Rapid Ply - versatile, modular formwork

- Rapid Ply is an extremely cost effective formwork system because it can be used without the use of a crane and it only needs two workers to erect it. The heaviest panel of 1.44m² weighs only 38.5kg, consequently Rapid Ply can be used flexibly to form in-situ concrete structures, even on the most difficult project sites.

- Rapid Ply is a popular, modular formwork panel system that has been used in a diverse range of projects around Australia, some of these are water tanks, dams, and house cellars.

- Its popular because it is quick to assemble, and the panels have easy connectability to each other, thereby making a big saving on project costs.

- Furthermore, you can now use it with composite form face, which provides a high quality finish, lasts up to 20 times longer and is much easier to maintain and repair.
Rapid Ply Panels

Features and Benefits

• **Rapid Ply panels feature high tensile steel frames** manufactured to exacting specifications, therefore the frames are more rigid and less prone to damage and the weight is reduced by approximately 5kg per square metre.

• **The 12mm thick plywood with a heavy-duty phenolic overlay on the face** provides extra long life and a high quality finish for the concrete.

• **A wide range of panel sizes** are available from 600mm x 600mm to 2400mm x 600mm, enabling the assembly of virtually any combination of panels for a large range of layouts and pour heights to suit structures of various sizes and shapes.

600mm Rapid Ply Panels
Composite Form Face

- You can now order Rapid Ply panels with a **composite form face**, which means they provide a high quality finish, which is far superior to the finish provided by a ply panel.

- They also can be **used many more times** than ply panels because they are resistant to the common causes of timber damage.

- They can **last up to 20 times longer** than timber panels and they are much easier to clean and repair, saving immensely on replacement and maintenance costs.
Standard Rapid Tie
Standard Rapid Ties are made from 5.89mm drawn wire manufactured to provide 50mm cover at the break off the notch (30mm cover on 100/125mm thick walls). Successful removal of the Rapid Tie loops at the break point is reliant upon the ties being stripped within 24 hours of pouring.

Adjustable Rapid Tie
Sizes range from 100-600mm in 50mm increments.

Extended Rapid Tie
When panels are used in a gangform Extended Rapid ties are required because they protrude past the back of panels to enable gangforms to be moved in one piece.
How Panels Are Connected

Unlike most formwork where Bar Tie is used, Rapid Ply uses its own tie system called **Rapid Tie** to hold the panels in place.

- The Rapid Tie fits through slots on the edges of the panels and is held in place by **Rapid Tie Wedges**.
- One wedge fits through the loop at the end of the tie and the two adjoining panels and then another wedge fits through the end of the first wedge and secures the tie in place.
- The tie is crimped so the end loop can be broken off within the face of the concrete after it has cured. The small hole left in the concrete can then be plugged.
How Panels are Connected

- The **Break Off Tool** is used to break off the ends of the ties.

- The **Tie Slot Filler** plugs up the gaps where Rapid Ties aren’t used, to stop the flow of concrete through these gaps.

- The **Podger Bar** is used for aligning the slotted holes in the panels to allow for the fitting of ties and wedges.
Clamps and Wales

- Tube or RSJ wales are utilised to align the panels and strengthen the structure.

- The tube wales are fastened to the back of the panels using a B Clamp and the RSJ is secured to the panels using a C Clamp.

These are the A, B and C Clamps. B and C are used with wales whilst the A clamp secures and aligns adjacent panels.
Summary of Strengths

• Rapid Ply is an extremely cost effective system because it can be used without a crane.

• The heaviest panel of 1.44m$^2$ weighs only 38.5kg, consequently Rapid Ply can be used flexibly to form in-situ concrete structures, even on the most difficult project sites.

• RMD Australia’s Rapid Ply is a popular modular formwork panel system that has been used in a diverse range of projects around Australia, such as water tanks, dams, house cellars and much more.

• It’s popular because it is extremely easy to use, due to the lightness of its panels and how quick they are to connect to each other, thereby making a big saving on the project cost.
Summary of Strengths

• Rapid Ply is a tried and tested system.
• It’s well known in the marketplace.
• Construction workers are skilled in its use.
• Some customers possess Rapid Ply and top-up their stock.
• Versatile capabilities:
  1. Used for walls
  2. Used for curved structures
  3. Used for elevated slabs
• Rapid Ply can be gangformed (panels connected together) – allows for movement of a large combined form to a different forming location by crane. Makes the project more productive.
Summary of Strengths

- The edge frame is made of high tensile steel – reducing the weight to 5 kg/m².
- Replaceable plywood – ensures a better concrete finish.
- Plywood fits flush with the frame – also providing a better concrete finish.
- A wide range of panels are available, providing more options to assemble the correct sized form and speeds-up the construction time without having to make up special sizes all the time.
- Fixed and hinged corner panels – allows for greater flexibility of design.
- Infill sections up to 150mm – makes assembly much quicker.
The End