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BAF-23-311-S-A-UK
BDA Agrément®
Ryno Aluminium Decking System
Structural Flooring System

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SCOPE OF AGRÉMENT

This BDA Agrément® (hereinafter 'Agrément') relates to Ryno Aluminium Decking System (hereinafter the 'System'). The System is a mechanically fixed aluminium decking board system, consisting of aluminium joist, steel pedestal and aluminium cleats. The System is for installation on waterproofed substrates and metal-framed balconies, terraces and roofs. The System is for existing and new dwellings, and buildings other than dwellings.

DESCRIPTION

The System comprises a range of aluminium decking boards (ADB, DFB or DFB-DR), available in various colours, along with aluminium joists, steel pedestals, aluminium cleats and fixing components (starter/end clip and AluClip). The decking boards are mechanically fixed to the aluminium joists using self-drilling screws. The System is available with two types of supporting joists systems; TerraSmart is loose-laid directly onto waterproofed substrates and BalcaSmart for metal-framed balconies (direct fix or using cleats).

ILLUSTRATION





THIRD-PARTY ACCEPTANCE

None requested by the Agrément holder.

STATEMENT

It is the opinion of Kiwa Ltd. that the System is safe and fit for its intended use, provided it is specified, installed and used in accordance with this Agrément.

Craig Devine Operations Manager, Building Products

Alpheo Mlotha CEng FIMMM MBA Business Unit Manager, Building Products



SUMMARY OF AGRÉMENT

This document provides independent information to specifiers, specialists, engineers, building control personnel, contractors, installers and other construction industry professionals who are considering the safety and fitness for purpose of the System. This Agrément covers the following:

- · Conditions of use:
- Production Control, Quality Management System and the Annual Verification Procedure;
- System components and ancillary items, points of attention for the Specifier and examples of details;
- Installation;
- Independently assessed System characteristics and other information;
- Compliance with national Building Regulations, other regulatory requirements and Third-Party Acceptance, as appropriate;
- Sources.

MAJOR POINTS OF ASSESSMENT

Strength - see Section 2.2.7 - a correctly designed and installed System will have sufficient strength and rigidity to sustain and transmits both dead and imposed load.

Fire performance - see Section 2.2.8 - the System is classified as European Classification A2-s1, d0, in accordance with BS EN 13501-1.

Durability - see Section 2.2.9 - the System shall have a service life durability equivalent to that of the building into which it is incorporated.

UKCA, UKNI and CE marking - see Section 2.2.10 - the Agrément holder has responsibility for conformity marking, in accordance with all relevant British and European Product Standards.

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1 GENERAL CONSIDERATIONS

1.1 CONDITIONS OF USE

1.1.1 Limitations

This Agrément has been prepared in accordance with the mandatory requirements defined in the relevant Kiwa Technical Requirement. Some information in this Agrément is provided for guidance or reference purposes only; this information falls outside the scope of the Technical Requirement.

1.1.2 Application

The assessment of the System relates to its use in accordance with this Agrément and the Agrément holder's requirements.

1.1.3 Assessment

Kiwa Ltd. has assessed the System in combination with relevant test reports, technical literature, the Agrément holder's quality plan, DoPs and site visit, as appropriate.

1.1.4 Installation supervision

The quality of installation and workmanship shall be controlled by a competent person who shall be an employee of an Approved Installer.

The System shall be installed strictly in accordance with the instructions of the Agrément holder and the requirements of this Agrément.

1.1.5 Geographical scope

The validity of this document is limited to England, Wales, Scotland and Northern Ireland, with due regard to Section 3 of this Agrément (CDM, national Building Regulations and Third-Party Acceptance).

1.1.6 Validity

The purpose of this Agrément is to provide well-founded confidence to apply the System within the scope described. The validity of this Agrément is as published on www.kiwa.co.uk/bda.

1.2 PRODUCTION CONTROL AND QUALITY MANAGEMENT SYSTEM

Kiwa Ltd. has conducted an audit of the Agrément holder and determined that they fulfil all their obligations in relation to this Agrément in respect of the System.

The initial audit demonstrated that the Agrément holder has a satisfactory Quality Management System (QMS) and is committed to continuously improving their quality plan. Document control and record-keeping procedures were deemed satisfactory. A detailed Production Quality Specification (PQS) has been compiled to ensure traceability and compliance under the terms of this Agrément.

1.3 ANNUAL VERIFICATION PROCEDURE - CONTINUOUS SURVEILLANCE

To demonstrate that the System conforms with the requirements of the technical specification described in this Agrément, an Annual Verification Procedure has been agreed with the Agrément holder in respect of continuous surveillance and assessment, and auditing of the Agrément holder's QMS.

2 TECHNICAL ASSESSMENT

This Agrément does not constitute a design guide for the System. It is intended only as an assessment of safety and fitness for purpose.

2.1 SYSTEM COMPONENTS AND ANCILLARY ITEMS

2.1.1 Components included within the scope of this Agrément

The components listed in Table 1 below are integral to the use of the System. The System is available with two types of fixing mechanism i.e. TerraSmart and BalcaSmart. TerraSmart is an aluminium decking system that is loose-laid onto waterproofed substrate, while BalcaSmart is designed to be fixed to balcony steel on metal-framed balconies.

Table 1 - Integral components

Component			Description	Dimensions (mm)		
			Description	Height	Width	Max. Span
decking	ADB - for use with	ADB60		25	200	600
	TerraSmart and BalcaSmart	ADB80		25	200	800
		DFB60-LH	aluminium grooved decking board with minimum top surface thickness of 2 mm, manufactured from 6063-T6 structural grade aluminium, coated with matt TGIC-free thermosetting polyester powder with coverage of 13 m²/kg and dry fill thickness of 60 to 80 µm, approved to Qualicoat Class 2 Category 1	20	200	600
		DFB60		25	200	600
	DFB - for use with BalcaSmart	DFB60-150		25	150	600
		DFB100		30	200	1,000
board		DFB120		30	200	1,200
		DFB150		40	200	1,500
		DFB60-DR		25	200	600
	DFB-DR - for use with	DFB100-DR		30	200	1,000
	BalcaSmart	DFB120-DR		30	200	1,200
		DFB150-DR		40	200	1,500
	DS	DS15		15	48	360
		DS25	mill-finished aluminium joist manufactured from 6063-T6 grade aluminium	25	48	600
		DS50		50	48	1,200
ioists		DS75		75	48	1,600
joioto	mechanical fixings for joist to pedestal		stainless-steel A4 self-drilling screw with pan head	13 mm long by 4.2 mm diameter		
	mechanical fixings for joist to cleat		stainless-steel A2 self-drilling screw with Hex drive	19 mm long by 4.8 mm diameter		diameter
	RD-FR - for use with TerraSmart	RD-FR-1	a steel pedestal with zinc-nickel electroplating for corrosion resistance, available in adjustable height ranges	25 to 35	120	120
		RD-FR-2		35 to 50		
		RD-FR-3		50 to 70		
		RD-FR-4		70 to 115		
pedestal		RD-FR-5		115 to 205		
		RD-FR-6		205 to 305		
		RD-FR-7		305 to 405		
		RD-FR-8		405 to 505		
	ADC - for use with TerraSmart and BalcaSmart	ADC-0	adjustable joist cleat with minimum thickness of 2 mm, manufactured from 6063-T6 grade aluminium, for use on waterproofed substrates or metal-framed balconies 2.5 to 7.0 2 to 15 2 to 28 2 to 40 15 to 78	2.5 to 7.0	85	
		ADC-1		2 to 15	90	75
cleat		ADC-2		2 to 28	90	
		ADC-3		2 to 40	90	
		ADC-4		130	7	

The components listed in Table 2 below can be used in conjunction with the System.

