

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION FR-33

August 1, 2004
Revised January 10, 2005

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation 3 years after the effective date.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Rastra Wall Panel System manufactured by

Rastra Corporation
7621 E. Gray Road, Suite A1
Scottsdale, AZ 85260
866-2RASTRA

will be acceptable as an alternative residential construction method in designated catastrophe areas along the Texas Gulf Coast when constructed in accordance with this product evaluation.

The Rastra wall panel system consists of hollow concrete filled Thastyron forms. The Rastra forms may be stacked horizontally or vertically and are available in standard thickness of 8.5, 10, 12 and 14 inches and standard widths of 7.5, 15, and 30 inches. Standard lengths are 7.5, 8 and 10 feet. The hollow cores are filled with concrete to form vertical and horizontal members. The horizontal and vertical members are reinforced with steel spaced 15" o.c. The form system remains in place after the concrete cures.

INSTALLATION INSTRUCTIONS

General Design Requirements:

A set of blueprints, sealed by a Texas licensed professional engineer, shall be submitted to the Texas Department of Insurance before the commencement of construction of a structure using the Rastra wall panel system. A WPI-2D, Building Design Compliance form, sealed by the Texas licensed professional engineer who designed the building, shall also be submitted with the design drawings.

Construction of the building system shall adhere to the requirements set forth in the blueprints. A set of sealed blueprints shall be available on the job site to the windstorm field inspector at all times.

The Rastra wall panel system can be built onto a standard slab-on-grade foundation or a foundation design specified on the sealed blueprints. If a standard slab-on-grade foundation is used, then Texas Department of Insurance windstorm field inspectors will inspect it for compliance with the applicable windstorm construction guidelines adopted by the Texas Department of Insurance. If the foundation design is specified on the sealed design drawings, then it will be inspected for compliance with the design drawings. If the foundation is not inspected by the Texas Department of Insurance, then it

must be certified by a Texas licensed professional engineer. The design drawings shall specify the connection of the wall system to the foundation.

The design for the roof framing shall be sealed by a Texas licensed professional engineer. The roof framing drawings shall be available on the job site at all times. The design drawings for the Rastra wall panel system shall specify the connection of the roof system to the wall system.

The attachment of the exterior wall coverings and roof coverings shall either be specified on the blueprints or shall be specified in a Texas Department of Insurance product evaluation report. If a Texas Department of Insurance product evaluation is used, the evaluation report shall have a method for fastening to the appropriate substrate.

Installation Requirements:

Inland II Zone: The building system shall be designed to resist the wind pressures of ASCE 7-02, 110 mph 3 second gust. The design drawings shall include the design wind pressure (in psf) used to design the building system.

Inland I Zone: The building system shall be designed to resist wind pressures of ASCE 7-02, 120 mph 3 second gust. The design drawings shall include the basic wind speed (in miles per hour) used to design the building system.

Seaward Zone: The building system shall be designed to resist wind pressures of ASCE 7-02, 130 mph 3 second gust. The design drawings shall include the basic wind speed (in miles per hour) used to design the building system.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC) and the International Building Code (IBC).