

# Speaking from experience

Ventilation of cold roof designs in New Zealand doesn't always go smoothly. Here, BRANZ physicists hand over to a couple of professional builders who have long been at the coalface dealing with roof moisture issues on their projects.

**BRANZ HAS WORKED** with Roland Alderton and Mike Way for some time, and their experience is worth a read as roof ventilation is a complex topic and there is no silver bullet that provides the answers for all the eventualities.

## **Passive vents often add resilience**

Last year, Tasmania published some guidelines on the benefits of ventilating roof spaces. Conversely, the Scottish Building Standards Technical Handbook recommends staying away from ventilated cold, flat roofs in the Scottish climate.

While we generally recommend using passive vent elements in New Zealand to add resilience against the accumulation of moisture in the roof space (see Bulletin 630 *Roof space ventilation*), *A school lesson* on pages 69-70 of this *Build* illustrates how problems can still arise. But enough from us - over to Roland and Mike. ◀

## Roland Alderton of RJ Alderton Builders, Hamilton

**WE BEGAN VENTILATING** roofs 20 years ago. In the beginning, this was ventilating asphalt shingle roofs at the fascia and ridge or, if the wall cladding allowed it, custom timber louvre gable vents such as in old buildings.

At that time, we were only ventilating to control the roof space temperature. Venting seemed a good idea - we had no idea that it was potentially so important to overall home health.

## **Bach in a high wind zone**

In 2009, we built a bach in National Park

village by Mt Ruapehu. It is 825 m above sea level and in a very high wind zone. Our main focus for the build was a basic weathertight design with insulation well above Building Code requirements.

We were interested in how the building was performing, and during an inspection, we noted ice forming in the roof on the underlay. After speaking with locals, it became apparent that this was common in this region, so we did some homework on how to best combat the problem.