

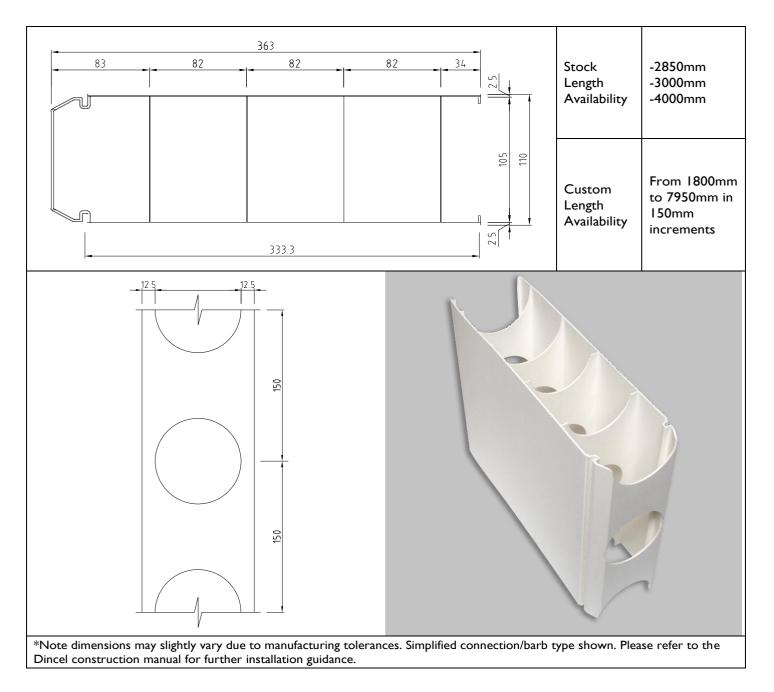
Technical Data Sheets





110mm Main Profile (110P-1)

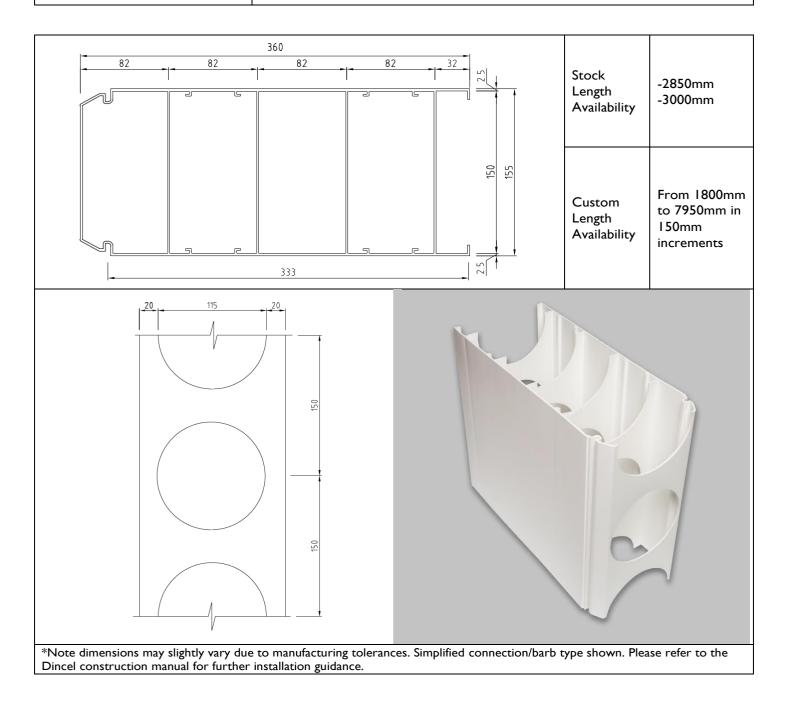
Description & Purpose	The 110P-1 is the main profile within the Dincel 110mm range, which can be installed in the vertical or horizontal direction. These are also referred to as 'panels' and are the main component of the Dincel formwork. Each panel adds 333.3mm to the wall length.
Installation	Click or slide a 110P-1 into another main profile or a compatible accessory by using the snap-lock connection.
Order Form Reference No.	I I OP-I





155mm Main Profile (155P-1)

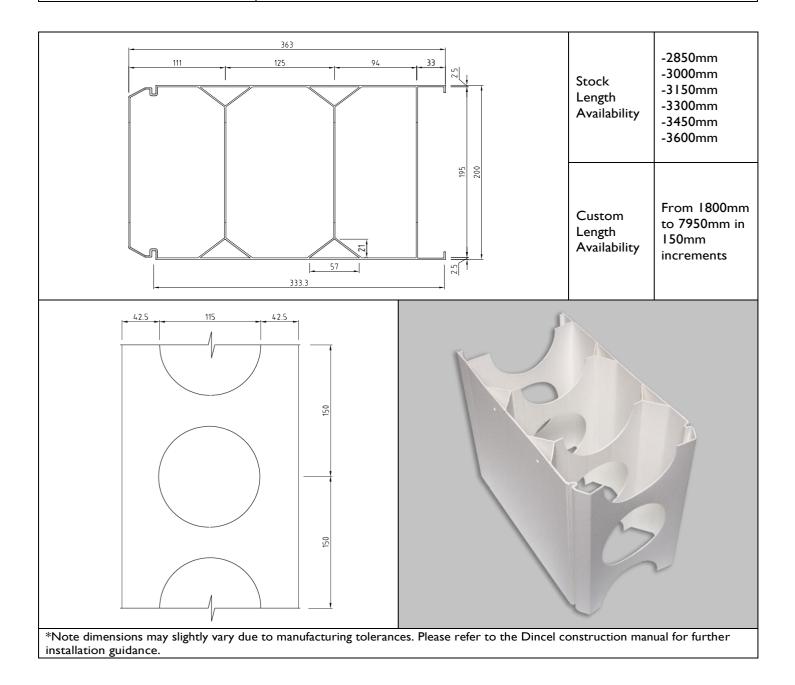
Description & Purpose	The 155P-1 is the main profile within the Dincel 155mm range, which can be installed in the vertical or horizontal direction. These are also referred to as 'panels' and are the main component of the Dincel formwork. Each panel adds 333.3mm to the wall length.
Installation	Click or slide a 155P-1 into another main profile or a compatible accessory by using the snap-lock connection.
Order Form Reference No.	155P-1





