



Proudly Australian owned & manufactured

# DURRA PANEL<sup>®</sup>

## Residential Applications



## About Durra Panel

Durra Panel is a fully certified wall and ceiling panel that contains an engineered biomass panel core made entirely out of reclaimed wheat straw.

Durra Panel is Australian owned and manufactured in Bendigo, Victoria from locally sourced materials.

The manufacturing process converts a wasted agricultural by-product into a strong and durable construction material which is 100% recyclable and biodegradable at the end of its useful life.



Using processes and systems developed over 40 years, Durra Panel can be used to create simple and safe ceiling and wall systems along with non-load bearing partition walls.

Durra Panel is faster, safer and more economical than traditional building materials, providing cost effective savings on site and greatly reducing labour and build times.



# Specifications

## Durra Panel S50 Natural

<b>Nominal Thickness</b>	50mm
<b>Weight</b>	18.5 kg/m <sup>2</sup> (nominal)
<b>Width (Standard)</b>	1187mm
<b>Minimum Length</b>	1200mm
<b>Maximum Length</b>	3600mm
<b>Face Colour</b>	Kraft liner
<b>Strength*</b>	Point load 5.8kN
<b>Impact Resistance</b>	10 times more impact resistant than impact resistant plasterboard
<b>Thermal Conductivity</b>	0.081 W/mK
<b>Thermal Resistance</b>	0.62 m <sup>2</sup> W/k
<b>Specific Heat Capacity</b>	1050 J/kgK
<b>Embodied Energy</b>	12.6 MJ/m <sup>2</sup>
<b>VOC Emission rate (ASTM D5116)</b>	<0.05 mg/m <sup>2</sup> /hr (7 days)
<b>Biscuit Slots</b>	Available as an optional extra for all finishes

\* Point load testing at midspan of S50 Durra Panel Natural Finish supported by Durra Steel Sections at 1200mm centres.

Please note:

- For transport and storing it is important to keep Durra Panel well protected from rain and dampness. Keep panels off the ground, indoors, well sheeted and away from moisture.
- When Durra Panel is used as an internal lining it should not be installed until the building envelope is weather tight. Once installed, Durra Panel Natural Finish is not designed to be exposed to the elements and should be sealed with a sealant for best results.
- All following details are indicative only. Customers should use Durra Panel in accordance with all local building requirements and consult relevant authorities.

# Durra Panel Finishes



## Natural

A compressed straw core between two layers of Kraft Paper Liner. Simple, versatile, affordable.

S50 Natural	Panel Thickness (nom): 50mm
	Maximum Length: 3600mm
S58 Natural	Panel Thickness (nom): 58mm
	Maximum Length: 3000mm



## Textured Paint

Utilising our textured paint, for a hard-wearing and low maintenance finish. Available in a range of Dulux colours.

S50 Textured Paint	Panel Thickness (nom): 50mm
	Maximum Length: 3600mm
S58 Textured Paint	Panel Thickness (nom): 58mm
	Maximum Length: 3000mm



## Hardboard

Added robustness perfect for areas requiring flat finished surfaces.

3.2mm Hardboard	Panel Thickness (nom): 53.2mm
	Lengths: 2400, 2700, 3600mm



## Plywood

A design-focused finish for applications requiring a touch of style.

