5-inch ACFoam II, FlintBoard, ENRGY 3 or H-Shield	M-PG1	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-PG1	SBS-SA	(Optional) SBS-SA	SBS-SA	-172.5



NEMO | etc.

TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
R-22	Existing fully bonded BUR or modified bitumen roof cover	Min. 1.0-inch ISO 95+ GL, H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch AC Foam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	CR-20	Min. 0.25-inch DensDeck primed with FlintPrime or FlintPrime SA	CR-20	SBS-SA	(Optional) SBS-SA	SBS-SA	-192.5
HYBRID SYSTEMS:									
R-23	Existing fully bonded BUR or modified bitumen roof cover	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	HA	None	N/A	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-105.0
R-24	Existing fully bonded, smooth surface BUR or modified bitumen	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.	None	N/A	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-105.0
R-25	Existing fully bonded, mineral surface modified bitumen	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.	None	N/A	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-180.0
R-26	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-PG1	None	N/A	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-180.0
R-27	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	None	N/A	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-120.0
R-28	Existing fully bonded, smooth- or granule-surface BUR or granule-surface modified bitumen	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	ICP BOARD-MAX	None	N/A	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-195.0
R-29	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	None	N/A	SBS-SA-H	(Optional) SBS-AA, SBS-TA, APP-TA	SBS-AA, SBS-TA, APP-TA	-195.0
CONVENTIONAL SYSTEMS:									
R-30	Existing fully bonded BUR or modified bitumen roof cover	0.5-inch Structodek High Density Fiberboard or min. 0.75-inch Fesco Board (homogeneous)	HA	None	N/A	BP-AA, SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-105.0
R-31	Existing fully bonded BUR or modified bitumen roof cover	0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	HA	None	N/A	BP-AA, SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-105.0
R-32	Existing fully bonded BUR or modified bitumen roof cover	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY 3, H-Shield or Multi-Max FA3	HA	Min. 0.5-inch Structodek High Density Fiberboard, Min. 0.75-inch Fesco Board (homogeneous) or Min. 0.5-inch DuraBoard (homogeneous)	HA	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-105.0



NEMO | etc.

TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
R-44	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 0.5-inch Structodek High Density Fiberboard	M-PG1	None	N/A	BP-AA, SBS- AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-180.0
R-45	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-PG1	None	N/A	BP-AA, SBS- AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-180.0
R-46	Existing fully bonded BUR or modified bitumen roof cover	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY 3 or H-Shield	M-PG1	Min. 0.5-inch Structodek High Density Fiberboard	M-PG1	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-180.0
R-47	Existing fully bonded BUR or modified bitumen roof cover	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY 3 or H-Shield	M-PG1	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board or DensDeck	M-PG1	BP-AA or SBS-AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-180.0
R-48	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 0.5-inch Structodek High Density Fiberboard	OB500	None	N/A	BP-AA, SBS- AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-120.0
R-49	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	None	N/A	BP-AA, SBS- AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-120.0
R-50	Existing fully bonded BUR or modified bitumen roof cover	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY 3 or H-Shield	OB500	Min. 0.5-inch Structodek High Density Fiberboard	OB500	BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-120.0
R-51	Existing fully bonded BUR or modified bitumen roof cover	Min. 1.5-inch AC Foam II, FlintBoard ISO, ENRGY 3 or H-Shield	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board, DensDeck or DensDeck Prime	OB500	BP-AA, SBS- AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-120.0
R-52	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 0.5-inch Structodek High Density Fiberboard	CR-20	None	N/A	BP-AA, SBS- AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-195.0
R-53	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	ICP BOARD-MAX	None	N/A	BP-AA, SBS- AA, SBS-TA or APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-195.0
R-54	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 1.0-inch ISO 95+ GL, H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch AC Foam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	ICP BOARD-MAX	Min. 0.25-inch DensDeck or DensDeck Prime	ICP BOARD-MAX	SBS-TA	(Optional) SBS-TA	SBS-TA	-180.0



NEMO etc.

