



# Operations & Maintenance Manual

## Mega Balance Universal



Wallbarn Ltd  
Unit 16 Capital Business Centre  
22 Carlton Road, South Croydon. CR2 0BS

IMS.T.961.v3

Phone : 020 8916 2222 Email : [sales@wallbarn.com](mailto:sales@wallbarn.com) Website : [www.wallbarn.com](http://www.wallbarn.com)



## PRODUCT DESCRIPTION

Adjustable Height Pedestals for use with suspended paving, decking & rail systems with a universal self-leveling headpiece for different applications.

25-1025mm in height – injection moulded support pedestals made from virgin fibre Polypropylene (PP) with no fillers. Packed into boxes of 20 units each.

## PHYSICAL AND CHEMICAL PROPERTIES

HEIGHT RANGES	WEIGHT TOLERANCE	
<p>*25mm to 75mm 75mm to 125mm 125mm to 225mm 225mm to 325mm 325mm to 425mm 425mm to 525mm 525mm to 625mm 625mm to 725mm 725mm to 825mm 825mm to 925mm 925mm to 1,025mm</p> <p>*(25-75mm comprises of four components : Base + Half Dome +Dome + Headpiece)</p>	<p>Maximum Load : 31.68 kN (Approximately 3,230kg)</p> <p>STS Laboratory Certificate No: IC11715 <a href="#">*(Go to Test)</a></p>	
<b>Stainless Steel Key</b>	To adjust the height of the pedestals whilst slabs/tiles are in situ for paving projects.	
<b>Self Levelling Headpiece</b>	Can accommodate slopes/gradients of up to 5% (2.86° or 1 in 20 fall)	
<b>Grey Nut</b>	Allows the tilting mechanism to be anchored, fixing the headpiece in position. Particularly ideal for perimeter installation of small slabs/tiles	
<b>Pedestal Material</b>	80% Virgin Polypropylene / 20% Recycled Polypropylene	
<b>Acoustic Shim (On Headpiece)</b>	TPE	
<b>Headpiece Diameter</b>	150mm	
<b>Base Diameter</b>	200mm	

Wallbarn Ltd  
Unit 16 Capital Business Centre  
22 Carlton Road, South Croydon. CR2 0BS

IMS.T.961.v3

Phone : 020 8916 2222 Email : sales@wallbarn.com Website : [www.wallbarn.com](http://www.wallbarn.com)



## PHYSICAL AND CHEMICAL PROPERTIES (con't)

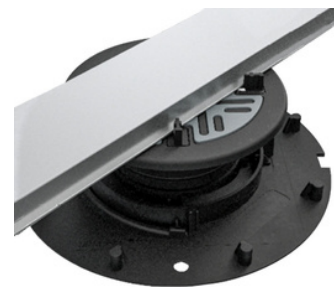
	Score	Test Method
Melt Flow Rate	14-16 Gr / 10'	ASTM D 1238
Weight / density	0.99-1.04 Gr / cm <sup>3</sup>	ASTM D 792 Method A
Softening point with load of 5kg (VICAT test)	>75 °C	ASTM D 1525
Heat Deflection Test with load of 1820 kPa	> 90 °C	ASTM D 648
Coefficient of elasticity	1600 Mpa	ASTM D 790
Impact resistance (Izod test - at 23°C)	>40 J/m	ASTM D 256
Impact resistance (Izod test - at minus 20°C)	>20 J/m	ASTM D 256
Max Weight Tolerance at minus 40°C	27.830 N	CATAS 179112 / 1
Fire classification	MEGA BALANCE pedestals are classified as "EUROCLASS E" according to EN 13501-1:2009	



Paving



Timber Joist



Aluminium Joist

Wallbarn Ltd  
 Unit 16 Capital Business Centre  
 22 Carlton Road, South Croydon. CR2 0BS

