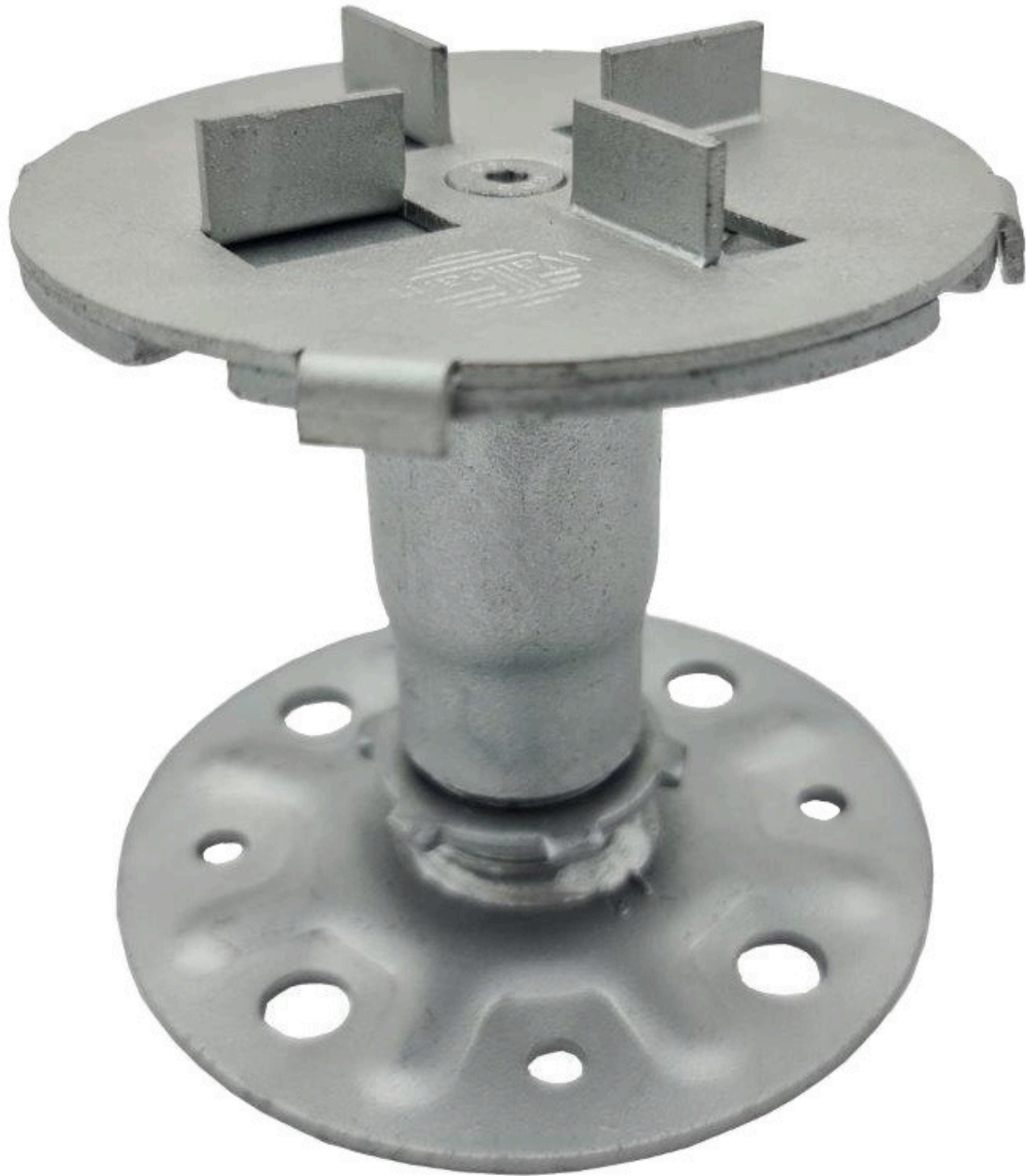




Operations & Maintenance Manual

MetalPad Ex Class A Pedestal



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

IMS.T.432.v2

Phone : 0208 916 2222 Email : sales@wallbarn.com Website : www.wallbarn.com



PRODUCT DESCRIPTION

Non-combustible, fully adjustable, Class A pedestal specially designed for suspended decking and paving systems on exterior high-rise balconies, terraces and flat roofs.

The pedestals are covered in Zintec 200 anti corrosion protective coating. This makes the pedestals suitable for external applications and also creates a barrier between the steel and the aluminium.

***(Larger height pedestals above 375mm are available on special order)**

- There are zero plastic or rubber components ensuring it's Class A rating.
- Rated Class A according to BS EN 13501-1:2018 and EC Decision 94/61 1/EC.
- Independently weight tested by STS UK to 49.86kN (Approximately 5,080Kg) - [\(Go to Report\)](#)

They are covered in Zintec 200 coating provides a superior finish, which offers outstanding cathodic corrosion protection and staves off white rust formation. Zintec 200 also demonstrates exceptional performance in Neutral Salt Spray Testing (NSST) as well as in Cyclic Corrosion Testing (CCT).- [\(Go to Technical Documents for Zintec 200\)](#).

Accurate levelling of the floor surface is possible with millimetre precision by twisting the threaded stem to adjust the height. The height can be adjusted even with the paving slab or rail / decking system in place by simply turning the stem. The headpiece is 95mm diameter and the circular baseplate is 100mm in diameter.

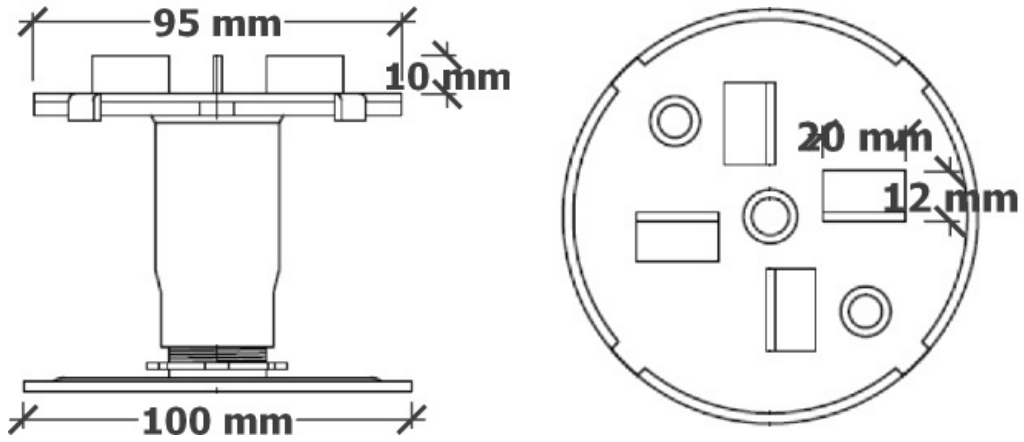
The MetalPad Ex has been designed to work with a number of accessories, headpieces and Wallbarn Aluminium Joists/Rails to create substructure for paving or decking projects that need to meet the latest rules related to Class A specified projects.



PHYSICAL AND CHEMICAL PROPERTIES

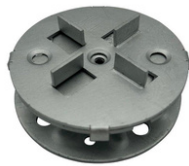
MATERIAL	Mild Steel	EN 10152
PEDESTAL COATING	Zintec 200 corrosion protection coating	
THREADED STEM	Mild Steel Class 4:8	
FIRE CLASSIFICATION	Class A1 - EC Decision 96/603/EC BS EN 13501-1:2018	
BUILDING STANDARDS COMPLIANCE	Approved Document B (amended)	2022
	British Standard (balcony construction)	BS 8579
USE/PURPOSE	Suspended decking and paving projects on Balconies, Terraces, Flat Roof & Podium Decks.	
WEIGHT TOLERANCE	49.86kN (Approximately 5,080Kg) per unit	
WEIGHT TOLERANCE WITH SPREADER PLATE	70.69kN (Approximately 7,207Kg) per unit	
DURABILITY	MetalPad EX is manufactured for long-term performance and resistance to corrosion, exposure to elements and to UV rays	
WARRANTY	Limited warranty 15 years	
	Life span 50 years	
TOXICITY	These products are not classified as toxic	
HEADPIECE	95mm diameter with central hole 6mm diameter 4 x connection slots 10mm x 22mm	
BASE PLATE	100mm diameter Circular Base plate 4 x drilled drainage holes 10mm diameter 4 x drilled fixing holes 6mm diameter	

Paving Headpiece



28-37mm

SP-MET-EX-P-028-Z



32-42mm

SP-MET-EX-P-032-Z



42-52mm

SP-MET-EX-P-042-Z



52-72mm

SP-MET-EX-P-052-Z



62-92mm

SP-MET-EX-P-062-Z



77-117mm

SP-MET-EX-P-077-Z



112-187mm

SP-MET-P-EX-112-Z



187-262mm

SP-MET-EX-P-187-Z



252-327mm

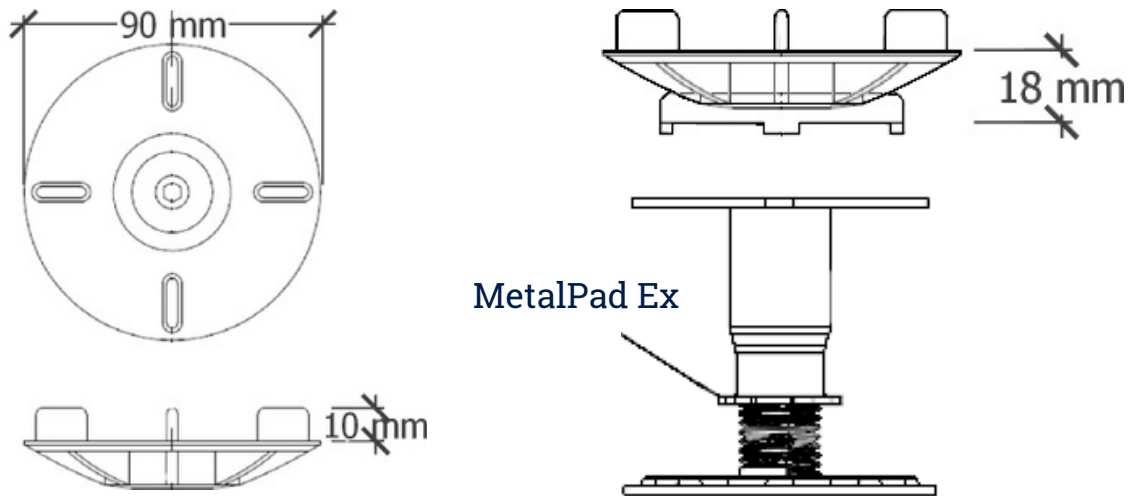
SP-MET-EX-P-252-Z



302-377mm

SP-MET-EX-P-302-Z

Self Levelling



44-53mm

SP-MET-EX-SL-044-Z



48-58mm

SP-MET-EX-SL-048-Z



58-68mm

SP-MET-EX-SL-058-Z



68-88mm

SP-MET-EX-SL-068-Z



78-108mm

SP-MET-EX-SL-078-Z



93-133mm

SP-MET-EX-SL-093-Z



128-203mm

SP-MET-EX-SL-128-Z



203-278mm

SP-MET-EX-SL-203-Z