200mm Main Profile (200P-I)

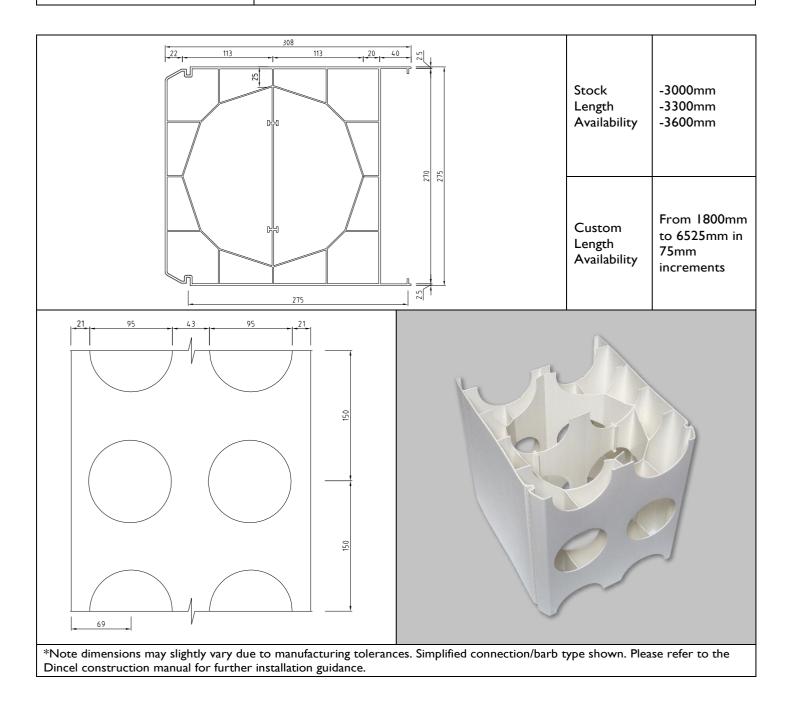
Description & Purpose	The 200P-I is the main profile within the Dincel 200mm range, which can be installed in the vertical or horizontal direction. These are also referred to as 'panels' and are the main component of the Dincel formwork. Each panel adds 333.3mm to the wall length.
Installation	Click or slide a 200P-1 into another main profile or a compatible accessory by using the snap-lock connection. Ensure that the wall is installed so that pin holes located at the service channels are towards the wall bottom.
Order Form Reference No.	200P-1

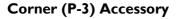




275mm Main Profile (275P-I)

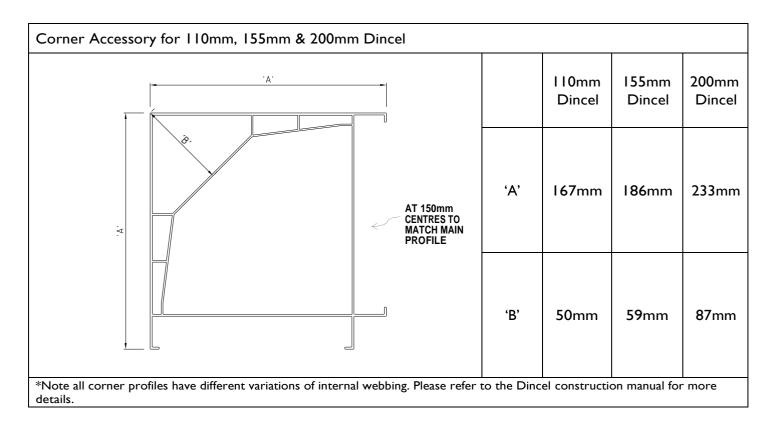
Description & Purpose	The 275P-1 main profile within the Dincel 275mm range, which can be installed in the vertical or horizontal direction. These are also referred to as 'panels' and are the main component of the Dincel formwork. Each panel adds 275mm to the wall length.
Installation	Click or slide a 275P-1 into another main profile or a compatible accessory by using the snap-lock connection.
Order Form Reference No.	275P-1





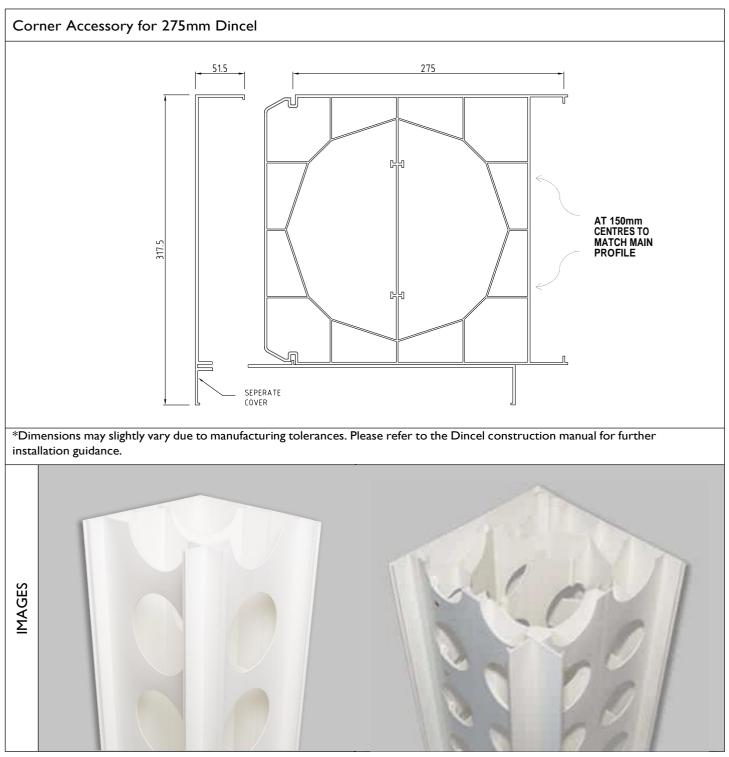
Description & Purpose	Used to achieve a 90° wall corner.
Installation - for 110mm, 155mm & 200mm Dincel	Click or slide the P-3 into a compatible Dincel main profile or accessory by using the snap-lock connection.
Installation - for 275mm Dincel	Click or slide the P-3 into a compatible Dincel main profile or accessory by using the snap-lock connection. The 275P-3 corner is provided with a separate cover module for side access and allows for easy placement of steel reinforcement. The cover module is required to be screwed and braced, for further instructions please refer to the Dincel construction manual.

