

# HURRICANE - GABLE END BRACING ENGINEERING

SILVER Designation Requirement

TO BE COMPLETED BY PROFESSIONAL ENGINEER. PLEASE COMPLETE ALL SECTIONS BELOW. IF THE SECTION DOES NOT APPLY, ENTER N/A FOR NOT APPLICABLE.

## GENERAL PROPERTY INFORMATION

FORTIFIED ID:

Homeowner's name: \_\_\_\_\_  
Property address: \_\_\_\_\_ City: \_\_\_\_\_  
State: \_\_\_\_\_ ZIP: \_\_\_\_\_ County: \_\_\_\_\_  
Roof installed on: \_\_\_\_\_

## GABLE END BRACING DOCUMENTATION

To ensure that gable end walls are adequately braced, details/specifications must first be incorporated in the plans, and then installation in the field must be verified.

To satisfy the FORTIFIED Home™ gable end bracing requirement:

- a. Engineering documentation requirements must be satisfied. This document, once properly completed and signed by a Professional Engineer certifying compliance with all requirements, satisfies the engineering documentation requirements.
- a. Contractor documentation of gable end bracing installation must also be satisfied. The FORTIFIED Home™ Compliance Form for Gable End Bracing INSTALLATION, once properly completed and signed by a licensed building contractor, professional engineer or architect, or building code official certifying installation in accordance with engineering plans for all requirements, will satisfy the installation documentation requirements for gable end bracing.

PLEASE COMPLETE ALL SECTIONS. FILL IN THE BLANKS WHERE INDICATED. IF THE SECTION DOES NOT APPLY, ENTER NA FOR NOT APPLICABLE.

Design wind speed for the location (mph) \_\_\_\_\_

Design wind speed from (check appropriate box) :

- ASCE 7-05 (current wind speed maps for 2006 and 2009 IRC) OR  
 ASCE 7-10 (recently adopted wind speed maps-dependent on Authority Having Jurisdiction)

Wind Exposure Category (check one):

- B  C  D (only with ASCE 7-10)

## GABLE END ENGINEERING DETAIL REQUIREMENTS

- Check here if gable end walls are wood or light gage steel and are balloon framed. Balloon framed walls are continuous from the floor/foundation to the roof deck.

Balloon framed gable end walls and connections to the floor/foundation and roof/ceiling diaphragms are designed to resist appropriate positive and negative lateral wind loads and wind uplift  Yes  No

Sheathing and/or outlookers are attached to the top of the gable end for appropriate wind loads  Yes  No

Describe the typical sheathing/outlooker connection:

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

Examples of typical connection description: Each gable outlooker attached to wall below with XX metal connector; sheathing attached directly to top of wall with 8d ring shank nails at Y" on center

- Check here if gable end walls are constructed using reinforced masonry or reinforced concrete and are continuous from the foundation to the roof deck.

Continuous reinforced masonry/concrete gable end walls and connections to the floor/foundation and roof/ceiling diaphragms are designed to resist appropriate positive and negative lateral wind loads and wind uplift  Yes  No

Sheathing and/or outlookers are attached to the top of the gable end for appropriate wind loads  Yes  No

Describe the typical sheathing/outlooker connection:

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

Examples of typical connection description: Each gable outlooker attached to wall below with an embedded XX metal connector; sheathing attached directly to double top plate with 8d ring shank nails at Y" on center

- Check here if gable ends are wood or light gage steel and are designed as platform framed gable ends. Platform framed gable ends are NOT continuous from the floor/foundation to the roof deck; a triangular gable end wall sits on top of a ceiling height wall below.

Top of gable is braced for out of plane wind loads from both positive and negative pressure  Yes  No

Roof sheathing and/or outlooker connections to the top of the gable end are designed for appropriate wind loads  Yes  No

Describe the typical sheathing/outlooker connection:

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

Example of typical connection description: Each gable outlooker attached to framing below with XX connector; sheathing attached directly to gable framing with 8d ring shank nails at Y" on center

Bottom of gable is braced for out of plane wind loads from both positive and negative pressure  Yes  No

Bracing/ tension connection is specified to hold the bottom of the gable/ top of the wall in place under out of plane wind loads  Yes  No

Describe the typical brace and brace spacing:

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

Example of typical brace and brace spacing description: 2x4xX' lateral braces at Y" on center along gable length

Describe the typical tension connection to resist negative pressure (suction) at the gable bottom/ top of supporting wall below:

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

Example of typical tension connection description: a GG gauge metal strap bent in an "L" shape attached to a 2x4 horizontal lateral brace (inside the building) and to the vertical endwall studs (on the exterior) at Y" on center.

Bottom of gable above is adequately connected to wall below for uplift and shear  Yes  No

Describe the typical connection of gable above to the wall below:

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

Example of typical connection description: X metal connector at Y" on center

**CERTIFICATION**

I hereby certify that I am a Licensed Professional Engineer in the State of \_\_\_\_\_.

I verify that, to the best of my knowledge, all applicable engineering requirements for gable end bracing listed above have been incorporated in the design details of the home located at:

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

Furthermore, I understand that any person who makes a false statement or misrepresentation, and any other person knowingly, with an intent to injure, defraud, or deceive, who assists, abets, solicits, or conspires with such person to make a false statement or misrepresentation may be subject to both criminal and/or civil penalties. By completion of this Affidavit, the undersigned does not make a health or safety certification.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Company: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Address: \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ ZIP \_\_\_\_\_  
License or Registration number: \_\_\_\_\_

Affix seal: