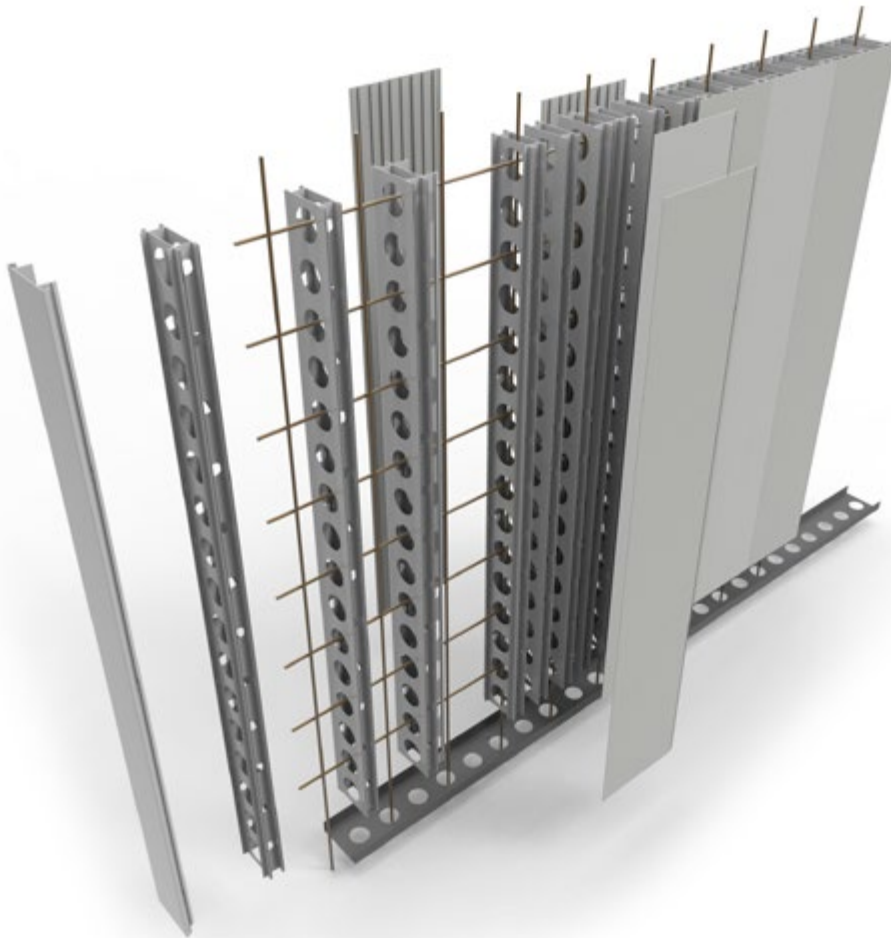


# PERMAFORM



Permaform is a PVC permanent wall formwork system which is concrete filled. Once filled, Permaform serves as a structural element and allows the builder to reduce the overall construction time and cost of the project.

- + Fast and economical
- + Flexibility in design
- + Light weight and easily installed
- + Reduction of trades
- + Not crane dependant

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# FEATURES AND BENEFITS

## WHAT IS PERMAFORM?

### *PERMAFORM IS AN INNOVATIVE PVC STRUCTURAL WALLING SYSTEM*

Permaform saves you time and money while giving you the ultimate in design flexibility, a huge variety of finishing options and peace of mind from certification for fire, acoustic and thermal properties.

The Polyvinyl Chloride (PVC) panels are lightweight and are manually assembled on site. They quickly and easily clip and slide together and are concrete-filled, creating loadbearing walls.

The panels remain in place leaving an excellent substrate for applied finishes such as acrylic render or paint, or can be left as is.

Permaform panels are available in a variety of width profiles to suit most engineering and architectural design requirements.

## APPLICATIONS

### *USE PERMAFORM IN PLACE OF COSTLY AND TIME-CONSUMING TRADITIONAL CONSTRUCTION METHODS*

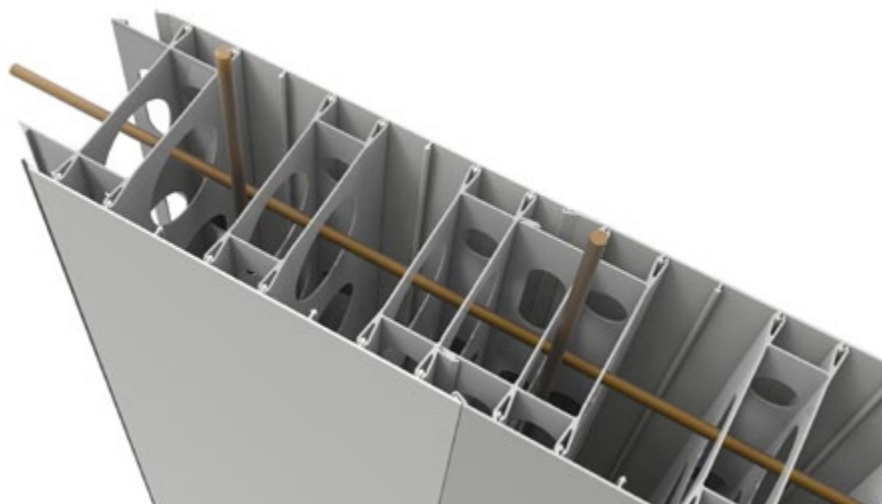
- + Concrete filled blocks
- + Conventionally formed in-situ reinforced concrete walls
- + Precast/tilt-up walls
- + Conventional clay and concrete masonry and blockwork

### *AVAILABLE IN THREE PROFILE WIDTHS, QUICKLY AND EASILY CONSTRUCT*

- + Stairwells and lift shafts
- + Party and corridor walls
- + Columns
- + Basement walls
- + Infill structures and balustrades
- + Blade, sheer and transfer walls
- + Boundary and external walls
- + Retaining walls

### *THE MANY BENEFITS OF PERMAFORM ARE REALISED IN MULTI-STOREY DEVELOPMENTS. THE SYSTEM IS IDEALLY SUITED FOR:*

- + Multi-storey developments
- + Apartment complexes
- + Hospitals
- + Hotels and motels
- + Offices
- + Shopping complexes
- + Schools
- + Aged care facilities
- + Warehouses and factories
- + Civil structures such as road barriers and retention tanks



# BENEFITS - COST

## *PERMAFORM KEEPS YOUR COSTS DOWN AS YOUR STRUCTURE GOES UP*

In today's competitive construction industry, cost efficiencies are critical. Our clients are looking for them everywhere. Constantly scouting for faster, cheaper, smarter ways to get that competitive edge and stay competitive.

Permaform panels have a comparable initial cost to blockwork, but the total cost savings stack up in no time.

Use the Permaform system on your next project and enjoy greatly reduced costs and greatly increased profits.

### *SAVE ON TRADES AND SERVICES*

- + Skilled labour
- + Excavation
- + Labour intensive vertical formwork
- + Wet trades
- + Clean-up, waste, landfill and bins
- + Traffic control and road closures
- + Concrete stripping
- + Heavy cranes

### *SAVE ON PRODUCTS, EQUIPMENT AND SITE INFRASTRUCTURE*

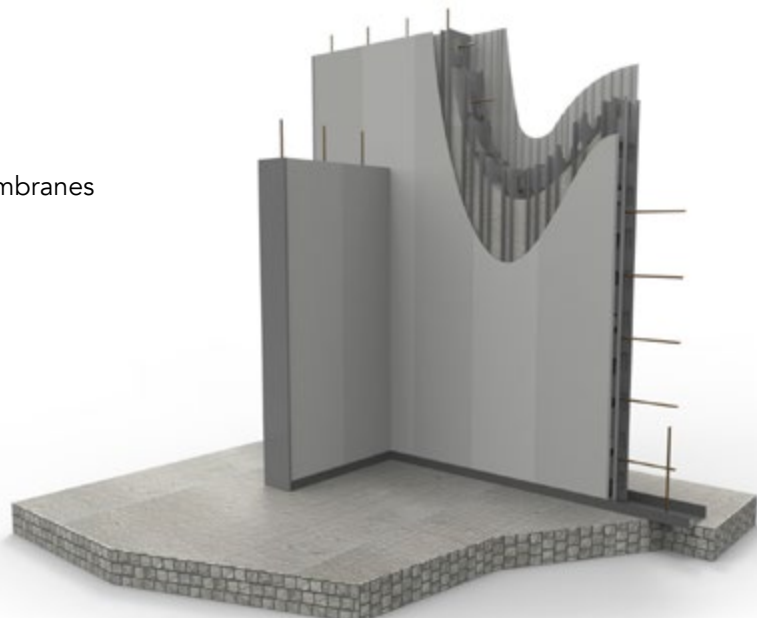
- + Scaffolding
- + Heavy bracing steel
- + Internal supports
- + Timber products
- + Steel and concrete for suspended slabs
- + Horizontal reinforcing
- + Structural steel lintels
- + Wall treatments, paint, render and finishes
- + Conventional waterproofing, glues and membranes
- + Pest control products and systems
- + Crack control

### *SAVE ON STRUCTURAL ELEMENTS*

- + Deep beams
- + Beams between floors
- + Transfer structures
- + Slab edge boards
- + Footing sizes
- + Structural column grids

### *SAVE ON PROJECT OVERHEADS*

- + Preliminaries
- + Maintenance
- + Insurances
- + Transportation costs
- + Handling and holding costs



# BENEFITS - TIME

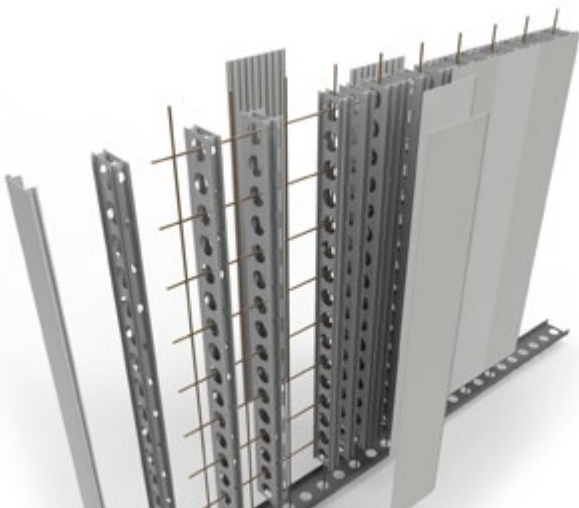
## GET ON THE FAST TRACK – PUT TIME BACK ON YOUR SIDE WITH PERMAFORM

'Time is money' is a driving force on every construction site. You have tight programs and schedules and constant pressure from your clients to meet or exceed them.

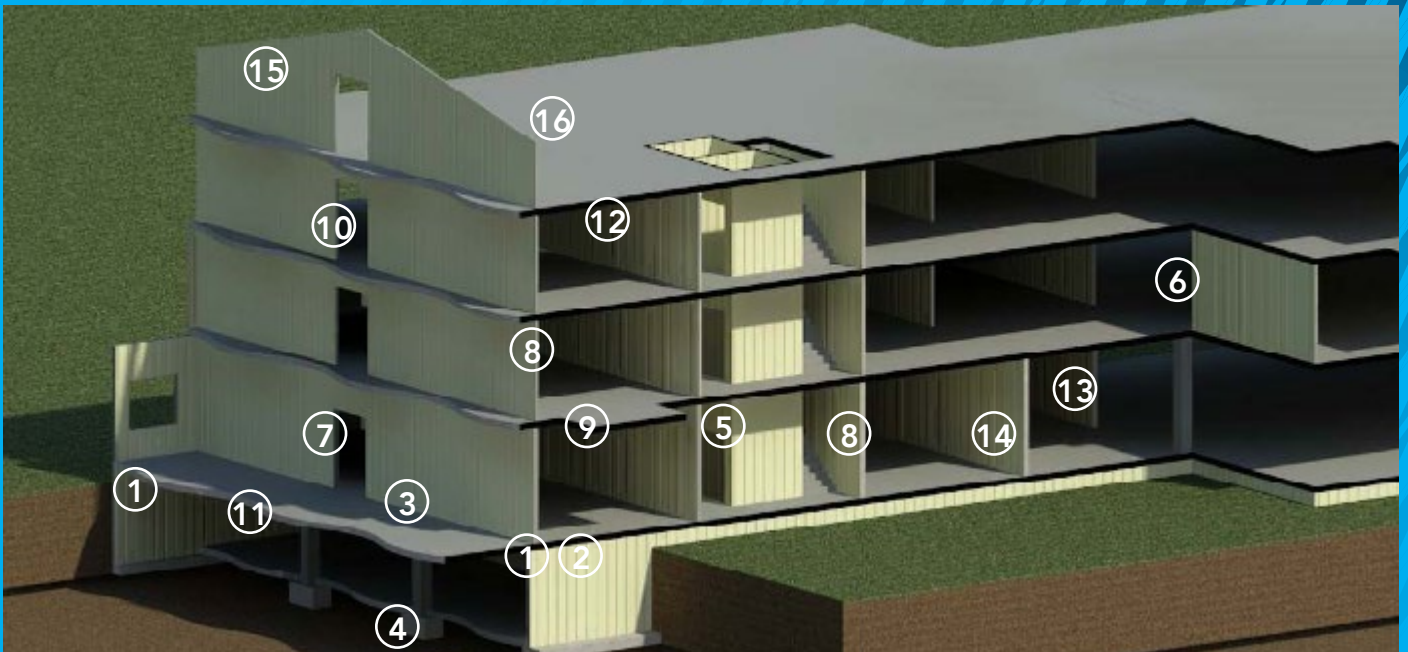
Permaform helps deliver large projects in record times. Finish ahead of schedule, impress your client and improve everyone's bottom line.

Use the Permaform system on your next project and finish fast.

- + Our simple 'clip and slide' panels fit together fast – a team of four assembles 150sqm of walling in just a day, a **time saving of up to 50%** compared to traditional block laying.
- + Installing steel **reinforcement is a breeze** – Permaform's hollow core allows you to easily and accurately slide in horizontal reo with no need for tying
- + Install your **walls on day one** after pouring the slab
- + Permaform panels stay in place - **no stripping means no waiting** for the pour to set
- + Turn over floor cycles, including slabs, **faster than any conventional method**
- + Permaform panels are **light-weight**, allowing for easier and quicker unloading and materials handling
- + Don't let **wet weather** interrupt your schedule
- + Structural elements come together quickly, meaning you can **start fit-outs sooner**
- + Reduce your **lead times** for vertical elements
- + Fully **utilise your floor slab formworkers** – increase the team you have available to install walls
- + Your project won't be driven by the **speed and availability of the crane**
- + Save time on **structural elements**: fewer deep beams, beams between floors, transfer structures and smaller footings
- + Vertical elements on projects with **multiple buildings** but limited crane access can be **built at the same time**
- + **Save time on scaffolding**, bracing and internal supports
- + Remove **waterproofing, crack control and pest control** from your program







- ① Water tight retaining walls at basement capable of resisting high point loads
- ② Horizontal reinforcement can be eliminated/ reduced as shrinkage effects not visible
- ③ Transfer walls eliminate need for transfer beams
- ④ Dead load reductions reduce footings
- ⑤ Wall strength allows greater spans between load bearing elements
- ⑥ Bracket action of walls enhances flexibility in planning
- ⑦ Walls easy to penetrate for doorways, windows, etc
- ⑧ Low construction loads on slabs at early stage
- ⑨ Ease of resisting balcony point loads at extremities
- ⑩ Precast type facade possible without heavy lifts
- ⑪ Permaform columns possible
- ⑫ Upper floors can utilize thinner walls
- ⑬ Embedded beams can be incorporated in floor depth
- ⑭ Need for transfer beams reduced
- ⑮ Upper floor party walls can be used to support and stabilize the roof
- ⑯ Long spans can be supported

#### Generally

Complex plans can be achieved

Control joints not necessary

# BENEFITS - FLEXIBILITY

## BETTER BUILDINGS (BY) DESIGN

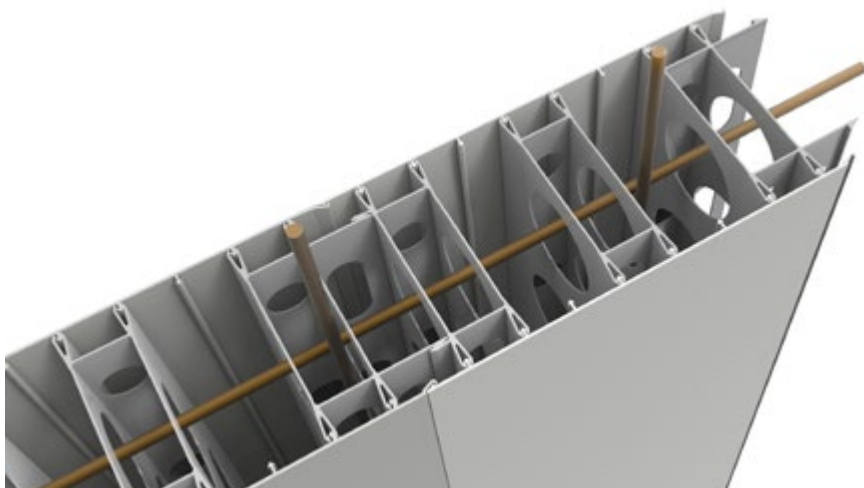
Specifying Permaform for your project opens up so many possibilities and flexibilities that just aren't possible with traditional construction methods.

Maximise living, storage and parking space for tenants and increase the value of your development.

Permaform panels come in a range of width profiles (110mm, 150mm and 200mm) to suit an infinite number of architectural and engineering design requirements.

Achieve architectural elegance and design with greater flexibility and floor space.

- + Don't be set back by tight sites with restrictive access. Make every metre count on sites with no room for storage, mess, waste or large cranes
- + Thinner walls create more space in each occupancy and reduce structure weight without compromising quality or structural integrity
- + Fewer internal supports mean more open plan spaces
- + Greater flexibility for future remodelling
- + Reduced need for beams gives you extra column-free space and a lower building height
- + Continue internal load bearing walls through to external blade walls
- + Reduce footings and slab thickness and improve floor slab deflections
- + Create curved walls that are near impossible to achieve with block work.
- + Eliminate the need to conceal concrete columns within the building's interior
- + Permaform's flexibility makes those late design modifications possible at the construction stage
- + Horizontally reinforced walls can easily span between columns eliminating the need for costly transfer beams
- + Concrete filled Permaform walls offer outstanding structural capacity allowing for heavily loaded retaining walls which can retain vast amounts of backfill







COOMBS, ACT



GLADESVILLE, NSW



HARRISON, ACT



'THE LOWANNA' BRADDON ACT



CAMPBELLTOWN, NSW





# BENEFITS - COMPLIANCE

## *DON'T MANAGE YOUR CLIENT'S EXPECTATIONS, EXCEED THEM WITH PERMAFORM!*

Saving time and money on your project doesn't mean you should sacrifice quality or service. Permaform gives you confidence, convenience and peace of mind.

The Permaform system has been thoroughly researched, developed, tested and certified to Australia's highest industry standards.

### *COMPLIANCE: ASSURED*

- + Permaform is 'deemed to comply' with AS (Australian Standards) AS3600 – Concrete Structures; and AS 3610 – Formwork for Concrete
- + Our company is committed to best practice and continuous improvement. We have a rigorous quality assurance cycle whereby we test our product quarterly at a minimum
- + The system has been independently certified to meet the specifications of the BCA (Building Code of Australia) by Australia's national science agency - the CSIRO; leading engineering firms; and both Australian and international certifiers.

### *QUALITY: INCREASE THE VALUE OF YOUR PROJECT INSTANTLY WITH PERMAFORM.*

- + Better quality walls mean less maintenance. Permaform prevents concrete cancer, rust and corrosion, increasing the quality and long-term value of your development.
- + Once concrete-filled, our panels are hard wearing and can withstand the hard wear-and-tear of the construction site
- + The 'clip and slide' system that locks our panels together so securely greatly reduces the instances of concrete blowouts
- + Our factory-produced panels guarantee a consistent, quality, waterproof finish which eliminates the risk of water damage or cracking, and is also pest resistant.



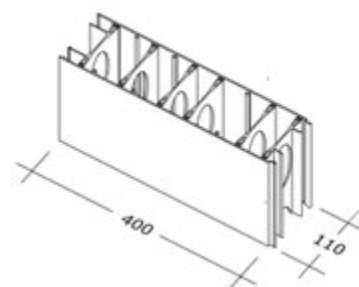
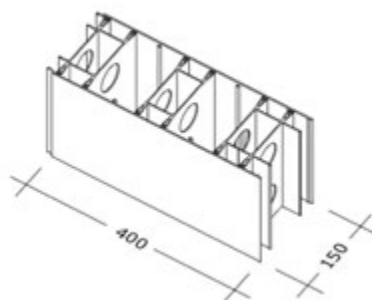
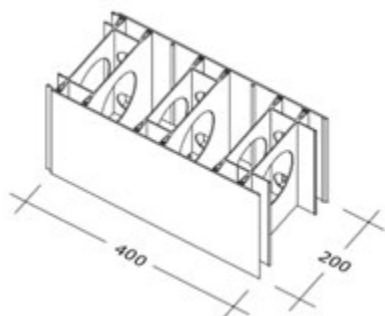
# PROFILE CATALOGUE

200mm

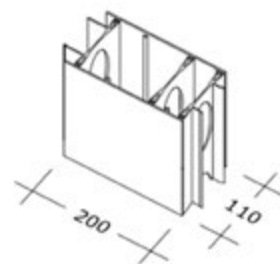
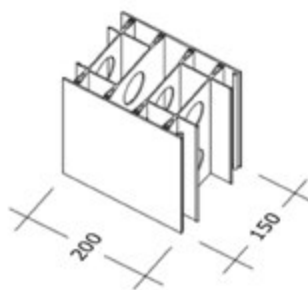
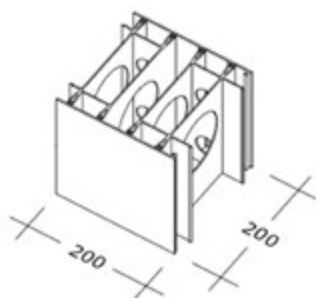
150mm

110mm

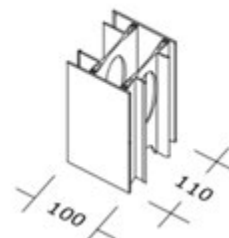
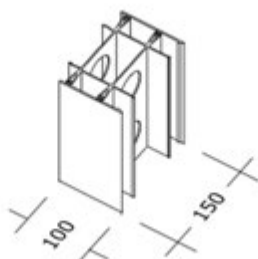
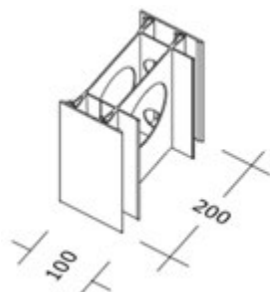
AP - ADJUSTABLE STANDARD WALL PANEL 400 WIDE



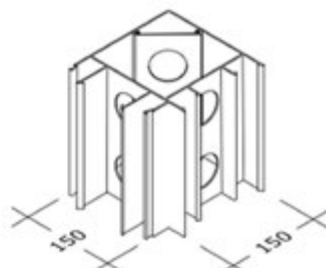
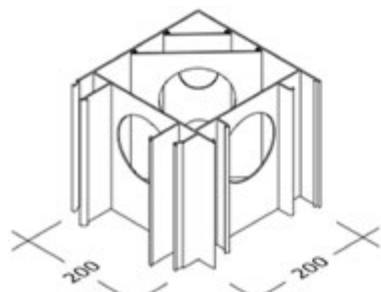
HP - HALF WALL PANEL 200 WIDE



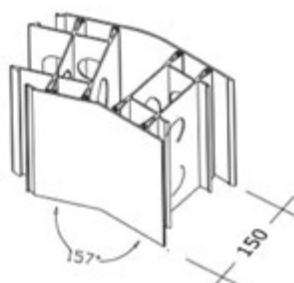
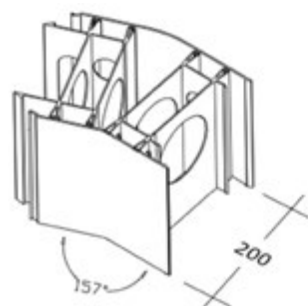
QP - QUARTER WALL PANEL 100 WIDE



CP - CORNER PANEL



CV - CURVED PANEL



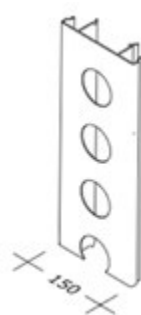
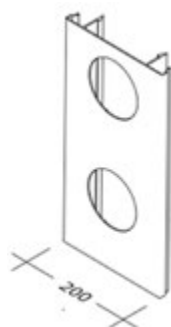
# PROFILE CATALOGUE

200mm

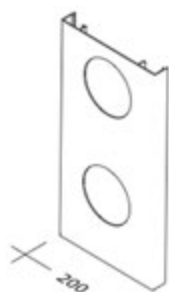
150mm

110mm

JTM - JUNCTION TRACK MALE



JTF - JUNCTION TRACK FEMALE



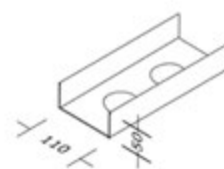
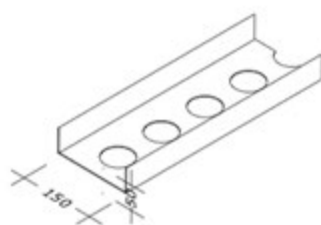
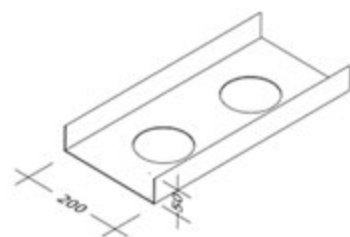
ECM - END CAP MALE



ECF - END CAP FEMALE



BT - BOTTOM TRACK





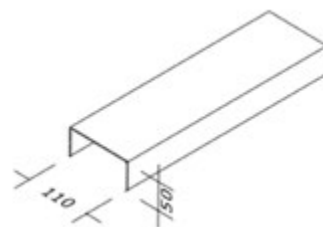
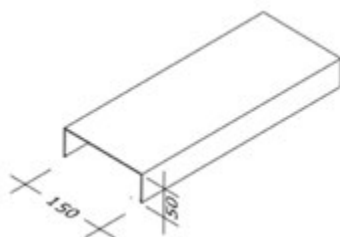
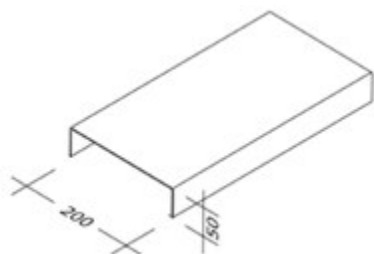
# PROFILE CATALOGUE

