



# Operations & Maintenance Manual

## ExaDeck Porcelain Decking System



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

IMS.T.968.v2

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## Product Description

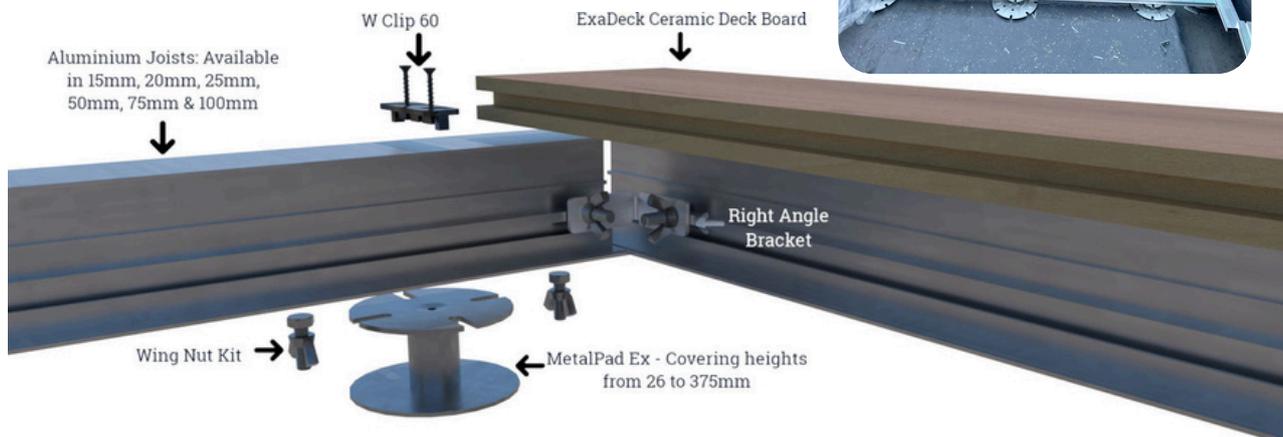
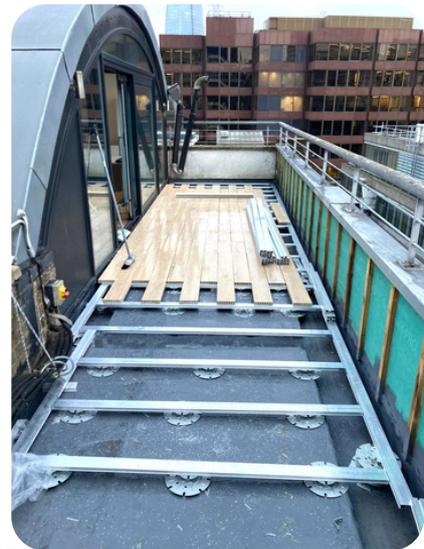
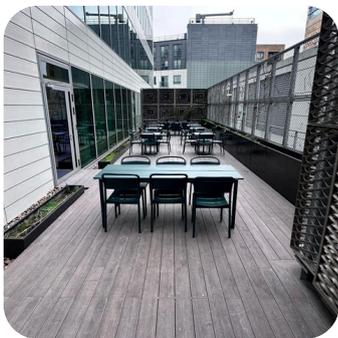
Exadeck is an innovative decking system exclusively manufactured from extruded porcelain boards. Exadeck offers exceptional suitability for outdoor environments, particularly in scenarios where traditional materials like wood, resin, or plastic are susceptible to moisture-related challenges, a common issue in raised access floor applications. What distinguishes ExaDeck is its robust porcelain composition, engineered for enduring outdoor conditions. It is also particularly suitable for high wind location - [See Test Report](#)

The ExaDeck Class A rated Decking system encompasses high mechanical strength, impressive breaking capacity, and substantial resistance to abrasion, making it an optimal choice for areas with heavy foot traffic. The system's Class A fire-resistant properties ensure safety and performance.

Beyond fire resistance, Exadeck exhibits resilience to frost and ice due to its minimal water absorption characteristics. Its ability to withstand temperature variations safeguards against expansion-induced deformities.

Hygiene and safety are two key priorities in UK Construction. Key properties include an easy-to-clean surface, barefoot friendly and almost zero water absorption.

## The Complete System



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## Technical Data - ExaDeck Board

**BOARD DIMENSIONS : 26mm (H) x 141mm (D) x 1,217mm (L)**

DESCRIPTION	TEST	STANDARD	RESULTS
Length & Width Thickness Straightness of sides Rectangularity Surface Flatness	ISO 10545-2 ISO 10545-2 ISO 10545-2 ISO 10545-2 ISO 10545-2w	$\pm 1,0\%$ $\pm 2,0\text{mm}$ $\pm 10\%$ $\pm 0,5\%$ $\pm 1,0\%$ $\pm 0,5\%$	$\pm 0,6\%$ $\pm 2 \text{ mm}$ $\pm 5\%$ $\pm 1,2 \text{ mm}$ $\pm 0,5\%$ $\pm 2 \text{ mm}$ $\pm 0,5\%$ $\pm 0,5\%$
Fire Resistance	A1-A2	Class A1-A2	Class A1fl
Water absorption	ISO 10545-3	$\leq 0,5 \%$	$\leq 0,5 \%$
Breaking strength	ISO 10545-4	$\geq 3000 \text{ N}$	$\geq 15.000 \text{ N}$
Resistance to thermal shock	ISO 10545-9	Required	Guaranteed
Crazing Resistance	ISO 10545-11	Required	Guaranteed
Frost Resistance	ISO 10545-12	Required	Guaranteed
Chemical Resistance	ISO 10545-13	Minimum B	A/LA/HA
Stain Resistance	ISO 10545-14	Minimum Class 3	Class 5
Anti-slip Resistance (barefoot)	DIN 51097	-	C Group
Anti-slip Resistance (ramp)	DIN51130	-	R11

## Technical Data (cont'd)

DESCRIPTION	TEST	STANDARD	RESULTS
Slip Resistance (pendulum)	UNE-41901 EX	Required (C.T.E)	Anti-slip Class 3
Minimal value of static load	EN 12825	-	Class 2
Maximum value of deflection for ultimate load 6KN	EN 12825	-	Class A
WEIGHT			
8.52Kgs per Board		49Kgs per sqm	

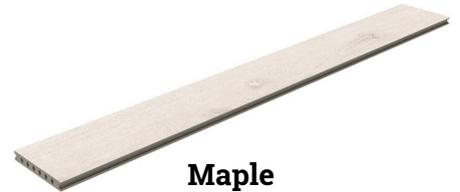
## Colours



**Natural**



**Antico**



**Maple**



**Grey**

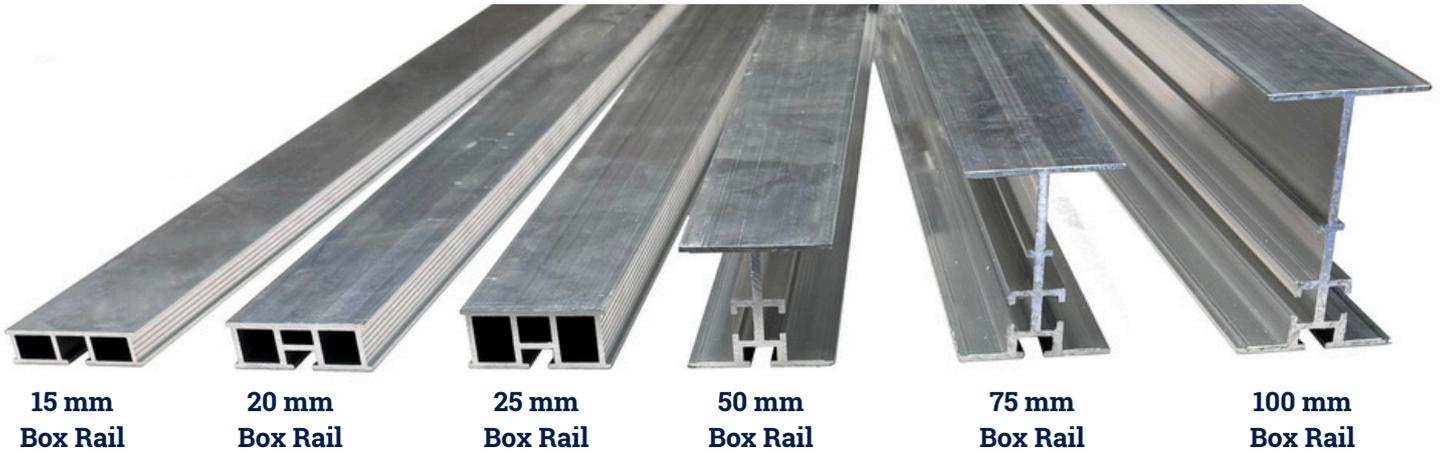


**Oak**

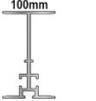


**Teca**

## Aluminium Box Rails & I-Plus Joists



### Physical & Chemical Properties

	15mm Box Rail	20mm Box Rail	25mm Box Rail	50mm I-Plus Beam	75mm I-Plus Beam	100mm I-Plus Beam
Profile						
Material	<b>ALUMINIUM 6063 T6</b>					
Fire Classification	<b>Class A1 BS EN 13501-1 2018</b>					
Weight	0.90kg/m	0.99kg/m	1.99kg/m	1.61kg/m	1.92kg/m	2.19kg/m
Height	15mm	20mm	25mm	50mm	75mm	100mm
Length	2,400mm	2,400mm	2,400mm	3,600mm	3,600mm	3,600mm



