



## Sub-floor moisture

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Moist conditions under the sub-floor are expected after a flood, particularly one of long duration. However, a well drained and vented sub-floor should slowly but surely dry out. The time to dry out is very variable, depending on ventilation rate, soil type and design factors. If the subfloor has not dried out within 2-12 weeks then there may be additional problems restricting drying. Such problems may include

- [poor sub-floor ventilation](#)
- [sub-floor moisture traps](#)

The persistence of high sub-floor moisture can result in significant deterioration of floor and its supports including fungal and mould growth on timber, corrosion of connectors, corrosion of steel work as well as a persistence of warping of floorboards, etc.

### Poor sub-floor ventilation

The building code of Australia recommends that for timber clad houses there should be a minimum of 350 mm between the ground and floor joists. This should provide all the ventilation required as long as air movement across the sub-floor is not restricted. After a flood remove barge boards and other obstructions to air flow. Soil may have built up against the barge boards, this should be removed. Ensure that the sub-floor can drain away from the house. Also ensure that there are no-obstructions to air flow under the house. Flood debris or materials stored under the house may obstruct air flow. More seriously structural members such as concrete or brick walls may block airflow. Strategic vents should be placed in these members (at least 15600 mm<sup>2</sup> per metre). If the sub-floor does not dry out and the separation of ground floor joist is significantly less than 350 mm it may be necessary to lower the ground level. Alternatively forced venting or as a last resort venting into living spaces may be required.



### Sub-floor moisture traps



Moisture may be trapped at various points in the sub-floor. Earth may build up around the perimeter of the house (particularly in old houses) so the sub-floor is effectively dammed.

Alternatively, hollows may be associated with stumps/piers or chimneys. These hollows may form during the flood itself or may be left from the building process. All hollows need to be filled and built up earth removed and temporary channels provided so the flood water beneath the sub-floor drain away from the houses.