# SUPPORT PADS FOR PAVING AND DECKING

WALLBARN SUPPORT PADS ARE DESIGNED TO SUSPEND PAVING SLABS AND DECKING OFF THE WATERPROOFED DECK. THIS ALLOWS WATER TO DRAIN BETWEEN AND BENEATH THE SLABS PREVENTING LOCALISED FLOODING ON THE TERRACE.



The major advantage of using support pads is that no mechanical fixings are required.

The waterproofing membrane is not pierced or interrupted in any way and the paving slabs can be taken up at any time if the deck beneath needs to be inspected.

The weight of the slab holds the whole system in place. It is a much faster, cleaner and easier way to lay paving onto concrete decks than by bedding them into mortar.







**SUMMER 2013** 

#### 17MM HIGH PLASTIC SUPPORT PADS

The standard, most commonly used support pad Wallbarn offers is the 17mm high plastic support pad. The plastic ring shaped pad is a simple design, but very hard wearing and tough. It is easy to store, handle and install.

The pad is placed beneath the paving slab so that the corner of the slab rests on a segment of the support and is held into place by the right-angled positioning lugs. Four corners will sit onto one support pad and the whole system is held securely in place by the weight of the slab.

Wallbarn plastic support pads are injection moulded high density polypropylene made from recycled plastic. They are circular in shape with a hollow middle and a smooth, flat underside. The upper side has reinforcing bars around the face of the circle to help support the weight of the slab. The pad has four positioning lugs - small bars emerging from the face of the support in a cross formation. These give a 4mm gap between each paving slab, allowing water to drain effectively in between each slab to the deck beneath. This means there is no standing water on top of the slabs and the rainwater can be channelled and collected efficiently.





The lugs also ensure clear, consistent spacing between each slab, which gives uniform, straight paving line. This creates an attractive, superior finish to paved areas. There are a series of small holes around the edge of the support pad for drainage, meaning no water will collect either within the support itself or in the central hole. This is important as standing water can attract insects or lead to bad odours.

The plastic supports are made in four quadrants joined together with a small link. They can be easily snapped into segments of a half or quarter to support paving slabs up to edges or around corners. This eliminates wasting a whole support for one small section, a major advantage over other support pads on the market. It will also give a tidier finish to details.



## 14MM HIGH PLASTIC SUPPORT PADS

PLASTIC SUPPORT PADS ARE AVAILABLE IN DIFFERENT HEIGHTS TO GIVE GREATER FLEXIBILITY TO DESIGNERS AND APPLICATORS.

Wallbarn can supply a polypropylene support pad which is 14mm high. Manufactured in exactly the same way as the 17mm support and made from the same recycled material, these supports share the same properties but are slightly thinner.



This gives installers a slightly more cost effective option when laying suspended paving.

Plastic support pads are truly adaptable, and a large range of coverings can be placed onto them. They can be used to suspend Wallbarn hardwood timber tiles as well as concrete paving slabs. A natural, luxurious finish can be created much easier than by installing long plank decking and is more cost effective. As well as the standard concrete pressed slabs common on many public walkways, these pads are ideal for use with natural stone and promenade tiles. This can produce a truly high-class finish to roof decks and terraces.



Wallbarn recommends that slabs or tiles are at least 30mm thick. Users must be sure that the tile is strong enough to be suspended, and is heavy enough to remain stable once in situ. Users

should contact the slab manufacturer for clarification. Where applicators are laying thinner tiles or very large slabs, it is very easy to snap off all the positioning lugs to create a smooth ring and place the pad underneath the centre of the slab for extra support.

If the slabs are laid in a complicated pattern, a support can have some or all of the lugs removed to create a T junction to support three slabs in a staggered formation.

For additional height, applicators can stack both the 17mm and 14mm plastic supports one on top of another. The lugs will be housed within the drainage cavity of the pad above, and the corner of the slab laid on top as normal.

However, Wallbarn recommends that a maximum of two pads are stacked up. A larger number of pads stacked up can lead to instability, so Adjustable Support Pads should be chosen where greater heights are required.





d = 150mm	TECHNICAL DATA	
	MATERIAL	INJECTION MOULDED RECYCLED POLYPROPYLENE
	BEARING CAPACITY	400KG
	OUTER DIAMETER	150MM
di - Bomm	INNER DIAMETER	BOMM
17 17	HEIGHT OF SUPPORT PAD	17MM
		14MM
- <u> </u>	LUG HEIGHT	1 DMM
	LUG THICKNESS / GAP BETWEEN SLABS	4MM
	THICKNESS OF DRAINAGE CHANNELS	ЭММ
	THICKNESS OF DRAINAGE HOLES	ВММ

For both 17mm and 14mm high plastic support pads, any minor differences in the level of the paving slab can be arrested by fitting plastic levelling shims onto the upper side of the disc. They are available 1mm, 2mm and 3mm thick. Further details can be found on page 6.

#### 9MM HIGH RUBBER SUPPORT PADS

WALLBARN OFFERS SUPPORT PADS MANUFACTURED FROM RUBBER FOR APPLICATORS WHO DESIRE A SOFTER MATERIAL TO INTERFACE WITH THE DECK BENEATH.

