SECTION 01 56 00

CONCRETE SLAB PROTECTION

Display hidden notes to specifier. (Don't know how? [Click Here](https://www.arcat.com/sd/display_hidden_notes.shtml))

*Copyright 2021 - 2021 ARCAT, Inc. - All rights reserved*

\*\* NOTE TO SPECIFIER \*\* Armorlon, Division of Reef Industries, Inc.; concrete slab floor protection and containment tarps.  
This section is based on the products of Armorlon, Division of Reef Industries, Inc., which is located at:9209 Almeda Genoa Rd.Houston, TX 77075Toll Free Tel: 800-231-6074Tel: 713-507-4251Fax: 713-507-4295Email: [request info (ri@reefindustries.com)](https://arcat.com/rfi?action=email&company=Armorlon%252C%252BDivision%252Bof%252BReef%252BIndustries%252C%252BInc.&message=RE%253A%2520Spec%2520Question%2520(01560aml)%253A%2520&coid=39666&spec=01560aml&rep=&fax=713-507-4295)  
Web: <https://www.reefindustries.com/armorlon.php>   
 [ [Click Here](https://arcat.com/company/armorlon-division-of-reef-industries-inc-39666) ] for additional information.  
The Armorlon product group addresses a wide range of performance requirements in municipal, commercial or industrial environments. Whether the application is repair and maintenance, new construction or protection of existing facilities, Armorlon's line of products meets the challenges of the most diverse and demanding applications, including concrete slab floor protection and containment tarps.  
Features / Advantages  
 Low Permeability  
 Reflective  
 Reusable  
 Easily Handled  
 Allows for light traffic during the curing process  
 Complies with ASTM Specification C-171  
 D.O.T. approved in most states

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Concrete slab floor protection.
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 03 30 00 - Cast-in-Place Concrete.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. ASTM International (ASTM):
       1. ASTM C156 - Standard Test Method for Water Loss; from a Mortar Specimen Through Liquid Membrane-Forming Curing Compounds for Concrete.
       2. ASTM C171 - Standard Specification for Sheet Materials for Curing Concrete.
       3. ASTM D751 - Standard Test Methods for Coated Fabrics.
       4. ASTM D882 - Standard Test Method for Tensile Properties of Thin Plastic Sheeting.
       5. ASTM D1709 - Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method.
       6. ASTM D2261 - Standard Test Method for Tearing Strength of Fabrics by the Tongue (Single Rip) Procedure (Constant-Rate-of-Extension Tensile Testing Machine).
       7. ASTM D2582 - Standard Test Method for Puncture-Propagation Tear Resistance of Plastic Film and Thin Sheeting.
       8. ASTM D3786 - Standard Test Method for Bursting Strength of Textile FabricsDiaphragm Bursting Strength Tester Method.
       9. ASTM D4533 - Standard Test Method for Trapezoid Tearing Strength of Geotextiles.
       10. ASTM D4833 - Standard Test Method for Index Puncture Resistance of Geomembranes and Related Products.
       11. ASTM D5199 - Standard Test Method for Measuring the Nominal Thickness of Geosynthetics.
       12. ASTM E1347 - Standard Test Method for Color and Color-Difference Measurement by Tristimulus Colorimetry.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data:
        1. Manufacturer's data sheets on each product to be used.
        2. Preparation instructions and recommendations.
        3. Storage and handling requirements and recommendations.
        4. Typical installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable to product type.

* + 1. Verification Samples: Two representative units of each type, size, pattern and color.
    2. Shop Drawings: Include details of materials, construction and finish. Include relationship with adjacent construction.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.
     2. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
     3. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.

\*\* NOTE TO SPECIFIER \*\* Include mock-up if the project size or quality warrant the expense. The following is one example of how a mock-up on might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
       1. Intent of mock-up is to demonstrate quality of workmanship and visual appearance.
       2. If mock-up is not acceptable, rebuild mock-up until satisfactory results are achieved.
       3. Retain mock-up during construction as a standard for comparison with completed work.
       4. Do not alter or remove mock-up until work is completed or removal is authorized.
  1. PRE-INSTALLATION CONFERENCE
     1. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.
  2. DELIVERY, STORAGE, AND HANDLING
     1. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
     2. Protect from damage due to weather, excessive temperature, and construction operations.
  3. PROJECT CONDITIONS
     1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
  4. WARRANTY
     1. Manufacturer's standard limited warranty unless indicated otherwise.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Armorlon, Division of Reef Industries, Inc., which is located at:9209 Almeda Genoa Rd.Houston, TX 77075Toll Free Tel: 800-231-6074Tel: 713-507-4251Fax: 713-507-4295Email: [request info (ri@reefindustries.com)](https://arcat.com/rfi?action=email&company=Armorlon%252C%252BDivision%252Bof%252BReef%252BIndustries%252C%252BInc.&message=RE%253A%2520Spec%2520Question%2520(01560aml)%253A%2520&coid=39666&spec=01560aml&rep=&fax=713-507-4295);Web: <https://www.reefindustries.com/armorlon.php>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
  1. CONCRETE SLAB FLOOR PROTECTION
     1. Armorlon TRANSGUARD 4000 Reusable Wet Cure Covers: Transguard 4000 consists of a natural colored polypropylene nonwoven fabric with a white polyethylene coating applied to one side. The non-perforated coating contains ultraviolet light stabilizers providing protection against UV degradation.
        1. Performance Requirements: Meet or exceed ASTM C171 - Standard Specification for Sheet Materials for Curing Concrete, for moisture retention and reflection.
        2. Physical Properties:
           1. Weight per ASTM D751: 37 lbs per 1000 sq ft (18.1 kg per 100 sq m).
           2. Thickness per ASTM D5199: 35 mil (0.9 mm).
           3. Tensile per ASTM D882: 135 lbf (601 N).
           4. Elongation per ASTM D882: 170 percent.
           5. Trapezoidal Tear per ASTM D4533: 44 lbf (200 N).
           6. Hydraulic Burst per ASTM D3786: 212 psi (1.46 N).
           7. Water Loss per 72 hrs, per ASTM C156: 0.00061 lbs per sq ft (30 grams per sq m).
           8. WVTR per ASTM E96: \_\_\_ grains per 100 sq in ( \_\_\_ g per sq m)
           9. Reflectance per ASTM E1347: 76 percent.
           10. Puncture Strength per ASTM D4833: 71 lbf (315 N).
           11. Color: Natural colored polypropylene.
        3. Features:
           1. Will not mildew.
           2. White polyethylene coating applied to one side.
           3. Weather proof.
           4. Allows light traffic.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly constructed and prepared.
      2. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION
      1. Install in accordance with manufacturer's instructions, approved submittals, and in proper relationship with adjacent construction.
   4. FIELD QUALITY CONTROL
      1. Field Inspection: Coordinate field inspection in accordance with appropriate sections in Division 01.

\*\* NOTE TO SPECIFIER \*\* Include if manufacturer provides field quality control with onsite personnel for instruction or supervision of product installation, application, erection or construction. Delete if not required.

* + 1. Manufacturer's Services: Coordinate manufacturer's services in accordance with appropriate sections in Division 01.
  1. CLEANING AND PROTECTION
     1. Clean products in accordance with the manufacturers recommendations.
     2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION