



# FORTIFIED Multifamily™– 2025 Wind

## Existing Construction, Low-Sloped ( $\leq 10^\circ$ ) Re-Roofing

This form captures the specific construction details for existing construction, low-sloped re-roofing. Qualifications are listed in section 3.1.1 of the *FORTIFIED Multifamily– 2025 Wind Standard*.

This form is to be filled out by the project architect, a licensed structural engineer, and the general contractor and/or roofer. It confirms the requirements for the selected FORTIFIED level have been included in the building documents and the contractor and/or roofer is aware of these requirements.

Fill out only the applicable sections. Some portions of the sections may pertain only to Hurricane or High Wind—fill out accordingly depending on your building's exposure.

### Compliance Agreement

I, the DESIGNER COMPLETING THIS CHECKLIST, understand and agree that:

1. The *FORTIFIED Multifamily– 2025 Wind Existing Construction, Low-Sloped Re-Roofing Form* must be completed FULLY and CORRECTLY for the applicable hazards.
2. I will provide engineered plans (and all other necessary documentation) that verify the structure meets FORTIFIED design criteria BEFORE construction starts. These plans and documents must be:
  - Legible
  - Complete
  - Certified by the Professional of Record
  - Included with this document
3. The plans submitted will comply with all local building codes and with the FORTIFIED Multifamily criteria as detailed in the *FORTIFIED Multifamily– 2025 Wind Standard*.

Full Name: \_\_\_\_\_

License/Registration Number: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

### Hazard and FORTIFIED Level

Select the site-specific hazard<sup>1</sup>: ☐ Hurricane ☐ High Wind

Select the FORTIFIED Commercial Wind level being pursued:

- ☐ **FORTIFIED Roof™**—Enhanced roof performance
- ☐ **FORTIFIED Silver™**—FORTIFIED Roof requirements plus building envelope protection and reduction of business operations downtime
- ☐ **FORTIFIED Gold™**—FORTIFIED Silver requirements plus enhanced structural performance and maintaining business operations

### Building Overview

Street Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip Code: \_\_\_\_\_

Year of Construction: \_\_\_\_\_

**Existing buildings with wood frame roofs must be constructed in accordance with the 2000 IBC or later for eligibility.**

☐ Yes ☐ No ☐ N/A

Please select the option which best describes the buildings proximity to saltwater:

- ☐ Within 300 feet
- ☐ More than 300 ft but less than 1,000 ft
- ☐ More than 1,000 ft but less than 3,000 ft
- ☐ More than 3,000 ft

Corrosion protection requirements described in section 3.1.4 of the *FORTIFIED Multifamily– 2025 Wind Standard* have been implemented ☐ YES ☐ NO

### Project Status

Tentative Re-Roofing Start Date: \_\_\_\_\_

Tentative Completion Date: \_\_\_\_\_

☐ Re-covering applications are not permitted. Check box to confirm this method is not being used.

Select the option(s) which best describe the building:

- ☐ Low-slope re-roofing using existing structural roof deck<sup>2</sup>
- ☐ Low-slope re-roofing with new structural roof deck
- ☐ Other<sup>3</sup>: \_\_\_\_\_

<sup>1</sup>Hurricane-prone regions are areas vulnerable to hurricanes as defined in ASCE 7. See section 1.4 of the *FORTIFIED Multifamily– 2025 Wind Standard* for more information.

<sup>2</sup>All damaged or deteriorated roof deck must be removed and replaced. See section 3.1.1.2.1 of the *FORTIFIED Multifamily– 2025 Wind Standard*.

<sup>3</sup>Must be confirmed/approved by IBHS and/or the FORTIFIED Multifamily Evaluator.



## General Building Characteristic

Number of Stories: \_\_\_\_\_

Roof Slope: \_\_\_\_\_

Gross Square Footage (sq ft): \_\_\_\_\_

Building Dimensions (ft):

Length: \_\_\_\_\_

Width: \_\_\_\_\_

Height: \_\_\_\_\_

Occupancy Type: \_\_\_\_\_

Wall/Framing (gravity system) [select all that apply]:

☐ Concrete ☐ Masonry

☐ Steel ☐ Light Gauge

☐ Wood ☐ Other: \_\_\_\_\_

Lateral System [select all that apply]:

☐ Moment Frames or Braced Frames

☐ Shear Walls

☐ Other: \_\_\_\_\_

## Flood—Recommended Whole-Building Protection (Not Required)

While protecting electrical and mechanical systems from flood is a requirement of FORTIFIED Silver, whole-building protection against the flood hazard is not required under FORTIFIED Multifamily.

First finished floor elevation (ft): \_\_\_\_\_

FEMA-designated flood zone<sup>4</sup>: \_\_\_\_\_

If located in a FEMA-designated flood zone (V, A, B, D, and X-shaded), please select one of the following options:

☐ The building's first finished floor is located above the 500-year flood level.

500-year flood level (ft): \_\_\_\_\_

☐ The building's first finished floors is located 3 ft above the base flood elevation.

Base flood level (ft): \_\_\_\_\_

☐ Dry flood protection such as flood gates, walls, or doors, inflatable barriers, sand bags, or similar devices are readily available on site to help mitigate water intrusion.

☐ Not applicable (N/A)

## Hail Recommended Protection (Not Required)

Are you seeking the Hail Supplement? ☐ Yes ☐ No If yes, select one of the following options for the installed roof cover:

☐ FM Approval Standard 4470 with a Class 1-SH or 1-VSH

☐ UL 2218 Class 4

☐ Not Applicable

## Existing Conditions Verification

### Foundations

Check the box beside each requirement to indicate that the existing foundation is in accordance with the standard. Fill out requested information where indicated.

☐ The existing foundation system is NOT constructed of unrestrained stacked masonry or stone (dry-stacked foundation).

