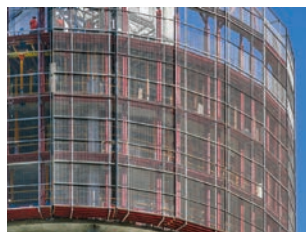


novatec

FORMWORK SYSTEMS

Flexible Formwork Solutions



Novatec Formwork Systems



Residential



Skyscrapers



Infrastructure



Bridge Building and Tunnelling



Civil and Mining



Commercial and Industrial



Architectural

Novatec was established in 2001 and is part of the Mitolo Corporation. The founding owners' extensive experience in commercial formwork meant they were best placed to introduce a wider range of formwork solutions to achieve a safer and more productive work environment. We are now recognised throughout Australia as one of the leading formwork suppliers, with innovative technologies, comprehensive services and practical expertise in providing formwork solutions for any building project.

Novatec stocks a comprehensive product range, from hand-set formwork to highly engineered climbing technologies. High quality formwork products alone do not ensure a successful building process. We are committed to assisting the contractor to achieve their goals by offering engineering, planning and detailed scheduling services.

Novatec was the first formwork supplier to introduce into Australia a new era of form facing technology; the 100% wood-free, all-plastic facing, Alkus. It is now the standard facing in all of Novatec's panel formwork systems throughout Australia.

What Novatec can do for you?

An integral part of Novatec's customer relationship program is to provide their clients with professional support services such as:

Sales and Hire

Novatec can offer formwork solutions for hire or purchase, or a combination of both. Other flexible options include buy-back packages.

Full Technical Support

We assist with in-depth planning and detailing work, right through to supporting our clients on site as required.

Temporary Structures Engineering

Our experienced Formwork Designers, including professional engineers and drafting personnel, work together to provide the best possible formwork solutions for the individual project.

CAD Design

Novatec provides professionally engineered, easy to follow and fully detailed design drawings to our clients to assist them to assemble and work with our products in the most efficient manner.

Site Supervision

Novatec are committed to ensuring that all of our formwork systems are used within the guidelines and recommendations for safe use (refer to the relevant product technical information manual). On site supervision includes a system specific safety induction and product training.

Maintenance Programs

Novatec's formwork systems are cleaned, repaired and well maintained at our storage facilities, under guidance and supervision by management. This work ensures that the equipment is delivered ready to use on construction sites throughout Australia.





Quality formwork products - professionally engineered

Novatec has a comprehensive and innovative range of formwork products. Our product range includes the Mammut 350, StarTec, AluStar and AluFix panel wall formwork systems along with the STB Support Frames for forming single-sided walls. We provide Triplex heavy duty bracing, R/SRL push pull props, along with MD, ME and MEP props which are used with MEP frames as Shoring. We offer 20 and 30kN Novaprops, Novabeams and two slab formwork systems, Novaflex and MevaDec. Carofalt is a moveable column formwork system. Climbing systems include the MAC (hydraulic) climber, the MGC rail guided (crane-assisted) climber and the MGC-H (hydraulic) climber. Our GT150 and Superlite Screens offer superior solutions, along with our Formwork Hoists. Safe Prop is an innovative safety product along with the BKB working platform.

Our commitment to provide the best possible formwork solutions is paramount. We remain aware of what our clients expect, from the time of enquiry, throughout the

design process and during the sales negotiation period. Understanding our client's needs is always our aim.

Quality is not just a feature of Novatec's comprehensive product range, it is a principal guiding all of our services. Our design engineers are amongst the best. They strive to find the most efficient, practical and safest solutions for your projects.

'Thinking outside the box' is part of what we do and it is how we find design solutions for those 'too hard basket' jobs. We welcome the challenges of architecturally complex shaped structures, high single-sided walls, specially fabricated tunnel systems and travellers.

Engineering challenges that require a visionary approach to make things possible, striving for the most economical and safest solution - this is Novatec's objective. Challenge us, ask us how to save money using formwork that brings you cutting edge technology and custom solutions.



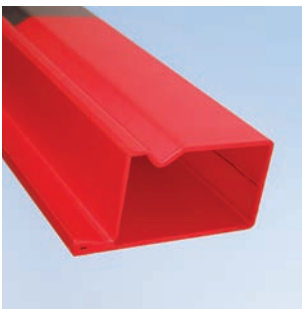
Meva Setting the industry standard



The Frame Profile: highest standard possible

The closed hollow panel frame profiles were developed from German technology. They are robust and sturdy and concrete cannot seep into the profile, thus resulting in quick and easy cleaning. Strategically placed weep holes are incorporated to assist with the elimination of any moisture. The acceptable panel tolerances are achieved by using high quality profiles, along with robotics during the welding process.

Closed profile - robust, sturdy, easy to clean *SAS - Quick release system*



Mammut inside corner - with M-Assembly locks and form-ties



StarTec panel connection - with AS-Assembly lock and typical form-tie



Unique treatment process

Cutting edge world class technology has been employed from the automotive industry to professionally prime, coat and thoroughly proof the manufactured formwork panel frames.

A unique process for Novatec's panel formwork systems that includes:

- Autophoretic Chemical Coating (ACC)
- Cathodic submersion coating (KTL)
- Wax injection sealant
- Powder Coating.

Without any doubt it is an excellent anti-corrosion treatment and the formwork panels can be expected to resist rust and remain in service for a very long time.

Articulated Flange Nut minimises panel damage



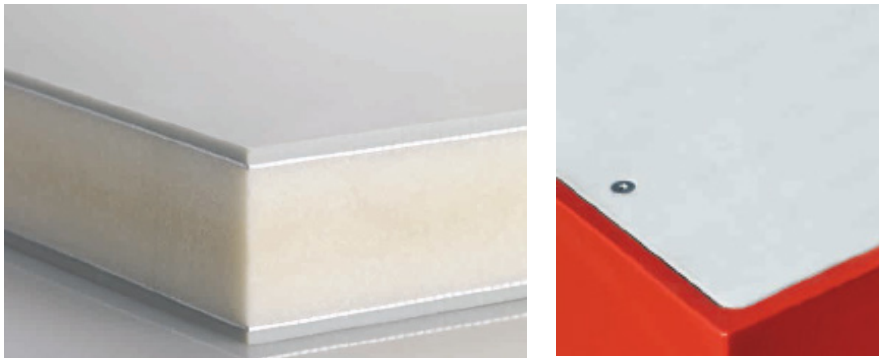
Form panels and fillers connected with the Uni-Assembly Lock



Safe, quick mount Scaffold Bracket



Alkus Innovation in formwork - no more plywood waste



Alkus - Panel Facing Technology

This new technology implemented in all Novatec products for over a decade has now surpassed the use of plywood. The all-synthetic sheeting lasts as long as the frame itself and can be reused countless times. During the development stage, an objective of 100% recyclability was among the indispensable requirements.

The patented synthetic Alkus sheet is a sandwich compound based on polypropylene and reinforced with a thin sheet of aluminium. It has a high modulus of elasticity, with similar thermal properties to plywood. It is also highly resistant to UV radiation, temperature extremes, rotting or decay, swelling or shrinkage and the acidic or alkaline solutions commonly found in concrete.

