



PRI Evaluation Report

PRI ER 1378E05

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Report Holder:

Owens Corning Roofing and Asphalt LLC

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SCOPE

Subject: Synthetic Roof Underlayments

Manufacturing Locations:

Products:

- ProArmor®
- Deck Defense®
- RhinoRoof® U10
- RhinoRoof® U20
- Titanium® UDL25
- Titanium® UDL30
- Titanium® UDL50
- Titanium® X30

<u>Factory ID</u>	<u>Location</u>
Silvassa, India	Khanvel Rd, Dapada Dadra & Nagar Haveli-396230, India

CSI MasterFormat® :

DIVISION: 07 00 00 – THERMAL AND MOISTURE PROTECTION
Sub-level 2: 07 30 00 – Steep Slope Roofing

Code References:

- 2024 International Building Code® (IBC)
- 2024 International Residential Code® (IRC)

Properties Evaluated:

- External Fire Exposure (ASTM E108)
- Physical Properties (ASTM D8257)

Evidence Submitted:

- Recognized test report(s) indicating compliance with ASTM E108
- Recognized test report(s) indicating compliance with ASTM D8257
- Quality Documentation
- Manufacturer’s Drawings and Installation Instructions



PRODUCT DESCRIPTIONS and USE

Product Descriptions:

Deck Defense® is a mechanically attached roofing underlayment comprised of a woven scrim coated on the exposed side laminated to a film with polymeric coating applied to the unexposed side. The product is light gray on the exposed side and supplied in 5 and 10 sq. rolls.

ProArmor® is a mechanically attached roofing underlayment comprised of a woven scrim with a polymeric coating applied to both sides. The product is light gray on the exposed side and supplied in 10 sq. rolls.

RhinoRoof® U10 is a mechanically attached multi-layered, polymer-coated roofing underlayment with a woven reinforcement. The product is black on the exposed side and supplied in 10 sq. rolls.

RhinoRoof® U20 is a mechanically attached multi-layered, polymer-coated roofing underlayment with a woven reinforcement. The product is black on the exposed side and supplied in 10 sq. rolls.

Titanium® UDL25 is a mechanically attached roofing underlayment comprised of a polypropylene filament fabric on the exposed side laminated to a woven synthetic scrim with a polymeric coating applied to unexposed side. The product is gray on the exposed side and supplied in 10 sq. rolls.

Titanium® UDL30 is a mechanically attached roofing underlayment comprised of a woven polypropylene scrim with a polymeric coating applied to both sides. The product is gray on the exposed side and supplied in 10 sq. rolls.

Titanium® UDL50 is a mechanically attached roofing underlayment comprised of a woven polypropylene scrim with a polymeric coating applied to both sides. The product is gray on the exposed side and supplied in 10 sq. rolls.

Titanium® X30 is a mechanically attached roofing underlayment comprised of two laminated, non-woven polypropylene sheets with a polymeric coating applied to unexposed side. The product is gray on the exposed side and supplied in 5 sq. rolls.

Product:	Factory IDs:	Dimensions:
Deck Defense®	Silvassa, India	Length: 143 ft & 286 ft Width: 42 in Weight: 4.0 lb/100ft ²
ProArmor®	Silvassa, India	Length: 286 ft Width: 42 in Weight: 3.9 lb/100ft ²
RhinoRoof® U10	Silvassa, India	Length: 286 ft Width: 42 in Weight: 1.9 lb/100ft ²
RhinoRoof® U20	Silvassa, India	Length: 286 ft Width: 42 in Weight: 2.35 lb/100ft ²
Titanium® UDL25	Silvassa, India	Length: 250 ft Width: 48 in Weight: 2.5 lb/100ft ²
Titanium® UDL30	Silvassa, India	Length: 250 ft Width: 48 in Weight: 4 lb/100ft ²
Titanium® UDL50	Silvassa, India	Length: 250 ft Width: 48 in Weight: 4.8 lb/100ft ²
Titanium® X30	Silvassa, India	Length: 143 ft Width: 42 in Weight: 5 lb/100ft ²

Uses:

The roofing underlayments covered under this report are polymeric sheet material used in steep slope roofing. They are recognized as ASTM D8257 roof underlayments as specified in the following codes:

- 2024 IBC Chapter 15
- 2024 IRC Chapter 9

Underlayments may be used as a component in fire classified roof assemblies when installed as described in the report and in accordance with the following codes:

- 2024 IBC Section 1505
- 2024 IRC Section R902



Fire Classification:

Underlayments covered under this report may be used as a component in approved, fire classified roof covering systems. When installed directly on minimum 3/8 inch thick exterior plywood decking (DOC PS-1) underlayments are part of a fire classified roof assembly in accordance with ASTM E108 and qualify for use under the following codes and when used with the allowable roof covers indicated in the following table:

- 2024 IBC Section 1505.1
- 2024 IRC Section R902.1

Product:	Fire Classification:	Allowable Roof Coverings:
RhinoRoof® U10	Class A Unlimited slope	ASTM D3462 asphalt shingles
RhinoRoof® U20	Class A Unlimited slope	ASTM D3462 asphalt shingles
Titanium® UDL25	Class A Unlimited slope	ASTM D3462 asphalt shingles
Titanium® UDL30	Class A Unlimited slope	ASTM D3462 asphalt shingles
Titanium® UDL50	Class A Unlimited slope	ASTM D3462 asphalt shingles
Titanium® X30	Class A Unlimited slope	ASTM D3462 asphalt shingles

Product:	Fire Classification:	Allowable Roof Coverings:
Deck Defense®	Class A Unlimited slope	ASTM D3462 asphalt shingles
ProArmor®	Class A Unlimited slope	ASTM D3462 asphalt shingles

INSTALLATION – GENERAL

Underlayments covered under this report shall be installed in accordance with the applicable code, this report, and the manufacturer’s published installation instructions, which shall be available at all times on the jobsite during installation. The underlayments are not the primary roof cover and as such are not intended to be left permanently exposed to direct weather.

Underlayments covered under this report have been evaluated for application to wood decks installed over ventilated attic spaces. Application to other surfaces is outside the scope of this evaluation.

Roof slopes shall be minimum 2:12 (16.67% slope or 9°). The underlayment has an orientation and shall be laid with the topside (i.e. print side) up. The underlayment shall be laid horizontally (i.e. parallel to the eave) starting at the lower edge of the roof. The underlayment shall be mechanically attached to structural wood deck in accordance with the local building codes. If the roof will not be covered immediately (i.e. same day), underlayment shall be independently attached to structural wood deck using fasteners.

Underlayments covered under this report are intended for exterior applications only. Roof coverings shall be mechanically fastened through to the wood deck. Roof coverings shall not be adhered to the underlayment.

Deck:

Deck surface shall be clean, smooth, dry, free of debris, and structurally sound prior to installing underlayment. All deck fasteners shall be checked for protrusion and corrected prior to underlayment application. Replace any damaged or rotted deck.

Fasteners:

Fasteners shall be ring or deformed shank nails with 1 inch diameter metal or plastic caps. Metal caps shall have a minimum thickness of 32 gauge (0.0134 inch) sheet metal for loose caps or 0.010 inch for power driven cap nails. Plastic caps shall have an outside edge minimum thickness of 0.035 inch. Nail shank shall be minimum No. 14 gauge (0.083 inch shank diameter) galvanized or stainless steel corrosion-resistance nails. Fasteners shall penetrate into the deck minimum 3/4 inch, or through the deck, where the deck is less than 3/4 inch thick. Dimensional tolerances of fasteners shall conform to ASTM F1667.

Deck Defense®, ProArmor®, RhinoRoof® U10, RhinoRoof® U20, and Titanium® X30 are permitted to be installed with staples when the primary roof covering is installed on the same day as the underlayment and in accordance manufacturer’s installation instructions.



Reroofing:

Prior to the reroofing, all existing roofing shall be removed down to the deck. Exposed deck surface shall be clean, smooth, dry, free of debris, and structurally sound prior to

installing underlayment. All deck fasteners shall be checked for protrusion and corrected prior to underlayment application. Replace any damaged or rotted deck.

CONDITIONS OF USE & IDENTIFICATION

The products described in this report comply with, or are suitable alternatives to, the codes listed in this report, subject to the following conditions:

- The products as well as the installation methods shall be in compliance with the applicable code, this report, and the installation instruction provided by the manufacturer. If the manufacturer's installation instructions differ from what is listed in this report, this report governs.
- This report does not supersede the local jurisdiction regulations and the final approval of the building products, materials, or systems in this report is the responsibility of the authorities having jurisdiction.
- This report is only valid if the product(s) and/or the referenced documentation/codes related to the products do not change. If there is a change in product(s) and/or the referenced documentation/codes related to the products, PRI Construction Materials Technologies, LLC shall be informed and further action may be necessary to revalidate this report.
- This report, in its entirety, shall be available at job sites upon request by the user or for inspection by the Building Official. A copy of this report in full shall be provided by the manufacturer or its distributors.
- The products are identified by marks bearing the report holder's name, the manufacture location, the product name, and the Seal of the PRI Validation Program for Building Materials. The Seal shall indicate, at a minimum, the following:
 - a. ASTM D8257
 - b. ASTM E108, Class A under ASTM D3462 Asphalt Shingles
- The products are manufactured at the locations listed in this report and are manufactured under a quality control program with inspections and/or surveillance by PRI Construction Materials Technologies, LLC.
- This report is a supplement to product certification. The products listed herein shall be certified separately under the PRI Validation Program for Building Products. This report alone is not a product certification and requires separate product certification under the PRI Validation Program for Building Products to be valid.
- The current status of this report as well as a directory of certified products, including supplemental PRI Evaluation Reports, can be found at pri-group.com.

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