



Roofing Issues: Decks to Dockets  
September 7-9, 2017 – Colorado Springs, CO

**Contractors Beware: Technical Issues**  
**Posing Liability Risks**

presented by

**Mark S. Graham**  
Vice President, Technical Services  
National Roofing Contractors Association (NRCA)

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**FM Global (FM) and**  
**Underwriters Laboratories, Inc. (UL)**

*Is compliance is FM and UL “required”?*



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## FM Global (FM)

- FM Global:
  - Insurance company
  - Insures about 1/3 of Fortune 1000 companies
  - Specializes in highly-protected risk (HPR)
  - Engineering-based approach to risk management
- FM Approvals:
  - Subsidiary of FM Global
  - Code-approved testing agency
  - Accredited certification agency



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## Underwriters Laboratories, Inc. (UL)

- Private, for-profit entity
- Code-approved testing agency
- Accredited certification agency
- Consulting services



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## **International Building Code, 2015 Edition**

### SECTION 1505 FIRE CLASSIFICATION

[BF] 1505.1 **General.** Roof assemblies shall be divided into the classes defined below. Class A, B and C roof assemblies and roof coverings required to be listed by this section shall be tested in accordance with ASTM E 108 or UL 790. In addition, fire-retardant-treated wood roof coverings shall be tested in accordance with ASTM D 2898. The minimum roof coverings installed on buildings shall comply with Table 1505.1 based on the type of construction of the building.

**Exception:** Skylights and sloped glazing that comply with Chapter 24 or Section 2610.

TABLE 1505.1<sup>a, b</sup>  
MINIMUM ROOF COVERING CLASSIFICATION  
FOR TYPES OF CONSTRUCTION

IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
B	B	B	C <sup>c</sup>	B	C <sup>c</sup>	B	B	C <sup>c</sup>

Footnotes to the table have been omitted here for clarity



[BF] 1505.2 **Class A roof assemblies.** Class A roof assemblies are those that are effective against severe fire test exposure. Class A roof assemblies and roof coverings shall be listed and identified as Class A by an approved testing agency. Class A roof assemblies shall be permitted for use in buildings or structures of all types of construction.

**Exceptions:**

1. Class A roof assemblies include those with coverings of brick, masonry or an exposed concrete roof deck.
2. Class A roof assemblies also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile or slate installed on non-combustible decks or ferrous, copper or metal sheets installed without a roof deck on noncombustible framing.
3. Class A roof assemblies include minimum 16 ounce per square foot (0.0416 kg/m<sup>2</sup>) copper sheets installed over combustible decks.
4. Class A roof assemblies include slate installed over ASTM D 226, Type II underlayment over combustible decks.



**1504.3.1 Other roof systems.** Built-up, modified bitumen, fully adhered or mechanically attached single-ply roof systems, metal panel roof systems applied to a solid or closely fitted deck and other types of membrane roof coverings shall be tested in accordance with FM 4474, UL 580 or UL 1897.

**1504.3.2 Structural metal panel roof systems.** Where the metal roof panel functions as the roof deck and roof covering and it provides both weather protection and support for loads, the structural metal panel roof system shall comply with this section. Structural standing-seam metal panel roof systems shall be tested in accordance with ASTM E 1592 or FM 4474. Structural through-fastened metal panel roof systems shall be tested in accordance with FM 4474, UL 580 or ASTM E 1592.

**Exceptions:**

1. Metal roofs constructed of cold-formed steel shall be permitted to be designed and tested in accordance with the applicable referenced structural design standard in Section 2210.1.
2. Metal roofs constructed of aluminum shall be permitted to be designed and tested in accordance with the applicable referenced structural design standard in Section 2002.1.