Table 2 - optional components

Component		Description	Dimensions	
decking starter fixing	decking starter/end clip	1 mm thick electroplated stainless steel A2 clip, used for securing the first and last decking board	30 mm long by 26 mm wide	
	mechanical fixings for clip - joist	stainless-steel A4 self-drilling screw	Minimum 15 mm long by 3.9 mm diameter	
decking intermediate fixing	Aluclip - use with ADB decking board	Manufactured from 6063-T6 grade aluminium with powder coating specified to PPC RAL 9005, providing a drainage gap of 6.65 mm between decking boards	20 mm long by 20 mm wide	
	mechanical fixings for Aluclip - joist	stainless-steel A4 self-drilling screw	30 mm long by 3.9 mm diameter	

2.1.2 Ancillary items falling outside the scope of this Agrément

The following ancillary items detailed in this Section may be used in conjunction with the System, but fall outside the scope of this Agrément:

- joist hanger;
- base rubber shock pad 3 mm thick;
- furniture anchor;

- UltraGrip:
- end board support (EBS) profile;
- termination profile;
- non-combustible isolating metal layer;
- substrate:
- silicone sealant.

2.2 POINTS OF ATTENTION TO THE SPECIFIER

2.2.1 Design

2.2.1.1 Design responsibility

A Specifier may undertake a project-specific design, in which case it is recommended that the Specifier co-operates closely with the Agrément holder. The Specifier or Installer is responsible for the final as-built design.

2.2.1.2 Basis of design

The characteristics detailed in the section titled 'Major Points of Assessment' shall be considered during the use of the System.

2.2.1.3 General design considerations

A project-specific design is required. This shall be developed in close co-operation with the Agrément holder.

The supporting substrate shall have adequate strength and stiffness. This shall be verified by a suitably qualified structural engineer.

Assessment of the structural performance of the System shall be carried out by the Agrément holder or a suitably qualified structural engineer to confirm that the System can:

- resist the applied dead and imposed loads;
- safely transfer the applied loads to the substrate;
- accommodate all anticipated thermal movements without damage.

The System components' deflection shall be limited to prevent damage to the System.

The System shall not be subjected to impact loading (outside the scope of this Agrément). If impact loading occurs during the System's design life, it shall be verified and assessed by the Specifier.

The project-specific wind uplift design (outside the scope of this Agrément) shall be carried out by suitably qualified structural engineer in close co-operation with the Specifier, in accordance with BS EN 1991-1-4 / I.S. EN 1991-1-4, to ensure that the System's counterweight is suitable for wind uplift forces.

Supporting substrates incorporating the System shall be:

- detailed to reduce the risk of damage due to movement in the supporting substrate, taking into consideration differential movement in dissimilar materials;
- designed in accordance with the relevant Standards to limit mid-span deflections.

A sufficient gap around the perimeter edge of the decking board is required to ensure that water (due to snow melt or precipitation) drains without imposing any additional load to the System.

The project-specific design shall ensure that sufficient gap between decking boards is provided to enable expansion and contraction.

2.2.1.4 Project-specific design considerations

The project-specific design shall:

- · be determined by the Specifier;
- · consider the exposure zones where the System is installed;
- take into account the requirements of the relevant national Building Regulations see Section 3.2;
- take into account the service life durability required see Section 2.2.9.

The decking board shall be appropriately marked, designed, and manufactured in accordance with BS EN 1090-1.

A pre-installation survey is required to allow determination of the project-specific design - see Section 2.4.1.

The Specifier shall ensure that the following considerations are included in the development of a project-specific design:

- structural adequacy of the supporting substrate;
- likely local impact resistance;
- pull-out of fixings;
- pull-through of fixings;
- effect of wind action loads on the System;
- accommodation of structural movement.

2.2.2 Applied building physics (heat, air, moisture)

A Specialist shall check the hygrothermal behaviour of a project-specific design incorporating the System and, if necessary, offer advice on improvements to achieve the final specification. The Specialist can be either a qualified employee of the Agrément holder or a suitably qualified consultant (in which case it is recommended that the Specialist co-operates closely with the Agrément holder).

2.2.3 Permitted applications

Only applications designed according to the specifications given in this Agrément are permitted. In each case, the Specifier and Installer shall co-operate closely with the Agrément holder.

2.2.4 Installer competence level

The System shall be installed strictly in accordance with the instructions of the Agrément holder and the requirements of this Agrément.

Installation can be undertaken by competent persons experienced in this type of work.

2.2.5 Delivery, storage and site handling

The System is delivered in suitable packaging bearing relevant identification information (such as the System name, production identification date or batch number, the Agrément holder's name, etc.) and, where applicable, the BDA Agrément® logo incorporating the number of this Agrément.

Prior to installation, the System components shall be stored in accordance with the Agrément holder's requirements. Good housekeeping protocols shall be followed to avoid damage.

2.2.6 Maintenance and repair

Once installed, the System does not require regular maintenance. For advice in respect of repair, consult the Agrément holder.

Performance factors in relation to the Major Points of Assessment

2.2.7 Strength

The System has adequate strength and stiffness to sustain specified loads given within the span table in Section 2.5.1.

The System components (decking board, joist, pedestal, cleat) act to transfer loads to the supporting substrate.

The Specifier shall ensure that the specified System can resist the wind design loads (outside the scope of this Agrément).

The substrate shall have sufficient strength to withstand all dead, imposed, snow and wind loads applied to and from the System, including any temporary loads that could be applied during installation. The strength of supporting substrate shall be verified by a suitably qualified structural engineer.

Imposed loads and snow loads shall be calculated in accordance with BS EN 1991-1-1 / I.S. EN 1991-1-1 and BS EN 1991-1-4 / I.S. EN 1991-1-4.

To ensure that System has adequate strength to resist the applied loads, the components shall be designed in accordance with BS EN 1999-1-1 / I.S. EN 1991-1-1.

The System shall be designed to withstand wind action loads in accordance with BS EN 1991-1-4 / I.S. EN 1991-1-4. Account shall be taken of the location, shape and size of the building. The average yearly wind action load data for the site location shall be collated and used to calculate the required design wind resistance (positive and negative) of a given fixing pattern. Due consideration shall be given to the higher-pressure coefficient applicable to the corners of a building. The suitably qualified structural engineer shall incorporate all site-specific conditions that can affect the wind load calculations.

The decking boards and joists shall be designed in accordance with the relevant Standards to limit mid-span deflections to L/200 or 5 mm (total load).

The System shall not be subjected to impact loading (outside the scope of this Agrément) and will be subjected to the static loading only. If impact loading occurs during the System's design life, it shall be verified and assessed by a suitably qualified structural engineer in close collaboration with the Specifier.

The decking boards have low slip resistance - see Section 2.5.1.

The decking boards demonstrate sufficient scratch resistance against footfalls and simulated movement of a furniture leg - see Section 2.5.1.

2.2.8 Fire performance

The System is classified as European Classification A2-s1, d0, in accordance with BS EN 13501-1.

The System can be used on buildings without any restrictions on building height or boundaries, in accordance with the national Building Regulations.

2.2.9 Durability

The System shall have a service life durability equivalent to that of the building into which it is incorporated. The expected lifespan of the building itself shall be at least 60 years.

2.2.10 UKCA, UKNI and CE marking

The British and European standard for the System's component is BS EN 1090-2.

Diagram 1 - BalcaSmart Aluminium decking system using ADB decking board

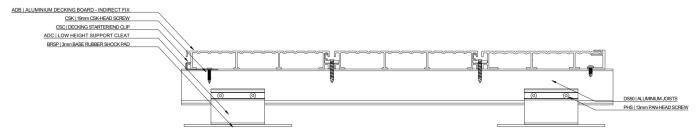


Diagram 2 - BalcaSmart Aluminium decking system using DFB decking board

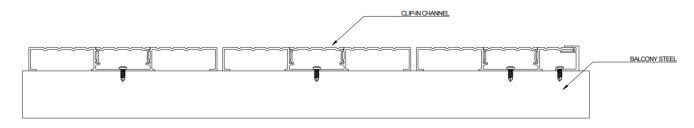


Diagram 3 - BalcaSmart Aluminium decking system using DFB-DR decking board

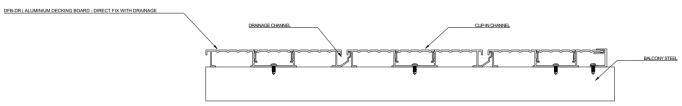
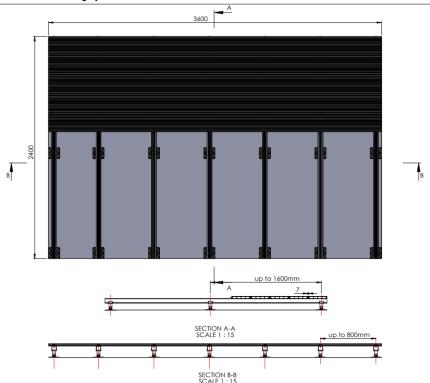


