Technical Datasheet

MetalPad Ex Class A Pedestal

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)
- Independently Fire Tested by Warrington Fire to meet Class A fire rating. (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.

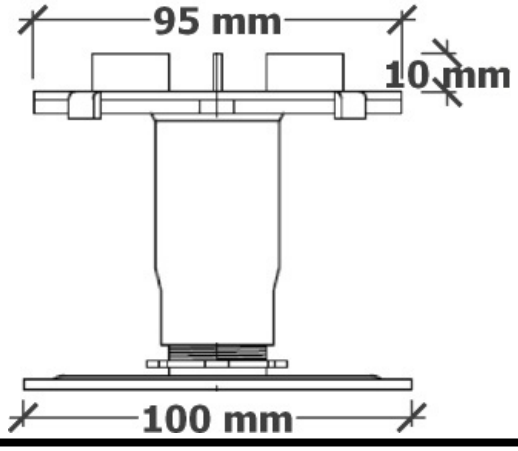
The MetalPad Ex has been designed to work with a number of accessories, headpieces and Wallbarn Aluminium Joists/Rails to create substructure for paving or decking projects that need to meet the latest rules related to Class A specified projects.

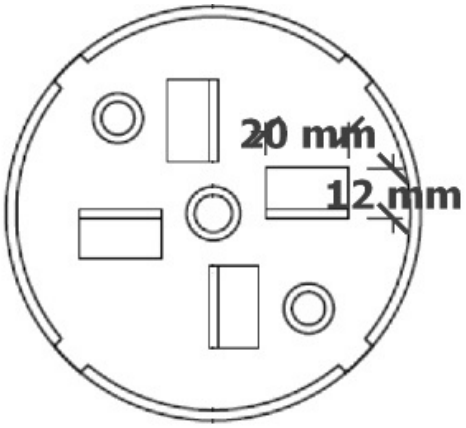
PHYSICAL AND CHEMICAL PROPERTIES

MATERIAL	**Mild Steel**	**EN 10152**
PEDESTAL COATING	**Zintec 200 corrosion protection coating**	
THREADED STEM	**Mild Steel Class 4:8**	
FIRE CLASSIFICATION	**Class A - 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**	

