

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-20/0232
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General Part

Technical Assessment Body issuing the
European Technical Assessment:

Deutsches Institut für Bautechnik

Trade name of the construction product

Kalksteinfüller KSF 60/3

Product family
to which the construction product belongs

Cacium carbonate filler aggregate with additional
characteristics

Manufacturer

Fels-Werke GmbH
Geheimrat-Ebert-Straße 12
38640 Goslar
DEUTSCHLAND

Manufacturing plant

Fels-Werke GmbH
Kalkwerk Rübeland (Werk 3)
Kastanienallee 4a
38889 Oberharz am Brocken

This European Technical Assessment
contains

4 pages

This European Technical Assessment is
issued in accordance with Regulation (EU)
No 305/2011, on the basis of

EAD 260048-00-0301

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Specific part

1 Technical description of the product

The calcium carbonate filler aggregate with additional characteristics "Kalksteinfüller KSF 60/3" is a filler aggregate obtained by processing (grinding) natural calcium carbonate for use in concrete. The calcium carbonate filler aggregate possesses the following additional characteristics according to EN 197-1, clause 5.2.6 for limestone (LL):

- CaCO_3 content at least 75 % by mass,
- content of fines $\leq 1,20$ g/100 g and
- total organic content (TOC) $\leq 0,20$ % by mass.

Furthermore, the chloride content complies with EN 197-1, clause 7.3:

- chloride content $\leq 0,10$ % by mass.

2 Specification of the intended use in accordance with the applicable European Assessment Document

The calcium carbonate filler aggregate "Kalksteinfüller KSF 60/3" is a type I addition for concrete conforming to European standard EN 206, i.e. concrete for structures cast in situ, precast structures, and structural precast products for buildings and civil engineering structures. The concrete can be mixed on site, ready-mixed or produced in a plant for precast concrete products.

The calcium carbonate filler aggregate "Kalksteinfüller KSF 60/3" is also intended to be used for self-compacting concrete (SCC).

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of concrete incorporating the calcium carbonate filler aggregate "Kalksteinfüller KSF 60/3" of at least 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment

Table 1 Mechanical resistance and stability (BWR 1)

| Essential characteristic | Performance | |
|------------------------------------------------------------------------|-------------------------------|----------------------------|
| | Sieve [mm] | Percentage passing by mass |
| Particle size distribution | 2 | 100 |
| | 0,125 | 85-100 |
| | 0,063 | 70-100 |
| Specific surface (Blaine) | 5300 ± 400 cm ² /g | |
| Particle density | 2,71 ± 0,10 g/cm ³ | |
| CaCO ₃ content | ≥ 75 % by mass | |
| Content of fines (Clay content) | ≤ 1,20 g/100 g | |
| Total organic content (TOC) | ≤ 0,20 % by mass | |
| MgCO ₃ content | No performance assessed | |
| Chloride content (Cl ⁻) | ≤ 0,10 % by mass | |
| Sulfate content (SO ₃) | AS _{0,2} | |
| Total content of sulfur | ≤ 1,0 % by mass | |
| Constituents which alter the rate of setting and hardening of concrete | Passed | |
| Initial setting time | No performance assessed | |
| Soundness | No performance assessed | |

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with EAD No. 260048-00-0301 the applicable European legal act is: 1999/469/EC(EU).

The system to be applied is: 2+

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 25 March 2020 by Deutsches Institut für Bautechnik

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beglaubigt:
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