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Agrément Certificate

99/3608

Product Sheet 1

MSA LATCHWAYS WALKSAFE

WALKSAFE PVCu ROOF WALKWAYS

This Agrément Certificate Product Sheet⁽¹⁾ relates to WalkSafe PVCu Roof Walkways, used to provide anti-slip walkways across flat roofs, in roof valleys and half-valleys, to facilitate access and for maintenance traffic on metal, membrane and traditional roofing systems.

(1) Hereinafter referred to as 'Certificate'.

CERTIFICATION INCLUDES:

- factors relating to compliance with Building Regulations where applicable
- factors relating to additional non-regulatory information where applicable
- independently verified technical specification
- assessment criteria and technical investigations
- design considerations
- installation guidance
- regular surveillance of production
- formal three-yearly review.



KEY FACTORS ASSESSED

Slip resistance — the product has satisfactory slip resistance in both dry and wet conditions (see section 6).

Mechanical strength — the product will resist the impacts likely to occur in service (see section 7).

Colour stability — the white product remains colour stable over an extended period. The silver product will fade evenly in exposed areas (see section 8).

Performance in relation to fire — the product is classified as Class 1Y when tested to BS 476-7 : 1997 (see section 9).

Durability — the product, when subjected to normal conditions of exposure and use, will retain its integrity for a period in excess of 25 years (see section 11).



The BBA has awarded this Certificate to the company named above for the product described herein. This product has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Sixth issue: 7 December 2020

Originally certificated on 3 June 1999

Hardy Giesler
Chief Executive Officer

The BBA is a UKAS accredited certification body – Number 113.

The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk

Readers MUST check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.

Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

British Board of Agrément

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Regulations

In the opinion of the BBA, WalkSafe PVCu Roof Walkways, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations (the presence of a UK map indicates that the subject is related to the Building Regulations in the region or regions of the UK depicted):



The Building Regulations 2010 (England and Wales) (as amended)

In the opinion of the BBA, the use of the product is not subject to these Regulations.



The Building (Scotland) Regulations 2004 (as amended)

Regulation:	8(1)(2)	Durability, workmanship and fitness of materials
Comment:		The use of the product satisfies the requirements of this Regulation. See sections 10 and 11 and the <i>Installation</i> part of this Certificate.
Regulation:	9	Building standards applicable to construction
Standard:	4.8(d)	Danger from accidents
Comment:		The roof safety walkway can provide safe and suitable access over roof areas and can contribute to a roof satisfying this Standard, with reference to clauses 4.8.3 ⁽¹⁾⁽²⁾ , 4.8.7 ⁽²⁾ and 4.8.8 ⁽²⁾ . See section 6 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The product can contribute to meeting the relevant requirements of Regulation 9, Standards 1 to 6 and therefore will contribute to a construction meeting a bronze level of sustainability as defined in this Standard.
Regulation:	12	Building standards applicable to conversions
Comment:		Comments in relation to the product under Regulation 9, Standards 1 to 6 also apply to this Regulation, with reference to clause 0.12.1 ⁽¹⁾⁽²⁾ and Schedule 6 ⁽¹⁾⁽²⁾ .

(1) Technical Handbook (Domestic).
(2) Technical Handbook (Non-Domestic).



The Building Regulations (Northern Ireland) 2012 (as amended)

In the opinion of the BBA, the use of the product is not subject to these Regulations.

Construction (Design and Management) Regulations 2015

Construction (Design and Management) Regulations (Northern Ireland) 2016

Information in this Certificate may assist the client, designer (including Principal Designer) and contractor (including Principal Contractor) to address their obligations under these Regulations.

See sections: 1 *Description* (1.1), 4 *Use* (4.4) and 6 *Slip resistance* of this Certificate.

Additional Information

NHBC Standards 2020

In the opinion of the BBA, WalkSafe PVCu Roof Walkways, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapter 7.1 *Flat roofs and balconies*, Clause D11 *Access for maintenance*.

CE marking

The Certificate holder has taken the responsibility of CE marking the product in accordance with harmonised European Standard BS EN 516 : 2006.

Technical Specification

1 Description

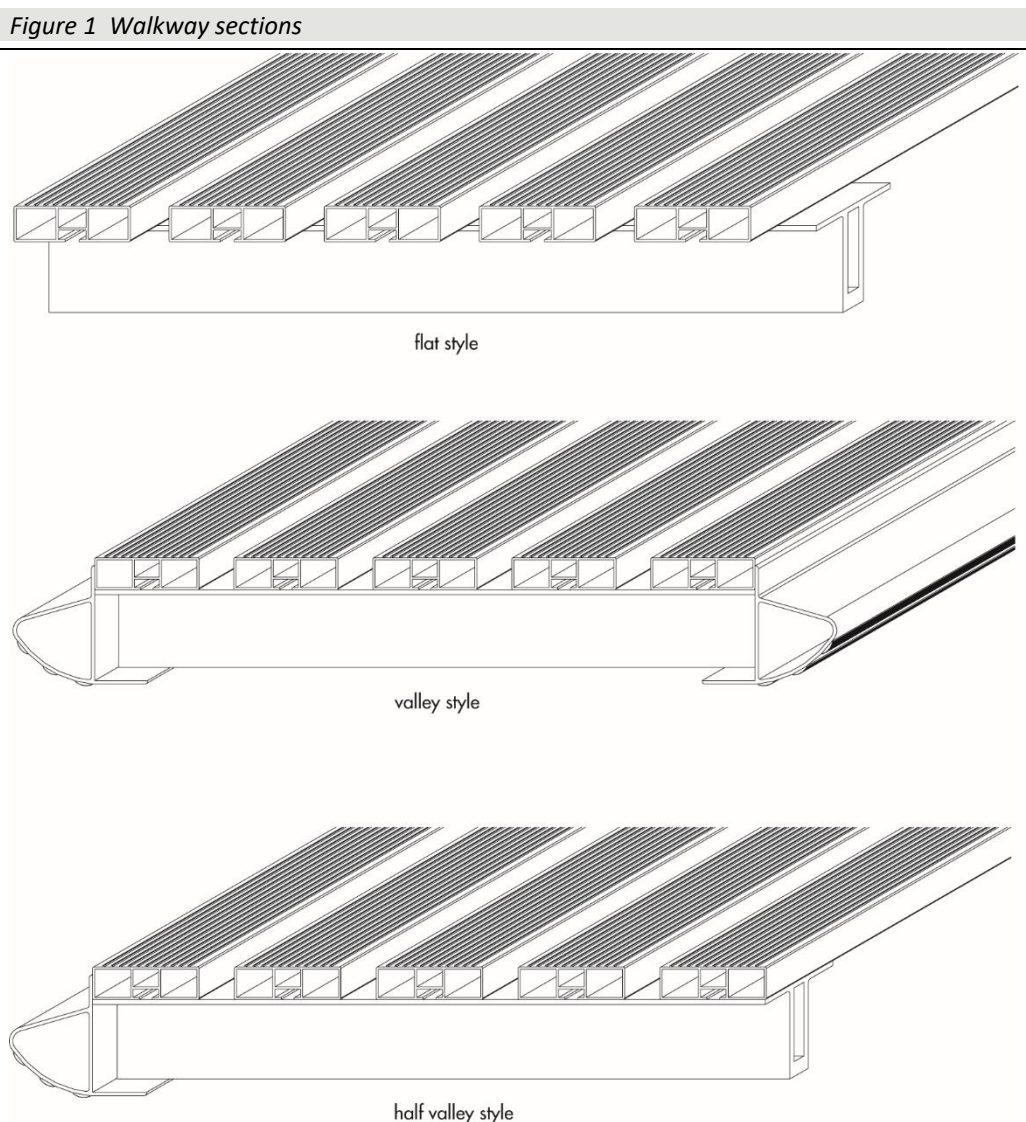
1.1 WalkSafe PVCu Roof Walkways are anti-slip walkways for use across flat roofs, in roof valleys and half-valleys to facilitate access and for maintenance traffic on metal, membrane and traditional roofing systems. The product is available in three styles: flat, valley and half-valley (see Figure 1), and is manufactured to the following nominal characteristics:

Width (mm)	≥ 430
Length (m) ⁽¹⁾	≥ 500
Weight (kg·m ⁻²) ⁽²⁾	11.6
Colour ⁽³⁾	white and silver.

(1) Other lengths are available upon request.

(2) Weight of the flat-style product.

(3) Other colours available on request.



1.2 Guidelines for the number of planks for a specific width are given in Table 1.

Required width (mm) ⁽¹⁾	Number of planks
175	2
275	3
375	4
475	5
575	6
675	7
775	8
875	9
975	10

(1) The Health and Safety Executive (HSE) recommends a minimum width of 430 or 600 mm if materials are to be carried along a walkway. It may not be possible to use the recommended widths in some situations, for example where there are gutters. For widths above 915 mm intended for use in valleys, a suitably experienced and qualified surveyor should be consulted.

1.3 Fall-proof and roof light covers are available to provide protection over fragile substrates (eg fibre-cement sheets), where walkways are to be installed in valleys or at parapets and north-light roofs.

