

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION MC-9

Effective November 1, 2004

*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.

CrossTimbers™ Composite Deck Boards and Guardrail Systems, manufactured by

Elk Composite Building Products, Inc.
15500 W. 108th Avenue
Lenexa, Kansas 66219
(913) 599-5300

will be acceptable for exterior, non-structural decking and guardrail applications in designated catastrophe zones along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

CrossTimbers™ Deck Boards

CrossTimbers™ wood-thermoplastic composite deck boards are intended to be used as flooring, guard rails, or non-structural trim components for exterior balconies, porches, decks, and other exterior walking surfaces under the 2000 International Building Code (IBC), and the 2000 International Residential Code (IRC). CrossTimbers™ deck boards are made from a manufactured wood plastic composite material that consists of at least 50% wood fibers by weight, with the remainder of the material being a thermoplastic polymer plastic. CrossTimbers™ deck boards that are designated as nominal 5/4 x 6 (actually 1.05 " x 5.42") will be manufactured by an extrusion process in accordance UL Follow-up Service File R21537. The CrossTimbers™ deck boards utilize an EZ-Build™ Deck Fastening System, which consists of (1) EZ-Build™ Fastening Clips and (2) 1 5/8" long, #7, Type 17 Point, Stainless Steel Screws (supplied by Elk).

CrossTimbers™ Guard Rail Systems

The Elk CrossTimbers™ guard rail is composed of a top rail, bottom rail, post, and baluster components manufactured out of the same composite material as the Elk CrossTimbers™ deck board with the exception of the posts, which have additional fiberglass. Elk CrossTimbers™ guard rail assembly configurations are shown in the manufacturer's installation instructions and shall utilize the fastener types, sizes and placement as stipulated in the installation instructions.

DESIGN LIMITATIONS

- ***The maximum wind uplift capacity of the CrossTimbers™ board fastening system is 75 psf. The maximum allowable joist spacing needed to achieve the 75 psf uplift capacity is 28 inches on-center.***
- CrossTimbers™ is used for exterior decks and balconies, guard rails, stair treads, and as flooring or non-structural trim components for exterior balconies, porches, decks, and other exterior walking surfaces. CrossTimbers™ lumber is not evaluated for structural use in interior framing application, such as truss components, or as joists, rafters, studs, beams, columns or posts.
- CrossTimbers™ deck board is fastened directly to floor joists. Floor joists must be designed by the engineer of record to sustain the applicable gravity loads and resist the appropriate wind uplift pressure.

Joist spacing shall be based on the applied live loads as determined from the following table:

Board Size (Nominal)	Live Loads using L/360			
	40 psf	100 psf	125 psf	200 psf
5/4 x 6	28"	20"	16"	12"

INSTALLATION INSTRUCTIONS

- The maximum CrossTimbers™ board span is for stair treads is 16 inches (spanning from joist-to-joist).
- CrossTimbers™ deck boards are gapped to permit adequate drainage in accordance with the manufacturer's instructions.
- CrossTimbers™ shall not be attached to any solid surface or watertight flooring system, such as sheathing, waterproof membranes, concrete, roof decks, or patios.

Note: The deck boards and guard rails shall be installed in accordance with the manufacturer's installation instructions and this product evaluation report. The manufacturer's installation instructions shall be on the job site during the installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC) and the International Building Code (IBC).