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Authorised and notified according to Article 10 of the Council Directive (89/106/EEC) of 21 December 1988 on the approximation of laws, regulations and administrative provisions of Member States relating to construction products.

BBA APPROVAL INSPECTION TESTING CERTIFICATION
TECHNICAL APPROVALS FOR CONSTRUCTION

Designated by Government to issue European Technical Approvals

Member of EOTA

European Technical Approval ETA-09/0139

*Second issue**

Trade name:	SikaRoof MTC Waterproofing Systems
Holder of approval:	Sika Services AG BU Contractors Tüffenwies 16 CH-8048 Zürich Switzerland Tel: + 41 58 436 40 40 Fax: + 41 58 436 43 43 e-mail: sika@sika.ch
Generic type and use of construction product:	Liquid-applied roof waterproofing using kits based on polyurethane
Valid from: to:	19 July 2010 31st January 2014
This version replaces	ETA-09/0139 valid from 28th April 2009 to 31st January 2014
Manufacturing plant:	Plant 1
This European Technical Approval contains:	8 pages including four Annexes which form an integral part of the document

I LEGAL BASES AND GENERAL CONDITIONS

1 This European Technical Approval is issued by the British Board of Agrément in accordance with:

- Council Directive 89/106/EEC of 21 December 1988 [Construction Products Directive (CPD)] on the approximation of laws, regulations and administrative provisions of Member States relating to construction products[1], modified by the Council Directive 93/68/EEC of 22 July 1993[2].
- UK implementation of CPD Statutory Instruments 1991, No 1620. The Building and Building Construction Products Regulations 1991 — made 15 July 1991, laid before Parliament 22 July 1991, coming into force 27 December 1991, and amended by the Construction Products (Amendment) Regulations 1994 (Statutory Instruments 1994, No 3051)
- Common Procedural Rules for Requesting, Preparing and the Granting of European Technical Approvals set out in the Annex to Commission Decision 94/23/EC[3]
- *Guideline for European Technical Approval of Liquid Applied Roof Waterproofing Kits* ETAG 005, edition March 2000, Part 1 *General* and Part 6 *Specific Stipulations for Kits Based on Polyurethane*.

2 The British Board of Agrément is authorised to check whether the provisions of this European Technical Approval are met. Checking may take place in the manufacturing plant. Nevertheless, the responsibility for the conformity of the products to the European Technical Approval and for their fitness for the intended use remains with the holder of the European Technical Approval.

3 This European Technical Approval is not to be transferred to manufacturers or agents of manufacturers other than those indicated on page 1, or manufacturing plants other than those indicated on page 1 of this European Technical Approval.

4 This European Technical Approval may be withdrawn by the British Board of Agrément, in particular after information by the Commission on the basis of Article 5(1) of Council Directive 89/106/EEC.

5 Reproduction of this European Technical Approval, including transmission by electronic means, shall be in full. However, partial reproduction can be made with the written consent of the British Board of Agrément. In this case partial reproduction has to be designated as such. Texts and drawings of advertising brochures shall not contradict or misuse the European Technical Approval.

6 The European Technical Approval is issued by the approval body in its official language. This version should correspond to the version circulated within EOTA. Translations into other languages have to be designated as such.

(1) Official Journal of the European Communities No L40, 11.2.1989, p12.

(2) Official Journal of the European Communities No L220, 30.8.1993, p1.

(3) Official Journal of the European Communities No L17, 20.1.1994, p34.

II SPECIFIC CONDITIONS OF THE EUROPEAN TECHNICAL APPROVAL

1 Definition of product and intended use

1.1 Definition of the product

1.1.1 SikaRoof MTC Waterproofing Systems are kits consisting of single-component, moisture-triggered, liquid, aliphatic polyurethanes and glass-reinforcing scrims. Specific substrates require a primer to promote adhesion of the roof waterproofing. Once installed the kits form an homogeneous roof waterproofing:

- SikaRoof MTC 12 — the kit is used to produce a system to the following specification on a smooth substrate; a first coat of Sikalastic-601 BC at a rate of 0.75 $l \cdot m^{-2}$, with embedded Reemat Standard glass reinforcement and a topcoat of Sikalastic-621 TC at a rate of 0.75 $l \cdot m^{-2}$, giving an overall finished thickness of approximately 1.3 mm
- SikaRoof MTC 15 — the kit is used to produce a system to the following specification on a smooth substrate; a first coat of Sikalastic-601 BC at a rate of 1.0 $l \cdot m^{-2}$, with embedded Reemat Premium glass reinforcement and a topcoat of Sikalastic-621 TC at a rate of 0.75 $l \cdot m^{-2}$, giving an overall finished thickness of approximately 1.5 mm
- SikaRoof MTC 18— the kit is used to produce a system to the following specification on a smooth substrate; a first coat of Sikalastic-601 BC at a rate of 1.0 $l \cdot m^{-2}$, with embedded Reemat Premium glass reinforcement and a topcoat of Sikalastic-621 TC at a rate of 1.1 $l \cdot m^{-2}$, giving an overall finished thickness of approximately 1.8 mm
- SikaRoof MTC 22 — the kit is used to produce a system to the following specification on a smooth substrate; a first coat of Sikalastic-601 BC at a rate of 1.0 $l \cdot m^{-2}$, with embedded Reemat Premium glass reinforcement, a second coat of Sikalastic-621 TC at a rate of 0.8 $l \cdot m^{-2}$ and a third (topcoat) of Sikalastic-621 TC at a rate of 0.8 $l \cdot m^{-2}$, giving an overall finished thickness of approximately 2.2 mm.

1.1.2 Sikalastic Grit — may be broadcast in the topcoat of the systems to provide a non-slip finish when required.

1.2 Intended use

1.2.1 The SikaRoof MTC Waterproofing Systems are for use as liquid-applied roof waterproofing kits to resist the passage of water to the building's internal structure, where Essential Requirements 2, 3 and 4 of the Directive 89/106/EEC concerning, *Safety in the case of fire*, *Hygiene, Health and the Environment* and *Safety in use*, including the aspect of durability, apply.

1.2.2 The kits have been assessed for use on substrates of:

- concrete primed and unprimed
- asphalt
- mineralised bitumen roofing felt
- galvanized steel
- non-mineralised roofing felt over plywood
- liquid, bituminous roof coating
- glass-reinforced polyester
- aluminium paint
- polyisocyanurate foam insulation board using a carrier membrane
- existing SikaRoof MTC roofs.

1.3 Intended working life

The provisions made in this ETA are based on assumed working lives of 10 years for SikaRoof MTC 12 and 25 years for SikaRoof MTC 15, SikaRoof MTC 18 and SikaRoof MTC 22. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be used as a means for selecting the appropriate product in relation to the expected economically reasonable working life of the works.

2 Characteristics of product and methods of verification

2.1 Characteristics of product

The installed systems produced from the kits (given in Part II, clause 1.1.1), have the characteristics listed in Annexes 1 to 4.

2.1.2 The characteristic values and respective tolerances for the components of the kits are stated in the Manufacturer's Technical Dossier (MTD) to this ETA.

2.1.3 Details of the chemical composition of the components of the kits and the manufacturing and quality control procedures are held by the British Board of Agrément.

2.1.4 The ETA is issued for the kits on the basis of the product composition held by the British Board of Agrément. Changes to the components of the kits or in the production process of the components, that could result in the details held by the British Board of Agrément being wrong, should be notified to the British Board of Agrément before the changes are introduced. The British Board of Agrément will decide whether the changes affect the ETA and consequently the validity of the CE Marking and whether further assessment and alterations to the ETA are required.

2.2 Methods of verification

2.2.1 Assessment of the fitness for intended use of the kits with regard to the Essential Requirements 2, 3 and 4 was carried out in accordance with the *Guideline for European Technical Approval of Liquid Applied Roof Waterproofing Kits* ETAG 005, edition March 2000, Part 1 *General* and Part 6 *Specific Stipulations for Kits Based on Polyurethane*.

2.2.2 According to the manufacturer's declaration, the SikaRoof MTC Waterproofing Systems do not contain any of the dangerous substances listed in the EU database.

2.2.3 Within the scope of this approval, there may be other requirements applicable to dangerous substances resulting from transposed European legislation or applicable national regulations and administrative provisions. Such requirements must be met.

3 Evaluation of Conformity and CE Marking

3.1 Attestation of Conformity system

The system of Attestation of Conformity applied to these kits shall be that laid down in the CPD, Annex III, 2(ii) (referred to as System 3).

3.2 Responsibilities

3.2.1 Tasks for the manufacturer

3.2.1.1 Factory production control

The manufacturer shall set up production control at his factory and perform regular inspection and controls according to the prescribed test plan[4].

The manufacturer may only use the initial materials stated in the MTD. They shall inspect or control the raw materials on acceptance according to the prescribed test plan.

The results of factory production control are recorded and evaluated. The records include at least:

- designation of the material
- type of control or testing
- date of manufacture of the product and date of testing
- result of control or testing and, if appropriate, comparison with requirements
- signature of person responsible for factory production control.

The records shall be kept for at least five years. On request they shall be presented to the British Board of Agrément.