268-343mm

SP-MET-EX-SL-268-Z



318-393mm

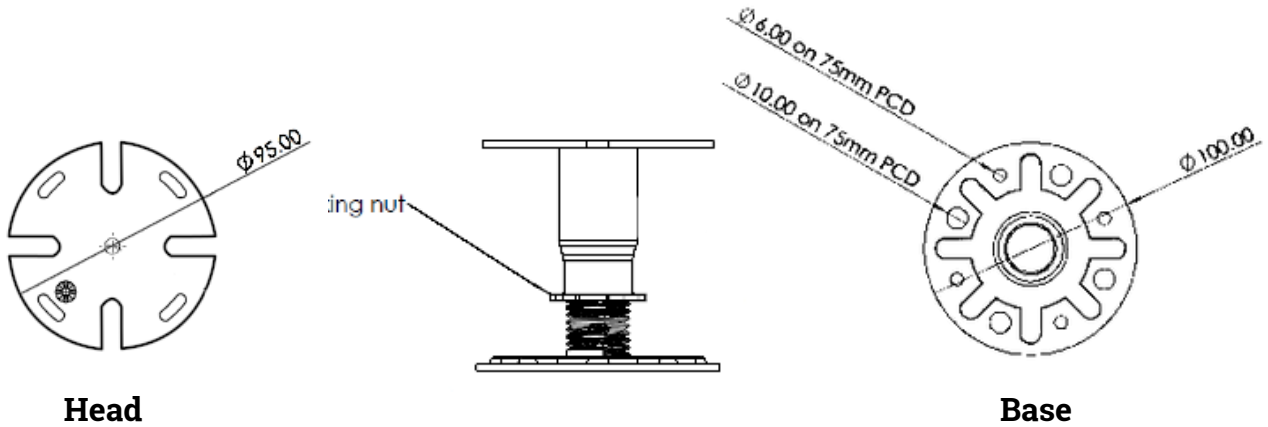
SP-MET-EX-SL-318-Z

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Flat Head



26-35mm
SP-MET-EX-026-Z



30-40mm
SP-MET-EX-030-Z



40-50mm
SP-MET-EX-040-Z



50-70mm
SP-MET-EX-050-Z



60-90mm
SP-MET-EX-060-Z



75-115mm
SP-MET-EX-075-Z



110-185mm
SP-MET-EX-110-Z



185-260mm
SP-MET-EX-185-Z

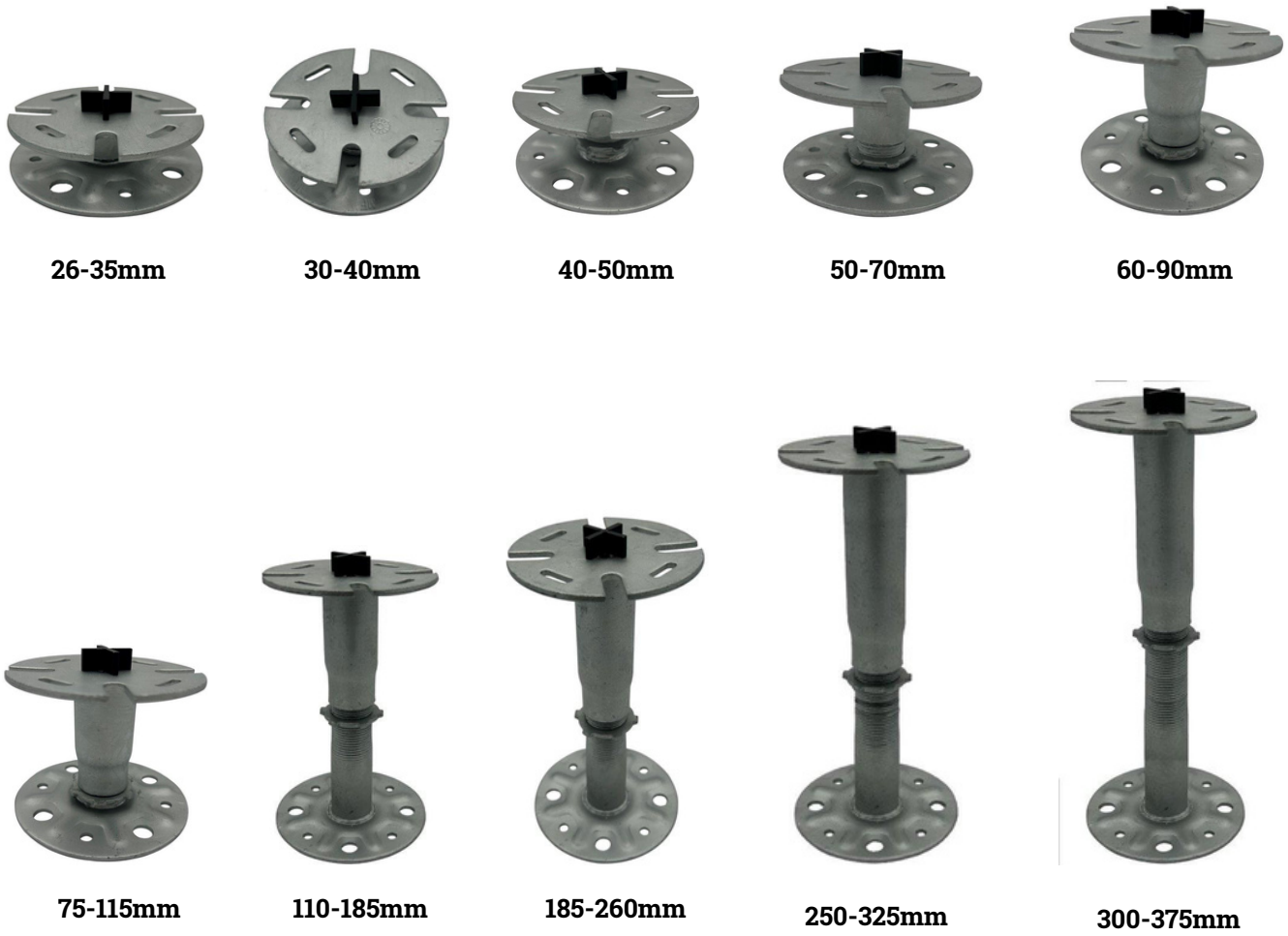
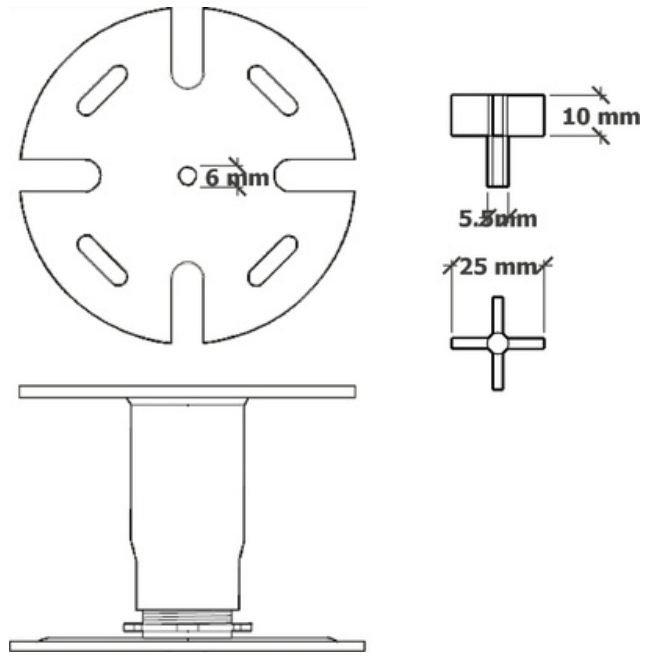


250-325mm
SP-MET-EX-250-Z



300-375mm
SP-MET-EX-300-Z

Crucifix for Paving





MetalPad Ex with Aluminium Joists / Rails

