

General construction technique permit

Public-law institution jointly founded by the
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**Technical authority granting approvals
and permits for construction products
and construction techniques**

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Z-21.1-2145

Applicant:
fischerwerke GmbH & Co. KG
Klaus-Fischer-Straße 1
72178 Waldachtal
Germany

Validity
from: **12 July 2022**
to: **12 July 2027**

Subject of decision:
fischer bolt anchor FAZ II, FAZ II R, FAZ II HCR for anchoring in steel fibre reinforced concrete

The subject named above is herewith granted a general construction technique permit (*allgemeine Bauartgenehmigung*).

This decision contains four pages.

Translation authorised by DIBt

DIBt

I GENERAL PROVISIONS

- 1 The general construction technique permit confirms the fitness for application of the subject concerned within the meaning of the Building Codes of the federal states (*Landesbauordnungen*).
- 2 This decision does not replace the permits, approvals and certificates required by law for carrying out construction projects.
- 3 This decision is granted without prejudice to the rights of third parties, in particular private property rights.
- 4 Notwithstanding further provisions in the 'Special Provisions', copies of this decision shall be made available to the installer of the subject concerned. Furthermore, the installer of the subject concerned shall be made aware of the fact that this decision must be made available at the place of application. Upon request, copies of the decision shall be provided to the authorities involved.
- 5 This decision shall be reproduced in full only. Partial publication requires the consent of DIBt. Texts and drawings in promotional material shall not contradict this decision. In the event of a discrepancy between the German original and this authorised translation, the German version shall prevail.
- 6 This decision may be revoked. The provisions contained herein may subsequently be supplemented and amended, in particular if this is required by new technical findings.
- 7 This decision is based on the information and documents provided by the applicant on the subject concerned during the permit procedure. Alterations to the information on which this general construction technique permit was based are not covered by this decision and shall be notified to DIBt without delay.

II SPECIAL PROVISIONS

1.1 Subject concerned

The subject concerned is the use of the torque-controlled expansion fastener "fischer Bolt Anchor FAZ II, FAZ II R, FAZ II HCR" in sizes M 6 to M 24 in accordance with European Technical Assessment ETA-05/0069 of 24 April 2020 in steel fibre reinforced concrete.

1.2 Field of application

The anchorage may be carried out in accordance with ETA-05/0069 in compacted, cracked or uncracked normal weight concrete of strength classes C20/25 to C50/60 in accordance with DIN EN 1992-1-1:2011-01 in conjunction with DIN EN 1992-1-1/NA:2013-04.

In addition, the anchorage may be applied in steel fibre reinforced concrete in accordance with the DAfStb Guideline on steel fibre reinforced concrete (*DAfStb-Richtlinie Stahlfaserbeton*) 2012-11. The steel fibres shall comply with DIN EN 14889-1:2006:11. The maximum fibre content shall be 80 kg/m³.

The anchorage may be applied under static and quasi-static loads.

The permitted environmental conditions are given in Annex B of European Technical Assessment ETA-05/0069.

Applications with an effective embedment depth $h_{ef} < 40$ mm are limited to statically indeterminate members. They shall be used only in members subject to dry internal conditions.

2 Provisions for planning, design and execution

2.1 Planning

The anchorages shall be planned in line with good engineering practice. Verifiable calculations and design drawings shall be prepared taking into account the loads to be anchored.

The design drawings shall contain the exact positions as well as sizes of the fasteners.

The permitted minimum member thicknesses, minimum spacing and edge distances are given in Annex B of European Technical Assessment ETA-05/0069.

2.2 Design

The present design provides the verification of the immediate local transmission of the anchor loads into the concrete. The transfer of the loads to be anchored in the concrete member shall be verified separately.

The design shall be carried out in accordance with DIN EN 1992-4:2019-04, method A. The characteristic values in accordance with Annex C of European Technical Assessment ETA-05/0069 for static and quasi-static loads shall also apply to the application in steel fibre reinforced concrete in accordance with Section 1.2.

2.3 Execution

2.3.1 General

The fastener to be anchored shall be installed in accordance with the design drawings prepared in accordance with Section 2.1.

The installation parameters and the installation instructions are given in Annex B of European Technical Assessment ETA-05/0069.

The installer of the construction technique or the executing company shall provide a declaration of conformity in accordance with Sections 16a(5) and 21(2) of the Model Building Code to confirm the conformity of the construction technique with this general construction technique permit.

2.3.2 Drilling and cleaning of drill hole

The specifications given in Annex B of European Technical Assessment ETA-05/0069 shall be observed for drilling and cleaning the drill hole.

2.3.3 Installation of the fastener

The installation instructions in accordance with Annex B of European Technical Assessment ETA-05/0069 shall be observed.

2.3.4 Inspection of execution

During the installation of the fastener, the contractor commissioned with the anchoring or the site manager assigned by him or her or a competent representative of the site manager shall be present at the construction site. The contractor shall ensure that the work is executed properly.

During the installation of the anchorages, the site manager or the site manager's representative shall document that the existing concrete compressive strength and the proper installation of the fastener have been verified. The records shall be available at the construction site during the construction period and shall be submitted to the inspection supervisor upon request. As is the case with the delivery notes, they shall be kept by the executing company for a minimum of 5 years after completion of the project.

Beatrix Wittstock
Head of Section

Drawn up by
Lange