

APPENDIX A

FORTIFIED for Existing Homes™

A.1 Program Overview

The IBHS FEH program provides prescriptive solutions for retrofitting single-family homes in hurricane-prone regions. The prescriptive solutions proposed by FEH were developed in part from FEMA best practice and guidance publications and the FEMA MAT findings, in much the same way this Guide was written. The FEH program has three designations, Bronze, Silver, and Gold, and prescribes evaluation protocols and encourages insurance premium reductions.

The FEH program was developed by focusing on the observed damages and losses caused by different hurricane events. The designation levels follow a prioritized strategy for retrofitting homes, which is outlined in detail in the FEH manuals on each level.

IBHS developed FEH in consultation with the insurance industry to ensure that the homes achieving a FORTIFIED designation also receive a standardized insurance premium reduction. Greater insurance premium reductions are awarded at the higher designation levels.

A.2 Inspections and Evaluations

One notable component of the FEH program is the standardized inspection process each home must undergo prior to retrofitting. To determine whether the home is suitable for a wind retrofit project, an FEH accredited evaluator performs an evaluation of the home in accordance with the FEH inspection criteria.

A.3 Summary of the Bronze Level of Protection

The Bronze designation is the lowest hurricane-resistance designation a home can achieve. There are two options to consider when retrofitting a home to achieve the Bronze FEH designation. One option involves replacing the roof covering, while the other option does not.

- When the roof covering will not be replaced, the retrofits for a Bronze designation are required to:
 - ▶ Strengthen the anchorage of the gable end walls
 - ▶ Secure soffits and protect roof vents
 - ▶ Secure roof sheathing by using SPF adhesive on the underside of the roof sheathing

- When the roof covering will be replaced, the retrofits for a Bronze designation are required to:
 - ▶ Secure roof sheathing through the addition of fasteners in accordance with a designated schedule
 - ▶ Install a secondary underlayment
 - ▶ Strengthen the anchorage of gable end walls
 - ▶ Secure soffits and protect roof vents
 - ▶ Install a new roof covering

A.4 Summary of the Silver Level of Protection

The Silver designation is the second level in the FEH designations. To achieve the Silver designation, the home must meet the requirements of the Bronze designation in addition to the retrofits specific to the Silver designation.

- Retrofits required to achieve a Silver designation include:
 - ▶ Protect building openings (windows, entry doors, and garage doors) from windborne debris
 - ▶ Further strengthen gable ends
 - ▶ Strengthen the anchorage of attached structures such as porches and carports

The Silver designation provides a higher level of protection against wind damage than the Bronze designation, and consequently has a higher project cost. However, the Silver designation should provide a greater reduction in insurance premiums than a Bronze designation.

A.5 Summary of the Gold Level of Protection

The Gold designation is the highest level that can be achieved in the FEH program. To achieve the Gold designation, homes must first meet both the Bronze and Silver requirements as well as the additional retrofit requirements specific to the Gold designation.

- Retrofits required to achieve a Gold designation include:
 - ▶ Develop a continuous load path
 - ▶ Protect building openings from windborne debris and wind pressure

A Gold designation requires a more invasive inspection and has a greater project cost. However, the Gold designation also provides the most significant reduction in insurance premiums and highest level of protection of all designations within the FEH program.

Prescriptive solutions to develop a continuous load path for simple building shapes and types of construction are provided in the FEH manual to meet the continuous load path requirement of the Gold designation. FEH does not require that a professional engineer be consulted to achieve the Gold designation if a prescriptive solution can be used.