



# UTILITYCLAD™ PRODUCT RANGE

**Manufactured by Carter Holt Harvey Woodproducts, Utilityclad™ is a band sawn plywood panel sourced from downgraded Shadowclad® exterior cladding, it is available in either a grooved or textured finish.**

Utilityclad™ is available as a natural textured board where CCA treated, and as both a pre-primed and natural board for LOSP treated product. All Utilityclad product is 12mm (nominal) thick and the available panel sizes are 2440x1216mm and 2745x1216mm. All sheets feature a shiplap joint on the long sheet side (this gives an effective sheet width of 1200mm).

The Utilityclad Groove product features a 9mm wide, 5mm deep grooved profile at 150mm centres across the face of the board, while the Texture board has a consistent rough sawn face across the full width of the panel.

As a downgraded product, Utilityclad has a limited range of suitable applications. These are detailed in Section 1.1 below.

## 1.0 PRODUCT INFORMATION

### 1.1 SUITABLE APPLICATIONS

Utilityclad is not suitable as an exterior cladding where a high level of visual finish and/or compliance with New Zealand Building Code (NZBC) Clause E2 External Moisture is required.

Suitable cladding applications include un-lined structures such as:

- Sheds & Barns
- Farm Buildings
- General Utility Buildings

Utilityclad is not suitable for applications such as residential and commercial cladding which require a higher level of visual finish and/or compliance with NZBC Clause E2 External Moisture. Where compliance with NZBC Clause E2 External Moisture is required, CHH Woodproducts recommends the use of Shadowclad exterior cladding.

Utilityclad must be competently installed in accordance with good building practices and sound design principles to satisfy the requirements of the Building Act 2004, the New Zealand Building Code, and applicable New Zealand Standards. This is the responsibility of building owners and the design professionals and builders that they engage.

This document contains information, limitations, and cautions regarding the properties, handling, installation, usage and maintenance of Utilityclad.

### 1.2 PRODUCT LIMITATIONS

Utilityclad sheets may contain defects up to 5% of the area of the sheet surface.

Defects may include but are not limited to:

- Ship lap edge damage
- Surface delamination associated with natural defects
- Visual blemishes including bald patches and texture inconsistencies
- Veneer overlaps
- Surface ridges and veneer mis presses
- Chain marks, visible glue line, stone chips

It must not be used for any application requiring a building consent subject to the provisions of NZBC Clause E2 External Moisture.

H3 CCA Treated Utilityclad Products:

- May exhibit slight sheet bowing resulting from the treatment and surface coating processes
- The fillets used to separate sheets during drying may leave marks on the sheet surface. These will fade over time and can be disguised with paint but may be visible under penetrating stains
- The H3 CCA treatment and subsequent drying process may increase the likelihood of face checking on the surface of the panel



### 1.3 PRESERVATIVE TREATMENT

Utilityclad™ is available either H3 CCA or H3 LOSP treated (subject to availability). H3 treated Utilityclad is treated in accordance with AS/NZS 1604.3 with the standard treatment.

Utilityclad is envelope preservative treated. Where sheets are cut, cuts must be coated with a brush on timber preservative. Holdfast® Metalex® Clear is recommended. Failure to do so may affect the long term durability of the panel.

Information provided above should only be considered a general guide. For technical information contact customer services or visit [www.chhwoodproducts.co.nz](http://www.chhwoodproducts.co.nz)

#### H3.1 LOSP Treatment

H3.1 LOSP treatment does not discolour the panel surface and does not use water in the treatment process allowing panels to remain at uniform dimensions.

When coating H3.1 LOSP treated plywood some residual solvent may be present on the sheet surface from the treatment process. Sheets feeling greasy to touch should be placed in a well ventilated area and allowed to flash off to ensure proper adhesion of paints and stains to the sheet surface.

#### H3.2 CCA Treatment

H3.2 CCA uses water during the treatment process and may leave panel surfaces with a slight green colour.

Where Utilityclad is H3.2 CCA treated the use of aluminium flashings or galvanised fasteners in direct contact should be avoided and the use of stainless steel is required.

Mechanical fasteners are required to fix Utilityclad to framing.

### 1.4 PRODUCT IDENTIFICATION

In accordance with AS/NZS 2269, as a minimum every sheet of Utilityclad plywood has the following information marked on the back:

- Brand name: e.g. Utilityclad
- Glue bond: e.g. A BOND
- Intended application: e.g. STRUCTURAL
- Australasian Standard: e.g. AS/NZS 2269:2012
- Date and time of manufacture: e.g. 01/01/12 19:45:45
- Formaldehyde emission class: E<sub>0</sub>
- The Engineered Wood Products Association of Australasia (EWPPAA) brand and mill number: e.g. 911 (Tokoroa mill)

#### For example:

SECONDS HANDIPLY UTILITYCLAD STRUCTURAL  
A BOND E0 AS2269.0.2012  
NOT SUITABLE FOR BUILDINGS REQUIRING E2 COMPLIANCE  
AS/NZS 1604.3.2012 01 H3 E CCA RETREAT CUTS  
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### 1.5 AVAILABILITY

Utilityclad arises from production of first grade Shadowclad exterior cladding products.

Supply of Utilityclad cannot be guaranteed and is always supplied on a "subject to availability" basis.



## 2.0 DESIGN CONSIDERATIONS

### 2.1 DESIGN RESPONSIBILITY

Design responsibility lies with the building owner and the professionals that the owner engages. The Specifier for the project must ensure that Utilityclad™ is an appropriate cladding for their individual project. The Specifier must also provide their own specific design or detailing for any areas that fall outside the scope and specifications of this literature.

### 2.2 COMPLIANCE & STANDARDS

Utilityclad manufactured by CHH Woodproducts will meet the structural and durability requirements of the NZBC as a cladding product. However CHH Woodproducts will not warrant Utilityclad used in applications required to meet Clause E2 External Moisture of the NZBC or any issues relating to surface appearance or finish of the product.

### 2.3 LITERATURE SCOPE

Utilityclad is not suitable for use where compliance with NZBC Clause E2 External Moisture is required. Where compliance with NZBC Clause E2 External Moisture is required CHH Woodproducts recommends the use of Shadowclad exterior cladding.

### 2.4 WIND LOADING

Utilityclad is suitable for use as a cladding in all wind zones up to and including extra high (55 m/s) as defined by NZS 3604 when installed on stud framing with stud spacing not exceeding 600mm (Refer section 4.1 Framing - Construction below).

### 2.5 GROUND CLEARANCES

The bottom edge of the Utilityclad sheet must be a minimum of 100mm above decks or paved ground and a minimum of 175mm above unprotected ground.

Utilityclad must overhang the bottom plate on a concrete slab by a minimum of 50mm (and maximum of 75mm) as required by NZS 3604.

### 2.6 COATINGS & FLASHINGS

Designers may wish to specify the use of coatings or flashings as part of their design. The Shadowclad® Specification and Installation Guide may be used as guidance where and as appropriate. This is available from [www.chhwoodproducts.co.nz](http://www.chhwoodproducts.co.nz)

The designer should confirm the suitability of these coatings or flashings for their individual project.

The selection, application, and maintenance of coatings is the responsibility of building owners and the professionals that they engage. For advice on specific coating products and their suitability for use on Utilityclad, always refer to the coating manufacturer.





## 3.0 OTHER CONSIDERATIONS

### 3.1 HEALTH & SAFETY

Utilityclad™ must be handled in accordance with the relevant Material Safety Data Sheet (MSDS) which can be downloaded from [www.chhwoodproducts.co.nz](http://www.chhwoodproducts.co.nz).

If wood dust exposures are not controlled when machining (sawing, routing, planing, drilling etc) a class P1 or P2 replaceable filter or disposable face piece respirator should be worn.

Wear comfortable work gloves to avoid skin irritation and the risk of splinters. Wash hands with mild soap and water after handling panels.

### 3.2 STORAGE & HANDLING

Utilityclad panels must be:

- Kept dry;
- Stored under cover;
- Handled and stacked with care to avoid damage;
- Stacked flat; clear of the ground, on at least three evenly spaced bearers; and
- Stored in well-ventilated areas away from sources of heat, flames or sparks.