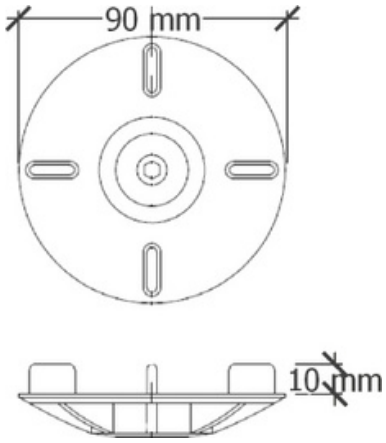
Accessories & Headpiece

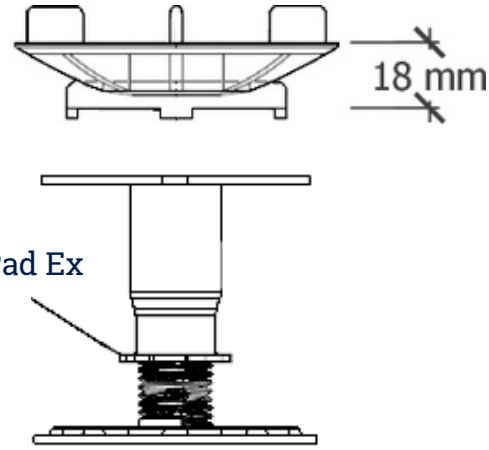
Paving Headpiece



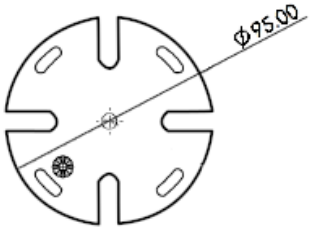


Self Levelling

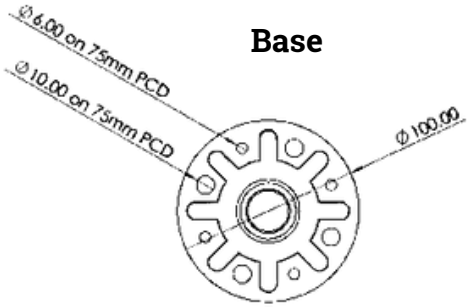




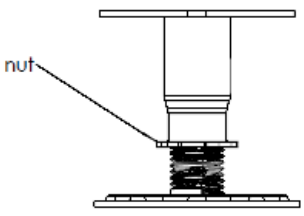
Flat Head



Head



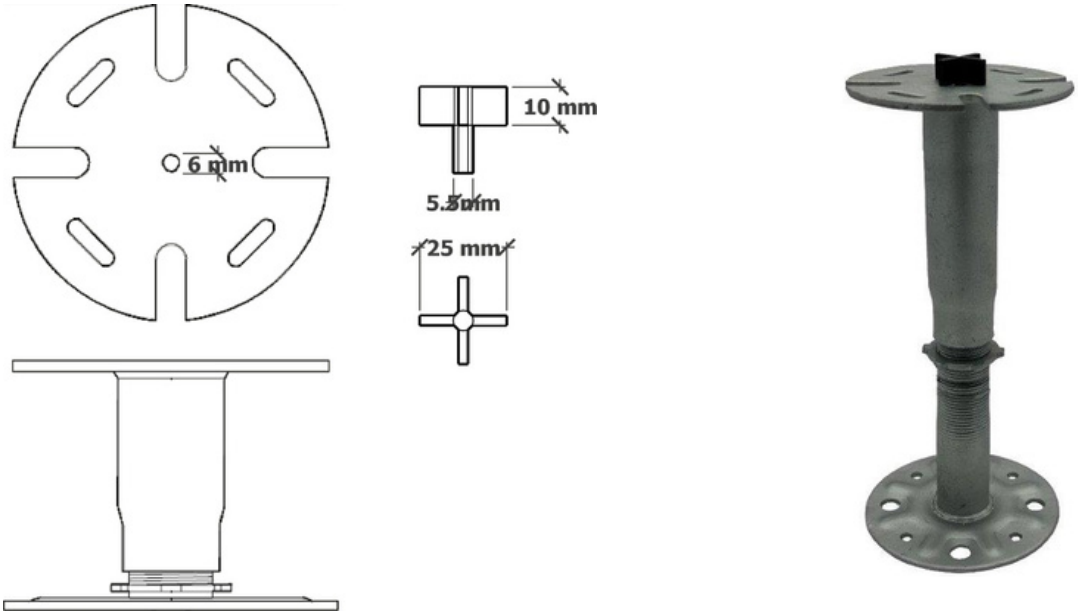
Base



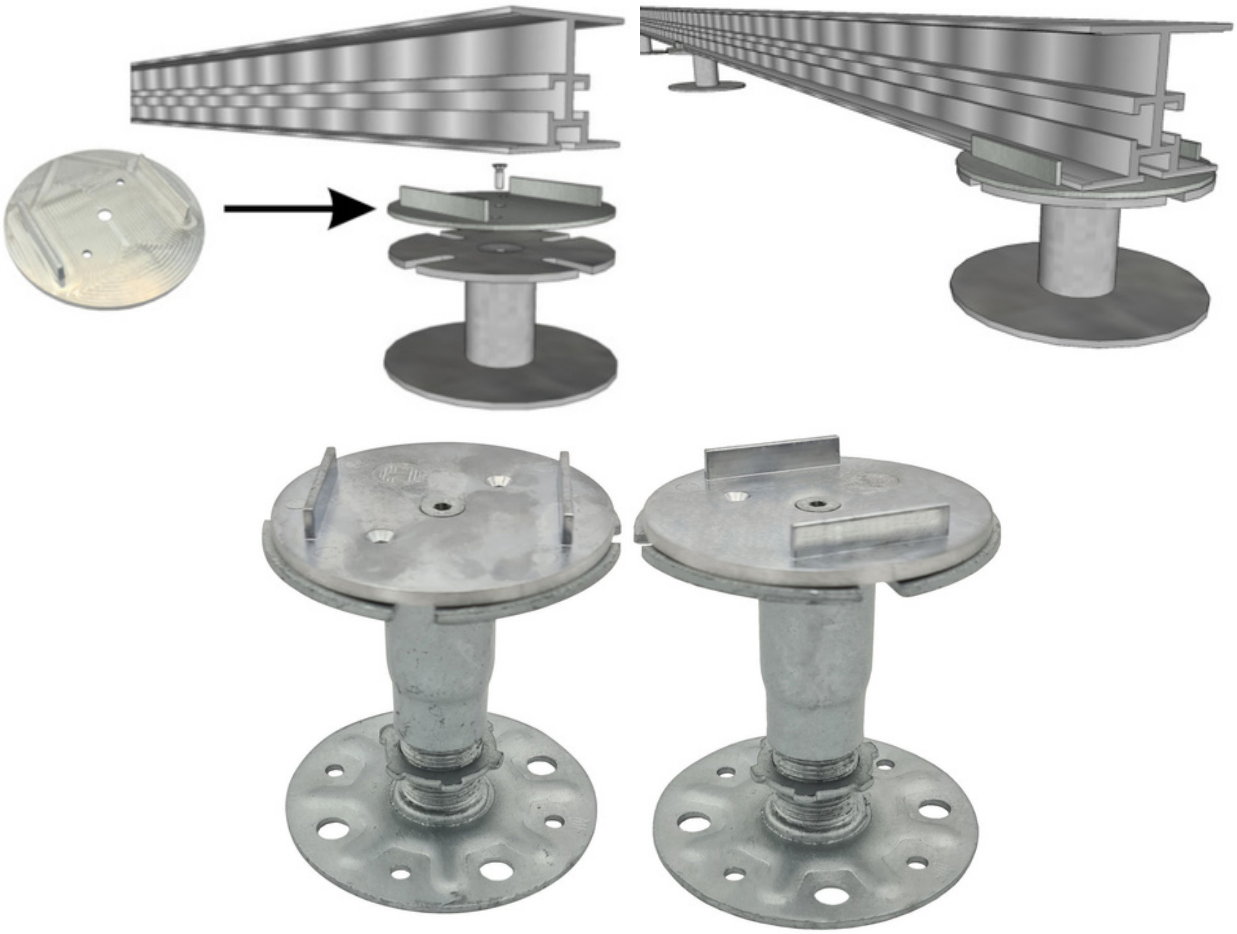
Wallbarn Ltd
Unit 16 Capital Business Centre
22 Carlton Road, South Croydon. CR2 0BS