3mm Plywood	Panel Thickness (nom): 53mm
	Length: 2400mm

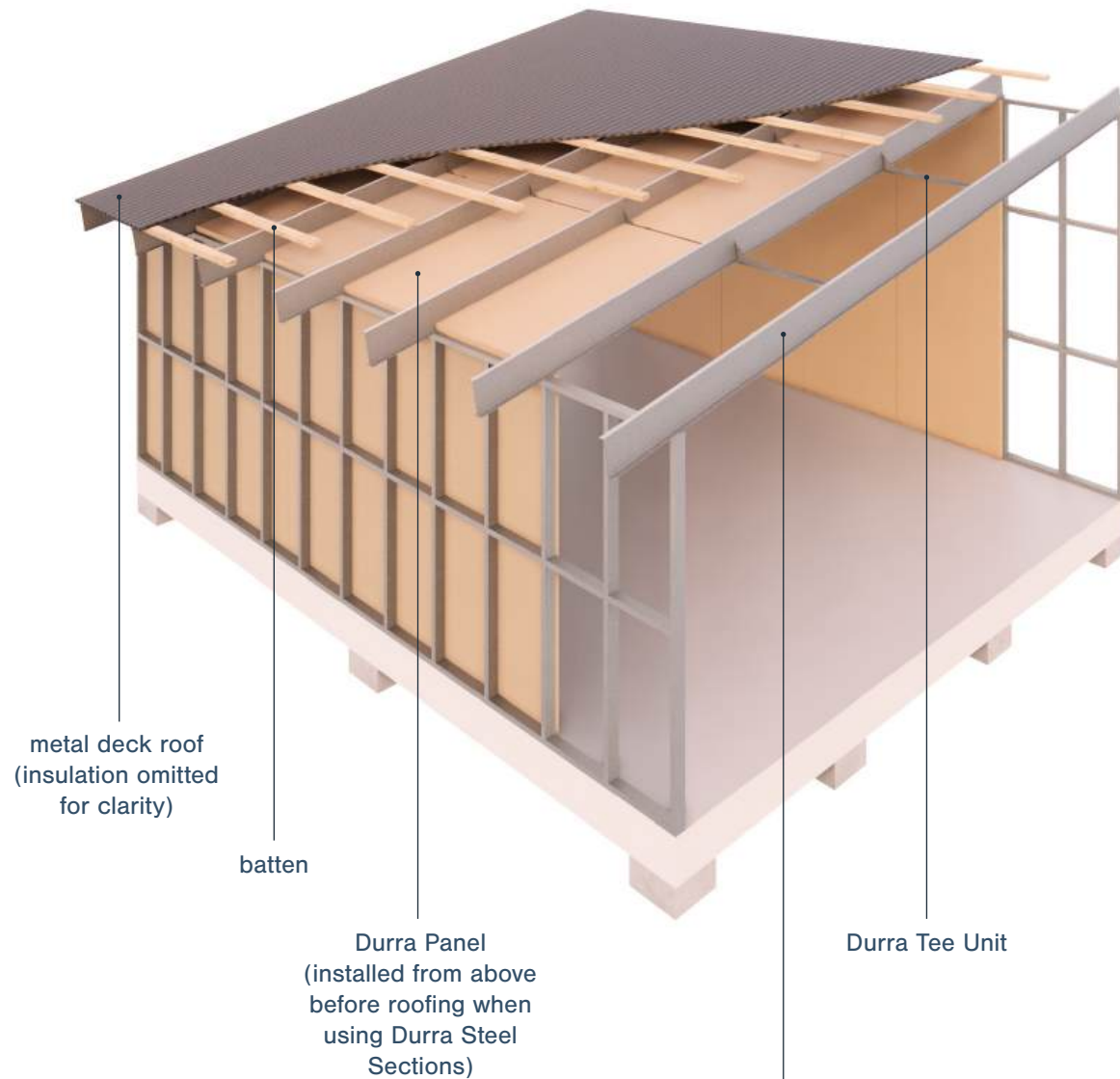


## Cement Sheet

Hardy and durable. Group 2 Fire Resistance and suitable for wet areas.

4.5mm Cement Sheet	Panel Thickness (nom): 54.5mm
	Lengths: 2400, 2700, 3000mm
6mm Cement Sheet	Panel Thickness (nom): 56mm
	Lengths: 2400, 2700, 3000mm

# Durra Panel Ceilings



## Beam

Durra I-Beam or Duplex Beam as rafters or purlins (page 7)

Durra Panel used with exposed timber rafters (page 9)

## Ceilings with Durra Steel Sections

Durra Roof / Ceiling System includes Durra I-Beams or Durra Duplex Beams which can act as rafters or purlins, typically spanning the shorter distance.



### Durra Steel Sections as rafters

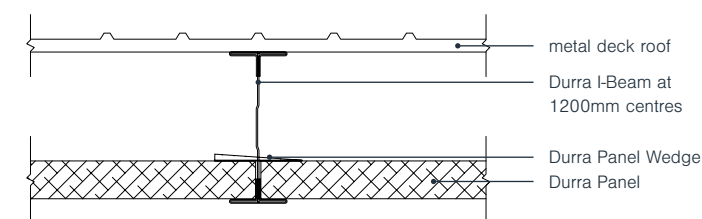
(vertical beams)

### Durra Steel Sections as purlins

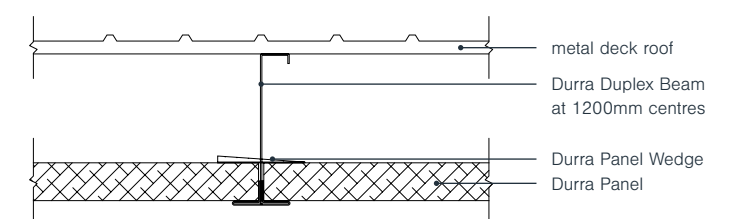
(horizontal beams)



### Durra I-Beam



### Durra Duplex Beam



Durra Beams are available in I-Beam and Duplex Beam profiles in a variety of sizes to accommodate span lengths. Please see Ortech Technical Manual Section 8 for beam spans to assist in selecting beam type and size.