Diagram 4 - Typical detail of TerraSmart decking system



2.4 INSTALLATION

The System shall be installed strictly in accordance with the instructions (hereinafter 'Installation Manual') of the Agrément holder, the requirements of this Agrément and the requirements of BS 8000-0.

2.4.1 Project-specific installation considerations

The project-specific design shall be determined from a pre-installation survey.

The primary requirement of the pre-installation survey is to determine the following:

- the substrate or existing steel beams are correctly constructed and structurally sound;
- a suitably qualified structural engineer shall carry out the wind uplift forces calculations and verify the System's suitability.

2.4.2 Preparation

The following considerations apply before starting the work:

the supporting substrate surface shall be finished and free from corrosion.

The following works shall be undertaken before installing the System:

- the supporting substrate over which the System is to be installed shall be prepared and cleaned;
- the direction in which the decking is to be installed shall be determined.

2.4.3 Outline installation procedure

Detailed installation procedures can be found in the Agrément holder's Installation Manual.

The outline procedure is as follows:

- lift the joists onto the substrate, perpendicular to the direction of the decking, at the required centres;
- place the joists onto the pedestals, placed at each end of the joist and level up to the required height;
- install the appropriate supporting joist system:
 - o for TerraSmart, fasten the joist to the pedestal head using 13 mm self-drilling screws and tighten the locking nut to secure it at the required height;
 - o for BalcaSmart, cleat supports with 4.8 mm hex head self-drilling screws shall be used. A separation layer (outside the scope of this Agrément) may be required to mitigate the risk of bimetallic corrosion;
- as per the joist span, use intermediate supports at the required centres along the joint. Ensure the joist is fully supported and level. Where joists are to be butted end-on-end, provide support under the joint;
- install the starter/end clips along the ends of the joists to place the first row of the decking boards and push the decking board securely into the clip;
- place the AluClip along the inside edge of the decking board, above each joist, and slip the second row of board into place. Lay five rows of decking boards without fastening them to ensure decking is square and tight;
- optionally, use G-clamps to lock the row of decking boards tightly against the previous rows, ensuring all gaps are consistent;
- fix the decking boards using 30 mm self-drilling screws through the AluClip;
- for the final board that does not require cutting, leave out the last two rows of decking and install the starter/end clips at the ends of the joists. Place the second to last row of decking, apply AluClips, push the last row into starter/end clips, and pivot both boards together before fastening;
- if the final board needs to be cut, a termination profile needs to be used;
- ensure that there is a 10 mm gap around the perimeter of the area for drainage.

2.4.4 Finishing

The following finishing is required on completion of the installation:

- remove any aluminium swarf from the finished surface:
- make sure that top edges of the boards are not subjected to scratches.

Post-installation inspection checks shall be carried out to ensure that the installation has been successfully complete and that no damage has occurred to the building. These checks shall be conducted as soon as possible after completion of the work; any defects shall be reported immediately.

INDEPENDENTLY ASSESSED SYSTEM CHARACTERISTICS 2.5

2.5.1 Strength

System Component			Calculation		
		Standard	Characteristic Uniformly Distributed Load ² kN/m ²	Characteristic Concentrated Load kN	Max. Span
Dealine iniet et	DS15	DO EN 4000			360 mm
Decking joist at	DS25	BS EN 1990			600 mm
spacing of 600 mm	00 mm BS EN 1991-1-1 BS EN 1991-1-4	4.00	2.00	1,200 mm	
6.6.	DS75	BS EN 1999-1-1			1,600 mm
Decking board ^{^^}		DO LIN 1999-1-1			1,500 mm