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## Code requirements

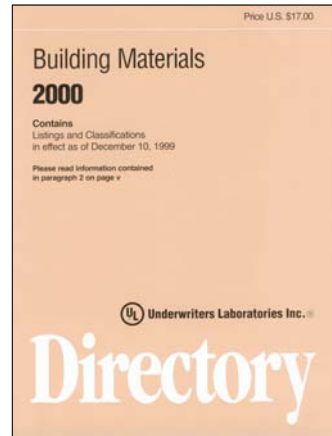
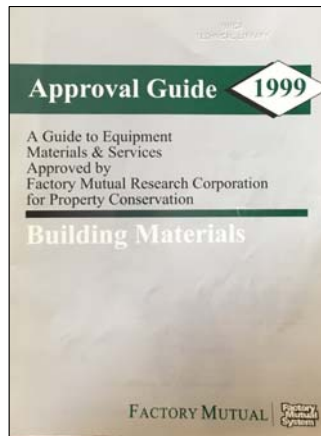
- Fire resistance (Class A, B or C): Assembly testing, certification and labeling is required
- Wind uplift resistance: Assembly testing only is required.
  - Some form of documentation of that testing will be necessary. (e.g., lab. report)



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## Documentation sources

Previously

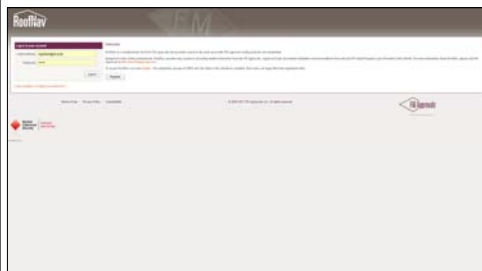


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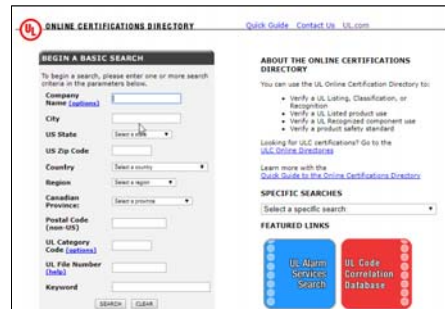


## Documentation sources

Current generation



[www.roofnav.com](http://www.roofnav.com)



[www.ul.com](http://www.ul.com) and select "Online Certifications Directory" on the bottom of the page



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## UL Online Certifications Directory

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To begin a search, enter search criteria in the parameters below. Use the Online Certification Directory to:

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**Search results**

You may choose to [Refine Your Search](#).

Company Name	Category Name	Link to File
Construction No. 575	Roof Deck Constructions	<a href="#">TGKX.575</a>
NATIONAL ROOFING CONTRACTORS ASSOCIATION	Metal Roof Deck Panels	<a href="#">TJPV.R20610</a>
NATIONAL ROOFING CONTRACTORS ASSOCIATION	Roof Deck Fasteners	<a href="#">TLSX.R20686</a>
NATIONAL ROOFING CONTRACTORS ASSOCIATION	Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems	<a href="#">TGJZ.R27046</a>
NATIONAL ROOFING CONTRACTORS ASSOCIATION	Roofing Systems	<a href="#">TGFU.R20610</a>
NATIONAL ROOFING CONTRACTORS ASSOCIATION	Roofing Systems, Uplift Resistance	<a href="#">TGJK.R20610</a>

Model number information is not published for all product categories. If you require information about a specific model number, please contact [Customer Service](#) for further assistance.

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**TGJZ.R27046**  
**Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems**

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**Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems**

[See General Information for Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems](#)

**NATIONAL ROOFING CONTRACTORS ASSOCIATION**

R27046

SUITE 600  
 10255 W HIGGINS RD  
 ROSEMONT, IL 60018 USA

**The NRCA ROOFING MANUAL includes Construction (Installation) Details for each of the Edge Flashing (or Fascia) or Coping**

**Product Classifications described below.**

**SPRI Test Method RE-2 - See manufacturer's installation instructions.**

- 1. - Raised Perimeter Edge (Fascia Cap) Flashing**, 8-in wide, 24 ga.G-90 galvanized steel or 24 ga. Type 302 or Type 304 stainless steel fascia cover, 22 ga. G-90 galvanized steel or 22 ga. Type 302 or Type 304 stainless steel continuous front face cleat.  
 Rated 170 psf
- 2. - Raised Perimeter Edge (Fascia Cap) Flashing**, 8-in wide, 0.040-in 3105 or 3003 aluminum fascia cover, 0.040-in 3105 or 3003 aluminum continuous front face cleat.  
 Rated 140 psf
- 3. - Raised Perimeter Edge (Fascia Cap) Flashing**, 8-in wide, 0.040-in 3105 or 3003 aluminum fascia cover, 0.050-in 3105 or 3003 aluminum continuous front face cleat.  
 Rated 230 psf
- 4. - Raised Perimeter Edge (Fascia Cap) Flashing With Flat Drip**, 8-in wide, 24 ga.G-90 galvanized steel or 24 ga. Type 302 or Type 304 stainless steel fascia cover, 22 ga. G-90 galvanized steel or 22 ga. Type 302 or Type 304 stainless steel continuous front face cleat.  
 Rated 250 psf

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**TGJZ.GuideInfo**  
**Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems**

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[View Listings](#)

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**Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems**

[Guide Information for Roofing Materials and Systems](#)

**GENERAL**

This category covers metal roof-edge systems, which may include edge flashings and copings or other horizontal roof-edge terminations as shown in the individual certifications.

These products are investigated for wind resistance associated with high-velocity winds. The investigation includes 1) an evaluation of the structural integrity of the substrate that secures the edge, such as nailers, 2) the wind resistance of the edge detail, and 3) the material being used.

These products are intended to be used where the design load rating of the edge system complies with the required design wind load for the building as derived from either building codes and/or design standards, such as ASCE 7, "Minimum Design Loads for Buildings and Other Structures." The magnitude of the wind velocity across a roof deck and the resulting uplift pressures on a roof deck are dependent upon many factors, such as wind gusts, the shape of the roof deck, edge configuration, and the landscape surrounding the roof-deck installation. A method to calculate the uplift pressures on roof decks is contained in ASCE 7 (2002).

These products are intended to be installed in accordance with the manufacturer's installation instructions. Authorities Having Jurisdiction should be consulted before installation.

**RELATED PRODUCTS**

For uplift resistance of metal roof-deck constructions that also includes attachment to supports, see Roof-deck Constructions ([TRKX](#)). Unless otherwise noted, plywood deck assemblies are intended to consist of minimum B-C-rated sheathing.

For uplift resistance of metal roof-deck panels used in roof-deck constructions, see Metal Roof-deck Panels ([TRPV](#)). See also Roof-covering Materials ([TRVT](#)).

**ADDITIONAL INFORMATION**

For additional information, see Roofing Materials and Systems ([LARM](#)).

**REQUIREMENTS**

The basic standard used to investigate products in this category is ANSI/SPRI ES-1, "Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems."

Within ANSI/SPRI ES-1, roof-edge products are investigated to the following specific test methods:

1. SPRI Test Method RE-1 - Test for Roof Edge Termination of Ballasted or Mechanically Attached Systems,
2. SPRI Test Method RE-2 - Pull-Off Test for Edge Flashings, or
3. SPRI Test Method RE-3 - Pull-Off Test for Copings

**UL MARK**

The Certification Mark of UL on the product or on the smallest unit container in which the product is packaged is the only method provided by UL to identify products manufactured under its Certification and Follow-Up Service. The [Certification Mark](#) for these products includes the UL symbol, the words "CERTIFIED" and "SAFETY," the geographic identifier(s), and a file number.

NRLRC Conference - Roofing Issues: Decks to Dockets

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Company Name	Category Name	Link to File
CARLISLE SYNTEC INC	Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems	<a href="#">TGJZ.R26275</a>
CERTAINTED CORP	Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems	<a href="#">TGJZ.R26871</a>
FABRAL INC	Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems	<a href="#">TGJZ.R26274</a>
GAF	Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems	<a href="#">TGJZ.R27207</a>
NATIONAL ROOFING CONTRACTORS ASSOCIATION	Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems	<a href="#">TGJZ.R27046</a>
OMG INC, DBA OMG EDGESYSTEMS	Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems	<a href="#">TGJZ.R28074</a>
SIKA SARNAFIL INC	Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems	<a href="#">TGJZ.R26450</a>
SIPLAST INC	Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems	<a href="#">TGJZ.R25582</a>
TREMCO INC	Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems	<a href="#">TGJZ.R26229</a>



