

Installing Hardwood Timber on QwickBuild Framing System

Unlike composite decking, hardwood timber installed on QwickBuild uses large amounts of screws. The combination of stainless steel and aluminium has wide applications in the marine industry, however, extra steps are necessary to prevent corrosion in high exposure zones. All Outdure's stainless steel brackets and corresponding screws are manufactured with a powder coated surface. However for Zone D areas, Outdure recommends an extra durable fluoropolymer coating for all screws combined with the use of anti-wetting / isolating agents. Therefore, currently Outdure cannot offer a warranty for QwickBuild when used as a sub-frame for hardwood decking timber in Zone D corrosive environments.

Exposure Zones B, C or D

Standards New Zealand, (2011) Timber-framed buildings: Superseding NZS 3604:2011

The standard NZS 3604:2011 classifies environments in New Zealand which may affect the durability of elements of the building such as structural timber parts, fasteners, fixings, brackets, and similar. When selecting appropriate materials, the overall environment in the location of the intended structure requires consideration. Depending on the severity of exposure to wind-driven sea salt, building sites shall be classified as being in Exposure Zones B, C or D. Please refer to the attached map to determine your exposure zone.

Exposure Zones Description

Zone B: Low

Inland areas with little risk from wind blown sea-spray salt deposits.

Zone C: Medium

Inland coastal areas with medium risk from wind blown sea-spray salt deposits. This zone covers mainly coastal areas with relatively low salinity. The extent of the affected area varies significantly with factors such as winds, topography and vegetation.

Zone D: High

Coastal areas with high risk of wind blown sea-spray salt deposits. This is defined as within 500 m of the sea including harbours, or 100 m from tidal estuaries and sheltered inlets. The coastal area also includes all offshore islands including Waiheke Island, Great Barrier Island, Stewart Island, the Chatham Islands, and the areas shown in white (see attached map).

Microclimatic considerations

In addition to exposure zones, evidence of local environmental effects (microclimates), and those produced by the erection of a structure or installation of equipment, shall be considered. Such on-site factors require additional consideration because a mildly corrosive atmosphere can be converted into an aggressive environment by microclimatic effects. Indications of such local conditions may be in the form of corrosion of metal items on adjacent structures. Significant acceleration of the corrosion rate of structural fasteners and fixings beyond what could be expected from the geographical location can occur in the following circumstances:




- a) Industrial contamination and corrosive atmospheres;
- b) Contamination from agricultural chemicals or fertilisers; and
- c) Geothermal hot spots. Hot spots are defined as being within 50 m of a bore, mud pool, steam vent, or other source

Microclimatic conditions (a) to (c) require *SED*.

For more information, please refer to <https://www.standards.govt.nz/>



NOTE – Zone D includes all offshore islands, the area within 500 m of the coastline of New Zealand, and those areas shown in white. The map shall be read in conjunction with [4.2.2](#).

Exposure zones	
	Zone B
	Zone C
	Zone D