	I I 0mm Dincel	155mm Dincel	200mm Dincel	275mm Dincel
Availability	\checkmark	\checkmark	\checkmark	\checkmark
Order Form Reference No.	110P-3	155P-3	200P-3	275P-3
Stock Length	3000mm	3000mm	3600mm	3600mm



DINCEL TECH SHEET





110m, 155mm, 200mm

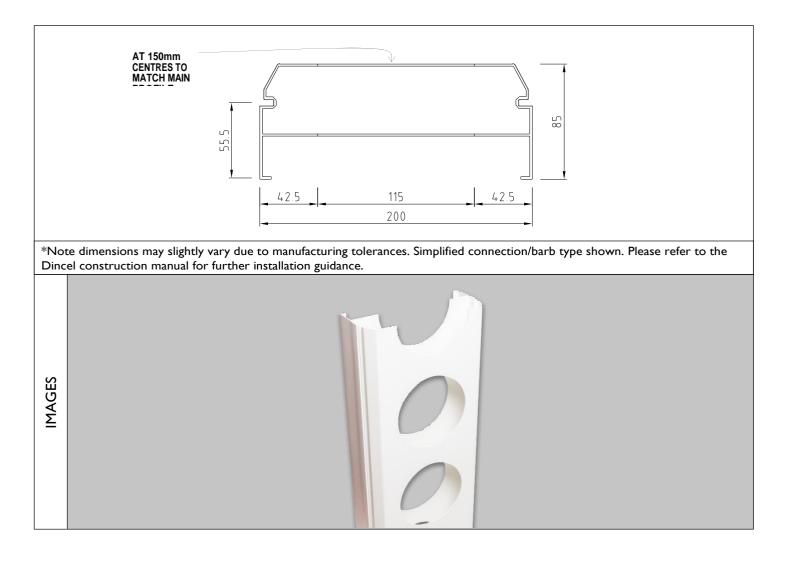
275mm

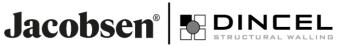


55mm Spacer (P-2) Accessory

Description & Purpose	Allows for Dincel walls to be built with 55.5mm increments. Typically used for waterproofing applications where snap-lock joints are required to be retained (to avoid profile cutting). Six spacers connected together provide an equivalent width to one main profile.
Installation	Click or slide the P-2 into a Dincel main profile or another accessory by using the snap-lock connection.

	110mm Dincel	155mm Dincel	200mm Dincel	275mm Dincel
Availability	×	×	\checkmark	×
Order Form Reference No.	-	-	200P-2	-
Stock Length	-	-	3600mm	-

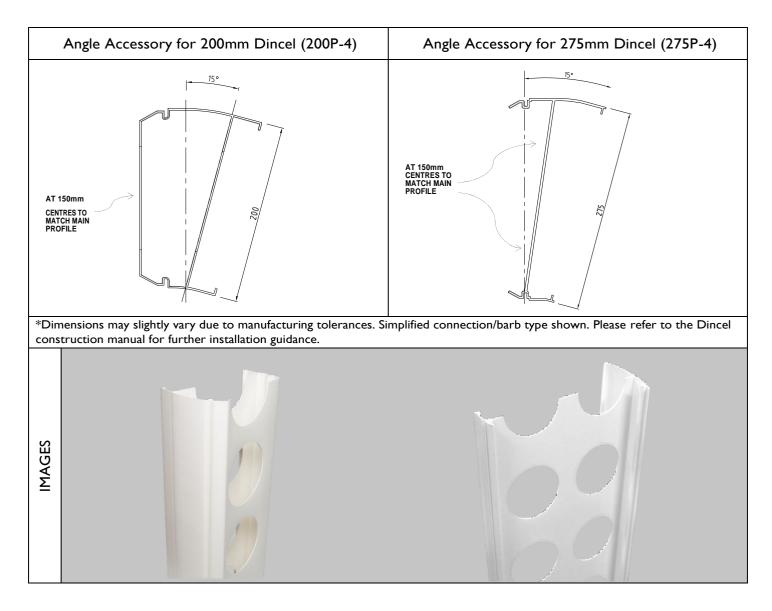




Angle (P-4) Accessory

Description & Purpose	Used to construct curved walls or curved corners with 15° increments.
Installation	Click or slide the P-4 into a compatible Dincel main profile or accessory by using the snap-lock connection.

	I I 0mm Dincel	155mm Dincel	200mm Dincel	275mm Dincel
Availability	×	×	\checkmark	\checkmark
Order Form Reference No.	-	-	200P-4	275P-4
Stock Length	-	-	3600mm	3600mm



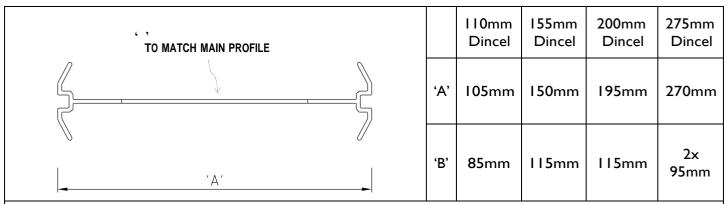


Joiner (P-J) Accessory

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Description & Purpose	An accessory used to join two Dincel profiles together through their male clips. The joiner accessory does not add any length to the wall.
Installation	Click or slide the joiner into a compatible Dincel main profile or accessory by using the snap-lock connection. The Dincel profiles being joined must have their male clip ends facing the joiner.

	110mm Dincel	155mm Dincel	200mm Dincel	275mm Dincel
Availability	\checkmark	\checkmark	\checkmark	\checkmark
Order Form Reference No.	110P- J	155P- J	200P- J	275P- J
Stock Length	3000mm	3000mm	3600mm	3600mm



*Note dimensions may slightly vary due to manufacturing tolerances. Simplified connection/barb type shown. Please refer to the Dincel construction manual for further installation guidance.

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End Cap (P-EC) Accessory

Description & Purpose	An accessory used to finish/close off the end of a wall installed vertically. The end cap extends the overall wall length by 55.5mm (for 110mm Dincel and 200mm Dincel) or by 75mm (for 155mm Dincel and 275mm Dincel)
Installation	Click or slide the end cap into a compatible Dincel main profile or accessory by using the snap-lock connection. To prevent bulging from the concrete pour, the end cap requires to be braced using methods detailed in the Dincel construction manual.

	110mm Dincel	155mm Dincel	200mm Dincel	275mm Dincel
Availability	\checkmark	\checkmark	\checkmark	\checkmark
Order Form Reference No.	I I OP-EC	I 55P-EC	200P-EC	275P-EC
Stock Length	3000mm	3000mm	3600mm	3600mm

	΄Α΄ 	'A'	I I 0mm Dincel I I 0mm	I 55mm Dincel I 55mm	200mm Dincel 200mm	275mm Dincel 275mm
		'B'	55.5mm	75mm	55.5mm	75mm
		ʻC'	23mm	29mm	23mm	2 9 mm
*Not Dinc	te dimensions may slightly vary due to manufacturing tolerances. Simplified co el construction manual for further installation guidance.	onnectio	on/barb typ	e shown. P	lease refer 1	to the
IMAGES						

Top Cap (P-TC) Accessory

Description & Purpose	 A versatile accessory with multiple purposes: Used to cap the top or the end of a Dincel wall for aesthetic or finishing purposes. For I 55P-G and 275P-G only, the accessories are supplied with a preformed indent so that it can easily be snapped into half in order to create two separate angles, which can then be used as external wall guides.
Installation	The top cap simply slides over the Dincel profile at the top or ends of the wall. It is typically secured using screw fixings or a suitable adhesive. If used as a guide, the angles are held down using concrete nails or equivalent.

	I I 0mm Dincel	155mm Dincel	200mm Dincel	275mm Dincel
Availability	\checkmark	\checkmark	\checkmark	\checkmark
Order Form Reference No.	II0P-TC	I55P-TC	200P-TC	275P-TC
Stock Length	3000mm	3000mm	3600mm	3600mm

			l 10mm Dincel	l 55mm Dincel	200mm Dincel	275mm Dincel
,B,	~ ~ ~	'A'	116mm	157mm	206mm	283mm
	``A'	'B'	50mm	75mm	50mm	75mm
	te dimensions may slightly vary due to manufacturing tolerances. Simplified el construction manual for further installation guidance.	d conr	nection/barb	type shown	Please refe	⁻ to the
IMAGES						

Guide (P-G) Accessory

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Description & Purpose	An accessory used to as a guide/track to hold the bottom of the walls during concrete pouring. The use of a guide accessory is not recommended for walls which are required to be waterproof or for shear walls. For 155P-G only, the accessory is supplied with a preformed indent so that it can easily be snapped into half in order to create two separate angles, which can then be used as external wall guides.
Installation	The guide accessory is secured to the slab or footing with concrete nails or equivalent. Once this is complete the Dincel main profiles are able to slide down into the track.

	I I 0mm Dincel	155mm Dincel	200mm Dincel	275mm Dincel
Availability	\checkmark	\checkmark	\checkmark	×
Order Form Reference No.	I I OP-G	155P-G	200P-G	-
Stock Length	3000mm	3000mm	3600mm	-

	'TO MATCH MAIN PROFILE		l I 0mm Dincel	l 55mm Dincel	200mm Dincel
, U	\downarrow	'A'	II6mm	157mm	206mm
		'B'	50mm	75mm	50mm
-	· A'	'C'	85mm	II5mm	II5mm

*Note dimensions may slightly vary due to manufacturing tolerances. Simplified connection/barb type shown. Please refer to the Dincel construction manual for further installation guidance.

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Wall Splicer (P-WS) Accessory

Description & Purpose	The wall splicer accessory is primarily used to connect two Dincel main profiles together without the use of a snap-lock connection. This is typically required when main profiles are cut and the snap-lock connectors cannot be used. The accessory can also be used as a sill or head for windows.
Installation	The flanges of the wall splicer can simply slide into two Dincel profiles, either at the top, bottom or ends of the wall. It is typically secured using screw fixings or a suitable adhesive. If a waterproof wall is required, the joint is required to waterproofed using a membrane or sealant.

	I I 0mm Dincel	155mm Dincel	200mm Dincel	275mm Dincel
Availability	\checkmark	\checkmark	\checkmark	\checkmark
Order Form Reference No.	I I OP-WS	I 55P-WS	200P-WS	275P-WS
Stock Length	3000mm	3000mm	3600mm	3600mm

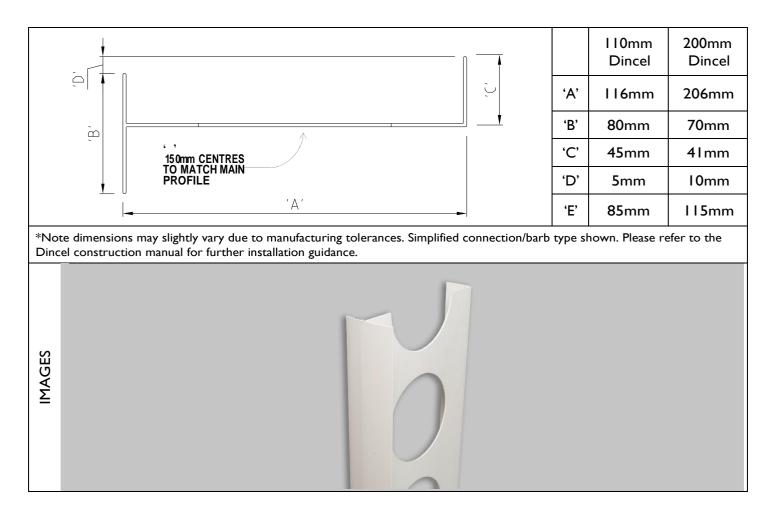
			l I 0mm Dincel	l 55mm Dincel	200mm Dincel	275mm Dincel	
<u> </u>		'A'	83mm	150mm	83mm	150mm	
	· · , /	'B'	II6mm	I 57mm	206mm	283mm	
	150mm CENTRES TO MATCH MAIN PROFILE	'C'	5mm	0mm	5mm	0mm	
	'B'	'D'	I I 5mm	II5mm	II5mm	2x 95mm	
*Note d installati	*Note dimensions may slightly vary due to manufacturing tolerances. Please refer to the Dincel construction manual for further installation guidance.						
IMAGES							



Edge Guide (P-EG) Accessory

Description & Purpose	The edge guide accessory is used at the slab edge to start the wall over, of for window jambs, sills and heads.	
Installation	The bottom flange is placed to cover the slab edge/wall underneath and fixed using concrete nails or equivalent. The two top flanges can then work in the same manner as a guide track and allows for Dincel profiles to slide into it. If a waterproof wall is required, the joint is required to waterproofed using a membrane or sealant.	

	I I 0mm Dincel	155mm Dincel	200mm Dincel	275mm Dincel
Availability	\checkmark	×	\checkmark	×
Order Form Reference No.	I I OP-EG	-	200P-EG	-
Stock Length	3000mm	-	3600mm	-

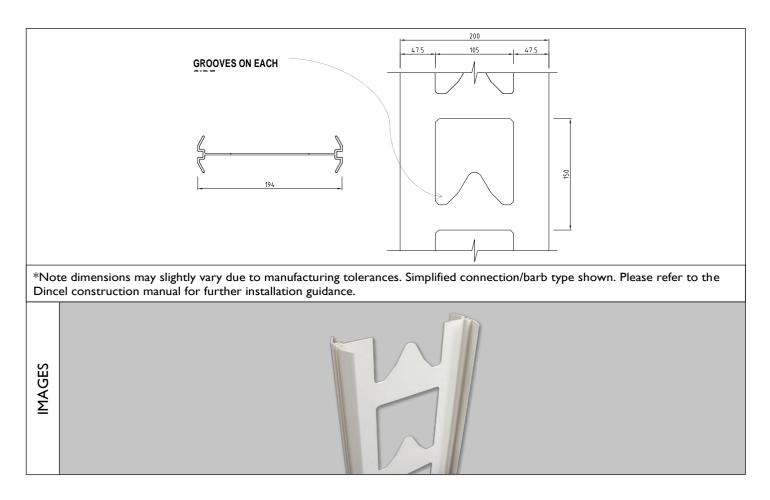


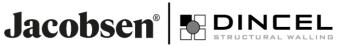


Horizontal Reo-Clip (P-HRC) Accessory

Description & Purpose	The Horizontal Reo-Clip accessory is used to hold two layers of horizontal steel reinforcement. It is best suited for long lengths of walls. For short lengths of walls which require two layers of horizontal steel reinforcement, hair-pin bars can simply be used.
Installation	The P-HRC can either be clipped into a Dincel snap-lock connector or alternatively slid down a 200P-1. Horizontal bars can be fed into the wall following this which sit snug into the lower portion of the P-HRC grooves. The accessory can be slid up or down in order to adjust the concrete cover to the steel reinforcement.

	I I 0mm Dincel	155mm Dincel	200mm Dincel	275mm Dincel
Availability	-	-	\checkmark	-
Order Form Reference No.	-	-	200P-HRC	-
Stock Length	-	-	3600mm	-

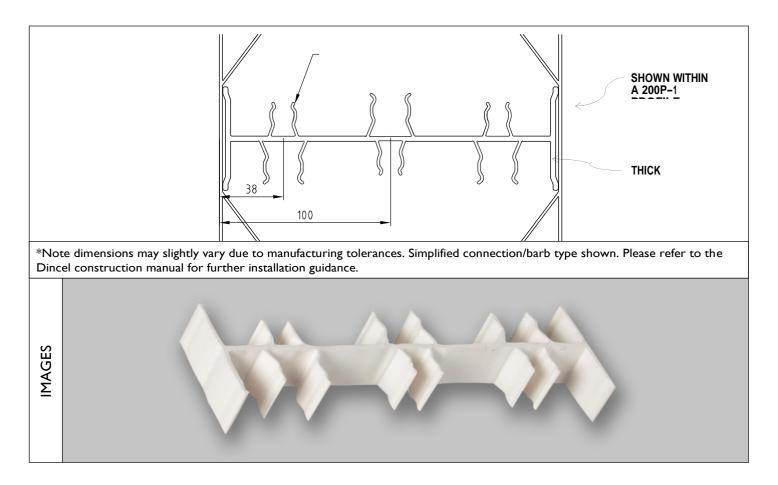


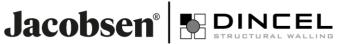


Vertical Reo-Clip (P-VRC) Accessory

Description & Purpose	The Vertical Reo-Clip accessory is used to hold vertical reinforcement in place during a concrete pour. It can accommodate bar sizes of up to Ø20mm in either a central location or at each face.	
Installation	The P-VRC is clipped onto the vertical steel reinforcement before inserting into the wall, typically clipped at the bottom, middle and top of the bars. Following this, the reinforcement is inserted into the Dincel formwork with the clips already attached. The clips must be inserted in between the Dincel service channels, as shown below. If a custom concrete cover is required, the bars can simply be tied onto the clip at the desired location using tie- wire.	