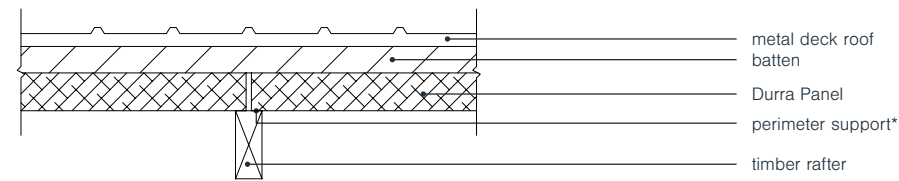


## Ceilings with Timber Rafters

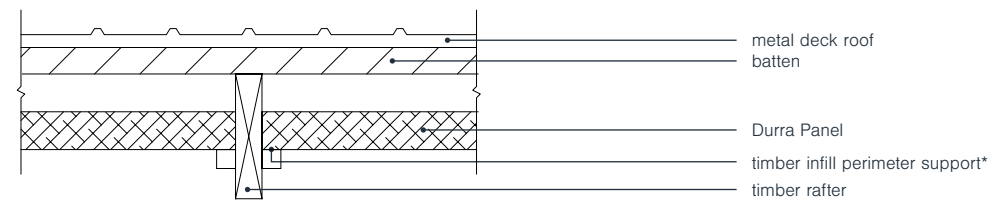
Durra Panel can be installed in ceilings using exposed timber framing.



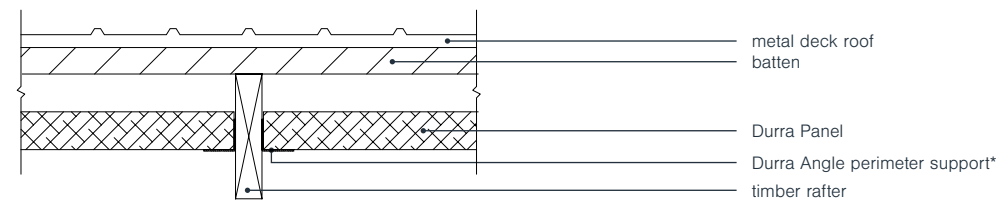
### Top Side Rafter



### Infill Rafter with Timber



### Infill Rafter with Angle

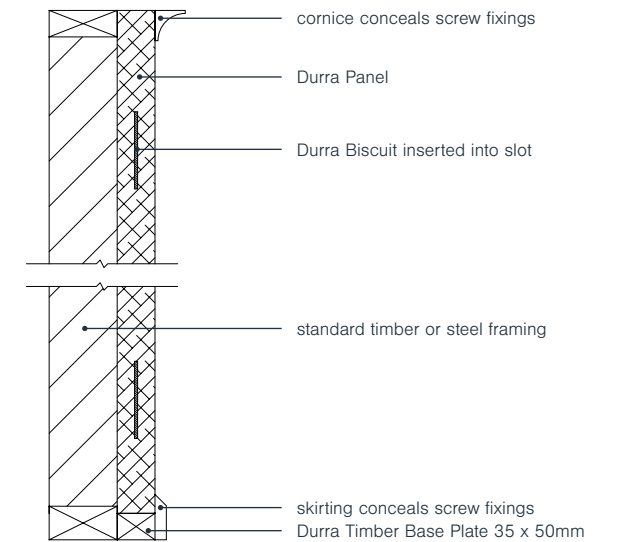


\*Durra Panel requires a minimum of 25mm perimeter support.

Mechanical restraint is required to all sides at 450mm centres in accordance with residential building practice.

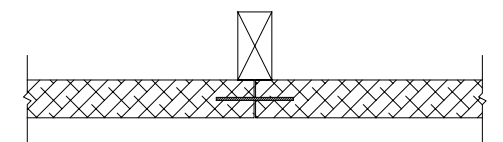
# Durra Panel Walls

## Durra Panel Wall Lining



WALL SECTION

Refer to fixing details on pages 16 and 17



WALL PLAN VIEW

## Installation



With Durra Biscuit Connectors in place, lift the Durra Panel onto the Durra Base Plate.

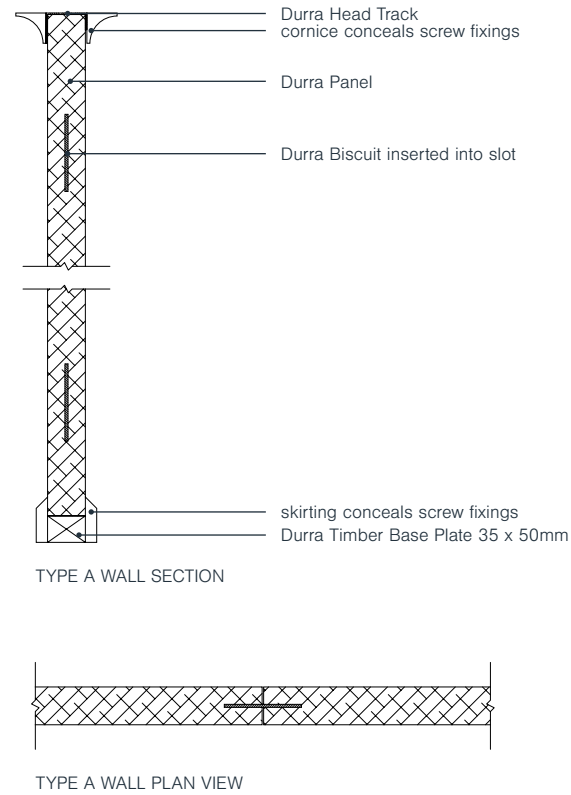
Push Durra Panel to slot the Durra Biscuit Connectors and close the gap between the two panels.

