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ICCONS® Serious Connections®

Building Product Information Sheet

Class 1

Product Name:

FM753 Crack - Heavy Duty Through Bolt

Date of Report:

04 / 10 / 2023

Product Line:

Fruilsider FM

Product Description and its intended use:

ICCONS FM753 Crack anchor is an extreme performance expansion anchor with seismic C1 and C2 certification. Trusted by engineers and architects in New Zealand. This anchor is ideal for applications requiring extreme load performance. The FM753 Crack is National Code Compliant, ETA approved, cracked concrete approved, seismic (C1 and C2) approved, fire rated and available in both 9.8 grade carbon steel and 316 stainless steel. Nine gripping dents for undercutting action into concrete

Key technical specifications:

- Product type: Thru-Bolt
- Finish options: Galvanised Carbon steel 9.8 - Corrosion Resistant 3DG Coating OR Stainless Steel 316 INOX A4.
- Head options: Nut hex head, external thread
- Base material: Concrete, cracked concrete
- Special features: European Assessment, Seismic Rated, Fire Rated
- Load performance: Heavy duty loads
- Material specifications: drill diameter, internal metric thread, overall length, width and other values varies based on part. Refer to document '1034.1 - FM-753 Crack TDS' for specific values per part: https://sestofasteners.co.nz/products/fm753-crack-heavy-duty-through-bolt?variant=37594968981673

Product Identifier

CIS Threaded Inserts

Place of Manufacture:

Overseas

Manufacturer:

ICCONS PTY LTD

Importer:

Sesto Fasteners Limited

Address: 5e Piermark Drive
Rosedale, Auckland
Postcode: 0632
Website: www.sestofasteners.co.nz
Email: orders@sestofasteners.co.nz
Phone: +64 94158564
NZBN: 9429041704103

Relevant Building Code Clauses:

- B1 Structure: Performance clauses B1.1, B1.2, B1.3.1, B1.3.2, B1.3.3, B1.3.4
- B2 Durability: Performance clauses B2.2
- C6 Structural Stability (Fire Safety): Performance clauses C6.1, C6.2
- F2 Hazardous Building Materials: Performance clause F2.3.1

Statement on how the building product is expected to contribute to compliance:

• B1 Structure: Performance clauses B1.1, B1.2, B1.3.1, B1.3.2, B1.3.3, B1.3.4
- Fruilsider FM753 Bolts are compliant with National Code (NCC) requirements, meeting standard AS 5216 (Design of post-installed and cast-in fastenings in concrete). AS 5216 is an Australian standard published by Standards Australia that outlines the minimum requirements for the selection, design and assessment of cast-in anchor channel and post installed fasteners.
- Compliant with European Technical Assessments based on finish. (Galvanised) ETA 09/0056, Option 1 and (Stainless Steel) ETA 10/0293, Option 1. Refer to document '1034.1 - FM-753 Crack TDS' to see ETA applicability per part, available in the link below: https://sestofasteners.co.nz/products/fm753-crack-heavy-duty-through-bolt?variant=37594968981673
- See document 'FM753 Crack Heavy Duty Through Bolt European Technical Assessment' for ETA-09/0056 of 18/03.2015. Applicable for sizes M8, M10, M12 and M16.
- Fruilsider FM753 bolts are ETA approved for used in cracked concrete.
- C1 and C2 seismic approvals are available dependent on part. See document '1034.1 - FM-753 Crack TDS' available in the link above.
- CE marking certified as deemed to meet safety, health and environmental protection requirements within the European Union.
- ETA assessed for use in cracked and uncracked concrete.
- F120 Fire rated
- Suitable for Heavy performance.
- Suitable for overhead applications.