### 3.3 MAINTENANCE REQUIREMENTS

All cladding materials, including Utilityclad, require careful and regular product maintenance by the building owner throughout the cladding's normal service life to ensure long term durability and to maintain visual aesthetics.

At a minimum, Utilityclad should be maintained by:

- Regularly washing it down (at least annually) with a mild detergent or solution to remove surface dirt, moss, mould, and sea spray;
- Inspecting sheets, sheets joints, corners and bases (at least annually); and
- Keeping dirt, soil or leaf build-up at least 150 mm away from the base of panels.



## 4.0 INSTALLATION – EXTERIOR CLADDING

### 4.1 FRAMING – CONSTRUCTION

Use kiln dried framing such as Laserframe® in accordance with the timber framing manufacturer's specifications and treated in accordance with NZS 3602.

Timber frame sizes and set out must comply with NZS 3604 (or specifically designed to NZS 3603) and with stud and nog centres and timber width required by this specification.

All Utilityclad™ sheet edges must be fully supported by framing.

- Studs must not exceed 600mm centres
- Studs to be a minimum of 45mm thick
- Nogs must be provided at a maximum of 800mm centres

When direct fixing, position the framing to allow a 6mm capillary gap behind panels where they overlap the edge of concrete floor, brick veneer or lower storey cladding.

### 4.2 SHEET LAYOUT

- Sheet edges must be supported by the framing
- Sheets are designed to be vertically fixed. Do not fix sheets horizontally
- When laying up on to framing, start at framing corners and work across the wall
- All treated Utilityclad panels are envelope preservative treated. Where sheets are cut, edges must be coated with a brush on timber preservative such as Holdfast® Metalex® Clear
- Cut edges must be placed at the top of the sheet to avoid rain drips soaking in to cut end grain
- Priming or pre coating of bottom edges and sheet rears to a depth of 150mm is required for sheets which will be in close proximity to moisture such as sheets overhanging building framing close to ground and apron flashings on roofs
- An extra stud is required at internal corners for ventilated cavities
- Refer to NZS 3602 for moisture content requirements.  
As a guide, frame and cavity batten moisture content should be no greater than 20%
  - Framing must be kept as dry as possible at all times
  - Single spans of Utilityclad should not exceed 600mm (e.g. Below windows or balustrades)

### 4.3 FIXINGS – FASTENER DURABILITY

**Table 1 Fastener DURABILITY**

Treatment	Exposure Zone (refer to section 4 of NZS 3604)	Material Required
<b>H3.1 LOSP</b>	Zones B & C	Minimum hot dipped galvanised or better
	Zone D (sea spray)	Stainless Steel
<b>H3.2 CCA</b>	All Zones	Stainless Steel

### 4.4 FIXINGS – FASTENER SIZE & LAYOUT

**Table 2 Fastener Lengths for Utilityclad**

Application	Fastener Length (Direct Fix)	Fastener Length (Cavity Fix)
Nails in Timber	50 x 2.8mm	60 x 2.8mm
Screws in Timber	8 g x 40mm	8 g x 65mm

