



VERSION 21.0

# **VAPOR RETARDERS**

DIVISION 033000, 072600

# PRODUCT NAME

Nu-Age Films® 6+ Engineered Poly Sheeting

# **MANUFACTURER**

### **ISI BUILDING PRODUCTS**

401 Truck Haven Road East Peoria, IL 61611 866.698.6562 / www.isibp.com

# PRODUCT DESCRIPTION

#### **BASIC USE**

Nu-Age Films are uniquely enhanced high performance vapor retarders that exceed performance properties of conventional single layer polyethylene sheeting. Nu-Age Films 6+ surpasses 6-mil polyethylene sheeting requirements outlined in ASTM D 4397. Nu-Age Films are used as multi-purpose high performance vapor retarders for numerous construction, industrial and agricultural applications. Nu-Age Films 6+ delivers excellent impact resistance, tensile strength and elongation for demanding vapor retarder and protective covering applications.

## **COMPOSITION & MATERIALS**

Nu-Age Films are tri-layer extruded films 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, 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 its individual parts. Nu-Age Films 6+ is a lighter weight roll with increased product performance all while maintaining long-term stability.

#### SIZE

Available in roll sizes ranging from 8 to 20 feet wide by 100 feet in length. Special roll lengths are available upon request.

#### WEIGHT

Approximately 13.2 lbs per 1,000 ft  $^2$  at .00275 inches (69.9  $\mu)$  thick.

### **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 6-mil poly per ASTM D 4397
- Multi-use for construction, industrial and agricultural applications
- Superior value without forfeiting quality

# TECHNICAL DATA

#### **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.

#### **ENVIRONMENTAL CONSIDERATIONS**

Nu-Age Films can aid in controlling soil gas such as radon.

### **PHYSICAL PROPERTIES**

Nu-Age Films 6+ exceeds 6-mil polyethylene sheeting performance properties outlined in ASTM D 4397.

# INSTALLATION

#### **UNDER-SLAB INSTALLATION**

SUB-GRADE PREPARATION

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

# VAPOR BARRIER PLACEMENT

Unroll Nu-Age Films with the longest dimension parallel with the direction of the pour. Unfold Nu-Age Films to full width.

Lap Nu-Age Films 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.

#### **PROTECTION**

When installing reinforcing steel and utilities, in addition to the placement of concrete, take precaution to protect Nu-Age Films. 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 Films. The strength characteristics of Nu-Age Films will help guard against possible punctures caused by reinforcing bar supports.

Avoid driving stakes through Nu-Age Films. 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.

These are very general installation instructions. Instructions on architectural or structural drawings should be reviewed and followed. Detailed installation instructions can be obtained by calling our corporate office at 866.698.6562 or online at www.isibp.com.

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.

# WARRANTY

Warranty information can be obtained by calling the manufacturer at 866.698.6562 or visiting www.isibp.com.

# **MAINTENANCE**

Requires no maintenance once installed.

# TECHNICAL SERVICES

Technical information and detailed test results can be obtained by calling the manufacturer at 866.698.6562.

# FILING SYSTEMS

Additional information can be obtained by calling the manufacturer at 866.698.6562 or visiting www.isibp.com.

PROPERTIES TEST PROCEDURE (INDEPENDENT TEST FACILITY)	TEST METHOD APPLICABLE STANDARDS	RESULTS IP UNITS
THICKNESS	N/A	.00275 in   69.9 μ
PERFORMANCE CLASSIFICATION	ASTM D 4397	EXCEEDS 6-mil
FILM TYPE	ASTM D 2103	TYPE 15233
PUNCTURE RESISTANCE	ASTM 1709 METHOD A	299 grams
TENSILE STRENGTH	ASTM D 882	4,860 PSI LD   33.5 MPa 4,650 PSI CD   32.1 MPa
ELONGATION	ASTM D 882	910% LD, 850% CD
WATER VAPOR PERMEANCE	ASTM E 96 METHOD E	0.028 perms*   0.018 perms**
CHEMICAL RESISTANCE	N/A	UNAFFECTED
LIFE EXPECTANCY	N/A	INDEFINITE

\*grains/(ft<sup>2</sup>\*hr\*inHg) \*\*g/(m<sup>2</sup>\*24hr\*mmHg)



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