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

Crucifix for Paving



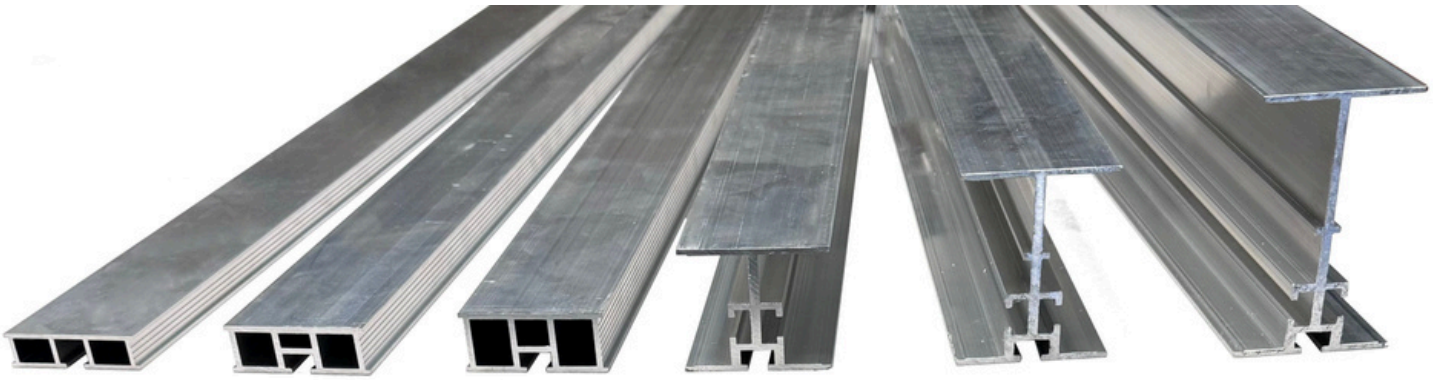
Rail Headpiece



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

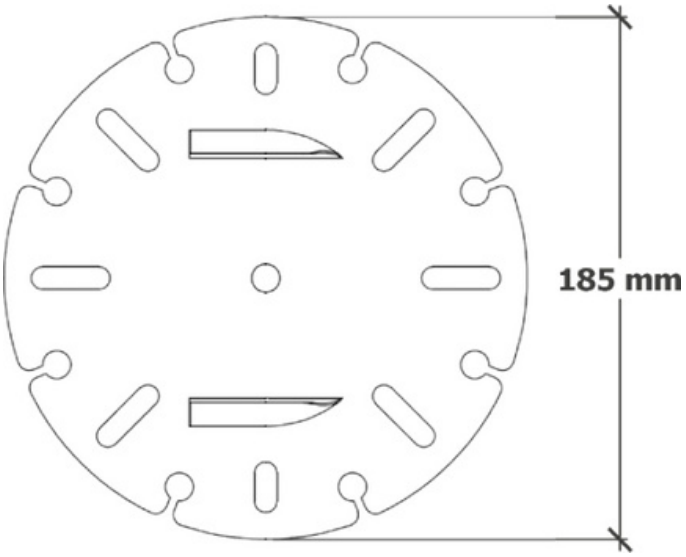
Phone : 0208 916 2222 Email : sales@wallbarn.com Website : www.wallbarn.com

MetalPad Ex with Aluminium Joists / Rails



15 mm Box Rail | 20 mm Box Rail | 25 mm Box Rail | 50 mm I-Plus Rail | 75 mm I-Plus Rail | 100 mm I-Plus Rail

Spreader Plate



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

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

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 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:**	15th May 2024
JOB NO.:	P10259	**CERTIFICATE DATE:**	24th May 2024
CERTIFICATE NO.:	IC11714	**SUPPLIER/SOURCE:**	Client

TEST DETAILS:

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 not be reproduced except in full
Approved By:	Andrew Gore		
Position:	Technical Director		
	Signature:		QC: TC001 – Test Certificate – v4.0 | Page 1 of 1

END OF PAGE

Unit D4, Poole Hall Business Park, Poole Hall Road, Ellesmere Port, Cheshire, CH66 1UA, United Kingdom
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

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:

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.

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 not be reproduced except in full
Approved By:	Andrew Gore		
Position:	Technical Director		
	Signature:		QC: TC001 – Test Certificate – v4.0 | Page 1 of 1

END OF PAGE

Unit D4, Poole Hall Business Park, Poole Hall Road, Ellesmere Port, Cheshire, CH66 1UA, United Kingdom
T: +44 (0) 1244 794 104 **F:** +44 (0) 1244 794 204
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Offices Located at: Chester | Ellesmere Port
Website: https://www.sts-group.co.uk

APPENDIX E:

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

mks | Atotech

Zintek® 200 XT
Zinc flake coatings from Atotech

Application

- Dip-spin
- Rack-spin
- Spray

Top coat combinations

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

Parts (application)

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

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

Coefficient of friction

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

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)

Corrosion performance (8 µm layer thickness)

Start

>1,800 h*

Start

6 cycles**

Atotech an MKS Brand

info@atotech.com

atotech.com

APPENDIX F:

