Pronto Panel

Multi-Storey Internal Technical Manual

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Pronto Panel[™]



Pronto Panel[™] Technical Manual **Contents**

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Pronto Panel Introduction



Pronto Panel Technical Manual **Building with Pronto Panel**

Pronto Panel is a non-load bearing panel system that can be used both internally and externally. Pronto Panel's durable, lightweight and simplistic nature makes it perfectly suitable for both residential and commercial projects.



The benefits stack up





Lightweight

Durable





Exceptionally low water permeability Effective acoustic insulation resistance





High pull-out strength

Minimal components



Fast and simple installation



High fire



Exceptional lateral load capacity



Compliance and Quality

Compliance

Pronto Panel has been extensively tested at CSIRO, University of Newcastle and other NATA accredited laboratories. The manufacturing, testing and installation procedures for wall system Intertenancy Wall 1, Corridor Wall 3 & Internal Partition Wall 5 have been accredited for compliance with the National Construction Code (NCC) by GlobalMark Pty Ltd for CodeMark certification.

CodeMark[™] Certification

CodeMark is a building product certification scheme. The CodeMark scheme supports the use of new and innovative building products by providing a nationally and internationally accepted process for products to be assessed for compliance with the requirements of the building codes of Australia and New Zealand. The scheme provides confidence and certainty to regulatory authorities and the market through the issuing of a Certificate of Conformity.



National Construction Code

Pronto Panel wall systems Intertenancy Wall 1, Corridor Wall 3 & Internal Partition Wall 5 meets the provisions of the NCC Performance Requirements. It has been tested for structural adequacy, fire resistance and acoustic performance. Thorough testing has been conducted to verify these requirements using registered testing authorities and expert judgment by professional engineers.

Quality

Pronto Panel is manufactured under licence by a company with full ISO 9001 accreditation. This ensures that all materials, processes, quality control and quality assurance are rigorously checked and verified.

Pronto Panel has achieved CodeMark certification, an independent accreditation to further ensure the quality and consistency of the product.

Pronto Panel has numerous quality checks, both during manufacture and before dispatch, to ensure only the highest quality product reaches the market.

Each batch of Pronto Panel can be traced and verified by its batch number to its original raw materials.

Intention

This manual is intended to be used by experienced and qualified builders, engineers and architects. No responsibility is taken for inappropriate, incomplete and incorrect use of the information in this manual. Pronto Panel is suitable for any non-load bearing wall that requires fire and sound insulation.

Pronto Panel can be used for walls separating sole occupancy units or for walls separating sole occupancy units from a public corridor or public lobby. These walls require impact sound attenuation.

Pronto Panel installation must be carried out by qualified panel installers. No responsibility is taken for incorrect installations of Pronto Panel.



Pronto Panel Technical Manual Scope and Applications

Pronto panel can be used as:

- Intertenancy Walls
- Internal Partition Walls
- Common Walls
- Service Shaft Walls
- Wet Area Walls
- External Walls

Pronto Panel Technical Manual **Product Range**

Pronto Panel

Pronto Panel comes in various lengths.



Panel size (mm) (L x W x T)	Dimensional Tolerance (mm)	Mass (kg)	Mass Tolerance (kg)
2,700 x 610 x 60	±5	85	±5
2,850 x 610 x 60	±5	90	±5
3,000 x 610 x 60	±5	95	±5

Pronto Angle

A Pronto Angle is a 75 x 50 x 1.2mm BMT slotted galvanised angle.



Pronto Panel Adhesive

Pronto Panel Adhesive comes in 20kg bags.



Pronto Panel consists of a composite of lightweight aggregates bonded into a cementitious matrix. The panels are sheeted with a Calcium Silicate board. The panels have a tongue and groove on the vertical edges to interlock and to prevent the passage of noise and fire.

Due to its design, the panels can also be cut to size as required, without compromising its structural capacity.

Pronto Panel Material Properties

Properties	Value
Working Density	52kg/m ²
Dry Density	770kg/m³
Water Absorption	<5 %
*R-Value	0.253m² K/W

*The panel is tested in accordance with the Australian and New Zealand Standard AS/NZS 4859.1

Pronto Panel Technical Manual **Material Properties**



Pronto Panel Technical Manual **Structural Properties**

Pronto Panel has undergone extensive testing.

1. Ultimate Design Load

When correctly installed, a 3m long Pronto Panel will resist an internal pressure of 0.70kPa.



2. Fixtures

When correctly installed, 8g screws embedded 50mm into the Pronto Panel would have a capacity to hold 120kg of weight per screw.

3. Thermal Properties

Pronto Panel's R value is 0.253m².K/W with no plasterboard or other linings.

Ultimate Design

Load (kPa)

0.86

0.77

0.70

System Components



The diagram and specification above outlines the Intertenancy Wall 1 system. Refer to System details for all other wall type.

Pronto Panel Technical Manual **Pronto Panel Systems**

- 7. PRONTO PANEL ADHESIVE JOINT
- 8. 20mm GAP BETWEEN PANEL AND SOFFIT WITH 4 HOUR FIRE RATED SEALANT AND
- 9. NO ADHESIVE BETWEEN PANEL AND ANGLE

Pronto Panel Technical Manual **System Details**

The details in the following sections show the common junctions of the Pronto Panel walls with other building elements, such as concrete floors and soffits, and intersections of walls. Refer to installation section for specification of components labelled in the details.

1. Intertenancy Walls

Suitable for walls separating two sole-occupancy units including bathroom, laundry and kitchen areas.

NCC REQUIREMENTS

FRL -/60/60 ACOUSTIC (Rw+Ctr) 50



INTERTENANCY WALL 1 PLAN

FRL	-/120/120
ACOUSTIC (Rw+Ctr)	50
WALL THICKNESS	170mm
ONLY FOR WALLS	≤3m

INTERTENANCY WALL 2 PLAN

FRL	-/120/120
ACOUSTIC (Rw+Ctr)	55
WALL THICKNESS	185mm
ONLY FOR WALLS	≤3m

1. Intertenancy Walls

Suitable for walls separating two sole-occupancy units including bathroom, laundry and kitchen areas.

NCC REQUIREMENTS

FRL -/60/60 ACOUSTIC (Rw+Ctr) 50



INTERTENANCY WALL 3 PLAN

FRL	-/120/120
ACOUSTIC (Rw+Ctr)	51
WALL THICKNESS	235mm
ONLY FOR WALLS	≤3m

Pronto Panel Technical Manual System Details



INTERTENANCY WALL 4 PLAN

FRL	-/120/120
ACOUSTIC (Rw+Ctr)	50
WALL THICKNESS	213mm
ONLY FOR WALLS	≤3m

2. Corridor Walls

Suitable for walls separating a sole-occupancy unit from a public corridor, public lobby or the like.

NCC REQUIREMENTS

FRL -/60/60 ACOUSTIC (Rw) 50



CORRIDOR 1 PLAN

FRL	-/120/120
ACOUSTIC (Rw)	55
WALL THICKNESS	160mm
ONLY FOR WALLS	≤3m

CORRIDOR 2 PLAN

FRL	-/90/90
ACOUSTIC (Rw)	53
WALL THICKNESS	147mm
ONLY FOR WALLS	≤3m

2. Corridor Walls

Suitable for walls separating a sole-occupancy unit from a public corridor, public lobby or the like.

NCC REQUIREMENTS

FRL -/60/60 ACOUSTIC (Rw) 50



CORRIDOR 3 PLAN

FRL	-/60/60
ACOUSTIC (Rw)	50
WALL THICKNESS	126mm
ONLY FOR WALLS	≤3m

Pronto Panel Technical Manual **System Details**

3. SOU to Plant Room Walls

Suitable for walls separating a lift shaft or plant rooms from a sole occupancy unit.

NCC REQUIREMENTS

FRL -/60/60 ACOUSTIC (Rw+Ctr) 50

SOU TO PLANT ROOM PLAN

FRL	-/90/90
ACOUSTIC (Rw+Ctr)	52
WALL THICKNESS	172mm
ONLY FOR WALLS	≤3m

4. Service Shaft Walls

Suitable for walls separating services from a sole occupancy unit, public corridor, public lobby or the like.

NCC REQUIREMENTS

FRL -/60/60 OR -/90/90 ACOUSTIC (Rw+Ctr) 40



4. Service Shaft Walls

Suitable for walls separating services from a sole occupancy unit, public corridor, public lobby or the like.

NCC REQUIREMENTS

FRL -/60/60 OR -/90/90 ACOUSTIC (Rw+Ctr) 40

Pronto Panel Technical Manual **System Details**



SERVICE SHAFT WALL 4 PLAN

FRL	-/120/120
ACOUSTIC (Rw+Ctr)	42
WALL THICKNESS	140m_m
ONLY FOR WALLS	≤3m

5. Internal Partition Walls

Suitable for internal walls within a sole-occupancy unit, plant room, public lobby or the like.

NCC REQUIREMENTS

FRL – NONE ACOUSTIC (Rw+Ctr) – NONE



INTERNAL PARTITION WALL 1 PLAN

FRL	-/90/90
ACOUSTIC (Rw)	39
WALL THICKNESS	86mm
ONLY FOR WALLS	≤3m

INTERNAL PARTITION WALL 2 PLAN

FRL	-/120/120
ACOUSTIC (Rw)	39
WALL THICKNESS	86mm
ONLY FOR WALLS	≤3m

5. Internal Partition Walls

Suitable for internal walls within a sole-occupancy unit, plant room, public lobby or the like.

NCC REQUIREMENTS

FRL – NONE ACOUSTIC (Rw+Ctr) - NONE



-/90/90
v) 38
SS 73mm
∖LLS ≤3m
E

Pronto Panel Technical Manual System Details

4 PLAN

5. Internal Partition Walls

Suitable for internal walls within a sole-occupancy unit, plant room, public lobby or the like.

NCC REQUIREMENTS

FRL – NONE ACOUSTIC (Rw+Ctr) – NONE



INTERNAL PARTITION WALL 5 PLAN

FRL	-/60/60
ACOUSTIC (Rw)	36
WALL THICKNESS	60mm
ONLY FOR WALLS	≤3m

6. Joining Pronto Panels

When panels are joined together, the FRL of the wall system will be limited to -/60/60. Please contact Brickworks for more information.



PANEL TO PANEL CONNECTION ELEVATION

Pronto Panel Technical Manual **System Details**

14g x 200mm TYPE 17 BUGLE HEAD BATTEN SCREWS

Pronto Panel Technical Manual System Details



Pronto Panel Technical Manual **System Details**



Corner Joint Plan



External Corner Detail Plan

Pronto Panel Technical Manual System Details

12. Door Details





Door Detail Plan

60mm PRONTO PANEL FIRE & ACOUSTIC SEALANT ON BACKING ROD Control joint Plan Refer to step 14 on page 39 for more detail



Wall Junction Detail Plan

13. Chasing Details

Door Elevation



Chasing Elevation



16. Wall Junction Detail

14. Control Joint

Pronto Panel Technical Manual **System Details**

15. Pronto Panel to Angle



Pronto Panel To Angle Elevation



Pronto Panel Technical Manual Installation

Delivery on Site

Pronto Panels are wrapped and strapped on pallets for delivery to site. Each pallet, containing 12 panels, is loaded by forklift onto trucks for delivery.

Pronto Panel can be unloaded either by forklift or a boom crane. The panels must be stored on site in areas where they will not be immersed in pooled water and clear of possible damage that could be caused by site movement and construction. The packs of Pronto Panels come wrapped with plastic sheeting and should remain covered during site storage.

Pronto Panel Adhesive bags are plastic wrapped and packaged on a pallet and must be stored in dry conditions. Shelf-life of Pronto Panel Adhesive is 12 months.



Pronto Panel Safety

1. Panel Content

Pronto Panel contains no toxic or volatile components. While the product contains polystyrene aggregates, they are coated with sufficient cement based matrix that they do not burn or emit dangerous volatile compounds in a fire situation.