Screw fix Durra Panel back to frame at top and bottom.

It is recommended that a stud adhesive is applied between the noggins and the Durra Panel and that PVA glue is applied at panel to panel biscuit joints.

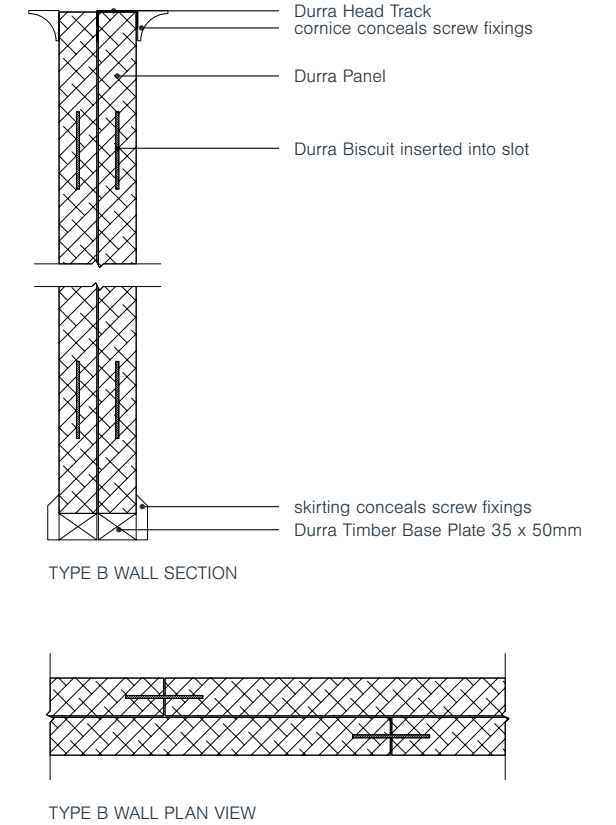
## Durra Panel Partition Wall Type A

### Single Layer Non Load Bearing Wall



## Durra Panel Partition Wall Type B

### Double Layer Non Load Bearing Wall



## Installation



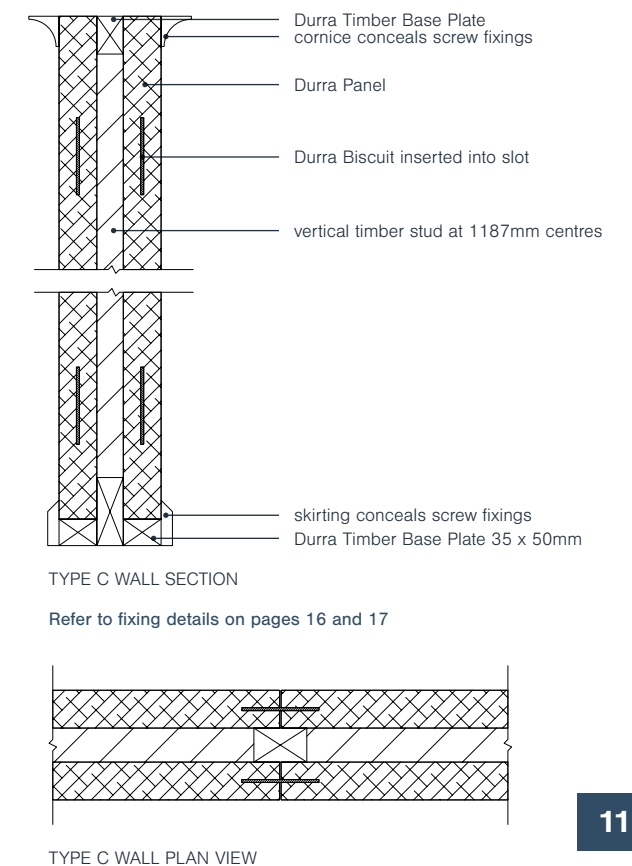
Lift Durra Panel into place between Durra Head Track and Durra Base Plate

Place Durra Biscuit Connectors in slots of Durra Panel

Lift next Durra Panel into place and push together to close the gap between the panels.