Reaction to fire classification report

Issuing laboratory: Warringtonfire Testing and Certification Limited

Classification standard:	EN 13501-1: 2018
Sponsor(s):	Wallbarn Ltd
Product(s):	"Zintek 200"
Report number:	544697
Version:	1

Quality management

Version	Date	Summary of amendments including reasons			
1	10 September 2024	Description	Initial issue		
			Prepared by	Reviewed by	Authorised by
		Name	Tracy Deluce	Leslie Berry	Stacey Deeming
		Signature			
			*Signed for and on behalf of Warringtonfire Testing and Certification Limited		

Contents

1. Introduction

This classification report defines the classification assigned to "Zintek 200", in line with the procedures given in EN 13501-1: 2018.

Warringtonfire Testing and Certification Limited (Warringtonfire) issued the classification report at the request of the sponsor listed in Table 1.

Table 1 Sponsor details

Entity	Address
Sponsor	
Wallbarn Ltd	Unit 16 Capital Business Park, 22 Carlton Road, South Croydon, CR2 0BS, United Kingdom

2. Details of classified product

2.1 General

The product, "Zintek 200", is defined as being suitable for construction applications excluding flooring and linear pipe thermal insulation applications.

2.2 Product description

The product, "Zintek 200", is described in Table 2 and in the test reports listed in Section 3.1.

Table 2 Product description

Item		Detail
General description		Coated steel sheet
Product reference of overall composite		“Zintek 200”
Name of manufacturer		MetalFloor (Steel manufacturer) Atotech (coating material manufacturer) AST (applicator)
Overall thickness (coated steel)		1.55-1.62mm (stated by sponsor) 1.49mm (determined by Warringtonfire)
Overall weight per unit area (coated steel)		11.33kg/m² (stated by sponsor) 11.33kg/m² (determined by Warringtonfire)
Coating	Generic type	An inorganic, zinc rich corrosion protective base coating material made with zinc and aluminium flakes.
	Product reference	“Zintek 200”
	Name of manufacturer	Atotech
	Colour	Silver
	Number of layers	1
	Overall thickness	0.05-0.12mm
	Application rate	30g/m²
	Specific gravity	See Note 1 below
	Application method	Spray
	Curing process	Oven cure 40 mins, at 220°C
	Flame retardant details	See Note 2 below

Continued on next page

Item		Detail
Steel	Generic type	Steel plate
	Product reference	“MetalPad EX “
	Name of manufacturer	MetalFloor
	Thickness	1.5mm
	Weight per unit area	11.7kg/m²
	Flame retardant details	See Note 2 below
Brief description of manufacturing process		Steel coated with’ Zintec 200’, an inorganic, zinc rich corrosion protective base coating material made with zinc and aluminium flakes.
Mounting and fixing details		The coated steel was tested over a 12mm thick calcium silicate substrate as defined in EN 13238:2010

Note 1: The sponsor was unable to provide this information.

Note 2: The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the component.

3. Test reports and test results in support of classification

3.1 Test reports

Table 3 details the test reports that have been used in support of classification.

Table 3 Test reports

of laboratory	Name of sponsor(s)	Test report no.	Test date	Test and extended application standard
Warringtonfire	Wallbarn Ltd	544691 (Issue 2)	14 June 2024	EN 13823: 2020 + A1: 2022
Warringtonfire	Wallbarn Ltd	544692 (Issue 2)	19 June 2024	EN ISO 1716: 2018 (*)

(*) As the test procedure for EN ISO 1716 remained identical for versions 2010 & 2018 and no substantial technical changes were noticed in the most recent version 2018, results obtained with the 2018 version can also be considered valid for classification purposes (where only the 2010 version is mentioned).

3.2 Test results

3.2.1 Official test results used for the classification

Table 4 details the test results that have been used in support of classification. The fire performance parameters for class A2 - s1, d0 can be found in Table 5.