IMS.T.961.v3

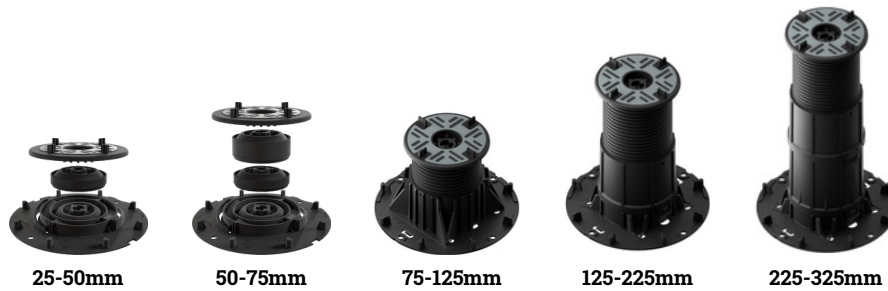
Phone : 020 8916 2222 Email : sales@wallbarn.com Website : [www.wallbarn.com](http://www.wallbarn.com)



## Mega Balance Heights

The Mega Balance Height Range is made up of three pedestals and three height extenders to cover a height range from 25mm to 1,025mm. The Half Dome and Dome can be used to extend the height of any Mega Balance Pedestal by 12.5mm and 25mm respectively. No more than three of these extenders can be used on any one pedestal. The 100mm Tower is used only on the 125mm to 225mm and can be used to build up to 1,025mm in height.

### 3 Pedestals + 2 Extenders to cover 25mm to 1,025mm





## Product Installation

These pedestals are designed for use on predominantly flat decks and are suitable for flat roofs, podium decks, balconies, terraces, and walkways that have a minimal fall for drainage (Mega Balance Pedestals are self levelling up to 5% (2.86° or 1 in 20 fall)).

They should be placed on structural decks that are sufficiently strong enough to support the weight of the system. It is important to ensure that waterproofing membranes are adequately protected before the installation of paving or decking systems, to prevent point loading and/or puncturing of the membrane.

Pedestals are typically loose-laid without mechanical fixings or adhesive, allowing them to move independently from the structural building and prevent stress points. However, if securing the pedestals to the subdeck is necessary (ensuring that waterproofing seals are not compromised), mechanical fixings can be installed through a series of holes moulded into the baseplates.

The placement of pedestals depends on various factors, and Wallbarn Technical staff are available to provide advice on recommendations based specifically on your project.

## The Key

Material	Stainless Steel	
Odour	None	
Weight	0.2 kgs	
Length of Shaft	160mm	
Length of Arm	150mm	
Key Turn Width	15mm	
Fire Classification	EuroClass A	
Toxicity	Not classified as toxic	



## For Paving

Slabs / tiles are loose laid onto headpieces between four integrated lugs to position and separate them and provide 4mm gap for drainage. The Key is used to adjust the height of the pedestal after the full system has been installed without having to lift the slab / tile.



## For Decking

Place timber or composite joists onto headpiece between the positioning lugs so it is suspended on top of the pedestal. There is no need to mechanically fix the joists to the pedestals. The rubber shim built into the headpiece will grip the joists and weight of the decking will keep pedestal in place.

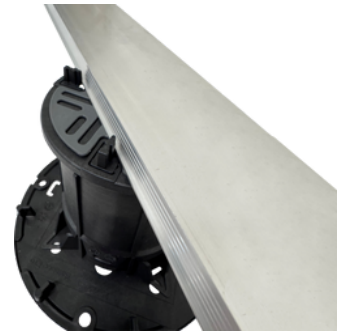
Cross fix the joists to form a framework. Adjust the height of the pedestals to create a flat framework level. Fix the decking boards perpendicular to the main joist beams using top fixings or side fixings.