☐ The existing foundation system has adequate positive connections from the floor or wall structure to support the foundation.<sup>5</sup>

### Low-Slope Re-Roofing Using Existing Structural Deck

If the existing structural roof deck is going to be re-used, complete the following section.

Existing Structural Deck Material: \_\_\_\_\_

Check the box beside each requirement to indicate that the existing structural roof deck is in accordance with the standard. Fill out requested information where indicated.

☐ The existing structural roof deck was inspected after old roofing materials were removed.

Were there any locations where the existing structural roof deck was damaged or deteriorated?<sup>6</sup> ☐ Yes ☐ No

If YES was selected, please describe the type of damage.

Fill out the following if damage or deterioration existing structural deck was indicated:

The damaged sections of the deck were removed, and the entire sheet was replaced with the same deck type and thickness as the existing. ☐ Yes ☐ No

*If the roof deck is damaged, there is a possibility that the framing members are damaged as well.*

Roof framing members below the deteriorated roof deck were evaluated for damage. ☐ Yes ☐ No

<sup>4</sup>Flood zone as defined by FEMA.

<sup>5</sup>When seeking FORTIFIED Gold, the existing foundation systems must be evaluated by the structural engineer of record. Additional information and on-site testing may be required to verify the structural capacity of the existing conditions.

<sup>6</sup>If re-roofing, all roof decks shall be evaluated for any rust, rotting, or any other condition that may reduce the integrity of the deck. If the deck includes lightweight insulating concrete, gypsum, cementitious wood-fiber or similar materials, the deck also must be evaluated for moisture, cracks, or brittleness, and insulation fastener pull tests shall be conducted.



If yes was indicated that roof framing members were damaged or deteriorated, then the members must be evaluated by a structural engineer. Please provide the signed and sealed conditions report by a licensed structural engineer.

All necessary repairs to the roof deck were completed prior to installation of a new roof cover system. ☐ Yes ☐ No

## Low-Slope Re-Roofing with New Structural Roof Deck Yes ☐ No ☐

If the existing structural roof deck is going to be replaced with a new one, please complete the following section. Check the box beside each requirement to indicate that the existing structural roof framing is in accordance with the standard. Fill out requested information where indicated.

Roof framing members below the deteriorated roof deck were evaluated for damage. ☐ Yes ☐ No

If Yes was indicated that roof framing members were damaged or deteriorated, then the members must be evaluated by a structural engineer. Please provide the signed and sealed conditions report by a licensed structural engineer.

All necessary repairs to the roof deck was completed prior to installation of a new roof deck and roof cover system. ☐ Yes ☐ No

## FORTIFIED Roof

### Roof Configuration

Does the building have more than one roof type? ☐ Yes ☐ No

If yes, please fill the low slope roof details section for the corresponding quantity of roof systems. Number of different roof types are \_\_\_\_\_.

Does the building have roofs at multiple heights? ☐ Yes ☐ No

If yes, are the heights different enough that roof systems with different wind ratings are specified? ☐ Yes ☐ No

If yes, fill out the low slope roof details section for each roof system with a different wind rating.

### General Information

Roof Type Number: \_\_\_\_\_ out of: \_\_\_\_\_

Roof Slope (degrees): \_\_\_\_\_

Average Roof Height (ft): \_\_\_\_\_

ASCE 7 Roof Dimension "a" (ft): \_\_\_\_\_

### Re-Roofing Code Specification

Select the applicable code and fill out the corresponding information:

☐ ASCE 7-10

☐ Risk Category II

☐ Risk Category III

☐ Risk Category IV

Design wind speed ( $V_{ult}$ ): \_\_\_\_\_ mph

☐ ASCE 7-16

☐ Risk Category II

☐ Risk Category III

☐ Risk Category IV

Design wind speed ( $V_{ult}$ ): \_\_\_\_\_ mph

☐ ASCE 7-22

☐ Risk Category II

☐ Risk Category III

☐ Risk Category IV

Design wind speed ( $V_{ult}$ ): \_\_\_\_\_ mph

Select the applicable building code:

☐ IBC 2000

☐ IBC 2012

☐ IBC 2003

☐ IBC 2015

☐ IBC 2006

☐ IBC 2018

☐ IBC 2009

☐ IBC 2021

### Exposure Category and Classification

The exposure category per ASCE 7 is: ☐ C ☐ D

In accordance with the code selected in the above section, please identify the building exposure classification:

☐ Partially enclosed

☐ Enclosed

☐ Open

### Minimum Required Factor of Safety

Please select the minimum factor of safety that was applied to the building design pressures. See section 3.1.1.3 of the *FORTIFIED Multifamily– 2025 Wind Standard*.

☐ ASCE 7-10 ASD Method: Calculated ASD wind load x 2 (Minimum Required Factor of Safety)

☐ ASCE 7-10 LRFD Method: Calculated LRFD wind load x 0.6 x 2 (Minimum Required Factor of Safety)

☐ ASCE 7-16 ASD Method: Calculated ASD wind load x 1.67 (Minimum Required Factor of Safety)

☐ ASCE 7-16 LRFD Method: Calculated LRFD wind load

☐ ASCE 7-22 ASD Method: Calculated ASD wind load x 1.67 (Minimum Required Factor of Safety)

☐ ASCE 7-22 LRFD Method: Calculated LRFD wind load



## Wind Design Pressures

Select and fill out the appropriate wind pressure table. The base pressure shall be directly calculated from corresponding ASCE 7 edition and the additional factor of safety as described in section 3.1.1.3 of the *FORTIFIED Multifamily– 2025 Wind Standard*.

☐ ASCE 7-10 design pressures (psf) using minimum terrain, Exposure C or D.

Please select the method used to obtain base pressures:

☐ ASD ☐ LRFD

Roof Geometry<sup>7</sup>: \_\_\_\_\_

Zone <sup>8</sup>	Base Design Pressure (psf)	Minimum F.O.S. <sup>8</sup>	Pressure with F.O.S. (psf)
Field (Zone 1)			
Perimeter (Zone 2)			
Perimeter Overhang (Zone 2OH)			
Corner (Zone 3)			
Corner Overhang (Zone 3OH)			

☐ ASCE 7-16 and 7-22 design pressures (psf) using minimum terrain, Exposure C or D.

Please select the method used to obtain base pressures:

☐ ASD ☐ LRFD

Roof Geometry<sup>5</sup>: \_\_\_\_\_

Zone <sup>9</sup>	Base Design Pressure (psf)	Minimum F.O.S. <sup>7</sup>	Pressure with F.O.S. (psf)

<sup>7</sup>Roof geometry refers to the ASCE 7 profile designation such as mono-sloped, flat roof, and stepped roof. For more roof geometries, see ASCE 7.

<sup>8</sup>For more information, see section 3.1.1.3.2 of the *FORTIFIED Multifamily– 2025 Wind Standard*.

<sup>9</sup>Please use the table to describe the different wind zones of the roof. ASCE 7-16 has implemented new wind zone designations so please denote which roofing geometry was used to obtain base pressures.

<sup>10</sup>If selected, skip "Roof System Detail Breakdown" and fill out the information in the "Architectural/Structural Metal Roof Panel Systems" section.

<sup>11</sup>See "Additional Single-ply Membrane Requirements" section.

## Low-Slope Re-Roofing Details

### Roof System Type

Select the roofing system type:

☐ Architectural Metal Panels (attached to wood deck)<sup>10</sup>

☐ Built-up Roofing

☐ Gravel fully embedded in asphalt

☐ Loose-laid gravel on low-sloped (**High-Wind-Prone Regions Only**)

☐ Modified Bitumen

☐ Single-ply Membrane<sup>11</sup>

☐ TPO

☐ PVC

☐ EPDM

☐ Ballasted, Roof Pavers and Pedestal Systems (**High-Wind-Prone Regions Only**)

☐ Structural Metal Panels

☐ Vegetative Roof Systems (**High-Wind-Prone Regions Only**)

### Approved Low-Sloped System

**Material substitutions and deviations from the approved system's design criteria are not acceptable.** The entire system must be installed in accordance with the Approval or Product Evaluation description and meets the specified design and limitations for use of the product as well as specified installation methods. ☐ Yes

Please select and complete one of the following low-sloped approved roofing systems:

☐ Florida Product Approval (FPA)

**Note:** The design team must submit a copy of the FPA Evaluation Report for each approved system to the FORTIFIED Multifamily Evaluator. FPA Evaluation Reports can be found by using the search tool located: [www.floridabuilding.org/pr/pr\\_app\\_srch.aspx](http://www.floridabuilding.org/pr/pr_app_srch.aspx)

☐ Multiple Systems

#### Field

Uplift Resistance (psf): \_\_\_\_\_

FL Number: \_\_\_\_\_

#### Perimeter

Uplift Resistance (psf): \_\_\_\_\_

FL Number: \_\_\_\_\_

#### Corner

Uplift Resistance (psf): \_\_\_\_\_

FL Number: \_\_\_\_\_



☐ Single System

Uplift Resistance (psf): \_\_\_\_\_

FL Number: \_\_\_\_\_

☐ Single System—Enhanced Fastening<sup>12</sup>

Uplift Resistance (psf): \_\_\_\_\_

FL Number: \_\_\_\_\_

Describe the enhancements:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Enhancements have been designed for the component and cladding wind pressures and provide uplift resistance with a minimum factor of safety of 2.0 (1.67 for ASCE 7-16 ASD loads) in the field, perimeter, and corners of the roof as described in section Roof Design Load Requirement. ☐ Yes

☐ FM Approved with a current and active [RoofNav](#) Assembly Number

**Note:** The design team must submit a copy of the FM Assembly Report highlighting the selected assembly details for each approved system to the FORTIFIED Multifamily Evaluator. FM Approved roof assemblies can be found by using the RoofNav® search tool located at [www.roofnav.com](http://www.roofnav.com).

☐ Multiple Systems

▪ Field

FM Rating: \_\_\_\_\_

Roof Nav Assembly #: \_\_\_\_\_

▪ Perimeter

FM Rating: \_\_\_\_\_

Roof Nav Assembly #: \_\_\_\_\_

▪ Corner

FM Rating: \_\_\_\_\_

Roof Nav Assembly #: \_\_\_\_\_

☐ Single System

FM Rating: \_\_\_\_\_

Roof Nav Assembly #: \_\_\_\_\_

☐ ICC Evaluation Service (ICC-ES)

**Note:** The design team must also submit a copy of the ICC-ES Report for each approved system to the FORTIFIED Multifamily Evaluator. ICC-ES Approved roof assemblies can be found by using the search tool located at [www.icc-es.org/evaluation-report-program/reports-directory](http://www.icc-es.org/evaluation-report-program/reports-directory).

☐ Multiple Systems

▪ Field

ESR Report Number: \_\_\_\_\_

Division Number: \_\_\_\_\_

Section Number: \_\_\_\_\_

Table and System Number: \_\_\_\_\_

Uplift Resistance(psf): \_\_\_\_\_

▪ Perimeter

ESR Report Number: \_\_\_\_\_

Division Number: \_\_\_\_\_

Section Number: \_\_\_\_\_

Table and System Number: \_\_\_\_\_

Uplift Resistance (psf): \_\_\_\_\_

▪ Corner

ESR Report Number: \_\_\_\_\_

Division Number: \_\_\_\_\_

Section Number: \_\_\_\_\_

Table and System Number: \_\_\_\_\_

Uplift Resistance (psf): \_\_\_\_\_

☐ Single System

ESR Report Number: \_\_\_\_\_

Division Number: \_\_\_\_\_

Section Number: \_\_\_\_\_

Table and System Number: \_\_\_\_\_

Uplift Resistance(psf): \_\_\_\_\_

☐ Miami-Dade County (MDCA) with current and active Notice of Acceptance (NOA)

☐ Multiple Systems

▪Field

NOA: \_\_\_\_\_

Uplift Resistance: \_\_\_\_\_

▪ Perimeter

NOA: \_\_\_\_\_

Uplift Resistance: \_\_\_\_\_

▪ Corner

NOA: \_\_\_\_\_

Uplift Resistance: \_\_\_\_\_

☐ Single System

NOA: \_\_\_\_\_

Uplift Resistance: \_\_\_\_\_

<sup>12</sup>In some instances, FPA does permit edge (perimeter/corner) enhancements. Enhancements must follow provisions stated in corresponding active FPA Evaluation Report.



