

Technical Bulletin

15 December 2020

Permastop® Building Blanket for effective condensation management

There has been a lot of speculation circulating in recent times that the latest NCC 2019 under Condensation Management has restricted the use of bonded foil and glasswool under residential roofs. NCC 2019 called for 'Condensation in Buildings - Tasmanian Designers' Guide - Version 2' to be followed wherever possible in Tasmania. This is not a compulsory requirement. It is a recommendation in the NCC 2019 only.

It is important to note that the 'Condensation in Buildings - Tasmanian Designers' Guide - Version 2' clearly gives designers the option to use bonded foil/insulation for roofs in conjunction with ventilated air spaces as per below.

> Consider the use of bonded foil/insulation for roofs, in conjunction with ventilated roof spaces

Extract from Condensation in Buildings - Tasmanian designers' Guide - Version 2: Strategies for minimising condensation Page 8.

Fletcher Insulation fully supports and believes that bonded foil and glasswool blanket under pitched metal roofs is a cost-effective optimal solution for condensation control. For many years, Permastop® Building Blanket has successfully managed condensation in metal roof applications in cold as well as warm climates. The new ventilation requirements in NCC 2019 will reduce the risk of condensation even further.

It is widely acknowledged that metal roof cladding temperature can get lower than its surrounding air at night with clear sky due to radiative cooling. Without insulation supplied underneath the cladding, condensation may occur if the moist air gets into the roof cavity.

With foil faced bulk insulation blanket positioned directly underneath the metal cladding it:

- can maintain the internal vapour barrier facing temperature above dew point and reduce the opportunity of condensation occurring.
- provides a vapour barrier to prevent internal moisture from contacting the cold external metal cladding, better protecting the roof structure.
- delivers good acoustic performance and reduces rain noise and other external noises transferring into the home.

Permastop® Building Blanket is also a compliant product for bush fire zone construction where BAL rating is required. To further reduce condensation risks, Permastop® Building Blanket needs to be installed as per the manufacturer's recommendation and it is good practice to avoid thermal bridging wherever possible.

Note 1: this guide is the guide for one condensation management strategy and there are other strategies to manage condensation control. For more detail, please consult the Condensation in Buildings - Tasmanian Designers' Guide - Version 2 and/or NCC 2019. Note 2: although this guide is specific to Tasmania, these condensation issues may arise in other states with similar climate zones, such as zone 5, 6, 7, 8 and it can also be used as a guide for those regions.

© Fletcher Insulation Pty Limited 2020. Fletcher Insulation reserves the right to change product specifications without prior notification. Information in this publication and otherwise supplied to users as to the subject product is based on our general experience and is given in good faith, but because of the many particular factors which are outside our knowledge and control and affect the use of products, no warranty is given or is to be implied with respect to either such information or the product itself, in particular the suitability of the product for any particular purpose. The purchaser should independently determine the suitability of the product for the intended application. Unless otherwise stated all TM and ® are trademarks and registered trademarks of Fletcher Insulation Pty Limited ABN 72 001 175 355. TB05_Revision_0_Issuedate 151220.

For more information please email the Fletcher Insulation technical team at technical@insulation.com.au

