

## Solid Timber Panelling Installation Specification

Tongue & Groove (T&G),
Tongue & Groove with 'V' (TG&V)
or Square Negative Detail

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#### 1.0 General Information

#### 1.1 Introduction

The Hermpac panelling profiles have been designed and manufactured by Herman Pacific Ltd and can be used for exterior soffits or as an interior ceiling/sarking or feature wall system.

Hermpac panelling is available in a range of profiles and species in accordance with NZS3602:2003, NZS3610:1979 Specification for profiles or mouldings and joinery and NZS3631:1988 New Zealand Timber Grading Rules.

A wide range of widths and thicknesses are available, and include custom profiles to match some weatherboard and decking profiles.

Various grade options are also available in some species.

#### 1.2 Species options

- 1.2.1 **Exterior Soffits\*** Durability Requirements as per NZBC B2/AS1, Table 1:
  - Canadian Coastal Western Red Cedar
    - PC1 65-172mm wide x 9.5-28mm thick
    - PremSelect 83-172mm wide x 18mm thick
  - DuraLarch IKF Grade 83-128mm wide x 18-28mm thick

## 1.2.2 Interior Ceiling/Sarking or Feature Walls\*

- Canadian Coastal Western Red Cedar
  - Premium Clears 1 (PC1)
    65-172mm wide x
    9.5-28mm thick
  - PremSelect 83-172mm wide

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x 18mm thick

- DuraLarch (IKF Grade) 83-128mm wide x 18-28mm thick
- Ashin (Quartersawn Select Grade)
   65-172mm wide x 9.5mm-28mm thick
- American White Oak
  - Prime 85-178mm wide
     x 15-21mm thick
  - Light Feature and Rustic Grade –
     85-178mm wide
     x 18-21mm thick
- American White Ash (Prime Grade)
   85-178mm wide x 15-20mm thick.
- Australian Oak (Select Grade)
   85-133mm wide x 15-20mm thick
- Spotted Gum (Standard & Better Grade)
   83-128mm wide x 15-20mm thick

NB: Subject to stock availability at time of order. Wider profiles may require a thicker depth. Please consult with our Technical Team for recommended species and thickness for your proposed application.

#### 1.4 Finish

Most Hermpac panelling profiles are machined in either a dressed or bandsawn face finish and are available end locked. Hermpac panelling profiles for interior use must be kiln dried or seasoned to the appropriate Equilibrium Moisture Content (EMC).

#### 1.5 Accessories

Accessories to assist with the correct installation of Hermpac panelling.

 Hermpac panelling clip to suit specified standard or custom panelling profile –

 $f^*$ Please consult with our Technical Team for assistance with species and profiles outside of the options listed



available in Stainless Steel or Galvanised (refer NZBC E2/AS1 Table 20)

- Stainless steel screws or nails for fixing of panelling clips
- Stainless steel nails for face or secret fixing of panelling profiles
- Flexible adhesive

**Rondo system fixings** – metal to metal pancake head drill tip 13x8g. Pre-drill larger holes in the Hermpac panelling clip prior to installation into the Rondo system.

**Steel framing or purlins** - panel clip can be fixed using a countersunk screw.

#### 1.6 Coating

For best practice, one coat of a quality coating should be applied to all faces and edges of the profile prior to installation.

This can be applied via Machinecoat NZ Ltd or applied on-site (as per coating manufacturer's instructions).

During installation, all cut ends and end grain should be coated.

Following installation a second coat should be applied to the seen faces (as per the coating manufacturer's instructions).

You must ensure that the coating specified is recommended for the intended use. For exterior soffits Hermpac recommend the use of Wood-X or Resene Waterborne Woodsman. For interior ceiling/sarking or wall feature panelling Hermpac recommend the use of the *Colorwood* stains manufactured by Resene. The coating manufacturer's instructions must be followed at all times.

## 1.7 Handling and storage

#### **TIMBER PANELLING SPECIFICATION**

Hermpac panelling timber must be stacked flat and true, clear of the ground by a minimum of 150 mm and supported on dry and clean timber gluts at maximum 900 mm centres.

The timber must be kept dry by storing within an enclosed building. Care must be taken to minimise moisture uptake into the boards and avoid damage to all panelling surfaces. Water must not be allowed to enter the stack.

