DEPARTMENT OF PUBLIC WORKS – BUILDING DIVISION

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BLD-PEM-001

PROTECTION OF OPENINGS – PLAN REQUIREMENTS

The following outlines the procedures to be used in Residential Building Permit Applications.

- 1. Where protection of openings is required (i.e., the site wind speed has been determined to be 130 mph or greater), the County Residential Building Code 5B Section R301.2.1.2 requires that either a) glazed opening protection, b) wood structural panels, or c) a safe room be provided.
- 2. The cover sheet of the plans shall provide the following information:
 - a. Site wind speed based on the ASCE 7-16 as determined by the ASCE 7 Hazard tool.
 - b. How the requirement for protection of openings will be satisfied.
- 3. If a safe room is used to satisfy this Section, then a Structural Engineer's details and calculations shall be submitted for review.
- 4. If impact glazing is used to satisfy this Section, then the following note shall be included on the plans.

*** PROTECTION OF OPENINGS VIA R301.2.1.2 ***

Per Chapter 5B RESIDENTIAL BUILDING CODE Section R301.2.1.2, protection of openings prior to a hurricane event is a life-safety requirement of the County of Hawaii.

It is understood that the Design Professional of Record, Contractor and/or Home Owner Builder, comply with the provisions of this Section. Failure to comply may result in a significant threat to life-safety.

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By this note on the plans, the Architect or Structural Engineer of Record, Contractor or Owner-Builder, and Homeowner acknowledges the Section R301.2.1.2 requirements and indicates their decision to protect glazed openings from windborne debris by using glazing that meet the requirements of the Large Missile Test of ASTM E1996 and ASTM E1886 as modified in Section 301.2.1.2.1.

5. If wood structural panels are to be used to satisfy this Section, then the following note shall be included on the plans. (For convenience, a fastener type and spacing was selected. Alternatively, a fastener type and spacing from the County Residential Building Code 5B Table R301.2.1.2 may be substituted by the homeowner.)

*** PROTECTION OF OPENINGS VIA R301.2.1.2 EXCEPTION 1 ***

Per Chapter 5B RESIDENTIAL BUILDING CODE Section R301.2.1.2, protection of openings prior to a hurricane event is a life-safety requirement of the County of Hawaii.

It is understood that the homeowner will comply with the provisions of this Section. Failure to comply may result in a significant threat to life-safety.

By this note on the plans, the Contractor and Homeowner or Owner-Builder acknowledge the Section R301.2.1.2 requirements and indicates his decision to install wood structural panels with a minimum thickness of 7/16 inch to satisfy the protection of openings requirement. Panels shall be precut so that they can be quickly installed by screwing to the perimeter structural framing containing the glazing. Panels shall be predrilled to facilitate the installation of No. 8 corrosion-resistant wood screws (with 2-inch embedment length) at 8 inch maximum spacing (or per County Residential Building Code 5B Table R301.2.1.2). Screws shall be located a minimum of 1 inch from the edge of the panel and along two parallel panel edges as a minimum. The maximum panel span between these two parallel panel edges is limited to 8 feet.