### UL's roofing-related category codes

Test standards	UL Category Code	Description (applies to:)
n/a	TEVT	Roof covering materials
ASTM E108/UL790, ASTM D3161 & ASTM D3462	TFWZ	Asphalt shingles (fire, wind & product standard)
ASTM E108/UL790 & ASTM D3161	TFXX	Non-asphaltic shingles (fire & wind)
ASTM D7158	TGAH	Asphalt shingles (wind)
UL 2218	TGAM	Impact resistance (hail)
ASTM C1371, ASTM C1549	TGFE	Solar reflectance
UL 55A, UL 2218 & UL 790	TGFU	BUR, MB and SPF systems (product standard, impact & fire)
UL 1897	TGIK	TFWZ & TGFU systems (wind)
Various ASTM standards	TGJR	Various components (product standard)
UL 580 & UL 1256	TGKX	All listed assemblies (wind, fire)
ANSI/SPRI ES-1	TGJZ	Edge metal flashings (wind)

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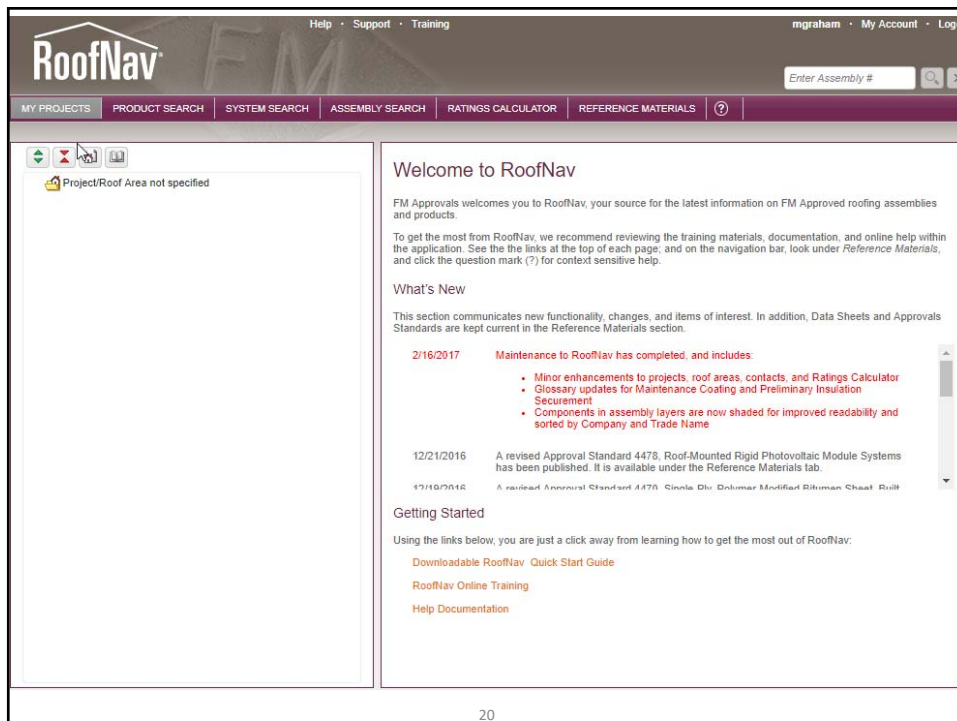


A UL label (i.e., certification) applies only to a specific certification (e.g., category code)

Some products/assemblies may have multiple UL certifications addressing different attributes



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**Data Sheets**

FM Global Property Loss Prevention Data Sheets are engineering guidelines written to help reduce the chance of property loss due to fire, weather conditions and failure of electrical and mechanical equipment. They incorporate loss experience, input from consensus standards committees, equipment manufacturers and others, and represent 170 years of FM Global research into the area of property protection. The data sheets included in RoofNav are specific to roofing installations and the roofing industry.

Note: Adobe Acrobat Reader version 6.0 or later is required to open Data Sheets.

**Most Commonly Used Data Sheets**  
The following table shows the Data Sheets that provide the most useful information for the majority of roofing professionals.

