



## **03. Technical Specifications**

### **03.04a HOME DESIGN CONSIDERATIONS**

Shrinkage and expansion of timber board floors is a natural and cyclical process. The degree of movement depends on the surrounding changes in atmospheric moisture content and therefore is generally controlled by seasonal weather conditions. Changes are most evident during long periods of either dry or wet conditions. However, local conditions also have considerable influence.

Good ventilation under your floor is a very significant factor in a successful installation and is probably the most misunderstood requirement for good floor design and performance. “Minimum” ventilation recommendations may not be adequate for your site. Excessive humidity in the under-floor area can be caused by the lack of sufficient cross-flow of ventilation or from damp soil conditions arising from poor drainage. Ensure that water from gardens or storm water does not drain under the floor area and that no water lies in the under-floor area.

Air conditioning and heating systems (especially sub-floor heating systems) can dramatically reduce the general moisture content within a home. Your flooring specialist should be made aware that these systems are to be used. It may be necessary or advisable before laying/coating to operate these systems and to acclimatise the flooring to the average conditions in these situations.

In situations where timber floors are exposed to extreme stress, humidity controls may be necessary to control and maintain ideal environmental conditions.

Shutting a house up when away on holidays for long periods can also create abnormal humidity conditions.

Full length windows, large glass areas and skylights which admit direct sunlight can create sunroom conditions with high temperatures and low moisture conditions causing flooring to shrink. Direct sunlight will also cause color changes to the timber, so moving rugs occasionally, and the use of curtains or blinds are a good idea.

If your home is located close to a large body of water such as the ocean, a river, lake, dam or wet lands, or if it will experience prevailing winds which may direct particularly moist or dry air towards your home, special moisture control measures may be required. Expert advice should be sought.