• B2 Durability: Performance clauses B2.2, B2.3.1(a), B2.3.2
- Available in Galvanised Carbon Steel Class 9.8 - Corrosion Resistant 3DG coating, and 316 A4 INOX A4 Stainless Steel.
- 3DG Coating is a special anti-corrosion coating with glossy finish. 100 hours rated in salt spray test.
- (Galvanised): Assembled Hardened and tempered anchor body with a stainless steel A4 clip. Holds Seismic certification category C1 for non-structural use, and C2 for structural and non-structural use. ETA Option 1 for cracked concrete.
- (Stainless Steel): Assembled Stainless steel A4 - 316SS. Holds Seismic certification category C1 for non-structural use, and C2 for structural and non-structural use. ETA Option 1 for cracked concrete.
- Extreme / heavy load performance.
- Stainless steel A4 expander clip.
- Made in Italy.
- Increased thickness of three expander segments.
- Nine gripping dents for keying effect into concrete.
- Fruilsider FM753 Bolts have been tested for performance data - design and recommended loads in cracked and non-cracked concrete C20/25. Values vary based on part, base material and other relevant factors. Refer to document '1034.1 - FM-753 Crack TDS' for specific values per part, available in the link below: https://sestofasteners.co.nz/products/fm753-crack-heavy-duty-through-bolt?variant=37594968981673
- Fruilsider FM573 Bolts have been tested for seismic resistance in category C1 and C2. Refer to document 'FM753 Crack Heavy Duty Through Bolt Declaration of Performance' for specific values per part, available in the link above.
- Refer to document 'FM753 Crack Heavy Duty Through Bolt Seismic & Crack Concrete Certification' for in depth specifications available based on part, available in the link above.

• C6 Structural Stability (Fire Safety): Performance clauses C6.1, C6.2
- Fruilsider FM753 Bolts hold F120 Fire resistance certification (highly fire resistant) to a minimum of 120 minutes.
- Fire resistance declared performance in accordance to ETA-09/0056. Design method according to TR020. Refer to document 'FM753 Crack Heavy Duty Through Bolt Declaration of Performance', available in the link above.
- Characteristic fire resistance values vary based on part. Refer to document 'FM753 Crack Heavy Duty Through Bolt Seismic & Crack Concrete Certification' for specific values per bolt, available in the link above.

• F2 Hazardous Building Materials: Performance clause F2.3.1
- Fruilsider FM753 Bolts are safe when handled.
- Refer to ETA document 'FM753 Crack Heavy Duty Through Bolt European Technical Assessment' for information regarding safety in use, available in the link as above.

Limitations on the use of the building product:

- Design and recommended load values available in document '1034.1 - FM-753 Crack TDS' are dependent on the safety factors and characteristic loads derived from the ETA certification. Load values are only valid if the installation has been carried out correctly. The design engineer is responsible for the designing and calculation of the fixing. The designing and calculation of the anchorage should be carried out in accordance with ETAG001-C or CEN/TS 1992/4 or under Seismic action according to TR045. Refer to page 3, doc as above, available in the link below:
https://sestofasteners.co.nz/products/fm753-crack-heavy-duty-through-bolt?variant=37594968981673

Design requirements that would support the use of the building product:

Fruilsider FM753 Crack Bolts have been designed for use in the following applications:
- Safety critical systems
- Facades
- Seismic areas
- Fixing machinery - production lines
- Scaffolding and shuttering
- Structural fixings.

Features that support use of the building product:
- Available in 9.8 grade carbon steel and 316 stainless steel (INOX A4)
- NCC: National Code Compliant
- CE Certified
- Seismic Certification (C1 and C2)
- Cracked Concrete approved
- Fire resistance certification
- Extreme Load Performance.

Installation requirements:

Refer to document 'FM753 Crack Heavy Duty Through Bolt European Technical Assessment' for design values relevant to installation requirements, available in the link below:
https://sestofasteners.co.nz/products/fm753-crack-heavy-duty-through-bolt?variant=37594968981673

Installation steps:
1. With the correct diameter drill bit, drill a hole to the correct depth.
2. Clean dust and other material from the hole.
3. Insert anchor into position.
4. With correct size socket or spanner tighten anchor to specified torque. Installation complete!

• Excessive torque during installation may damage the anchor. Training, expertise and good judgment is required. Always adhere to anchor installation max. impact torque tool settings.
• Use the correct diameter drill bit.
• DO NOT use a worn drill bit outside tolerance specification.
• Ensure the hole is drilled perpendicular to the concrete, with a maximum deviation up to 5 degrees. Failure to do so may cause anchor breakage.
• Clean dust and other materials from the hole. Use ICCONS Blow Pump for a perfect result.
• Use a torque wrench or an impact driver
• Ensure correct clearance hole in the fixture
• Apply pressure against the fixing
• Rotate to engage the first thread
• Tighten the anchor until it is firmly seated

Maintenance requirements:

N/A, no on-going maintenance required.

Is the building product subject to warning or ban under section 26?:

No