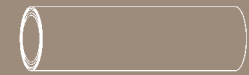




DALTEX®

Innovators in Nonwoven Technology



1.5m x 30m



MultiTX® PLUS

HIGH VAPOUR RESISTANCE AIR AND LIQUID BARRIER UNDERLAY FOR PITCHED ROOFS



- Modern alternative to traditional type 1F roofing felts
- Clean, light and easy to cut
- Protects against wind driven rain, snow and dust
- Exceptional resistance to water penetration
- Stabilised against UV degradation
- Excellent low temperature flexibility
- Excellent durability



Technical Data

Mass (per unit area) (EN 1848-2)		116 g/m ²
Tensile Strength (EN 12311-1)	Machine Cross	230 N/50mm 160 N/50mm
Tear Resistance (EN 12310-1)	Machine Cross	170 N 160 N
Water Vapour Transmission (EN 1931)		4 g/m ² /24hrs
Water Vapour Resistance (Sd) (EN 12572)		10m
Resistance to Water Penetration (EN 1928)		W1

www.donlow.com



Code: 921

Issue 3 Mar/2010





HIGH VAPOUR RESISTANCE AIR AND LIQUID BARRIER UNDERLAY FOR PITCHED ROOFS

DalTex[®] MultiTX[®] Plus can be used in warm & cold, supported & unsupported ventilated pitched roof systems for tiles and slates. In mainland UK and Ireland the underlay should be installed in accordance with IAB 07/0268. For general information please see details below:

COLD PITCHED ROOFS

Where MultiTX[®] Plus roofing underlay is used, roof spaces or enclosed cavities should be ventilated above the thermal insulation layer. Ventilation openings should be provided on the longer sides of a typical rectangular roof, to allow good through ventilation thereby avoiding stagnant air pockets. The openings should be equivalent in area to a continuous opening of not less than:

- a) 25 mm length at eaves for pitches of 15° or less;
- b) 10 mm length at eaves for pitches of more than 15°;

Care should be taken to ensure that insulation covers the ceiling completely but does not block the ventilation pathway in the eaves, especially in lower pitched roofs. Proprietary ducts are available that can be fixed between rafters, and allow insulation to be pushed into the eaves with a free opening above.

Additional ventilation openings, equivalent in area to a continuous opening of 5mm, should be provided at high level in:

- roofs pitched at 35° and above;
- roofs of any pitch with a span greater than 10m;
- lean-to and mono-pitch roofs.

Care should be taken to minimise the risk of water vapour coming into contact with cold parts of the roof construction. Factors to be considered and minimised include moisture diffusion through the ceiling, infiltration through unsealed openings / penetrations in the ceiling and services evaporating or venting moisture into cold spaces. Further guidance can be found in BS 5250:2002 Section 8.4, BS 5534:2003, Annex B, and BRE report (BR 262:2002) *Thermal insulation - avoiding risks*.

Gaps in the ceiling should be avoided as far as possible to minimise the flow of warm moist air from the house into the loft. Loft hatches should be airtight and kept closed and service penetrations sealed with mastic. When a new house is drying out, it should be ventilated to the outside and care taken to minimise water vapour entering the roof.

WARM PITCHED ROOFS

When MultiTX[®] Plus is used in a hybrid warm roof, the ceiling should be well sealed and a ventilation gap of at least 20mm between the insulation and the underlay should be allowed. A vapour control layer should be used on the underside of the insulation.

GENERAL INSTALLATION INFORMATION

MultiTX[®] Plus should be fixed with the dark side uppermost. In unsupported applications the membrane should be draped over the rafters and fixed using tiling battens, ensuring that there is sufficient drape to allow moisture and air movement. The underlay should be draped by more than 6mm and less than 25mm. In supported applications MultiTX[®] Plus should be installed onto counter battens. MultiTX[®] Plus is unrolled horizontally across the roof starting at the eaves. Subsequent rows of membrane should be lapped over the underlying row to shed water out and down the slope. Sufficient vertical overlap should also be allowed - see table below and diagram 9.

MINIMUM OVERLAPS

Roof Pitch (°)	Horizontal Lap (mm)		Vertical Lap Limit (mm)
	Partially Supported	Fully Supported	
12.5 to 14	225	150	100
15 to 34	150	100	100
35+	100	75	100

Note: For Republic of Ireland a horizontal overlap of 225mm should be maintained for partially supported roofs up to a roof pitch of 22.5°. All other values in the table above are valid for ROI.