[^] do not combine distributed loads with point loads or with line loads

^{**} calculations considered deflection limit of lesser of span/200 or 5 mm

Test	Standard	System component	Result	
Coratab registance	BS EN ISO 16581		Slight [^]	
Scratch resistance	SATRA TM391	Aluminium decking board	Very slight wear - change in surface (100,000 footfalls)	
Slip resistance	BS 7976-1, BS 7976-2		Low slip potential	
Vertical load resistance	Laboratory own test method	Pedestal (RD-FR)	34.0 kN (no signs of permanent damage or distortion) ^{^^}	

^{&#}x27;slight' has been reported in the direction of manufacture and 90 ° to the direction of manufacture, for type 0, type 2 and type 3 in case of transfer of brass

2.5.2 Fire performance

Test	Standard	System or component	Result
		System [^]	A2-s1, d0
Reaction to fire	BS EN 13501-1	Aluminium joist	
Reaction to life	BS EN 13301-1	Pedestal (RD-FR)	A1^^
		Cleats	

with colour of the aluminium decking board according to EGOLF recommendation 003-2016 method 2 in accordance with European Commission Decision 96/603/EC

^{^^} pedestals are tested at the maximum height

3 CDM, NATIONAL BUILDING REGULATIONS AND THIRD-PARTY ACCEPTANCE

3.1 THE CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015 AND THE CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS (NORTHERN IRELAND) 2016

Information in this Agrément may assist the client, principal designer/CDM co-ordinator, designer and contractors to address their obligations under these Regulations.

3.2 THE NATIONAL BUILDING REGULATIONS

In the opinion of Kiwa Ltd., the System, if installed and used in accordance with Section 2 of this Agrément, can satisfy or contribute to satisfying the relevant requirements of the following national Building Regulations.

This Agrément shall not be construed to confer the compliance of any project-specific design with the national Building Regulations.

3.2.1 England

The Building Regulations 2010 and subsequent amendments

- B4(1) External fire spread the System components do not contribute to the spread of fire over walls and from one building to another
- Regulation 7(1) Materials and workmanship the System is manufactured from suitably safe and durable materials for their application, and can be installed
 to give a satisfactory performance

3.2.2 Wales

The Building Regulations 2010 and subsequent amendments

- B4(1) External fire spread the System components do not contribute to the spread of fire over walls and from one building to another
- Regulation 7(1) Materials and workmanship the System is manufactured from suitably safe and durable materials for their application, and can be installed
 to give a satisfactory performance

3.2.3 Scotland

The Building (Scotland) Regulations 2004 and subsequent amendments

- 3.2.3.1 Regulations 8 (1)(2) Durability, workmanship and fitness of materials
- The System is manufactured from acceptable materials and is adequately resistant to deterioration and wear under normal service conditions
- 3.2.3.2 Regulation 9 Building Standards Construction
- 2.7 Spread on external walls the System can contribute to satisfying this Requirement
- 7.1(a)(b) Statement of sustainability the System 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. In addition, the System can contribute to a
 construction meeting a higher level of sustainability, as defined in this Standard
- 3.2.3.3 Regulation 12 Building Standards Conversions
- All comments given under Regulation 9 also apply to this Regulation, with reference to Schedule 6 of The Building (Scotland) Regulations 2004 and subsequent amendments, clause 0.12 of the Technical Handbook (Domestic) and clause 0.12 of the Technical Handbook (Non-Domestic)

3.2.4 Northern Ireland

The Building Regulations (Northern Ireland) 2012 and subsequent amendments

- 23(1)(a)(i)(iii)(b) Fitness of materials and workmanship the System is manufactured from materials which are suitably safe and acceptable as described in
 this Agrément
- 36(a) External fire spread the System can contribute to satisfying this Requirement

3.2.5 Ireland

Building Regulations 1997 and subsequent amendments

In order to demonstrate compliance with Irish Building Regulations, this BDA Agrément® certifies that the System complies with the requirements of a recognised document and indicates it is suitable for its' intended purpose and use.

- B4 External fire spread the System can contribute to satisfying this Requirement
- B9 External fire spread the System can contribute to satisfying this Requirement
- D1 Materials and workmanship the System is manufactured from suitably safe and durable materials for their application, and can be installed to give a satisfactory performance

3.3 THIRD-PARTY ACCEPTANCE

None requested by the Agrément holder.

4 SOURCES

- BS EN ISO 9001:2015+A1:2024 Quality management systems. Requirements
- BS EN ISO 16581:2019 Resilient and laminate floor coverings. Determination of the effect of simulated movement of a furniture leg
- BS EN 1090-1:2009+A1:2011. Execution of steel structures and aluminium structures. Requirements for conformity assessment of structural components
- BS EN 1090-2:2018+A1:2024 Execution of steel structures and aluminium structures Technical requirements for steel structures
- BS EN 1990:2002+A1:2005 Eurocode. Basis of structural and geotechnical design
- NA to BS EN 1990:2002+A1:2005 UK National Annex for Eurocode. Basis of structural design
- BS EN 1991-1-1:2002 Eurocode 1. Actions on structures. General actions. Densities, self-weight, imposed loads for buildings
- NA to BS EN 1991-1-1:2002 UK National Annex to Eurocode 1. Actions on structures. General actions. Densities, self-weight, imposed loads for buildings.
 Densities, self-weight, imposed loads for buildings
- BS EN 1991-1-4:2005+A1:2010 Eurocode 1. Actions on structures. General actions. Wind actions
- NA to BS EN 1991-1-4:2005+A1:2010 UK National Annex to Eurocode 1. Actions on structures. General actions. Wind actions
- BS EN 1999-1-1:2007+A2:2013 Eurocode 9. Design of aluminium structures. General structural rules
- NA to BS EN 1999-1-1:2007+A1:2009 UK National Annex to Eurocode 9: Design of aluminium structures. General structural rules
- BS EN 13501-1:2018 Fire classification of construction products and building elements. Classification using data from reaction to fire tests
- BS 7976-1:2002+A1:2013 Pendulum testers. Specification
- BS 7976-2:2002+A1:2013 Pendulum testers. Method of operation
- BS 8000-0:2014+A1:2024 Workmanship on construction sites. Introduction and general principles
- European Commission Decision 96/603/EC: Commission Decision of 4 October 1996 establishing the list of products belonging to Classes A 'No
 contribution to fire' provided for in Decision 94/611/EC implementing Article 20 of Council Directive 89/106/EEC on construction products
- I.S. EN 1991-1-1:2002 Eurocode 1: Actions on structures. Part 1-1: General actions. Densities, self-weight, imposed loads for buildings
- I.S. EN 1991-1-1:2002/NA:2013 Irish National Annex to Eurocode 1: Actions on structures. Part 1-1: General actions. Densities, self-weight, imposed loads for buildings
- I.S. EN 1991-1-4:2005 Eurocode 1: Actions on structures. Part 1-4: General actions. Wind actions
- I.S. EN 1991-1-4/NA:2005 Irish National Annex to Eurocode 1: Actions on structures. Part 1-4: General actions. Wind actions
- SATRA TM391:2016 Flooring biomechanical abrasion method

Remark - Apart from these sources, technical information and confidential reports have been assessed; any relevant documents are in the possession of Kiwa Ltd. and are kept in the Technical Assessment File of this Agrément. The Installation Manual for the System may be subject to change; contact the Agrément holder for the clarification of revisions.

5 AMENDMENT HISTORY

Revision	Amendment description	Author	Approver	Date
-	First issue	M Javed	C Devine	May 2025

6 CONDITIONS OF USE

This Agrément may only be reproduced and distributed in its entirety.

Where a National Annex exists in respect of a BS EN (or other) standard, its use is deemed mandatory wherever the original standard is referenced.

Kiwa Ltd. has used due skill, care and attention in the preparation of this BDA Agrément®.

Whilst all due diligence has been used, no liability or warranty is extended by Kiwa Ltd.

The Agrément holder is responsible for advising Kiwa Ltd. immediately if there is a variation to the System specification or constituent elements/components after initial publication of this BDA Agrément[®].

For full terms and conditions, refer to Kiwa Ltd.