☐ Single System with Edge (Perimeter/Corner) Enhancements

▪ **Field**

NOA: \_\_\_\_\_

Uplift Resistance: \_\_\_\_\_

**Note:** Perimeter and corner enhancements can be made in accordance with the Miami-Dade County Notice of Acceptance.

Describe the enhancements and how they were obtained for both the perimeter and corner:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

☐ Texas Department of Insurance (TDI)

**Note:** The design team must also submit a copy of the TDI Product Evaluation Report for each approved system to the FORTIFIED Multifamily Evaluator. TDI Approved roof assemblies can be found by using the search tool located at [www.tdi.texas.gov/wind/prod/indexrc.html](http://www.tdi.texas.gov/wind/prod/indexrc.html).

☐ Multiple Systems

▪ **Field**

TDI Evaluation ID: \_\_\_\_\_

Assembly Number: \_\_\_\_\_

Uplift Resistance Range: \_\_\_\_\_

▪ **Perimeter**

TDI Evaluation ID: \_\_\_\_\_

Assembly Number: \_\_\_\_\_

Uplift Resistance Range: \_\_\_\_\_

▪ **Corner**

TDI Evaluation ID: \_\_\_\_\_

Assembly Number: \_\_\_\_\_

Uplift Resistance Range: \_\_\_\_\_

☐ Single System

TDI Evaluation ID: \_\_\_\_\_

Assembly Number: \_\_\_\_\_

Uplift Resistance Range: \_\_\_\_\_

☐ UL Rated

**Note:** The design team must submit a copy of the UL Product Specification Report for each approved system to the FORTIFIED Multifamily Evaluator. Product Specification Reports can be found by using the UL search tool located at <http://productspec.ul.com/index.php>.

☐ Multiple Systems

▪ **Field**

UL Product Number: \_\_\_\_\_

Option Number: \_\_\_\_\_

Uplift Resistance (psf): \_\_\_\_\_

▪ **Perimeter**

UL Product Number: \_\_\_\_\_

Option Number: \_\_\_\_\_

Uplift Resistance (psf): \_\_\_\_\_

▪ **Corner**

UL Product Number: \_\_\_\_\_

Option Number: \_\_\_\_\_

Uplift Resistance (psf): \_\_\_\_\_

☐ Single System

UL Product Number: \_\_\_\_\_

Option Number: \_\_\_\_\_

Uplift Resistance (psf): \_\_\_\_\_

## Roof System Detail Breakdown

Fill in the correct information for the individual parts of the approved system. If it does not apply to the selected approved system, please select N/A.

For architectural and structural metal roof panel systems, do not fill out the information in this section—rather, fill out the information in the “Architectural/Structural Metal Roof Panel Systems” section.

**Cover/Cap Sheet**

Yes ☐ N/A ☐

Cover/Cap Sheet Type: \_\_\_\_\_

Manufacturer: \_\_\_\_\_

Trade Name: \_\_\_\_\_

**Cover/Cap Sheet Attachment**

Yes ☐ N/A ☐

☐ Adhered

Manufacturer: \_\_\_\_\_

Trade Name: \_\_\_\_\_

Adhesion Rate: \_\_\_\_\_

☐ Mechanically Fastened

Sheet Width (in.): \_\_\_\_\_

Fastener:

Manufacturer: \_\_\_\_\_

Type: \_\_\_\_\_

Plate:

Manufacturer: \_\_\_\_\_

Type: \_\_\_\_\_

Fastener Spacing (in.):

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_

Fastener Spacing Along Laps (in.):

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_

**Cover Board**Yes ☐ N/A ☐

Select the cover board type:

- ☐ Polyisocyanurate  
☐ Perlite  
☐ Fiberglass  
☐ Wood Fiber  
☐ Other: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_  
Trade Name: \_\_\_\_\_  
Thickness (in.): \_\_\_\_\_

Cover Board Attachment:

- ☐ Adhered ☐ Mechanically Fastened

Details: \_\_\_\_\_

Insulation Yes ☐ N/A ☐

Select the insulation board(s) type:

- ☐ Isocyanurate  
☐ Perlite  
☐ Fiberglass  
☐ Wood Fiber  
☐ Other: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_  
Trade Name: \_\_\_\_\_  
Board Thickness (in.): \_\_\_\_\_

Number of boards: \_\_\_\_\_

Is the insulation board tapered Yes ☐ No ☐**Intermediate Layers**Yes ☐ N/A ☐

Select the intermediate layer type:

- ☐ Isocyanurate  
☐ Perlite  
☐ Fiberglass  
☐ Wood Fiber  
☐ Other: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_  
Trade Type: \_\_\_\_\_  
Thickness (in.): \_\_\_\_\_

**Insulation Board Fasteners**Yes ☐ N/A ☐

Select the attachment method:

- ☐ Adhered  
Manufacturer: \_\_\_\_\_  
Trade Name: \_\_\_\_\_  
Application Type<sup>13</sup>: \_\_\_\_\_  
Adhesion Rate: \_\_\_\_\_

☐ Mechanically Fastened

Fastener:

Trade Name: \_\_\_\_\_

Diameter (in): \_\_\_\_\_

Length (in): \_\_\_\_\_

Plate:

Plate Name: \_\_\_\_\_

Plate Material:

- ☐ Metal ☐ Plastic

☐ Other: \_\_\_\_\_

Plate Diameter (in): \_\_\_\_\_

Fastening Pattern<sup>14</sup>:

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_

**Base Sheet**Yes ☐ N/A ☐

Base sheet general information:

Base Sheet Manufacturer: \_\_\_\_\_

Thickness (in): \_\_\_\_\_

Base sheet attachment:

- ☐ Self-Adhered  
☐ Mechanically Attached

Fastener:

Trade Name: \_\_\_\_\_

Fastener Type: ☐ Split Shank ☐ Other: \_\_\_\_\_

Diameter (in): \_\_\_\_\_

Length (in): \_\_\_\_\_

Plate (if differs from trade name above):

Plate Name: \_\_\_\_\_

Plate Material: ☐ Metal ☐ Plastic ☐ Other: \_\_\_\_\_

Plate Diameter (in): \_\_\_\_\_

Fastening Pattern<sup>13</sup>:

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_

<sup>13</sup>Refers to the application; fully adhered, strips, ribbons, etc. For example, securement of insulation to concrete deck with an adhesive applied was installed in a serpentine method with a ribbon width of 0.75 in.

<sup>14</sup>Fastening pattern rate shall be in terms of square footage (sq ft) per (1) fastener.

**Additional Single-Ply Membrane Requirements** Yes ☐ N/A ☐

Single-ply roof covers have a perimeter peel stop with a termination bar or similar located 1–2 ft from the roof edge. Yes ☐ N/A ☐

Mechanically Attached Single-Ply Membrane on Steel Decks—Sheets and fasteners are installed PERPENDICULAR to the steel deck ribs.

Yes ☐ N/A ☐

Ballasted, roof pavers, and pedestal systems are NOT being used.

Yes ☐**Vegetative Roof Systems (High-Wind-Prone Regions Only)**Yes ☐ N/A ☐

Vegetative roof systems are permitted only high-wind-prone regions. Structural calculations, uplift tests, and/or additional documentation may be requested by the FORTIFIED Multifamily Evaluator.

Select the system:

☐ Extensive☐ Simple Intensive (Semi-Intensive)

Provide the appropriate approval rating and number:

☐ FM RoofNav Number: \_\_\_\_\_☐ Miami-Dade NOA: \_\_\_\_\_**Architectural/Structural Metal Roof Panel**Yes ☐ N/A ☐

Please indicate the roof system:

☐ Non-structural architectural metal panel roofs on solid wood sheathing☐ Structural metal panel roof systems on open framing members☐ Structural Standing Seam☐ Through-Fastened (Lap Seam)

Purlin spacing:

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_

Approved System:

☐ FM Approval Standard 4470 or FM4471

FM RoofNav: \_\_\_\_\_

☐ Miami-Dade County Approved

NOA: \_\_\_\_\_

Attachment:

☐ Clip Spacing (in.):

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_

Number of screws per clip: \_\_\_\_\_

Total screw pull out value (lb): \_\_\_\_\_

☐ Other (i.e., through-fastened with wood screw):

Describe: \_\_\_\_\_

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_

Lap Seam Fasteners:

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_

☐ Attachments include a minimum 2.0 safety factor as described in section 3.1.1.3 of the *FORTIFIED Multifamily– 2025 Wind Standard*.

**Structural Roof Deck**

☐ Structural roof deck resists the loads and load combinations specified in ASCE 7 as described in section 3.1.1.3.1 of the *FORTIFIED Multifamily– 2025 Wind Standard*.

☐ Structural roof deck attachment capacity meets the pressures described in section 3.1.1.3 of the *FORTIFIED Multifamily– 2025 Wind Standard*.

☐ Structural calculations verifying the roof deck capacity and attachment must be submitted to the FORTIFIED Multifamily Evaluator with this form.

Select the deck type and specify construction:

☐ Cast-in-place structural concrete with lightweight insulating concrete (LWIC) above structural concrete☐ Cast-in-place structural concrete without LWIC☐ Poured concrete on steel form deck with LWIC☐ Poured concrete on steel form deck without LWIC☐ Precast concrete “tees”

Panel width (in.): \_\_\_\_\_

☐ Gypsum on bulb “tees”

Panel width (in.): \_\_\_\_\_

Clip trade name: \_\_\_\_\_

Clip spacing (in.):

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_

☐ Cementitious wood fiber

Panel width (in.): \_\_\_\_\_

Clip trade name: \_\_\_\_\_

Clip spacing (in.):

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_





☐ LWIC poured on steel form (fill out steel deck information below)

☐ Steel deck

Specify the details listed below:

Deck gauge: \_\_\_\_\_

Deck attachment method:

☐ Weld

Weld size (in.): \_\_\_\_\_

Weld spacing (in.): \_\_\_\_\_

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_

☐ Screw **or** ☐ Rivet

Size: \_\_\_\_\_

Head diameter (in.): \_\_\_\_\_

Spacing (in.): \_\_\_\_\_

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_

☐ Other: \_\_\_\_\_

Spacing (in.): \_\_\_\_\_

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_

Joist or Beam Spacing (in.): \_\_\_\_\_

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_

Manufacturer: \_\_\_\_\_

Model: \_\_\_\_\_

Type/size: \_\_\_\_\_

☐ Wood Deck

Deck Type:

☐ Plywood

☐ Oriented strand board (OSB) plank

☐ Other: \_\_\_\_\_

Deck Thickness (in.): \_\_\_\_\_

Deck Attachment Method:

☐ Screw ring-shank nail

☐ Spiral nail

☐ Smooth nail

Fastener size: \_\_\_\_\_

Fastener spacing (in.): \_\_\_\_\_

Structural Framing Members:

☐ Wood joists

☐ Wood beams

☐ Glulam beams

☐ Cross laminated timber

☐ Other: \_\_\_\_\_

Structural Framing Member Spacing (in.): \_\_\_\_\_

Field: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Corner: \_\_\_\_\_

## Roof Edge Flashing, Coping, and Counter Flashing

Yes ☐ N/A ☐

☐ All flashing is designed in accordance with ANSI/SPRI/FM 4435/ES-1 for the ASCE 7 design wind pressures as described in section 3.1.1.3 of the *FORTIFIED Multifamily– 2025 Wind Standard*.