Table 4 Test data

Test method Report number	Parameter	Number of tests	Results	
			Continuous parameters	Compliance with parameters
EN 13823: 2020 + A1: 2022 544691 (Issue 2)	FIGRA (THR(t) threshold of 0.2MJ)		0	-
	FIGRA (THR(t) threshold of 0.4MJ)		0	-
	THR600s (MJ)		0.2	-
	LFS < edge of specimen		-	Compliant
	SMOGRA (m²/s²)		0	-
	TSP600s (m²)		5 -	- Compliant
	No flaming droplets/particles persisting shorter than 10 s in EN 13823 within 600s			
	No flaming droplets/particles persisting longer than 10 s in EN 13823 within 600s		-	Compliant
EN ISO 1716: 2018 544692 (Issue 2)	Average gross heat of combustion, QPCS (MJ/m²) of external non-substantial component on non-homogeneous product Coating	3	0.3	-
EN ISO 1716: 2018 N/A	Average gross heat of combustion of substantial component, of non-homogeneous product, QPCS (MJ/kg) Steel	-	0.0	-
Product as a whole, QPCS (MJ/kg)			0.0	

Note: '-' symbol confirms this parameter is not applicable.

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with EN 13501-1:2018.

4.2 Classification

The product "Zintek 200" in relation to its reaction to fire behavior is classified as:

A2

The additional classification in relation to smoke production is:

s1

The additional classification in relation to flaming droplets / particles is:

d0

The format of the reaction to fire classification for construction applications excluding flooring and linear pipe thermal insulation applications products is:

Fire behaviour		Smoke production			Flaming droplets	
A2	-	s	1	,	d	0

Alternatively shown:

Reaction to fire classification: A2 - s1, d0

4.3 Field of application

The classification for the product described in Section 2.2 of this report is valid for end use applications described in Table 5.

End use	Description	Origin
Substrate	Any substrate with a density equal to or greater than 652.5 kg/m³, a minimum thickness of 9 mm and a fire performance of A2-s1, d0 or better (excluding paper faced gypsum plasterboard).	As per EN 13238: 2010, clause 5.3 and EGOLF recommendation 045-2018.
Airgap	None allowed	N/A

This classification is valid for the following product parameters:

- Overall thickness: 1.55-1.62mm (no variation allowed)
- Overall weight per unit area: 11.33kg/m^2(no variation allowed)
- Coating thickness: 0.05 – 0.12mm (no variation allowed)
- Coating application rate: 30g/m^2(no variation allowed)
- Number of layers of coating: One (no variation allowed)
- Coating application method: Spray (no variation allowed)
- Coating curing process: Oven cure 40 mins, at 220°C (no variation allowed)
- Coating colour: Silver (no variation allowed)
- Steel thickness: 1.5mm (no variation allowed)
- Steel weight per unit area: 11.7kg/m² (no variation allowed)
- Use of flame retardants: No variation allowed
- Construction: No variation allowed

  Composition: No variation allowed

4.4 Fire performance parameters for A2 - s1, d0

All the products described in Section 2.2 and within the field of application defined in Section 4.3 comply with the fire performance parameters shown in Table 5. The test results can be found in Section 3.2.

Table 5 Fire performance parameters for A2 - s1, d0

Test method	Parameter	Continuous parameters	Compliance with parameters
EN 13823: 2020 + A1: 2022	FIGRA (THR(t) threshold of 0.2MJ)	FIGRA0,2MJ ≤ 120 W/s	-
	FIGRA (THR(t) threshold of 0.4MJ)	-	-
	THR600s (MJ)	THR600s ≤ 7,5 MJ	-
	Lateral flame spread to edge of test specimen?	-	LFS < edge of specimen
	SMOGRA (m²/s²)	SMOGRA ≤ 30m²/s²	- -
	TSP600s (m²)	TSP600s ≤ 50m²	No flaming droplets/particles persisting shorter than 10 s in EN 13823 within 600s
	Fall of flaming droplets/particles < 10s?	-	No flaming droplets/particles persisting longer than 10 s in EN 13823 within 600s
	Fall of flaming droplets/particles > 10s?	-	

Continued on next page

Test method	Parameter	Continuous paramet ers	Compliance with parameters
EN ISO 1716: 2018	Average gross heat of combustion for substantial components of non-homogenous products, QPCS (MJ/kg)	PCS ≤ 3,0 MJ/kg	-
	Average gross heat of combustion per unit area for any external non-substantial component of non-homogenous products, QPCS (MJ/m²)	PCS ≤ 4,0 MJ/m²	-
	For the product as a whole, (MJ/kg)	PCS ≤ 3,0 MJ/kg	-

Note: '-' symbol confirms this parameter is not applicable.