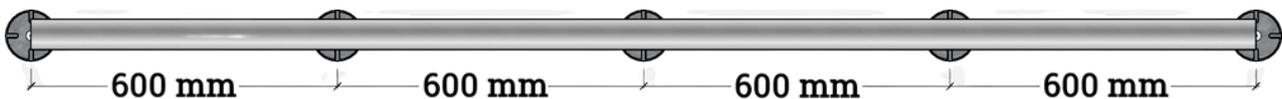
## Recommended Pedestal Placement - Box Rail

Wallbarn Aluminium Box Rails/Joists are designed to achieve large spans despite their minimal height and lightweight. These products were independently tested for weight tolerance by Specialist Technical Services (U.K) Limited ([STS- Group](#)). See the Test Certificate : [Appendix E](#)

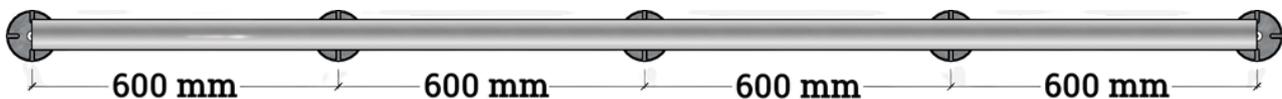
The testing was conducted in accordance with BS 8579:2020, using the test standard method BS 8527:2020, targeting a load resulting in a 5mm deflection. The recommended spacings provided ensure even distribution of the pedestals along the chosen rail, effectively distributing the weight and reducing point loading.

Rail/Joist Height	Recommended maximum distance between pedestals	STS UK Test - Maximum distance between pedestals
15mm	600mm	600mm
20mm	600mm	600mm
25mm	800mm	800mm

### 15mm Box Rail/Joist



### 20mm Box Rail/Joist



### 25mm Box Rail/Joist





## Load Testing - Box Rail

Wallbarn Aluminium Box Rails/Joists have been independently tested by Specialist Technical Services (U.K) Limited to determine destructive load possible. 2 metre lengths of each rail were clamped on each end and a vertical compressive load was applied to the centre. ([See Test : Appendix F](#)).

Starting with a 1.05kN force (approximately 107Kg), the rails bent to over 64mm without breaking. It was observed by the tester, that not only did the rails not break under this force but also regained their original shape after test had finished.

Test Product	STS UK Test - Load Obtained (kN)	STS UK Test - Maximum Displacement (mm)
15mm	1.05 (Approx. 107Kg)	68.77
20mm	1.06 (Approx. 108Kg)	65.87
25mm	1.58 (Approx. 161Kg)	64.63

\*\* 1 Kilonewton (kN) is equal to 101.9716213 kilograms



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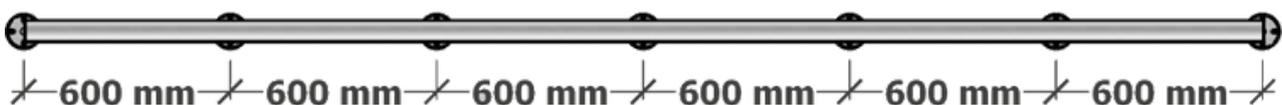
## Recommended Pedestal Placement - I-Plus Rail

Wallbarn Aluminium I-Plus Rails/Joists are capable of longer spans. These products were independently tested for weight tolerance by testing organisation, Specialist Technical Services (U.K) Limited. ([See Test : Appendix E](#))

The testing was conducted in accordance with BS 8579:2020, using the test standard method BS 8527:2020, targeting a load resulting in a 5mm deflection. The recommended spacings provided ensure even distribution of the pedestals along the chosen rail, effectively distributing the weight and reducing point loading.

