

Building Product Information Sheet

Class 1

Product Name:

SYMPAFIX Through Anchor - A4 Stainless Steel

Date of Report:

28 / 09 / 2023

Product Line:

Sympafix ICCONS TBI-A4-Plus Thru Bolt

Product Description and its intended use:

SYMPAFIX[®] TB1 PLUS THRU-BOLT is a heavy-duty pre-assembled a torque controlled mechanical expansion anchor. When tightened the anchor draws the tapered end of the bolt into the expander clip forcing it out and creating expansion forces against the wall of the hole. This premium anchor is ideal for quickly fixing steel and timber structures to a range of base materials (concrete, cracked concrete, brick, block, rock, and stone). The Sympafix TB1 Plus thru-bolt has a range of approvals such as NCC (National Code Compliant), ETA Approval for cracked concrete and fire rated, making this thru-bolt perfect for a range of uses in both residential and commercial construction.

Key technical specifications:

- Product type: Thru-Bolt
- Finish options: 316 A4 Stainless steel
- Head style: Nut hex head, external thread.
- Base material: concrete, cracked concrete
- Special features: European assessment ETA, Fire Rated
- Load performance: Heavy duty loads, Medium loads.
- Material specifications: drill diameter, minimum anchor embedment, head socket, ETA options and other values varies based on part. Refer to document 'Sympafix Thru Bolt TB1 A4 Plus TDS' for specific values per part:

<https://sestofasteners.co.nz/products/sympafix-through-anchor-a4-stainless-steel?variant=37585783586985>

Product Identifier

Sympafix Thru-Bolt

Place of Manufacture:

Overseas

Manufacturer:

SYMPAFIX B.V.

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, B2.3.1(a), B2.3.2
- 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
 - SYMPAFIX TB1-A4-Plus Thru 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 ETA-14/0123, ETAG 001, Option 1 (06790CPR-1025) Date of issue 17/04/2014, description: metal anchors for use in concrete used as an EAD. Specific part numbers are not included in the ETA approval. Refer to document 'Sympafix Thru Bolt TB1 A4 Plus TDS' to see ETA applicability per part, available in the link below:
<https://sestofasteners.co.nz/products/sympafix-through-anchor-a4-stainless-steel?variant=37585783586985>
 - ETA option 1 approved stainless steel range: M8, M10 and M12.
 - Compliant with standard SA TS 101:2015 (Design of post-installed and cast-in fastenings for use in concrete).
 - 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
 - Sympafix approved.
 - Suitable for Heavy and Medium load performance.
 - Suitable for overhead applications.
 - Embedment depth, drill diameter and other values vary based on part. Refer to document 'Sympafix Thru Bolt TB1 A4 Plus TDS' for specific values per bolt, available in the link below:
<https://sestofasteners.co.nz/products/sympafix-through-anchor-a4-stainless-steel?variant=37585783586985>
 - B2 Durability: Performance clauses B2.2, B2.3.1(a), B2.3.2
 - Available in 316 A4 Stainless steel.
 - Continuous thread enables optimal flexibility in fixture thicknesses and applications.
 - Guaranteed safe installation because of a colour-marking of the required approved embedment depth.
 - Hardened stainless clip: the part of the anchor responsible for achieving the actual load values is not subject to corrosion.
 - Heightened thread-free anchor head ensures the thread is not damaged when installing the anchor.
 - Rounded cone: anchor easily slides into the drilled hole.
 - Steep angle of the anchor cone results in quick tension resistance when installing the anchor.
 - TB1-A4-Plus Thru-Bolts have been tested for performance data - design resistance for tension load and shear load for cracked and non-cracked concrete, and across a range of part numbers. Values vary based on part, base material and other relevant factors. Refer to document 'Sympafix Thru Bolt TB1 A4 Plus TDS' for specific values per part, available in the link below:
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 - C6 Structural Stability (Fire Safety): Performance clauses C6.1, C6.2
 - SYMPAFIX TB1-A4-Plus Thru Bolts are F120 Fire rated (highly fire resistant) to a minimum of 120 minutes.
 - F2 Hazardous Building Materials: Performance clause F2.3.1
 - SYMPAFIX TB1-A4-Plus Thru Bolts are safe when handled.
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Limitations on the use of the building product:

- Use the correct diameter drill bit, drill to the required anchor embedment depth plus at least one anchor diameter deeper.
- Ensure hole is drilled perpendicular to the concrete surface with maximum deviation of up to 5° degrees. Failure to do so may cause anchor breakage
- Clean dust and other material from the hole before installation.
- DO NOT use a worn drill bit outside of drill bit tolerance specification. Worn Drill bits will affect the anchor installation either during installation or post installation.
- When installing with an Impact screw gun do not exceed the recommended torque specifications, failure to comply may result in anchor breakage.
- When securing the screwbolt, do not over tighten and exceed the recommended clamping torque requirements, failure to comply may result in anchor breakage.

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

SYMPAFIX Through Anchor - A4 Stainless Steel have been designed for use in the following applications:

- Ideal for fastening columns and beams.
- Perfect for quickly fixing steel and timber structures to a range of base materials.
- Concrete
- Brick
- Block
- Marble
- Stone
- Suitable for both residential and commercial construction.

Features that support use of the building product:

- Torque controlled high performance anchor
- Compatible with ICCONS DesignFIX software.
- Through fixing for fast installation
- Engineered clip for optimum expansion and anti-rotation
- Uncracked and cracked concrete assessed
- AS 5216 compliant
- ETA Assessed - ETA 20/0900
- Fire assessed (F120)
- Sympafix approved
- Identification code on bolt head for easy traceability.

Installation requirements:

Refer to document 'Thru-Bolt Technical Data' for illustrated installation steps, available in the link below:

<https://sestofasteners.co.nz/products/sympafix-through-anchor-a4-stainless-steel?variant=37585783586985>

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
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Maintenance requirements:

N/A, no on-going maintenance required.

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

No