### Wood Nailers

Yes ☐ N/A ☐

☐ Wood nailers comply with the guidance found in section 2.2.2 of the FM Data Sheet 1-49.

Wood Nailer:

Wood Species: \_\_\_\_\_

Width: \_\_\_\_\_

Thickness(in): \_\_\_\_\_

Wood Nailer Securement:

Nail/Bolt Size: \_\_\_\_\_

Corrosion Resistance:

☐ Hot-dipped galvanized steel

☐ Stainless steel

☐ Other: \_\_\_\_\_

☐ Wood nailers have been secured with two rows of staggered fasteners.

## Gutters Systems

Yes ☐ N/A ☐

Select the option which best describes the gutter system.

☐ ANSI-SPRI GD-1 (2010) with the adjustments described in section 3.1.1.3 of the *FORTIFIED Multifamily– 2025 Wind Standard*.

☐ ANSI-SPRI GT-1 (2016) with the adjustments described in section 3.1.1.3 of the *FORTIFIED Multifamily– 2025 Wind Standard*.

## Skylights

Yes ☐ N/A ☐

Check the box beside each requirement to indicate that the skylights are in accordance with the *FORTIFIED Commercial– 2025 Wind standard*.

☐ Skylights and their attachments are designed and detailed for the ASCE 7 wind loads and provide an uplift resistance as defined in section 3.1.1.3.1.



Skylights must be tested and approved at a minimum to (check one that applies):

- ☐ AAMA/WDMA/CSA 101/ CSA 101/ A440, ASTM E330
- ☐ The Florida Building Code Testing Application Standard TAS 202

☐ Installation meets the air and water infiltration requirements of ASTM E330 and ASTM E331.

☐ The curb is designed to meet the minimum required uplift requirements with additional factor of safety as defined in section 3.1.1.3.

#### Hurricane-Prone Regions Only:

Skylights shall conform to one of the following:

- ☐ ASTM E1886 cyclic pressure test requirements and ASTM E1996 large missile impact rated "C" or "D"
- ☐ FM Approved per ANSI FM 4431 and FM 4350 with large missile impact rating.
- ☐ Miami-Dade County Approved (TAS 201 and TAS203), with large missile impact rating.

### Roof-Mounted Structures and Equipment (RME) Yes ☐ N/A ☐

Check the box beside each requirement to indicate that the RME are in accordance with the FORTIFIED Commercial– 2025 Wind standard.

- ☐ Ballasted systems are NOT used.
- ☐ All RME and their attachments have been designed with a minimum factor of safety as defined in section 3.1.1.3 of the FORTIFIED Commercial– 2025 Wind standard.

All RME and their attachments are in accordance with one of the following:

- ☐ ASCE 7-10 Section 29.5.1 (h≤60ft)
- ☐ ASCE 7-16 Section 29.4

### Photovoltaic Systems Yes ☐ N/A ☐

Photovoltaic (PV) systems and their attachments are designed with a minimum factor of safety outlined in section 3.1.1.3 of the FORTIFIED Commercial– 2025 Wind standard and in accordance with (select one):

- ☐ ASCE 7-16
- ☐ ASCE 7-22
- ☐ SEAOC PV2
- ☐ Model-scale wind tunnel study that meets the requirements of ASCE 49-12 (documentation must be submitted)

### Lightning Protection Yes ☐ N/A ☐

Check the box beside each requirement to indicate that the lightning protection system is in accordance with the *FORTIFIED Multifamily– 2025 Wind Standard*.

- ☐ The system is designed and installed in accordance with FEMA– Rooftop Attached Lightning Protection Systems in High-Wind Regions.
- ☐ Looped conductor connections were used in lieu of pronged connectors.
- ☐ Bolted splice connectors were used in lieu of pronged connectors.

### Low-Sloped (≤10°) Roof-Mounted Safety Rails Yes ☐ N/A ☐

Check the box beside each requirement to indicate that the Low-Sloped (≤10°) Roof-Mounted Safety Rails are in accordance with the *FORTIFIED Multifamily– 2025 Wind Standard*.

- ☐ Rails and their connections were designed in accordance with IBC 2015/2018 and ASCE 7-10/16.
- ☐ A calculation set by the engineer of record must be submitted with this document including all wind design parameters, member selection and design, connection details and capacity verification, and the supporting structural member calculations.

### Low-Sloped (≤10°) Roof Equipment Screens Yes ☐ N/A ☐

Check the box beside each requirement to indicate that the Low-Sloped (≤10°) Roof Equipment Screens are in accordance with the *FORTIFIED Multifamily– 2025 Wind Standard*.

- ☐ Roof equipment screens and their connections were designed to the parameters of section 3.1.1.3.1 of the *FORTIFIED Multifamily– 2025 Wind Standard*.

## Re-Roofing Photo Documentation

Additional photo documentation may be requested by FORTIFIED Multifamily Evaluator.

Photo documentation is a supplementary tool that helps the FORTIFIED Multifamily Evaluator inspect the roofing job more efficiently. Clear and focused photos help ensure all items are captured and could reduce the time of the overall inspection process.

### Existing Conditions Documentation

#### Overview

- ☐ Photo(s) - exposed structural deck with removed cover (single ply, built-up, etc.) in the corner, perimeter, and field conditions<sup>15</sup>

#### Damaged or Deteriorated Structural Deck and Framing Members

YES ☐ N/A ☐

- ☐ Photo(s) - damaged or deteriorated existing structural deck
- ☐ Photo(s) - photos of the structural framing members under the damaged or deteriorated existing structural deck (damaged deck removed)

<sup>15</sup>A photo is required in all areas of the roof; for example, if the roof has four corner conditions, four corner conditions are captured.