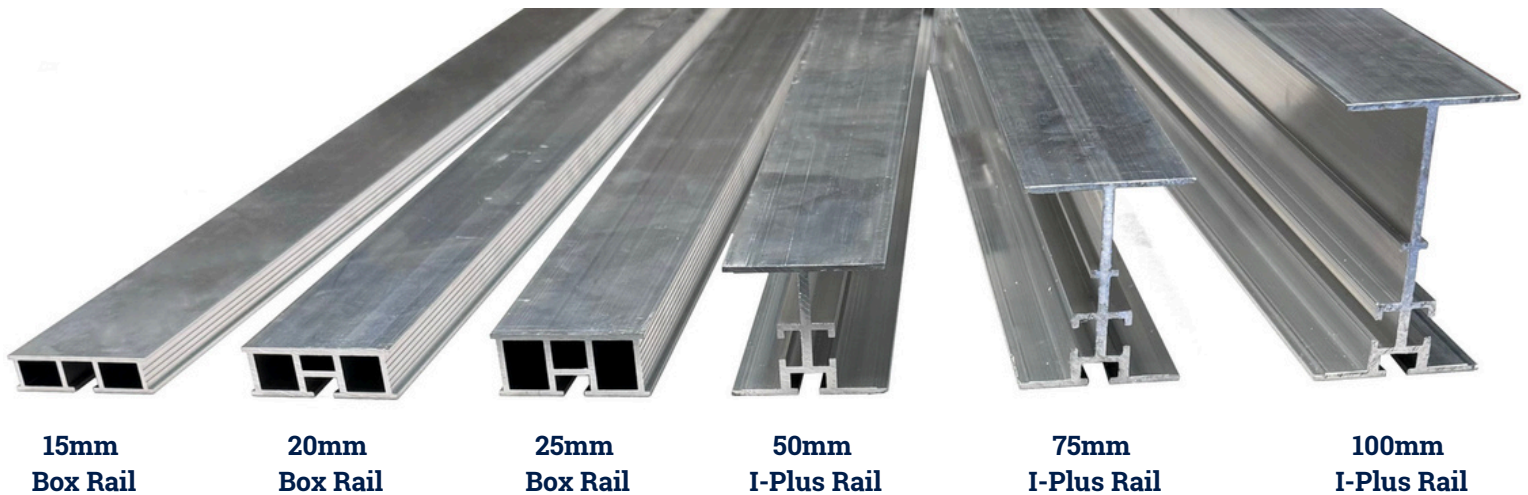
## For Rail System

The Mega Balance has a Universal Headpiece that can be used for Paving or decking applications. It's unique design makes it compatible with all of our Box & I-Plus aluminium joists/rails. These simply click into the headpiece, and then be used as substructure for paving or decking system.



## Box Rail & I-Plus Rail

Wallbarn Aluminium Rails/Joists, made from high-grade 6063 T6 extruded aluminium, are designed and manufactured in the UK for heavy-duty paving and decking applications. Specifically designed to seamlessly connect with Wallbarn's Mega Balance and MiniPad pedestals, they provide secure installation without the need for mechanical fixings.



**15mm  
Box Rail**

**20mm  
Box Rail**

**25mm  
Box Rail**

**50mm  
I-Plus Rail**

**75mm  
I-Plus Rail**

**100mm  
I-Plus Rail**

Wallbarn Ltd  
Unit 16 Capital Business Centre  
22 Carlton Road, South Croydon. CR2 0BS

IMS.T.961.v3

Phone : 020 8916 2222 Email : [sales@wallbarn.com](mailto:sales@wallbarn.com) Website : [www.wallbarn.com](http://www.wallbarn.com)



## The Grey Nut

Mega Balance is supplied with a self-leveling headpiece as standard but the head can be locked in place by inserting the Grey Nut into the centre of the headpiece. This is particularly handy for pedestals on the perimeter of an area that are supporting small tiles/slabs. See [Video](#)



## The Black Nut

The Black Nut can be used on the lower height Mega-Balance which allows you to adjust the height instead of the key. By pushing this nut into the central part of the headpiece it allows you to twist the stem of the pedestal to adjust the height when already in situ. See [Video](#)



## Other Accessories

There are a number of accessories that can be used with our pedestals, such as edge plates, levelling shims, Acoustic pads or profile edge plates. The use of these are dependent on your project's detail. The Wallbarn Technical Team will be able to advise on the use of these.

