

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION
RC-153

Effective December 1, 2011
Revised April 1, 2012

*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 **December 2015**.*

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.

PremiumCoat® Roofing and Waterproofing System manufactured by

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www.hydro-stop.com

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 PremiumCoat® System is a liquid applied roofing and waterproofing system.

LIMITATIONS and INSTALLATION

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

Application Conditions: Do not apply the PremiumCoat® System if the ambient temperature is expected to fall below 40 degrees F or if rain is expected before the application has time to cure.

Roof Framing: Roof framing members shall be in accordance with either the International Residential Code or the International Building Code.

Roof Deck Attachment: The roof deck shall be secured to the roof framing to resist the required wind uplift pressures.

Installation Over an Existing Roof Covering: Installation of the PremiumCoat® System over an existing roof covering is not within the scope of this evaluation report. The PremiumCoat® System may be installed over an existing wood roof deck. The existing roof deck must be solidly sheathed and correspond to the assemblies listed below. The existing roof covering shall be completely removed. Inspection of the existing roof deck shall be made before installation of the PremiumCoat® System. The condition of the existing roof deck shall be acceptable to receive the PremiumCoat® System before installation of the PremiumCoat® System can proceed.

PremiumCoat® System – General Installation:

- Verify that the roof deck has the minimum required slope.
- Verify that the roof does not have ponding water areas.
- The existing roof covering shall be completely removed.
- Inspection of existing roof decks shall be made before installation of the PremiumCoat® System.
- The roof deck shall be smooth, clean and free of loose particles, cracks, or projections.

Assembly No. 1 – Wood Deck

Design Pressure Rating: -138.5 psf

Roof Deck: Minimum $1\frac{5}{32}$ " plywood deck

Insulation: None.

Foundation Coat: Apply one coat of the FoundationCoat to the perimeter of the wood roof deck. Apply 12 inch wide PremiumCoat® fabric, laid into the wet FoundationCoat, over the wood roof deck perimeter. Apply a second coat of the FoundationCoat over the PremiumCoat® fabric. The FoundationCoat shall be applied at a total rate of 40 sq ft/gallon. The FoundationCoat shall be applied with brushes approved by Hydro-Stop, Inc. Rolling and spraying of the FoundationCoat is not permitted.

Premium Coat Fabric: Non-woven, 100% polyester fabric, 6" wide at plywood joints, 12" wide at perimeter, 40" wide fabric over the entire assembly.

Finish Coat: Apply two coats of the PremiumCoat FinishCoat at a combined total rate of 70 sq ft/gallon over the entire wood deck surface at a minimum application thickness of 10-11 mils per wet coat. Allow the FinishCoat to dry between coats. The total FinishCoat dry thickness shall be a minimum of 15 mils. The FinishCoat shall be applied with a roller approved by Hydro-Stop, Inc.

Assembly No. 2 – Concrete Decks

Design Pressure Rating: See Insulation Types below.

Roof Deck: Minimum 2,500 psi structural concrete or concrete plank.

Insulation:

- Atlas AC Foam-II adhered to the roof deck with 2 rows of $\frac{3}{4}$ " to 1" wide beads of Insta-Stick roofing adhesive spaced at 12" o.c.
(Design Pressure Rating -75 psf)
- Apache Pyrox adhered to the roof deck with 2 rows of $\frac{3}{4}$ " to 1" wide beads of Insta-Stick roofing adhesive spaced at 12" o.c.
(Design Pressure Rating -105 psf)
- Johns Manville E'NGRG'Y-2 adhered to the roof deck with 2 rows of $\frac{3}{4}$ " to 1" wide beads of Insta-Stick roofing adhesive spaced at 12" o.c.
(Design Pressure Rating -52.5 psf)

- Minimum 1.5" thick EPS adhered to the deck with 2 rows of $\frac{3}{4}$ " to 1" wide beads of Insta-Stick roofing adhesive spaced at 12" o.c. Followed by minimum $\frac{1}{4}$ " Dens-Deck adhered to the insulation with 2 rows of $\frac{3}{4}$ " to 1" wide beads of Insta-Stick roofing adhesive spaced at 12" o.c.
(Design Pressure Rating -120 psf)

Coverboard: (Optional except with EPS) minimum $\frac{1}{4}$ " Dens-Deck adhered to the insulation with 2 rows of $\frac{3}{4}$ " to 1" wide beads of Insta-Stick roofing adhesive spaced at 12" o.c.