Rail/Joist Height	Recommended maximum distance between pedestals	STS UK Test - Maximum distance between pedestals
50mm	600mm	600mm
75mm	1,200mm	1,200mm
100mm	1,800mm	2,200mm

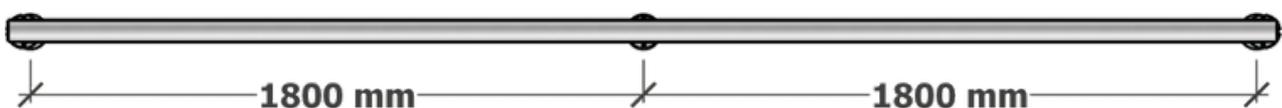
### 50mm Box Rail/Joist



### 75mm Box Rail/Joist



### 100mm Box Rail/Joist





## Load Testing - I-Plus Rail

Wallbarn Aluminium I-Plus Rails/Joists have been independently tested by Specialist Technical Services (U.K) Limited to determine destructive load possible. 2 metre lengths of each rail were clamped on each end and a vertical compressive load was applied to the centre. ([See Test : Appendix F](#))

The table below displays the force applied and the corresponding deflection achieved prior to failure.

Test Product	STS UK Test - Load Obtained (kN)	STS UK Test - Maximum Displacement (mm)
50mm	4.08 (Approx. 415Kg)	44.96
75mm	6.58 (Approx. 670Kg)	32.65
100mm	8.10 (Approx. 825Kg)	27.86

\*\* 1 Kilonewton (kN) is equal to 101.9716213 kilograms



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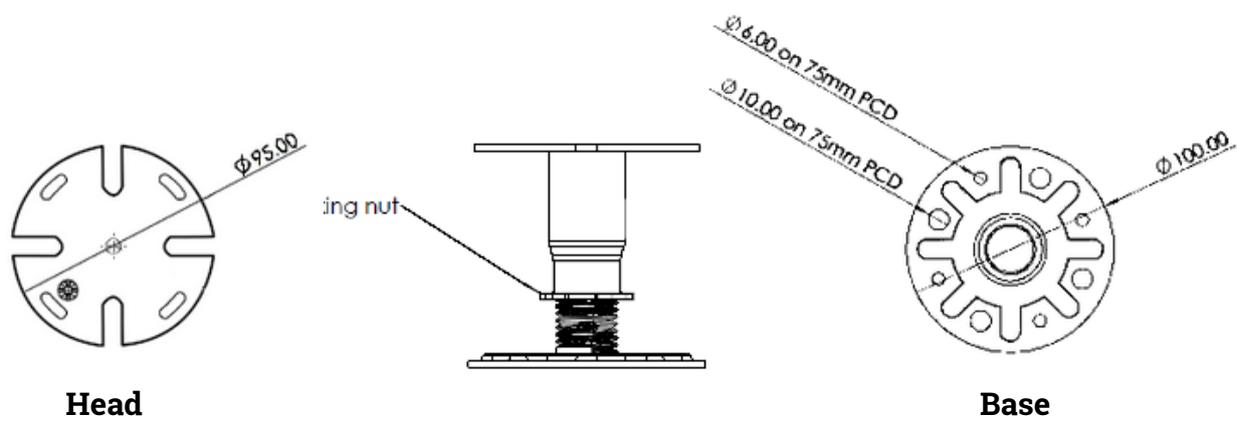
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## MetalPad Ex Pedestal

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 when used as part of the ExaDeck System.

- 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](#))



## Height Range



Wallbarn Ltd

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## MetalPad Ex Pedestal - Physical & Chemical Properties