A 9mm thick disc made from a synthetic rubber compound is available as an alternative to the plastic support pads. The rubber is a much tougher, more durable material, and the disc is a solid ring, so can tolerate much higher weight than the plastic pads.

Being made from rubber, the pad is much softer and more flexible than polypropylene. This makes the pad ideal for laying onto more delicate surfaces such as insulation, mastic asphalt and single ply.



The material is flexible and has a great deal of elasticity. The pad is also manufactured with a curved underside at the edges, which means there is less risk of the pad digging into the deck beneath.

The soft profile of the rubber pad also makes it ideal for use with very hard surfaces, and it has been laid successfully directly onto surfaces such as fibreglass and glass without any risk of causing scratches or damage. The rubber compound also helps prevent the pad from slipping on the sub-surface.

The pad is manufactured with four lugs on the upper side which keep the slabs in position. The lugs are 5mm wide, which ensures a good level of drainage between each slab and helps maintain a straight paving line along the area. Again there is no mechanical fixing of the slabs or pads, and applicators do not have to point between the slabs. This saves a great deal of time when laying flags onto a large area. As the slabs are not bedded into mortar, significant savings are made in both labour and extra weight on the roof. It is also a far less messy way to install paving.

The pads can either be cut with a sharp knife if installers wish to butt the slabs right up to the wall or upstand, or a small border of washed pebbles can be laid around the perimeter as a border.





# TECHNICAL DATA

MATERIAL BEARING CAPACITY OUTER DIAMETER INNER DIAMETER HEIGHT OF SUPPORT PAD LUG HEIGHT LUG THICKNESS / GAP BETWEEN SLABS THICKNESS OF DRAINAGE CHANNELS

the second s	_
SYNTHETIC RUBBER COMPOUND	
8,000KG	
1 20MM	-
55MM	1.10
ЭММ	
ЭММ	
5MM	
4MM PER CHANNEL (2 CHANNELS)	1

4

#### 5MM RUBBER DISCS

Where applicators have very restricted height thresholds, Wallbarn can offer a solution in the form of 5mm thick rubber discs laid in conjunction with cross spacers.







The solid circular discs are made from PVC with a smooth finish.

Separation of each slab is achieved with a loose laid cross spacer. These are available in various thicknesses and further details are given below.

#### 3-8MM WEDGE SHAPED RUBBER DISCS



Wedge shaped discs are also available. They are similar to the 5mm discs but wedge shaped instead of being flat. They slope from a thickness of 8mm at the highest down to 3mm.

On areas where there is only a very small threshold, it is possible to use two of these wedge shaped discs together to act as an alternative adjustable pad. More a shock absorber or membrane protection than an actual support, they can be slid towards or away from each other to create different thicknesses, achieving a range from 3mm (where one has been used on its own, up to

11mm, where two have been stacked on top of each other completely).

A better use for these items are as slope correctors beneath fixed height support pads. Simply placed onto the deck with a plastic or rubber ring loose laid on top without fixings, they can take out the fall in the deck to ensure that the support pad is completely vertical and straight, and the paving does not tilt in any way.

#### CROSS SPACERS

The discs described above are all flat pads without integrated separation lugs. Where they are being used for paving, it is advisable that loose laid cross spacers are placed on the centre of the disc to achieve the accurate, straight paving line. These polypropylene two-part pieces are slotted together to create a small cross shape, which can be fitted into the junction between four paving slabs to ensure they remain straight and in place. Therefore, regular paving can still be achieved even when using flat discs. The cross spacers are available 3mm, 4mm and 5mm thick. All of these sizes will ensure adequate drainage, the gaps between the paving slabs depends more on the wishes of the designer.







#### TECHNICAL DATA

RUBBER 5MM DISC	
MATERIAL	PVC OR EPDM
BEARING CAPACITY	8,000KG
DIAMETER	1 50MM
THICKNESS	5MM
and the second se	the second se
WEDGE SHAPED RUBBER DISC	and the second
MATERIAL	PVC OR EPDM
BEARING CAPACITY	8,000KG
DIAMETER	150MM
THICKNESS	3-8MM WEDGE
CROSS SPACER	
MATERIAL	WHITE POLYPROPYLENE
HEIGHT	9MM
LUG THICKNESS / GAP BETWEEN SLABS	ЗММ
	4MM
70.00	5ММ

#### LEVELLING SHIMS FOR FIXED HEIGHT SUPPORTS

LEVELLING SHIMS IN A NUMBER OF DIFFERENT SIZES ARE AVAILABLE TO USE IN CONJUNCTION WITH BOTH PLASTIC AND RUBBER SUPPORT PADS.

There may be occasions where installers are laying fixed height support pads, but reach an area where a slightly different thickness of clearance is required. This can happen where the thickness of the actual paving slab alters slightly from one flag to another, where the deck underneath changes or where an unexpected door threshold occurs, for example. These minor changes can be addressed with the use of levelling shims.

Levelling shims have been designed to fit on top of all fixed height support pads and will make up those small differences in the level. To avoid one of the slabs rocking, applicators can simply hang a levelling shim onto the support pad to make up the difference.