200mm

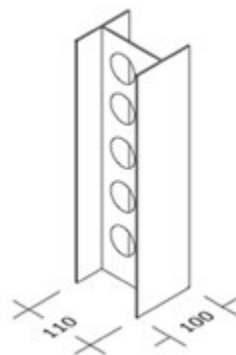
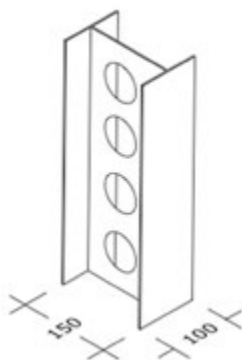
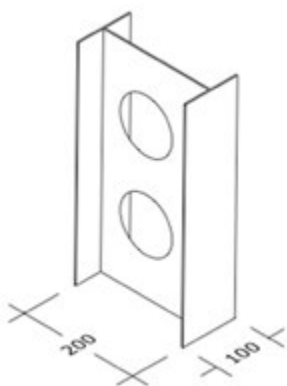
150mm

110mm

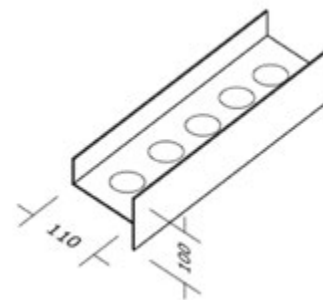
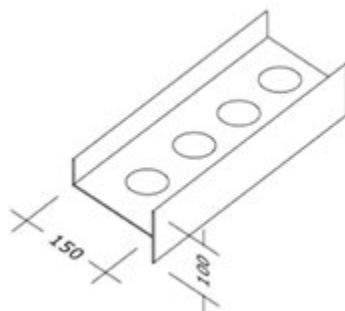
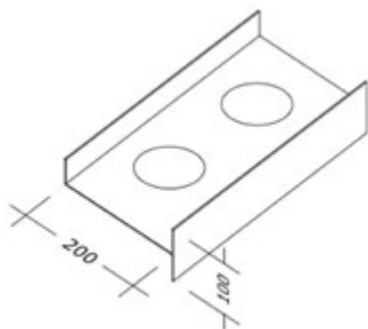
TC - TOP CAP



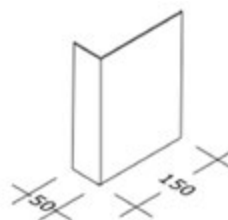
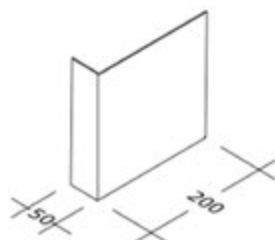
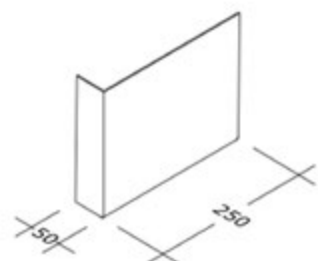
PC - PANEL CONNECTOR



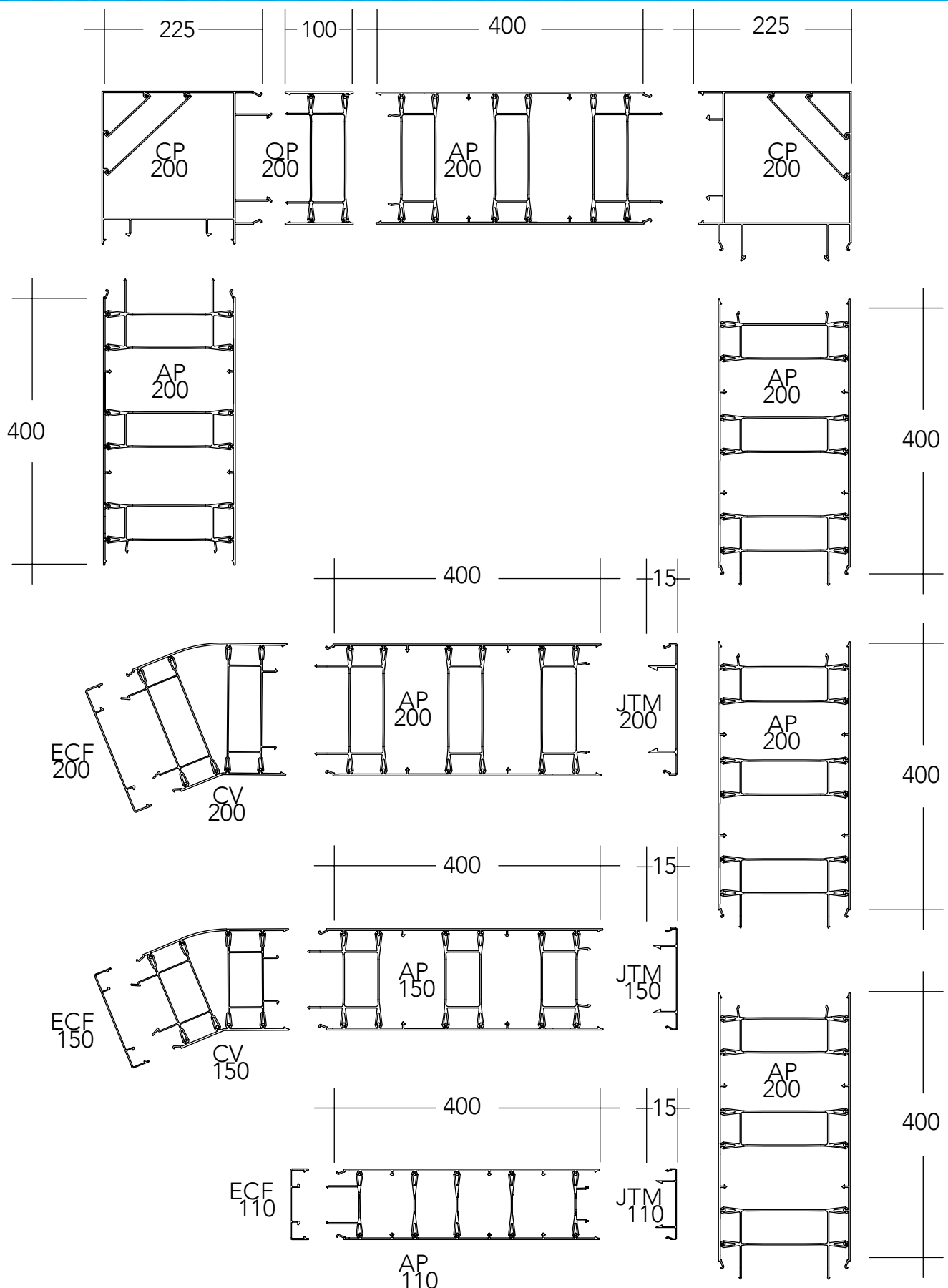
EF - EDGE FLASHING



CS - CORNER STOP



# EXAMPLE PANEL ARRANGEMENT



# TECH SPECS DATASHEET

## PRODUCT SPECIFICATIONS

Profiles	Available in thicknesses of 110, 150 and 200 mm	Finish	Semi-gloss white, water resistant
Panel width	Standard wall panels: 400mm Half wall panels: 200mm Quarter panels: 100mm	PVC thickness	2.5 mm
Height	Standard panels: 3 meters or 3.3 meters heights All panels can be ordered to custom height Minimum 0.5m; Maximum 6m	PVC density	1,300 kg/m <sup>3</sup>
Concrete volume	110mm profile: 0.10 cbm per sqm 150mm profile: 0.14 cbm per sqm 200mm profile: 0.18 cbm per sqm	Life expectancy	Minimum 50 years
Weight	110mm profile: 18.1 kgs per sqm 150mm profile: 21.6 kgs per sqm 200mm profile: 23k kgs per sqm	Fire rating	200mm profile: four (4) hours 150mm profile: three (3) hours 110mm profile: two (2) hours See also 'Certifications and Compliance'
Mass	97.13 kg/m <sup>3</sup> once concrete filled	UV stability	Not affected by exposure to sunlight either in storage or as part of finished product

## CERTIFICATIONS AND COMPLIANCE

CODE , SPECIFICATION OR STANDARD	COMPLIANCE	CERTIFIED BY
AS/NZ3837:1998 - heat and smoke release rates	✓ Complies	CSIRO
BCA Parts A2 and C1 - heat and smoke release requirements	✓ Complies	CSIRO; SGS-CSTC; Murtagh Bond Structural Engineers
BCA Part F5 – acoustic performance, sound transmission and insulation	✓ Complies	Rudds Consulting Engineers
Green Building Council of Australia – Green Star Office Design	✓ Complies	CETEC



# TECH SPECS DATASHEET CONTINUED

## SAFETY

**Specific PPE** None required. Gloves are not essential, but on sites where mandatory, gloves with rubber fingers and palm infill will remove risk of slipping.