## Maintenance Details

The pedestals are designed for long-term coverage without disturbance. It is essential to keep gaps between paving slabs or decking boards clear of debris to ensure proper drainage of the upper surface and prevent ponding and slip hazards.

The cavities between the structural subdeck and the surface material (paving or decking) should be inspected regularly, at least once per year, to make sure that drainage channels remain unblocked and that flammable materials do not accumulate. Jets of water should be used to clear limited amounts of debris, taking care to avoid blocking or damaging drainage outlets.

For significant or compacted debris build-up, it may be necessary to remove the upper surface (paving or decking system) to clear the debris effectively. If needed, this removal should be carried out using machines.





## **Hazards Identification**

The major hazards identified for these products are physical and include manual handling.

## **First Aid Measures**

In event of cuts or injury, wash out wound with plenty of clean water. Seek medical attention.

## **Fire-Fighting Measures**

These products do not constitute a fire hazard. Use extinguishing media appropriate to the surrounding fire conditions.

## **Accidental Release Measures**

Damaged product can be taken up and disposed of to landfill as inert waste if necessary; however recycling is the preferred method of disposal. As supplied, the products are not classified as hazardous.

## **Handling & Storage**

When handling the pedestals, due regard should be paid to the risks outlined in the Manual Handling Operations Regulations 1992. Appropriate PPE should be used.

If cutting the base of the pedestal with a saw, appropriate measures to control dust and debris should be used. The product should be stored in a safe place out of strong weather conditions.

Wear suitable protective clothing e.g. overalls, gloves and safety boots to reduce the chances of physical injury while using this product.

## **Ecological Information**

Subsequent to manufacture, this is a stable product with no known adverse environmental effects.

## **Disposal Considerations**

Dispose of this product at any approved solid waste disposal site but recycling is best and recommended method of disposal. Wallbarn Mega Balance pedestals are made from virgin fibre Polypropylene and therefore will make for a higher quality recycled product. Disposal of the product should be in accordance with any local or national regulations although recycling is preferred.



## **WARRANTIES**

A Limited Warranty exists that the products will comply with the test data as laid out in this document for a period of 15 Years. Warranty is limited to replacement of products which have been installed in the correct manner and for the correct purpose only. Warranty is limited to the value of the cost price of the materials only, not replacement costs or any other labour cost.

Under no circumstances shall Wallbarn Ltd be held responsible or liable for any incidental, consequential, indirect, special, punitive or any other damage (including, but not limited to, loss of profits, loss of sales, loss of start-up, loss or reduction of work).

This Limited Warranty covers our pedestals on condition that the Installation and Care & Maintenance Instructions are followed, and are installed according to Wallbarn Ltd guidelines.

See Terms and Conditions of the Warranty and Scope of the Guarantee below for other exclusions and limitations of this Warranty.

### **1) WARRANTY TERMS AND CONDITIONS**

1.1 Complaints are physically examined by Wallbarn Ltd.

1.2 Complaints / claims should be filed in writing to Wallbarn Ltd.

1.3 Proof of purchase of the rails/joists should accompany the written complaint / claim. Complaints / claims without the appropriate documentation will not be considered.

1.4 The company examining complaints (or its representatives) reserves the right to check the pedestals in the place of installation, the manner they have been installed and obtain details of the care and maintenance programme carried out before giving considering to the complaint/claim.

1.5 The complaint / claim is only valid if the products are installed in the territory that the original purchase was made.

1.6 Wallbarn Ltd reserves the right to either repair the defect or to offer material free of charge to the customer.

The above guaranteed lifetime of the pedestal exists only where the Products have been installed in the correct and proper manner.