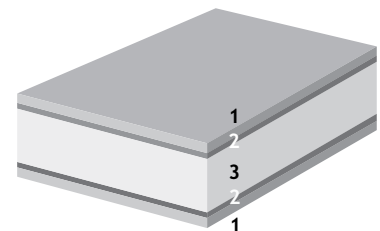
Alkus was developed to maintain the advantages of nailing, screwing, sawing and high load-bearing capacity through flexural strength. Alkus leaves no discolouration on the concrete finish and can be repaired on site.

Building and formwork contractors endorse the advanced attributes of Alkus and have enjoyed its cost savings attributes, leading to greater on-site efficiencies.

Having to re-sheet plywood faced formwork products can now be considered an avoidable expense, with Alkus being the far superior cost-effective alternative.

Advantages

- Provides a consistently better finish
- Fast and easy to clean with high pressure water or scrubbers
- Weldable and can be shaped and curved for special applications
- Similar weight and nailing characteristics to plywood
- Does not chip when nailing
- Infinitely repairable
- Non toxic and 100% recyclable
- Environmentally friendly

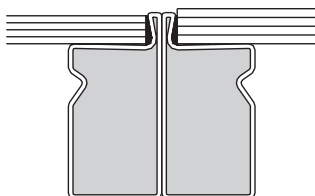


The patented sandwich construction consists of polypropylene reinforced with a thin aluminium foil.

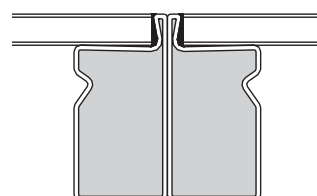


Alkus repair kit - portable welding kit that allows you to join and fix Alkus panels on-site saving valuable downtime.

Old Technology - Plywood facing.
Swelling & shrinking, uneven surfaces.



New Technology - Alkus facing.
No swelling, no shrinking, no warping, no discolouration.



Novaflex Simple, Safe, Light, Fast

Novaflex is a conventional and flexible slab forming system which uses props or shoring towers, H20 timber beams and plywood or Alkus sheet facing. The position of the props and H20 beams is variable according to the concrete structures demands. The system has key benefits in that it easily adapts to differing and varying layouts, especially in the case of irregular geometries, specific concrete loads and varying slab thicknesses.



Novaprop

A comprehensive range of props with lengths to suit all applications. All props are high quality and meet Australian design standards. Refer to page 10.

Novabeam

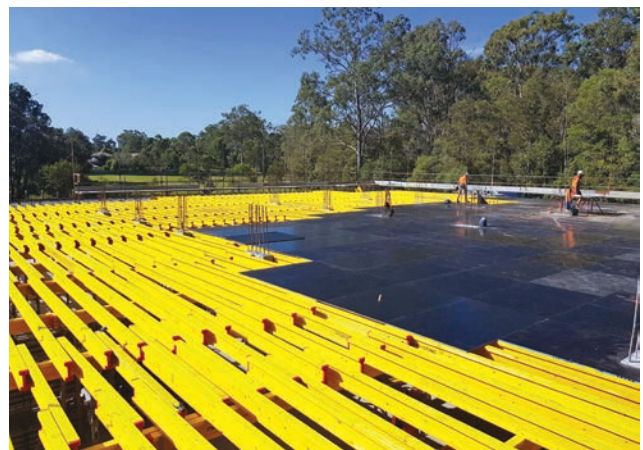
Robust multi-purpose timber beams can be utilised as main and cross girders and are able to be cut to length and supported as necessary. Novabeams offer a high load capacity and weigh only 4.50kg per metre. The ends are protected by a substantial plastic cap. Custom branding available.

MEP Shoring

A modular system used to support the Novaflex slab system for heights up to 21 metres. It can be used with access equipment integrated such as plants, ladder access and access hatches enabling safe working conditions of great heights. Refer to page 28.

Form Facing

Flexible and free choice of type and size according to class of concrete finish required. From plaspline and hardwood to Alkus sheets.



Novaflex Conventional Formwork

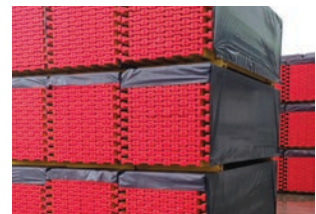


Prop Information*

Prop Bearing Loads	20kN	30kN	30kN	30kN
Prop Sizes	3.00m	3.50m	4.00m	5.50m
Prop Weight	From 15.90kg (3.00m ECO Prop) to 35.00kg (5.50m Prop)			

*Further details on Page 10 - Novaprops

Novabeam The Unique H20 Beam



Standard Lengths (m)	1.95	2.45	2.65	2.90	3.30	3.60	3.90	4.50	4.90	5.90	6.00
Wood Species	Spruce										
Weight	4.50kg/m										
Wood Moisture	12% +/- 2% at delivery										
Glue	Melamine resin based adhesive - approved for use with load bearing timber components										
Chord	Spruce wood; Finger-jointed, solid wood cross-sections, dimensions 80 x 40 mm; Finger jointed chords; Web-milling on opposing side of core (left-sided chord surface); Planned and chamfered to approximately 0.40 mm										
Web	3-ply solid wood panel, laminated, vertical growth-ring orientation										
Surface Protection	Water resistant coloured stain - full immersion										
End Protection	Shock resistant protection cap available in your chosen colour										
Support	3-ply solid wood web allowing Novabeam to be cut and supported at any length										
Packaging	Standard: 50 pieces per package. Container: 100 pieces per package. Ready for immediate use.										

MevaDec Rapid, Proven, Safe



Forming of slabs has become more efficient with the introduction of the MevaDec modular slab formwork system.

MevaDec modular formwork offers three forming methods, using the one system, for any suspended slab project. These include FTE, HN and the E method.

The drop head system enables early striking to be achieved, typically within 3-4 days (subject to engineer's approval). MevaDec components can then be cleaned and reused which reduces the amount of slab formwork materials required on site.

MevaDec is extremely versatile and will:

- Handle concrete thicknesses in excess of 1000mm
- Give an option to achieve an off-form finish as required

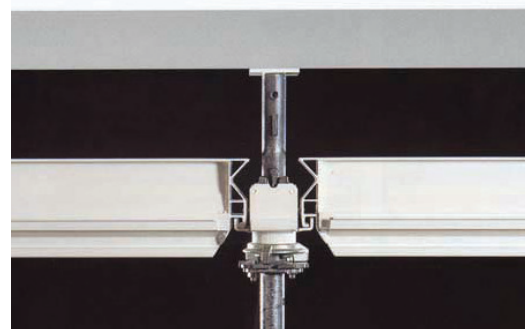
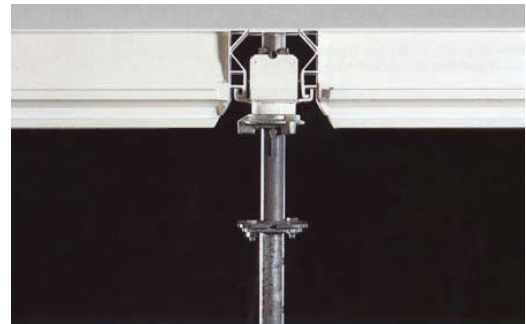
- Greatly minimise all infill areas
- Reduce inventory and parts handling by up to 40%
- Eliminate the need to purchase large quantities of timber and plywood
- Reduce freight costs as more formwork is able to be loaded per truck than conventional systems
- Assist you to address fall from height concerns - the assembly and dismantle is typically done from below
- Provide larger open and unobstructed work areas with excellent access for other trades
- Ensure high levels of productivity, resulting in significant labour savings.

The new generation of MevaDec offers improved features for ease of handling and cleaning. A lighter panel with integrated grip profiles, simple and smart.

MevaDec Sizes				Lengths (mm)		
Panel 1600mm width		1600	800	600	400	
Panel 800mm width			800	600	400	
Primary Beam	2700	2100	1600	800		
Secondary Beam			1600	800		

FTE Method Drop Head, Beam and Panel Method

The load bearing system is composed of primary beams and props with drop heads. This provides support to the aluminium panels which are faced with Alkus (patented synthetic composite). The drop head permits early striking of the primary beams and panels which are then reused for subsequent pours. The props remain behind undisturbed with the added advantage of typically having a series of single props to each 3.74m² area (dependent on slab thickness and or design). This can provide an open and unobstructed work area with excellent access for other trades.



HN Method Primary and Secondary Beam Method

The load bearing system is also composed of primary beams and props with drop heads. This provides support to the secondary beams. The primary and secondary beams are situated at the same level with plywood used as an overlay. The secondary beams have a composite nailing strip inset to which the plywood is nailed. The use of props with drop heads permits early striking of the primary beams and secondary beams which are then reused for subsequent pours.

The props remain behind undisturbed with the added advantage of typically having a series of single props to each 3.74m² area (dependent on slab thickness and or design). These provide an open and unobstructed work area with excellent access for other trades. This forming method can be applied to all floor layouts, even if the floor is not right-angled, as the modular system adapts in both directions. This system can be utilised to achieve an off-form finish.



E Method Panel Method

Panels are supported directly at their joints by props with prop heads. The prop head has an in-built anti-lift mechanism that locks on to the panel profile during assembly. It is easily disengaged during the stripping process. When props are used at each corner of the MevaDec panel, a concrete thickness of up to 500mm can be achieved.



Novaprop High Quality, Universal, Unique

The Novaprop is Novatec's new standard in temporary support structures. With high load capacity and high strength steel tube, they are your go-to prop for projects large and small.

With safety being a priority, all props are fitted with an anti-pullout system preventing the escape of the extendable inner tube, and at full closure, the prop allows a 100mm gap to prevent accidental hand crushing.

Manufactured and assembled with the highest quality control, each prop is made from black steel and then hot-dip galvanised, rather than being made from galvanised pipe. This ensures all welded parts are coated, reducing the chance of rusting and damage from the elements.

Work smarter and faster with the easy hammer release system. With one strike of a hammer, the collar will release. The collar is made from high strength forged steel rather than cast iron, reducing the chance of damage when using this method. The bevelled prop pin also improves efficiency enabling faster hole insertion.



Custom branding solutions available

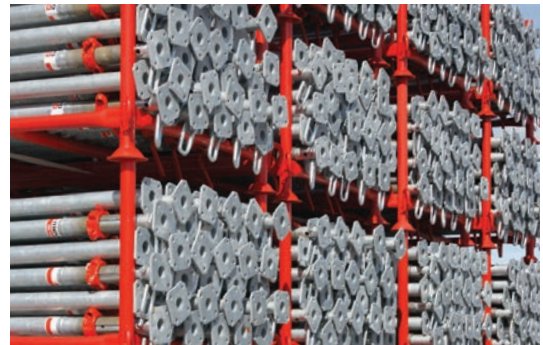
Novatec aim to provide unique and tailored solutions for our customers, from efficiently engineered systems to clever designed products. The Novaprop has the ability to be customised with your branding, from the choice of coloured collar to the embossing of your company name into the prop handle. This unique option offers your company greater security over your equipment, greater visibility and easy identification of your props both on and off site. Learn how you can customise your Novaflex system on page 6 and 7.

Key Information	D30 ECO	D35 ECO	D35	D40	D55	E30	E35	E40
Bearing load - max. height (kN)	25.30	24.10	28.70	25.10	24.00	35.60	33.60	36.50
Bearing load - min. height (kN)	39.00	39.00	39.00	39.00	39.00	41.00	41.00	41.00
Adjustment range (m)	1.82-3.00	2.10-3.50	1.98-3.50	2.25-4.00	3.03-5.50	1.73-3.00	1.98-3.50	2.25-4.00
Weight (kg)	15.90	17.60	19.70	22.10	35.00	17.50	23.80	26.00

MD prop

The MD series galvanised props have been designed and manufactured under stringent controls which comply to Australian Standards. The maximum load capacity is 30kN at all extensions, when used with a drop head and the MevaDec slab formwork system.

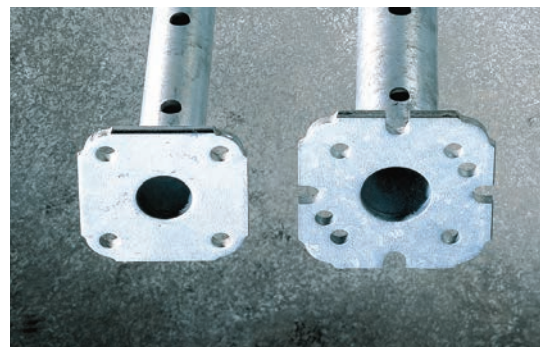
Description / Application	Size(mm)	Kg
MD prop 300/20	1750-3000	14.7
MD prop 400/20	2250-4000	24.7



ME prop

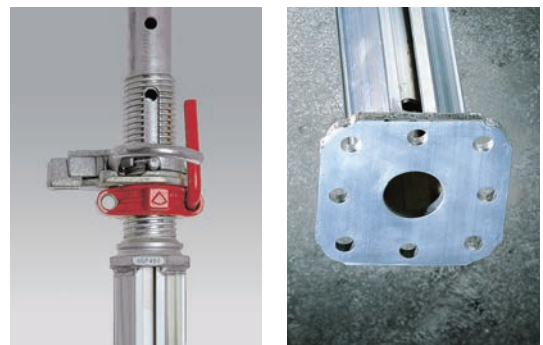
The ME series galvanised props have been designed and manufactured under stringent controls which comply to Australian Standards. The maximum load capacity is 40kN at all extensions, when used with a drop head and the MevaDec slab formwork system.

Description / Application	Size(mm)	Kg
ME prop 250/30	1500-2500	15.8
ME prop 350/30	2000-3500	24.6



MEP prop

MEP props can be used individually or as part of a shoring system. Refer to the information on the page 28.