Data Sheet	Purpose	Month Issued
1-29 - Roof Deck Securement and Above-Deck Roof Components	Provides recommendations for the required corner and perimeter enhancements for all roof systems except Standing/Lap Seam roofs. Also provides general installation guidelines and recommendations for hail resistance and internal and exterior fire ratings.	4/2016
1-31 - Panel Roof Systems	Provides recommendations for the required corner and perimeter enhancements for standing/lap seam roofs.	7/2016
1-33 - Safeguarding Torch-applied Roof Installations	Provides design considerations and precautions that should be taken during the installation of torch-applied roof covers.	1/2000
1-49 - Perimeter Flashing	Provides recommendations for selecting FM Approved perimeter flashing and nailer securement, and provides general installation details.	7/2016

**Other Roofing-Related Data Sheets**  
The following table shows other Data Sheets that are useful for roofing designers, plan reviewers, and others who are interested in knowing detailed information about how roofs are designed.

Data Sheet	Purpose	Month Issued
1-0 - Safeguards During Construction	Examines the hazards associated with construction, alteration, and demolition operations. Provides recommended precautions to greatly reduce the danger of fire, explosions, water and wind damage, and collapse.	4/2012
1-13 - Chimneys	Provides guidelines for elimination or reduction of damage to chimneys and related equipment caused by fire, explosion, lightning, wind, structural failure, and earthquake.	4/2012
1-15 - Roof Mounted Solar Photovoltaic Panels	Provides property loss prevention guidance related to fire and natural hazards for the design, installation, and maintenance of all roof mounted photovoltaic (PV) solar panels used to generate electrical power.	10/2014
1-20 - Protection Against Exterior Fire Exposure	Provides guidelines for recognizing and dealing with a potential fire exposure from one or more existing buildings or yard storage, and to enable designers and architects to avoid exposure problems when laying out new buildings.	10/2016
1-22 - Criteria for Maximum Foreseeable Loss Fire Walls and Space Separation	Provides design criteria and guidelines for Maximum Foreseeable Loss (MFL) fire walls and space separation.	4/2011
1-28 - Design Wind Loads	Provides additional information for determining the wind speed for your location and for understanding how the wind uplift rating is determined for different areas of the roof.	10/2016
1-28R/1-28R - Roof Systems	Provides descriptive and background information on roof systems, including various generic types of roof components, wind forces, fire resistance, hail resistance, etc.	1/2016

**Welcome to RoofNav**

FM Approvals welcomes you to RoofNav, your source for the latest information on FM Approved roofing assemblies and products.

To get the most from RoofNav, we recommend reviewing the training materials, documentation, and online help within the application. See the links at the top of each page, and on the navigation bar, look under *Reference Materials*, and click the question mark (?) for context sensitive help.

**What's New**

This section communicates new functionality, changes, and items of interest. In addition, Data Sheets and Approvals Standards are kept current in the Reference Materials section.

2/16/2017 **Maintenance to RoofNav has completed, and includes:**

- Minor enhancements to projects, roof areas, contacts, and Ratings Calculator
- Glossary updates for Maintenance Coating and Preliminary Insulation Securement
- Components in assembly layers are now shaded for improved readability and sorted by Company and Trade Name

12/21/2016 A revised Approval Standard 4478, Roof-Mounted Rigid Photovoltaic Module Systems has been published. It is available under the Reference Materials tab.

11/10/2016 A revised Approval Standard 4476, Single Ply, Polymer Modified Bitumen Sheet Built

**Getting Started**

Using the links below, you are just a click away from learning how to get the most out of RoofNav:

- [Downloadable RoofNav Quick Start Guide](#)
- [RoofNav Online Training](#)
- [Help Documentation](#)

Assembly Properties

Assembly #: 319122-0-0  
Roof System: Single-Ply System  
Application: New Roof  
Cover Securement: Attached  
Deck Type: Steel

Slope: 1.0000  
Wind Uplift\*: 105  
Internal Fx: 1  
Exterior Fx: A  
Hail: SH  
For Use With Non-Combustible Walls: No

**FM 1-105A SH**

\* FM Approved roofs must also have corner and perimeter enhancements and FM Approved perimeter flashing. For details, see FM Global Property Loss Prevention Data Sheets 1.29 and 1.49. For StandingLap Seam roofs, see Property Loss Prevention Data Sheet 1.31.  
Adobe Acrobat Reader version 6.0 or later is required to open Property Loss Prevention Data Sheets. Click here to download this software for free.