5. Restrictions

At the time the standard EN 13501-1: 2018 was published, no decision was made about the duration of validity of a classification report.

When this report is used to support UKCA marking under the Construction Products Regulation 2011 (retained EU law EUR 2011/305) as amended by the Construction Products (Amendment etc.) (EU Exit) Regulations 2019 and the Construction Products (Amendment etc.) (EU Exit) Regulations 2020 and/or 'CE+UK(NI)' marking for Northern Ireland under the Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011, the provisions of those regulations prevail over any conflicting provisions in the designated/harmonised standards and technical specifications.

6. Limitations

According to the information mentioned by the sponsor on the technical information sheet there was no harmonised product standard for UKCA or CE+UK(NI) marking available at the time the classification report for the tested material/product was drafted. When such a product standard is published, this report may be submitted again to the laboratory to evaluate the adequacy of the report for UKCA or CE+UK(NI) marking.

The test laboratory played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide evidence for the traceability of the samples tested.

7. Validity

This document is the original version of this classification report and is written in English. In case of doubt the original version prevails over a translation.

This document is issued subject to Warringtonfire's standard terms and conditions, which are available at: Terms and Conditions | Element.

The classification results relate to the behaviour of a product under the particular conditions of the test(s); they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use, nor can the classification results be extrapolated and applied to other products, or imply suitability for use in configurations not specifically detailed in the classification report. The classification is based on the information available to Warringtonfire at the time of the report. Should conflicting or contradictory evidence become available, Warringtonfire reserves the right to unconditionally withdraw the classification report forthwith upon giving written notice of the same.

Reports are statements of fact prepared in accordance with the referenced version of the standards stated in Section 3 of this report. Test, classification and extended application are based upon the information provided to Warringtonfire. Warringtonfire takes no responsibility for the accuracy or completeness of such information.

The results stated in this classification report apply to the test specimens as received and/or specified in the referenced/supporting test reports. Any differences in composition, production process, thickness, density or colour of the product may significantly affect the performance and will therefore invalidate the application of the test and classification results to the variant product. It is recommended that any proposed variation to the tested configuration or product should be referred to the sponsor. The sponsor should then obtain appropriate documentary evidence of compliance from Warringtonfire or another accredited testing authority. The supplier of the product is responsible for ensuring that the product which is supplied for use is identical to the test specimens that were tested.

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The report is issued for the benefit of Warringtonfire's direct customer only, and may not be relied upon by any third parties without Warringtonfire's express written consent.

This document does not represent type approval or certification of the product. Warringtonfire does not give an opinion nor is it Warringtonfire's responsibility to determine or state whether the product meets any particular fire or life safety standards as set out in the Building Regulations or any other appropriate document.

warringtonfire
Proud to be part of element

Registered office:

Warringtonfire Testing and Certification Limited
3rd Floor, Davidson Building, 5 Southampton Street, London, WC2E 7HA, United Kingdom
Registered Company No. 11371436

Name & address of issuing laboratory:

Warringtonfire Testing and Certification Limited
Holmesfield Road, Warrington WA1 2DS, United Kingdom

Reaction to Fire laboratory locations:

Ghent, Belgium
BELAC accredited laboratory 196-TEST
T: +32 9 243 77 50
Notified Body Number 1173

Warrington, United Kingdom
a UKAS accredited testing laboratory No.0249
T: +44 (0) 1925 655 116
Approved Body Number 0833