James Hardie

The information in this supplement and James Hardie's technical literature is ony intended for use in relation to the relevant James Hardie products

Stiffening of Surface Structure

Foundations for building in TC3 Zone

Technical Supplement – MARCH 2016

GENERAL

This technical supplement is developed to achieve the required stiffness / sub floor bracing for Type 1 and Type 2 'Surface Structure Foundations' of timber framed buildings to be built in TC3 (Technical Category 3) zone in Christchurch and must be read in conjunction with guidance document ***'Interim Guidance for Repairing and Rebuilding Foundations in Technical Category 3'*** published by Ministry of Business, Innovation and Employment (MBIE). These buildings are to be built within the design scope of NZS 3604.

Refer to www.building.govt.nz for further information regarding this guidance document. This document provides detailed guidance on repairing and rebuilding the foundation of timber framed houses in TC3 zone. Section C5.4 of this guidance document specifically covers details on light weight surface structures and shallow foundations with a view that these foundation will be re-levelable after a significant lateral ground movement/settlement.

Also refer to Section 5 'Bracing' and Section 6 'Foundation and Sub Floor Bracing' of NZS 3604 for more information regarding the Sub Floor framing and bracing.

The specifier or other party responsible for the project must ensure that the details in this technical supplement are appropriate for the intended application and additional detailing is carried where needed to ensure the detail is fit for purpose. In case you need any further information, Ask James Hardie™ on 0800 808 868.

FRAMING

The sub floor framing, piles, foundation, timber grade and sizes etc. must be in accordance with Section 6 of NZS 3604. Timber treatment level for sub-floor framing must be selected in accordance with NZS3602 (Timber and Wood Based Products for Use in Buildings).

- The framing in between the sub-floor piles must be provided as per Figure 1 or Figure 2.

TITAN™ FAÇADE PANEL / HARDIEFLEX™ SHEET 7.5MM INSTALLATION

Titan Façade Panel or HardieFlex Sheet must be fixed to the entire framing directly using 40x2.8mm HardieFlex™ Nails as per the fixing Figure 1 and Figure 2.

The interim guidance document published by MBIE allows the floors to be maximum 1000mm from the finished ground. So in this case the panels can be fixed to the framing horizontally to minimise cutting of panels on site. The vertical joint between the two panels must have a 50mm wide 3259 Inseal tape used under the joint or using a jointer.

The panels must be primed at the back face and painted on front face to maintain the durability.

SUB FLOOR VENTILATION & GROUND CLEARANCE

Sub floor ventilation must be provided in accordance with NZS 3604. The ground under the panels is to be dressed with paving slabs. Clearance between the clear ground and bottom edge of cladding along the entire perimeter must be minimum 50mm. This opening will allow ventilation of the subfloor.

MAINTENANCE

The cladding must be washed once every 6 months.

The clearance between the finished ground and the bottom edge of cladding must always be kept clear of debris.

For further information regarding the maintenance of cladding, refer to product technical specification. In case you have any specific queries related to Sub Floor Bracing, Ask James Hardie 0800 808 868.

Figure 1: Type 1 Surface Structure Foundations

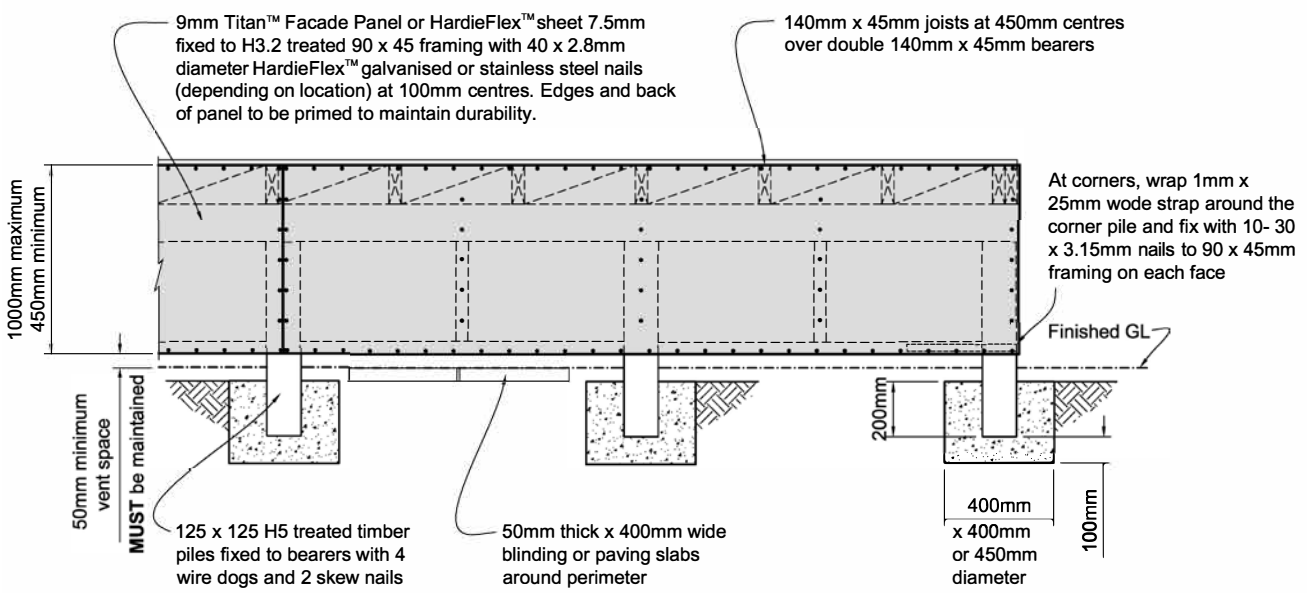

Figure 2: Type 2 Surface Structure Foundations