

## BPIR PRODUCT FORM



# **Building Product Information Sheet**

Class 1

**Product Name:** 

Date of Report:

04 / 10 / 2023

ThunderBolt® PRO - EYE

**Product Line:** 

ICCONS Thunderbolt®

## Product Description and its intended use:

ICCONS Black-Tip Eyebolt is a high tensile self-tapping concrete and masonry anchor for use in a whole range of base materials such as concrete, block, brick, marble, and stone, just to name a few. The Thunderbolt is particularly suitable for close-to-edge applications as the cutting thread does not expand or put pressure on the surrounding substrate. Installation is quick and easy, simply drill, clean the hole and screw in the anchor, making the Black-Tip Thunderbolt® Eyebolt an ideal general purpose anchor, even on temporary jobs as it's completely removable.

Key technical specifications:

- Product type: Screw Bolt
- Finish options: Galvanised
- Head options: Eyelet
- Material specifications: High tensile Boron Steel Galvanised
- Part dimensions and values vary based on part number. Refer to document 'SXTB EYE Bolt Catalogue' for specifications per part, available in the link below:

https://sest of a steners.co.nz/products/thunderbolt%C2%AE-pro-eye?variant=37601295794345

#### **Product Identifier**

ThunderBolt® PRO - EYE

#### 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
- F2 Hazardous Building Materials: Performance clause F2.3.1

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

- B1 Structure: clauses B1.1, B1.2, B1.3.1, B1.3.2, B1.3.3, B1.3.4:
- ICCONS Black-Tip Eyebolt is a high tensile self-tapping concrete and masonry anchor for use in a whole range of base materials such as concrete, block, brick, marble, and stone, just to name a few. The Thunderbolt is particularly suitable for close-to-edge applications as the cutting thread does not expand or put pressure on the surrounding substrate. Installation is quick and easy, simply drill, clean the hole and screw in the anchor, making the Black-Tip Thunderbolt® Eyebolt an ideal general purpose anchor, even on temporary jobs as it's completely removable.
- ICCONS ThunderBolt® PRO Eyebolts achieve the Highest Loads while generating Low Expansion forces which can make it a great alternative to adhesive anchors. The Thunderbolt® PRO is also completely removable making it ideal for temporary applications. Unlike mechanical expansion anchors, the Thunderbolt® PRO keys into the base material for the entire depth and diameter of the hole, not just at the base of the hole. This reduces high energy forces within the concrete allowing close anchor spacing and near to edge anchor locations.
- 10 sharp thread forming teeth ensure the most secure connection in hard base materials.
- ICCONS ThunderBolt® PRO Eyebolts have been laboratory tested for recommended load data in 20MPa, 32MPa and 40MPa concrete and Heat Treated Carbon Steel. Values vary based on part number. Refer to page 2, document 'SXTB EYE Bolt Catalogue' for specific values per bolt, available in the link below:

https://sestofasteners.co.nz/products/thunderbolt%C2%AE-pro-eye?\_pos=3&\_sid=07932b11b&\_ss=r

- B2 Durability: Performance clauses B2.2
- ICCONS ThunderBolt® PRO Eyebolts are available in high tensile boron steel galvanised finish.
- Material specifications:

Anchor body: Heat Treated 10B21

Plating: Galvanised coating thickness 45 microns (min).

- The highly engineered design of ICCONS® Thunderbolt® PRO is the result of extensive testing and provides market leading load performance. ICCONS Thunderbolt® PRO is a one piece, fast, efficient and cost effective fix for any job.
- F2 Hazardous Building Materials: Performance clause F2.3.1
- ICCONS ThunderBolt® PRO Eyebolts are safe when handled.

#### Limitations on the use of the building product:

- ICCONS Thunderbolt® PRO Eyebolt Screwbolts are designed for use in non-safety critical applications only. The Thunderbolt® PRO Eyebolt Screwbolt is NOT designed for use in Fall Arrest Systems or as a lifting anchor.
- Note on recommended load data (refer document 'SXTB EYE Bolt Catalogue' page 2): The designer shall take into consideration both Concrete and Steel load capacities. Published load capacities incorporate a safety factor of 3 for concrete and 2.5 for steel. The above information has been derived from laboratory test results using NATA calibrated equipment and all loads are representative of a single anchor installed in a hammer drilled, dry hole remote from an edge. Please contact ICCONS engineering department for specific design applications, engineering@iccons.com.au. Limit State Design Multiply the above loads by 1.8 (Concrete) and 2 (Steel) to determine the Limit State Design capacities.
- Information contained in the technical document 'SXTB EYE Bolt Catalogue' is based on testing by the manufacturer and should be reviewed and approved by a design professional responsible for the given application. For safety critical applications designed in accordance with SA TS 101:2015, AS216:2018 please refer to the ICCONS website for a complete suite of compliant post-installed chemical and mechanical anchoring products.

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

ICCONS Thunderbolt® PRO Eyebolts have been designed for use in the following applications:

- Ideal for close to edge applications due to minimal expansion force.
- Concrete
- Brick
- Block
- Marble
- Stone

Features that support use:

- Quick install
- Removable
- High tensile self-tapping concrete and masonry anchor.

## Installation requirements:

Refer to documents 'How To Install' and 'Install Torque Specs' for installation instruction, torque values and cautions of use, available in the link below:

https://sestofasteners.co.nz/products/thunderbolt%C2%AE-pro-eye?\_pos=3&\_sid=07932b11b&\_ss=r Installation steps:

- 1. Using the correct diameter drill bit, drill a hole to the required anchor embedment depth plus at least one anchor diameter deeper. (This ensures residual dust doesn't interfere with the anchor installation).
- Caution: 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.
- 2. Clean dust and other material from the hole.
- Caution: 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.
- 3. Screw in the anchor using a torque wrench or impact screw gun. Apply pressure against the fixing and rotate to engage the first thread. Continue to tighten the anchor until flanged head is firmly seated against fixture.
- Caution: When installing with an impact screw gun do not exceed the recommended torque specifications, failure to comply may result in anchor breakage.
- 4. Installation complete!
- Caustion: Do Not over tighten and exceed the recommended clamping torque requirements, failure to comply may result in anchor breakage.

Impact Screw Gun Torque Specification:

IMPORTANT:

Always refer to specific product torque specifications prior to installation. This can be found in ICCONS Technical Data Sheets, ICCONS Product Guide or on the individual product labels.

- Refer to document 'SXTB EYE Bolt Catalogue' for maximum clamping torque guide values, available in the link above.
- Recommended drill bit for installing eye bolts is the ICCONS B1-900, available from Sesto Fasteners stockists.

### Maintenance requirements:

N/A, no on-going maintenance required.

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

No