TABLE 7A: RECOVER APPLICATIONS SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER										
System No.	Substrate (Notes 1 & 12)	Base Insulation Layer			Top Insulation Layer			Roof Cover (Note 15)		
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply
R-64	Existing fully bonded BUR or modified bitumen roof cover	Min. 1.0-inch ISO 95+ GL, H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	CR-20	Min. 0.25-inch DensDeck	CR-20		BP-AA or SBS-AA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA	-240.0
COLD-APPLIED SYSTEMS:										
R-65	Existing fully bonded BUR or modified bitumen roof cover	(Optional) Min. 0.5-inch ACFoam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	OB500	Min. 1.5-inch ACFoam III, FlintBoard Iso Cold, H-Shield CG or FlintBoard Iso Cold _H	OB500		SBS-CA1	None	SBS-CA1	-82.5
R-66	Existing fully bonded BUR or modified bitumen roof cover	(Optional) Min. 0.5-inch ACFoam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	CR-20	Min. 1.5-inch ACFoam III, FlintBoard Iso Cold, H-Shield CG or FlintBoard Iso Cold _H	CR-20		SBS-CA1	None	SBS-CA1	-82.5
R-67	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.	None	N/A		SBS-CA1	None	SBS-CA1	-105.0
R-68	Existing fully bonded, smooth surface BUR or modified bitumen	Min. 0.5-inch ACFoam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	A-PD, 6-inch o.c.	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.		SBS-CA1	None	SBS-CA1	-52.5
R-69	Existing fully bonded, mineral surface BUR or modified bitumen	Min. 0.5-inch ACFoam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	A-PD, 6-inch o.c.	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	A-PD, 6-inch o.c.		SBS-CA1	None	SBS-CA1	-105.0
R-70	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-PG1	None	N/A		SBS-CA1	None	SBS-CA1	-105.0
R-71	Existing fully bonded, mineral surface BUR or modified bitumen	Min. 0.5-inch ACFoam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	M-OSFA, M-PG1	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M-PG1		SBS-CA1	None	SBS-CA1	-105.0
R-72	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	None	N/A		SBS-CA1	None	SBS-CA1	-105.0
R-73	Existing fully bonded, mineral surface BUR or modified bitumen	Min. 0.5-inch ACFoam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500		SBS-CA1	None	SBS-CA1	-105.0
R-74	Existing fully bonded, smooth- or granule-surface BUR or modified bitumen	(Optional) Min. 0.5-inch ACFoam II, FlintBoard ISO, H-Shield, FlintBoard ISO _H	ICP BOARD-MAX	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	ICP BOARD-MAX		SBS-CA1	None	SBS-CA1	-105.0



[BCIS Home](#) | [Log In](#) | [User Registration](#) | [Hot Topics](#) | [Submit Surcharge](#) | [Stats & Facts](#) | [Publications](#) | [Contact Us](#) | [BCIS Site Map](#) | [Links](#) | [Search](#)



Product Approval
USER: Public User

[Product Approval Menu](#) > [Product or Application Search](#) > [Application List](#) > **Application Detail**



FL #	FL15216-R8												
Application Type	Revision												
Code Version	2020												
Application Status	Approved												
Comments													
Archived	<input type="checkbox"/>												
Product Manufacturer	Owens Corning Roofing and Asphalt, LLC												
Address/Phone/Email	One Owens Corning Parkway Toledo, OH 43645 (740) 321-6345 Greg.Keeler@owenscorning.com												
Authorized Signature	Keeler Greg Greg.Keeler@owenscorning.com												
Technical Representative	Greg Keeler												
Address/Phone/Email	2790 Columbus Road Granville, OH 43023 (740) 321-6345 greg.keeler@owenscorning.com												
Quality Assurance Representative													
Address/Phone/Email													
Category	Roofing												
Subcategory	Underlayments												
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer <input type="checkbox"/> Evaluation Report - Hardcopy Received												
Florida Engineer or Architect Name who developed the Evaluation Report	Robert Nieminen												
Florida License	PE-59166												
Quality Assurance Entity	Intertek Testing Services NA, Inc. - QA Entity												
Quality Assurance Contract Expiration Date	12/31/2023												
Validated By	John W. Knezevich, PE <input checked="" type="checkbox"/> Validation Checklist - Hardcopy Received												
Certificate of Independence	FL15216 R8 COI 2020 01 COI NIEMINEN.pdf												
Referenced Standard and Year (of Standard)	<table border="0"> <thead> <tr> <th>Standard</th> <th>Year</th> </tr> </thead> <tbody> <tr> <td>ASTM D226 (physicals)</td> <td>2009</td> </tr> <tr> <td>ASTM D4533 (tear strength)</td> <td>2015</td> </tr> <tr> <td>ASTM D4798 (weathering)</td> <td>2011</td> </tr> <tr> <td>ASTM D4869 (liquid transmission)</td> <td>2016</td> </tr> <tr> <td>ASTM D5035 (tensile strength)</td> <td>2011</td> </tr> </tbody> </table>	Standard	Year	ASTM D226 (physicals)	2009	ASTM D4533 (tear strength)	2015	ASTM D4798 (weathering)	2011	ASTM D4869 (liquid transmission)	2016	ASTM D5035 (tensile strength)	2011
Standard	Year												
ASTM D226 (physicals)	2009												
ASTM D4533 (tear strength)	2015												
ASTM D4798 (weathering)	2011												
ASTM D4869 (liquid transmission)	2016												
ASTM D5035 (tensile strength)	2011												
Equivalence of Product Standards Certified By													
Sections from the Code													



NEMO|etc.