L (m)	1.50	1.60	1.70	1.75	1.85	1.90	2.00	2.10	2.20	2.25	2.30	2.40	2.50	2.60	2.70	2.80	2.90	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90	4.00	4.10	4.20	4.30	4.40	4.50												
ME 250/30 (kN)	40																																												
ME 350/30 (kN)							40																																						
MEP 300 (kN)					40																																								
MEP 450 (kN)																		40					35 (with frame 40) Inner tube downwards																						
MD 300/20 (kN)				30																																									
MD 400/20 (kN)										30																																			

AluStar Lightweight, Sturdy, Flexible

AluStar is a light-weight, modular aluminium formwork system

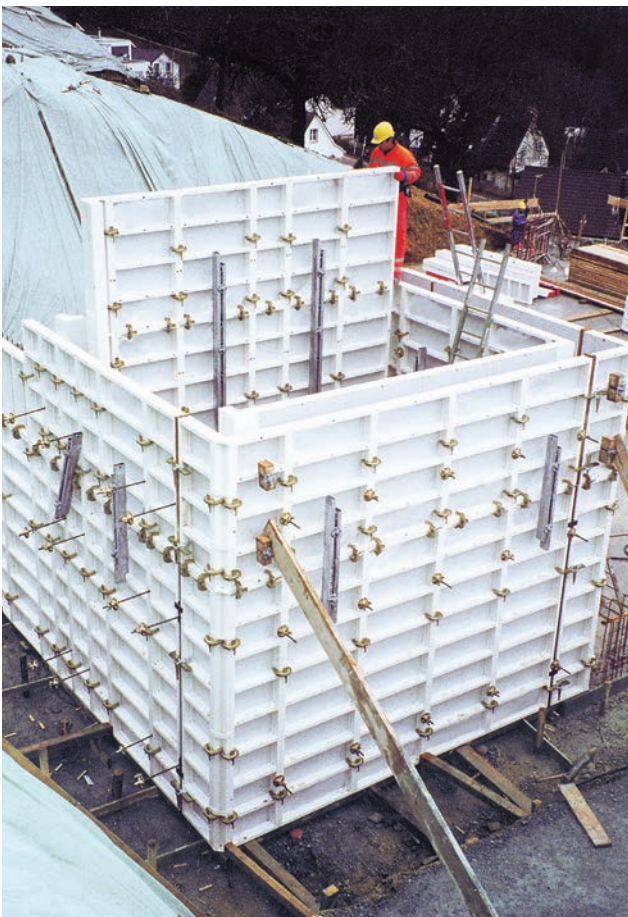
Contractors of any size appreciate AluStar as a formwork system for all jobs. There is no need for a crane to assemble or dismantle this panel system.

AluStar panels are designed to resist high concrete pressure. The advantages of its use include fast assembly times with few accessories, easy stock-keeping and no wasted time searching for unnecessary components. Bracing props and scaffold brackets are easily installed as and when required. All AluStar panels are manufactured with an Alkus (synthetic plastic) form-facing. AluStar panels are totally compatible with the StarTec panels.

AluStar advantages include:

- Lightweight and sturdy aluminium panels
- A resistance to high concrete pressures
- Suitability for use in both small and larger projects
- Fast and efficient panel connection using the lightweight assembly lock
- Simple connection method for all accessories using the multifunction profiles
- Adaptable and universal accessories
- Alkus (synthetic plastic) form-facing
- Total compatibility with the StarTec system
- Closed and powder-coated profiles.

Concrete Load Capacity	60 kN/m ²	
Assembly Lock	2 kg	
Panel Heights (mm)	2700 / 1350	
Panel Widths (mm)	900 / 750 / 550 / 500 / 450 / 400 / 300 / 250 / 200	
Largest Panel	2700 x 900mm	Weight 65 kg
Tie Holes Per Panel Height	2 for 2700mm, 1 for 1350mm	



StarTec Strong, Versatile, Efficient



StarTec is a high capacity universal formwork system:

StarTec is a particularly sturdy, high capacity universal panel formwork system that complies with Australian Standards. The frames are made of steel and may be used with larger panel sizes and the system is generally regarded as crane-dependent. StarTec will do what the AluStar system can do, and more.

The smaller panels can be assembled either manually or by crane. StarTec is well regarded as a versatile panel formwork system which suits most construction requirements. It is extremely useful in forming a wide range of small and large walls.

The panels can be assembled to obtain continuous vertical joints in the concrete, while at the same time keeping the projecting formwork to a minimum.

The advantages of its use include fast assembly times with few accessories, easy stock-keeping and no wasted time searching for unnecessary components. Bracing props and scaffold brackets are easily installed as and when required.

All StarTec panels are manufactured with an Alkus form-facing. StarTec panels are totally compatible with the AluStar panels (taking panel sizes into consideration).

StarTec advantages include:

- An increased resistance to high concrete pressure
- Suitable for use in both small and larger demanding projects
- Fast and efficient panel connection using the lightweight assembly lock
- Simple connection method for all accessories using the multifunction profiles
- Has a large range of optimal panel sizes
- Adaptable and universal accessories
- Autophoretic Chemical Coating and Cathodic submersion coating increases panel lifespan
- Alkus form-facing
- Total compatibility with the AluStar system



Concrete Load Capacity	70 kN/m ²
Assembly Lock	2 kg
Panel Heights (mm)	3300 / 2700 / 1350 / 900
Panel Widths (mm)	2400 / 1350 / 900 / 750 / 550 / 500 / 450 / 400 / 300 / 250 / 200
Largest Panel	2700mm x 2400mm
Weight	401 kg
Tie Holes Per Panel Height	3 for 3300mm, 2 for 2700mm, 1 for 1350mm

Mammut 350 Bigger, Faster, Stronger



Since the very successful entry of the Mammut panel system into the market in 1982, the new Mammut 350 has set a higher standard with a concrete load capacity of 100kN/m². This means that concrete can be poured up to a height of 4000mm, without any restrictions to the rate of pour. The system has a standard panel height of 3500mm along with a number of new features.

Mammut panels are ideal for:

- Mining, infrastructure, power plants and waterworks
- Fast, high pours - having excellent resistance to very high concrete pressures.

A panel of 3500mm x 2500mm equates to a forming area of 8.75m².

This provides a great saving potential with large shutters able to be assembled very quickly.

The Mammut 350 can be used in horizontal positions for underground car parks (height of 2500mm), horizontally or vertically stacked for a lobby (height of 5000mm or 7000mm), or for typical floor heights of 3500mm.

Mammut 350 panels and accessories are also fully compatible with the original Mammut system.

Extra features include:

- Bump notches at the outer corners allowing easy assembly and alignment
- Seven multi-function profiles with integral Z-Bar threaded nuts, creating easier attachment and removal of accessories
- Height increments of 250mm
- All Mammut 350 panels are faced with Alkus (patented synthetic composite).



Panel Heights (mm)	3500 / 3000 / 2500 / 1250
Panel Widths (mm)	2500 / 1250 / 1000 / 750 / 550 / 500 / 300 / 250
Largest Panel (mm)	3500 x 2500 with a weight of 581.50 kg
Tie Holes Per Panel Height	3 for 3000mm and 3500mm, 2 for 2500mm, 1 for 1250mm

AluFix Hand-set, High Performance

AluFix is the optimum light-weight, high-performance, hand-set wall and slab system - perfect when crane time is not available and working space is limited.

The all-plastic, 100% wood-free polypropylene facing will last as long as the sturdy aluminium frame and does away with plywood waste and refacing costs. AluFix panels deliver a smooth, clean, consistent and even concrete finish from the first pour to the last.

When labour costs are high and cost savings are required, AluFix creates an attractive cost-performance ratio, making it the perfect choice for the quality-conscious contractor.

Suitable for large and small residential and commercial projects.

Key features include:

- Permissible fresh concrete pressure of 55 kN/m²
- Three tying methods in one system
- Tie rod fixture - attaches to multi-function profile, no loose parts or accessories, saves assembly time
- Closed hollow aluminium profile - Robust, ergonomic grip profile, high-grade powder-coated finish, impact and scratch-resistant surface
- Multi-function profile with welded-in DW nut for simple attachment of all parts with the flange screw
- Intelligent design - Continuous aligned connection of panels using assembly lock with only a few hammer blows
- High-quality Alkus all-plastic facing.



Panel Heights (mm)	3000 / 1500
Panel Widths (mm)	750 / 600 / 500 / 450 / 400 / 300 / 250
Largest Panel (mm)	3000 x 750 with a weight of 49.70 kg
Tie Holes Per Panel Height	3 for 3000mm, 2 for 1500mm

CaroFalt Fast, Adjustable, Movable



CaroFalt is a safe modern, adjustable and movable column formwork system. It has been designed with optional access platforms, including integrated ladders and safety cages. CaroFalt consists of four identical panels with articulated links which are assembled like a windmill.

CaroFalt features:

- Standard panel sizes of 2700mm and 3600mm
- Extension panels of 1200mm and 600mm
- Easy and fast adjustment with a spanner
- Totally mobile with optional wheel assemblies
- Removable triangular strips provide bevelled edges
- Alkus faced panels - ensures that permanent high-quality concrete surfaces are achievable.



AluStar/ StarTec Strong, Universal, Versatile



AluStar and StarTec are strong, versatile and efficient panel formwork systems which can be easily adapted for use as column formwork. AluStar is manufactured from aluminium and is regarded as a crane-independent system. StarTec is made from steel and may be used with larger panel sizes, therefore being heavier and generally a crane-dependent system.

AluStar and StarTec are universal and totally compatible.

AluStar and StarTec advantages include:

- The safe, simple and fast use of panels with external corners and assembly locks
- A large range of universal panel sizes available with few components
- Resistance to high concrete pressure
- Choice of manual handling with AluStar
- Alkus faced panels - ensures that permanent high-quality concrete surfaces are achievable.



GT150 Superior Protection in High-rise construction

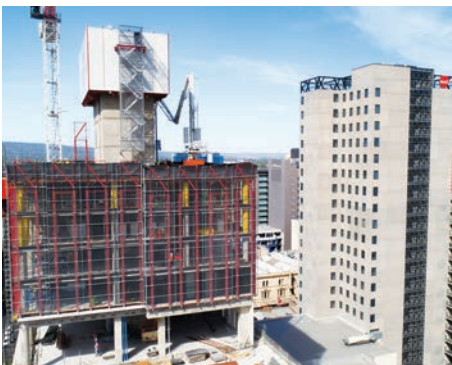


Climbing by Hydraulic Lift, Winch or Crane

GT150 provides all-round worker safety during the forming of suspended floor slabs and subsequent works in high-rise construction. The screens are guided by a simple needle system and vertically lifted from one level to the next by hydraulic rams, winching system or by crane. Screens can be provided with or without working platforms and stair access. Novatec custom design every GT150 system to suit your project, ensuring the highest safety whilst working on the live construction floors.

Fast assembly, setup and function

The GT150 system is transported pre-assembled ready to install or can be fully assembled on site. The screens are attached to the building by their guiding profiles and remain captive during the entire building and climbing phases. The initial setup can be installed with or without needles. Depending on floor heights, the screens can be climbed to the new level prior to concrete placement on the live construction floor.



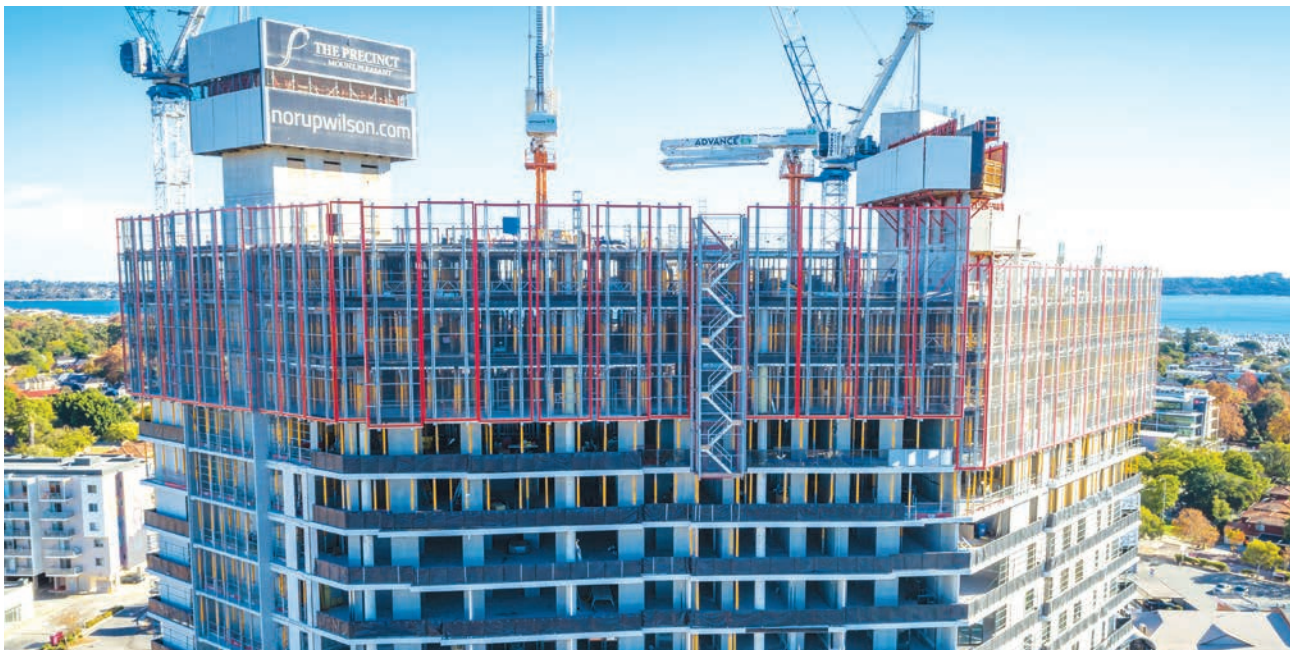
Description	Size (mm)	Floor Coverage*
Standard Screens	15,000	4-5
Platform Screens	15,000	4-5
Stair Screens	15,000	4-5
Screen & Stair Extensions	various	5+

*Dependant on finished floor levels.

System benefits include:

- Hydraulic, electric or crane lifting option, depending on site and building requirements
- Enables faster construction program cycles due to the high number of floors covered
- Cantilever screen up to 9 meters from the highest fixing point or restraint
- Engineered and designed to withstand cyclonic weather conditions
- Safer working conditions - mesh panel enclosure
- Working platforms can be added at any height enabling access for post tensioning, painting and glazing
- Stair access (including stretcher stair) as required
- Bespoke *screen needle hurdles* accommodate fixing points above pre-installed balustrades
- Adaptable to various building layouts
- Compliant with Australian safety standards.

Superlite Innovative, Light, Safe



Climbing by Hydraulic Lift or Crane

The Superlite Safety Screen is as it states, super light! Suitable for lightweight structures or high-rise construction with reduced slab edge loads. Superlite provides all-round worker safety during suspended floor slab construction and subsequent works. The screens are guided by our innovative state of the art needle system and are vertically lifted from one level to the next by hydraulic rams or by crane. Novatec's design and sales team work with you throughout the entire project, from custom design right through to install and decommissioning, to ensure timely operation and the highest safety on your site.