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

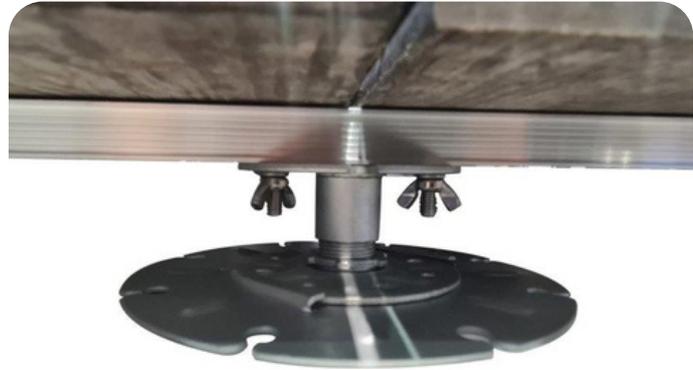
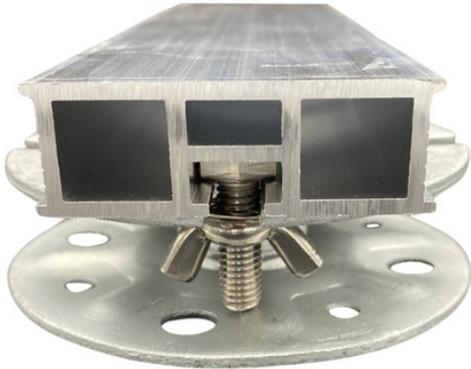
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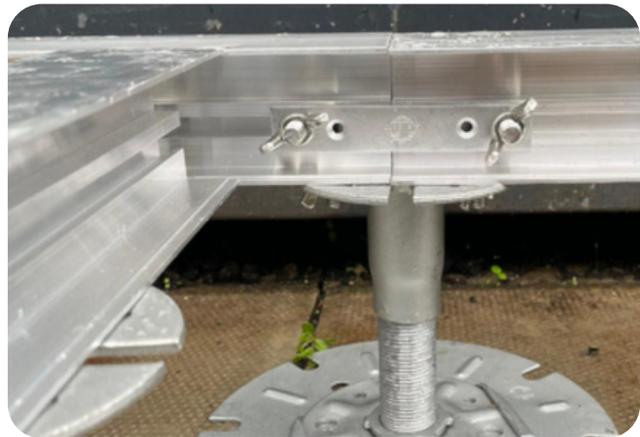
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## Wing Nut Kit

Constructed from stainless steel, the M8 Wing Nut Kit meets Class A fire rating requirements. It is designed for use with the [MetalPad Ex](#) pedestal and securely attaches any Wallbarn aluminium joists to the pedestal's head.

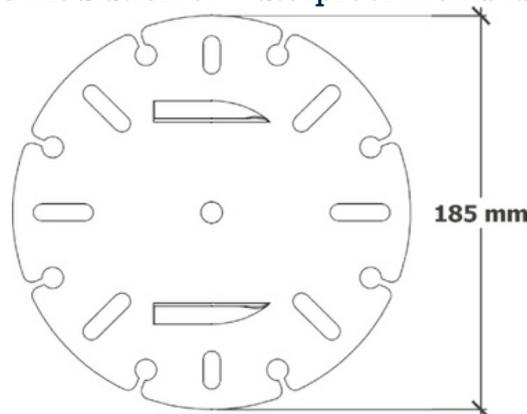


The Wing Nut Kit also facilitates the connection of stainless steel brackets to the [I-Plus Rails](#), whether they're joined end-to-end or at right angles.

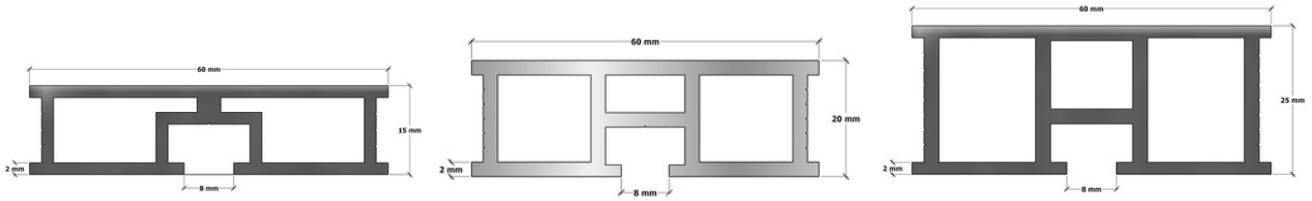


## Optional Spreader Plate

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](#)).



## Brackets/Connections for Aluminium Box Rail



The Box Rail can be secured end to end or at right angles using brackets & screws supplied by Wallbarn.

**Straight Bracket with Stainless Steel Screw**

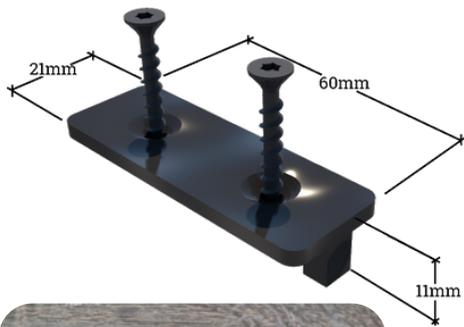


**Right Angle Bracket with Stainless Steel Screw**



## W Clip for Fire Rated Decking

The W Clip is made from Aluminium which is powder coated and meets Class A rating. The W Clip also comes with the screws as part of the fixing.