## **2) VISUAL APPEARANCE WARRANTY ON DELIVERY**

Each pedestal is carefully inspected by our quality control team personnel prior to leaving our factory to ensure they are defect free. We urge Customers and the installers to inspect each pedestal prior to installation. This Limited Warranty does not extend to cover defects in pedestals on delivery after installation has taken place.

## **3) SCOPE OF GUARANTEE**

3.1 This guarantee is issued in accordance with and is subject to the laws of England & Wales.

3.2 Obvious defects in the pedestal should be communicated to the supplier within 30 days from the delivery date of goods on site/warehouse. Claims regarding obvious defects after this period will not be considered.

3.3 To be able to make use of the Warranty the product – Mega Balance Pedestals- must be installed according to the Installation Instructions. Use fixings recommended and approved by Wallbarn Ltd as indicated in the appropriate technical documentation. The use of other types of fixtures not provided or approved by Wallbarn Ltd invalidates this Warranty.

3.4 If a claim is granted before installing the material, faulty pedestals are replaced free of charge.

3.5 No claims can be accepted after installing the material if the buyer could have detected the defects before installation. This Warranty does not cover damage caused by third parties before installation.

## **TRANSPORT INFORMATION**

The best method of transportation is strapped securely onto pallets.



## KEY CONTACTS

Wallbarn Ltd.

Unit 16 Capital Business Centre,  
22 Carlton Road,  
South Croydon CR2 0BS

Tel: +44 (0)20 8916 2222

Fax: +44 (0)20 8916 2223

Email: [sales@wallbarn.com](mailto:sales@wallbarn.com)

Web: [www.wallbarn.com](http://www.wallbarn.com)

## APPENDIX A

The following table summarizes the products referenced in this document:

Product	URL
Mega Balance Universal Pedestal	<a href="https://www.wallbarn.com/pedestals-2/self-levelling-heavy-duty/">https://www.wallbarn.com/pedestals-2/self-levelling-heavy-duty/</a>
Pedestal Accessories	<a href="https://www.wallbarn.com/pedestals-2/pedestal-accessories/our-range/">https://www.wallbarn.com/pedestals-2/pedestal-accessories/our-range/</a>
Non Fire Rated Substructure	<a href="https://www.wallbarn.com/substructure/plastic-pedestal-substructure-system/">https://www.wallbarn.com/substructure/plastic-pedestal-substructure-system/</a>
Aluminium I-Plus Joist/Rail	<a href="https://www.wallbarn.com/substructure/i-plus-beam/">https://www.wallbarn.com/substructure/i-plus-beam/</a>
Aluminium Box Joist/Rail	<a href="https://www.wallbarn.com/substructure/box-rail/">https://www.wallbarn.com/substructure/box-rail/</a>

Wallbarn Ltd  
Unit 16 Capital Business Centre  
22 Carlton Road, South Croydon. CR2 0BS

IMS.T.961.v3

Phone : 020 8916 2222 Email : [sales@wallbarn.com](mailto:sales@wallbarn.com) Website : [www.wallbarn.com](http://www.wallbarn.com)



## APPENDIX B:

# LIMITED WARRANTY

Wallbarn Ltd provides a limited warranty of 15 years for products. This Warranty corresponds to the performance and strength characteristics given in the published technical datasheets.

Wallbarn Ltd warranties that, under normal use and service conditions, and where the products have been installed in the proper manner, Wallbarn Ltd products shall be free from material defects in workmanship and materials, shall not crack, splinter, swell, rot or suffer structural damage from damp or fungal decay.

If a defect occurs within the Warranty Period, the Purchaser shall notify Wallbarn Ltd in writing and, after investigation and confirmation of the defect(s) by a Wallbarn Ltd representative, Wallbarn Ltd's sole responsibility shall be limited to replacement of the affected products or to refund the Purchaser up to the maximum value of the Sales Invoice.

