

SPECIFICATION INFORMATION

TOPPER™ Pro Plus

Concrete Curing
Blanket
Division: 03300

Revision #1

1.0 Product Name

Topper™ Pro Plus
Concrete Curing Blanket.

2.0 Manufacturer



Insulation Solutions™
Insulation Solutions Inc.
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3.0 Product Description

3.1 Basic Use:

Topper™ Pro Plus is a concrete curing blanket designed for both hot and cold weather curing. **Topper™ Pro Plus** allows the concrete to maintain sufficient levels of water and heat so that the concrete can achieve its desired physical properties. **Topper™ Pro Plus** also protects the concrete from outside weather elements such as wind, rain, sleet and snow. **Topper™ Pro Plus** is most commonly used for all types of wall forms, slabs-on-grade, curbs, gutters, footings and pier boxes. The black polyethylene layer faces up during cold weather curing which absorbs and transfers the heat produced from the sun down into the concrete.

While the black layer absorbs and transfers heat, the low emissive aluminum layer reflects the heat, generated from the concrete, back to its source. During hot weather curing **Topper™ Pro Plus** is positioned with the low emissive aluminum layer facing up. This allows the heat generated from the sun to be reflected, which prevents the water in the concrete from evaporating too quickly.



Roll Sizes:
24" x 125'
48" x 125'
72" x 125'

3.2 Composition & Materials:

Topper™ Pro Plus is composed of high density polyethylene bubble sandwiched between a layer of black polyethylene and a layer of highly reflective aluminum foil.

3.3 Size:

Topper™ Pro Plus is 5/16 inches thick and is available in rolls of: 24" x 125', 48" x 125' and 72" x 125'.

3.4 Weight:

Topper™ Pro Plus weighs approximately 25 lbs, 40 lbs and 55 lbs respectively.

4.0 Technical Data

4.1 Applicable Standards

- **ASTM C 236** Standard Test Method for Steady-State Thermal Performance of Building Assemblies by Means of a Guarded Hot Box
- **ASHRAE 2005** Handbook of Fundamentals
- **ASTM E 96** Standard Test Methods for Water Vapor Transmission of Materials
- **ASTM C 1371** Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emittance Meters
- **ASTM D 751** Standard Test Methods for Coated Fabrics
- **ACI 308R-01** Guide to Curing Concrete
- **ACI 308.1-98** Standard Specification for Curing Concrete

Note: To the best of our knowledge, these are typical property values and are intended as guides only, not as specification limits. Insulation Solutions Inc.® makes no warranties as to the fitness for a specific use or merchantability of products referred to, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage.



PROPERTIES	TEST METHOD	TOPPER™ Pro Plus
<i>Test Results - Independent Test Facility</i>		<i>English</i>
Thickness, Nominal		5/16 inch
Degradation/Linear Shrinkage		None
Water Vapor Permeance	ASTM E 96	0.02 perms
Bursting Strength	ASTM D 751-00	87.6 psi
Emissivity	ASTM C 1371	.03 to .04
Temperature Range		-50°F to 180°F
Thermal Resistance (R-Value)	ASHRAE 2005 (3/4" air space) ASHRAE 2005 (3.5" air space)	R-3.8 (Heat Flow Down) R-9.6 (Heat Flow Down)

4.2 Environmental Considerations:

The **Topper™ Pro Plus** is manufactured using recycled resins.

4.3 Physical Properties

The black layer of **Topper™ Pro Plus** is manufactured with high-density polyethylene which adds additional strength and tear resistance to the product. The physical characteristics of **Topper™ Pro Plus** allow it to be reused multiple times. **Topper™ Pro Plus** is lightweight and easy to transport from job to job. The high-density bubble within **Topper™ Pro Plus** prevents water from being trapped between the outer skins.

5.0 Installation

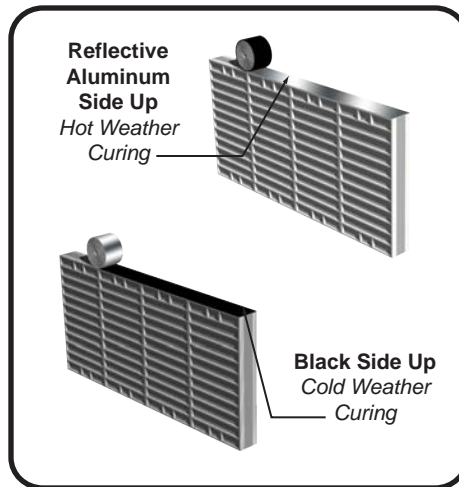
TOPPER™ PRO PLUS PLACEMENT

5.1 Proper planning to maintain adequate temperatures and keep the concrete from freezing should be done prior to expected periods of freezing weather. Equipment and materials should be readily available at the site before cold weather is likely to occur. All surfaces expected to be in contact with freshly poured concrete should be at temperatures not likely to cause early freezing. Concrete should not be placed on frozen sub-grade.

5.2 **Topper™ Pro Plus** is available in 24 inch, 48 inch and 72 inch widths. The length of all rolls are 125 feet. For areas that require less coverage, simply cut **Topper™ Pro Plus** to fit.

5.3 Place the **Topper™ Pro Plus** over all exposed concrete surfaces as soon as the concrete receives a finish and hardens sufficiently.

5.4 Provide sufficient material to cover all surfaces and edges with excess to hold material securely in place by weighting down or alternative fastening method. Allow for a minimum 12 inch overlap between adjoining pieces of **Topper™ Pro Plus**



5.5 Keep **Topper™ Pro Plus** in place until the concrete conforms to criteria specified. The weather conditions can dictate or prolong the amount of time it takes for the concrete to cure properly. Check with project architect/engineer on desired time of coverage for concrete to properly reach its peak performance.

5.6 If removal of **Topper™ Pro Plus** is required, for form removal or other necessary work, recover all exposed areas as soon as possible for the duration of the time needed for the concrete to reach desired conditions or until architect/engineer approve the termination of curing measures.

PROTECTION

5.7 If punctures or tears occur in the **Topper™ Pro Plus**, the damaged areas should be sealed with appropriate tape or patch.

5.8 **Topper™ Pro Plus** may be reused as long as the material is in serviceable condition.

(These are very general installation instructions. Instructions on architectural or structural drawings should be reviewed and followed as well. ACI 308R-01 Guide to Curing Concrete and ACI 308.1-98 Standard Specification for Curing Concrete provides valuable installation information).

6.0 Availability & Cost

Topper™ Pro Plus is sold through construction supply houses across the United States and Canada.

Current cost information on **Topper™ Pro Plus** can be obtained by calling our corporate sales office at 866-698-6562.

7.0 Warranty

To the best of our knowledge, the specification chart on page one lists typical property values and are intended as guides only, not as specification limits. INSULATION SOLUTIONS INC. MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, NO GUARANTEE OF SATISFACTORY RESULTS FROM RELIANCE UPON CONTAINED INFORMATION OR RECOMMENDATIONS AND DISCLAIMS ALL LIABILITY FOR RESULTING LOSS OR DAMAGE.

8.0 Maintenance

If **Topper™ Pro Plus** is to be reused, make sure it is clean and dry. The memory within **Topper™ Pro Plus** enables it to roll back to its original shape for easy transport and storage.

9.0 Technical Services

Technical Information and detailed test results can be obtained by calling our corporate office at 866-698-6562.

10.0 Filing Systems

Additional Information is available from the manufacturer.