The MetalPad Ex is designed to work with all Wallbarn aluminium [Box](#) & [I-Plus](#) joists/ rails. These are connected together using the supplied Wing Nut Kit which is tightened by hand loosely at first. Once the substructure is correctly placed, they can be tightened firmly to create a strong and stable substructure.



Rail Headpiece

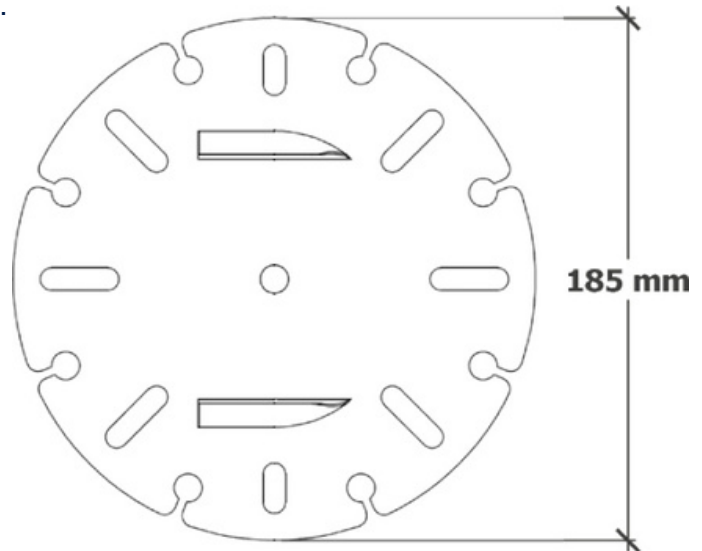
The [Rail Headpiece](#) can be used to accommodate any Box Rail Joist that has a maximum width of 60mm. The headpiece is secured to the [MetalPad Ex pedestal](#) and secured with a central screw. The headpiece is Made from High Grade Aluminium 6063 T6 to BS EN 755-9.



