SO OFTEN, we do things without even realising why. It’s just the way we have always done it. For building construction, understanding the why is key to avoiding potential problems and doing better.

Last year, BRANZ ran a successful seminar called Detail, Science, Build. This looked at the basic science of water and wind and the application of this science to common construction details – how and why they work.

BRANZ has been leading this science for many years, improving understanding on how to keep moisture out and why it is important to drain and dry the moisture that does get in.

This Build, we pick up some of the key messages from that seminar. Some of you will find this far too basic – you know it already. That’s great, but there may be one little gem you could pick up.

For the rest of you, these articles may explain the unknown reasons how and why many building materials and construction details that are used every day work. How cavities work, and why we use air barriers. Why missing an air seal is not OK. Why some gaps must be filled, and others must be left open.

Getting these basic construction details wrong, either at the design or build stage, create potential problems for the life of a building.

As the industry struggles to deal with poor quality, we need to go back to the basics and get them right. We need to make sure everyone has a sound foundation of basic building science knowledge so the right decisions can be made at all stages of a design and build.