**MSDS** Readily available

## ORDERING AND SUPPLY

**Lead time** Standard 3 and 3.3 metre panels delivered to major capital cities within seven days from order, custom height panels within four weeks.

**Payment terms** COD or 30 days

**Manufacturing capacity** Manufactured in a new (2014), state-of-the-art 10,000 sqm factory capable of producing 40,000 sqm a month

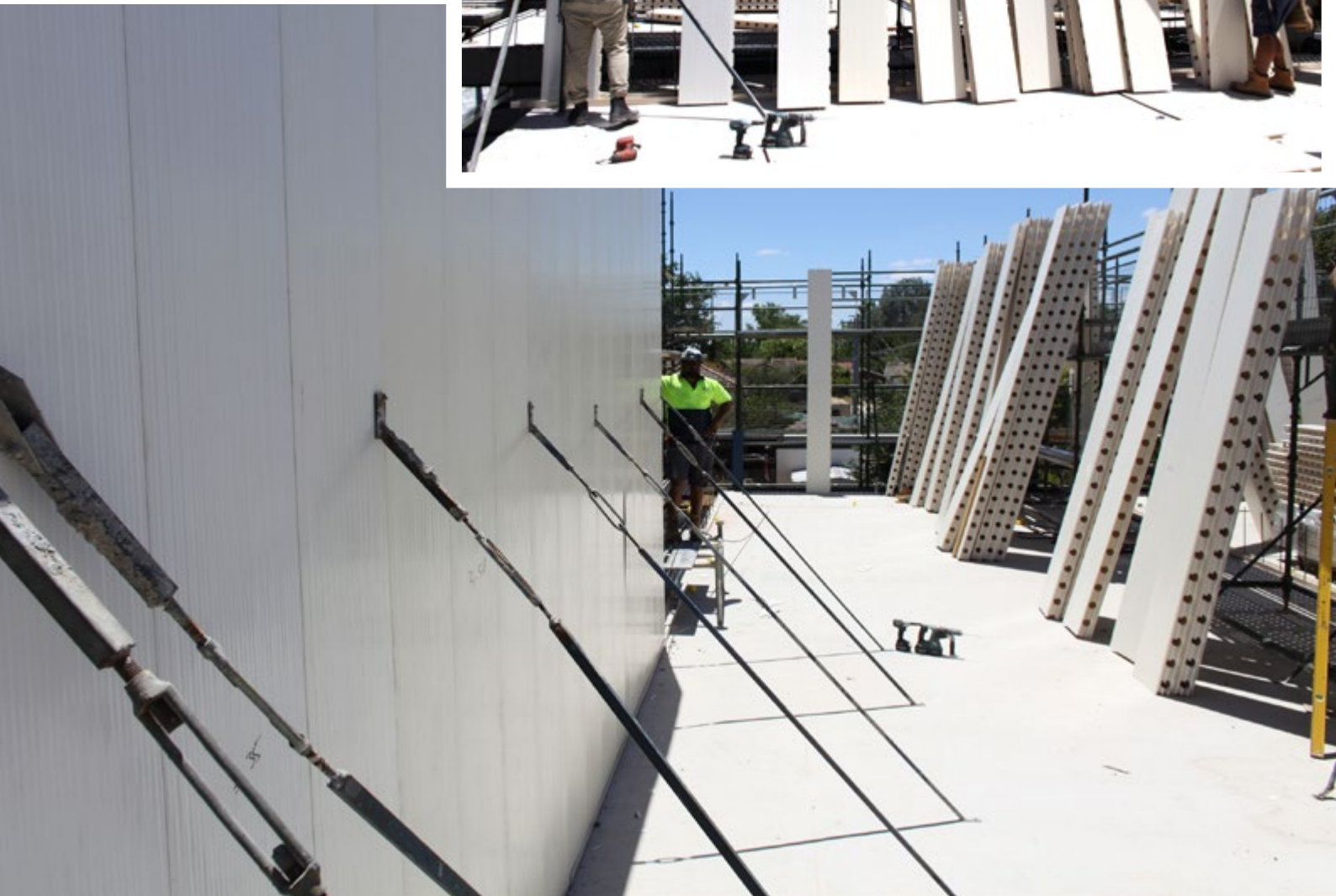
**Shipping and freight** We can offer delivery service, or you can arrange your own

## ABBREVIATIONS AND ACRONYMS

- + BCA – Building Code of Australia
- + PPE – Personal Protective Equipment
- + MSDS – Material Safety Data Sheet
- + CSIRO – Commonwealth Scientific and Industrial Research Organisation
- + SGS-CSTC - the world's leading inspection, verification, testing and certification company. [www.sgs.com](http://www.sgs.com)
- + CETEC Pty Ltd - a professional and independent consultancy delivering scientific and technical based solutions.
- + CETEC focuses on providing Environmental, Sustainability and OH&S services and solutions for buildings and the built environment [www.cetec.com.au](http://www.cetec.com.au)

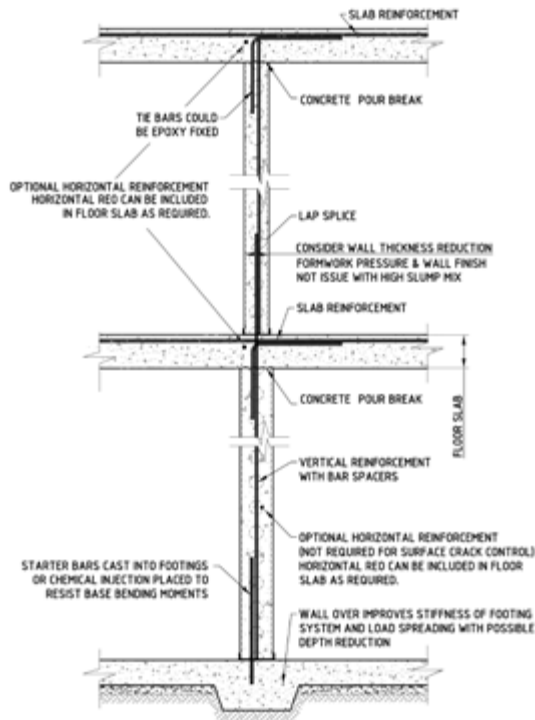


  
PERMAFORM



# STRUCTURAL APPLICATIONS

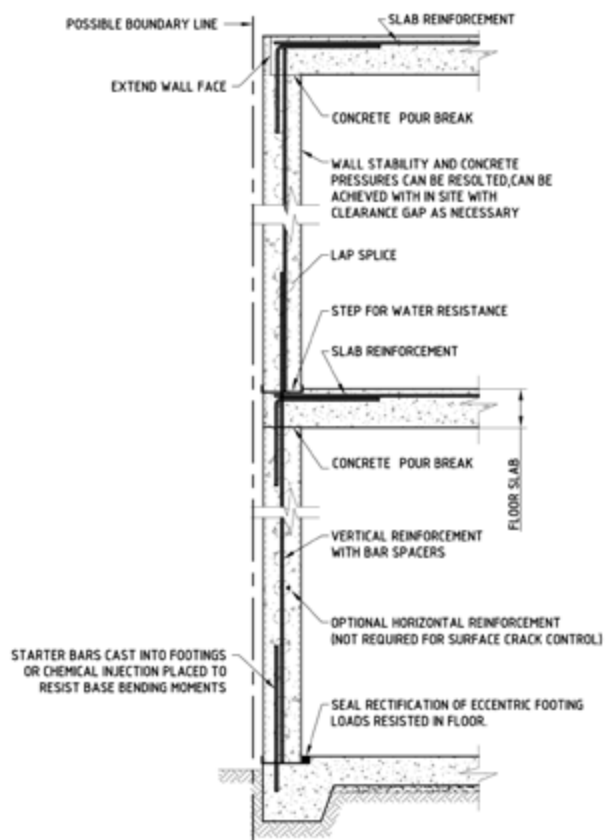
## INTERNAL WALL - UPPER STOREY LOAD BEARING CONSTRUCTION



WALL SLAB REINFORCEMENT & THICKNESS TO BE DETERMINED BY ENGINEER. PERMAFORM RECOMMENDED PLACEMENT OF SINGLE PANELS BETWEEN FLOOR HEIGHTS NOT TO EXCEED 6 METRES.

