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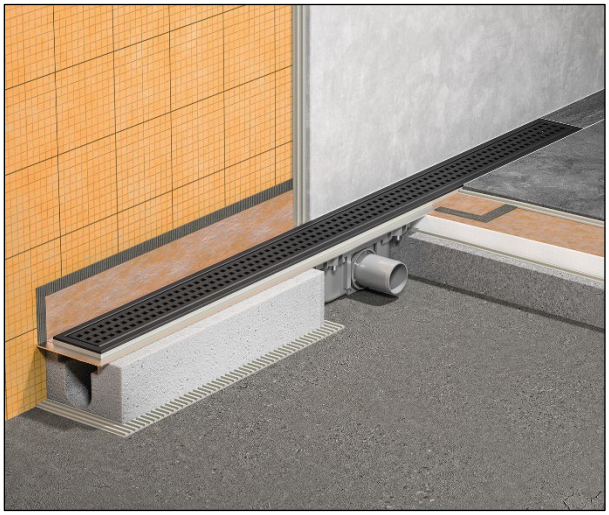
Agrément Certificate
24/7215
Product Sheet 1 Issue 1

BATHROOM AND WET ROOM DRAINAGE SYSTEM

SCHLÜTER KERDI-LINE-G3

This Agrément Certificate Product Sheet(1) relates to Schlüter-KERDI-LINE-G3, a range of four different configurations (with varied outlet positions and in various channel lengths), with an overall drain height of 78 mm, incorporating a removable and cleanable 50 mm water trap/seal, for use in inside buildings to receive wastewater in tiled floor showers and wet rooms.

(1) Hereinafter referred to as 'Certificate'.



The assessment includes

Product factors:

- compliance with Building Regulations
- compliance with additional regulatory or non-regulatory information where applicable
- evaluation against technical specifications
- assessment criteria and technical investigations
- uses and design considerations

Process factors:

- compliance with Scheme requirements
- installation, delivery, handling and storage
- production and quality controls
- maintenance and repair

Ongoing contractual Scheme elements†:

- regular assessment of production
- formal 3-yearly review

KEY FACTORS ASSESSED

Section 1. Mechanical resistance and stability
Section 2. Safety in case of fire
Section 3. Hygiene, health and the environment
Section 4. Safety and accessibility in use
Section 5. Protection against noise
Section 6. Energy economy and heat retention
Section 7. Sustainable use of natural resources
Section 8. Durability

The BBA has awarded this Certificate to the company named above for the system described herein. This system 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 issue: 4 October 2024

Hardy Giesler
Chief Executive Officer

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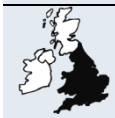
SUMMARY OF ASSESSMENT AND COMPLIANCE

This section provides a summary of the assessment conclusions; readers should refer to the later sections of this Certificate for information about the assessments carried out.

Compliance with Regulations

Having assessed the key factors, the opinion of the BBA is that Schlüter-KERDI-LINE-G3, 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 Building Regulations 2010 (England and Wales) (as amended)

Requirement:	**H1(1)**	**Foul water drainage**
Comment:		The system can contribute to satisfying this Requirement. See sections 1 and 9 of this Certificate.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		The system is acceptable. See sections 8 and 9 of this Certificate.

The Building (Scotland) Regulations 2004 (as amended)

Regulation:	**8(1)(2)**	**Fitness and durability of materials and workmanship**
Comment:		The system is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**9**	**Building standards - construction**
Standard:	3.7(b)(c)	Wastewater drainage
Comment:		The system can contribute to satisfying this Standard, with reference to clause 3.7.1[(1)(2)]. See section 1 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The system can contribute to satisfying 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 - conversion**
Comment:		All comments given for the system 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)

Regulation:	**23(1)(a)(i) (iii)(b)(i)**	**Fitness of materials and workmanship**
Comment:		The system is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**79**	**Drainage systems**
Comment:		The system can contribute to satisfying this Regulation. See sections 1 and 9 of this Certificate.

Additional Information

NHBC Standards 2024

In the opinion of the BBA, Schlüter-KERDI-LINE-G3, 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 8.1 *Internal Services*.