Assembly Details

<b>1. Cover (Single-ply)</b>		
<input checked="" type="radio"/> GAF	Everguard Extreme TPO	<a href="#">View</a>
<input type="radio"/> GAF	Everguard TPO	<a href="#">View</a>
<b>Securement (Sheet Lap)</b>		
<input checked="" type="radio"/> Generic	weld, hot air	<a href="#">View</a>
<b>2. Securement (Cover) from 1. Cover (Single-ply) to 7. (Deck) Steel</b>		
<input type="radio"/> GAF	Drill-Tec Extra Heavy Duty ASAP Assembled Screw and 2-3/8 in. Steel Plate	<a href="#">View</a>
<input checked="" type="radio"/> SSSP15641		<a href="#">View</a>
<input type="radio"/> GAF	Drill-Tec 2 3/8 in. Barbed XHD Plate	<a href="#">View</a>
<input type="radio"/> GAF	Drill-Tec XHD Fastener	<a href="#">View</a>
<input type="radio"/> SSSP16931		<a href="#">View</a>
<input type="radio"/> OMG	Eyehook Seam Plate	<a href="#">View</a>
<input type="radio"/> OMG	OMG XHD screw	<a href="#">View</a>
<input type="radio"/> SSSP16932		<a href="#">View</a>
<input type="radio"/> OMG	Eyehook Reel-Fast Plates	<a href="#">View</a>
<input type="radio"/> OMG	OMG XHD screw	<a href="#">View</a>
<input type="radio"/> SSSP16933		<a href="#">View</a>
<input type="radio"/> OMG	Eyehook Accuseam Plate	<a href="#">View</a>
<input type="radio"/> OMG	OMG XHD screw	<a href="#">View</a>
<input type="radio"/> SSSP19462		<a href="#">View</a>
<input type="radio"/> GAF	Drill-Tec Eyehook AccuSeam Plate	<a href="#">View</a>
<input type="radio"/> GAF	Drill-Tec XHD Fastener	<a href="#">View</a>
<input type="radio"/> SSSP19483		<a href="#">View</a>
<input type="radio"/> GAF	Drill-Tec Eyehook AccuSeam Plate	<a href="#">View</a>
<input type="radio"/> OMG	OMG XHD screw	<a href="#">View</a>
<input type="radio"/> SSSP20355		<a href="#">View</a>
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<input type="radio"/> GAF	Drill-Tec XHD Fastener	<a href="#">View</a>
<input type="radio"/> SSSP20356		<a href="#">View</a>
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<input type="radio"/> GAF	Drill-Tec XHD Fastener	<a href="#">View</a>
<input type="radio"/> SSSP20357		<a href="#">View</a>
<input type="radio"/> OMG	Eyehook Seam Plate	<a href="#">View</a>
<input type="radio"/> GAF	Drill-Tec XHD Fastener	<a href="#">View</a>

