



<b><u>DESCRIPTION</u></b>	
<p><b>GREENSTUFF</b> is a single component, liquid applied, waterbased copolymer rubber air barrier. <b>GREENSTUFF</b> cures to form a tough, seamless, elastomeric membrane which exhibits excellent resistance to air leakage and inhibits moisture transmission.</p>	
<b><u>FEATURES</u></b>	
<b>Exceptionally low air transmission</b>	Effectively blocks the transmission of air through porous building materials.
<b>Highly flexible</b>	Bridges cracks which may form in the substrate.
<b>Visual Coverage Control (Vcc)</b>	VCC provides for easy inspection.
<b>Environmentally compatible</b>	The use of advanced polymer technology.
<b>User friendly</b>	Single component, waterbased technology allows for simple, safe application and easy clean-up.
<b>Liquid applied</b>	Simplifies detailing and assures a monolithic, seamless membrane when applied to a rough or smooth surface.
<b>Excellent adhesion</b>	Remains firmly bonded to the substrate even when applied over damp surfaces. Can also be used as an adhesive for most types of insulation.
<b>Fully compatible</b>	With commercially available preformed transition membranes, reinforcing fabrics and common thermal insulation materials.
<b><u>USES</u></b>	
<p><b>GREENSTUFF</b> has been specifically designed to perform as an air barrier and vapour inhibitor within the building envelope. It may be applied to most surfaces and integrated into various wall systems. <b>GREENSTUFF</b> is suitable for both new construction and restoration.</p>	
<b><u>LIMITATIONS</u></b>	
<p><b>GREENSTUFF</b> is not designed to perform as a permanently exposed membrane.</p> <p>Application and curing temperatures must be above 0°C (32°F).</p>	
<b><u>COVERAGE</u></b>	
<p>Application Rate - 100 sq. ft. per 20 litre pail.  Wet Film Thickness - 90 mil (2.33mm).  Cured Film Thickness - 45 mil (1.15mm).</p>	
<b><u>SURFACE PREPARATION</u></b>	
<p>The substrate should be clean, sound, free of excess water and loose materials, grease and any contaminants which may affect or compromise the performance of the membrane.</p>	
<b><u>APPLICATION</u></b>	
<p><b>GREENSTUFF</b> may be sprayed, brushed or trowel applied. For spray application use a conventional airless unit minimum 3000 PSI with a .025 tip. <b>GREENSTUFF</b> is a waterbased material and does not require the use of solvents for thinning or clean-up.</p>	

**CURING & DRYING**

Allow material to dry at air and surface temperature of 2°C or higher. Curing times will be affected by relative humidity, temperature and air flow. The following times are given for average conditions and designated thickness. Actual times may differ depending on specific conditions present on job at time of application. Tack free film - 1 to 3 hours. 95% cure - 7 days. Full cure - 30 days.

**CLEAN-UP**

Uncured material can be cleaned using light soap and water. Cured material is best removed by mineral spirits, xylol or by mechanical means.

**STORAGE & HANDLING**

Keep containers tightly sealed. Store in temperature range of 2°C to 30°C (35°F to 90°F). **Keep from freezing.**

**SHELF LIFE**

Indefinite in original sealed properly stored container.

**PACKAGING**

20 litre pail and 200 litre drum.

**PRECAUTIONS**

**Keep out of reach of small children.** Some people may be sensitive to chemicals contained in this product. Do not swallow. Should adverse effects occur, remove subject from area immediately. Wash any contaminated skin with water and introduce fresh air. Contact **PennKote Limited** for MSDS and further information.

**PHYSICAL PROPERTIES & DATA**

<b>Solids</b>	52%
<b>Colour Wet</b>	light Green
<b>Colour Cured</b>	translucent Forest Green
<b>Consistency</b>	light creamy green
<b>Bond Strength</b> (ASTM D321)	0.513 MPA (73.3 PSI)
<b>Tensile Strength</b> (ASTM D412)	2.73 MPA (390 PSI)
<b>Elongation</b> (ASTM D412)	340%
<b>Plastic Flow</b>	non Sag
<b>Air Leakage*</b> <b>at 75 Pa</b>	0.00065 l/m <sup>2</sup> .S - Surpasses TYPE III standards of N.R.C.(Complete test results available)



<b>Wind Load*</b>	No deflection, separation, damage or cracking observed under gust, wind and sustained wind load.
<b>Flammability Wet</b>	non Flammable
<b>Water Vapour Permeance**</b> (free film) (ASTM E-96)	34.2 ng/Pa.s.m <sup>2</sup>
<b>Service Temperature</b>	25°C to any environmental temperature
<b>Application Temperature</b>	above 0°C (32°F)

\*Note 1: According to the NRC (Canada) guidelines, air barrier material Type 1 is designated by air leakage rates of max 0.15 l/s.m<sup>2</sup>. Type 2: max 0.1 l/s.m<sup>2</sup> and Type 3 max 0.05 l/s.m<sup>2</sup>.

\*\*Note 2: The material that retards water vapour migration at the maximum rate of 15 ng/s.m<sup>2</sup>.Pa is considered Type 1, between 15-45 ng/s.m<sup>2</sup>.Pa is Type 2 and between 45-57.2 ng/s.m<sup>2</sup>.Pa is a Type 3 vapour inhibitor. ASTM Designation E241-90 Standard Practices for Increasing Durability of Building Constructions against Water-Induced Damage defines vapour inhibitor (formerly vapour barrier) as "a material that retards water vapour migration generally not exceeding 57.2 ng/s.m<sup>2</sup>.Pa" (1 perm).

#### **TECHNICAL ASSISTANCE**

Please contact **PENNKOTE** for specific details and/or data not outlined in this literature. **PennKote** will provide technical assistance from design through to product application upon request.

#### **TRANSITION MEMBRANE/REINFORCING FABRIC**

The transition membrane shall be a 40 mil thick self-adhering prefabricated membrane based on cross-laminated polyethylene bonded to rubberized asphalt such as SOPRASEAL STICK 1100 by Soprema Inc. or similar.\*\*\*

Reinforcing fabric for details shall be **PENNFLEX**, an expandable synthetic tape by **PENNKOTE**.

For further information on these and other acceptable transition membrane products contact **PENNKOTE**.

#### **WARRANTY**

PennKote Ltd. warrants its products against manufacturing and material defects. PennKote will, for a period of two years from the date of application, supply replacement material for product proven to be defective. This warranty is in lieu of any and all other warranties expressed or implied. Pennkote Ltd. and any Distributor or Retailer of this product accept no liability for incidental or consequential damage due to defective material or improper installation. The user shall determine the suitability of this product for intended use.

\*\*\*Note 3: For information on compatibility with other commercially available transition membranes, please contact **PennKote**.