BUILDING COMMON GROUND

MAX FRANK®

General Building Test Certificate

Intec® Standard

Injection hose system "Intec® Standard injection hose" and "Intectin® Plus resin"

P-51-08-0156e | 31.08.2023

issued by: TUM, MPA Bau, Munich

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General Building Authority Test Certificate

Approved Test Centre: MPA BAU TU Munich (BAY01)

No.: P-51-08-0156e

Bitumen and Sealing Materials Group

Date
31.08.2023

Our Ref.
AF/Fi

Subject: Injection hose system made from “Intec Standard grouting hose” and “Intectin Plus resin” injection resin for sealing of construction and butt joints in concrete structures with high resistance to the penetration of water according to MVV TB, Part C3, No. C 3.30

Applicant: Max Frank GmbH & Co. KG, Leiblfing

Date of issue 12.12.2008

Renewed until: 31.08.2028

This General Building Authority Test Certificate comprises 8 pages

A General provisions

(1) This General Building Authority Test Certificate verifies that the construction product is usable in compliance with the State building regulations.

(2) The General Building Authority Test Certificate does not replace the approvals, consents and certifications prescribed by law for the realisation of construction projects.

(3) The General Building Authority Test Certificate is issued without prejudice to the rights of third parties, in particular private property rights.

(4) Notwithstanding further regulations in the Special Provisions, producers and distributors of the construction product should provide its users with copies of the General Building Authority Test Certificate and inform them that the certificate must be available at the site location. Upon request, copies of the certificate shall be supplied to the authorities involved.

(5) The General Building Authority Test Certificate may only be reproduced in full. Publication of extracts requires the consent of the Centre for Materials Testing, Building Materials Division, of Munich Technical University. Advertising material texts and drawings must not be contradictory to the General Building Authority Test Certificate. Translations of the certificate must contain the notice “Translation of the original German version not checked by the Centre for Materials Testing, Building Materials Division, of Munich Technical University“.

(6) This General Building Authority Test Certificate is issued subject to revocation. The provisions of the certificate may be supplemented, or amended later, particularly if new technical knowledge so requires.

B Special provisions

1. Subject and scope of application

1.1 Subject

This General Building Authority Test Certificate is applicable to the manufacture and use of the “Intec Standard grouting hose” and “Intectin Plus Resin” injection resin sealing system from Max Frank GmbH & Co. KG, Leiblfing as a sealant for construction and butt joints in concrete structures with high resistance to the penetration of water, which cannot be classified as the C 2.10.2 and C 2.10.3 products in chapter C 2 in accordance with the Model Administrative Rules on Technical Building Regulations (MVV TB), 2021/1 edition, Part C3, No. C 3.30.

1.2 Scope of application

The “Intec Standard grouting hose” and “Intectin Plus Resin” injection resin sealing system may be used for the sealing of construction and butt joints in concrete structures with high resistance to penetration of water and a maximum aperture width of 0.25 mm against:

- Ground moisture and water not under hydrostatic pressure,
- Periodically accumulating seepage water and water under hydrostatic pressure up to a maximum of 2.0 bar (20 m immersion depth)

The sealant meets the requirements of service class A for Exposure Classes 1 and 2 under the WU-Richtlinie[1].

2. Provisions for the construction product

2.1 Composition, characteristics, and properties

2.1.1 Composition

The sealing system has the following product composition:

- Injection hose: “Intec Standard grouting hose” with accessories Intec nail clips, Intec shutter connectors, Intec Standard grouting hose ends, Intec ball-head nipples etc., see manufacturer’s specifications)
- Injection material “Intectin Plus” injection resin consisting of components A and B

2.1.2 Characteristics and properties

Use of the sealing system as a construction joint sealant in concrete structures with high resistance to the penetration of water, was verified in compliance with the “Testing Principles for the award of General Building Authority Test Certificates for joint sealants in concrete structures (FBB) with high resistance to penetration of water against water which is either under or not under hydrostatic pressure and ground moisture”, (PG-FBB), Part 1: Seals for construction joints and controlled crack joints, May 2008 edition.

The May 2008 PG FBBs, Part 1, applied, are essentially the same as those of May 2020.

