

## **New Documentation** Requirements

### **Technical Bulletin** FH 2018-01

#### First Release:

March 20, 2018

### Prepared by:

Fred Malik, Vice President, **FORTIFIED Building Programs** 

#### **Applicable Standards:**

FORTIFIED Home™-Hurricane

### **Applicable Designation Level:**







### **Abstract**

Metals exposed to salt and moisture in the air in coastal areas are highly susceptible to accelerated corrosion. The intent of this bulletin is to highlight the requirement for metal structural connections and materials fasteners used to retrofit or construct FORTIFIED buildings less than 3,000 ft from saltwater to be suitably protected from corrosion. The corrosion resistance outlined in the FORTIFIED standards is not new; however, there are new documentation requirements.

### Introduction

The minimum fastener and connector corrosion-protection retrofit requirements for FORTIFIED Home are outlined in Appendix D (page 132) of the FORTIFIED Home-Hurricane standards at fortifiedhome.org/wpcontent/uploads/2019/05/FORTIFIED-Home-Hurricane-Standards-2019.pdf.

### **Appendix D: FORTIFIED Corrosion Protection Requirements**

FORTIFIED Fastener and Connector Corrosion Protection Requirements				
Fasteners/Connector	Structures within 300 ft of saltwater	Structures more than 300 ft but less than 1,000 ft from saltwater <sup>1</sup>	Structures more than 1,000 ft but less than 3,000 ft from saltwater	Structures more than 3,000 ft from saltwater
Roofing nails for shingles	Stainless steel	Stainless steel	Hot-dip galvanized <sup>4</sup>	Corrosion resistant <sup>5</sup>
Concrete and clay roof tile fasteners	Stainless steel	Stainless steel	Hot-dip galvanized4	Corrosion resistant <sup>5</sup>
Metal roof clips and fasteners (exposed)	Stainless steel	Stainless steel	Stainless steel	Corrosion resistant <sup>5</sup>
Fasteners used for attachment of underlayment to roof deck	Hot-dip galvanized <sup>4</sup>	Hot-dip galvanized4	Hot-dip galvanized <sup>4</sup>	Corrosion resistant <sup>5</sup>
Aluminum soffits	Not allowed	Not allowed	Allowed	Allowed
Soffit and roof vent fasteners	Stainless steel	Stainless steel	Stainless steel	Corrosion resistant <sup>5</sup>
Metal framing connectors, fasteners, anchors, and hangers in exposed areas <sup>2</sup>	Stainless steel	Stainless steel	Stainless steel	Stainless stee or G185 galvanized
Metal framing connectors, fasteners, anchors, and hangers in vented enclosed areas <sup>3</sup>	Stainless steel	Stainless steel or G185 galvanized coating	Stainless steel or G185 galvanized coating	Corrosion resistant <sup>5</sup>



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<sup>1</sup>Buildings on open, elevated foundations within 1,000 ft of saltwater shall follow the requirements of structures within 300 ft of saltwater.

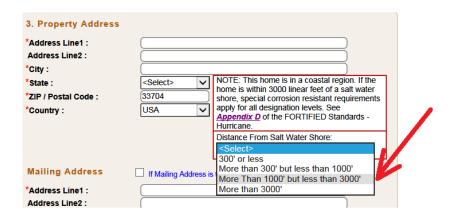
<sup>2</sup>Examples of exposed areas include areas that are under roof overhangs, decks and covered walkways or in any location that is openly or partially exposed to saltwater air.

<sup>3</sup>Examples of vented enclosed areas include attics with vents. <sup>4</sup>Hot-dip galvanized shall meet the requirements of ASTM A153, Class D for nails and screws.

<sup>5</sup>Corrosion-resistant nails and screws shall meet the requirements of ASTM A 641, Class 1, or an equal corrosion resistance by coating, galvanization, stainless steel, or other suitable corrosion-resistant material. Corrosion-resistant sheet metal connectors, anchors, and hangars shall meet the requirements of ASTM A653, G90.

# FORTIFIED Home Evaluators Only: New Applications & Evaluation Form Input

When a new residential application is made, a notification will appear if the address is within a coastal zip code. You will be asked to select one of four approximate distances from a shoreline.



For reference, there is a direct weblink to Appendix D within the note.



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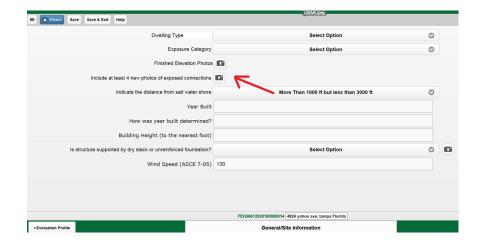






### **FORTIFIED Home Evaluators Only: Documentation Requirements**

If the distance from a saltwater shoreline is MORE than 3,000 ft, no additional documentation is required. If the distance is LESS than 3,000 ft, documentation of the corrosion-resistant connections and fasteners used on the home is now required. This information will be entered on the first page of the evaluation.



Photographs of labels, copies of invoices, and/or field delivery tickets indicating corrosion-resistance level for the connections and fasteners used are required. Photographs of the connections and fasteners should also be provided in this location.



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### **Examples**