## Re-Roofing

### Re-Roofing Materials

☐ Photo(s) - all roof covering material labels including but not limited to coverboard, insulation, membranes, and fasteners.

### Structural Deck Fastening YES ☐ N/A ☐

Use a measuring tape to show spacing of existing fasteners and additional fasteners added to meet the minimum spacing requirement specified in the *FORTIFIED Multifamily– 2025 Wind Standard*.

- ☐ Photos (Minimum of 2 locations) - structural deck in the corner area
- ☐ Photos (Minimum of 2 locations) - structural deck in the perimeter area
- ☐ Photos (Minimum of 2 locations) - structural deck in the field area
- ☐ Photos (Minimum of 2 locations) - structural deck at the roof ridge or top of a mono-sloped roof

### Cover Installation YES ☐ N/A ☐

- ☐ Photos (minimum of 2 locations) - fastening or adhesion pattern in the corner area
- ☐ Photos (minimum of 2 locations) - fastening or adhesion pattern in the perimeter area
- ☐ Photos (minimum of 2 locations) - fastening or adhesion pattern in the field area
- ☐ Photo(s) - any additional photos documenting the proper installation of the roof cover.

## FORTIFIED SILVER

All FORTIFIED Roof requirements must be satisfied.

For this section, check the box beside each requirement or respond to the item to indicate that items are in accordance with the *FORTIFIED Multifamily– 2025 Wind Standard*.

### Opening Protection

#### Wall Design Pressures

Provide select and fill out the appropriate wind pressures.

☐ ASCE 7-05 and 7-10 design pressures (psf) using minimum terrain Exposure C or D and effective wind area of 10 sq ft

Please select the method used to obtain base pressures:

- ☐ ASD ☐ LRFD

Specify the wind pressures (psf):

Zone 4: \_\_\_\_\_

Zone 5: \_\_\_\_\_

☐ ASCE 7-16 design pressures (psf) using minimum terrain Exposure C or D and effective wind area of 10 sq ft

Please select the method used to obtain base pressures:

- ☐ ASD ☐ LRFD

Specify the wind pressures (psf):

Zone 4: \_\_\_\_\_

Zone 5: \_\_\_\_\_

### Windows and Glazed Openings

Yes ☐ N/A ☐

Select the type(s) of window system:

- ☐ Single-pane
- ☐ Double-pane
- ☐ Laminated glass
- ☐ Impact-rated laminated window and frame system
- ☐ Triple-pane impact-rated laminated window and frame system

Check the box beside each requirement or respond to the item to indicate that the windows are in accordance with the *FORTIFIED Multifamily– 2025 Wind Standard*.

- ☐ Windows and glazed openings are designed for the load combinations described in section 3.2.1.1 of the *FORTIFIED Multifamily– 2025 Wind Standard*.

**Hurricane-Prone Regions:** Fill out the following if you are located in a hurricane-prone region. If you are not located in a hurricane-prone region, continue to high-wind-prone region.

- ☐ Labels verifying the impact rating and pressure capacity are visible on the installed windows.

Windows, glazed openings, curtain walls meet (select one of the following):

- ☐ AAMA/WDMA/CSA 101/ CSA 101/ A440, ASTM E330
- ☐ The Florida Building Code Testing Application Standard TAS 202

Impact Protection:

Within 30 Feet of Grade: Windows, glazed openings, curtain walls meet (select one of the following):

- ☐ Large Missile Level D (9 lb 2x4 impacting end on at 50 ft/sec) as defined in ASTM E1996 and ASTM E1886 and AAMA 506
- ☐ The Florida Building Code Testing Application Standards TAS 201 and TAS 203

30 Feet or Higher: Windows, glazed openings, curtain walls meet:

- ☐ ASTM E1886 cyclic pressure and Small Missile Level A as defined in ASTM E1996, ASTM E1886 and AAMA 506.

### Large Commercial Doors

Yes ☐ N/A ☐

☐ All large commercial doors including roll-up, overhead, and sectional (garage doors) are designed for the load combinations defined in section 3.1.1.3.1 of the *FORTIFIED Commercial– 2025 Wind standard*.

Large commercial doors meet (select one of the following):

- ☐ AAMA/WDMA/CSA 101/ CSA 101/ A440, ASTM E330
- ☐ ANSIDASMA 108
- ☐ The Florida Building Code Testing Application Standard TAS 202



#### Impact Protection:

Large commercial doors meet (select one of the following):

- ☐ Large Missile D (9 lb 2x4 impacting end on at 50 ft/sec) as defined in ASTM E1996 and ASTM E1886 and AAMA 506
- ☐ ANSI/DASMA 115 Standard Method for Testing Sectional Doors, Rolling Doors, and Flexible Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure
- ☐ The Florida Building Code TAS 201 (Impact Test Procedures), 202 (Criteria for Testing Impact & Nonimpact Resistant Building Envelope Components Using Uniform Static Air Pressure), and 203 (Criteria for Testing Products Subject to Cyclic Wind Pressure Loading)

#### Exterior Personnel Doors

Yes ☐ N/A ☐

- ☐ All personnel doors are designed for the load combinations described in section 3.2.1.1 of the *FORTIFIED Multifamily– 2025 Wind Standard*.

**Hurricane-Prone Regions:** Fill out the following if you are located in a hurricane-prone region.

Exterior personnel doors meet (select one of the following):

- ☐ AAMA/WDMA/CSA 101/ CSA 101/ A440, ASTM E330
- ☐ The Florida Building Code Testing Application Standard TAS 202

### Exterior Walls and Wall Protection

- ☐ Wall systems are designed for the load combinations described in section 3.1.1.3.1 of the *FORTIFIED Multifamily– 2025 Wind Standard*

**Hurricane-Prone Regions:** Fill out the following if you are located in a hurricane-prone region.

- ☐ Wall impact resistance meets the requirements of ASTM E1886 and ASTM E1996 for the impact of a 9-lb nominal 2x4 lumber missile impacting end-on at 34 mph (50ft/s) (large missile impact level D).

