

1.0 PRODUCT NAME

NU-AGE FILM 10+
High Performance
Vapor Retarder

2.0 MANUFACTURER



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3.0 PRODUCT DESCRIPTION

3.1 Basic Use:

NU-AGE FILM 10+ is a uniquely enhanced high performance vapor retarder that exceeds performance properties of conventional single layer polyethylene sheeting. **NU-AGE FILM 10+** surpasses 10-mil polyethylene sheeting requirements outlined in ASTM D 4397. It also exceeds ASTM E 1745 Class C requirements for under slab vapor retarders. **NU-AGE FILM 10+** is used as a multipurpose high performance vapor retarder for numerous construction, industrial and agricultural applications. **NU-AGE FILM 10+** delivers excellent impact resistance, tensile strength and elongation for demanding vapor retarder and protective covering applications.

3.2 Composition & Materials:

NU-AGE FILM 10+ is a tri-layer extruded film manufactured and engineered using a distinct virgin resin formulation. The tri-layer extrusion uses separate extruders to produce different layers of polymers. The layers join together, in the liquid state, just before they are extruded. The tri-layer manufacturing is desirable as it takes the best properties of different resins and links them together. The film structure is then engineered to perform better than it's individual parts.

NU-AGE FILM 10+ is a lighter weight roll with increased product performance all while maintaining long term stability.

3.3 Product Dimensions & Weight:

NU-AGE FILM 10+ is available in roll sizes ranging from 8 to 20 feet wide by 100 feet in length. Special roll lengths are available upon request. **NU-AGE FILM 10+** weighs approximately 20.16 pounds per 1,000 square feet at .0042 inches (106.7 μ) thick.

3.4 Benefits:

- Unrivaled material solution
- Made from premium grade virgin resin
- Enhanced performance
- State-of-the-art: one of a kind technology
- Lighter weight for ease of installation
- Outperforms 10-mil poly per ASTM D 4397
- ASTM E 1745 Class C Vapor Retarder
- Multi-use for construction, industrial & agricultural applications
- Superior value without forfeiting quality

4.0 TECHNICAL DATA

4.1 Applicable Standards

- **ASTM D 4397** Standard Specification for Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications
- **ASTM D 2103** Standard Specification for Polyethylene Film and Sheeting
- **ASTM D 1709** Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method
- **ASTM D 882** Standard Test Method for Tensile Properties of Thin Plastic Sheeting
- **ASTM F 1249** Standard Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor
- **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

Note: All NU-AGE FILMS are tested by accredited, third-party testing agencies following stringent industry guidelines and testing standards. NU-AGE FILMS performance properties have been tested and confirmed by the International Code Council® Evaluation Service (ICC-ES®).



PROPERTIES	TEST METHOD	NU-AGE FILM 10+	
<i>Test Procedure - Independent Test Facility</i>	<i>Applicable Standards</i>	<i>IP Units</i>	<i>SI Units</i>
Thickness		.0042 in	106.7 μ
Performance Classification	ASTM D 4397	EXCEEDS 10-MIL	
Performance Classification	ASTM E 1745	EXCEEDS CLASS C	
Film Type	ASTM D 2103	TYPE 15234	
Puncture Resistance	ASTM D 1709 Method A	598 grams	
Tensile Strength	ASTM D 882	5,030 PSI (LD) 4,870 PSI (CD)	34.7 MPa 33.6 MPa
Elongation	ASTM D 882	920% (LD), 1,000% (CD)	
Water Vapor Permeance	ASTM E 96 Method E	0.047 perms*	0.031 perms**
Chemical Resistance		Unaffected	Unaffected
Life Expectancy		Indefinite	Indefinite

*grains/(ft²*hr*inHg)

**g/(m²*24hr*mmHg)

4.2 Environmental Considerations:

NU-AGE FILM 10+ can aid in controlling soil gas such radon.

4.3 Physical Properties:

NU-AGE FILM 10+ exceeds 10-mil polyethylene sheeting performance properties outlined in ASTM D 4397. It also performs as a Class C vapor retarder per ASTM E 1745.

5.0 UNDER SLAB INSTALLATION

5.1 Sub-Grade Preparation:

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



5.2 Vapor Barrier Placement:

Unroll **NU-AGE FILM 10+** with the longest dimension parallel with the direction of the pour. Unfold **NU-AGE FILM 10+** to full 20 foot width.

Lap **NU-AGE FILM 10+** over the footings and seal to the vertical foundation walls with one of the following vapor barrier accessories: **WHITE VIPER® VAPOR TAPE**, **VIPER® DOUBLE BOND TAPE**, **VIPER® VAPORPATCH** or **VAPORCHECK® MASTIC**.



5.3 Seams and Penetrations:

Seal around pipes, support columns or any other penetration with **VIPER® VAPORPATCH**, **VAPORCHECK® MASTIC** or at minimum a combination of **NU-AGE FILM 10+** and **WHITE VIPER® VAPOR TAPE**. Doing so creates a monolithic membrane between the surface of the slab and moisture sources below.

Holes or openings through **NU-AGE FILM 10+** should be effectively sealed with **WHITE VIPER® VAPOR TAPE**, **VIPER® VAPORPATCH** or **VAPORCHECK® MASTIC** to maintain the integrity of the vapor barrier. Overlap joints a minimum of six inches. Seal overlap together with **WHITE VIPER® VAPOR TAPE** and/or **VIPER® DOUBLE BOND TAPE**.

5.4 Protection:

When installing reinforcing steel and utilities, in addition to the placement of concrete, take precaution to protect **NU-AGE FILM 10+**. Carelessness during installation can damage the most puncture-resistant vapor barriers. Provide for additional protection in high-traffic areas.

Place standard reinforcing bar supports on **NU-AGE FILM 10+**. The strength characteristics of **NU-AGE FILM 10+** will help guard against possible punctures caused by reinforcing bar supports.

Avoid driving stakes through **NU-AGE FILM 10+**. If this cannot be avoided, each individual hole must be repaired.

If a cushion or blotter layer is required in the design between the 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.

Note: These installation instructions are based on ASTM E 1643 - Standard Practice for Selection, Design, Installation and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs. These Instructions are intended to be used as a guide and do not take into account specific job site conditions. For further details check with local building codes, ACI 302, ACI 360 and/or architectural/engineering specifications.

6.0 AVAILABILITY & COST

NU-AGE FILM 10+ is sold through construction supply houses across the United States and Canada.

NU-AGE FILM 10+ current cost information can be obtained by calling our Corporate Office at 866-698-6562.

7.0 WARRANTY

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

NU-AGE FILM 10+ requires no maintenance once installed.

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 can be obtained by calling our Corporate Office at 866-698-6562 or online at www.insulationsolutions.com.



Note: 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.

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