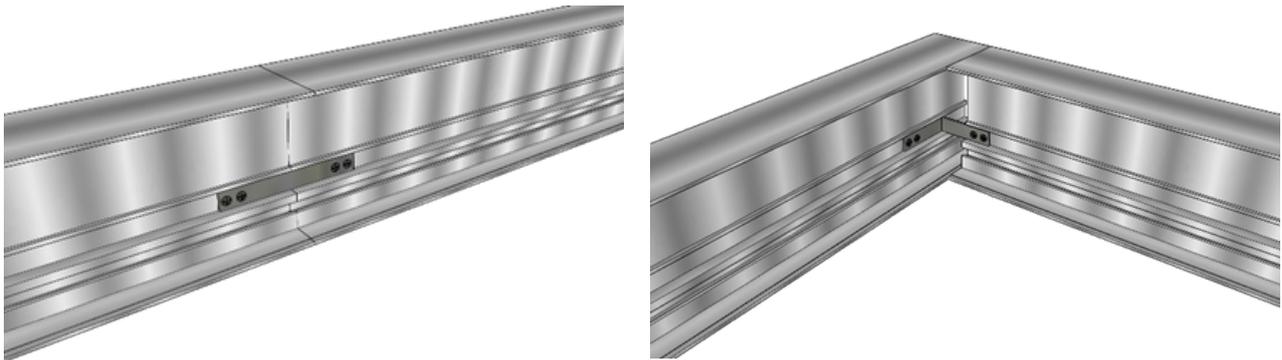


## **Brackets/Connections for Aluminium I-Plus Rail**

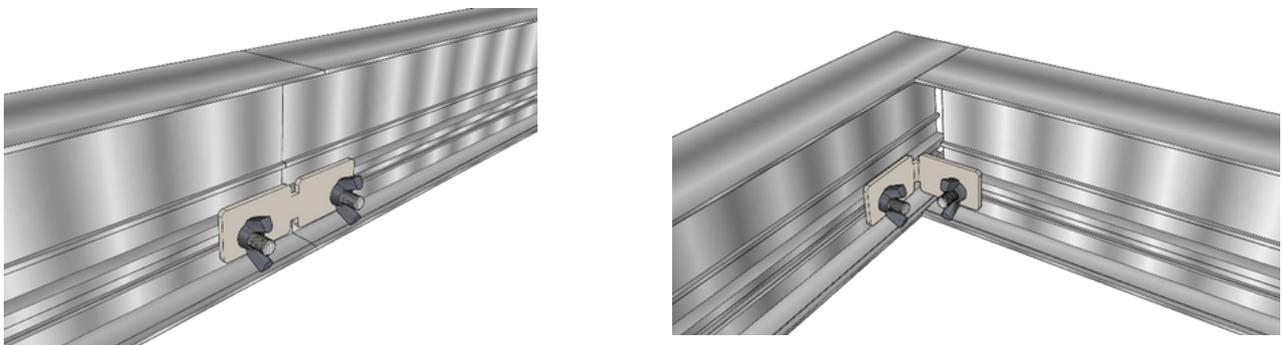
I-Plus Rails/Joists can be secured end to end or at right angles. There are two options to achieve this. The first method involves using a self-tapping screw for a secure mechanical fixing. The straight and right-angle fixing brackets come with two counter-sunk holes, allowing you to easily attach them using the self-tapping screw.

The alternative fixing method utilizes our Wing Nut/Bolt Kit for hand-tied fixing. To implement this method, slide the bolt head into the side or bottom profile of the I-Plus beam, then simply fit the wing nut around the bracket by hand. The advantage of this approach is that it allows you to initially secure the framework loosely, giving you the flexibility to readjust and achieve precise alignment. Once the exact alignment is achieved, tighten the wing nuts to securely fasten the substructure in place. This way, you can ensure a well-fitted and stable construction.

### **Straight & Right Angle Bracket – Screw Fixing**



### **M8 Straight & Right Angle Bracket with Wingnut Kit**





## CUTTING AND DRILLING

For cutting metal components of the system, it is recommended to use premium blades specifically designed to cut metal. This helps minimize 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. When cutting the ExaDeck porcelain boards there is a 30mm diamond blade available from Wallbarn that cuts clean and straight lines, minimising wastage and damage of the board.

When cutting any material, 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 or porcelain, such as a mitre saw, circular saw, diamond blade 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.



## **PRODUCT PERFORMANCE**

Wallbarn's complete Class A ExaDeck System, if well maintained, is extremely long lasting with a product performance Limited Warranty of 15 years and expected lifespan of up to 50 years. With care and attention, the system can look and perform for many years beyond the warranty period. Please refer to the Limited Warranty details and conditions later in this manual.