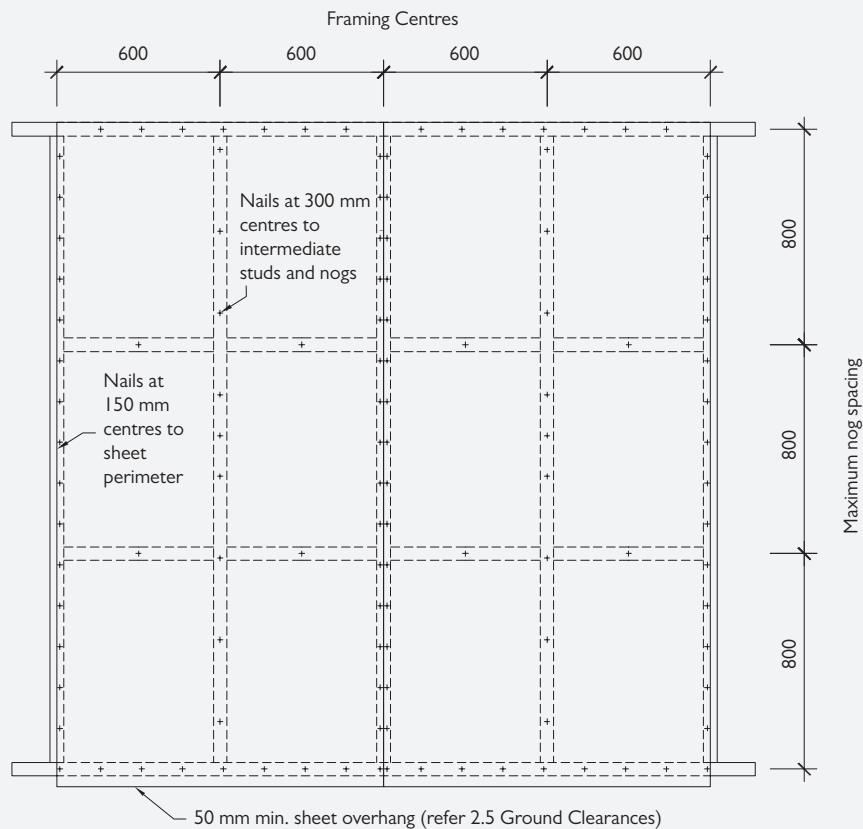
Utilityclad must be nailed or screwed to timber as per below:

- Use flat head (full round head) nails or rose head nails with timber framing. Rose head nails should be considered where a more decorative fastener is desired
- Standard fixing pattern: fasten sheet edges at 150mm centres and within the panel on all supports at 300mm centres
- Fasten no closer than 7mm to sheet edges except on edge with top lap (weather groove lap), do not nail through top lap
- Fasten shiplap joints independently to ensure natural sheet expansion is not restricted
- When using a rigid air barrier the Utilityclad fastener lengths should be increased by the thickness of the panel to ensure required fastener pull out loadings are achieved
- Drive nails & screws flush
- Do not nail or screw through the grooves in Utilityclad groove panels



#### 4.5 FASTENER LAYOUT

##### UC001: Utilityclad™ Fastener Layout

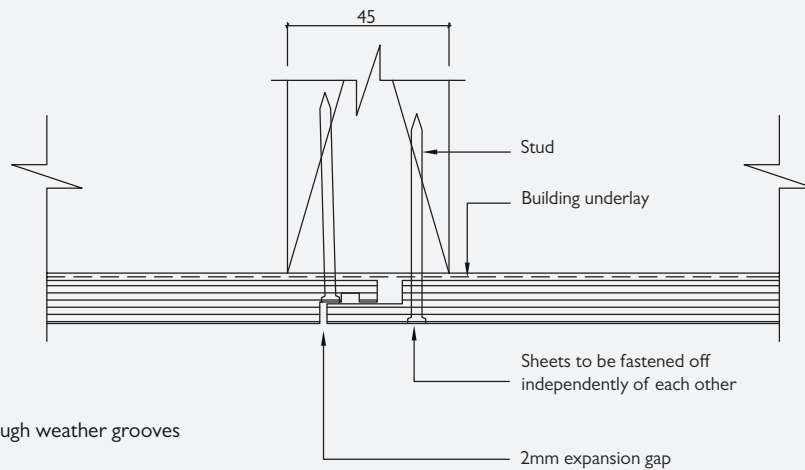




#### 4.6 VERTICAL SHEET JOINTS

Utilityclad™ sheets have a built-in shiplap joint and weathergroove on the long edges of all sheets. When installing texture profile sheets provide a 2mm expansion gap alongside ship lap joints to detail UC002. When installing texture groove profile sheets, use a 9mm temporary spacer in the groove alongside shiplap joint to establish correct expansion gap to detail UC003. Treat all cut edges with a suitable brush on preservative treatment such as Holdfast® Metalex® Clear.