Eaves and roof edges: MultiTX[®] Plus should be unrolled across the roof and draped a minimum of 150mm onto the proprietary eaves carrier. The eaves carrier needs to extend beyond the outer fascia board / tilting fillet edge to ensure effective drainage into the gutter – see figure 8.

Ridges: In duo-pitched roofs MultiTX[®] Plus from one elevation should overlap the other by at least 150mm see diagram. MultiTX[®] Plus should be sealed around penetrations through the roof at the ridge to accommodate high level void ventilation. With mono-pitched roofs MultiTX[®] Plus should be extended over the mono ridge by at least 100mm. It is recommended that MultiTX[®] Plus be extended to provide protection to the ends of roof timbers.

Verges: At verges MultiTX[®] Plus should be lapped over the outer walling (typically brickwork) by at least 50mm. Where the verge has a constructed overhang MultiTX[®] Plus should be fixed to the outer rafter.

Abutments: MultiTX[®] Plus should be returned up the abutment by at least 75mm below either a proprietary plastics or lead flashing – see figure 10.

Hips and Valleys: Should be covered with a separate 600mm wide strip of MultiTX[®] Plus

Details: Ensure that when detailing around service penetrations, roof lights or chimneys MultiTX[®] Plus is dressed a minimum of 100mm to the up-stand and is effectively sealed and weathered by an appropriate flashing.

HEALTH & SAFETY

Care should be taken in handling materials at height in particular ensure that manual handling regulations are not exceeded. Sufficient edge protection, netting and appropriate scaffolding and hoisting are necessary to ensure the safe application of roofing membranes and underlays. Before work commences a method statement and risk assessment should be prepared.

STANDARDS AND GUIDANCE

The standard that covers the use and installation of membranes in walls and underlays in roofs is the British Standard for the Control of Condensation in Buildings, BS 5250:2002. This is referenced in relevant sections of the Building Regulations in England and Wales, (Approved Document C), Scotland (Standard 3.15) and Northern Ireland (Technical Booklet C). An amended version of BS5250:2002, was issued in December 2005, this should now be followed.

In Southern Ireland Section 2 of Technical Guidance Document F provides guidance on the requirements for ventilation of roofs; although this makes reference to BS5250:2002, there are some differences in the case of warm roofs which are noted below. All warm roofs should have a 50mm gap between the covering and underlay, which means that counterbattens must be used. Further guidance for the appropriate detailing of roofing components is given in the British Standard Code of Practice for Slating & Tiling, BS5543:2003; this should always be followed when installing DalTex underlays.

For CE Accompanying Technical Document please contact your distributor or visit www.donlow.com

Don & Low believes that the information provided herein is accurate as at the date of publication. The information does not form part of any contract. Don & Low reserves the right to change specifications or other product information. Don & Low accepts no responsibility or liability for information provided by third parties. No warranties, express or implied, are offered regarding the suitability of any product for your use, as site conditions and customer requirements vary. Should you require further information, please contact us. Products are sold subject to the seller's terms and conditions of sale. No warranty or immunity is offered against infringement of patents or other intellectual property rights.

© Don & Low Limited, 2008. The intellectual property in the products is owned and protected by Don & Low or its licensors.

FIGURE 8 - DalTex[®] Roofing Underlay: Eaves Detail

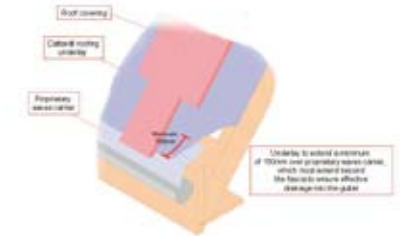


FIGURE 9 - DalTex[®] Roofing Underlay: Overlap Detail

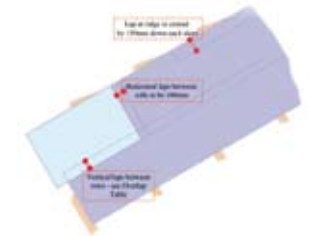


FIGURE 10 - DalTex[®] Roofing Underlay: Abutment Detail

