

General building test certificate

Intec[®] Premium

P-51-20-0058 | 29.01.2021 | english

Injection hose system consisting of “**Intec Premium injection hose**” and “**Intectin Plus**” injection resin for construction and butt joints in concrete structures with high resistance against water penetration

tested by: TUM - MPA BAU – Division Building Materials, Munich

(Translation of the original German text not checked by the Materials Testing Institute for the Building Industry, Division Building Materials of the Technical University of Munich)

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FG bitumen and sealing

Munich, 29/01/2021

General Building Test Certificate (abP)

No.: P-51-20-0058

Subject matter and scope:

Injection hose system consisting of “**Intec Premium injection hose**” and “**Intectin Plus**” injection resin for construction and butt joints in concrete structures with high resistance against water penetration, in accordance with the Model Administrative Rules on Technical Building Regulations (Muster-Verwaltungsvorschrift Technische Baubestimmungen - MVV TB), Part C3, Ser. No. C 3.30

Applicant: Max Frank GmbH & Co. KG, Leiblfing

Date of issue: 01/02/2011

extended to: 01/02/2026

A GENERAL PROVISIONS

(1) This German National approval (abP) certifies the usability of the construction product in the sense of the Federal State Building Code.

(2) The German National approval (abP) does not replace the legally required approvals, consents and certificates for the execution of construction projects.

(3) The German National approval (abP) is issued without prejudice to the rights of third parties, in particular private property rights.

(4) Without prejudice to further regulations, manufacturers and distributors of the construction product must provide the user of the construction product with copies of the German National approval (abP) in the “Special Provisions” and point out that the national technical approval certificate must be available at the place of use. Copies of the German National approval (abP) shall be provided to the authorities involved upon request.

(5) The German National approval (abP) may only be reproduced completely. Publication of extracts requires the permission of the Materials Testing Institute for the Building Industry (Materialprüfungsamt für das Bauwesen), Division Building Materials of the Technical University of Munich. Texts and drawings of advertising material may not contradict the German National approval (abP). Translations of the German National approval (abP) must contain the note “Translation of the original German text not checked by the Materials Testing Institute for the Building Industry, Division Building Materials of the Technical University of Munich”.

(6) The German National approval (abP) is revocable. The provisions of the German National approval (abP) can be supplemented or changed at a later date, especially if new technical knowledge requires so.

B SPECIAL PROVISIONS

1 Subject matter and scope

1.1 Subject of approval

The German National approval (abP) for the sealing system “Intec Premium injection hose” and “Intectin Plus” injection resin of the company Max Frank GmbH & Co. KG, Leiblfling, applies to the production and use of a sealing for construction and butt joints in concrete structures with high resistance against water penetration that cannot be categorised as products C 2.10.2 and C 2.10.3 in section C 2 in accordance with the Model Administrative Rules on Technical Building Regulations (Muster-Verwaltungsvorschrift Technische Baubestimmungen - MVV TB), edition 2017/1, Part C3, Ser. No. C 3.30.

The sealing system “Intec Premium injection hose” and “Intectin Plus” injection resin may be used for sealing of construction and butt joints in concrete structures with high resistance against water penetration with a maximum joint opening width of 0.25 mm against:

- Soil moisture and water without hydrostatic pressure,
- seepage water which temporarily accumulates and water with hydraulic pressure up to 0,2 MPa (2 bar; 20 m water head; test pressure 0,5 MPa – safety factor 2,5).

The sealing meets the requirements of service class A for stress classes 1 and 2 in accordance with the German WU guideline¹.

2 Provisions for the construction product

2.1 Composition, characteristics and properties

2.1.1 Composition

The sealing system consists of the following products:

- Injection hose “Intec Premium injection hose” with accessories (shutter connector, Intec clamps, Intec hose ends, ball-head nipple, etc., see manufacturer’s specifications),
- Injection material “Intectin Plus” injection resin, consisting of components A and B.

2.1.2 Characteristic and properties

Evidence of the usability of the sealing system as a sealing for construction joints in concrete structures with high resistance against water penetration was obtained in accordance with the “Testing requirements for issuing of national technical approvals for joint waterproofing in structures made of, inter alia, concrete with high water penetration resistance in the area in contact with the ground, PG-FBB, Part 1, Seals for working joints, crack control joints, transitions and connections, edition September 2017”.

The results are documented in the test reports No. Ta51010/05 of 27/01/2006 and No. 51-20-0058 of 21/01/2021 issued by the Laboratory of Building Structures (MPA BAU).

The injection hose “Intec Premium injection hose” fulfils the requirements for building materials of class B2 rating according to DIN 4102-1 (normal flammability). The proof was provided with test certificate No. B20315 from TUM Research Laboratory Wood (Holzforschung München - HFM) dated December 10th, 2020.

The injection material “Intectin Plus” injection resin is marked according to DIN EN 1504-5 CE (declaration of performance No. IPUP01 dated 01/10/2019).

¹1DAfStb - Guideline for water-impermeable concrete structures (WU Guideline)

2.2 Manufacture, packaging, transport, storage and marking

2.2.1 Manufacture

The construction products “Intec Premium injection hose” and “Intectin Plus” injection resin are factory-made.

2.2.2 Packaging, transport, storage

Packaging, transport and storage must be carried out in accordance with the manufacturer’s instructions.

The specifications on the packaging regarding requirements in other legal domains (e.g. hazardous substances and/or transport regulations) is to be observed.

2.2.3 Identification of the product and the components

2.2.3.1 German conformity mark (Ü mark)

The sealing system must be marked by the manufacturer with the German conformity mark (Ü mark) in accordance with the conformity mark regulations of the German federal states. The marking may only take place if the prerequisites laid down in section 3 of the certificate of conformity are fulfilled.

The Ü mark featuring the following information:

- Manufacturer’s name
- Number of the German National approval (abP) and identification of the testing laboratory

must be affixed to the packaging, or, if this is not possible, to the delivery note or package leaflet.

2.2.3.2 Additional information

The following specification must be included on the packaging of the construction product or on the package leaflet:

- Product name
- Batch number
- Intended purpose
- Reference to the associated processing instructions
- Fire behaviour of building material class B2 rating according to DIN 4102-1 (normal flammability)

Individually packaged components must be clearly labelled as belonging to the sealing system.

3 Attestation of conformity

3.1 General

In accordance with 3.2 and 3.3, the confirmation of compliance of the construction product with the provisions of this German National approval (abP) must involve, for each manufacturing plant, a declaration of conformity issued by the manufacturer on the basis of an initial test of the construction product by a testing laboratory accredited for this purpose and a factory production control.

The manufacturer must issue the declaration of conformity by marking the construction product with the conformity mark (Ü mark) in accordance with 2.2.3.1.

3.2 Initial testing of the construction product by an accredited testing laboratory

The initial test of the product may be omitted, since the test samples were taken from the ongoing production of the manufacturing plant within the scope of the proof of usability.

If the production requirements change, an initial test must be carried out again.

3.3 Factory production control

Factory production control needs to be set up and carried out in the manufacturing plant. Factory production control means the continuous monitoring of production to be carried out by the manufacturer to ensure that the construction product it manufactures complies with the provisions of the German National approval (abP).

The factory production control is determined in accordance with DIN 18200:2018 and the testing requirements for joint waterproofing PG FBB, Part 1, edition September 2017:

- Control of the raw materials on the basis of manufacturer's declarations or through suitable tests (per delivery batch)
- Injection hose: Structure and dimensions (per 1000 m), impermeability to cement paste (per 5000 m)
- Injection resin: according to DIN EN 1504-5 (per batch or delivery)

If selling components supplied together with the construction product, the manufacturer has to verify that the properties of materials are suitable for the intended use. This can be done either by way of incoming goods inspection at the manufacturer or by submitting a factory test certificate 2.2 according to DIN EN 10204 issued by the supplier of the component.

The results of the factory production control are to be recorded and evaluated. The records must include at least the following details:

- Description of the construction product
- Type of control
- Manufacturing and control date of the construction product
- Results of the inspections and, if applicable, comparison with the requirements
- Signature of the person responsible for the factory production control

The records of the factory production control must be kept for at least five years. Upon request, they are to be presented to the testing laboratory in the event of changes or extensions to the German National approval (abP) and to the highest building inspection authority.

If the inspection result is unsatisfactory, the manufacturer must immediately take the necessary measures to remedy the shortcoming and remove the affected products. As part of the factory production control, steps need to be taken to ensure that construction products that do not meet the requirements are not marked with the Ü mark and that they cannot be mixed up with compliant products. After the elimination of the shortcoming, the relevant inspection must immediately be repeated if this is technically possible and necessary to prove the elimination of the shortcoming.

4 Execution

The sealing system is applied in accordance with the manufacturer's application guidelines (Appendix 1).

This German National approval (abP) relates exclusively to the joint sealing using "Intectin Plus" injection resin.

Only the components belonging to the product and marked accordingly may be processed.

Before the first injection, the following requirements must be met:

- The heat of hydration must have dissipated;
- Structural settlement and shrinkage should have largely subsided;
- Experience has shown that resin injection should not take place until 4 weeks have elapsed since concreting.

In principle, it should be injected as late as possible.

The "Intectin Plus" injection resin must be mixed and well stirred according to the manufacturer's instructions. Neither water nor other materials may be added to the mixture. The injection resin can be injected with an electric one-component injection pump or, in the case of small quantities, with a simple hand pump. In all systems, the injection pressure must be monitored constantly.

The “Intectin Plus” injection resin should be injected into the “Intec Premium injection hose” with moderate and on-going pressure. Prolonged low pressure is more useful than short high pressure. The injection pressure should be increased from 0 to 80 bar in a controlled manner. It is recommended to re-inject resin once or twice during the processing time. If water penetrates heavily through a non-sealed working joint, the water flow rate should be monitored carefully. Suitable measures should be taken (e.g. water drainage) if the “Intectin Plus” injection resin cannot harden without being rinsed out.

When using the “Intec Premium injection hose” for multiple injection, it must be emptied after each injection by so-called pressure flushing. The “Intectin Plus” injection resin can be blown out of the injection hose with compressed air at max. 2 bar, then the hose can be rinsed with the “Intectin special cleaner” supplied by the manufacturer and finally blown out with compressed air or rinsed immediately with “Intectin special cleaner” at a pressure of max. 2 bar and blown free with compressed air. The pressureless conical-head nipples required for pressure flushing (not conical-head nipples with high opening pressure) can be obtained from the manufacturer. Using a suitable pressure gauge, it must be ensured that the highest permissible “discharge pressure” of 2 bar is maintained.

The “Intectin Plus” injection resin can be processed in a component temperature range between +8°C and +40°C. The corresponding processing times must be observed.

5 Provisions for use, maintenance and care

(if necessary)

6 Legal basis

This German National approval (abP) is granted based on § 19 of the Building Code for the State of Bavaria in connection with the Model Administrative Rules on Technical Building Regulations (MVV TB), Ser. No. C 3.30.

7 Notice of recourse to law

This decision may be appealed within one month of its notification by filing a legal action with the registration court of the Straubing Superior Court of Justice: HRA 1341/GmbH: HRB 9032 in writing or for the record of the clerk of the office of this court. The legal action must identify the plaintiff, the defendant (Free State of Bavaria) and the subject matter of the claim and should contain a specific request. The facts and evidence serving as justification should be given, and the contested decision should be attached as an original or a copy. Copies of the appeal and all pleadings should be attached for the other parties involved.



Notes on legal remedies:

- The objection procedure in the area of building regulations in Bavaria was abolished by the law amending the law for implementing the Administrative Procedure Code of 22 June 2007 (GVBl p. 390). It is not possible to object to this decision.
- Filing of a lawsuit in electronic form (e.g. by e-mail) is not permitted.
- By virtue of federal law, since 1 July 2004, an advance fee has to be paid when bringing legal proceedings before the administrative courts.