1.4 The following ancillary items are for use with the walkways and are within the scope of this Certificate:

- edge skirting — for installing walkways in valleys and half-valleys. It is riveted to the plank to ensure stability
- edge gasket — fitted to the edge skirting to ensure a secure fit into the roof valley
- cushioned T Bearer — PVCu bearer
- end caps — PVCu Injection-moulding caps for closing ends of runs
- jointing fasteners — Marine Grade A4 stainless-steel fasteners for jointing sections into a linear run
- supporting angle — a heavy-duty metal angle for use in half-valleys.

1.5 Also for use with the product, but outside the scope of this Certificate, are PVCu guard rails on glazing bars, for use with walkways designed for north-light roofs [see Health and Safety in Roof Work (HSG 33), Figure 25, page 39 and Figure 42 page 68, for guidance on the use of guard rails].

2 Manufacture

2.1 WalkSafe PVCu Roof Walkways consist of an assembly of extruded PVCu, moulded PVCu, stainless steel and aluminium components. The plank sections are manufactured with a patterned surface to provide improved slip resistance.

2.2 As part of the assessment and ongoing surveillance of product quality, the BBA has:

- agreed with the manufacturer the quality control procedures and product testing to be undertaken
- assessed and agreed the quality control operated over batches of incoming materials
- monitored the production process and verified that it is in accordance with the documented process
- evaluated the process for management of nonconformities
- checked that equipment has been properly tested and calibrated
- undertaken to carry out the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

2.3 The management system of the manufacturer has been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 by BSI (Certificate FM 24961).

3 Delivery and site handling

3.1 Product packaging depends on the size and style of the order. Wherever possible, the items are banded together to avoid movement in transit. Larger items are stacked separately for ease of handling. Other arrangements may be made for special orders.

3.2 Each assembly is indelibly marked with the Extrusion/Fabrication Works Order numbers, CE marking and the Latchways logo embossed on the endcap moulding fitted to each end of a plank section. A self-adhesive barcoded label is also affixed on each assembly at the final manufacturing stage.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on WalkSafe PVCu Roof Walkways.

Design Considerations

4 Use

4.1 WalkSafe PVCu Roof Walkways are satisfactory for use in providing slip-resistant walkways for access and maintenance traffic on flat roofs, in roof valleys and half-valleys.

4.2 When used on flat roofs, the roof deck must comply with BS 6229 : 2018. When used over fragile substrates in valleys or at parapets and north-light roofs, precautions to protect the substrate should be taken [see Health and Safety in Roof Work (HSG 33), Figure 25, page 39 and Figure 42 page 68, for guidance on the use of guard rails].

4.3 When used over roof waterproofing membranes, the waterproofing layer must have a minimum static indentation rating of 15 kg when tested to BS EN 12730 : 2001, to ensure sufficient resistance to damage.

4.4 The fall-proof and roof light covers, when used over fragile roofing material, can support the instantaneous loads imposed by a person stumbling or falling onto it, according to ACR[M]001 : 2014. They will also provide suitable protection to the material enabling it to meet the appropriate requirements of the Construction (Design and Management) Regulations 2015 and Construction (Design and Management) Regulations (Northern Ireland) 2016 and the recommendations of Health and Safety in Roof Work (HSG 33), Clauses 193 and 194.

5 Practicability of installation

Installation is designed to be carried out by a competent roofing/maintenance contractor experienced with this type of product.

6 Slip resistance



The product has satisfactory slip resistance in both dry and wet conditions.

7 Mechanical strength

7.1 The product has adequate strength to resist the loads associated with installation and use of the product, in accordance with BS EN 516 : 2006.

7.2 The product has sufficient resistance to normal impacts likely to occur in service.

7.3 The fall-proof and roof light covers, when tested in accordance with ACR[M]001 : 2014, achieved an 'A' classification.

8 Colour stability

The white PVCu compound is UV stabilised and will remain colour stable over an extended period. The silver PVCu compound is not colour stable but exposed areas of the product will fade evenly.

9 Performance in relation to fire

Installations for roof access covered by BS EN 516 : 2006 have a reaction to fire classification of A1 without the need for testing (see Commission Decision 96/603/EC) .

10 Maintenance



10.1 The product may be washed down periodically with a suitable liquid cleaner and water. A stiff brush may be used to remove debris.

10.2 If installed in a gutter, the product may be removed to allow routine maintenance.

11 Durability



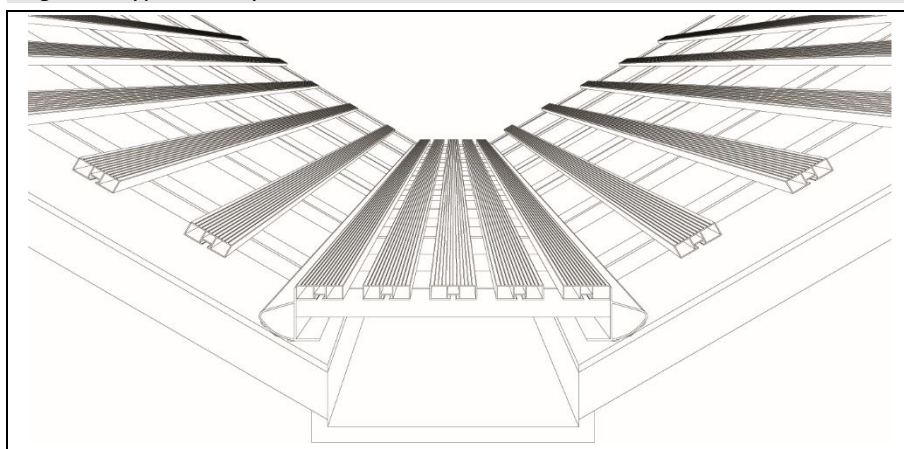
The product, under normal conditions of exposure and use, will retain its integrity for a period in excess of 25 years.

Installation

12 General

12.1 WalkSafe PVCu Roof Walkways should be installed in accordance with the Certificate holder's instructions and the relevant clauses of *Health and Safety in Roof Work* (HSG 33). A typical valley installation over fragile roofs, in conjunction with fall-proof covers, is shown in Figure 2.

Figure 2 Typical valley installation



12.2 To maintain integrity on linear runs, sections are joined using the jointing fasteners. End caps are used to close the end of walkway runs.

12.3 The walkways do not require mechanical fixing through the waterproofing layer of the roof, so maintaining the integrity of the layer.

13 Flat roofs

The walkway for flat roofs is constructed using a cushioned, non-slip bearing bolted to longitudinal planking. To allow better drainage in gutters and for profiled roof deckings, the walkway can be constructed using cross-planks and longitudinal bearers. Cushioned bearers have depths of 16, 25, 50 and 75 mm.

14 Valleys

14.1 Fall-proof covers should be installed in accordance with the Certificate holder's instructions where walkways are installed over fragile substrates. The covers are installed on both sides of valleys and on one side of parapets and north-light roofs.

14.2 The walkway sections stand upon deep bearers incorporating edge skirting. The angle of the bearers can be altered to suit the pitch of the valley. The valley walkways also include a flexible gasket to allow matching to the roof angle.

15 Repair

Any damage is repaired by replacement of the affected section.

Technical Investigations

16 Tests

16.1 Tests were carried out on the product and the results assessed to determine:

- dimensions
- weight
- tensile impact
- effect of heat and UV ageing on tensile properties
- soft body impact
- hard body impact
- coefficient of friction fragility
- heat distortion
- point loading.

16.2 Test data on the PVCu compound were assessed to determine:

- density
- ash content
- dehydrochlorination
- resistance to impact at low temperature
- shrinkage on heating (reversion)
- verification of gelation by heating.

17 Investigations

17.1 The manufacturing process was evaluated, including the methods adopted for quality control, and details were obtained of the quality and composition of the materials used.

17.2 A user survey was carried out to assess the product's performance in use.

17.3 A visit was made to an existing site installed in 1981 to assess the durability of the product under natural ageing conditions.

Bibliography

BS 476-7 : 1997 *Fire tests on building materials and structures — Method of test to determine the classification of the surface spread of flame of products*

BS 6229 : 2018 *Flat roofs with continuously supported coverings — Code of practice*

BS EN 516 : 2006 *Prefabricated accessories for roofing — Installations for roof access — Walkways, treads and steps*

BS EN 12730 : 2001 *Flexible sheets for waterproofing — Bitumen, plastic and rubber sheets for roof waterproofing — Determination of resistance to static loading*

BS EN ISO 9001 : 2015 *Quality management systems — Requirements*

Advisory Committee for Roof Work ACR[M]001 : 2014 *Test for Non-Fragility of Large Element Roofing Assemblies (Fifth edition)*

EOTA TR010 : 2004 *Exposure procedure for artificial weathering*

ETAG 005 : 2013 *Metal Anchors for Use in Concrete — Part 1: General*

18 Conditions

18.1 This Certificate:

- relates only to the product/system that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page – no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- is valid only within the UK
- has to be read, considered and used as a whole document – it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English Law.

18.2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

18.3 This Certificate will remain valid for an unlimited period provided that the product/system and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

18.4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

18.5 In issuing this Certificate the BBA is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product/system or any other product/system
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product/system
- actual installations of the product/system, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product/system is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product/system, including its manufacture, supply, installation, use, maintenance and removal
- any claims by the manufacturer relating to CE marking.

18.6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product/system which is contained or referred to in this Certificate is the minimum required to be met when the product/system is manufactured, supplied, installed, used, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Work etc. Act 1974, or of any other statutory, common law or other duty which may exist at the date of issue or reissue of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care.