## EXTERNAL WALL - UPPER STOREY LOAD BEARING CONSTRUCTION

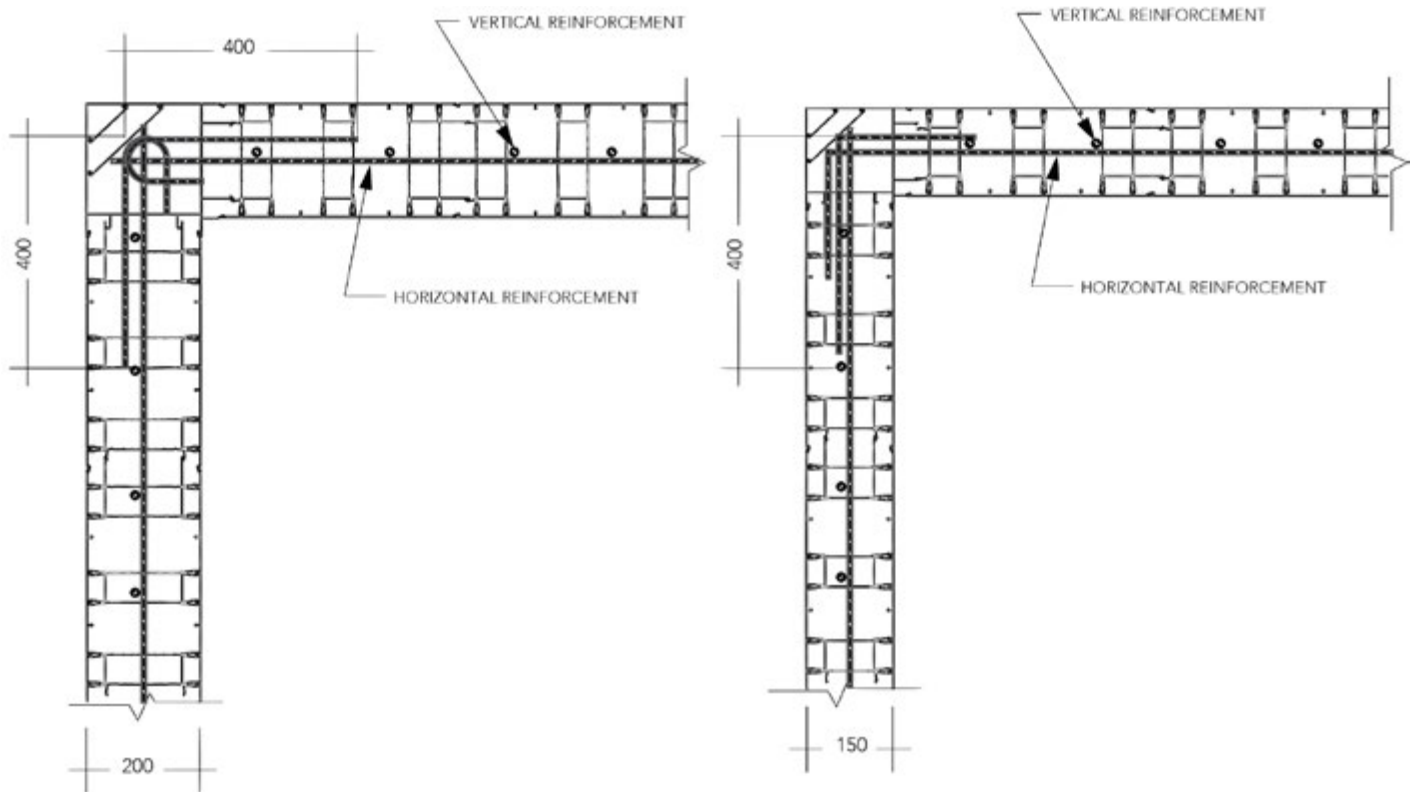
WALL SLAB REINFORCEMENT & THICKNESS TO BE DETERMINED BY ENGINEER. PERMAFORM CUT BACK AT TOP TO ACCOMMODATE SLAB. LAP SPLICES NORMALLY 40D.