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

ENGINEER

EVALUATE

TEST

CONSULT

EVALUATION REPORT

Owens Corning Roofing and Asphalt, LLC
One Owens Corning Parkway
Toledo, OH 43659
(740) 321-6345

Evaluation Report I40510.02.12-R9

FL15216-R8

Date of Issuance: 02/17/2012

Revision 9: 12/15/2020

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 products described herein have been evaluated for compliance with the **7th Edition (2020) Florida Building Code** sections noted herein.

DESCRIPTION: RhinoRoof U20, ABC Pro Guard 20 and SRS TopShield TS20 Roof Underlayments

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein and FBC 1507.1.1.

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



The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 12/15/2020. This does not serve as an electronically signed document.

CERTIFICATION OF INDEPENDENCE:

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.

ROOFING COMPONENT EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Underlayment

Compliance Statement: RhinoRoof U20, ABC Pro Guard 20 and SRS TopShield TS20 Roof Underlayments, as produced by Owens Corning Roofing and Asphalt, LLC, have demonstrated compliance with the following sections of the 7th Edition (2020) Florida Building Code through testing in accordance with applicable sections of the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

Section	Properties	Standard	Year
1507.1.1.1(2&3, Exception), 1507.1.1.1(5) / R905.1.1.1(2&3, Exception), R905.1.1.1(5)	Tear strength	ASTM D4533	2015
1507.1.1.1(2&3, Exception), 1507.1.1.1(5) / R905.1.1.1(2&3, Exception), R905.1.1.1(5)	Tensile strength	ASTM D5035	2011
1507.1.1.1(5) / R905.1.1.1(5)	Liquid water transmission	ASTM D4869	2016
1518.4, RAS 115	Unrolling, Breaking Strength, Pliability	ASTM D226	2009
TAS 110	Accelerated Weathering	ASTM D4798	2011

3. REFERENCES:

Entity	Examination	Reference	Date
ITS (TST1509)	ASTM D226	100539395COQ-006	10/26/2011
ITS (TST1509)	ASTM D4869	100539395COQ-002	10/26/2011
PRI (TST5878)	ASTM D226 / D4798 / D4869	OCF-394-02-07.4	01/06/2020
PRI (TST5878)	ASTM D226 / D4798	OCF-464-02-02.2	01/06/2020
PRI (TST5878)	ASTM D4533 / D5035 / D4798	1378T0109	10/15/2020
PRI (TST5878)	ASTM D4533 / D5035	1378T0127	10/15/2020
ITS (QUA1673)	Quality Control	Service Confirmation	12/09/2020
ITS (QUA1673)	Quality Control	Florida BCIS	Current

4. PRODUCT DESCRIPTION:

	Product	Specification	Plant(s)	Description
4.1	RhinoRoof U20	1507.1.1.1(2&3, Exception), 1507.1.1.1(5) / R905.1.1.1(2&3, Exception), R905.1.1.1(5)	Qingdao, China	Multilayered polymer woven coated synthetic roof underlayment
4.2	ABC Pro Guard 20	1507.1.1.1(2&3, Exception), 1507.1.1.1(5) / R905.1.1.1(2&3, Exception), R905.1.1.1(5)	Silvassa, India	Multilayered polymer woven coated synthetic roof underlayment
4.3	SRS TopShield TS20	1507.1.1.1(2&3, Exception), 1507.1.1.1(5) / R905.1.1.1(2&3, Exception), R905.1.1.1(5)	Silvassa, India	Multilayered polymer woven coated synthetic roof underlayment