## Durra Panel Partition Wall Type C

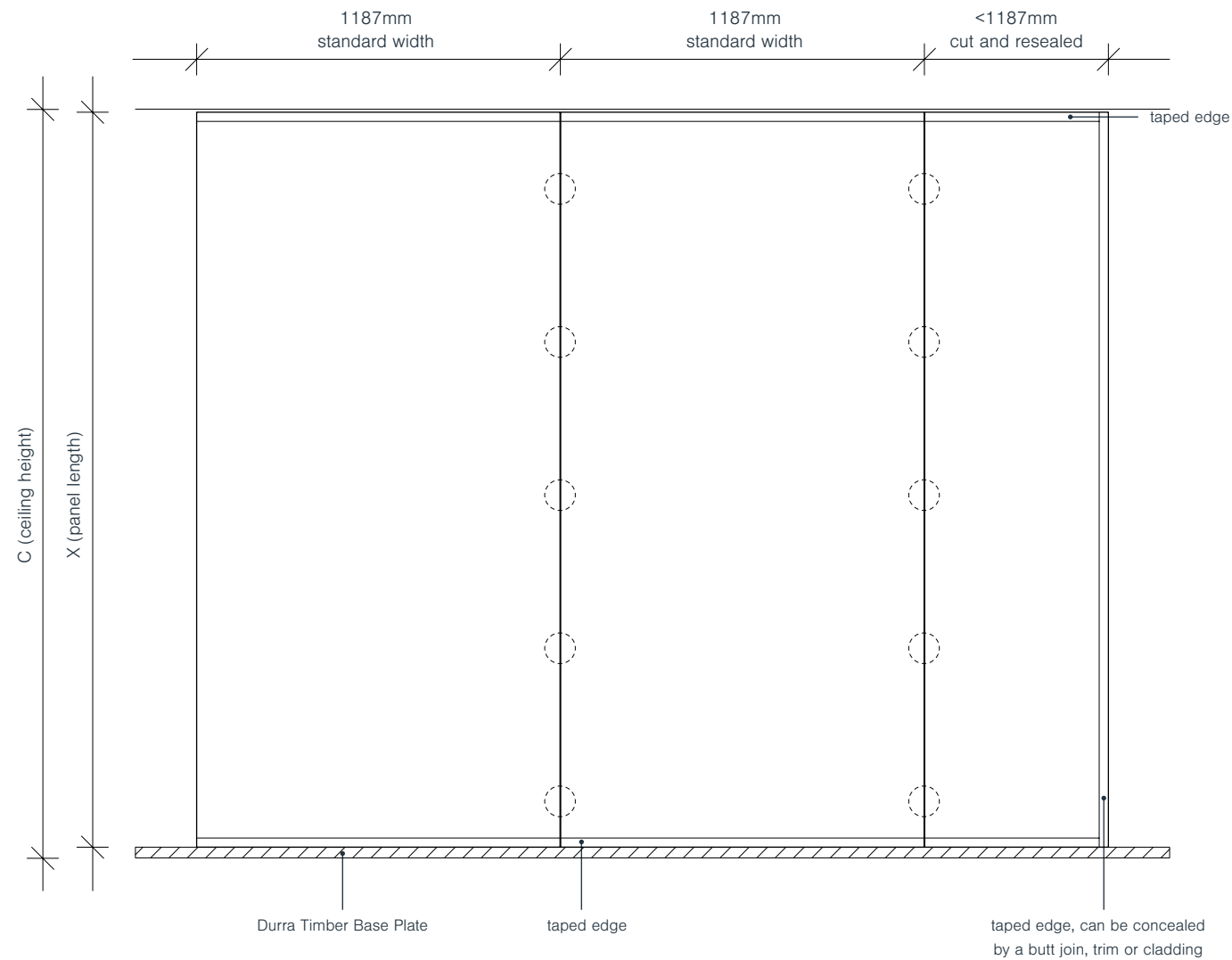
### Double Layer Non Load Bearing Wall With Services Cavity





## Ordering Durra Panel for Walls Type A, B, C

Durra Panel is manufactured at a standard width of 1187mm and lengths are made to order to suit your project. Widths less than 1187mm can be supplied, with an additional charge for cutting and resealing. Alternatively, panels can be cut on site and resealed with Durra sealing tape.



### Panel Length

Take the height of the ceiling and minus 35mm for the Durra Timber Base Plate and 10mm tolerance for ease of installation.

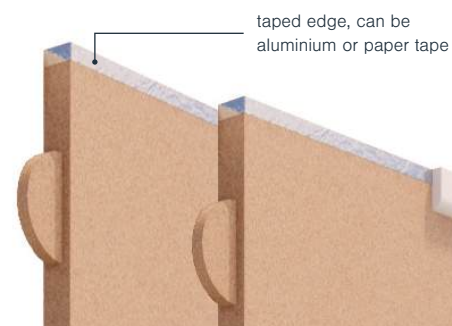
Length of wall panel =  $C - 35 - 10$

Ensure that the Durra Panel length does not exceed the maximum height for the type of wall or desired finish.