Details concerning extent, type and frequency of tests or inspections to be performed within the scope of the factory production control shall correspond to the prescribed test plan that is part of the MTD to this ETA.

3.2.2 Tasks for approved bodies

3.2.2.1 Initial type-testing of the product

For initial type-testing the results of the tests performed as part of the assessment for the European Technical Approval shall be used unless there are changes in the manufacturing procedure that will affect the properties. In such cases, the necessary type-testing has to be agreed between the British Board of Agrément and the approved body involved.

3.3 CE Marking

The CE Marking shall be affixed to each component of the kit. The CE symbol shall be accompanied by the following information:

- identification of the product
- name and address or identification mark of the manufacturer
- the last two digits of the year in which the CE Marking was affixed
- number of the European Technical Approval
- statement on dangerous substances
- class of external fire performance
- reaction to fire class : no performance determined (NPD).

(4) The test plan is deposited with the British Board of Agrément and contains the required information on the factory production control.

4 Assumptions under which the fitness of the product for the intended use was favourably assessed

4.1 Manufacture

The components of the kits are factory made in accordance to the procedure laid down in the MTD.

4.2 Design

The fitness for the respective use for the levels of performance stated in Annexes 1 to 4 results from national requirements, and previous use of the kits.

The manufacturer has stated in the MTD the quantities required to produce the specified thicknesses of the four waterproofing layers (see section 1.1).

4.3 Installation

The fitness for use of the roof waterproofing can be assumed only if the installation is carried out in accordance with the manufacturer's instructions as stated in the MTD, in particular taking into account the following points:

- installation by trained and approved personnel
- substrates must be free of contamination, visibly dry, sound and free from loose materials
- only marked components of the kit must be used
- it must be ensured that the thickness of the waterproofing is at least the nominal thickness
- installation should be only carried out during suitable weather conditions
- the substrate should be primed, if required, with the correct primer
- any points of weakness in the substrate should be reinforced prior to installation of the waterproofing layer.
- The instructions for method of repair and handling of waste products shall be followed.

4.4 Responsibility of the manufacturer

It is the manufacturer's responsibility to make sure that all those who use the kits are appropriately informed of the specific conditions in sections 1, 2, 4 and 5 including the annexes to this ETA.

5 Information from the manufacturer

5.1 Information on packaging, transportation and storage

Information on packaging, transportation and storage are given in the MTD.

5.2 Information on use, maintenance and repair

Information on use, maintenance and repair are given in the MTD.

BBA APPROVAL INSPECTION TESTING CERTIFICATION
TECHNICAL APPROVALS FOR CONSTRUCTION

On behalf of the British Board of Agrément

Date of Second issue: 19 July 2010

Simon Wroe
Head of Approvals — Materials

Greg Cooper
Chief Executive

**Original ETA issued 28th April 2009. This amended version includes reference to SikaRoof MTC 15 kit, change of intended working life of SikaRoof MTC 18, inclusion of SikaRoof MTC 15 Annex, re-wording of system specifications and amendments to* Levels of performance *in Annexes with subsequent renumbering.*

ANNEX 1 SIKAROOF MTC 12 SYSTEM

This annex applies to the SikaRoof MTC 12 roof waterproofing kit described in the main body of this ETA.

The substrates applicable to this kit are defined in the main body of this ETA.

Water vapour transmission — 6.6 $g \cdot m^{-2} \cdot day^{-1}$.

Resistance to wind loads — >50 kPa.

The categorisation of levels of performance in accordance with ETAG 005 is given in Table 1.

Table 1 Levels of performance

Characteristic	Level of performance
External fire performance	NPD[1]
Reaction to fire	NPD (Euroclass F)
Categorisation by working life	W2
Categorisation by climatic zones	M and S
Categorisation by imposed loads:	
most compressible substrate	P1
least compressible substrate	P2
Categorisation by roof slope	S1 to S4
Categorisation by surface temperature:	
lowest	TL3
highest	TH4
Statement on dangerous substances	None contained
Slipperiness [slope (°)/friction coefficient]:	
no grit (dry)	18.7/0.34
grit at 0.25 $kg \cdot m^{-2}$ (dry)	29.0/0.55
grit at 1.00 $kg \cdot m^{-2}$ (dry)	32.0/0.62
no grit (wet)	16.7/0.30
grit at 0.25 $kg \cdot m^{-2}$ (wet)	28.3/0.54
grit at 1.00 $kg \cdot m^{-2}$ (wet)	32.0/0.62

(1) Classification under BS 476-3 : 1958 is assessed as EXT.F.AA. Results of tests are given in the Evaluation Report.