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 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.
- 5.3 This Evaluation Report does not include evaluation of fire classification. Refer to **FBC 1505** or **FBC HVHZ 1516** for requirements and limitations regarding roof assembly fire classification. Refer to **FBC 2603** for requirements and limitations concerning the use of foam plastic insulation.
- 5.4 **RhinoRoof U20, ABC Pro Guard 20 and SRS TopShield TS20 Roof Underlayments** may be used with any prepared roof cover where the product is specifically referenced within FBC approval documents. If not listed, a request may be made to the Authority Having Jurisdiction for approval based on this evaluation combined with supporting data for the prepared roof covering.
- 5.5 Allowable roof covers:

TABLE 1: ROOF COVER OPTIONS					
FBC NON-HVHZ:	1507.2	1507.3	1507.4 & 1507.5	1507.7	1507.8 & 1507.9
FBC HVHZ:	TAS 110(S10), RAS 115	TAS 110(S11), RAS 118, 119 & 120	RAS 133	TAS 110(S11)	RAS 130
Underlayment	Asphalt Shingles	Clay and Concrete Tile	Metal	Slate or Slate-Type Shingles	Wood
RhinoRoof U20	Yes	No	Yes	No	NON-HVHZ: No HVHZ: Yes
ABC Pro Guard 20	Yes	No	Yes	No	NON-HVHZ: No HVHZ: Yes
SRS TopShield TS20	Yes	No	Yes	No	NON-HVHZ: No HVHZ: Yes

5.6 Exposure Limitations:

TABLE 2: EXPOSURE LIMITATIONS	
Underlayment	Maximum Exposure (days)
RhinoRoof U20	60
ABC Pro Guard 20	30
SRS TopShield TS20	30

6. INSTALLATION:

- 6.1 **RhinoRoof U20, ABC Pro Guard 20 and SRS TopShield TS20 Roof Underlayments** shall be installed in accordance with the manufacturer’s published installation instructions subject to the Limitations set forth in Section 5 herein and the specifics noted below.
- 6.2 Re-fasten any loose decking panels, and check for protruding nail heads. Sweep the substrate thoroughly to remove any dust and debris prior to application.

6.3 RhinoRoof U20, ABC Pro Guard 20 and SRS TopShield TS20 Roof Underlayments:

6.3.1 NON-HVHZ Jurisdictions:

6.3.1.1 Shall be installed in compliance with requirements for a synthetic underlayment in **FBC 1507.1.1.1(2, Exception), 1507.1.1.1(3, Exception) or 1507.1.1.1(5)** or **FBC Residential R905.1.1.1(2, Exception), R905.1.1.1(3, Exception) or R905.1.1.1(5)** for the type of prepared roof covering to be installed, and the manufacturer’s installation instructions. FBC requirements take precedence over the manufacturer’s installation instructions.

6.3.1.2 **Fasteners:**
 Minimum fasteners shall be corrosion resistant, ring-shank cap nails shall be as set forth in **FBC 1507.1.1.1 or 1507.1.1.3 or FBC Residential R905.1.1.1 or R905.1.1.3.**

6.3.2 HVHZ Jurisdictions:

6.3.2.1 Shall be installed in a shingle fashion with minimum 4-inch wide side (horizontal) laps and minimum 6-inch wide end laps, and fastened in accordance with FBC HVHZ 1518.2.

7. BUILDING PERMIT REQUIREMENTS:

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

8. MANUFACTURING PLANTS:

Contact the named QA entity for manufacturing facilities covered by **F.A.C. Rule 61G20-3** QA requirements. Refer to Section 4 herein for products and production locations having met codified material standards.

9. QUALITY ASSURANCE ENTITY:

Intertek Testing Services NA Inc. – QUA1673; (312) 906-7779; maura.norlander@intertek.com

- END OF EVALUATION REPORT -



**STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**

CONSTRUCTION INDUSTRY LICENSING BOARD
2601 BLAIR STONE ROAD
TALLAHASSEE FL 32399-0783

(850) 487-1395

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto www.myfloridalicense.com. There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!



STATE OF FLORIDA DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

CCC1332008 ISSUED: 07/21/2020
 CERTIFIED ROOFING CONTRACTOR
 VARELA, LILIAN CATHERINE
 BUILDERS 360 INC

Signature
 LICENSED UNDER CHAPTER 489, FLORIDA STATUTES
 EXPIRATION DATE: AUGUST 31, 2022

Ron DeSantis, Governor

Halsey Beshears, Secretary

**STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CONSTRUCTION INDUSTRY LICENSING BOARD**

LICENSE NUMBER: CCC1332008

EXPIRATION DATE: AUGUST 31, 2022

THE ROOFING CONTRACTOR HEREIN IS CERTIFIED UNDER THE PROVISIONS OF CHAPTER 489, FLORIDA STATUTES

VARELA, LILIAN CATHERINE
BUILDERS 360 INC
12811 SUGARWOOD LN
CLERMONT FL 34715



ISSUED: 07/21/2020

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.