2. Cutting/Drilling

Cutting or drilling of the panels will liberate dust which must be controlled by suitable means. A suitable saw is a Makita 5057KB 1400W 185mm (7-1/4") Fibre Cement Dustless Circular Saw. It should be attached to an appropriate dust extraction system for minimal dust generation whilst cutting.

3. Pronto Panel Adhesive

The Pronto Panel Adhesive contains both cement powder and fine sand. This may constitute a hazard during use. Suitable respiratory protection, eye protection and hand protection must be worn when using this product.

4. Safe Handling of Pronto Panel Pronto Panel weighs between 85 and 95kg, depending on length. We recommend the use of a cradle trolley to transport the panels from the pallet to the worksite. If a Pronto cradle trolley

is not available the panels may

be transported flat on a pallet

jack or similar.

The panels do not have to be completely lifted into place for installation. The panels are to be placed with the base on the floor and the top end raised to meet the slotted angle. This reduces the load to be lifted and allows two operators to rotate the panels into position.

Safety Data Sheets for these products are available from the Pronto Panel website www.prontopanel.com.au or by contacting 13 PANELS (13 726 357)

Please see the installation section for full details of installation.



1. System Components

Pronto Panel

Pronto Panel comes in various lengths.

Length (mm)	Weight (kg)
2,700	85
2,850	90
3,000	95

Pronto Angle

Pronto Angles are to be used for both head and base connections in all Pronto Panel Wall Systems. They are for positioning and restraining the top and bottom of the panels. The panels are to be fixed to the angles with metal mechanical fasteners.

Pronto Panel Adhesive

Pronto Panel Adhesive (supplied in 20kg bags) is used to fill in the cavity between adjacent Pronto Panels.



2. Fixings

Pronto Panel to Pronto Angle Fixings

Use 14-10 x 50mm hex head type 17 screws in accordance with AS 3566.1-2002 or equivalent to fix the Pronto Panel onto the Pronto Angles.

Pronto Panel to Pronto Panel in Corner Details

Use 14-10 x 150mm hex head type 17 screws in accordance with AS 3566.1-2002 or equivalent to fix Pronto Panel to Pronto Panel.

Plasterboard to **Pronto Panel Fixings**

Use collated bugle head screws in accordance with AS 3566.1-2002 or equivalent to fix plasterboard to Pronto Panel.





- (recommended)



4. Installer

Pronto Panel installation must be carried out by qualified panel installers.

No responsibility is taken for incorrect installations of Pronto Panel.

Pronto Panel Technical Manual Installation



Pronto Panel Technical Manual Installation

5. Installation Procedures

Step 1: Fixing steel angles to soffit and concrete slab

Pronto Panel installation requires fixing Pronto Angles to soffit and concrete slab. The steel angle should be connected to the

soffit and concrete slab using mechanical fasteners at 600mm centres.



The mechanical fasteners must achieve a connection design shear strength of greater than 0.77kN when fixed at 600mm centres.

Step 2: Mixing Pronto Panel Adhesive

The Pronto Panel Adhesive is a twopart thin bed adhesive mix. For the best results the use of an electric drill mixer (900W electric drill, Festo or the like) is recommended.



the 20kg bag of adhesive to 5 litres of water while stirring continuously. Continue stirring until the consistency is smooth. Leave mixture for 2 minutes to allow for hydration before mixing again for another minute. The adhesive has a pot life of 2 hours at 25°C.

CAUTION: For handling of adhesives, personal protection such as safety glasses to AS1337 and chemical gloves must be worn. P1 or P2 dust musk is also recommended. Please refer to the SDS for more details.

Pronto Panel Technical Manual Installation

Typical adhesive coverage rate is 40m²/20kg bag. Follow the steps below for mixing of the adhesive:



Pronto Panel Technical Manual

Installation

Step 3: Lifting Pronto Panel into position

With a cradle trolley, lift the panels into position.