1mm & 2mm shims

3mm shims



Shims are available 1mm, 2mm and 3mm thick. They are loose fitted and held in place by the positioning lugs. The 3mm thick shim has a slightly different shape to the 1mm and 2mm shims, but all three are suitable for all of the fixed height supports. The shims will overhang the rubber ring slightly, but this is no issue. The weight of the slab will ensure that the whole system is held in place properly.

All shims can be snapped apart into a half shape or into quarters where only one corner needs extra support. This is often required where just one of the flags becomes unsteady and needs bringing up to the level of the others.

Multiple shims can be stacked onto a support pad, but care should be taken that the lug does not become engulfed as this will affect the paving guide and compromise straightness. There needs to be enough of the lug showing for the slab to butt up to.



#### **RUBBER ACOUSTIC / ANTI-SHOCK SHIMS**



These shims are styled in the same design as the standard plastic 3mm shim, but are made from PVC instead of plastic. They are 2.5mm thick and can be placed onto both fixed height support pads, ASP adjustable supports and TD timber decking supports.

They act as an effective vibration or sound control layer. They can deaden the sound of pedestrian traffic over tiles or timber decking (very useful when terraces are being installed on top of dwellings below) and give extra protection by preventing the risk of vibration damaging the tiles over time.



### TECHNICAL DATA

PLASTIC LEVELLING SHIMS				
MATERIAL	RECYCLED POLYPROPYLENE			
OUTER DIAMETER	150MM			
THICKNESS	1MM - TO FIT 9MM, 14MM & 17MM SUPPORTS			
and the second se	2MM - TO FIT 9MM, 14MM & 17MM SUPPORTS			
the local data and the second data and the sec	the second se			
PLASTIC LEVELLING SHIMS	the second se			
MATERIAL	RECYCLED POLYPROPYLENE			
OUTER DIAMETER	150MM			
THICKNESS 3MM - TO FIT 9MM, 14MM & 17MM SUPPORTS				
the second se				
RUBBER ANTI-SHOCK SHIM				
MATERIAL	PVC			
OUTER DIAMETER	150MM			
THICKNESS	2.5MM TO FIT 9MM, 14MM,17MM & ASP SUPPORTS			

# ADJUSTABLE SUPPORT PADS FOR PAVING

WHERE A VERY HIGH CLEARANCE IS REQUIRED, AND TO COPE WITH CONTINUOUS CHANGES TO THE CONCRETE DECK BENEATH, ADJUSTABLE SUPPORT PADS ARE THE BEST WAY TO ENSURE TOP QUALITY FINISHES TO ROOFS, BALCONIES AND TERRACES.



Best practice for roof and terrace design is to ensure the deck is built to a fall to allow proper drainage. Where a very high clearance is required, and to create the highest level finishes the best way to arrest the continual change to the deck level is to use adjustable support pads.

Unlike fixed height supports, which can only be altered in height by adding shims, changes in level that are irregular, very large or continual can easily be accommodated using ASP adjustable supports for paving.

These adjustable supports create a completely flat upper surface on roofs built-to-falls in the safest, most efficient way.

The robust supports are manufactured from injection moulded polypropylene and can tolerate loads of 400kg per unit. They are made from virgin material. Wallbarn has to use virgin material for all adjustable supports to ensure that the weight tolerance and strength is consistent.

Unfortunately the consistency of the material cannot be guaranteed when using recycled plastic as the sources and quality cannot always be traced and measured. Beware claims of strength performance on moving parts when using recycled plastic.

As this is a suspended system, there is no risk of the delicate waterproofing membrane beneath being pierced or damaged. The weight of the slabs is spread through the base plates. If the deck ever needs to be inspected, the system can be taken up easily.

The cavity also presents opportunities to hide unsightly objects, such as water pipes, electricity cables, drainage outlets and manholes beneath the paving slabs.





They can be used with pressed concrete slabs and tiles, natural stone and timber decking tiles. In fact anything which has a straight edge can be used in conjunction with ASP adjustable support pads. The head plate holds the corner of four slabs. It has four integrated postioning "lugs" which the slabs will butt up to. These lugs provide a clear space between each slab which allows the drainage of rainwater between and beneath them. They also give a clear paving line, so the slabs can be laid in a straight line quickly and easily.

They range in height from 25mm up to 220mm. We can also supply a smaller 22mm support as part of our MEGAPADS range, please see page 14. A large range in height is often required where drainage channels or pipework need to be overlaid, and a seamless finish can be achieved since the head plates and basepates are identical, so the finished paving is consistent in look across the area.



Slope correctors can be fitted to the baseplates of all ASP supports. Please see page 18 for more information.

The support pad is made up of four sections:



The base plate is a solid, round base measuring 200mm in diameter. In the centre of the base is a round collar in which the stem and nut will sit. It is designed so that the weight will pass down the stem and onto the outside of the collar, and then pass down along the diagonal arms spreading out

across the face of the base plate. This ensures that the weight is spread to the maximum possible area and does not concentrate on the core (with the risk of digging into the membrane beneath).

The stem is manufactured with a thread to accommodate the nut fixing. The nut can be twisted up and down on the screw thread to adjust the height of the support pad. Installers can adjust the height either before laying the slabs and set the levels with a laser, or can level up the paving by hand once the slabs are in situ. Wallbarn can supply our "Easykey" to help twist the collar if required. The height range of each stem is marked in a small hole at the top.

The headpiece slots into place on top of the stem. It is designed to hold the corners of four slabs, held in place by the four positioning lugs.

#### HEADPIECES

The standard headpiece measures 2.2mm wide and 18mm high. This will hold a 50mm slab in place effectively and gives a sufficient amount of drainage between slabs. Wallbarn can offer variations to this standard headpiece, according to the needs of the client.













standard headpiece

4mm wide lugs

10mm wide lugs flat headpiece

e Short lugged headpiece

2 lugged headpiece

If installers are looking for a larger gap between the paving slabs, a 4mm wide lug can be supplied which will allow a greater amount of water to pass through the gaps. This may be required where there is a risk of sand or dirt clogging up the gaps, for example.

A 10mm wide lug is also available, although designers should be sure that such a large gap does not present a trip hazard in some instances.

If very large paving slabs are being installed, or if thinner tiles or more delicate softer stone is being used (such as slate) then it is recommended that a support pad is placed underneath the centre of the slab to give added support. A flat headed support should be used in this instance. The headpiece is completely flat, so will not scratch the paving or interfere with the levels.



Where thinner tiles are being installed, the standard height lugs may be too visible for a truly fine finish. A shorter, 10mm high lugged headpiece is available should this be the case.

If irregular paving patterns are being laid, often a slab will need supporting, not only at the corners but also in a T junction or across a larger span. In these instances, the two lugged headpiece can be fitted onto the support pad to allow just two slabs to be supported at the edge. These headpieces are also useful when paving directly up the parapet wall (please see the section below).

You can fit loose fitting cross spacers onto these supports if you require a wider gap between the slabs. Cross spacers (featured on page 5) are available 3mm, 4mm or 5mm wide.



#### PAVING UP TO THE EDGE - MINI BASES

Paving directly up to the wall and around corners is neat and easy using Wallbarn Mini Bases for ASP adjustable supports.



Mini Bases are designed for use with the ASP range. They have a 150mm diameter base which means both base and head can be butted up against the upstand or parapet wall without a gap between the slab and the wall.

The slabs placed against the wall are properly supported and stable. The weight passes through the centre of the baseplate and onto the deck in a consistent manner. There is no risk of the slab tipping up as it is not overhanging.

The 120mm diameter headpiece has two lugs instead of four so two slabs or tiles are resting on each support. This creates a neat finish. The positioning lugs still provide for adequate and ensure uniform paving across the area. The baseplates will fit any height of ASP support pad and the strength and weight tolerance is the same as with the standard bases. Point loading is slightly increased, however.

Mini Bases are also suitable for very small tiles, where a 200mm diameter base would be too large underneath to neatly position the slabs. Tiles and slabs as small as 20cm can be laid using the Mini-bases. Ask for MINI BASES for edges and perimeters.



Two of the positioning lugs will need to be removed from the headpiece so that two (rather than the normal four) paving slabs will sit onto it. Customers can order our special 2 lugged headpiece (featured on page 10) These can be butted up to the wall.

The other side of the paving slabs positioned up against the wall will rest on support pads in the normal manner – i.e. one corner on each quadrant of the support pad. The paving can then be extended across the rest of the deck area.

Support pads are a useful way of laying slabs as ballast for insulation in the inverted waterproofing system. The support pads create a separation between the flags and the insulation, preventing the flags damaging the insulation boards in any way. The manner in which the base plates spread the weight of the slabs ensures that they do not dig into the insulation boards.

As long as a suitably heavy paving slab is used, the insulation will be held in place and the area above can be utilised. This is a major advantage to the old fashioned method of using pebbles as ballast (which also carried the risk of stones getting beneath the insulation and possibly damaging the waterproofing membrane).





The adjustable supports are ideal for areas where a seamless terrace or walkway is required but the concrete has been cast with multiple steps or ridges. Even large differences in the height of the deck can be alleviated, creating one level across the whole area.

By suspending the paving off the deck, truly beautiful finishes can be achieved on flat roofs and structural decks.





#### ASP EXT - EXTRA

Wallbarn has developed the EXT EXTRA support pad in order to give greater flexibility for installation of suspended slabs.

The ASP EXT EXTRA ranges from 210 to 380mm.

This extended height support pad has an extra-large threaded stem measuring 170mm. This gives installers a huge range in height variation across the area. This means they can choose one product for decks even with very large differences in height, instead of having to calculate multiple sizes.

A separate extension shank is supplied as part of the kit which is slotted into central core of the baseplate, allowing the weight to be passed consistently and centrally. The threaded stem (complete with headpiece) fits onto the extension shank to make up the unit.

Slope correctors and 150mm diameter Mini Bases can be fitted as normal.



#### ASP adjustable support pads for paving are available in the following sizes:

CODE	HEIGHT	DIAMETER OF HEAD	DIAMETER OF BASE	LUG WIDTH	LUG HEIGHT	WEIGHT TOLERANCE
MEGA 22	22-30MM					
MEGA 28	28-37MM		LEASE SEE <del>OUR SECH</del> C	IN ON MEGAPADS OVERLEAF	FUR FULL DETAILS	1
ASP 25 F	25MM FIXED	1 20MM	200MM, 150MM*	2.2MM # , 4MM, 10MM	18.5MM #, 10MM	400KG
ASP 35 F	35MM FIXED	1 20MM	200MM, 150MM*	2.2MM # , 4MM, 10MM	18.5MM #, 10MM	400KG
ASP 35	35-50MM	1 20MM	200MM, 150MM*	2.2MM # , 4MM, 10MM	18.5MM #, 10MM	400KG
ASP 50	50-70MM	1 20MM	200MM, 150MM*	2.2MM # , 4MM, 10MM	18.5MM #, 10MM	400KG
ASP 65	65-100MM	1 20MM	200MM, 150MM*	2.2MM # , 4MM, 10MM	18.5MM #, 10MM	400KG
ASP 95	95-130MM	1 20MM	200MM, 150MM*	2.2MM # , 4MM, 10MM	18.5MM #, 10MM	400KG
ASP 125	125-160MM	1 20MM	200MM, 150MM*	2.2MM # , 4MM, 10MM	18.5MM #, 10MM	400KG
ASP 155	155-190MM	1 20MM	200MM, 150MM*	<b>2.</b> 2MM # , 4MM, 10MM	18.5MM #, 10MM	400KG
ASP 185	185-220MM	1 20MM	200MM, 150MM*	2.2MM # , 4MM, 10MM	18.5MM #, 10MM	400KG
ASP 210 **	210-245MM	1 20MM	200MM, 150MM*	2.2MM # , 4MM, 10MM	18.5MM #, 10MM	400KG
ASP 240 **	240-275MM	1 20MM	200MM, 150MM*	2.2MM # , 4MM, 10MM	18.5MM #, 10MM	400KG
ASP 270 **	270-305MM	1 20MM	200MM, 150MM*	2.2MM # , 4MM, 10MM	18.5MM #, 10MM	400KG
ASP 300 **	300-335MM	1 20MM	200MM, 150MM*	2.2MM # , 4MM, 10MM	18.5MM #, 10MM	400KG
ASP 330 **	330-365MM	1 20MM	200MM, 150MM*	2.2MM # , 4MM, 10MM	18.5MM #, 10MM	400K
ASP EXT EXTRA 210 **	210-380MM	120MM	200MM, 150MM*	2.2MM # , 4MM, 10MM	18.5MM #, 10MM	400KG

\* Special MINI BASE – standard baseplate is 200mm diameter

**# Please note** – Standard positioning lugs are 2.2mm thick and 18.5mm high, non-standard headpieces available as follows:

- Special lug widths- 4mm and 10mm wide.
- Special lug height 10mm high
- Headpieces with 2 lugs running in the same direction
- Flat headpieces with no lugs.

\*\* Two part kit – part A = headpieces, baseplates and stems, part B = extension shank Please see page 18 for information on slope correctors

# MEGAPADS FOR PAVING

MEGAPADS OFFER INSTALLERS A MUCH LARGER RANGE OF HEIGHT WHEN LAYING PAVING SLABS. THEY ARE ALSO A MORE HEAVY DUTY SUPPORT, ALLOWING GREATER WEIGHT TO BE BOURNE ONTO THEM.



The Megapad range is available from 22mm at the lowest right up to 620mm at their highest. The individual pads have a much larger range of adjustment than the ASP range, which can make installation simpler since a smaller number of different sized units can be chosen even for very large falls.

They are heavy duty and extremely hard wearing with a weight tolerance of 800kg; double that of the ASP or TD range.

Not only are they fully adjustable, but once the desired height is achieved, they can be locked into place, so that the thread does not start to unwind itself (with the possible risk of the slabs becoming unlevel).

Some roof finish designs call for a very high cavity beneath the paving

slab, and there can be complicated areas where steps and many multi-levels across the deck are present or where voids are required to cover services, ducts and gulleys. Drainage integrity is maintained between and below the slabs without interference with the top deck.

Megapads are the optimum product for such areas and provide a uniform, standard support mechanism across the entire area with an identical interface between slab and deck.



The Megapad units are made up of fixed sections (called Towers) which click into the sheath securely, and an adjustable section on the top end of the support which holds the headpiece. The amount of height adjustment depends on the size of the unit. The taller Megapads have a height range of 100mm each.













Each section is locked into place using the "Multi-function Easy Key". The key is used to help turn the supports at the thread, but also click into "locking holes" once the desired height is achieved and lock the threads. Additional collars are then wound up and down to brace the thread in place.

This ensures that none of the elements work their way loose over time and the upper surface is completely secure.









#### MINI MEGAPADS

Megapads are available in smaller sizes – 22-30mm and 28-37mm and are suitable for both paving and timber decking.

Manufactured in a similar manner to the higher range Megapads, these polypropylene units have a flat headpiece and base plate measuring 150mm in diameter. The lug separators are supplied as separate units, which clip into the central hole to provide the 2mm gap between paving slabs.

The integrated thread in the central column allows for height adjustment. If a wedge is required, a loose fitting rubber disc (shown on page 5) can be placed underneath. These mini Megapads can also be fitted with TD headpieces for use with decking. Please see page 17 for more details.





# PAVING UP TO THE EDGE



support pad can be turned upside down and the lug head unit is placed onto the bottom of the base plate. The base plate is 200mm in diameter, so when turned upside down it

exceeds the diameter of the (old) head piece and can butt up to the wall completely. Therefore the paving slab sits securely onto the plate and does not overhang the supporting columns. The headpiece will support two (rather than four) slabs in this case. The slabs are thus fully supported and stable and are in direct contact with the wall without problems. The weight and force is directly vertical and down through

Edges and end-of-runs can be paved more effectively and securely with the Megapad system. The lug headpiece is removable, the

the shaft. Even at their maximum height these supports are stable and secure.

They are designed to be easy to install and adjust. For complicated areas slabs can be installed and then final minor adjustments can be made by



hand when the slabs are in situ, without the need for constant re-setting.

They work very well on areas where there are large differences in the deck level. Megapads are designed to incorporate slope correctors, wedge shaped discs which clip onto the underside of the baseplate where the fall of the deck needs to be addressed. Please see page 18 for more details.

IMPORTANT – Megapads are now available with a TD timber decking joist headpiece. Please see page 17 for details.

CODE	HEIGHT	DIAMETER	DIAMETER	LUG WIDTH	LUG HEIGHT	REVERSIBLE?	WEIGHT
		OF HEAD	OF BASE				TOLERANCE
MEGA 22	22-30MM	150MM	150MM	2.2MM	18.5MM	ND	800KG
MEGA 28	28-37MM	1 50MM	150MM	2.2MM	18.5MM	ND	800KG
MEGA 35	35-50MM	150MM	200MM	2.2MM	18.5MM	ND	800KG
MEGA 50	50-75MM	150MM	200MM	2.2MM	18.5MM	ND	800KG
MEGA 75	75-120MM	150MM	200MM	2.2MM	18.5MM	ND	800KG
MEGA 115	115-220MM	150MM	200MM	2.2MM	18.5MM	YES	800KG
MEGA 215	215-320MM	150MM	200MM	2.2MM	18.5MM	YES	800KG
MEGA 315	315-420MM	150MM	200MM	2.2MM	18.5MM	YES	800KG
MEGA 415	415-520MM	150MM	200MM	2.2MM	18.5MM	YES	800KG
MEGA 515	515-620MM	150MM	200MM	2 <b>.</b> 2MM	18 <b>.</b> 5MM	YES	800KG

Slope correctors can be fitted to Megapads - please see page 18 for more information.

## ADJUSTABLE SUPPORT PADS FOR TIMBER DECKING

WALLBARN SUPPLIES THE TD RANGE -SPECIFICALLY DESIGNED FOR SUSPENDED TIMBER DECKING ON ROOFS AND BALCONIES.



A considerable amount of roof finishes are now completed using timber decking rather than paving slabs. There is renewed interest in decking areas, as developers seek more efficient use of the building footprint and outdoor space (for example for designated smoking areas) becomes more important.

Since many waterproofing systems are fairly delicate, to simply lay timber directly onto the membrane runs too much risk of damage. Wallbarn's TD range was developed to provide a solution to this problem. The strong polypropylene pads raise the decking off the roof deck, allowing proper drainage, preventing the timber digging into the membrane, and keeping the

wood out of standing water, helping to prevent rotting.

Wallbarn found that roofing contractors wanted to be in control of this element of construction since warranties can be at stake, so we developed an easy, fast system so roofing contractors can do the work themselves. Because the supports are adjustable, applicators do not need to cut multiple thicknesses of timber to create a level surface, they simply turn the thread on the telescopic stem.



The system is simple – the pads are loose laid onto the deck, the heights are adjusted at the stem across the deck by hand to ensure the upper surface is level, a joist framework is constructed sitting on top of the supports, and the top layer of decking planks are fixed to the joist frame. It is designed to be loose fitted. The supports are not drilled or bonded to the deck and the joists sit on them without being fixed. The weight of the timber and the fixings will hold everything stable and in place.

The void between the decking and the roof can be used to hide items such as water pipes, electrical wiring and drains. Attractive light or water features can also be incorporated into the decking fairly easily. The end result can be stunning.

The adjustable supports are similar in most ways to the paving pads, apart from the design of the headpiece. We manufacture a headpiece with pegs positioned in the corners, either 40mm or 60mm apart. This means a 2 inch joist or batten can fit in between the pegs or lugs easily and there is a little extra room in case some of the timber is twisted or swollen.

The battens are laid onto the supports no more than 600mm apart.

We recommend that only properly pressure treated wood is used, since these supports are used on outdoor decks. Cross battens are screwed into place to give a framework which is sturdy and weight bearing. It is sometimes advisable to also fix the joists to the parapet wall or upstand for additional strength. The decking planks – the timber which will be visible to the end users, is screwed onto the joist framework.







