

TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION RC-376

Effective Date: May 1, 2013

*The following product has been evaluated to withstand the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **May 2017**.*

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.

SWD Quick-Shield 125 Spray Applied Foam Polyurethane Roof System manufactured by

SWD Urethane
222 S. Date Street
Mesa, AZ 85210
Telephone: (800) 828-1394

is acceptable 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

The SWD Quick-Shield 125 is a two-component, spray-applied, polyurethane foam plastic insulation. The insulation is produced in the field by combining Component A with resin Component B, resulting in insulation with a nominal density range of 2.5 to 3.0 pcf.

LIMITATIONS

Roof Slope: The wood roof deck shall have a minimum slope of $\frac{1}{4}$:12.

Application Conditions: The spray applied foam must be applied when the substrate and ambient temperature is at least 50 degrees Fahrenheit and when the wind speed does not exceed 15 mph. The insulation must not be installed when the substrate is wet, damp, or when dew, condensation, rain or freezing temperatures are expected immediately before, during or immediately after completion of the foam and coating application.

INSTALLATION INSTRUCTIONS

General: All International Residential Code (IRC) and the International Building Code (IBC) requirements must be satisfied and manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

Roof Framing: Roof framing members shall be in accordance with either the International Residential Code or the International Building Code. The wood framing members (rafters or trusses) shall be spaced a maximum of 24" o.c.

Roof Deck: The roof deck shall be solidly sheathed with minimum $\frac{19}{32}$ " thick plywood or 22 gauge Type B-WR G90 steel deck as noted in the assemblies below.

Installation Over an Existing Roof Covering: Installation of the SWD Quick-Shield system over an existing roof covering system is not within the scope of this evaluation report. The SWD Quick-Shield system may be installed over an existing wood or steel roof deck. The existing roof deck must be solidly sheathed. The minimum thickness and type of roof deck must be in accordance with the approved assemblies below. The existing roof covering shall be completely removed. Inspection of the existing roof deck shall be made before installation of the SWD Quick-Shield system. The existing roof deck shall be smooth, clean and free of loose particles, cracks, or projections. The installation of the SWD Quick-Shield system over an existing deck shall follow the instructions outlined below.

Installation:

- Verify that the roof deck has the minimum required slope.
- Verify that the roof does not have ponding water areas.
- The roof deck shall be smooth, clean and free of loose particles, cracks, or projections.

Assembly No. 1 – Wood Deck

Design Pressure Rating: -82.5 psf

Roof Deck: Minimum $\frac{19}{32}$ " thick plywood

Primer: SWD Quick-Shield 1000 or SWD Quick-Shield 2000 applied at a rate of $\frac{1}{2}$ gallon per square feet. The primer must be dried prior to the application of the foam system.

Polyurethane Foam Application: SWD Quick-Shield 125 is applied at a 1:1 ratio by volume of the A and B components. The insulation is spray-applied in one or more $\frac{1}{2}$ " thick to 2" thick passes to reach a minimum thickness of 1" on a wood substrate.

Finish Coat: SWD 1929F Acrylic Coating shall be applied to achieve a minimum dry thickness of 25 mils.

Assembly No. 2 – Steel Deck

Design Pressure Rating: -502.5 psf

Roof Deck: Minimum 22 Type B WR G90 steel deck

Primer: SWD Quick-Shield 1000 or SWD Quick-Shield 2000 applied at a rate of $\frac{1}{2}$ gallon per square feet. The primer must be dried prior to the application of the foam system.

Polyurethane Foam Application: SWD Quick-Shield 125 is applied at a 1:1 ratio by volume of the A and B components. The insulation is spray-applied in one or more $\frac{1}{2}$ " thick to 2" thick passes to reach a minimum thickness of $1\frac{1}{2}$ " on a steel substrate.

Finish Coat: SWD 1929F Acrylic Coating shall be applied to achieve a minimum dry thickness of 25 mils.

Note: 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).