Fast assembly, setup and function

The system is transported pre-assembled ready to install or can be fully assembled on site. The screens are attached to the building by their guiding profiles and remain captive during the entire building and climbing phases. The initial setup can be installed with or without needles. The screens can be climbed, depending on floor heights, to the new level prior to concrete placement on the live construction floor.

Description	Size (mm)	Floor Coverage*
Standard Screens	12,000	up to 4
Screen Extensions	various	on request

*Dependant on finished floor levels.

Custom Features

Branding to the screens is available on request. Novatec are able to customise the colour of the perimeter edge to your chosen colour and display your logo across the mesh panel.

System benefits include:

- Lightweight frame assembly enabling significantly reduced slab edge loads
- Hydraulic or crane lifting option, depending on site and building requirements
- Faster construction program cycles
- Cantilever screen up to 6 metre from the highest fixing point or restraint
- State-of-the-art, simplified needle system allowing greater versatility
- Safer working conditions - mesh panel enclosure
- Operational in high wind velocities
- Adaptable to various building layouts
- Optional stair access
- Compliant with Australian safety standards.

Working Platforms Safe, Quick to install

Safety in every situation - Just hook into place

Regardless of the specific application and site conditions, Novatec offers a smart working platform solution combining maximum safety with fast assembly. The key considerations with the use of working scaffolds are rapid deployment, space-saving storage and efficient transportation.

BKB

Foldable working platform

The BKB foldable pouring platform can be easily mounted on formwork panels to provide a safe working scaffold. Simply fold out, hook into place and start work. The 1250mm platform offers ample working space at elevated heights, whilst the 1250mm side railing can be easily used to fill gaps, provide rear protection or close off ends. Various platform lengths of 1400mm, 2350mm and 3000mm allow flexibility of the system in line with project requirements. Self-locking suspensions are available for AluStar, StarTec and Mammut 350 systems. BKB is a safe, quick-to-assemble working platform for formwork.



The low stacking height helps to economise on space during storage and transportation.



SAFE PROP Innovative, Efficient, Safe



Constructing suspended slab floors creates a number of safety risks which need to be managed. SAFE PROP is a unique attachment for back props, designed to eliminate several of those risks, with simple and cost effective installation.

SAFE PROP is an innovative product that does not require pre-drilling and screwing into slabs. This makes back propping far more efficient and more importantly, safer than traditional methods.

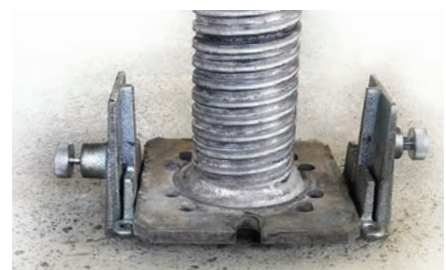
Its patented design has been engineered and manufactured to a premium quality to meet Australian standards and safety regulations.

SAFE PROP has a 'one size fits all' design fitting any type or size of prop.

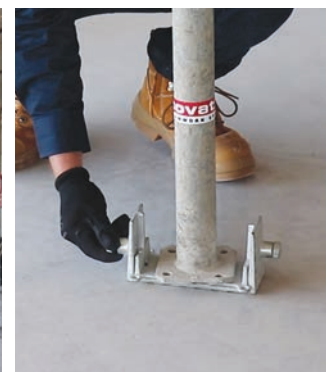
The SAFE PROP advantages

- **Prevents serious injuries.** The patented spring loaded attachment prevents back props from becoming loose or falling over during the curing and post stressing period, increasing safety.
- **Increases efficiency.** Removing the need to drill support screws onto prop heads means installation is quicker and easier, saving time and costs.
- **Maintains structural integrity.** No drilling of concrete required, reducing the risk of damaging services and/or post tensioning cables.
- **Prevents harmful exposure.** Reduced exposure to crystalline silica dust by eliminating overhead concrete drilling.

Minimise risk, save time and money with SAFE PROP and increase the performance on your next project.



Quick and easy to install



MGC Climbing Higher, Climbing Safer

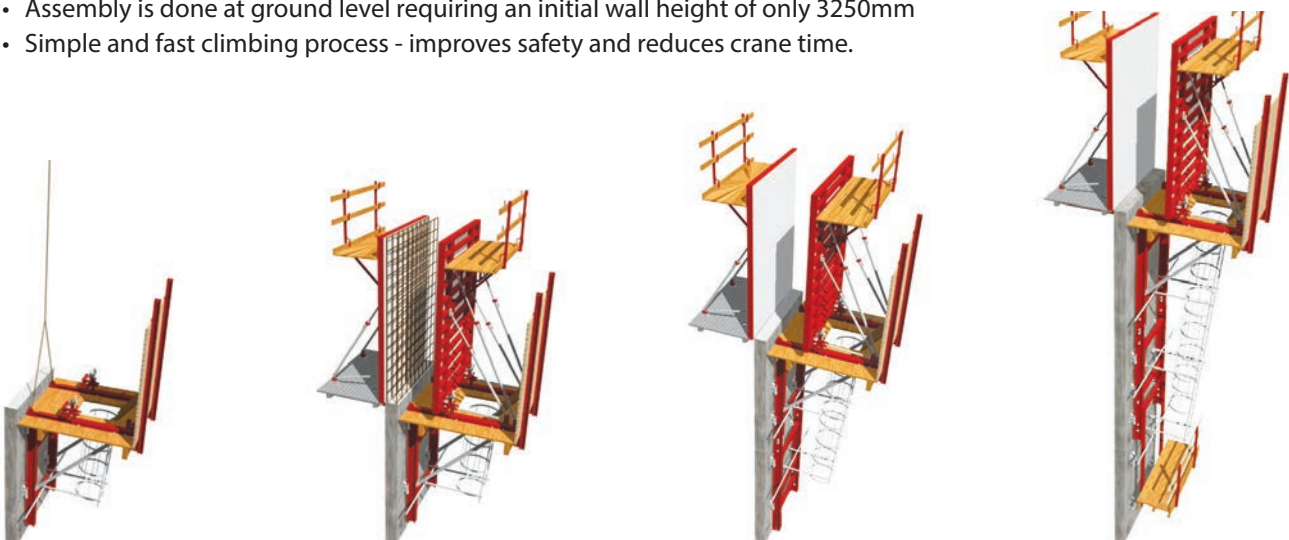


Novatec's Guided Climbing System, MGC, comprises vertical formwork and safety platforms as a single unit. These units are integrated with climbing rails. They remain securely and safely fixed to the building structure at all times with climbing shoes. These shoes are fixed to the structure with cast-in concrete anchors.

The MGC system is designed to meet the highest standards in efficiency and safety for high-rise construction.

Benefits and features include:

- Proven and cost-effective technology for buildings enabling core shafts and shear walls to be poured ahead of floor slabs
- A modular system for climbing, enabling screen adaption with the simplest possible design and logistics
- Choice of formwork system with simple adaptation
- Sliding carriages enable roll back of formwork for easy cleaning and the placement of reinforcement
- System is anchored to the building throughout the climbing process reducing the impact of wind velocities
- The working platforms are easily attachable to the climbing rails at any point
- Free positioning of guide rails up to a maximum width of 4500mm
- Optional trailing platforms complete with integrated ladders and safety cages
- Assembly is done at ground level requiring an initial wall height of only 3250mm
- Simple and fast climbing process - improves safety and reduces crane time.