#### APPLICATION

Timber decking is laid, using TD supports, in the following manner:



After waterproofing and insulation is installed, a geotextile membrane is loose laid on top





The support pads are laid out 600mm apart and adjusted so that the headpieces are level

A 50mm wide joist or batten is fitted on top of the headpiece in between the lugs



A framework of timber joists is created with the planks and cross battens fixed securely to give a strong, stable frame





The whole area is covered by the timber joist framework right up to the edges. This frame should be able to withstand weight and vibration



The decking layer is then fixed onto the joists using wood screws.

A small gap between each plank of decking should be made to help with drainage. A stunning finish can be achieved with a natural, luxurious look to the terrace. The decking runs seamlessly up to the border, planters and door threshold.

CODE	HEIGHT	DIAMETER	DIAMETER	WIDTH BETWEEN	LUG	WEIGHT
		OF HEAD	OF BASE	LUGS	HEIGHT	TOLERANCE
MEGA 22	22-30MM	Contraction of the		JUR SECTION ON MEGAPADS FOR FU		-
MEGA 28	28-37MM		LASE SEE L	JUR SELTION ON MEGAPADS FOR FO		
TD 25 F	25MM FIXED	120MM	200MM	40MM, 60MM, 90MM OR TO MOBILE	18.5MM	400KG
TD 35 F	35MM FIXED	120MM	200MM	40MM, 60MM, 90MM OR MOBILE	18.5MM	400KG
TD 35	35-50MM	120MM	200MM	40MM, 60MM, 90MM OR MOBILE	18.5MM	400KG
TD 50	50-70MM	120MM	200MM	40MM, 60MM, 90MM OR MOBILE	18.5MM	400KG
TD 65	65-100MM	120MM	200MM	40MM, 60MM, 90MM OR MOBILE	18.5MM	400KG
TD 95	95-130MM	120MM	200MM	40MM, 60MM, 90MM OR MOBILE	18.5MM	400KG
TD 125	125-160MM	120MM	200MM	40MM, 60MM, 90MM OR MOBILE	18.5MM	400KG
TD 155	155-190MM	120MM	200MM	40MM, 60MM, 90MM OR MOBILE	18.5MM	400KG
TD 185	185-220MM	120MM	200MM	40MM, 60MM, 90MM OR MOBILE	18.5MM	400KG
TD 210 **	210-245MM	120MM	200MM	40MM, 60MM, 90MM OR MOBILE	18.5MM	400KG
TD 240 **	240-275MM	120MM	200MM	40MM, 60MM, 90MM OR MOBILE	18.5MM	400KG
TD 270 **	270-305MM	120MM	200MM	40MM, 60MM, 90MM OR MOBILE	18.5MM	400KG
TD 300 **	300-335MM	120MM	200MM	40MM, 60MM, 90MM OR MOBILE	18.5MM	400KG
TD 330 **	330-365MM	120MM	200MM	40MM, 60MM, 90MM OR MOBILE	18.5MM	400KG
ASP EXT EXTRA 210 **	210-380MM	1 20MM	200MM	40MM, 60MM, 90MM OR MOBILE	18.5MM	400KG

\*\* Two part kit – part A = headpieces, baseplates and stems, part B = extension shank Please see page 18 for information on slope correctors REMEMBER TO LAY TD SUPPORTS A MAXIMUM OF 600mm APART TO AVOIFD OVERLOADING THE SYSTEM

#### 90MM WIDE JOIST HEADPIECE

Wallbarn also has a headpiece with the two placement lugs 90mm apart for all TD support pads.

The headpiece is clicked into place in the same way as the 40mm /60mm headpiece, and is priced the same. Wallbarn can therefore give a much greater amount of flexibility to installers as they can be assured that even larger sized battens will not slip off their mounting.



Having a larger batten in place allows for more weight displacement through the system, but care should always be taken not to overload the support pads. Each pad tolerates 400kg. Wallbarn recommends a maximum span of 600mm between support pads.

# FLAT HEADED ADJUSTABLE SUPPORTS FOR USE WITH TIMBER DECKING





If a very wide joist beam is being used and even the 90mm gap on TD supports is not sufficient, a flat headed support pad can be used to hold the joist. These headpieces are 120mm in diameter and completely smooth.

They give extra support without anything protruding up from the

surface and potentially interfering with the levels. Provided that the joists are fixed together with cross battens and built into a framework, the whole structure will be sturdy, weight bearing and secure. Flat headed support pads can also be used beneath the centre of paving slabs where extra support is needed, for example, very large (over 600mm) flags or thinner tiles. They are priced at the same level as the ASP and TD range.

# TD MOBILE – MOVEABLE HEADPIECE FOR TIMBER JOISTS

A major improvement in the way timber decking can be installed has been developed with the launch of the TD MOBILE headpiece.





The new moveable headpiece allows installers to fix battens to the headpiece more easily, more securely and with more options available to house different sized pieces of timber.

The headpiece clicks into place on top of the stem in the same





way as all other headpieces, but the side bar can be detached and moved along the face of the headpiece to adjust the width from 30mm up to 90mm.

There are small holes in the side bar which allow screws to be passed through the headpiece and into the joists themselves. With the joists fixed to the supports and the decking fixed to the joists the whole decking system becomes very stable and secure. The measurements are clearly marked at 30mm, 50mm, 70mm and 90mm apart, ensuring that installers achieve exact spacing along the decking line. The load will always remain on top of the central axis, preventing movement or tilting.