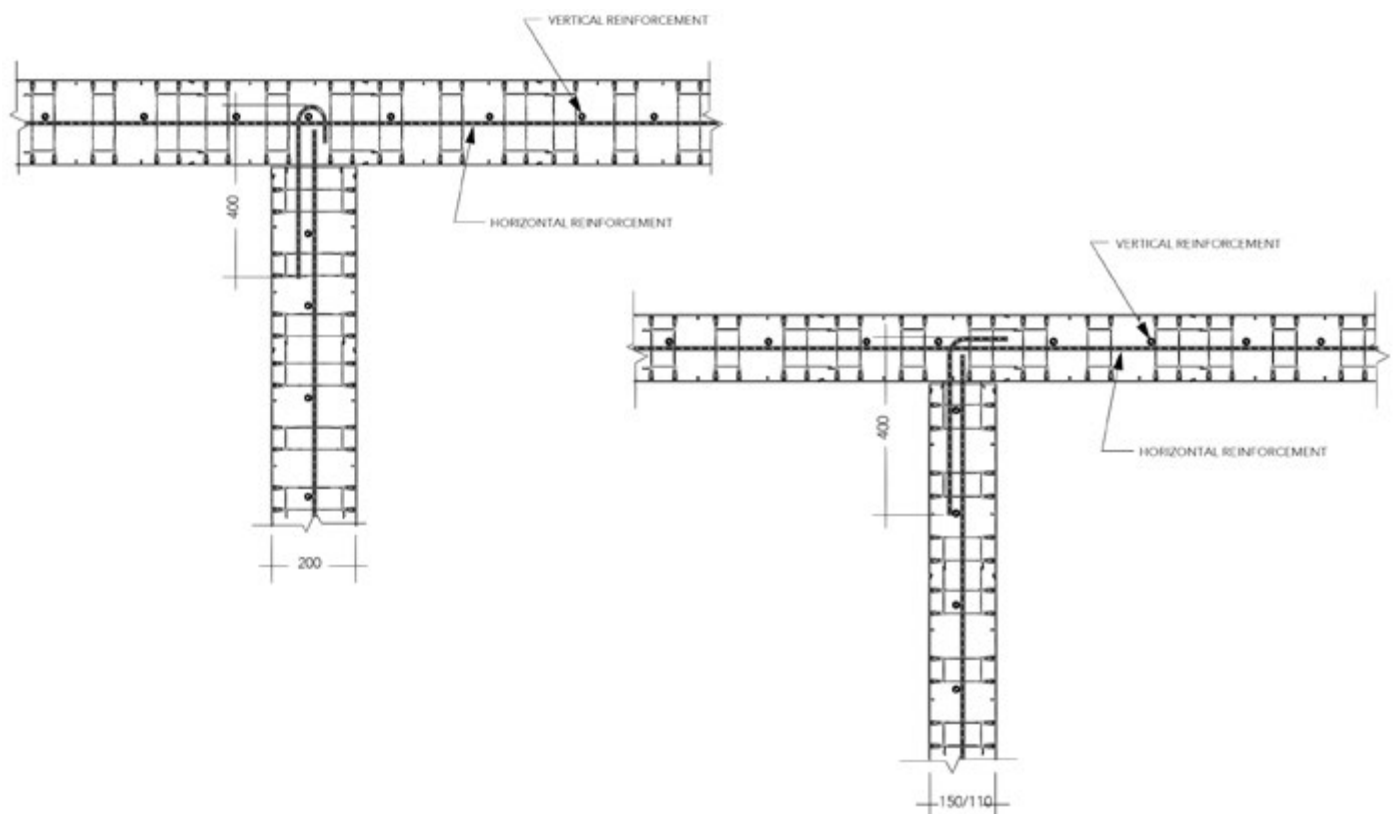


# STRUCTURAL APPLICATIONS

TYPICAL CORNER PLAN DETAIL

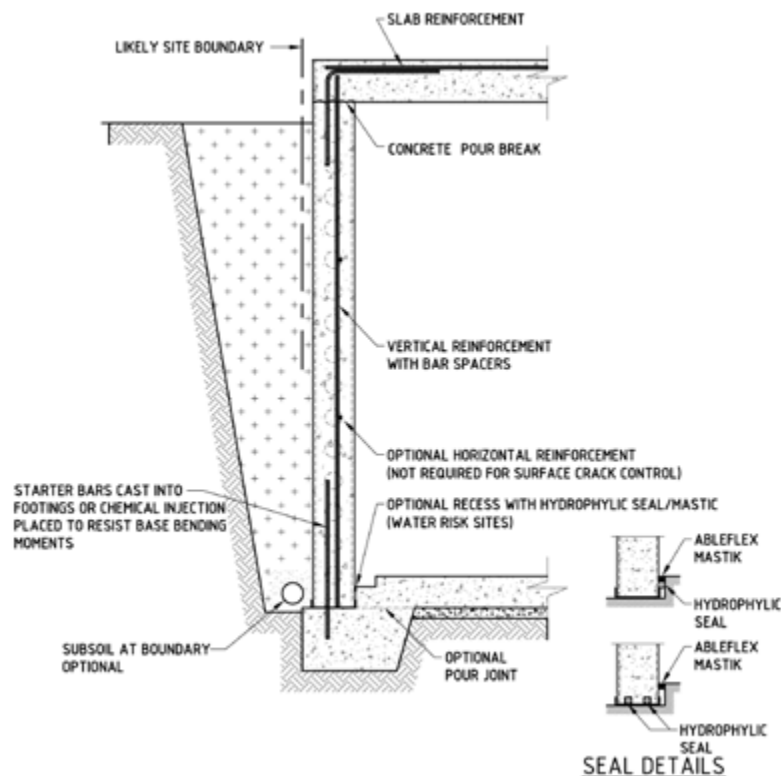


TYPICAL TEE JUNCTION PLAN DETAIL



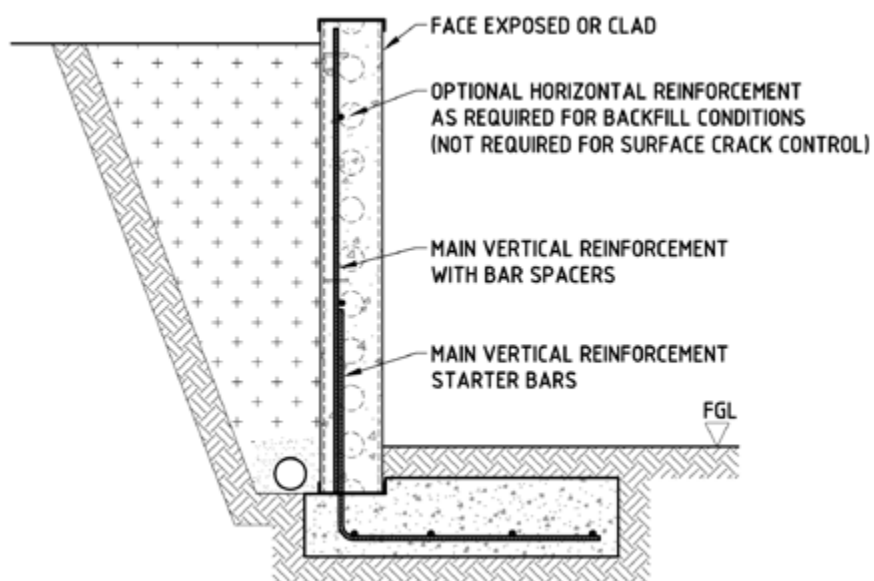
# STRUCTURAL APPLICATIONS

## TYPICAL BASEMENT WALL SECTION



THE HORIZONTAL REINFORCEMENT FOR CRACK CONTROL IS OPTIONAL. IF FORMED, VERTICAL SHRINKAGE CRACKS WILL BE FULLY ENCAPSULATED IN THE PERMAFORM ENVELOPE.

## TYPICAL CANTILEVER RETAINING WALL



PERMAFORM WILL ACT AS AN EFFECTIVE WATERPROOFING MEMBRANE FOR MOST SITUATIONS.

IF FULL WATER PROOF INTEGRITY IS REQUIRED, PROPRIETARY WATERPROOFING AGENT SHOULD BE APPLIED. MOST BRANDS OF SHEET MEMBRANES ARE SUITABLE, CHECK WITH MANUFACTURER FOR ADHESION QUALITY TO PVC IF IN DOUBT. IN CASES WHERE WATERPROOFING IS NOT IMPERATIVE, PERMAFORM WILL PROVIDE A BARRIER TO WATER PENETRATION AND SUBSEQUENT REINFORCING DEGRADATION.

# SAFETY

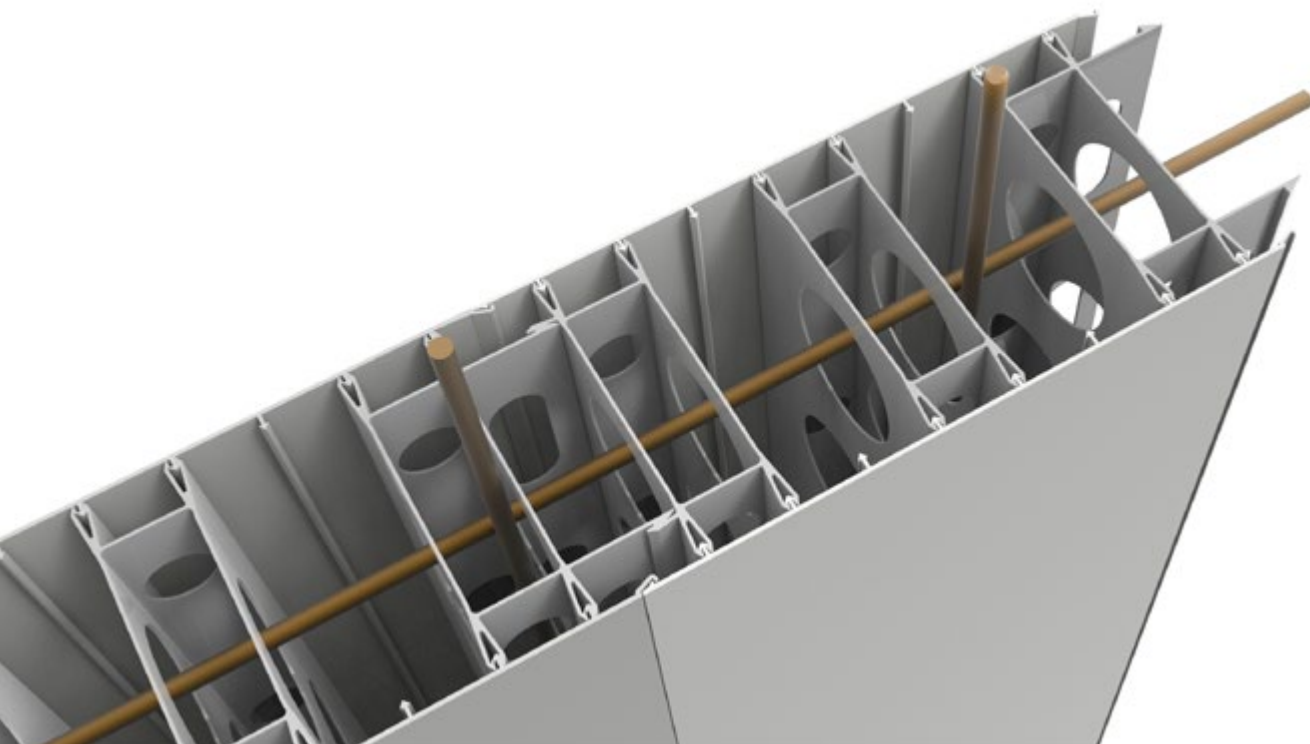
## HIGH-RISE CAN BE HIGH RISK. SAFETY IS EVERYTHING

Safety risks are an intrinsic and inherent part of any construction site. Safe Work Australia listed construction sites as having the highest injury rate of all dangerous working environments.

Developed with Australia's stringent work health and safety requirements in mind, the Permaform system helps you to mitigate these risks and increase the safety of your site.

Here's how:

- + A cleaner and more efficient work site - with less trades, tools, equipment, personnel and waste - is a safer one.
- + Large tower cranes are not only costly and slow, they greatly increase the safety risk profile of your site. Lightweight Permaform panels only require mobile cranes.
- + Exposed reo on site is a common safety risk for trips, falls, cuts and accidents. Permaform reduces the amount of exposed reo and the time it remains exposed.
- + At less than 23kgs/sqm – Permaform panels are light weight and easily handled, reducing risk of back injuries
- + Stripping traditional formwork is a high-risk activity – exposed nails, falling objects, sharp edges. The Permaform system removes this activity all together.
- + Install windows from the interior of the building without the need for scaffolding. Reducing scaffolding onsite means reducing the risk of falls from heights and scaffolding collapses.
- + Panels are ordered to size so there's no need for dangerous cutting activities on your busy worksite.