The ExaDeck System is designed to maintain its shape and structural integrity when installed correctly as per the installation guide. To ensure optimal performance and to take full advantage of the warranty, we highly recommend using the complete system with all the individual components, supplied by Wallbarn as laid out in this manual. The components have been designed to work together whilst still having enough flexibility to overcome common obstacles encountered on site and at the time of installation.

## **MAINTENANCE DETAILS**

The system has a relatively low maintenance requirement. In terms of its direct upkeep, there is not much that needs to be done. However, one critical aspect to consider is the proper functioning of the drainage system on the sub-deck where the rails/joists are installed.

It is important to ensure that the area where the rails/joists are placed does not accumulate standing water. If water pools or collects around the rails/joists, it can lead to various issues. Standing water can potentially cause damage to the materials over time, such as rust or corrosion in the case of metallic components. It can also affect the stability and integrity of the overall structure.

To prevent such problems, regular checks and maintenance of the drainage system are necessary. This involves ensuring that the drainage channels or outlets are clear and unobstructed, allowing water to flow away efficiently. Clearing any debris or blockages from the drainage system will help to maintain proper water flow and prevent water from pooling around the pedestals.

By prioritizing the maintenance of drainage in the area where the system is installed, you can help ensure the longevity and optimal performance of the system. This proactive approach will minimize the risk of damage or deterioration caused by excessive water exposure and promote a healthier and more stable environment for the system.



## **HAZARDS IDENTIFICATION**

The major hazards associated with these products are primarily physical, with a focus on manual handling. It is important to note that sparks can be generated during cutting processes.

When working with aluminium, it is recommended to use high-quality saws and drills to minimize the production of particles and sparks. Even though aluminium is relatively easy to cut, using appropriate tools will help reduce the risk of sparks. To ensure safety, it is essential to wear proper protective clothing and equipment when handling and cutting aluminium.

This includes full coverage eye protection, which is particularly important. By utilizing the appropriate safety gear, you can mitigate the potential risks associated with handling and cutting aluminium.

## **FIRST-AID MEASURES**

In case of cuts, it is important to thoroughly wash the wound with ample clean water. Afterward, it is advisable to seek immediate medical attention. Tetanus is a potential concern when working with metal, so prompt medical evaluation is crucial.

If you experience skin, eye, or respiratory irritation, it is important to seek medical attention as soon as possible. This is especially necessary if you are experiencing any eye irritation.

Prompt medical evaluation will help address any potential issues and ensure appropriate treatment for the symptoms you are experiencing.

## **FIRE-FIGHTING MEASURES**

The ExaDeck system achieves fire resistance Class A1 according to standard BS EN 3501-01 : 2018, so it poses no fire risk. Therefore, it can be easily installed in public areas and does not constitute a fire hazard. Use extinguishing media appropriate to the surrounding fire conditions.

**HAZARD** As supplied, the products are not classified as hazardous.



## **HANDLING AND STORAGE**

When handling the different components of this system, it is essential to consider the risks outlined in the Manual Handling Operations Regulations 1992, and appropriate personal protective equipment (PPE) should be used. The system will be delivered secured onto pallets, and it is important to utilize suitable lifting equipment such as forklifts and cranes, operated by qualified personnel when moving the pallets.

To ensure safe storage, all components should be stored in a stable manner. It is recommended to store them as they were delivered (on Pallets) and placed in secure area.

During the cutting process, it is crucial to implement measures to control metal particles and ensure proper ventilation. Additionally, always wear appropriate respiratory and full covered eye protection to safeguard against potential hazards.

## **DISPOSAL CONSIDERATIONS**

Recycling the system at the end of their life cycle is strongly recommended. Aluminium and Steel is a highly recyclable material, and recycling helps conserve resources and reduce environmental impact. By recycling all components, the material can be processed and used to create new products.

When it comes to the disposal of the system, it can be taken to an approved solid waste disposal site. These sites are equipped to handle various types of waste materials, including metals.

It is important to note that the disposal process should adhere to local or national regulations. Different regions may have specific guidelines and requirements for the disposal of certain materials. These regulations are in place to protect the environment and human health.

To ensure compliance, it is recommended to consult the relevant local or national authorities or waste management agencies for specific guidance on the proper disposal of aluminium rails. They can provide information on designated disposal facilities, recycling programs, or any special instructions that need to be followed.

By following the appropriate local or national regulations for disposal, you can contribute to responsible waste management and help minimize the environmental impact.

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## **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).

The lifespan of the Class A ExaDeck System is expected to be up to 50 Years. The Limited Warranty covers all the components on condition that the Installation and Care & Maintenance Instructions are followed, and the system is 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 system in the place of installation, the manner they have been installed and obtain details of the care and maintenance programme carried out before giving consideration to the complaint / claim.