Spreader Plate

The Spreader Plate is designed to significantly disperse weight and reduce point loading on vulnerable subfloors such as insulation or waterproof membranes ([Go to Test Report](#)).

The Spreader Plate is compatible with the [MetalPad Ex Pedestal](#), [Class A Fixed Height Pedestal](#) & [Class A Joist Holder](#).





Product Installation

To be used on predominantly flat decks. Pedestals to be placed onto the structural decks, sufficiently strong enough to tolerate the weight of the system. Care should be taken to ensure point loading will not occur under baseplates. An optional Spreader Plate should be added beneath bases to increase surface area for membranes and heavy loads. Waterproofing membranes to be adequately protected before installation of units to prevent point loading and / or puncturing of membrane.

Pedestals are loose-laid without mechanical fixings or adhesive. Wallbarn Aluminium Profiled rails / joists are laid onto headpieces and fixed into place using Wing Nut/Bolt Kit through gap in the headpiece of the pedestal and the bottom of the chosen rail/joist.

Wallbarn [I-Plus](#) or [Box](#) aluminium rails should be used when installing decking and substructure terrace platform projects. Class A decking boards / plates are mechanically fixed to Aluminium rails / bearers with sufficient gap between decking to ensure adequate drainage.

Telescopic stems are twisted to alter the height of the pedestals so that the rails / joists and then upper decking boards are flat and level in height.

For paving applications paving headpieces can be fitted to tops of headpieces using a screw. "Crucifix" cross spacers / lugs, made from anodized aluminium, are an alternative option for paving applications. Speak to Wallbarn Technical Team for any questions you have about suitability.

It is vital that designers and installers check that the strength of either option of system does not exceed maximum pedestal placement. ([See STS UK - Span Test Report](#))

INSTALLATION ONTO CONCRETE SURFACE

Consult the [deflection tests](#) provided above when using our aluminium rails/joists in conjunction with our pedestals on a concrete subfloor. To ensure optimal performance, we recommend avoiding spans that result in a deflection greater than 5mm.



INSTALLATION ONTO WATERPROOFING MEMBRANE / INSULATION

When using our aluminium rails/joists with pedestals, please refer to the provided [load and weight tolerance tests](#) to determine the maximum recommended span for pedestal placement in each specific option.

When installing the system on a waterproof membrane, insulation, or vulnerable subfloors, it is essential to consult with the product manufacturer to ensure their product has the compressive strength to handle the desired spacing of our pedestals. In such cases, we highly recommend using the optional [Spreader Plate](#) with our Class A pedestals to help distribute the weight and reduce point loading. Using the Spreader Plate increases the weight tolerance of the pedestal significantly.

Maintenance Details

Products are designed to be covered and not disturbed in the long-term. Cavities between the structural deck and the decking should be inspected at least once per year to ensure drainage channels do not become blocked and flammable material does not collect. Jets of water should be used to remove limited amounts of debris, taking care not to block up or damage drainage outlets. For large or compacted debris build-up, removal of the decking boards and removing the debris by hand or machine may be required.

Hazards Identification

The major hazards identified for these products are physical and include manual handling. Sparks and shrapnel / fragments may be generated from cutting processes.

First Aid Measures

In event of cuts or injury, wash out wound with plenty of clean water. Seek medical attention. In event of bruising or impact damage from dropped products, Seek medical attention as soon as possible.