MGC-H Self-Climbing Technology

Novatec's Guided Climbing System now with the added benefit of hydraulic climbing. The MGC-H is the same reliable system with all the benefits and features of the MGC, but with advanced components, further improving efficiency and saving time on the job.

Benefits and features include:

- Formwork and platform can be lifted as a single unit
- Lifting possible despite high winds
- Able to accommodate shutters up to 4.25 metres in combination with slide carriage
- Compatible with Novatec Safety Screens
- Operable without crane assistance
- Fewer platforms required using less brackets due to higher load capacity of new climbing cones

- Compact design allowing more componentry to be loaded and delivered, saving on transport costs.
- Optimised design resulting in faster erection times
- Hydraulic climbing, no need for crane once installed
- Cost savings over full blown climbing system (MAC)
- Lightweight therefore can be lifted with lower strength concrete mpA.

Recommended for:

- Higher loads, wider platforms
- Projects where high winds are expected
- High amount of re-uses.



MAC Automatic Climbing Fastest 3-Way accuracy

MAC Automatic Climbing is recognised as the fastest technology for climbing high-rise buildings.

The system combines safety and speed with precise adjustment. The formwork can be adjusted independently in three directions with relative ease.

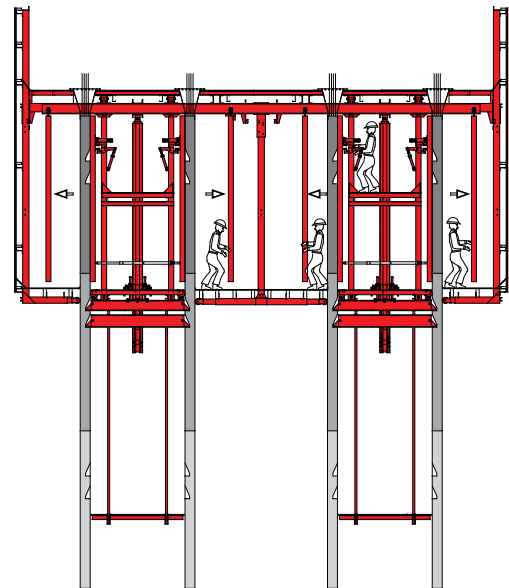
This assists to ensure the greatest possible accuracy.

The choice of formwork used is governed by the class of concrete finish required.

Hydraulic rams are used to climb the system. These rams are unique. They have a 20 tonne capacity with a single stroke height of 4000mm.

This travel height enables deep, single floor to floor pours.

The top deck is free of jacking masts and other mechanical obstacles; this improves the working conditions and assists with safety.



Climbing Systems



Non-return ratchet offers premium hydraulic safety.

The long-stroke, heavy-duty hydraulic system is equipped with safety features such as a non-return ratchet that locks on each cylinder. MAC platforms are completely enclosed offering protection from the weather and the safety of a closed working environment.

The jacking beams are supported by concrete that has already set and can be lifted the day after pouring, saving valuable time.

A ram lift of 4000mm takes only about 60 minutes.



Support Frame STB Tough, Safe, Innovative

STB is the safe support system for single-sided formwork. It is typically used in combination with either StarTec or Mammut 350 panels. The system can be used for extraordinarily high walls, proven in previous projects with walls poured higher than 12 metres.

The compact system has two larger frames - the STB 300 for pour heights of up to 3300mm and the STB 450 for higher walls. The STB 450 is used in combination with STB 150 extension pieces to achieve even greater heights. Having a base frame of only 2450mm wide makes it the number one solution for confined spaces. The assembly process is simplistic and fast.

Ideal for:

- Concreting against rock or soil
- Sheet piling and retaining walls
- Shafts and large tunnels.

When the STB Support Frames are used the following must be considered:

- The existing wall in which the system is coupled with must be able to resist the total concrete pressure.
- Foundations and floor slabs must be able to resist the transmitted loads (possibly requiring a static calculation).



Novatec Hoists Efficient, Rapid, Safe



Flexible materials movement solution

Novatec's Formwork Hoist is used throughout Australia as a versatile solution for the efficient movement of formwork and materials in high-rise construction. The Hoist is a dedicated self-climbing transport system that operates on demand. It eliminates costly down time waiting on crane availability - operational in high winds, even when the crane cannot. Material is simply loaded and unloaded by pallet jacks onto the large platform. The platform is large enough to carry formwork tables and can be extended to suit your requirements.

Material can be unloaded from the Hoist to the newly poured deck as soon as concrete curing allows.

The Hoist can be installed either on the outer face of the building or internally. Straight or inclined facades can also be achieved. The highly flexible system allows both hoist car travel distance (up to 15 meters) and landing gate height to be adjusted according to floor height requirements.

The Hoist can be transported pre-assembled ready to install or in separate components when access is limited.

The Novatec Formwork Hoist meets all Australian and ISO design codes and carries the CE mark. Novatec provides hoist specific operator training to your licensed Rigger and Materials Hoist Operators, supervision on install and decommission, and ongoing technical support.

Safety features include:

- Mechanical locking pawls
- Automatic over speed sensing safety brakes
- Top and bottom end of travel and over travel switches
- Remote control and full width electrically interlocked landing gates
- Split rails for safer and faster installation
- Extendable car screen height available
- Live deck edge protection available on request.

Description	Size* (mm)	Hoisting Payload (kg)	Floor Coverage	Rail Centre (mm)
Standard Hoist	4200 d x 3550 w	2000	4 +	3400
Extended Carriage	5200 d x 3550 w	1100	4 +	3400

*Internal dimension

MEP prop with SAS



The MEP series galvanised props have been designed and manufactured under stringent controls which comply to Australian standards. The MEP prop is a combination of steel inner tube and aluminium outer tube with T-groove to attach reinforcing frames.

The SAS quick-lowering system allows the stress in the prop to be released with one strike of a hammer. After stripping, the SAS automatically resets.

The MEP props and MEP aluminium reinforcing frames are simple to assemble and are used as shoring. The reinforcing frames can be quickly connected to the MEP props with hammerhead screws, using only a hammer. The MEP towers can be assembled in a horizontal position and crane-lifted into place, or assembled vertically as individual components.

MEP tube couplers attach anywhere on the outer tube of the MEP prop and scaffold tube can be used to provide extra bracing if required. Self-securing scaffold platforms can be used to provide working decks. The MEP lift trucks may be used to horizontally transport the MEP towers if a crane is unavailable.