	I I 0mm Dincel	155mm Dincel	200mm Dincel	275mm Dincel
Availability	-	-	\checkmark	-
Order Form Reference No.	-	-	200P-VRC	-
Method of Sale	-	-	Pack of 100	-

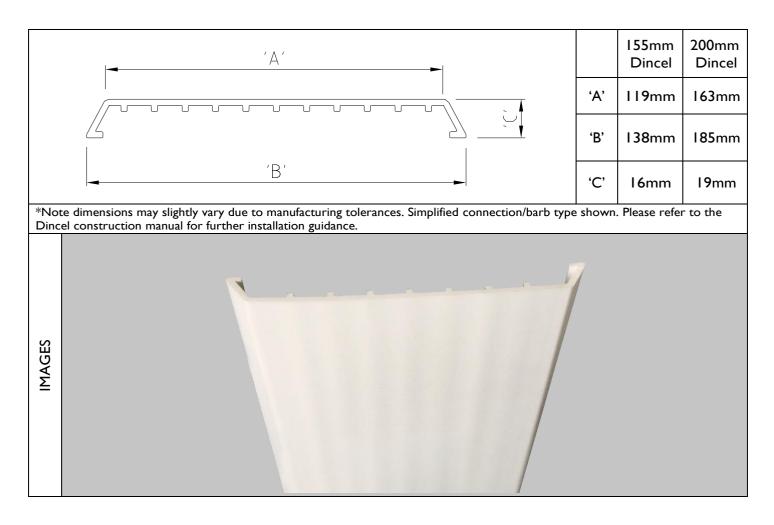




Stop End (P-SE) Accessory

Description & Purpose	An accessory used to close the male end of a P-I Dincel main profile or end cap (EC). This will prevent wet concrete from escaping the profile's horizontal circular openings during concrete pouring and also remove the requirement for edge bracing.
Installation	Slide the accessory vertically into the grooves of the P-1 main profile or end cap (EC), no screws are required. Off cuts can be placed on top of each other to minimise wastage.

	I I 0mm Dincel	155mm Dincel	200mm Dincel	275mm Dincel
Availability	×	\checkmark	\checkmark	×
Order Form Reference No.	-	I55P-SE	200P-SE	-
Stock Length	-	3000mm	3600mm	-



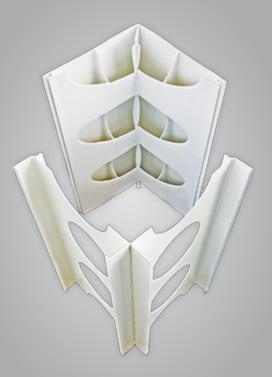




NEW

Introducing our latest industry innovation, **200P-5 CORNER PROFILE**

Our new two-piece corner for 200 Dincel consists of a removable cover which can either snap-click or slide into place and is able to offer the following benefits:



Safer installation

 Click or slide connection reduces mandatory scaffolding requirements (in comparison to slide only corners where it is typically required).

Easier access

- Horizontal reinforcement bars can be installed into the wall corner with ease.
- As the corner cover can be clicked into place, steel reinforcement bars can be inserted at the top of the wall without having to slide off the whole cover.

Manufactured in Australia

Talk to our team about your next project

Faster installation

 Solid two-piece corner allows for assembly without screwing or back propping, even with full vibrator use at the corner.

Satisfy engineer requirements

- Enables structural engineers to easily inspect steel reinforcement.
- Allows for easy installation of hair pin bars (two layers of reinforcement) at shear wall corners.
- Full concrete infill achieved at the corners (no voids), preventing water accumulation and increasing structural robustness.





New Dincel 200mm Series.

The Dincel 200mm Series has been modified and now consists of two horizontal web holes rather than one. This modification allows for:

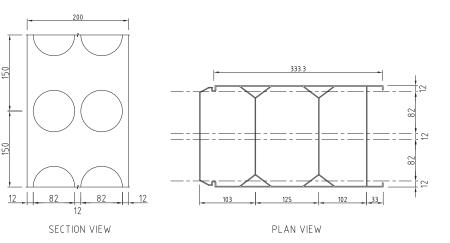


Easier placement of two layers of horizontal reinforcement (bars each face). Twin dedicated holes ensure that horizontal bars are always kept separated from each other during concrete pour / vibrator use.



The triangular service channels (developed originally for chasing services) are now cut by the dual web holes in order to be infilled with concrete, leading to solid concrete throughout the entire profile.

Profile Details.



Note: As triangular service channels are now filled with concrete, please refer to the following table for concrete quantity rates:

Per square metre of wall area:	0.195m ³ of concrete
Per cubic metre of concrete:	5.13m ² of wall area

(Excludes wastage for pump hose, hopper etc.)

Engineering / Structural Design.

- There is no change to structural capacity or design principles in comparison to the previous single hole Dincel 200 main profile.
- Structural engineers can still use the information provided in the Dincel Structural Engineering Manual and design the concrete and steel reinforcement inside the formwork to AS3600 (2018).
- The concrete-to-concrete equivalent shear plane between the web holes for the new profile is 70.4mm which is slightly larger than the 69.2mm shear plane associated with the previous design.

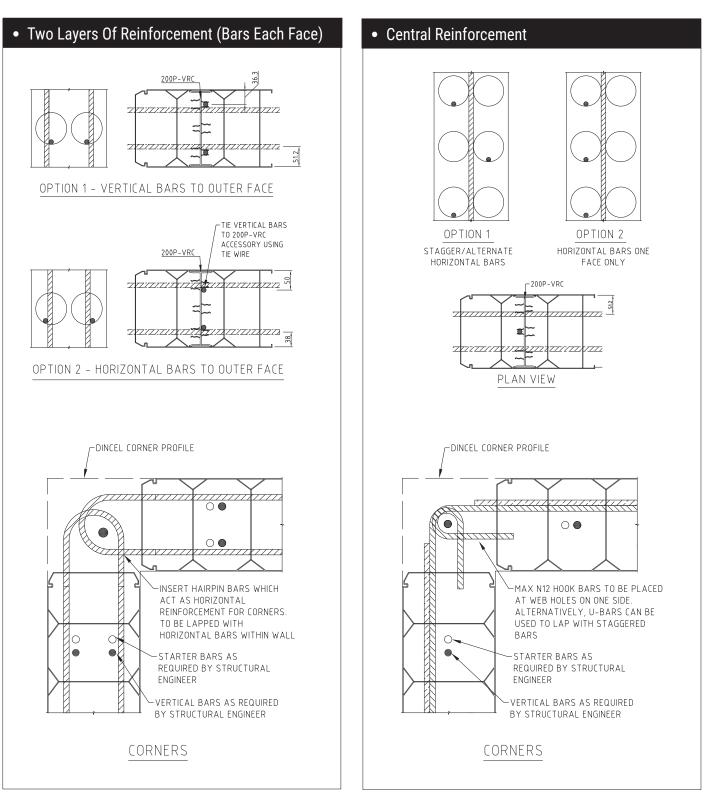






New Dincel 200mm Series.