MATERIALS TESTING INSTITUTE FOR THE BUILDING INDUSTRY
DIVISION BUILDING MATERIALS

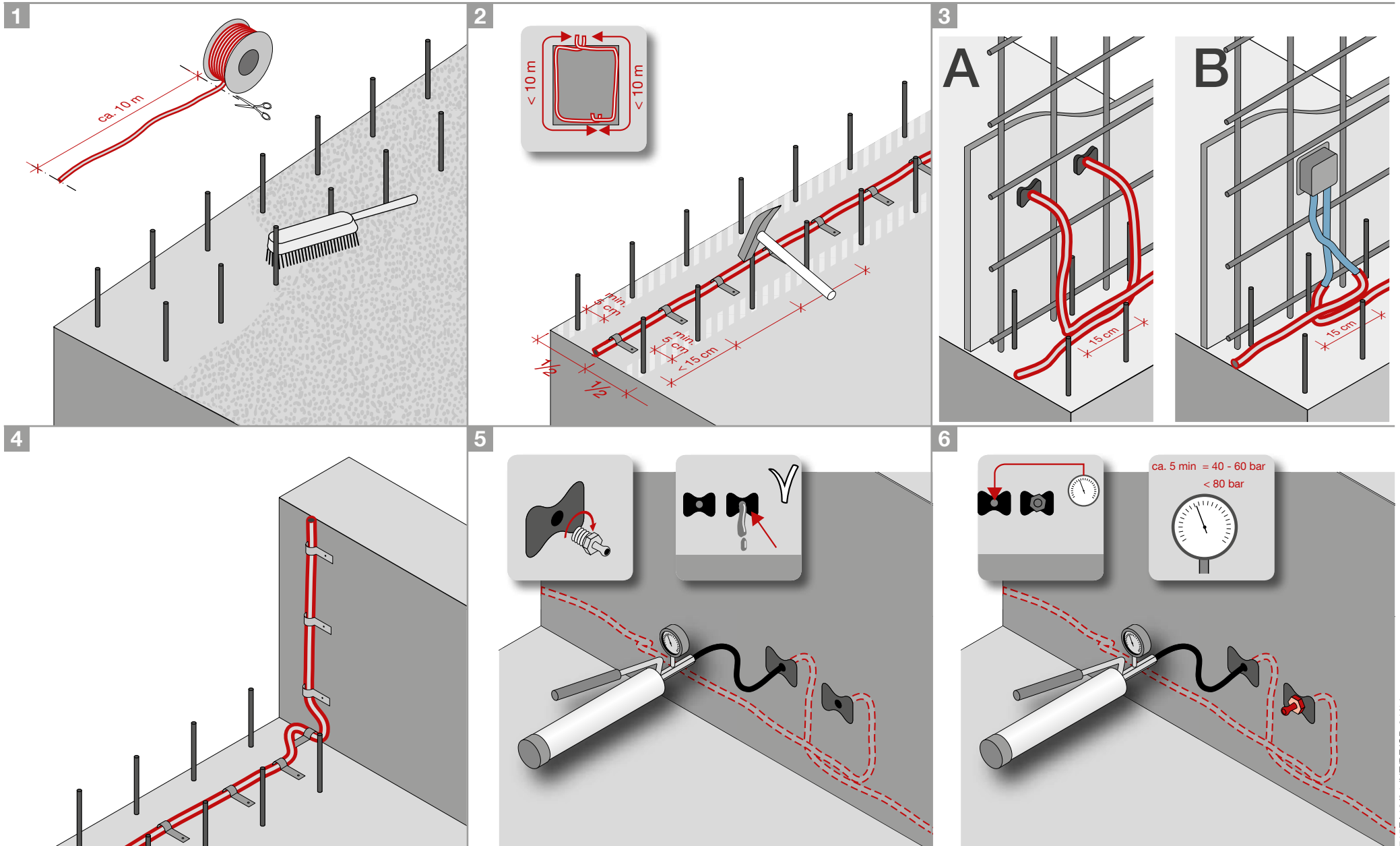
Ltd. Akad. Dir. Dr.-Ing. Th. Wörner
Head of the Working Group
Bituminous and Mineral Construction
Materials

