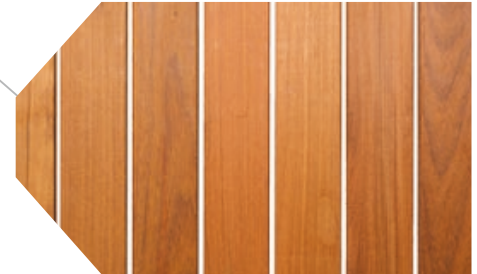


# Decking Ventilation

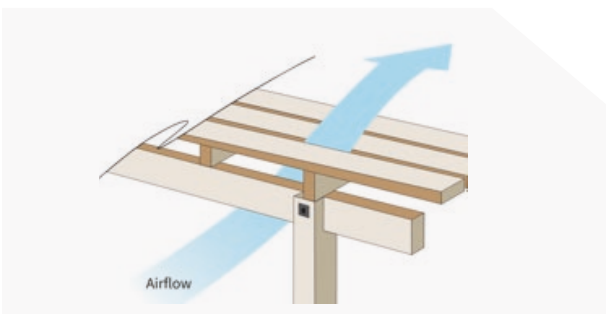


It is well known that air flow and ventilation under and around wood decking are important for the stability and performance of the product.

Humidity issues are a risk for any deck that is close to the ground or enclosed in some way. Decks can be enclosed either by building materials like wood or plaster, by thick plants, or anything that drastically reduces the amount of airflow through the deck's structure. The proximity to the ground means that even more moisture can get into the timber, especially if the ground has poor drainage. Rain exacerbates the problem too if it can reach the sub-deck space.

By ensuring good sub-floor ventilation, you're helping to keep your timber strong, and maintaining a proper appearance.

Air-dried decking is typically delivered with a moisture content between 18% and 25%. It is more prone to contraction and cupping immediately after installation if equalization has not been fully achieved. Air-dried decking may shrink face depending on the moisture content at the time of installation, climate, and site conditions.



thePRIMEWOOD Kiln-Dried (KD) Decking is pre-stabilized to a moisture content typically between 14% +/-2, which minimizes shrinkage or expansion.

High moisture content under a deck combined with the impact of the sun and heat on the surface of a deck can cause stress that can result in increased checking, cupping, or twisting. Some applications simply cannot avoid the reduction of ventilation by their design. Decks at grade or on roofs are not that uncommon, so how do we reduce problems in these applications?

First, it is essential to understand that dimensional stability is directly related to decking thickness and width ratios. Instability will increase as the board widens related to its thickness. For example, a 1x4 (19x90mm) is more stable than a 1x6 (19x140mm), and a 5/4x4 (25x90mm) is much more stable than a 5/4x6 (25x140mm).

## Poor Ventilation Solutions

We know that a 1 x 4 (19x90mm) and 5/4x4 (25x90mm) or 21x90mm (EU) deck boards, whether air-dried or kiln-dried, gives the most stable performance on poorly ventilated residential or commercial decks, no matter the fastening method used.

You may also wish to consider products thePRIMEWOOD Deck Tiles specifically designed for less well-ventilated applications. The deck tiles are constructed of wood slats that have a stable thickness-to-width ratio. Using shorter-length components provides a highly cost-effective and unique deck construction option. Deck tiles can be installed to create various designs and patterns.

