TECHNICAL HIGHLIGHT

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ROOF SPACERS

ISSUE #1

Welcome to the first in a series of technical highlights written specifically to assist you, the building designer, keep informed with some of the latest design issues. I hope you find them helpful. Please look for further notes at my website www.rachaelzeuner.com.au.

Rachael

Since their recent introduction in the market, roof spacers have become an integral part of the design process of a roof to achieve the thermal requirements detailed in Part J of Volume 1 of the NCC (previously the BCA). The NCC requires that the insulation blanket must recover to its full thickness over the purlin supports so not to compromise its Rw rating. To do this a roof spacer provides an intermediate support between the roof sheeting and the purlin and allows the voids between the spacer and the purlin to be filled with insulation blanket.

Roof spacers are available in a range of heights to suit a range of insulation thicknesses. Refer to the roof spacer manufacturer for the right spacer for your project.

Roof spacers should also be used when an insulation blanket of a thickness greater than 50mm is installed so as to not compromise the performance of the roof sheeting and its fixings. Trying to screw a sheet directly through an insulation blanket of thickness greater than 50mm can cause two problems; Firstly there may be difficulty using standard screws through the insulation and the force required to do so can put an additional upload forces on the screw and sheet which is unlikely to have been considered in the product testing.

Figure 1 - J-Clip from Carey Roofing Products, available in 3 heights 75, 100 & 120mm

Secondly the 'squashing' of the insulation is likely to create a pillowing effect on the roof, which along with aesthetic issues can lead to drainage issues and possible corrosion of the sheet and fasteners.

When selecting the spacer right for your project make sure it has undertaken full testing to the wind classification of your project (i.e. non-cyclonic or cyclonic). Point load testing is also important and the test set should consider a full roofing system, including the insulation.

Refer to the roof spacing manufacturer for full installation details. Details for the J-Clip can be found at www.j-clip.com.au.

Free access to the NCC range can now be accessed by registering at www.ABCB.gov.au.

J-CLIP
A stronger safer solution for section J