ANNEX 2 SIKAROOF MTC 15 SYSTEM

This annex applies to the SikaRoof MTC15 roof waterproofing kit described in the main body of this ETA.

The substrates applicable to this kit are defined in the main body of this ETA.

Water vapour transmission — 6.5 $g \cdot m^{-2} \cdot day^{-1}$.

Resistance to wind loads — >50 kPa.

The categorisation of levels of performance in accordance with ETAG 005 is given in Table 1.

Table 1 Levels of performance

Characteristic	Level of performance
External fire performance	B_{ROOF}(t1) B_{ROOF}(t2) B_{ROOF}(t3) B_{ROOF}(t4)
Reaction to fire	NPD (Euroclass F)
Categorisation by working life	W3
Categorisation by climatic zones	M and S
Categorisation by imposed loads: most compressible substrate least compressible substrate	 P4 P4
Categorisation by roof slope	S1 to S4
Categorisation by surface temperature: lowest highest	 TL3 TH4
Statement on dangerous substances	None contained
Slipperiness [slope (°)/friction coefficient]: no grit (dry) grit at 0.25 $kg \cdot m^{-2}$ (dry) grit at 1.00 $kg \cdot m^{-2}$ (dry) no grit (wet) grit at 0.25 $kg \cdot m^{-2}$ (wet) grit at 1.00 $kg \cdot m^{-2}$ (wet)	 18.7/0.34 29.0/0.55 32.0/0.62 16.7/0.30 28.3/0.54 32.0/0.62

ANNEX 3 SIKAROOF MTC 18 SYSTEM

This annex applies to the SikaRoof MTC 18 roof waterproofing kit described in the main body of this ETA.

The substrates applicable to this kit are defined in the main body of this ETA.

Water vapour permeability — 5.8 $g \cdot m^{-2} \cdot day^{-1}$.

Resistance to wind loads — >50 kPa.

The categorisation of levels of performance in accordance with ETAG 005 is given in Table 1.

Table 1 Levels of performance

Characteristic	Level of performance
External fire performance[1]	$B_{ROOF}(t1)$ $B_{ROOF}(t2)$ $B_{ROOF}(t3)$
Reaction to fire	Euroclass E
Categorisation by working life	W3
Categorisation by climatic zones	M and S
Categorisation by imposed loads: most compressible substrate least compressible substrate	 P4 P4
Categorisation by roof slope	S1 to S4
Categorisation by surface temperature: lowest highest	 TL3 TH4
Statement on dangerous substances	None contained
Slipperiness [slope (°)/friction coefficient]: no grit (dry) grit at 0.25 $kg \cdot m^{-2}$ (dry) grit at 1.00 $kg \cdot m^{-2}$ (dry) no grit (wet) grit at 0.25 $kg \cdot m^{-2}$ (wet) grit at 1.00 $kg \cdot m^{-2}$ (wet)	 18.7/0.34 29.0/0.55 32.0/0.62 16.7/0.30 28.3/0.54 32.0/0.62

(1) Classification under BS 476-3 : 1958 is assessed as EXT.F.AA. Results of tests are given in the Evaluation Report.

ANNEX 4 SIKAROOF MTC 22 SYSTEM

This annex applies to the SikaRoof MTC 22 roof waterproofing kit described in the main body of this ETA.

The substrates applicable to this kit are defined in the main body of this ETA.

Water vapour transmission — 3.8 $g \cdot m^{-2} \cdot day^{-1}$.

Resistance to wind loads — >50 kPa.

The categorisation of levels of performance in accordance with ETAG 005 is given in Table 1.

Table 1 Levels of performance

Characteristic	Level of performance
External fire performance[1]	$B_{ROOF}(t1)$
Reaction to fire	Euroclass E
Categorisation by working life	W3
Categorisation by climatic zones	M and S
Categorisation by imposed loads:	
most compressible substrate	P4
least compressible substrate	P4
Categorisation by roof slope	S1 to S4
Categorisation by surface temperature:	
lowest	TL3
highest	TH4
Statement on dangerous substances	None contained
Slipperiness [slope (°)/friction coefficient]:	
no grit (dry)	18.7/0.34
grit at 0.25 $kg \cdot m^{-2}$ (dry)	29.0/0.55
grit at 1.00 $kg \cdot m^{-2}$ (dry)	32.0/0.62
no grit (wet)	16.7/0.30
grit at 0.25 $kg \cdot m^{-2}$ (wet)	28.3/0.54
grit at 1.00 $kg \cdot m^{-2}$ (wet)	32.0/0.62

(1) Classification under BS 476-3 : 1958 is assessed as EXT.F.AA. Results of tests are given in the Evaluation Report.

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