Fulfilment of Requirements

The BBA has judged Schlüter-KERDI-LINE-G3 to be satisfactory for use as described in this Certificate. The system has been assessed for use in inside buildings to receive wastewater in tiled floor showers and wet rooms.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the system under assessment. Schlüter-KERDI-LINE-G3 consists of a range of drain channels with pre-adhered waterproofing collar, 50 mm water trap/seal, drain body/sump and solvent weld outlet, silicone O-ring (between the trap and the drain body/sump), a polystyrene channel support and a sealing gasket (between the drain body and the channel) as listed in Tables 1 and 2 of this Certificate.

Schlüter-KERDI-LINE-G3 system is a low height linear horizontal drain with different configurations (with various outlet positions and different channel lengths) as detailed in Table 1. The drain is covered with different design (A, B, DG3, E, F and G) grate options.

Assembled drain channel and drain body/sump have an overall height of 78 mm.

Table 1 Nominal characteristics of Schlüter-KERDI-LINE-G3

	Low height (78 mm) horizontal drain			
Channel length (mm)	Front outlet – Centre	Front outlet offset – Left	Front outlet offset – Right	Front outlet offset – Dual
500	KL F 43 G3E 50	-	-	-
600	KL F 43 G3E 60	-	-	-
700	KL F 43 G3E 70	KL FOL 43 G3E 70	KL FOR 43 G3E 70	-
800	KL F 43 G3E 80	KL FOL 43 G3E 80	KL FOR 43 G3E 80	-
900	KL F 43 G3E 90	KL FOL 43 G3E 90	KL FOR 43 G3E 90	-
1000	KL F 43 G3E 100	KL FOL 43 G3E 100	KL FOR 43 G3E 100	KL F20 43 G3E 100
1100	KL F 43 G3E 110	KL FOL 43 G3E 110	KL FOR 43 G3E 110	KL F20 43 G3E 110
1200	KL F 43 G3E 120	KL FOL 43 G3E 120	KL FOR 43 G3E 120	KL F20 43 G3E 120

Table 2 Components of Schlüter-KERDI-LINE-G3

Product Description	Material
Grates	Brushed or polished stainless steel
Drain channel	Stainless steel V4A (316)
Water trap/seal	Acrylonitrile-butadiene-styrene (ABS)
Drain body/sump	Acrylonitrile-butadiene-styrene (ABS)
Solvent weld 40mm ID/43 mm OD outlet	Acrylonitrile-butadiene-styrene (ABS)
O-ring (between trap and outlet)	Silicone
Sealing gasket (between drain body and channel)	EPDM to BS EN 681-1 : 1996
Channel support	Expanded polystyrene (EPS)

Ancillary items

The Certificate holder recommends the following ancillary items for use with the system, but these materials have not been assessed by the BBA and are outside the scope of this Certificate:

- Schlüter-KERDI-DRAIN
- Schlüter-KERDI-KEBA
- Schlüter-KERDI-KERECK
- Schlüter-KERDI-COLL-L
- Schlüter-KERDI-FIX
- Schlüter-KERDI-SHOWER
- Schlüter-KERDI-BOARD
- Schlüter-KERDI-200
- Schlüter-DITRA
- Schlüter-DITRA-HEAT/-DUO

The systems are intended for use in:

- inside buildings to dispose of wastewater from floors in wet rooms and walk-in showers
- domestic, commercial and public buildings and in installations designed in accordance with BS EN 12056-1 : 2000 and BS EN 12056-2 : 2000 for the conveyance of surface water and domestic sewage as is permitted to be discharged into public sewers by the Water Industry Act 1991 (England and Wales), and surface water and sewage as is permitted and defined by the Sewerage (Scotland) Act 1968 and the Water and Sewerage Services (Northern Ireland) Order 2006.

Product assessment – key factors

The system was assessed for the following key factors, and the outcome of the assessment is shown below. Conclusions relating to the Building Regulations apply to the whole of the UK unless otherwise stated.

1 Mechanical resistance and stability

Data were assessed for the following characteristics.