TD MOBILE supports are available from 35mm up to 380mm high. Full height range available (including the EXTRA range) can be found on pages 11 & 15.

This new mobile system is seen as far more secure and versatile than the traditional TD headpiece and is priced at a premium.

# TD MEGAPADS - FOR TIMBER DECKING

#### NEW TD TIMBER DECKING HEADPIECES FOR MEGAPADS – LESS UNITS REQUIRED PER M<sup>2</sup>

Wallbarn can also announce a brand new headpiece for Megapads specifically for timber decking.

The headpieces click into the centre of the flat head of all Megapads to house a timber joist securely in the same way that the TD headpiece does for our other adjustable range. The distance between the lugs is 60mm which will house a 2 inch joist.

Because the Megapads can withstand a load of 800kg per unit, when using them for timber decking a larger span between each unit can be allowed, and with less Megapads being required, a significant cost saving can be achieved. The extended range of adjustment (105mm for the larger sizes) means that less different sizes are required than for the TD support range, making purchasing an easier task. The locking mechanism on the stems also means that there is no risk of the supports starting to unwind themselves, which may cause changes in the level and instability.

Ask for Megapad TD when laying timber decking.





CODE	HEIGHT	DIAMETER OF HEAD	DIAMETER OF BASE	DISTANCE BETWEEN LUGS	LUG HEIGHT	REVERSIBLE?	WEIGHT TOLERANCE
MEGA TD22	22-30MM	150MM	150MM	60MM	18.5MM	FLAT HEAD	800KG
MEGA TD28	28-37MM	150MM	150MM	60MM	18.5MM	FLAT HEAD	800KG
MEGA TD35	35-50MM	150MM	200MM	60MM	18.5MM	FLAT HEAD	800KG
MEGA TD50	50-75MM	150MM	200MM	60MM	18.5MM	FLAT HEAD	800KG
MEGA TD75	75-120MM	150MM	200MM	60MM	18.5MM	FLAT HEAD	800KG
MEGA TD115	115-220MM	150MM	200MM	60MM	18.5MM	YES	800KG
MEGA TD215	215-320MM	150MM	200MM	60MM	18.5MM	YES	800KG
MEGA TD315	315-420MM	150MM	200MM	60MM	18.5MM	YES	800KG
MEGA TD415	415-520MM	150MM	200MM	60MM	18.5MM	YES	800KG
MEGA TD515	515-620MM	150MM	200MM	60MM	18.5MM	YES	800KG

Slope correctors can be fitted to Megapads.

#### FLAT HEADED MEGAPADS

Megapads can also be used to support very large timber decking by simply removing the lug connector entirely. This creates a completely flat headpiece 150mm in diameter, which gives installers more flexibility for very large sections of timber.



Because Megapads can tolerate a greater amount of weight – 800kg each – the system is more secure. A far greater amount of height range is achievable with Megapads, which make them suitable for very complicated areas which designers want to cover with one seamless timber decking layer.





# SLOPE CORRECTORS



Slope correctors are wedge shaped levellers which are clipped or fitted onto the base plate of the adjustable support pads. They are suitable for use with ASP, TD and Megapad supports; including the new mini-Megapads, ASP MBs with the 150mm diameter base plate, the ASP EXT and ASP EXT EXTRA range.

They are designed to arrest the fall of the roof or deck beneath – even "flat roofs" will be built to a fall for drainage, and by having these wedges attached underneath, the support pads remain completely vertical and straight, which ensures the force of gravity runs directly vertical, preventing tilting and keeping the support pad more stable.





They are very easy to apply to the base plate. For the 200mm diameter base plates a simple clip mechanism fixes around the lip of the plate. All 150mm base plates have a groove inside the perimeter which slots into a series of rings situated on the slope corrector. More than one slope corrector can be applied if required as one can clip onto another very easily.

They can be used with both timber decking supports and paving supports. The height of the support pad can still be adjusted once



these are in place, and the material is the s a m e polypropylene as used for the



support pads (although they contain an element of recycled material).

Slope correctors are available in three sizes, with a 1%, 2% and 3% gradient. The clip design and diameter of the corrector is the same for all three gradients, it is simply the amount of slope which is different.

The gradient or slope is measured as a percentage. The deck is most commonly laid to a fall around 1 in 40, so a 2% slope corrector is normally chosen. Additional slope correctors can be added where required.

Full measurement details are as follows:

CODE	OUTER	INNER	PERCENTAGE	DEGREE	TO FIT	WEIGHT
E 415	DIAMETER	DIAMETER	SLOPE	OF SLOPE	an which has a f	TOLERANCE
SLOPE 1	200MM	82MM	1%	<b>0.</b> 57°	ASP, TD, FLAT HEADED ASP,	800KG
SLOPE 2	200MM	82MM	2%	1.11°	TD MOBILE, MEGAPADS, ASP MB,	800KG
SLOPE 3	200MM	82MM	3%	1.71°	ASP-EXT & ASP-EXT-EXTRA	BOOKG



#### FOR MORE INFORMATION PLEASE CONTACT:

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