Dr.-Ing. Bernd Wallner
Head of the Technical Group
Bitumen and Sealing Materials

Appendix 1: Manufacturer's application guidelines

Intec® injection hose system

Intec® Injektionsschlauchsystem



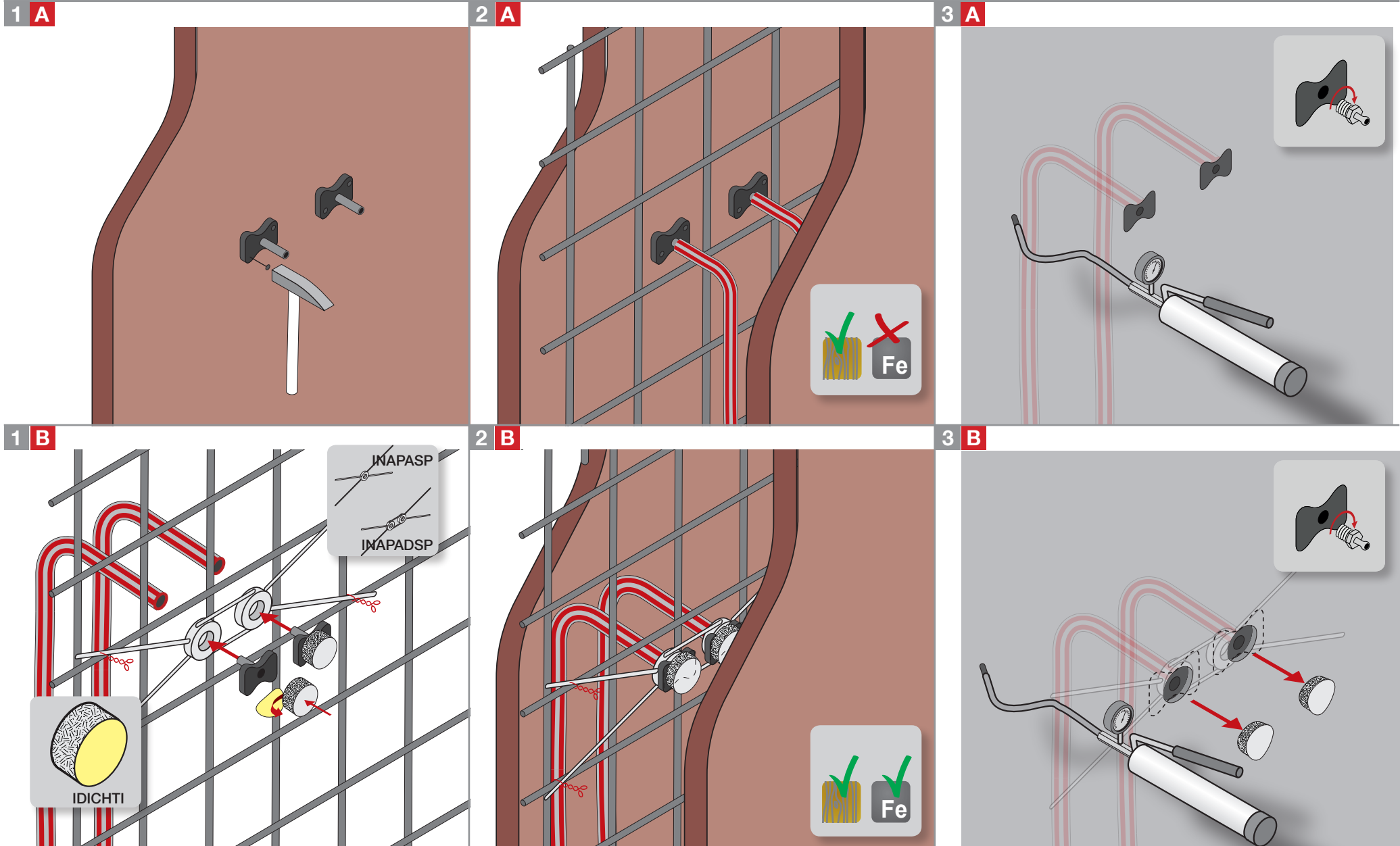
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This Installation Guideline is a condensed description of factors having a direct effect on the performance of the MAX FRANK Product and is based on the present state of the art. It may be necessary to alter these recommendations, as more information becomes available. Correct use is the responsibility of the user, if in doubt please consult your local supplier.

