

AIUA RETROFIT CERTIFICATION FORM

To be considered for Fortified Wind Resistive Retrofitted Construction discounts, the home must include features that address protection of the building envelope, wind and/or hail resistant roof coverings and underlayments. All entry doors, windows, skylights, patio doors and garage doors must be tested and certified to meet impact resistance requirements.

Inspection and certification by a licensed, profession engineer attesting that the home meets ALL of the following is required before any discount can be given. Any major renovations or additions must also be inspected and certified by a licensed, professional engineer.

- a. The design wind speed shall be equal to the ASCE 7-98 through -05 basic wind speed (or locally adopted basic wind speed if higher) plus 20-mph
- b. For buildings in areas where the design wind speed is 120-mph or greater as defined in 1 above, the roof sheathing shall resist the impact of a 9-pound 2x4 striking end-on at 23 mph without penetration.
- c. Roof decks shall be sheathed with panels rated for maximum deflection between supports, under a 100 pound per square foot uniform load, of the span between supports divided by 250 (span/250).
- d. Roof sheathing attachment shall be designed to provide panel uplift resistance with a minimum factor of safety of 2.0 relative to the design uplift pressure from ASCE 7-05 assuming terrain Exposure C.
- e. Component and cladding loads shall be determined for the design wind speed defined in 1 above assuming terrain Exposure C, regardless of the actual local exposure.
- f. Opening protection rated as meeting ASTM E1886 and E1996 or higher test and performance criteria shall be required for all building openings in all geographic areas with Fortified design wind speeds of 120-mph or higher as defined in 1 above. This can be a rated door or window or a rated protection system.
- g. Openings required to be protected as defined in VII above and located at upper levels without access from a porch or balcony shall be permanently installed and, at a minimum, operable from inside the house.
- h. The Main Wind Force-Resisting Systems (MWFRS) design loads shall be allowed to be determined for the actual terrain exposure of the building site as defined by ASCE 7 or the IRC.
- i. Roof coverings and their attachment shall be rated for the Fortified design wind speed as defined in 1 above and installed according to the manufacturer's instructions except that roof covering rated for 150 mph are acceptable when the Fortified design wind speed exceeds 150 mph.
- j. Soffits shall be capable of resisting the component and cladding design wind pressure for the adjacent wall areas and installed according to the manufacturer's instructions for that pressure rating.
- k. In areas where the Fortified design wind speed is 120-mph or higher as defined in 1 above, the roof cover underlayment shall be a fully adhered cap sheet, unless this is prohibited by the code in the area, and shall be installed according to the manufacturer's instructions.

I hereby attest and certify that the dwelling situated at _____

meets or exceeds Alabama Insurance Underwriting Association "Fortified Wind Resistive Retrofitted Construction" requirements as stated in items a through k listed above.

Name of Licensed Professional Engineer

Signature of Licensed Professional Engineer

Seal of Licensed Professional Engineer