1.1 Mechanical properties

1.1.1 Results of resistance to tensile force are given in Table 3.

Table 3 Characteristics for mechanical properties

Product assessed	Assessment method	Requirement	Result
Drain channel with pre-adhered waterproofing collar	Peeling of factory fixed skirt membranes to BS EN 1253-1 : 2015 clause 5.7.3	No peeling	Pass

1.1.2 On the basis of data assessed, the drains used with floor membranes are deemed to have adequate watertightness.

1.2 Performance of joints

1.2.1 Results of tightness of joints tests are given in Table 4.

Table 4 Characteristics for performance of joints

Product assessed	Assessment method	Requirement	Result
Grate	Dimensions of apertures in gratings to BS EN 1253-1 : 2015 clause 5.1	4 – 8 mm	Pass
Drain body	Watertightness to BS EN 1253-1 : 2015 clause 5.8.2	No leakage	Pass

1.2.2 On the basis of data assessed, the drains are deemed fit for purpose for ability to hold fluid inside the system.

1.2.3 The joints, when correctly made, will not be adversely affected by normal service conditions.

1.3 Strength and stability

1.3.1 Results of strength and stability tests are given in Table 5.

Table 5 Characteristics for strength and stability

Product assessed	Assessment method	Requirement	Result
Drain channel with grate	Loading test to BS EN 1253-1 : 2015 clause 5.6	No visible damage for declared Class K3	Pass

1.3.2 On the basis of data assessed, the system has adequate robustness to resist the loads associated with installation and subsequent normal service conditions.

1.4 Flow characteristics

1.4.1 Results of flow characteristics tests are given in Table 6.

Table 6 Characteristics for flow

Product assessed	Assessment method	Requirement	Result
Water trap/seal	Depth of water seal to BS EN 1253-1 : 2015 clause 5.3.1	≥ 50 mm	Pass
System (with single outlet configuration)	Water through the grating to BS EN 1253-1 : 2015 clause 5.9.1	≥ 0.4 $l \cdot s^{-1}$	Pass

1.4.2 On the basis of data assessed, the systems are deemed to have satisfactory flow characteristics and will allow disposal of wastewater without clogging.

2 Safety in case of fire

Not applicable.

3 Hygiene, health and the environment

3.1 Odour

3.1.1 Results of effectiveness of seal tests are given in Table 7.

Table 7 Characteristics for effectiveness of seal

Product assessed	Assessment method	Requirement	Result
System	Resistance of water seal to pressure to BS EN 1253-1 : 2015 clause 5.3.2	Passage of air > 400 Pa	Pass
	Odour-tightness to BS EN 1253-1 : 2015 cause 5.8.1	Pressure > 180 Pa for 15 min	Pass

3.1.2 On the basis of data assessed, the traps are deemed fit for purpose to prevent passage of foul smells and can withstand being subjected to pressure required for normal service conditions.

4 Safety and accessibility in use

Not applicable.

5 Protection against noise

Not applicable.

6 Energy economy and heat retention

Not applicable.

7 Sustainable use of natural resources

The system is manufactured from stainless steel, ABS, silicone, EPDM and polystyrene which can be recycled.

8 Durability

8.1 The potential mechanisms for degradation and the known performance characteristics of the materials in the system was assessed.

8.2 The system was tested for characteristics as given in Table 8.

Table 8 Characteristics for durability

Product assessed	Assessment method	Requirement	Result
System	Temperature cycling (Class A) to BS EN 1253-1 : 2015 Clause 5.5	No deformation	Pass
Traps and pipes material	Resistance to chemicals For guidance: PD ISO/TR 10358 : 2021	Product conforming to BS EN 1253-1 : 2015	Pass
Seals material	Resistance to chemicals For guidance: PD ISO/TR 7620 : 2005		Pass

8.2.1 On the basis of data assessed, the system is deemed to be suitably resistant to high temperatures and corrosion by water with which it is likely to come into contact in service.

8.3 Cleaning and maintenance

8.3.1 The system must be designed so that access for cleaning and maintenance is provided. It incorporates a removable and cleanable 50 mm water trap/seal. The sections of the system can be removed and replaced.

8.3.2 On the basis of data assessed, the system is suitably designed and resistant to cleaning and maintenance activities.

8.4 Service life

Under normal service conditions, the system will have a life of equivalent to the structure in which it is incorporated, provided it is designed, installed and maintained in accordance with this Certificate and the Certificate holder's instructions.

PROCESS ASSESSMENT

Information provided by the Certificate holder was assessed for the following factors:

9 Design, installation, workmanship and maintenance

9.1 Design

9.1.1 Installations containing the system must be designed in accordance with BS EN 12056-1 : 2000 and BS EN12056-2 : 2000.

9.1.2 Floors fitted with the drains must be designed to allow water to flow freely to the gratings and incorporate an effective damp-proof membrane, in accordance with BS 8215 : 1991.