Reinforcement Arrangements.



ADDENDUM 1









New Dincel 200mm Series.

The Dincel 200mm Series has been modified and now consists of two horizontal web holes rather than one. This modification allows for:

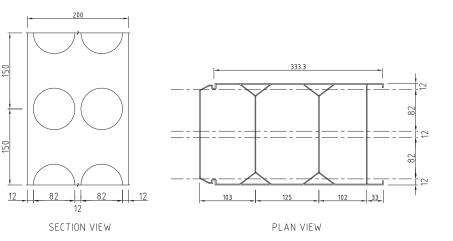


Easier placement of two layers of horizontal reinforcement (bars each face). Twin dedicated holes ensure that horizontal bars are always kept separated from each other during concrete pour / vibrator use.



The triangular service channels (developed originally for chasing services) are now cut by the dual web holes in order to be infilled with concrete, leading to solid concrete throughout the entire profile.

Profile Details.



Note: As triangular service channels are now filled with concrete, please refer to the following table for concrete quantity rates:

Per square metre of wall area:	0.195m ³ of concrete
Per cubic metre of concrete:	5.13m ² of wall area

(Excludes wastage for pump hose, hopper etc.)

Engineering / Structural Design.

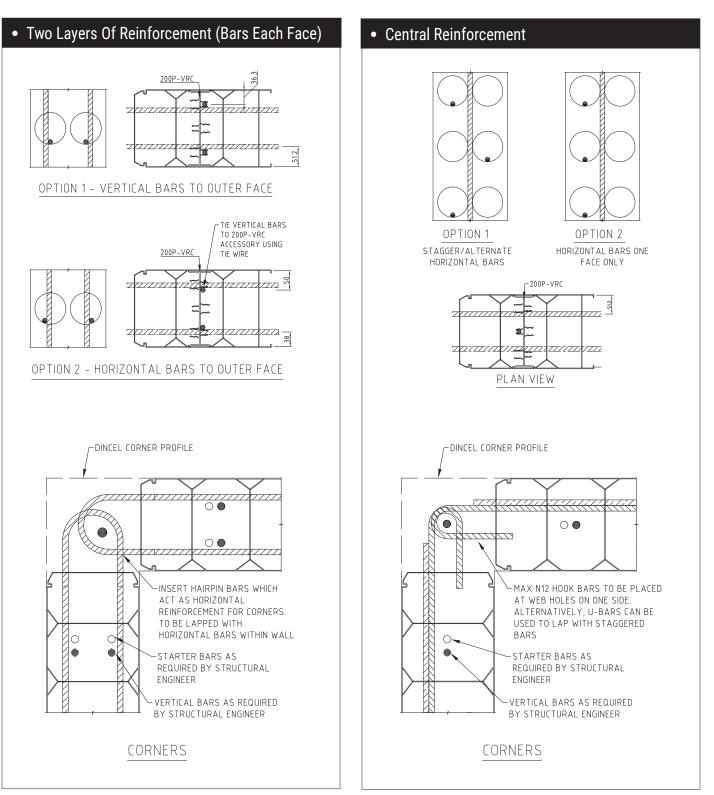
- There is no change to structural capacity or design principles in comparison to the previous single hole Dincel 200 main profile.
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- The concrete-to-concrete equivalent shear plane between the web holes for the new profile is 70.4mm which is slightly larger than the 69.2mm shear plane associated with the previous design.





New Dincel 200mm Series.

Reinforcement Arrangements.



ADDENDUM 2







Self-Compacting Concrete (SCC) is a special type of concrete that is extremely workable/flowable and does not require any vibration. As SCC is a verified method of providing compaction, its use will ensure that the wall will not have any air voids. SCC is the same as a conventional concrete mix, however with the addition of specialty admixtures to increase the flow. The concrete has such a high workability that it is measured by spread instead of slump.

The adoption of SCC is already widespread in government projects and as a result is available to order at most major concrete supply companies. With SCC, the benefits offered far outweigh the small cost increases. In some cases, SCC can be even more cost effective as no manual labour is required to vibrate the concrete or rectfication costs due to air voids.

Dincel's patented snap lock joints ensure that the highly flowable SCC remains within the formwork. SCC was successfully tested and independently verified for use within the Dincel Structural Walling system for the 155mm, 200mm and 275mm profiles.



Self-Compacting Concrete Pre-Pour Test



✓ Scan the QR Code at left to watch the full testing video.

Bracing Considerations.

As most SCC mixes generally have a long setting time, walls may need to be poured in one lift. This places greater pressure on the formwork so additional bracing will need to be provided.

- Critical areas which require attention to bracing are wall ends and wall corners.
- The pressure exerted by SCC in formwork can be compared to pouring conventional high slump concrete in one lift and providing extensive vibration.
- A base angle should be provided at the bottom of the wall on both sides and screwed to every panel. Sealant must be applied underneath angles at corner to prevent slurry leakage.
- Due to the higher concrete pressure, taller walls will result in a more 'wavy' finish. SCC can be considered for taller walls where they are provided with an additional finish (such as render or cladding) or where aesthetics are not critical. Otherwise, multiple pours / lifts can be considered to reduce pressure and therefore improve finish.

Pouring SCC.

- The pump hose can either be lowered into the wall or it can be pointed at a web.
- SCC (or any concrete mix) should always be poured starting at the wall corners.
- As SCC compacts under it's own weight, it is important to check that the top 100mm of the pour has adequately compacted (where there is limited/no weight above).
 Tapping the walls at the top 100mm of the pour with a rubber mallet may be necessary to ensure slurry has filled panel joints.

Recommended SCC Specifications.

- 680mm Spread +/- 50mm (at the point of discharge into the Dincel panels).
- Maximum 10mm Coarse Aggregate.
- Compressive Strengths (MPa) as per engineers requirements.