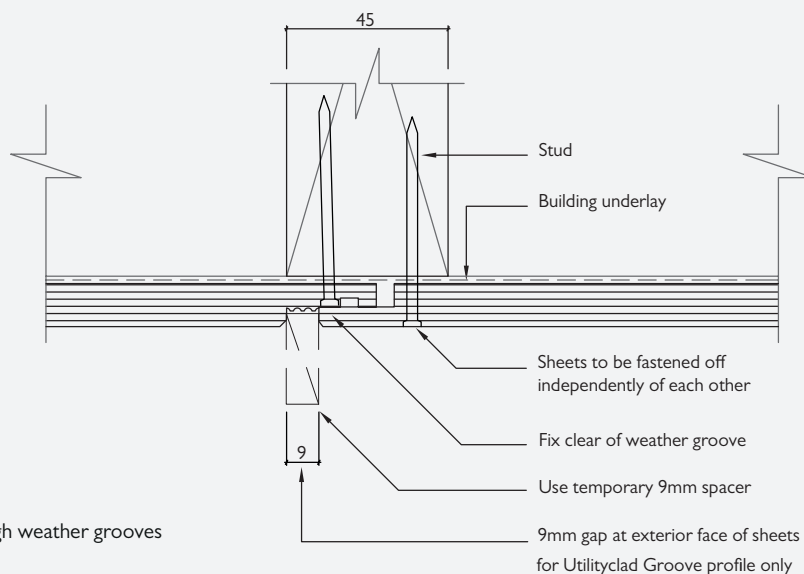
##### UC002: Utilityclad™ Texture Vertical Joint (Direct Fix)



Note:

- I. Do not nail through weather grooves

##### UC003: Utilityclad™ Groove Vertical Joint (Direct Fix)



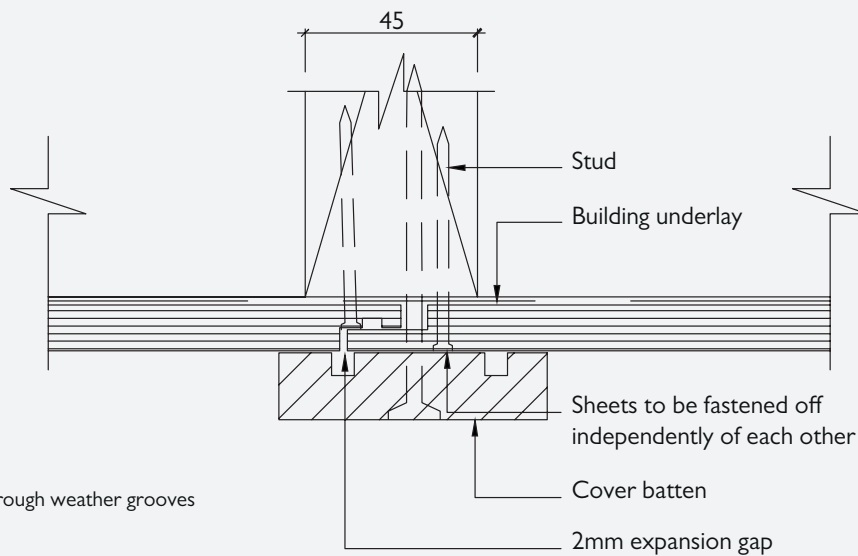
Note:

- I. Do not nail through weather grooves





UC004: Utilityclad™ Vertical Joint with Optional Cover Batten (Direct Fix)



Note:

1. Do not nail through weather grooves

## 4.7 HORIZONTAL SHEET JOINTS

Where a horizontal joint of sheets is required a horizontal flashing should be used. (refer 2.6 Coatings & Flashings)

## 5.0 LIMITATIONS

The information contained in this document is current as at May 2015 and is based on data available to CHH Woodproducts at the time of going to print.

CHH Woodproducts reserves the right to change the information contained in this document without prior notice. It is your responsibility to ensure that you have the most up to date information available. You can call toll free on 0800 326 759 or visit [www.chhwoodproducts.co.nz](http://www.chhwoodproducts.co.nz) to obtain current information.

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