9.2 Installation

9.2.1 Installation instructions provided by the Certificate holder were assessed and judged to be appropriate and adequate.

9.2.2 Installation must be carried out in accordance with this Certificate and the Certificate holder's instructions. A summary of instructions and guidance is provided in Annex A of this Certificate.

9.2.3 To achieve the performance described in this Certificate, the system must be installed and tested in accordance with BS EN 12056-5 : 2000 and PD CEN/TR 13801 : 2014.

9.3 Workmanship

Practicability of installation was assessed by the BBA, on the basis of the Certificate holder's information and a site visit to witness an installation in progress. To achieve the performance described in this Certificate, installation of the system must be carried out by a competent general builder, or a contractor, experienced with this type of system.

9.4 Maintenance and repair

9.4.1 Ongoing satisfactory performance of the system in use requires regular maintenance. The guidance provided by the Certificate holder was assessed by the BBA and found to be appropriate and adequate.

The following requirements apply in order to satisfy the performance assessed in this Certificate:

9.4.2 Access to system for cleaning must be provided by conventional means.

9.4.3 With traps removed, the pipework can be rodded using either cane or polypropylene rods with a cleaning coil head.

10 Manufacture

10.1 The production processes for the system have been assessed, and provide assurance that the quality controls are satisfactory according to the following factors:

10.1.1 The manufacturer has provided documented information on the materials, processes, testing and control factors.

10.1.2 The quality control operated over batches of incoming materials has been assessed and deemed appropriate and adequate.

10.1.3 The quality control procedures and system testing to be undertaken have been assessed and deemed appropriate and adequate.

10.1.4 The process for management of non-conformities has been assessed and deemed appropriate and adequate.

10.1.5 An audit of each production location was undertaken, and it was confirmed that the production process was in accordance with the documented process, and that equipment has been properly tested and calibrated.

† 10.2 The BBA has undertaken to review 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.

11 Delivery and site handling

11.1 The Certificate holder stated that the system is delivered to site in packaging bearing the system name, Certificate holder's name, article number, and system description.

11.2 Delivery and site handing must be performed in accordance with the Certificate holder's instructions and this Certificate, including:

11.2.1 The system should be transported in their original packaging if possible. During unloading they must be handled with care. Pipes must not be dragged across the floor or pulled over edges.

11.2.2 Care must be taken to not to drop system on their ends, particularly during cold weather conditions.

11.2.3 The product must be protected from direct sunlight if long-term storage is envisaged.

ANNEX A – SUPPLEMENTARY INFORMATION †

Supporting information in this Annex is relevant to the system but has not formed part of the material assessed for the Certificate.

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.

Additional information on installation

A.1 Special attention should be paid to appropriate:

- election of position of the system
- election of pipe and working tools
- election of connection depending on technology type and pipe dimensions
- pipe fastening, considering thermal expansion, sliding and rigid installation
- installation in concrete.

Bibliography

BS 8215 : 1991 *Code of practice for design and installation of damp-proof courses in masonry construction*

BS EN 681-1 : 1996 *Elastomeric seals — Material requirements for pipe joint seals used in water and drainage applications — Vulcanized rubber*

BS EN 1253-1 : 2015 *Gullies for buildings – Trapped floor gullies with a depth water seal of at least 50 mm*

BS EN 12056-1 : 2000 *Gravity drainage systems inside buildings — General and performance requirements*
BS EN 12056-2 : 2000 *Gravity drainage systems inside buildings — Sanitary pipework, layout and calculation*
BS EN 12056-5 : 2000 *Gravity drainage systems inside buildings — Installation and testing, instructions for operation, maintenance and use*

PD ISO/TR 7620 : 2005 *Rubber materials — Chemical resistance*

PD ISO/TR 10358 : 2021 *Plastics pipes and fittings for industrial applications — Collection of data on combined chemical-resistance*

PD CEN/TR 13801 : 2014 *Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure — Thermoplastics — Recommended practice for installation*

Conditions of Certificate

Conditions

1 This Certificate:

- relates only to the product 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.

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.

3 This Certificate will be displayed on the BBA website, and the Certificate Holder is entitled to use the Certificate and Certificate logo, provided that the product 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.

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

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

6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product which is contained or referred to in this Certificate is the minimum required to be met when the product 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.

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