The results of the tests are documented in test report 51-08-0156 of 10.12.2008 from TU Munich MPA BAU.

The “Intec Standard grouting hose” injection hose meets the requirements for building materials in material class B2 under DIN 4102-1 (normally flammable). This was verified by test certificate B18255 of 13.09.2018 by Holzforschung München (Munich Timber Research - HFM).

The “Intectin Plus resin” injection material is labelled as defined in DIN EN 1504-5 CE, has undergone initial testing and is subject to in-house production control (Certificate 0761-CPR-123 of 04.08.2023), Declaration of Performance G4B-Intectin-2023-V08 according to Annex III of Regulation (EU) 305/2011.

[1] DAfStb – Water Impermeable Concrete Structures guideline (WU-Richtlinie)

2.2 Manufacture, packaging, transport, storage, and labelling

2.2.1 Manufacture

The construction products “Intec Standard grouting hose“ and “Intec Plus resin” injection resin are factory produced.

2.2.2 Packaging, transport, storage

The “Intec Plus resin” components must be stored protected from frost. Other requirements are contained in the manufacturer’s instructions for installation and use.

2.2.3 Labelling of product and components

2.2.3.1 Mark of Conformity (Ü-Zeichen)

The sealing system shall be labelled by the manufacturer with the Mark of Conformity (Ü-Zeichen) under the Mark of Conformity regulations of the States. It may only be so labelled if the conditions of Section 3, Certificate of Conformity, are met.

The Mark of Conformity shall be inserted on the packaging or, if not possible, on the delivery or despatch note, together with the specified information:

- Manufacturer’s name
- General Building Authority Test Certificate number and testing centre designation

2.2.3.2 Additional information

The following information shall appear on the product packaging or despatch note:

- Product name
- Batch number
- Use
- Reference to the relevant application regulations
- Resistance to fire class B2 under DIN 4102-1 (normally flammable)

Components packed separately shall be clearly marked as belonging to the sealing system.

3 Proof of Conformity

3.1 General

The conformity of the construction product with the requirements of this General Building Authority Test Certificate shall be certified for each manufacturing facility by a Declaration of Conformity by the manufacturer on the basis of initial testing of the product by an approved test centre and an in-house production control system according to 3.2 and 3.3.

The manufacturer shall issue the Declaration of Conformity by labelling the product with the Mark of Conformity (Ü-Zeichen) specified in 2.2.3.1.

3.2 Initial testing of construction product by an approved testing centre

Initial testing of the product may be omitted, because the samples for testing are taken from regular production at the manufacturing facility in connection with the usability certification.

If the production conditions change, initial testing is to be reinstated.

3.3 In-house production control

An in-house production control system shall be set up and implemented at the manufacturing facility. In-house production control means the continuous monitoring of production undertaken by the manufacturer to ensure that the construction product manufactured complies with the provisions of the General Building Authority Test Certificate.

The in-house production control is defined on the basis of DIN 18200, and the test principles Joint Sealants, PG FBB, Part 1, May 2020 edition, and the manufacturer information:

– Control of the raw materials by means of manufacturers' declarations or appropriate tests (on each delivery batch)

– Injection hose: Structure and dimensions (every 1000 m), impermeability to cement paste (every 5000 m)

– Grouting resin: According to DIN EN 1504-5 (annually)

The results of the in-house production control shall be recorded and analysed. The records shall contain the following minimum information:

- Designation of construction product
- Type of control
- Date of manufacture and inspection of the construction product
- Result of the controls and, if applicable, comparison with the requirements
- Signature of the person responsible for the in-house production control

The in-house production control records shall be retained for a minimum of five years. Upon request, they shall be submitted to the testing centre in the event of changes to or renewals of the General Building Authority Test Certificate, and to the highest building supervision authority.

If the inspection result is unsatisfactory, the manufacturer shall take the necessary action without delay to correct the deficiency and reject the products affected. The in-house production control system shall ensure that products that do not meet the requirements are

not labelled with the Mark of Conformity and that confusion with compliant products is impossible. The relevant inspection shall be repeated without delay after correction of the deficiency – if technically possible and necessary for proof of remediation.

