



**1. Product Name**

Transguard® 4000 Reusable Wet Curing Covers

**2. Manufacturer**

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**3. Product Description**

**BASIC USE**

The Armorlon® division of Reef Industries, Inc., manufactures Transguard® 4000 Reusable Wet Curing Covers, synthetic fiber mats with polyethylene backing that significantly reduce concrete cracking, dusting and scaling during the curing process.

Appropriate for new slab construction, maintenance to existing facilities and protection of high performance flooring, Transguard 4000 covers have exceptionally low permeability and high water retention to allow proper moisture control and to permit the concrete to achieve maximum expansion. The covers are reusable, flexible and lightweight to simplify installation and handling in municipal, commercial or industrial environments.

**COMPOSITION & MATERIALS**

Transguard 4000 is a polypropylene nonwoven fabric with a 4 mil white coating applied to one side. The nonperforated white coating contains ultraviolet light stabilizers to provide protection against UV degradation.

**TYPES**

- TG 4000

**SIZES**

- 10' x 150' (3 x 46 m) TG 4000
- 20' x 100' (6 x 30 m) TG 4000

**COLOR**

- Natural with white backing

**BENEFITS**

- Low permeability and superior water retention reduces rewetting frequency during curing
- Durable, synthetic material is reusable for improved life cycle
- Does not produce brown stains or affect the appearance of concrete surfaces
- Allows for light traffic during the curing process without damaging the concrete
- Covers reflect UV and heat to decrease moisture loss
- Complies with AASHTO Specification M171 for reflection and moisture retention and is D.O.T. approved in most states

**4. Technical Data**

**APPLICABLE STANDARDS**

American Association of State Highway and Transportation Officials (AASHTO) AASHTO M171 Standard Specification for Sheet Materials for Curing Concrete

**ASTM International**

- ASTM C156 Standard Test Method for Water Retention by Concrete Curing Materials
- ASTM C171 Standard Specification for Sheet Materials for Curing Concrete
- ASTM D882 Standard Test Method for Tensile Properties of Thin Plastic Sheeting
- ASTM D1117 Standard Guide for Evaluating Nonwoven Fabrics
- ASTM D1709 Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method
- ASTM D2103 Standard Specification for Polyethylene Film and Sheeting
- ASTM D2582 Standard Test Method for Puncture-Propagation Tear Resistance of Plastic Film and Thin Sheeting
- ASTM D3786 Standard Test Method for Bursting Strength of Textile Fabrics-Diaphragm Bursting Strength Tester Method
- ASTM D4533 Standard Test Method for Trapezoid Tearing Strength of Geotextiles
- ASTM D4545 Standard Practice for Determining the Integrity of Factory Seams Used in Joining Manufactured Flexible Sheet Geomembranes
- ASTM D4632 Standard Test Method for Grab Breaking Load and Elongation of Geotextiles
- ASTM D4833 Standard Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products
- ASTM D5199 Standard Test Method for Measuring the Nominal Thickness of Geosynthetics
- ASTM D5735 Standard Test Method for Tearing Strength on Nonwoven Fabrics by



Apply pre-wetted curing covers polyethylene side up.

- the Tongue (Single Rip) Procedure (Constant-Rate-of-Extension Tensile Testing Machine)
- ASTM E1347 Standard Test Method for Color and Color-Difference Measurement by Tristimulus Colorimetry

**APPROVALS**

Department of Transportation (DOT), most U.S. States

**PHYSICAL & TECHNICAL PROPERTIES**

See Table 1.

**5. Installation**

**PREPARATORY WORK**

Deliver and handle this product per recommendations of Reef Industries, Inc. Store the product protected from exposure to harmful environmental conditions and at temperature and humidity conditions within the guidelines recommended by the manufacturer.

**METHOD**

The following steps are provided as a guideline. Consult the manufacturer for details and complete installation instructions.

Wet the exposed surfaces of the concrete. Water must be clean, clear and potable.

Apply pre-wetted Transguard curing covers with the white polyethylene side up so that moisture can cover the entire span of the deck. Make sure the Transguard covers lie flat without wrinkles. Also, do not allow space between Transguard sheets; make sure edges





Make sure the Transguard® 4000 covers lie flat without wrinkles. of adjoining covers overlap a minimum of 6" (152 mm) and are securely sealed to prevent moisture from escaping

To prevent the cover from being displaced before the curing completes, weight all laps and outside edges. Avoid contact between the blanket and the concrete surface.

Thoroughly soak the nonwoven synthetic side of the Transguard cover and check daily for proper moisture content. Rewetting may be performed using a soaker hose or equivalent.

Remove the Transguard covers in sections after the specified curing period.

**BUILDING CODES**  
Current data on building code requirements and product compliance can be obtained from Reef Industries, Inc. Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

**6. Availability & Cost**

**AVAILABILITY**  
Transguard products are available throughout the United States.

**COST**  
Cost information may be obtained from the manufacturer or any distributor of Transguard products.

**7. Warranty**

Complete warranty terms and conditions are available from the manufacturer.

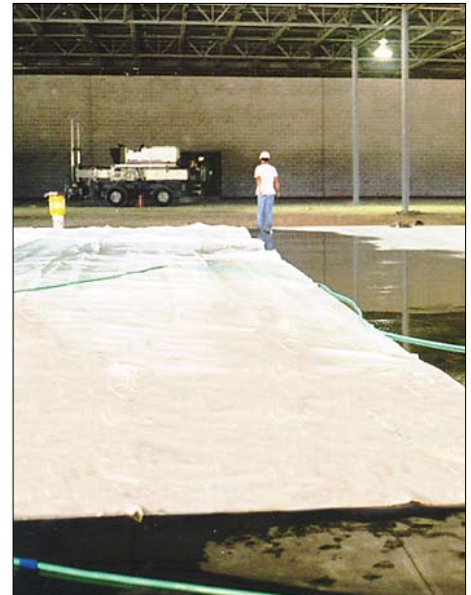
**8. Maintenance**

No specific care or maintenance is required for properly installed products.

**9. Technical Services**

Detailed information, product literature, test results, project lists, assistance in preparing project specifications and arrangements for application supervision are available through Reef Industries, Inc.

For questions about specifications, code regulations, product usage or product installation, please consult the Reef Industries website: [www.reefindustries.com](http://www.reefindustries.com).



Check Transguard® 4000 covers daily for proper moisture content.

**10. Filing Systems**

- Reed SmartBuilding Index
- Additional product information is available from the manufacturer upon request.

TABLE 1 PHYSICAL & TECHNICAL PROPERTIES	
Type	Transguard 4000
Weight, ASTM D2103	53 lb/1000 ft <sup>2</sup> (25.9 kg/100 m <sup>2</sup> )
Thickness, ASTM D5199	42 mil (1.1 mm)
1" load @ yield, ASTM D882	N/A
1" Elongation, ASTM D882	N/A
Water absorption capacity, ASTM D1117	N/A
Grab tensile, ASTM D4632	170 lbf (756 N)
Grab elongation, ASTM D4632	65%
Trapezoidal tear, ASTM D4533	54 lbf (240 N)
Hydraulic burst, ASTM D3786	190 psi (1.3 MPa)
Water loss (per 72 hours), ASTM C156	0.0205 lb/ft <sup>2</sup> (0.1 kg/m <sup>2</sup> )
Reflectance, ASTM E1347	85%
Puncture strength, ASTM D4833	70 lb (31.1 kg)