Diese Einbauhinweise können nur als Empfehlung gelten. Sie ersetzen nicht das für die Montage erforderliche Fachwissen. Die Hinweise werden stets auf dem neuesten Stand der Technik gehalten und werden ständig aktualisiert. Technische Änderungen sind daher – auch ohne vorherige Information des Kunden – ausdrücklich vorbehalten. Die jeweils gültige Version ist auf unserer Website unter: www.maxfrank.com zu finden. Ergänzend gelten unsere Allgemeinen Verkaufsbedingungen.

Intec® Shutter connector - mounting options

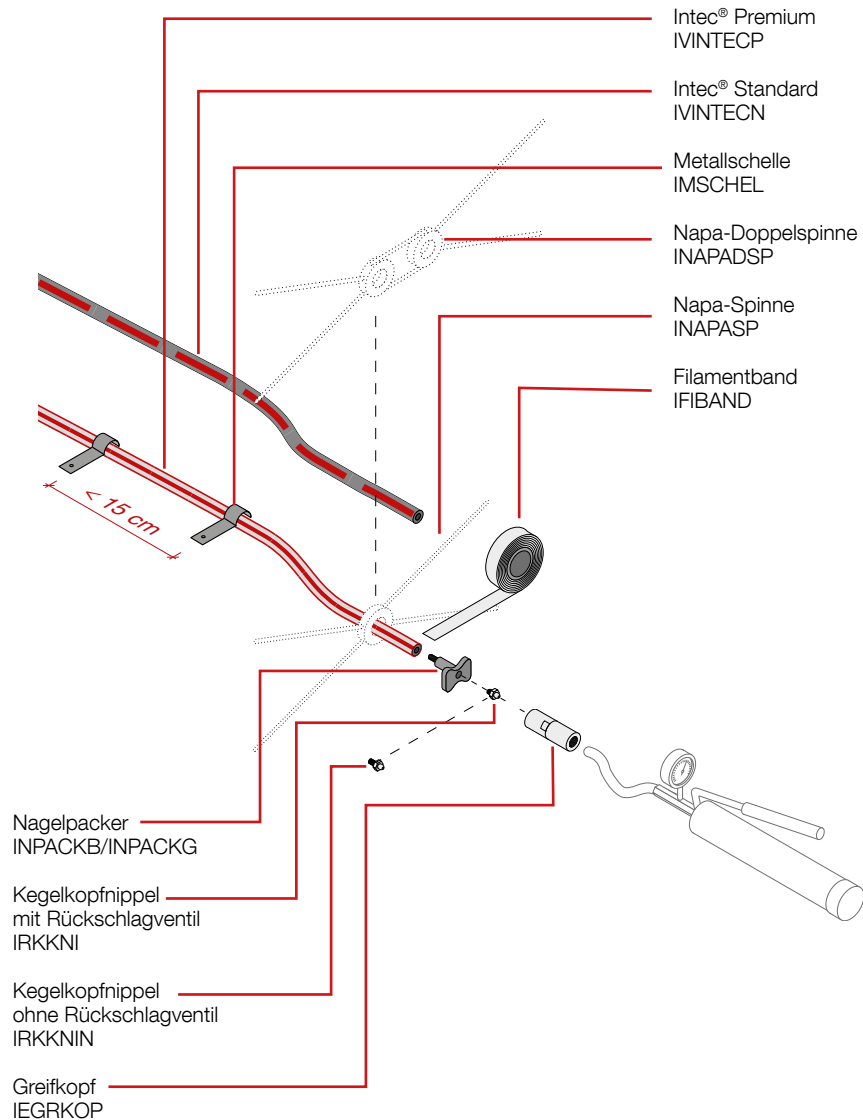
Intec® Nagelpacker - Montagevarianten



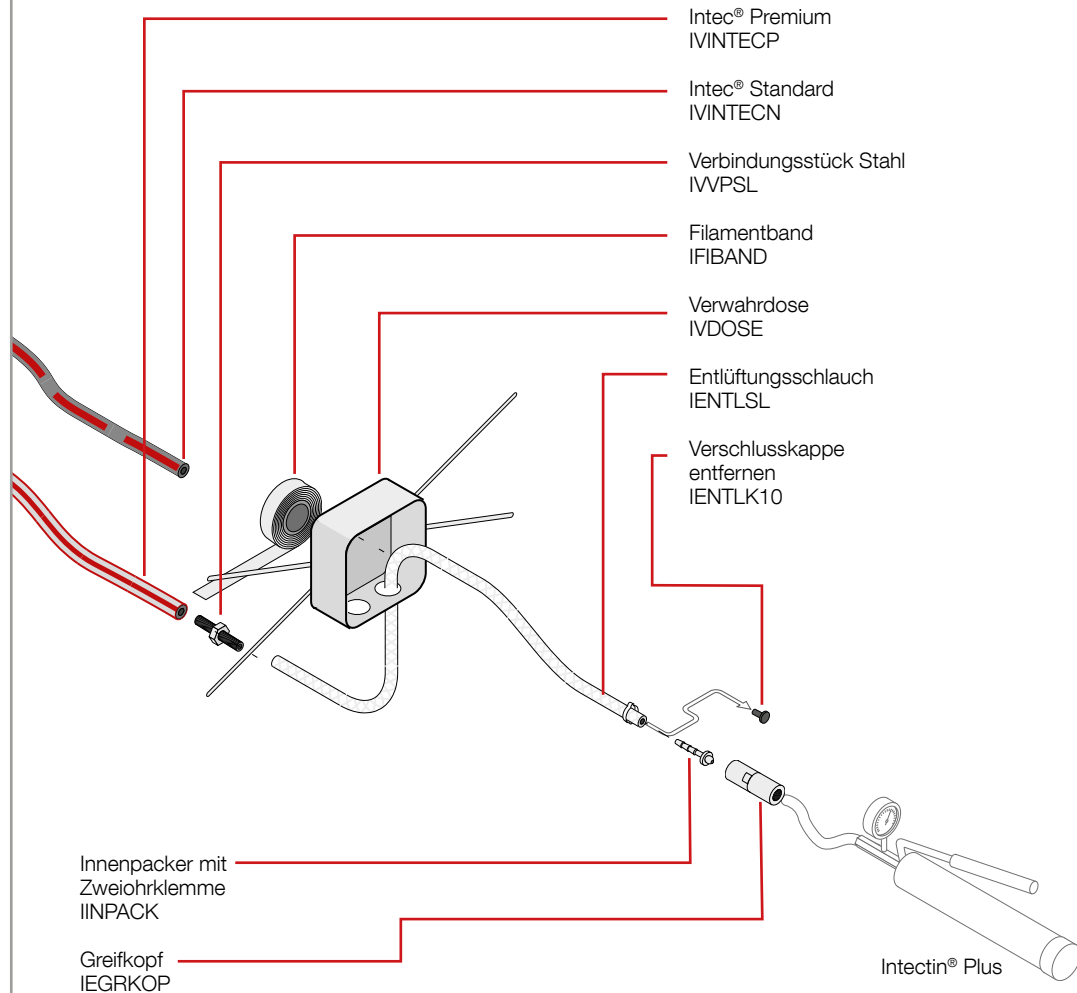
Intec® injection hose system – assembly options

Intec® Injektionsschlauchsystem – Kombinationen

1



2



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