David W. Jordan ★ Lake County Tax Collector

I am pleased to share the unanimous decision of the Lake County Board of County Commissioners to repeal the Lake County Business Tax Receipt requirement. Effective May 19, 2020, the Board passed an ordinance which eliminates the need for businesses to acquire and renew a Business Tax Receipt. As a result, you are no longer required to renew your Lake County Business Tax Receipt.

However, if your business operates within a municipality and you are currently required to have a Business Tax Receipt, please follow the requirements established by the respective municipality's ordinance.

The Tax Collector's Office has been responsible for the collection of this tax. I commend the Board's decision to eliminate this tax burden on our local businesses. This change not only affords a savings to our business community, but it also demonstrates the Board's pro-business position.

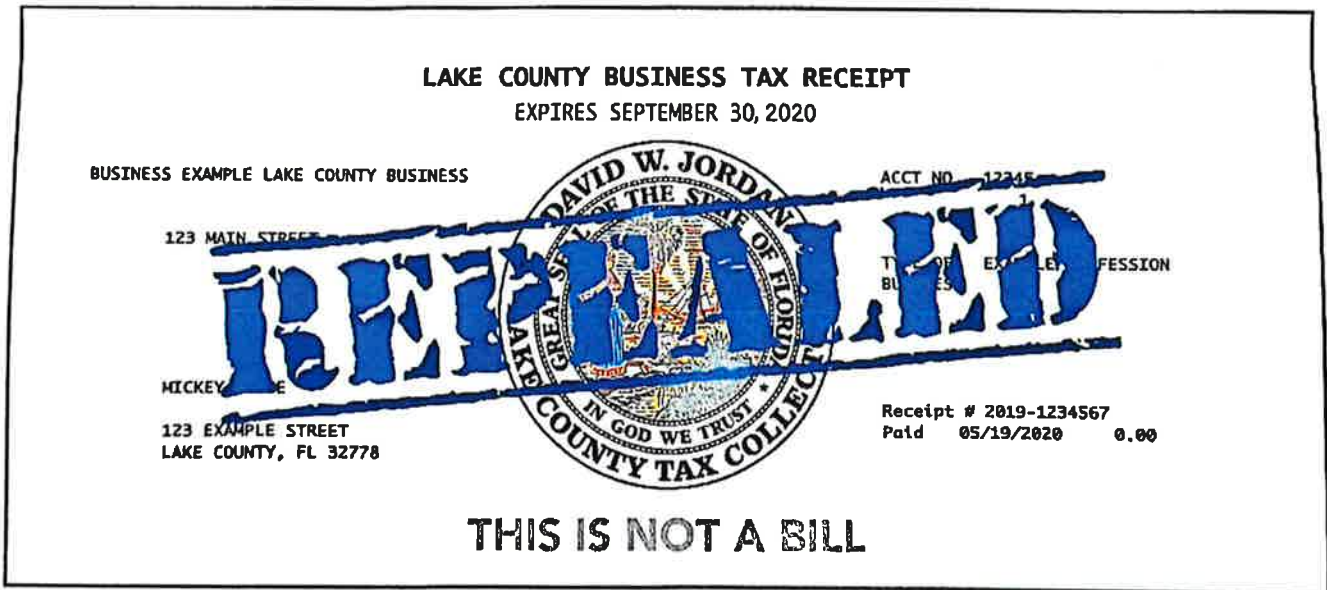
Thank you!

- Commissioner Leslie Campione**, District 4 – Chair
- Commissioner Wendy Breeden**, District 3 – Vice Chair
- Commissioner Tim Sullivan**, District 1
- Commissioner Sean Parks**, District 2
- Commissioner Josh Blake**, District 5

In service,

David W. Jordan

David W. Jordan
Lake County Tax Collector





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

04/07/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Custom Contractors Insurance, LLC PO Box 3430 Sedona AZ 86340		CONTACT NAME: Sean O'Keefe PHONE (A/C, No, Ext): (888) 652-4513 E-MAIL ADDRESS: info@customcontractorsinsurance.com		FAX (A/C, No): (888) 274-7438	
INSURED Builders 360 Inc 12811 Sugarwood Lane Clermont FL 34715		INSURER(S) AFFORDING COVERAGE INSURER A: PREFERRED CONTRACTORS INSURANCE CO. INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:		NAIC # 12497	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:		PC354861	05/17/2020	05/17/2021	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 50,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 1,000,000
	<input type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY					COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$					EACH OCCURRENCE \$ AGGREGATE \$
	<input type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	<input type="checkbox"/> Y <input type="checkbox"/> N	N/A			PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Lilian C. Varela
Roofing License CCC1332008
COVERAGE APPLIES IN FLORIDA

