SPECIFICATION INFORMATION

INSUL-TARP®/1745

PATENTED

Under-Slab Insulation/Vapor Barrier

Division: 0700

Revision #1

1.0 Product Name

Insul-Tarp® 1745
Under-Slab Insulation/Vapor Barrier

2.0 Manufacturer

InsulationSolutions®
Insulation Solutions Inc.
401 Truck Haven Road
East Peoria, IL 61611

Engineering Assistance
Toll Free: 866-698-6562
Fax: 309-698-0065
www.insulationsolutions.com

3.0 Product Description

3.1 Basic Use:

Insul-Tarp 1745 is an under-slab insulation/vapor barrier designed to provide a thermal break and moisture barrier between the slab and grade.

Insul-Tarp 1745 can also reduce condensation, mold and degradation by controlling water vapor migration.

3.2 Composition & Materials:

Insul-Tarp 1745 is a multilayer blanket insulation. **Insul-Tarp 1745** is manufacturered using cross woven polyethylene, high density closed-cell foam, a layer of high density polyethylene bubble and two layers of reflective aluminum. These layers combine to provide consistent thermal and moisture protection.

3.3 Size:

Insul-Tarp 1745 is available in 6' x 50'. Estimate 10% overage as roll sizes are approximate.

3.4 Weight:

Insul-Tarp 1745 weighs approximately 14 lbs. per 150 sq. ft.

4.0 Technical Data

4.1 Applicable Standards

American Society for Testing & Materials (ASTM)

- ***ASTM E 154*** *Standard Test Methods for Water Vapor Retarders used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover*
- ***ASTM E 96*** *Standard Test Methods for Water Vapor Transmission of Materials*
- ***ASTM E 1643*** *Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs*
- ***ASTM E 1745*** *Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs*
- ***ASTM D 3575*** *Standard Test Methods for Flexible Cellular Materials Made From Olefin Polymers*
- ***ASTM D 751*** *Standard Test Methods for Coated Fabrics*
- ***ASTM D 1709*** *Standard Test Methods for Impact Resistance of Plastic Film by the Free Falling Dart Method*

PROPERTIES	TEST METHOD	INSUL-TARP 1745
Test Results - Independent Test Facility		
Weight Per 150 sq. ft.		14 lbs.
Classification	ASTM E 1745	CLASS A, B & C
Tensile Strength (Cross Woven Polyethylene)	ASTM E 154, Sec. 9	136 lbf/in. (MD), 134 lbf/in. (TD)
Compression Set	ASTM D 3575-00	4.3%
Compression Set	ASTM D 3575-10-16	3.2%
Bursting Strength (Bubble Pack)	ASTM D 751-00 (Ball Burst)	95.1 lbf
Bursting Strength (Bubble Pack)	ASTM D 751-73 (Mullen)	90 psi
Tear Strength (Orange Cross Woven Polyethylene)	ASTM D 751 (Tongue Tear)	54 lbs (Warp), 57 lbs (Weft)
Puncture Resistance	ASTM E 154, Sec. 10	91.59 kg
Puncture Resistance	ASTM D 1709	15,839 grams (maximum weight sustained)
Operating Temperature		-60°F - 180°F
Water Vapor Permeance	ASTM E 96 / 154 Sec. 7	.0016 perms
Water Vapor Transmission Rate	ASTM E 96 / 154 Sec. 7	.0006 grains/ft²*hr

4.2 Environmental Considerations:

Insul-Tarp 1745 can be used as a radon and methane gas barrier.

4.3 Physical Properties

Insul-Tarp 1745 conforms to the subsoil and will not crack or break when walked upon.

5.0 Installation

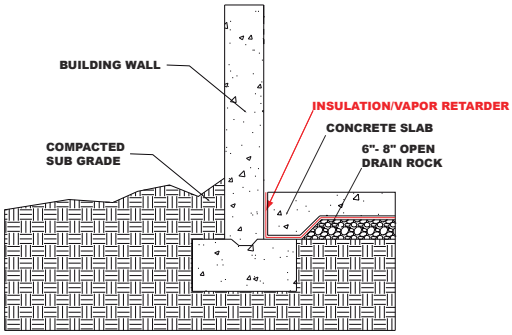
INSUL-TARP 1745 PLACEMENT

5.1 Level and tamp or roll granular base as specified by your architectural or structural drawings.

5.2 Unroll **Insul-Tarp 1745** with the longest dimension parallel with the direction of the pour.

5.3 Lap **Insul-Tarp 1745** over the footings and seal to the vertical foundation walls with appropriate tape. Seal around pipes, support columns or any other penetration by cutting an 'X' in the **Insul-Tarp 1745** and sliding it over the obstruction. Doing so will create a monolithic membrane between the surface of the slab and moisture sources below and at the slab perimeter.

5.4 Holes or openings through **Insul-Tarp 1745** should be effectively sealed with appropriate tape to maintain the integrity of the vapor barrier. Overlap joints a minimum of four inches. Seal overlap together with appropriate tape.



PROTECTION

5.5 When installing reinforcing steel and utilities in addition to the placement of concrete, take precaution to protect **Insul-Tarp 1745**. Carelessness during installation can damage the most puncture-resistant insulation/vapor barrier. Provide for additional protection in high-traffic areas.

5.6 Place standard reinforcing bar supports on **Insul-Tarp 1745**. The cross woven structure of **Insul-Tarp 1745** will help guard against possible punctures caused by reinforcing bar supports.

5.7 Avoid driving stakes through **Insul-Tarp 1745**. If this cannot be avoided, each individual hole must be repaired.

5.8 If a cushion or blotter layer is required in the design between the insulation/vapor barrier and the slab, additional care should be taken, especially if sharp crushed rock is used. Washed rock will provide less chance of damage during placement.

(These are very general installation instructions. Instructions on architectural or structural drawings should be reviewed and followed as well. ASTM E 1643 also provides valuable installation information).

6.0 Availability & Cost

Insul-Tarp 1745 is sold through construction supply houses across the United States and Canada.

Insul-Tarp 1745 current cost information 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 air pockets occur when pouring the concrete slab, simply cut a slit in the top layer of the tarp to release any trapped air. Place a piece of appropriate tape over the slit and continue pouring.

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.

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.

INSULATION SOLUTIONS, INC. [MOISTURE CONTROL DIVISION]

[401 Truck Haven Road] [East Peoria, Illinois 61611] [Toll Free: 866.698.6562] [P: 309.698.0062] [F: 309.698.0065]

WWW.**INSULATIONSOLUTIONS**.COM