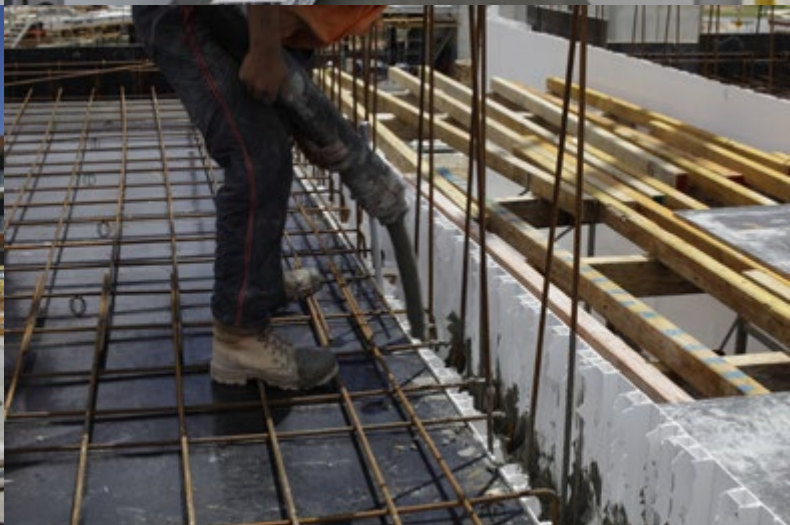


# INSTALLATION QUICK REFERENCE GUIDE

Timing	Can be installed within 24 hours of pouring the slab or footing.
Speed of installation	In a basement environment or similar, 150 sqm installed by four (4) people per day on average.
Delivery	Arrives to site in packs of up to six (6) bundles, each containing up to six (6) panels. In total, each pack contains between 25 and 36 panels (10 – 14 lineal metres).
Unloading	Lift up to two 30 panels at a time at 2/3 points. A spreader bar is recommended to minimise any risk of damage to panels.
Storage	Stack up to two packs high with spacers on a level surface. Spacers should be at four (4) points for even distribution of dead weight, particularly to prevent distortion in extreme heat.
Handling	Panels are lightweight (maximum 23 kgs per sqm) and can be handled by two people.
Handling at height	When installing more than one floor above stack location, crane or forklift bundles for convenience and speed.
Placing	Place panels carefully to accommodate starter bars and other detail. Panels clip and slide into place and lock together with ease. Use a rubber mallet or similar for adjustment and persuasion to height and line.
Pour height	Panels will withstand the dynamic bursting pressure of fresh concrete in single pours up to three (3) metres high. Use horizontal bracing for pours greater than three (3) metres.
Bracing	Use horizontal bracing on the lower half at 900 centres (including slab level) for pours greater than three (3) metres.
Vertical reinforcement	Place from top, aligning as close as possible to starter bars if applicable. The internal ribs will assist in achieving desired centres. Can be designed and placed at vertical spacing of 150mm or 200mm increments.
Horizontal reinforcement	If necessary, thread from the open end of the wall as the wall progresses. When a run ends at an existing wall and horizontal bars are required, place a length of horizontal bar with an attached draw wire in the voids, then ease the bar forward. Spacing is to relate to voids in vertical diaphragms at 150mm increments.

Propping	Use raking props at 1500mm centres to maintain plumb, use fixed restraint at base and use top restraints when available. For walls up to three (3) metres in height, affix prop to panel at top third of height. For walls three (3) metres or greater: prop at third points, prop 1000mm centres.
Aligning	The base should be plumb from the previous set. Use a stringline or laser to check horizontal and vertical alignment/plumb of panels. To correct out-of-plumb panels, adjust screws on props accordingly.
Concrete mix	Minimum 25mpa, 10mm aggregate at 180mm slump.
Pouring	Fill panels carefully with a boom pump in layers not exceeding three (3) meters high at a time. To reduce hydrostatic pressure and segregation at the base of the panels, discharge the concrete so that it impacts on as many internal ribs as possible.
Vibrating	Vibrate placed concrete at a low frequency. The slick PVC surface will allow the concrete to slide easily into any air pockets or voids.
Stripping	Not required, panels stay in place as sacrificial formwork.
Penetrations	Windows, doors and other openings are easily placed and cut-in with standard pre-pour procedures. Services and all other in situ requirements are the same as conventional formwork systems.
Contraction control	Not required.
Finishing	Panels leave a clean, straight, semi-gloss substrate perfect for a range of internal and external render and painting systems.

QUICK. STRONG. STRAIGHT.





# FINISHES AND PERMAFORM

## FINISH FAST – FINISH BETTER

Once you've installed and filled Permaform panels on your project, you are left with a waterproof, UV resistant, crack resistant, straight, clean, white, semi-gloss finish that needs no further treatment.

So, in areas that don't need decorative finishes (such as lift shafts, fire stairwells, basements, factory and warehouse walls) you don't need to do anything else.

For architectural and aesthetic internal and external finishes, Permaform provides the ideal substrate for a wide range of systems from plasterboard sheet and paint to a range of acrylic renders.

## TIPS AND TRICKS FOR THE PERFECT FINISH

### PERMAFORM HAS BEEN TRIED AND TESTED WITH A WIDE RANGE OF FINISHING, RENDERING AND TEXTURE SYSTEMS TO SUIT ANY ARCHITECTURAL DESIGN.

For a flawless finish, it's recommended:

- + Do not use traditional mineral renders such as sand or cement (or acrylic render with sand/cement modifiers).

As Permaform is manufactured from rigid polymer, sand and cement renders can't be used. For best results, use acrylic renders.

- + In coastal and seafront environments, apply finishes as soon as possible after panel are installed to avoid accumulating salts on the surface. Salts are known to have an effect on the long-term adhesiveness of some renders.

- + Prepare and clean the surface prior to applying your chosen render system to ensure it's free from contaminants such as dirt, dust, oils, grease or silicone. Avoid using detergent when cleaning, as some detergents leave a surface residue that could affect the adhesion of your chosen system. Remove solid contaminants, such as concrete splash, with a wire brush or scraper.

- + As Permaform has a smooth, sheen finish – some rendering systems may require scuffing or scratching of the surface. We recommend using a low-speed grinder fitted with a 200mm coarse diamond grinding disc. The disc must be coarse enough so as to scratch, not sand the surface. Low speeds are recommended as higher speeds can cause the surface to burnish smooth. Scuffing residue can be removed from the surface with a brush or compressed air.

- + For deeper tones, we recommend using infrared reflective wall finishes, such as Energy Star finishes which reduce the surface temperature of the panels.

- + As Permaform panels are waterproof, they do not absorb water from applied finishes. Additional water should not be added to render mixes.

- + Apply a minimum of 5mm thickness of render for insulation purposes.

- + Always apply your chosen rendering system in strict accordance with the manufacturer's instructions and system specifications.

### PERMAFORM AND ASTEC PAINTS

Permaform Australia Pty Ltd is proud to recommend Astec Paints, Australia's leading brand of textured coating and rendering systems. Astec Paints have been trusted by architects, builders and certifiers since 1978.

The Astec render system applied to Permaform provides a complete wall system that will protect a building from any harsh environment throughout its lifetime and is backed by a 15 year warranty.





# CLIENT SERVICING

## *CLIENT SERVICE: YOUR SUCCESS DRIVES OUR BUSINESS*

Our Australian owned and operated company was established by a team of construction industry professionals who understand your business. We developed our products in collaboration with leading structural engineering firms, developers, builders, architects and key trades. We speak your language and pride ourselves on no-nonsense, first-class customer service that you can rely on every time.

- + We're pleased to offer pre-sales presentations at a location and time that suits you. Bring your team together to understand the system and ask any questions from the outset of a project.
- + We offer every client a comprehensive 'take-off' service. We work with you and your team to understand the scope of your project and help you determine the quantities, lengths, heights and accessories you need to complete the job and provide you with a marked up drawing containing all the quantities.
- + A simple procurement process that allows you to buy from just one supplier for reliably better solutions to both above and below-ground walling.
- + Our company structure and flexibility means there is no client too big or too small to receive the best product with the service to match.
- + 1800 PERMAFORM gives you immediate after-sales support. We also stock you with comprehensive documentation with everything you need to know: a step-by-step installation manual; the engineering manual and safety data sheets.
- + Permaform is manufactured in a new (2014) purpose-built, state-of-the art factory. At 10,000 sqm, the plant has impressive production capacity, capable of manufacturing 50,000 sqm of Permaform a month – you'll never be caught short.

## *BUILD YOUR COMPETITIVE ADVANTAGE: CAN YOU AFFORD NOT TO?*

Don't just survive, make your business thrive in a market with unprecedented housing shortages, an ever-increasing cost of building materials and ever-decreasing access to skilled labour.

Produce developments with greater market appeal: higher quality buildings with more internal space and lower energy consumption.

Make your tenders more competitive and improve your margins.

+ FASTER  
+ SAFER

+ CHEAPER  
+ SMARTER

# OTHER RESOURCES

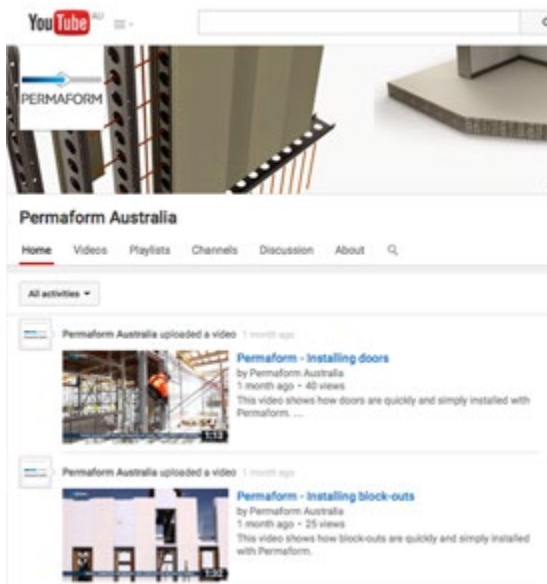
There is a range of other resources available. To obtain electronic or printed copies, please contact:

[info@bigrivergroup.com.au](mailto:info@bigrivergroup.com.au)

or call

1800 881 958

Watch practical videos on Permaform's YouTube channel. Just search 'Permaform Australia'



Request order forms



Request an account application



Review Australian Standards Compliance statements



Request the Material Data Safety Sheet (MSDS)



Request the illustrated installation manual



# NOTES

# CONTACT:

"For all enquiries please visit [www.bigrivergroup.com.au](http://www.bigrivergroup.com.au) or call 1300 881 958"  
"Email us at [info@bigrivergroup.com.au](mailto:info@bigrivergroup.com.au)"