CERTIFICATE HOLDER City of Belle Isle, 1600 Nela Avenue, Belle Isle, FL 32809	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
---------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

CERTIFICATE OF LIABILITY INSURANCE

Date
4/7/2021

Producer: Plymouth Insurance Agency
2739 U.S. Highway 19 N.
Holiday, FL 34691
(727) 938-5562

This Certificate is issued as a matter of information only and confers no rights upon the Certificate Holder. This Certificate does not amend, extend or alter the coverage afforded by the policies below.

Insured: South East Personnel Leasing, Inc. & Subsidiaries
2739 U.S. Highway 19 N.
Holiday, FL 34691

Insurers Affording Coverage		NAIC #
Insurer A:	Lion Insurance Company	11075
Insurer B:		
Insurer C:		
Insurer D:		
Insurer E:		

Coverages

The policies of insurance listed below have been issued to the insured named above for the policy period indicated. Notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions, and conditions of such policies. Aggregate limits shown may have been reduced by paid claims.

INSR LTR	ADDL INSRD	Type of Insurance	Policy Number	Policy Effective Date (MM/DD/YY)	Policy Expiration Date (MM/DD/YY)	Limits	
		GENERAL LIABILITY <input type="checkbox"/> Commercial General Liability <input type="checkbox"/> Claims Made <input type="checkbox"/> Occur <hr/> General aggregate limit applies per: <input type="checkbox"/> Policy <input type="checkbox"/> Project <input type="checkbox"/> LOC				Each Occurrence	\$
						Damage to rented premises (EA occurrence)	\$
						Med Exp	\$
						Personal Adv Injury	\$
						General Aggregate	\$
						Products - Comp/Op Agg	\$
		AUTOMOBILE LIABILITY <input type="checkbox"/> Any Auto <input type="checkbox"/> All Owned Autos <input type="checkbox"/> Scheduled Autos <input type="checkbox"/> Hired Autos <input type="checkbox"/> Non-Owned Autos				Combined Single Limit (EA Accident)	\$
						Bodily Injury (Per Person)	\$
						Bodily Injury (Per Accident)	\$
						Property Damage (Per Accident)	\$
		EXCESS/UMBRELLA LIABILITY <input type="checkbox"/> Occur <input type="checkbox"/> Claims Made <input type="checkbox"/> Deductible				Each Occurrence	
						Aggregate	
A		Workers Compensation and Employers' Liability Any proprietor/partner/executive officer/member excluded? NO If Yes, describe under special provisions below.	WC 71949	01/01/2021	01/01/2022	<input checked="" type="checkbox"/> WC Statutory Limits	<input type="checkbox"/> OTH-ER
						E.L. Each Accident	\$1,000,000
						E.L. Disease - Ea Employee	\$1,000,000
						E.L. Disease - Policy Limits	\$1,000,000

Other **Lion Insurance Company is A.M. Best Company rated A (Excellent). AMB # 12616**

Descriptions of Operations/Locations/Vehicles/Exclusions added by Endorsement/Special Provisions: Client ID: 90-68-610
 Coverage only applies to active employee(s) of South East Personnel Leasing, Inc. & Subsidiaries that are leased to the following "Client Company":
Builders 360 Inc
 Coverage only applies to injuries incurred by South East Personnel Leasing, Inc. & Subsidiaries active employee(s), while working in: FL.
 Coverage does not apply to statutory employee(s) or independent contractor(s) of the Client Company or any other entity.
 A list of the active employee(s) leased to the Client Company can be obtained by faxing a request to (727) 937-2138 or email certificates@lioninsurancecompany.com
Project Name:
 ISSUE 04-07-21 (SS)

Begin Date: 3/16/2020

CERTIFICATE HOLDER
CITY OF BELLE ISLE

1600 NELA AVENUE
BELLE ISLE, FL 32809

CANCELLATION
Should any of the above described policies be cancelled before the expiration date thereof, the issuing insurer will endeavor to mail 30 days written notice to the certificate holder named to the left, but failure to do so shall impose no obligation or liability of any kind upon the insurer, its agents or representatives.

[Signature]