### **This warranty is null and void if:**

- The products are not installed in the proper manner as detailed in official Wallbarn Ltd product catalogues, installation guides and technical datasheets.
- The products are not used for the purposes they are intended, as detailed in official Wallbarn Ltd product catalogues, installation guides and technical datasheets.
- Excessive weights, higher than the maximum weight as detailed in official Wallbarn Ltd product catalogues, installation guides and technical datasheets are placed onto the products.
- The products are installed in contravention of any relevant building regulations, code or standards.
- Any relevant building regulations, code or standards, including fire safety regulations are breached on the project during the construction process.
- There is movement, distortion, collapse or settling of the supporting structure on which Wallbarn Ltd products are installed.
- Any abnormal natural event such as flooding, hurricane, earthquake, lightning, etc., occurs.



## Wallbarn Ltd – Limited Warranty

This limited warranty does not cover any living product or any product which sustains life. This includes sedum and other plants and substrate mixes for M-Tray® and any other green roof system. The living and growing elements of M-Tray® and other green roof systems are specifically excluded from this Warranty.

This Warranty is limited to the maximum amount of the Sales Invoice and Wallbarn Ltd is not liable for any costs of examination, removal or installation of products. Wallbarn Ltd will not be responsible for any costs or expenses incurred during removal and replacement, including labour or transport costs.

This warranty is given only if the products are used for the purposes they are intended, as detailed in official Wallbarn Ltd product catalogues, installation guides and technical datasheets and are installed in the correct manner.

To make a claim under this Limited Warranty, the Purchaser should contact Wallbarn Ltd with a full report of the defects within the Warranty Period, including photographic evidence and proof of purchase. Any claim should be made to [sales@wallbarn.com](mailto:sales@wallbarn.com) as soon as possible by the Purchaser.

Our Terms & Conditions of Supply can be found here  
<https://www.wallbarn.com/terms-conditions-of-supply/>

APPENDIX C:

TEST CERTIFICATE  
LOAD TESTING IN ACCORDANCE WITH  
THE CLIENT'S SPECIFICATION



On Wallbarn Limited,  
3 Hagley Court North, The Waterfront, Dudley, West Midlands, DY5 1XF

**PROOF LOAD TESTING**  
**STS LABORATORY**

**TEST DESCRIPTION:** A weight tolerance test was conducted on two plastic mega balance pedestals. Testing was completed using a jack to apply a vertical compressive load centre to the product, to confirm structural performance and determine load failure limit. All testing was carried out in accordance with the client's specification.

**REF NO.:** DR-5744 **DATE TESTED:** 15<sup>th</sup> May 2024  
**JOB NO.:** P10259 **CERTIFICATE DATE:** 24<sup>th</sup> May 2024  
**CERTIFICATE NO.:** IC11715 **SUPPLIER/SOURCE:** Client


**TEST DETAILS:**  
**Product Tested:** Plastic Mega Balance Pedestal **Item Condition:** New  
**Target Loads:** Failure **Ambient Temperature:** 18°C  
**Test Location:** STS Laboratory **Procedure or Method:** Client's Specification

**TEST RESULTS:**

Test Product	Load Achieved (kN)
25 – 50mm Mega Balance Pedestal	46.99
125 – 225mm Mega Balance Pedestal	31.68

**ANALYSIS:**

Testing was completed with both mega balance pedestals obtaining failure loads. Following this, the highest load achieved at failure was the 25 – 50mm mega balance pedestal, achieving a load of 46.99kN before failure. The 125 – 225 mega balance pedestal obtained the lowest load achieved, with 31.68kN before the product began to deform. All testing was completed within the client's specification.

<b>For Specialist Technical Services (U.K) Limited</b>			The results found on this Certificate relate only to the product[s] tested as described above This Test Certificate shall <u>not</u> be reproduced except in full  QC: TC001 – Test Certificate – v4.0   Page 1 of 1
<b>Approved By:</b>	Andrew Gore		
<b>Position:</b>	Technical Director		
<b>Signature:</b>			

END OF PAGE

