

# **KWILA DECKING**Ventilation & Drainage

The majority of decking issues occur when moisture is allowed to build up below the deck. The underside of the decking boards absorb this moisture causing the timber to expand, while the top of the decking boards dry out and the timber contracts. This can cause cupping, splitting, twisting and warping.

While kwila is the most stable timber on the market and movement is minimal, it is still important to allow sufficient subfloor and cross-flow ventilation and drainage to help avoid moisture build up below the deck.

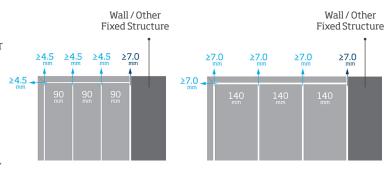
### Checklist

- Is there sufficient gapping between boards (minimum 5%)?
- Have you built side flow ventilation into the design?
- Have you considered whether additional drainage is needed?

### **Gapping (surface ventilation)**

The gapping should be a minimum of 5% of the width of the boards. For 90mm boards allow at least 4.5mm gapping, and for 140mm boards gaps should be at least 7mm. Allow a minimum 7mm gap from fixed structures such as walls.

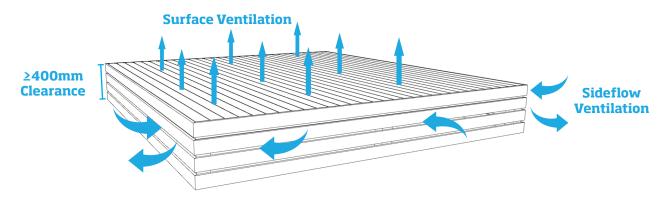
Wood naturally expands and contracts with changes in temperature and humidity, and leaving gaps allows room for this movement as well as helping with water drainage, preventing pooling, mold, or mildew. Adequate spacing also improves air circulation beneath the deck, preventing wood rot.



## **Gapping (sideflow ventilation)**

Designing your deck with adequate sideflow ventilation helps reduce trapped moisture under the deck by allowing fresh air to circulate. Without it, moisture from rain, ground humidity, or condensation can build up, leading to deteriation of both the decking boards and the subfloor structure.

We recommend installing decking at least 400mm off the ground, with a minimum of 5% gapping between the boards installed on the side of the deck. If your deck is lower to the ground, you will need to increase both the side and surface gapping between decking boards, and consider installing a drainage system.



#### **Drainage**

Decks should be built with a slight slope away from the house to direct water runoff. For fully exposed decks, decks that are low to the ground, or built over heavy, poorly draining soil/clay, additional sub-deck drainage systems should also be considered.

Customer claims relating to defects or damage arising from insufficient ventilation or drainage where the customer has failed to adhere to the specified ventilation and drainage recommendations provided at the time of purchase/installation will not be eligible for a product replacement or refund.