#### Wall Types

Select all that apply; for hurricane-prone regions, exterior walls must be impact rated (denoted as “IR” below).

- ☐ Reinforced concrete block (IR)
- ☐ Precast concrete/tilt up panels (IR)
- ☐ Cast-in-place concrete (IR)
- ☐ Brick veneer over wood or metal frame
- ☐ Brick with concrete block backing (IR)
- ☐ Metal walls

- ☐ Metal wall systems are designed and tested for resistance in accordance with ASTM E1592. Each assembly shall be tested for a load equal to 1.5 times the design pressure.

- ☐ Insulated concrete form

- ☐ Sandwich panel wall systems

- ☐ Meets the International Code Council (ICC) Evaluation Service – Acceptance Criteria for Sandwich Panels AC04. Any adhesives used shall comply with ASTM D2559 or the ICC Acceptance Criteria for Sandwich Panel Adhesives AC05.

- ☐ Exterior insulating finishing systems (EIFS) <sup>16</sup>

- ☐ For all new construction applications, EIFS systems shall be installed by a qualified professional with an active Association of the Wall and Ceiling Industry (AWCI)- EIFS Mechanics certification.

- ☐ **Hurricane-Prone Regions Only:** EIFS Installed on a metal or wood frame are not permitted unless they are a Miami-Dade County Approved system.

- ☐ Solid insulated concrete forms or  $\frac{3}{4}$ -in. plywood or  $\geq \frac{7}{16}$ -in. wood structural panel sheathing with one of the following finishes:

- ☐  $\frac{1}{2}$ -in. stucco (IR)
- ☐  $\frac{1}{2}$ -in. thick wood (IR)
- ☐  $\frac{1}{2}$ -in. fiber-cement-based planking (IR)

- ☐  $\geq \frac{5}{8}$ -in.-thick wood structural panel sheathing with vinyl or aluminum siding (IR)

- ☐ Other walls

Describe “other” wall system: \_\_\_\_\_

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- ☐ Wall systems are designed for the load combinations described in section 3.1.1.3.1 of the *FORTIFIED Multifamily– 2025 Wind Standard*

**Hurricane-Prone Regions:** Fill out the following if you are located in a hurricane-prone region.

- ☐ Wall impact resistance meets the requirements of ASTM E1886 and ASTM E1996 for the impact of a 9-lb nominal 2x4 lumber missile impacting end on at 34 mph (50ft/s) (large missile impact level D).

#### Parapets

Yes ☐ N/A ☐

Is the parapet taller than 3 ft from base connection to free end?

☐ Yes ☐ No

**If yes,** is structural bracing (internal or external) provided and does it meet the minimum ASCE 7 standards?

☐ Yes ☐ No

<sup>16</sup>For all existing EIFS that meet these criteria, a qualified professional with an active AWCIEIFS Inspectors certification shall inspect the EIFS and provide supporting documentation regarding its condition. EIFS that are not visibly damaged, deteriorated, chipped, or cracked, that have structurally sound horizontal and vertical seals including around windows and penetrations, are free of leaks, and have at least 5 years of useful life remaining are eligible for a FORTIFIED Silver designation. EIFS that do not meet these conditions and/or do not have at least 5 years of useful life remaining will require repairs or replacement to be eligible for a FORTIFIED Silver designation.



## Chimneys

Yes ☐ N/A ☐

☐ Chimneys have adequate load path members and connections capable of resisting the loads and load combinations specified in ASCE 7 as outlined in section 3.1.1.3.1.

## Electrical/ Mechanical Systems

### Flood Protection

All electrical and mechanical equipment and connections necessary to operate critical systems are located above the 500-year flood level if known, or at least 3 ft above the known base flood elevation (100-year flood level) or advisory flood elevation.

☐ Yes ☐ N/A

If the building is not located in a 500-year and 100-year flood zone, all electrical and mechanical equipment and connections necessary to operate critical systems are not exposed to flood waters.

☐ Yes ☐ N/A

### Electrical Connections for Backup Power

☐ Yes ☐ N/A

#### ***Recommended—not required***

☐ Transfer switch or docking station (sometimes referred to as a storm switch), that support connection of a generator capable of powering, at a minimum, the critical systems needed to provide continuity of operation.

All electrical connections for backup power are located above the 500-year flood level if known, or at least 3 ft above the known base flood elevation (100-year flood level) or advisory flood elevation.

☐ Yes ☐ N/A

## FORTIFIED Gold

All FORTIFIED Silver requirements must be satisfied.

For this section, check the box beside each requirement or respond to the item to indicate that items are in accordance with the *FORTIFIED Multifamily— 2025 Wind Standard*.

## Continuous Load Path

☐ A continuous and adequate load path from the roof to the foundation of the building exist. The building has positive connections from the roof to foundation as a means to transmit wind uplift and lateral loads safely to the ground. This includes providing roof-to-wall connection hardware (e.g., hurricane straps for wood) with the required roof uplift resistance as determined by the designer or specified in the prescriptive method being used.

☐ Inter-story connections in multi-story structures have a continuous load path through the wall to the foundation.

## Attached and Accessory Structures

Yes ☐ N/A ☐

☐ Canopies, carports, porte cocheres or any other vehicle-type drive-through structures will have adequate load path members and connections to resist the loads and load combinations specified in ASCE 7 as described in section 3.1.1.3.1.

## Backup Power

### ***Recommended—not required***

☐ Backup power shall be available and capable of powering critical electrical and mechanical systems that maintain vital business operations. All equipment shall be installed in accordance with the requirements of Electrical Systems (Flood) described in section 3.2.3.