<b>3. Insulation (Board Stock)</b>		
<input type="radio"/> GAF	EnergyGuard NH Polyiso Insulation	<a href="#">View</a>
<input type="radio"/> GAF	EnergyGuard NH Ultra Polyiso Insulation	<a href="#">View</a>
<input checked="" type="radio"/> GAF	EnergyGuard POLYISO INSULATION	<a href="#">View</a>
<input type="radio"/> GAF	EnergyGuard TAPERED POLYISO INSULATION	<a href="#">View</a>
<input type="radio"/> GAF	EnergyGuard Ultra Polyiso Insulation	<a href="#">View</a>
<input type="radio"/> GAF	EnergyGuard Ultra Tapered Polyiso Insulation	<a href="#">View</a>
<input type="radio"/> National Gypsum Company	DEXcell Cement Roof Board	<a href="#">View</a>
<input type="radio"/> National Gypsum		<a href="#">View</a>
<input type="radio"/> National Gypsum		<a href="#">View</a>
<input type="radio"/> Owens Corning		<a href="#">View</a>
<input type="radio"/> Owens Corning		<a href="#">View</a>
<input type="radio"/> Owens Corning		<a href="#">View</a>
<input checked="" type="radio"/> SSSP15260		<a href="#">View</a>
<input type="radio"/> See Separately		
<input type="radio"/> See Separately		
<b>4. Securement (Board)</b>		
<input type="radio"/> GAF		<a href="#">View</a>
<input type="radio"/> GAF		<a href="#">View</a>
<input checked="" type="radio"/> GAF		<a href="#">View</a>
<input type="radio"/> GAF		<a href="#">View</a>
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<input type="radio"/> Owens Corning		<a href="#">View</a>
<input type="radio"/> Owens Corning (China) Investment Co., Ltd.	Thermafiber RD-180	<a href="#">View</a>
<input type="radio"/> Owens Corning (China) Investment Co., Ltd.	Thermafiber RD-200	<a href="#">View</a>
<b>5. Insulation (Board)</b>		
<input type="radio"/> GAF		<a href="#">View</a>
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<input type="radio"/> National Gypsum		<a href="#">View</a>
<input type="radio"/> National Gypsum		<a href="#">View</a>
<input type="radio"/> National Gypsum		<a href="#">View</a>
<input type="radio"/> Owens Corning		<a href="#">View</a>
<input type="radio"/> Owens Corning (China) Investment Co., Ltd.	Thermafiber RD-180	<a href="#">View</a>
<input type="radio"/> Owens Corning (China) Investment Co., Ltd.	Thermafiber RD-200	<a href="#">View</a>
<b>6. Thermal Barrier</b> optional		
<input type="radio"/> GAF	EnergyGuard Perlife Roof Insulation (homogeneous)	<a href="#">View</a>
<input type="radio"/> GAF	EnergyGuard Perlife Roof Insulation (laminated)	<a href="#">View</a>
<input type="radio"/> Georgia-Pacific Gypsum LLC	DensDeck	<a href="#">View</a>
<input type="radio"/> United States Gypsum Company	SECUROCK Gypsum-Fiber Roof Board	<a href="#">View</a>
<input checked="" type="radio"/> None		

**7. (Deck) Steel**

See Separate  
 See Separate  
 See Separate

**Securement (C)**

Hilli Inc  
 Hilli Inc  
 Hilli Inc  
 Hilli Inc  
 Hilli Inc  
 Hilli Inc  
 Hilli Inc  
 ITW Comm  
 ITW Comm  
 ITW Comm  
 ITW Comm

**8. Securement (D)**

Hilli Inc  
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 Hilli Inc  
 Hilli Inc  
 Hilli Inc  
 Hilli Inc  
 Hilli Inc  
 ITW Comm

**9. Structure**

**Usage Details**

**Deck (Steel)**

Company: See Separate Steel Deck Manufacturer Listing  
 Trade Name: steel deck, min 80 ksi, 20 to 18 ga., wide rib (>90 psf)  
 Acoustical: No  
 Design Thickness: 0.0358 in  
 Rib Type: Type WR  
 Max Span: 72.0000 in  
 Min Depth: 1.5000 in  
 Min Grade: 80.0000 ksi  
 Max Depth: 1.5000 in  
 Min Thickness: 0.0000 in  
 Min Width: 24.0000 in  
 Max Width: 36.0000 in  
 Comments: none

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**FM**  
 APPROVED

An FM Approvals' approval applies to all of the attributes of the specific FM standard referenced and may address multiple attributes (e.g., fire, uplift, impact, solar reflectivity).

NRCA

NRLRC

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## **Recommendations**

Compliance with FM and UL requirements

- Obtain UL rating and/or FM approval information from manufacturers
  - FM Roofnav number
  - UL certification
- Maintain this information in your project file

Note: With FM and UL's current online systems, only current information is accessible; legacy information is not readily available.