If any metal fragments, shrapnel or foreign body gets into eyes DO NOT TRY TO REMOVE IT FROM YOUR EYE YOURSELF. Go immediately to the First Aid Officer on site. Go to A&E / walk in clinic at a hospital as soon as possible for help.



CUTTING AND DRILLING

For cutting rails/joists to length, it is recommended to use premium blades specifically designed to cut metal. This helps minimise sparks and reduces the risk of damaging the extruded profile of each rail/joist. This is especially applicable when working on top of insulation and waterproofing membranes. Also note that damaged profiles may affect their ability to work seamlessly with our pedestals and/or headpieces. Fragments cut from the pedestals may be hot, so do not attempt to pick fragments up with bare hands and avoid any contact with surfaces such as waterproofing membranes.

When cutting aluminium, it's important to take certain precautions to ensure safety and achieve accurate cuts. Here are some precautions to consider:

1. Personal Protective Equipment (PPE) : Wear appropriate PPE, including safety glasses or goggles, gloves, and a dust mask or respirator to protect your eyes, hands, and respiratory system from metal shavings and dust.

2. Use the Right Tools : Ensure you have the correct tools for cutting aluminium, such as a mitre saw, circular saw, or a specialized aluminium-cutting saw blade. Using the proper tools will help achieve clean and precise cuts.

3. Secure the Workpiece : Securely clamp the aluminium workpiece to prevent it from moving or vibrating during the cutting process. This will ensure stability and reduce the risk of accidents or inaccurate cuts.

4. Cutting Speed and Pressure : Maintain a steady cutting speed and avoid applying excessive force or pressure. Let the cutting blade do the work and allow it to cut through the aluminium at a controlled pace. Applying too much pressure can lead to rough cuts or blade damage.

5. Clear the Work Area : Prior to cutting any metal, it is important to clear the work area of clutter and unnecessary materials. When metal is being cut, sparks can be generated, so it is crucial to have a clean area free of debris to ensure fire safety. By removing any potential obstructions or hazards, you can create a safer environment during the cutting process.

6. Proper Waste Disposal : Collect and dispose of the aluminium shavings and waste material safely and appropriately. Aluminium shavings can be sharp and therefore has the potential to damage waterproofing membrane and/or insulation.

Always follow the manufacturer's guidelines and safety recommendations specific to the tools and equipment you are using. Additionally, consult local regulations and best practices for safe handling and disposal of aluminium waste.



Fire-Fighting Measures

These products are Class A and non-combustible. Therefore, they do not constitute a fire hazard.

Accidental Release Measures

Damaged product can be taken up and the steel should be recycled. 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.

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

Recycling of the steel material is preferable to disposal. If the product is to be disposed of, disposal should be made at an approved solid waste disposal site. Disposal of the product should be in accordance with any local or national regulations.



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

Web: www.wallbarn.com

APPENDIX A

The following table summarizes the products referenced in this document:

Product	URL
MetalPad Ex Pedestal	https://www.wallbarn.com/fire-rated/metalpad-ex/
Headpieces & Fixings	https://www.wallbarn.com/fire-rated/headpieces-fixings/our-range/
Spreader Plate	https://www.wallbarn.com/fire-rated/headpieces-fixings/spreader-plate/
Aluminium I-Plus Joist/Rail	https://www.wallbarn.com/substructure/i-plus-beam/
Aluminium Box Joist/Rail	https://www.wallbarn.com/substructure/box-rail/

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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 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 D:

TEST CERTIFICATE
LOAD TESTING IN ACCORDANCE WITH
BS 8579:2020



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 various aluminium rails fitted to steel pedestals, increasing in 100mm spans from the centre of the rail. Testing was completed using a jack to apply a vertical compressive load centre to the product, to confirm structural performance. Loading results obtained were recorded at the limit of 5mm deflection. All testing was carried out in accordance with the client's specification.