#### 2.0 Installation Information

### 2.1 Site requirements

The site requirements must meet the NZBC and NZS 3604:2011 *Timber Framed buildings in New Zealand.* 

#### 2.2 Substrate

All substrate (framing) timber must be installed in accordance with NZS 3604:2011.

All substrate timber must be treated in accordance with NZBC Acceptable Solution B2/AS1.

Ensure substrate moisture content is in accordance with NZ3602:2003 Table 4.

### 2.3 System Installation

Hermpac panelling can be either direct fixed to the framing or installed over a plywood or MDF substrate.

Hermpac panelling can also be attached to the Rondo system using a combination of the Hermpac panel clip and an appropriate screw fixing.

If fixing to steel framing or purlins then the panel clip can be fixed using a countersunk screw.



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If applying over sheet material then a continuous bead should be applied to the back side of the profile.

### 2.4 Recommended Fixing Centres

#### 2.4.1 Exterior Soffits

Whether running panelling profiles lengthwise along the soffits or at right angles from the exterior wall, when fixing to rafters only, panelling should be fixed at:

- -400mm for boards up to 15mm thick
- -600mm for boards more than 15mm thick

# 2.4.2 Interior Sarking/Ceiling & Wall Applications

When running panelling horizontally (fixing to studs), or vertically (fixing to dwangs/nogs), fixing should be at:

-400mm for boards up to 15mm thick -600mm for boards more than 15mm thick

The recommendations above (2.4.2) are as per the *BRANZ Good Practice Guide: Internal Linings, section 6.20 Timber Panelling.* 

#### 2.5 Fixings & Installation

Hermpac panelling can be either face nailed, secret nailed, or fixed using the Hermpac panel clip.

All Hermpac panelling profiles require a mechanical fixing (either screws or nails) or a combination of mechanical fixing and/or a flexible adhesive.

When used, the adhesive must be applied to the back side of the panelling profile to all areas in contact with the framing.

When the Hermpac panelling clip is being used, this needs to be placed over a stud or nog/dwang line (depending on orientation of panelling), and screwed or nailed into place, ensuring head is driven in flush.

The panelling clip must be fixed to allow the lip of the rebate to the panelling profile to be placed into the open side of the clip. The tongue of the subsequent board can then be placed into the groove of preceding board. This process is repeated across the face of wall or soffit.

If fixing to steel framing or purlins then the panelling clip can be fixed using a countersunk screw.

For interior ceiling/sarking applications Hermpac panelling must be installed directly over an air barrier if direct fixed to rafters in wet areas and for all skillion roofs (to stop air leakage from carrying moisture into roof cavities).

The length of the nails for fixing internal panelling is recommended at 2.5 times the board thickness.

As per BRANZ Good Practice Guide: Internal Linings.

Eaves can be enclosed by installing Hermpac Panelling direct fixed to framing.

From a verification perspective, an exterior soffit lining is considered a continuation of the wall cladding and should be installed as such.

<sup>\*</sup>Please consult with our Technical Team for assistance with species and profiles outside of the options listed



#### **TIMBER PANELLING SPECIFICATION**

Panelling profiles must be fixed with suitable fixing to achieve a minimum penetration of 30mm into the framing.

#### Extract as per NZBC E2/AS1 - 5.3

Soffit linings shall be finished to fascias, barges and wall claddings as outlined in NZBC Acceptable Solution E2/AS1 Figure 8A. Wall underlays are not required behind soffit linings.

You must ensure that that ventilation from the wall cavity is being blocked from entering the roof space.

#### 3.0 Maintenance

Building owners are responsible for the maintenance of the Hermpac Panelling System. Annual inspections must be made to ensure that all aspects of the system, including the substrate, remain in a structurally sound condition.

Any damaged areas or areas showing signs of deterioration or degradation of the timber must be repaired immediately. Coatings must be maintained in accordance with the relevant manufacturer's instructions.

## 4.0 Health & Safety

Cutting and drilling of Hermpac panelling profiles must be carried out in well ventilated areas. Dust masks, eye and hearing protection must be worn.

<sup>\*</sup>Please consult with our Technical Team for assistance with species and profiles outside of the options listed