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*In 2018, SPRI will reportedly launch their own on online "listing service".*



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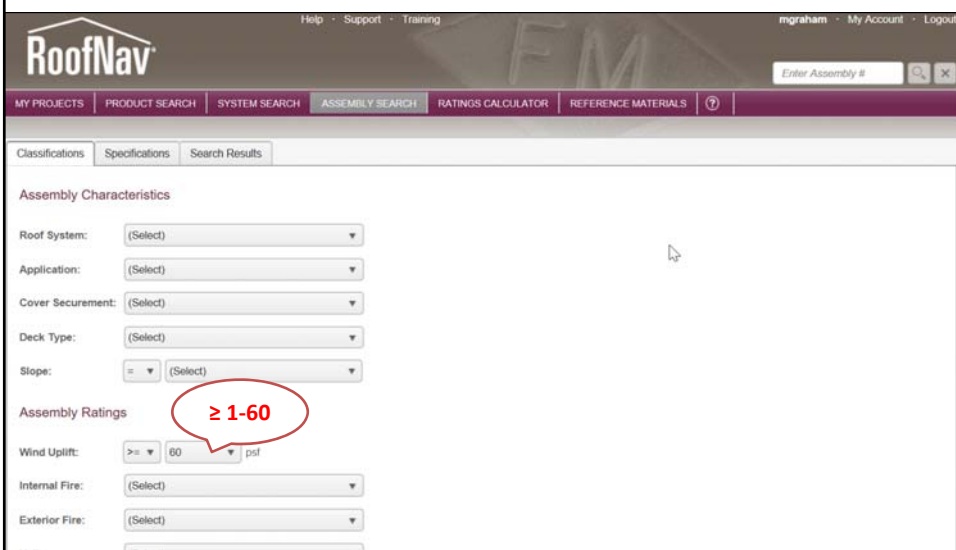


**Questions...**



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**Some more "fun" ...**  
RoofNav



The screenshot shows the RoofNav website interface. At the top, there is a navigation bar with links for 'MY PROJECTS', 'PRODUCT SEARCH', 'SYSTEM SEARCH', 'ASSEMBLY SEARCH', 'RATINGS CALCULATOR', and 'REFERENCE MATERIALS'. Below this, there are tabs for 'Classifications', 'Specifications', and 'Search Results'. The 'Assembly Characteristics' section contains several dropdown menus: 'Roof System', 'Application', 'Cover Securement', 'Deck Type', and 'Slope'. The 'Assembly Ratings' section includes a 'Wind Uplift' field with a dropdown set to '>=' and a value of '60 psf'. A red circle highlights the '60' value with the text '≥ 1-60' inside it. Other fields include 'Internal Fire' and 'Exterior Fire', both with '(Select)' dropdowns.

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Found: 968934 records → **968, 934 assemblies (as of Sept. 6, 2017)**

Assembly # ▲	Cover Type	Application Type	Securement Type	Deck Type	Wind Uplift	I/Fire	E/Fire	Slope	Hail
1-0-0	Composite Panel System	New Roof	Attached	No Deck	105	1	A	5	SH
2-0-0	Standing/Lap Seam System	New Roof	Attached	No Deck	90	1	Λ	5	SH
3-0-0	Composite Panel System	New Roof	Attached	No Deck	60	1	A	2	SH
4-0-0	Composite Panel System	New Roof	Attached	No Deck	90	1	A	2	SH
5-0-0	Composite Panel System	New Roof	Attached	No Deck	75	1	A	2	SH
6-0-0	Standing/Lap Seam System	New Roof	Attached	No Deck	90	1	A	5	SH
7-0-0	Composite Panel System	New Roof	Attached	No Deck	60	1	A	5	SH
9-0-0	Standing/Lap Seam System	New Roof	Attached	No Deck	120	1	A	5	SH
10-0-0	Standing/Lap Seam System	New Roof	Attached	No Deck	90	1	A	5	SH
12-0-0	Standing/Lap Seam System	New Roof	Attached	No Deck	60	1	C	5	SH
13-0-0	Standing/Lap Seam System	New Roof	Attached	No Deck	90	1	A	5	SH

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