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

1.8 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 Products "ExaDeck System" exists only where the Products have been installed in the correct and proper manner.



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

Each component 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 component prior to installation. This Limited Warranty does not extend to cover defects in components 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 components 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 – Exadeck System 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 components 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.

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

## APPENDIX A:

The following table summarizes the documents and URLs referenced in this document:

Document Name	Location
ExaDeck System	<a href="https://www.wallbarn.com/non-combustible-decking/porcelain-decking/">https://www.wallbarn.com/non-combustible-decking/porcelain-decking/</a>
MetalPad Ex Pedestal	<a href="https://www.wallbarn.com/fire-rated/metalpad-ex/">https://www.wallbarn.com/fire-rated/metalpad-ex/</a>
Class A Substructure	<a href="https://www.wallbarn.com/substructure/class-a1-rail-substructure-system/">https://www.wallbarn.com/substructure/class-a1-rail-substructure-system/</a>
Aluminium Box Joist/Rail	<a href="https://www.wallbarn.com/substructure/box-rail/">https://www.wallbarn.com/substructure/box-rail/</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>
W Clip Hidden Deck Fixing	<a href="https://www.wallbarn.com/decking-clips-fittings/wing-clip-60/">https://www.wallbarn.com/decking-clips-fittings/wing-clip-60/</a>
Spreader Plate	<a href="https://www.wallbarn.com/fire-rated/headpieces-fixings/spreader-plate/">https://www.wallbarn.com/fire-rated/headpieces-fixings/spreader-plate/</a>



## 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 D:

**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 various 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.:	IC11714	SUPPLIER/SOURCE:	Client

<b>TEST DETAILS:</b>			
Product Tested:	Various Pedestal Samples (See table Below)	Item Condition:	New
Target Loads:	Failure	Ambient Temperature:	18°C
Test Location:	STS Laboratory	Procedure or Method:	Client's Specification

**TEST RESULTS:**

Test Product	Product Material	Load Achieved (kN)
26 – 35mm Pedestal	Steel	53.67
185 – 260mm Pedestal	Steel	49.86
26 – 35mm Pedestal with Spreader Plate	Steel	70.69
185 – 260mm Pedestal with Spreader Plate	Steel	129.53
10mm Fixed Height Pad	Aluminium	209.24

**ANALYSIS:**

Testing was completed with each individual pedestal obtaining failure loads. Following this, the highest load achieved at failure was the 10mm Fixed Height Pad, achieving a load of 209.24kN before failure. The 185 – 260mm Pedestal obtained the lowest load achieved, with 49.86kN before the product began to deform. All testing was completed within the client's specification.

For Specialist Technical Services (U.K) Limited			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
Approved By:	Andrew Gore		
Position:	Technical Director		
Signature:			

END OF PAGE

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E: info@sts-group.co.uk

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



APPENDIX E:

**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 various aluminium rails to determine the destructive load obtainable. 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.:	IC11717	SUPPLIER/SOURCE:	Client

<b>TEST DETAILS:</b>			
Product Tested:	Aluminium Rail	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 Obtained (kN)	Maximum Displacement (mm)
15mm Rail	1.05	68.77
20mm Rail	1.06	65.87
25mm Rail	1.58	64.63
50mm Rail	4.08	44.96
75mm Rail	6.58	32.65
100mm Rail	8.10	27.86

**ANALYSIS:**

Testing was completed with each individual rail obtaining various loads before reaching failure. The 15mm rail obtained the lowest load (1.05kN) along with the highest displacement (68.77mm), with the 100mm obtaining the highest loading (8.10kN) along with the lowest recorded displacement (27.86mm). All testing was completed within the client's specification.

For Specialist Technical Services (U.K) Limited			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
Approved By:	Andrew Gore		
Position:	Technical Director		
Signature:			

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Offices Located at: Chester | Ellesmere Port

Website: <https://www.sts-group.co.uk>



APPENDIX F:

# 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.

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

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

**TEST RESULTS:**

Test Product	Load Achieved (kN)											
	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
15mm Rail	2.04	2.08	2.01	1.13								
20mm Rail	2.02		2.03	1.98								
50mm Rail			2.10	1.54	1.43	1.40	1.28					
75mm Rail			2.26	2.03	2.01	1.97	1.90	1.88	1.78	1.28		
100mm Rail			2.02	2.05	2.05	2.05	2.05	2.02	2.00	2.05	2.02	1.90

**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.

<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>			

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