### Taped Edges

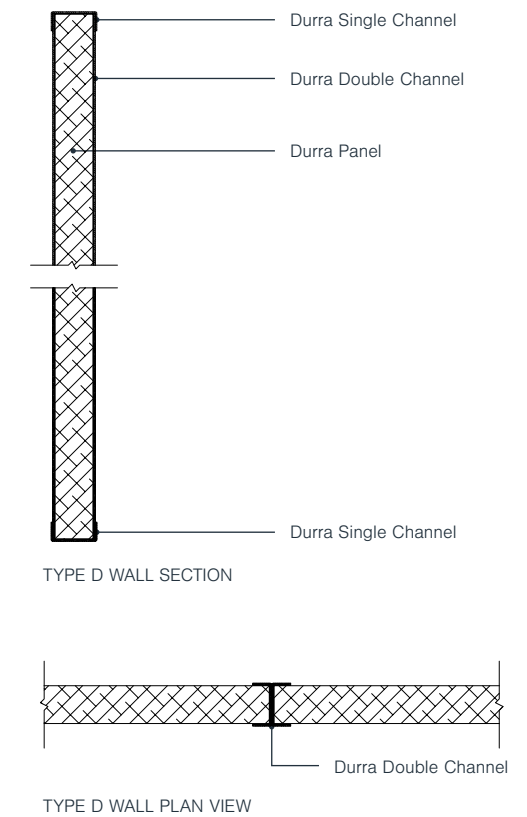
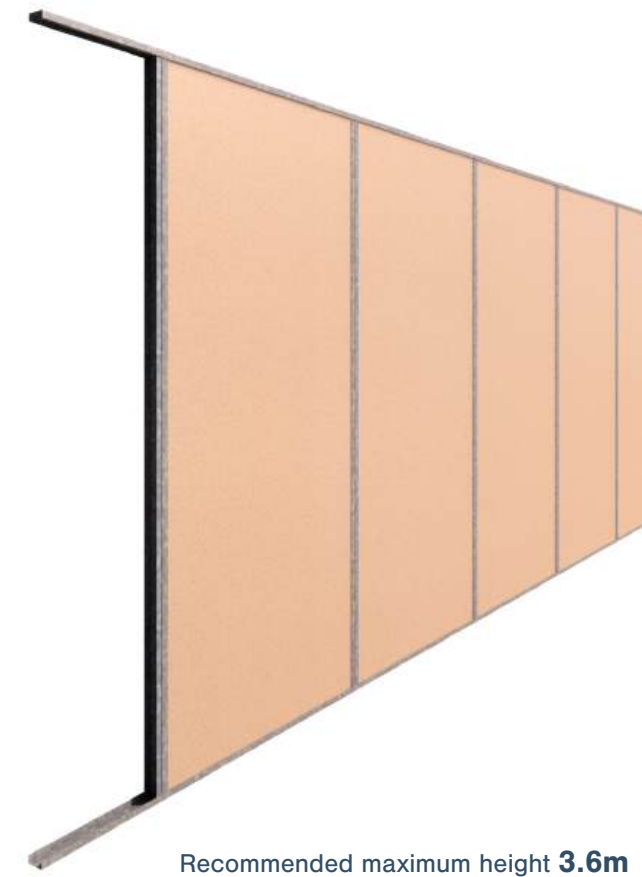
Full width panels (1187mm) are tape sealed at the top and bottom, leaving an exposed tape edge on the face of the panel. This will be concealed by cornice and skirting or any claddings applied to the face of the panel.

Any additional panel cuts made before delivery or on site for smaller widths, doors, windows or services must be tape sealed and may leave a visible tape edge on the face of the panel.



## Durra Panel Partition Wall Type D

### Self Supporting Non Load Bearing Wall using Durra Steel Sections



### Installation



Lift Durra Panel and place into bottom Durra Single Channel.

Push Durra Panel to fit inside Durra Double Channel stud.

Add Durra Double Channel inside Durra Single Channel and push towards Durra Panel.

Place top Durra Single Channel on top and screw fix.

# Tips & Tricks

## Durra Building Systems are simple to construct

Durra Panel can easily be cut smaller sizes, or for door and window openings and any plumbing or electrical penetrations.

- Durra Panel can be cut with a Circular or Reciprocating Saw.
- No more looking for studs! Fixings and fixtures such as TVs or shelving can be fixed directly to Durra Panel in any location.
- Lighting Fixtures, power outlets and any HVAC vents can be cut or fixed directly to the face of the Durra Panel.

Please note that all raw edges will require edge tape.



# Project Applications



Durra Panel walls present an opportunity to get creative with different methods of joining.