Step 6: Gap between panel and concrete soffit

A gap of 20mm must be left clear at the top of the panel to allow for expansion in the event of fire. The gap should be filled with backing rod and fire resistant acrylic sealant if required.

Step 7: Adhesive to Panel

Step 4:

Pronto Angle

Fixing Pronto Panel to

To fix the Pronto Panel to the

steel angle, use 14-10 x 50mm

hex head type 17 screws. The

screws should be nominally 300

centres. At least 4 screws should

be inserted per panel, 2 at the

top and 2 at the bottom.

When Pronto Panel is in place, apply Pronto Panel Adhesive into the groove of the panel.

Step 5: Fixing position

These screws should be placed at the bottom of the slot in the ceiling angle and at the top of the slot in the floor angle to allow the expansion of the panel in the event of a fire.



Step 8: Panel to **Panel Connection**

Position the second panel into place. Screw the second panel to steel angle.







Step 9: Smooth out Adhesive

Once the Pronto Panels are placed in position and connected, a trowel can be used to smooth out and scrape off any excess adhesives from the joints. This ensures good acoustic insulation and fire resistance.

Step 10: **Fire Sealing**

Where fire resistance is required, backing rod and fire resistant acrylic sealant must be installed at the top of the panel to ensure good acoustic insulation and fire resistance.





Step 12: Services penetrationg **Pronto Panel**

Pronto Panel can accommodate a 600 x 600mm penetration for a fire damper. The gap between the fire damper and the wall is to be treated in accordance with fire damper manufacturer's recommendations.

Fire collars are to be used when installing uPVC and HDPE pipes through fire rated walls. The gap between the fire collar and the wall is to be treated in accordance with fire collar manufacturer's recommendations.

Firerated sealants are to be used to treat small service penetrations through Pronto Panel walls.

Step 13: Fire Doors

When installed into Pronto Panel walls systems, fire rated door frames must be fully grouted.

Step 14: **Control Joints**

Control joints shall be located in walls of Pronto Panels to accommodate building movement including, but not limited to, foundation settlement and deflections of supporting structure, e.g. suspended slab deflection.

Control joints should be placed at points of stress concentration. Examples of these locations are listed below:

• At changes in height or thickness of wall

Pronto Panel Technical Manual Installation

Step 11: Door Frame

A steel door frame is recommended and the installation of the door frame should be coordinated to allow for solidly filling the space between the frame and Pronto Panel. Above the door way, the panel needs to be cut to size.



- At locations of joints in supporting structure (e.g. slab joints)
- Near door and window openings
- Near corners and intersecting walls

To accommodate building movement, vertical control ioints in walls shall be spaced at no more than 6-8 m centres in continuous runs of wall.

Control joints must be filled with appropriate sealant and backing rod. See system details on control joints.

It is vital to consult engineer and architect to determine the width and locations of all control joints.



Our tradition, experience and financial strength have made Brickworks Building Products the first choice for many architects, builders and designers. Brickworks Building Products continued commitment to quality and innovation ensures that our products will remain the benchmark for excellence for many years to come. Pronto Panel has a warranty of 15 years as per Brickworks Building Products' Warranty.

Pronto Panel has a Warranty of **15 years**

Pronto Panel Technical Manual Warranty



We are Brickworks

Brickworks Building Products is one of Australia's largest and most diverse building material manufacturers. Under the Brickworks Building Products umbrella are some of Australia's best known building materials brands. Our products include bricks, pavers, masonry blocks, retaining wall systems, precast concrete panels, concrete and terracotta roof tiles, timber products and specialised façade systems.

With a broad product portfolio and manufacturing and sales facilities across Australia, Brickworks Building Products is uniquely placed to service the demands of the building industry.

With over 1200 staff across Australia and New Zealand, we pride ourselves on our commitment to product, service excellence and our leadership position.

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13 PANELS (13 726 357) Email: sales@prontopanel.com.au www.prontopanel.com.au







The product images shown in this brochure give a general indication of the actual colour for your preliminary selection. We recommend that all customers see actual product samples at a selection centre prior to making final selections.