

## VAPOR SHIELD-101 MOISTURE VAPOUR BARRIER

### APPLICATION AND INSTALLATION

**Product Description** **Thermakraft VAPOR SHIELD-101 Moisture Control Barrier** consists of a woven polyethylene coated both sides with polyethylene film.

**Product Advantage** **Thermakraft VAPOR SHIELD-101** is tear resistant and can withstand climate extremes. It is moisture proof and impervious to rot, mildew and most chemicals. Easy to handle, cut and staple.

**Application** **Thermakraft VAPOR SHIELD-101** is the ideal underlayment for roof construction, where condensation and moisture control is required.

**Thermakraft VAPOR SHIELD-101** is laid as a moisture vapour barrier initially to maintain a waterproof membrane to keep the sarking dry until the roof is fixed, then acts as a vapour control layer during its serviceable life.

Allow 150mm lap. All joints to be sealed with **Thermakraft White P.V.C. Pressure Sensitive Tape**, roll width 48mm. Where battens are nailed through the membrane, cover pre-nail battens with sealastic at nail points. Any other projections and penetrations must be sealed.

**Special Caution - Thermakraft VAPOR SHIELD-101** should have a minimum clearance of 200mm from the chimney flue.

#### Control of Condensation

In climatic regions where condensation risks are high, such as cold or high humidity areas, care needs to be taken in specifying the correct design and installation to prevent moisture build-up in the roof cavities.

Factors which adversely affect the condensation risk in roofing systems include;

- Humid, and/or cold climatic regions
- Warm/Skillion roof construction
- Low roof cavity air volume and restricted air movement
- Omitting Vapour Control Layers
- Ceiling penetrations and entry of warm air into roof cavities
- Occupancy activities which have high moisture loading on conditioned spaces
- Low pitched roof
- Bulk insulation
- Building structures ability to naturally dry Construction Moisture

Skillion and Warm Roof Construction are particularly sensitive to moisture accumulation and the design and installation of roof construction needs to take into account the higher condensation risks. Refer MRM Code of Practice for details.

**Storage** **Thermakraft VAPOR SHIELD-101** should be stored on end in dry conditions, protect from the weather and direct sunlight.

**Roll Dimensions** 2130mm x 47m = 100m<sup>2</sup> 10kg

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### TECHNICAL SPECIFICATIONS

#### Durability

**Thermakraft VAPOR SHIELD-101 Moisture Control Barrier** will meet the performance requirements of NZBC Clause B2, Durability (B2.3.1[a] 50 years), and B2.3.1 (b) 15 years, E2 External Moisture providing:

- must be installed in accordance to the "APPLICATION and INSTALLATION GUIDELINES"
- is not left exposed for more than 7 days
- installed in accordance with Roofing Code of Practice
- installed by or under guidance of Licensed Building Practitioners

#### Physical Properties

|                              |                 |         |         |
|------------------------------|-----------------|---------|---------|
| Tensile grab                 | ASTM D751:1973  | MD 400N | CD 438N |
| Tear Strength<br>(trapezoid) | ASTM D4533:2004 | MD 110N | CD 100N |
| Burst                        | ASTM D751:1973  | 880kPa  |         |

**Thermakraft VAPOR SHIELD-101** has a base weight of 99gsm.

The recommendations contained in **Thermakraft's** literature are based on good building practice, but are not an exhaustive statement of all relevant information and are subject to any conditions contained in the Warranty. All product dimensions and performance claims are subject to any variation caused by normal manufacturing process and tolerances. Furthermore, as the successful performance of the relevant system depends on numerous factors outside the control of **Thermakraft** (for example quality of workmanship and design), **Thermakraft** shall not be liable for the recommendations in that literature and the performance of **the Product**, including its suitability for any purpose or ability to satisfy the relevant provisions of the Building Code, regulations and standards.