Foundation Coat: PremiumCoat Foundation shall be applied to the entire substrate at a rate of 1.25 gal/sq. Embed a single layer of Premium Coat Fabric to wet Foundation Coat, overlapping fabric joints at a minimum of 4". Followed by Premium Coat Saturation applied at a rate of 1.25 gal/sq to fully saturate the fabric.

Finish Coat: Apply two coats of the PremiumCoat FinishCoat at a combined total rate of 1.5 gal/sq.

Assembly No. 3 – Concrete Deck with Lightweight Concrete

Design Pressure Rating: -315 psf

Roof Deck: Minimum 2,500 psi structural concrete.

Lightweight Insulation Concrete: Nominal 0.25" thick slurry coat of Concrecel concrete with a 43.4 lb/ft³ wet density.

Insulation: 1 inch thick Apache Hole Board

Lightweight Insulation Concrete: Nominal 2.0" thick slurry coat of Concrecel concrete is cast with a 41.9 lb/ft³ wet density.

Barrier Guard: Barrier Guard slurry is applied over the lightweight insulating concrete at a rate of 0.5 gal/sq and allowed to dry.

Foundation Coat: PremiumCoat Foundation shall be applied to the entire substrate at a rate of 1.25 gal/sq. Embed a single layer of Premium Coat Fabric to wet Foundation Coat, overlapping fabric joints at a minimum of 4". Followed by Premium Coat Saturation applied at a rate of 1.25 gal/sq to fully saturate the fabric.

Finish Coat: Apply two coats of the PremiumCoat FinishCoat at a combined total rate of 1.5 gal/sq.

Assembly No. 4 – Steel Deck

Design Pressure Rating: -52.5 psf

Roof Deck: Minimum 22 gauge steel.

Insulation: Minimum 1.5" thick NRG Barrier E'NGRG'Y-2 mechanically attached to the 22 gauge steel decking using Olympic Standard fasteners and Olympic Standard 3" round galvalume AZ55 steel plates at a density of 1 per 1.3 square feet.

Foundation Coat: PremiumCoat Foundation shall be applied to the entire substrate at a rate of 1.25 gal/sq. Embed a single layer of Premium Coat Fabric to wet Foundation Coat,

overlapping fabric joints at a minimum of 4". Followed by Premium Coat Saturation applied at a rate of 1.25 gal/sq to fully saturate the fabric.

Finish Coat: Apply two coats of the PremiumCoat FinishCoat at a combined total rate of 1.5 gal/sq.

Assembly No. 5 – Steel Deck with Concrecel Cellular Concrete

Design Pressure Rating: -82.5 psf

Roof Deck: Minimum 22 gauge-vented B-steel deck attached to bar joists spaced a maximum of 6'-0" o.c. Concrecel International bonding agent is applied to the corrugated deck at a rate of 600 sq.ft./1 gallon. Concrecel International cellular concrete, minimum 42 lb/ft.sq. wet cast density is placed on the deck filling the corrugations plus a minimum of $\frac{1}{4}$ " thick above the top flange immediately followed by a 2 inch thick Holey Board expanded polystyrene insulation. Within 24 hours, a minimum of $2\frac{1}{4}$ inch thick topping of Concrecel International concrete is placed at a density of 42 lb/ft.sq.

Primer: Apply BarrierGuard Slurry at a rate of 150 sq./ft. per gallon.

Foundation Coat: BarrierGuard System with embedded fabric at a rate of 250 sq/ft per 5 gallons with $1\frac{2}{3}$ bags of Portland cement per 5 gallon batch.

Finish Coat: PremiumCoat FinishCoat applied at a rate of 35 sq./ft. per gallon with 4 coats at 140 sq./ft. per gallon.

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), the International Building Code (IBC), and the Texas Revisions.