Description / Application	Size(mm)	Kg
MEP prop 300 with SAS	1850-3000	19.6
MEP prop 450 with SAS	3000-4000	27.5

R/SRL

Push-pull props R

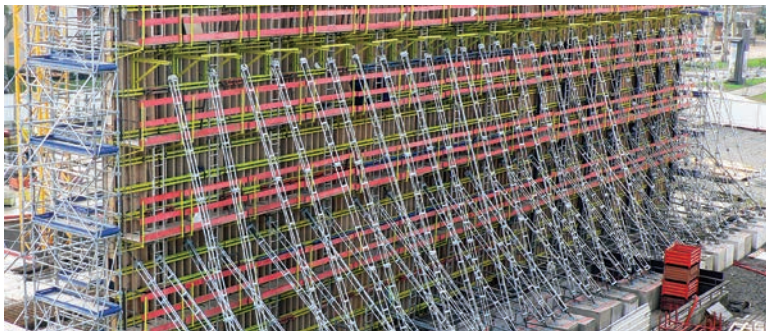
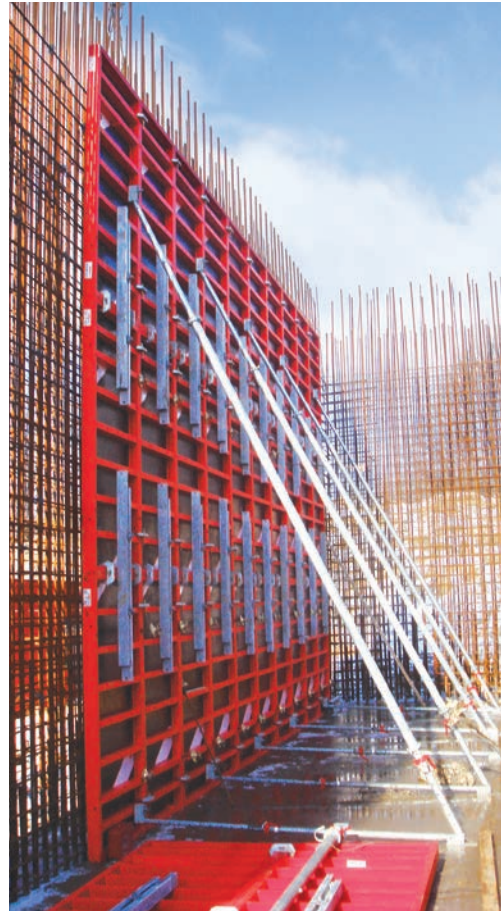
The galvanised R series props are used to align and brace wall formwork. Stringent design and manufacturing controls ensure consistency with tensile and compression strength. Accessories include foot plates, formwork prop-connectors and head bolts.

Description	Size(mm)	Kg
Push-pull prop R 160	1350-2000	11.0
Push-pull prop R 250	1900-3200	18.5
Push-pull prop R 460	3400-5200	35.8
Push-pull prop R 630	5100-7600	68.0

Braces SRL

The galvanised SRL series brace consists of a right-hand and a left-hand spindle, as well as a revolving centre part. It is also used to align and brace wall formwork. Stringent design and manufacturing controls ensure consistency with tensile and compression strength. Accessories include foot plates, formwork prop-connectors and head bolts.

Description	Size(mm)	Kg
Brace SRL 120	900 -1500	8.3
Brace SRL 170	1200-2200	10.5
Brace SRL 245	2200 -2900	16.8



Triplex Heavy Duty

Triplex is a strong modular system used to align and brace high vertical formwork.

Triplex R offers brace lengths of 1000mm, 2000mm and 3000 mm plus top units with spindle, connector coupling, flange screws and foot plates. The right hand and left hand threads of the top units allow for a precise adjustment.

The Triplex SB is used as an additional system for high single-sided walls (higher than 6000mm) when the Support Frame STB 450 and the 1500mm extensions pieces are used.



Serving some of Australia's largest projects



*The Towers & The Ritz
Carlton - Perth*



*UniSA Health Innovation
Building - Adelaide*



*Brisbane Skytower
- Brisbane*



Mantra - Perth



*Adelaide Convention Centre
- Adelaide*



*Ichthys LNG
- Northern Territory*



*FMG/BHP Overpass
- Western Australia*



Capital Square - Perth



*Port River Expressway
- South Australia*

Bridges

- Meadowlands Road Bridge
Gateway Motorway upgrade
- Brisbane
- Old Cleveland Road Bridge
Gateway Motorway upgrade
- Brisbane
- Port River Expressway
- South Australia
- Ross Lane Overpass
- New South Wales
- Northlink Bridge Abutments
- Western Australia

Infrastructure

- Cooroy STP - Queensland
- Binningup Desalination Plant
Stages 1 & 2 - Western Australia
- One Central septic tanks - Sydney
- Coombabah STP - Queensland
- Caboolture STP - Queensland
- Christies Beach STP - South Australia
- Tongala STP - Victoria
- Rochester Weir - Victoria
- Murrumba Downs WWTP
- Queensland
- City North sub-station - Sydney
- Pimpama STP - Queensland
- Braemar Power Station
- Queensland
- Maroochydore WWTP
- Queensland
- Para Sub Station - South Australia
- Bunbury Port Lithium Storage
Facility - Western Australia

Tunnels

- North-south bypass tunnel
- Brisbane
- Brisbane Airport Link
- Toombul and Kedron CC21
- Brisbane

Commercial developments

- UNSW Student Accommodation
- Sydney
- Lyell McEwin Hospital - South
Australia

- Adelaide Convention Centre
- Adelaide
- McKay Hospital - Queensland
- SAPOL - Adelaide
- New Museum Project - Perth
- Inner City College - Perth
- Queen Elizabeth Hospital Stage 2
- Adelaide
- Wheller on the Park - Brisbane
- Cairns Base Hospital - Queensland
- Robina Hospital - Gold Coast
- Adelaide University - Adelaide
- Green Square - Brisbane
- Megacentre - Brisbane
- Health Innovation Building
- Adelaide
- Osborne South Development
Project - South Australia
- Air7000 - South Australia
- Perth Childrens Hospital - Perth
- Kings Square 3 & 4 - Perth
- Joondalup Hospital
- Western Australia
- Campbell Barracks - Western
Australia
- Hallett Cove Shopping Centre
- South Australia

Car parks

- Elder Street - Perth
- Sydney International Airport
- New South Wales
- Garden City Shopping Centre
- Brisbane

Mining

- Solomon - Western Australia
- Degruessa Copper - Western
Australia
- Gorgon - Western Australia
- Sino Iron - Western Australia
- Jilalan - Queensland
- Wodgina Primary Crusher
- Western Australia
- Orange Grove Quarry Reclaim
Tunnel - Western Australia
- Cloudbreak - Western Australia

Skyscrapers

- Brisbane Skytower - Brisbane
- Infinity Tower - Brisbane
- Soleil Tower - Brisbane
- Soul Tower - Gold Coast
- Circle on Cavill - Gold Coast
- Q1 Apartments - Gold Coast
- Festival Towers - Brisbane

Residential & High-rise construction

- Mantra on 900 Hay St - Perth
- QIMR - Brisbane
- The Ritz Carlton - Perth
- Newstead Towers, Brisbane
- Chester & Ella - Brisbane
- The Towers at Elizabeth Quay
- Perth
- Bohem Apartments - Adelaide
- Uno Apartments - Adelaide
- Capital Square Tower 1 - Perth
- Evolution on Gardiner - Darwin
- The Melbourne Residencies
- South Brisbane
- Southport Central - Gold Coast
- Rhodes Development - Sydney
- Chester & Ella Apartments
- Brisbane
- Pivotal Point - Gold Coast
- Zetland Apartments - Sydney
- Blue Sky Student Accommodation
- South Brisbane
- Lexicon Apartments - Brisbane
- Broadbeach on the Park
- Gold Coast
- Southpoint - South Brisbane
- Homebush Apartment Tower
- Sydney
- Crown Plaza - Adelaide
- Ivy & Eve Tower, Brisbane
- Queens Riverside Apartments
- Perth
- The Precinct on Canning - Perth
- Burswood Towers - Perth
- West Franklin - Adelaide

novatec

FORMWORK SYSTEMS

BUILD SMARTER, BUILD FASTER

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