REF NO.: DR-5744 DATE TESTED: 15th May 2024
JOB NO.: P10259 CERTIFICATE DATE: 24th May 2024
CERTIFICATE NO.: IC11716 SUPPLIER/SOURCE: Client

TEST DETAILS:
Product Tested: Aluminium Rail with Steel Pedestal Item Condition: New
Target Loads: 5mm Deflection Ambient Temperature: 18°C
Test Location: STS Laboratory Procedure or Method: BS 8527:2020

TEST RESULTS:

Table with 13 columns: Test Product, 100mm from Centre, 200mm from Centre, 300mm from Centre, 400mm from Centre, 500mm from Centre, 600mm from Centre, 700mm from Centre, 800mm from Centre, 900mm from Centre, 1000mm from Centre, 1100mm from Centre, 1200mm from Centre. Rows include 15mm Rail, 20mm Rail, 50mm Rail, 75mm Rail, and 100mm Rail.

ANALYSIS:

Testing was completed with each individual rail obtaining various loads before reaching 5mm deflection. The 15mm & 20mm rail reached a 400mm span before the maximum deflection was obtained, with the 100mm rail reaching a span of 1200mm from the centre, before obtaining maximum permissible deflection. All testing was completed within the BS 8572:2020.

Table with 3 columns: For Specialist Technical Services (U.K) Limited, Signature (Andrew Gore), and The results found on this Certificate relate only to the product(s) tested as described above. This Test Certificate shall not be reproduced except in full. QC: TC001 – Test Certificate – v4.0 | Page 1 of 1

END OF PAGE

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T: +44 (0) 1244 794 104 F: +44 (0) 1244 794 204
E: Info@sts-group.co.uk

Offices Located at: Chester | Ellesmere Port
Website: https://www.sts-group.co.uk



Zintek® 200 XT

Zinc flake coatings from Atotech



General Metal Finishing

Zinc flake coatings

atotech.com



The neXT level base coat

Premium silver base coat with high cathodic corrosion resistance

For a premium silver zinc flake base coat that maintains a shiny, bright, and attractive silver color, turn to MKS' Atotech Zintek® 200 XT. The base coat provides superb adhesion and is not prone to hydrogen embrittlement. When combined with MKS Atotech top coats, Zintek® 200 XT offers outstanding cathodic corrosion protection and staves off white rust formation. The base coat also demonstrates exceptional performance in Neutral Salt Spray Testing (NSST) as well as in Cyclic Corrosion Testing (CCT).

Corrosion resistance

Base coat	Top coat	Durability
8 µm	-	>1,700 h*
8 µm	-	6 cycles**
10 µm	-	>2,000 h*

Corrosion resistance acc. to *ISO 9227 / **Ford L-467 and layer thickness may vary depending on part geometry, substrate and application method.

Features and benefits

- Inorganic premium silver zinc flake base coat
- Outstanding cathodic corrosion protection
- Exceptional performance in NSST and Cyclic Corrosion Testing (CCT)
- Excellent delay in white rust formation
- High color stability
- Very good adhesion
- Attractive silver appearance
- No hydrogen embrittlement
- Free of harmful heavy metals such as Cr(VI), cadmium, cobalt, lead or nickel
- Combinable with MKS' Atotech top coats

Zintek® 200 XT

Zinc flake coatings from Atotech

Application

- Dip-spin
- Rack-spin
- Spray

Parts (application)

- Fasteners
- Chassis parts
- Stamping parts
- Brake components
- Springs
- Clips

Coefficient of friction

- No defined coefficient of friction (μ_{tot})

Corrosion performance (8 μm layer thickness)



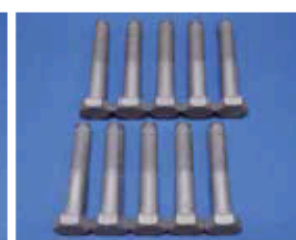
Start



>1,800 h*



Start



6 cycles**

Top coat combinations

- With inorganic Zintek® Top
- With organic Techseal®
- With organic Techdip®

Application parameters

- Application viscosity: 40 – 50 sec
- Curing time: 15 – 45 min
- Curing temperature: 220 – 260 °C
- Recommended 30 min at 250 °C object temperature

Technical data

- Delivery density: 1.40 – 1.55 g/cm³ (at 23 °C)
- Stability in sealed drums: 24 months
- Theoretical coverage rate: 25 m²/kg (based on 8 μm dry film)