Durra Panel Painted Finish with panel to panel joints caulked with a flexible and paintable sealer



Durra Panel Painted Finish with express joints



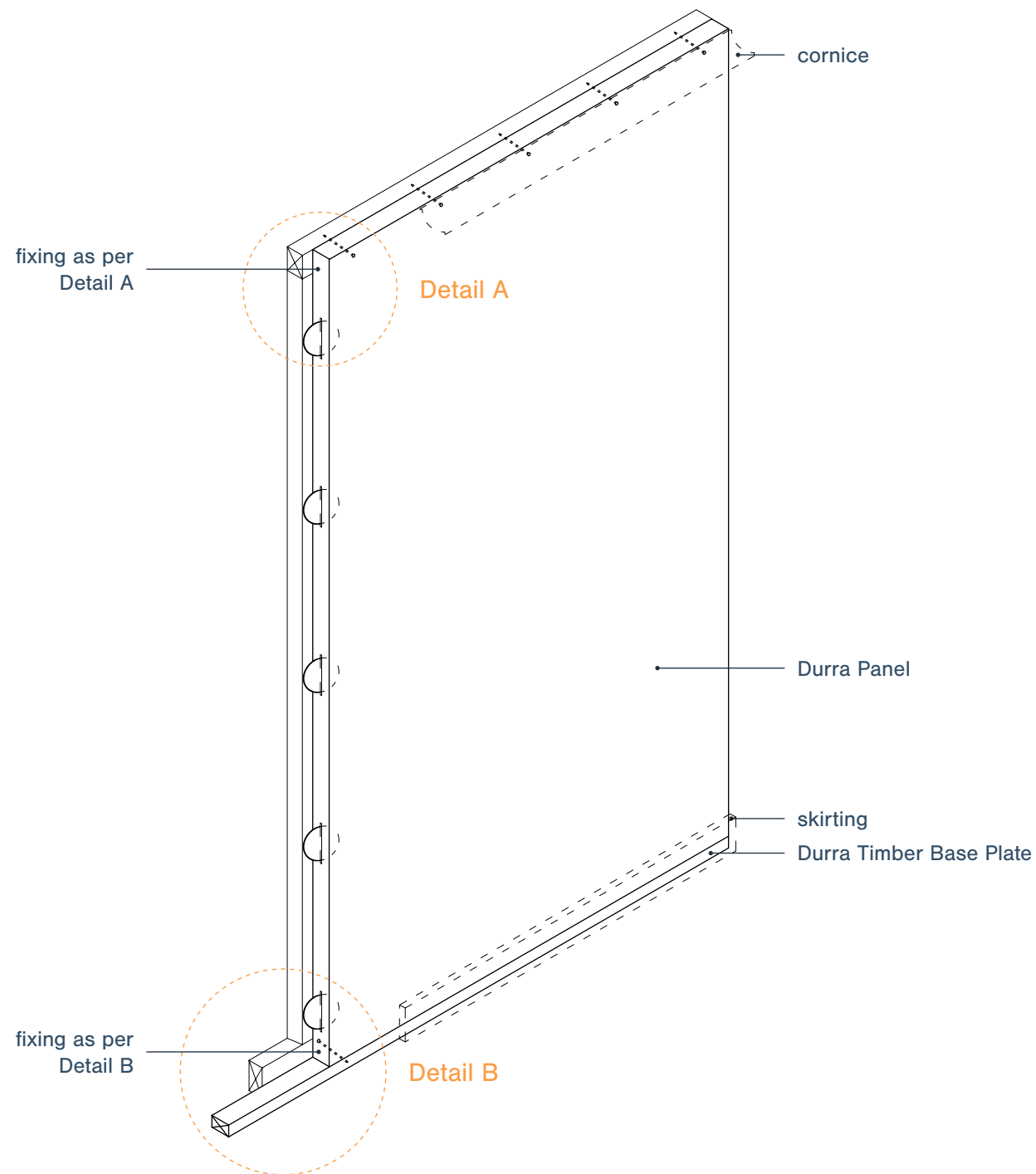
Durra Panel Natural Finish with powdercoated Durra stud system