DINCEL 155 & 200 (SINGLE POUR / LIFT)							
WALL HEIGHT	WALL END (SEE FIGURE 1)	WALL CORNER	BRACES (FREE STANDING WALLS)				
Up to 3.0m	Stop End Accessory. Perforated straps are not required for 155 Dincel. If tolerances do not allow for minimal deflection, use straps for 200 Dincel.	Provide screws @ max 300mm centres to joint locations, for bottom 1/3rd of corner (minimum).	Braces provided to walers at – maximum 1.66m centres (every 5th panel).*				
3.0m to 3.6m	Stop End Accessory, supported by perforated metal straps @ max 750mm centres for bottom 1/3rd of wall (minimum).	Provide screws @ max 150mm centres to joint locations, for bottom 1/3rd of corner (minimum).					
Above 3.6m	Dincel 275 recommended OR Provide separate pours/lifts (refer to next section) OR Increase bracing and supports to suit. Additional clamping supports required to each side of the wall for single pours > 3.6m						

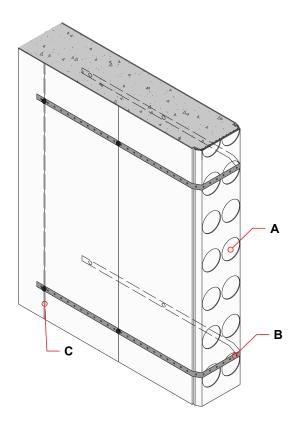


Figure 1 (1m x 1m section of wall end)

A - Dincel Stop End Accessory, slid down into slot of main profile.

B - Wrap reusable perforated metal straps around wall end, if required. Straps are to be min 1800mm long and screwed back to first and second panel joints. First strap must be positioned max 150mm from bottom of wall.

C - Preferred location for P-J (joiner) accessory. If P-J is not located underneath straps: P-J must be provided with screws at joint location for the bottom min. 1200mm height of the wall, with screws spaced at 400mm centres.

* Bracing must be designed by an engineer for the specific project. The information provided represents the minimum requirements for free standing walls and does not consider wind loading or site conditions.







DINCEL 275 (SINGLE POUR / LIFT)							
WALL HEIGHT	WALL END (SEE FIGURE 2)	WALL CORNER	BRACES (FREE STANDING WALLS)				
Up to 3.0m	Top Cap Accessory screwed @ max 200mm centres, supported by full	Provide screws @ max 300mm centres to joint locations, for bottom 1/3rd of corner (minimum).	Braces provided to walers at maximum 1.66m centres (every 6th panel).*				
3.0m to 3.6m	width timber as shown. Perforated metal straps @ max 750mm centres.	Provide screws @ max 150mm centres to joint locations, for bottom 1/3rd of corner (minimum).					
3.6m to 5.0m	Top Cap Accessory screwed @ max 150mm centres, supported by full width timber as shown. Perforated metal straps @ max 500mm centres.	Support both faces of corner with bracing for full width. Consider use of same support detail as wall ends.	Braces provided to walers at maximum 1.33m centres (approx every 5th panel).*				
Above 5.0m	Provide separate pours/lifts (refer to next section) OR Increase bracing and supports to suit. Additional clamping supports required to each side of the wall for single pours > 5.0m.						

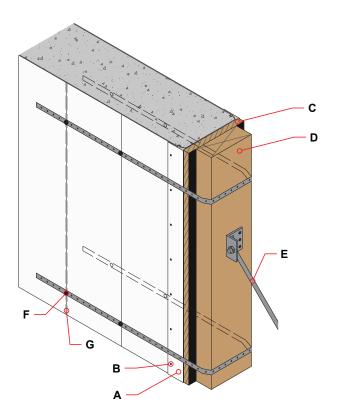


Figure 2 (1m x 1m section of wall end)

A - Dincel Top Cap Accessory.

B - Secure Top Cap to main profile by screwing at the required centres.

 ${\bf C}$ - Min 20 x 275mm wide plywood, provided along full height of wall end.

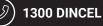
 ${\bf D}$ - Min 75 x 200mm timber support bearer, provided along full height of wall end.

E - Push-pull prop screwed to support timber, as specified by engineer. Multiple braces along height of wall are likely required at wall end.

F - Wrap reusable perforated metal straps around wall end. Straps are to be min 1600mm long and screwed back to first and second panel joints. First strap must be positioned max 150mm from bottom of wall.

G - Preferred location for P-J (joiner) accessory. If P-J is not located underneath straps: P-J must be provided with screws at joint location for the bottom min. 1200mm height of the wall, with screws spaced at 400mm centres.

* Bracing must be designed by an engineer for the specific project. The information provided represents the minimum requirement for free standing walls and does not consider wind loading or site conditions.





	TWO POURS / LIFTS (OPTIONAL) - ALL DINCEL PROFILES					
	WALL HEIGHT	1ST POUR (METRES)	MIN. WAITING TIME (HOURS)	2ND POUR (METRES)		
DINCEL 155 & 200	4.0m	2.0m	3.0*	2.0m		
	4.5m	2.5m	3.0*	2.0m		
	5.0m	2.5m	3.0*	2.5m		
	5.5m	3.0m	3.0*	2.5m		
	Above 5.5m	3.6m	Wait until following day (min 12 hours) before next pour. No single pour to be greater than 3.6m (unless Dincel 275 is used).			
DINCEL 275	5.5m	3.0m	3.0*	2.5m		
	6.0m	3.0m	3.0*	3.0m		
	6.5m	3.5m	3.0*	3.0m		
	7.0m	3.5m	3.0*	3.5m		
	7.5m	4.0m	3.0*	3.5m		
	8.0m	4.0m	3.0*	4.0m		
	Above 8.0m	5.0m	Wait until following day (min 12 hours) before next pour. No single pour to be greater than 5m.			

Dincel 155 and 200 must be poured in multiple lifts above 3.6m.

Dincel 275 must be poured in multiple lifts above 5m.

Dincel 275 profiles are available in standard lengths of up to 6.525m. For taller walls, longer profiles can be specially ordered or alternatively use multiple profiles spliced together.

* The time between each lift is based upon when the concrete achieves initial set. Consult with the selected concrete manufacturer for confirmation of initial setting times. The above assumes an initial setting time for SCC of 3 hours. A cold joint may occur at pour break locations which must be considered by the engineer.