3.4 Certification of conformity

The conformity of the construction product with the provisions of this General Building Authority Test Certificate shall be verified for each manufacturing facility by a Declaration of Conformity by the manufacturer, based on the initial testing and in-house production control defined in 3.2 and 3.3.

The manufacturer shall issue the Declaration of Conformity by labelling the product with the Mark of Conformity (Ü-Zeichen) as specified in 2.2.3.1.

4 Application

The manufacturer's application instructions apply to installation of the "Intec Standard grouting hose" and "Intectin Plus resin" sealing system. The instructions and this General Building Authority Test Certificate for the sealing system must be available at the point of installation.

The "Intec Standard grouting hose" shall be installed as centrally as possible in the structure. On thick structures (d > 60 cm), the hose should be fitted about 25 cm from the water side. It is essential that the product can lie fully on a structure surface of the construction joint. Minimum concrete cover of 5 cm shall always be maintained. The units shall not exceed 10 m in length. Successive grout passes shall overlap. The positions of the grout passes shall be recorded on the system circuit diagram if possible.

The following requirements apply to the substrate:

- Concrete with high resistance to penetration of water
- Support surface as level as possible

A connecting mix (0/8 grain size) should be used around the construction joints.

The following requirements shall be met before the first injection:

- The heat of hydration must have dissipated.
- Settlement and shrinkage of the structure must have largely subsided.
- Experience shows that grouting should not be done until at least 4 weeks after concreting.

Grouting must be left as late as possible.

5 Installation

The manufacturer's installation instructions apply to application of the "Intec Standard grouting hose" and "Intectin Plus resin" sealing system. The instructions and this General Building Authority Test Certificate for the sealing system must be available at the point of installation.

Only the accessories supplied by the manufacturer with the "Intec Standard" injection hose system shall be used.

The grouting hose should be fixed firmly in the construction joint and be secured to prevent it moving and lifting. When installing the hose, the fixing distances should not exceed about 15 cm. The hose should be fitted using the fixings recommended by the manufacturer. The hose must not touch the final concrete surface, or a recess etc., at any point.

The "Intectin Plus resin" must be mixed and stirred thoroughly according to the manufacturer's instructions. Water or other materials should not be added. The resin can be applied with an electric, 1-component injection pump, or for small quantities, with a hand pump. Any injection system used must be capable of continuously monitoring the injection pressure.

The "Intectin Plus resin" should be injected into the "Intec Standard grouting hose" at moderate and sustained pressure. Sustained low pressure is more appropriate than brief high pressure. There should be a controlled increase in the injection pressure from 0 up to 80 bar. Reinjection once or twice during the working time of the resin is recommended. If a high flow of water passes through an ungrouted construction joint, its flow rate should be monitored. If the "Intectin Plus resin" has no means of curing in the joint without being flushed out, appropriate preventative action should be taken (e.g. drainage).

The "Intectin Plus resin" may be applied when the minimum structure temperature is +5°C . Stay within the relevant working times.

Experience shows that a standard consumption of 1 kg "Intectin Plus resin" per 10 m of "Intec Standard grouting hose" can be expected.

An injection log should be kept.

6 Provisions for use, maintenance and servicing

(If required)

7 Legal basis

This General Building Authority Test Certificate is renewed under Article 19 of the State of Bavaria Building Regulations in conjunction with MVV TB No. C 3.30.

8 Legal remedies

Legal action may be taken against this decision within one month of its notification at Straubing Register Court, KG: HRA 1341 / GmbH: HRB 9032 in writing or for recording by the clerk of the court at the court office. The action must name the complainant, the respondent (Free State of Bavaria) and the subject of the claim and should contain a specific application. The facts and evidence justifying the action should be stated and the original or a copy of the contested decision should be attached. Copies of the action and all the written submissions should be enclosed for the other parties.

Information on legal remedies:

- The appeal proceedings in building regulation matters were abolished in Bavaria by the law amending the Code of Administrative Procedure of 22 June 2007 (Gaz. p. 390). There is no facility to appeal against this decision.
- Filing of an action electronically (e.g. by email) is not permitted.
- Under federal law, since 1 July 2004 an advance on fees has been payable in litigation proceedings at administrative courts.

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ABTEILUNG BAUSTOFFE

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