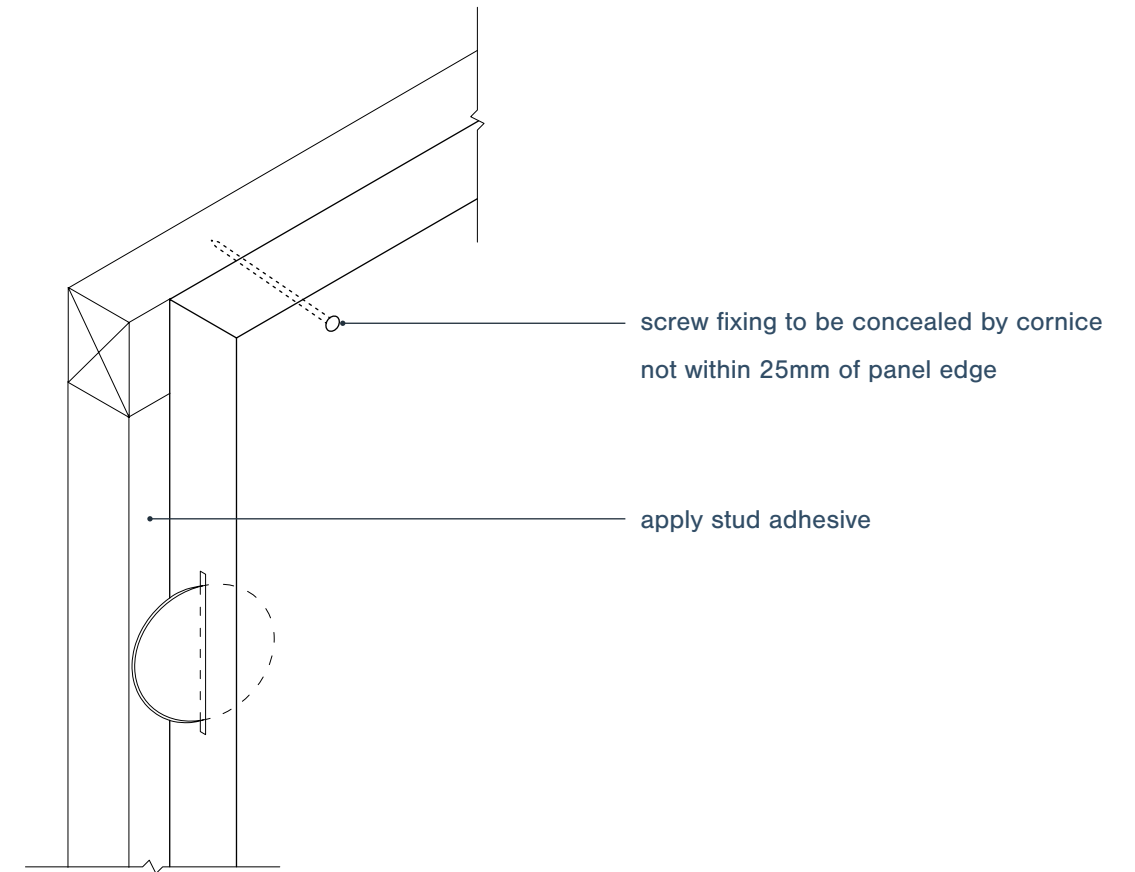
# Typical Details

## Fixing Durra Panel as a Wall Lining or Wall Type C

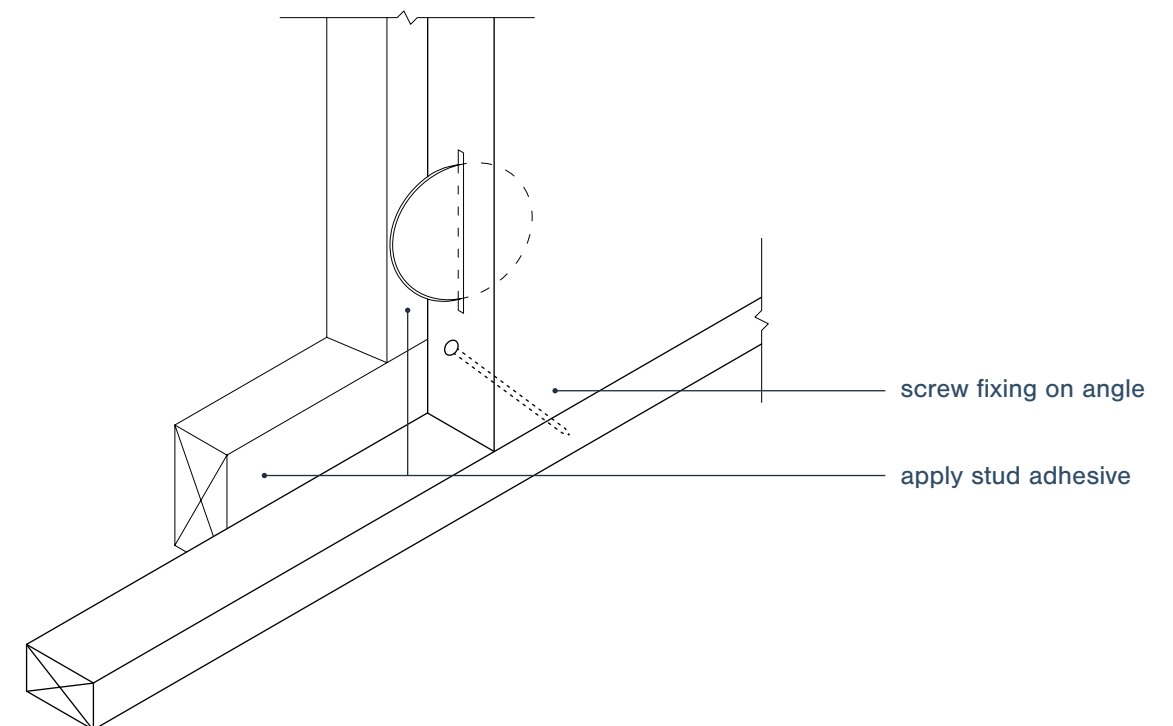
Screws can be hidden by fixing through the panel core.



### Detail A



### Detail B



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[www.durrapanel.com](http://www.durrapanel.com)

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