

Building Product Information Sheet

Class 1

Product Name:ThunderBolt[®]PRO SXTB Rod Hanger**Date of Report:**

14 / 09 / 2023

Product Line:ICCONS ThunderBolt[®]**Product Description and its intended use:**

The Thunderbolt Pro Rod Hanger features quick and safe installation, high load capacities in both cracked and non-cracked concrete with undercut load transmission. National Code Compliant (NCC), ETA Approved in Cracked Concrete, Fire Rated and CE Certified, this Rod Hanger is perfect for applications requiring safety critical threaded rod suspension, such as AC ducting, hanging pipe, fire protection, and cable-tray applications. The Thunderbolt Pro-XTM Rod Hanger can be easily removed and does not leave residue or metal components in the drilled hole that can cause corrosion. Loads can be achieved immediately upon installation.

Key technical specifications:

- Product type: ThunderBolt Pro Rod Hanger
- Finish options: Zinc (internal use), Galvanised (external use)
- Head Type: Hex
- Dimensions, drill depth and other details vary per size refer to ICCONS ThunderBolt[®]Pro Catalogue on our website www.sestofasteners.co.nz for specific values per part.

https://sestofasteners.co.nz/products/screwbolt-csk-galv?_pos=1&_sid=ef5209877&_ss=r

Product IdentifierThunderBolt[®] Pro Rod Hanger**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
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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: clauses B1.1, B1.2, B1.3.1, B1.3.2, B1.3.3, B1.3.4:

- ICCONS Thunderbolt Pro bolts comply with AS 5216:2021 (Design of post-installed and cast-in fastenings in concrete). Refer to document 'NCC FAQ' in link below for further information:

<https://sestofasteners.co.nz/collections/screwbolts/products/screwbolt-hex-galv?variant=37578216538281>

- ICCONS Thunderbolt Pro bolts have been ETA assessed for cracked concrete and fire performance (ETA-18/0643). Refer to the ETA document 'ThunderBolt®PRO-XTB European Technical Assessment Approval' (dated 1 November 2018) in link below for further information:

https://sestofasteners.co.nz/products/screwbolt-csk-galv?_pos=1&_sid=ef5209877&_ss=r

- ICCONS Thunderbolt Pro bolts are evaluated for their performance under C1 and C2 seismic categories. Fasteners seismically qualified under category C1 contain seismic tension and shear loads while fasteners qualified under category C2 contain seismic tension, shear and displacement information. Qualifications for C1/C2 ratings and ETA options for ICCONS Thunderbolt Pro bolts are available depending on size. Refer to document 'ThunderBolt®PRO Catalogue' in the link below for the specific rating qualifications granted per part:

<https://sestofasteners.co.nz/collections/screwbolts/products/screwbolt-hex-galv?variant=37578216538281>

- ICCONS ThunderBolt® bolts have been tested for design resistance capacities in uncracked and cracked concrete. Test data is available for use in accordance with AS 5216 at minimum recommended concrete thickness (single anchor, 20 MPa concrete), and for use in redundant non-structural systems. Refer to document 'ThunderBolt®PRO Catalogue' for testing data per size (pages 14 to 18), available in the link below:

https://sestofasteners.co.nz/products/thunderbolt%C2%AEpro-xtm-rod-hanger?_pos=1&_sid=684322069&_ss=r

- B2 Durability: Performance clauses B2.2, B2.3.1(a), B2.3.2:

- Available in zinc finish (Carbon steel, zinc plated coating $\geq 5 \mu\text{m}$), and galvanised finish (Carbon Steel NAUTILUS®C Coating).

- ICCONS Nautilus® C corrosion resistant coating is a multi layered corrosion resistant coating designed for indoor applications as well as outdoor applications based on urban and industrial atmospheres, moderate sulfur dioxide pollution and coastal areas with low salinity. This is typically covered in EN ISO 12944-2, corrosivity category environment C3 and durability range HIGH according to EN ISO 12944-1. Under these conditions the Nautilus® C coating offers a typical minimum life expectancy of between 15 to 25 yrs. This information is based on testing in accordance with EN ISO 12944.6 and provides average life expectancy data for typical applications. The final decision on coating suitability should be made by the customer/design professional responsible for the application and based on local specific environmental conditions.

For more information, refer to page 2 document 'ThunderBolt®PRO Catalogue' on coating options, available in the link below:

<https://sestofasteners.co.nz/products/thunderbolt%C2%AEpro-xtm-rod-hanger?variant=43219435913385>

- C6 Structural Stability (Fire Safety): Performance clauses C6.1, C6.2:

- ICCONS Thunderbolt Pro bolts have been ETA assessed for fire performance (ETA-188/0643). Refer to document 'ThunderBolt®PRO-XTM European Technical Assessment Approval' in link below for testing data (Table C6 and C7):

<https://sestofasteners.co.nz/collections/screwbolts/products/screwbolt-hex-galv?variant=37578216538281>

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

- ICCONS Thunderbolt Pro-SXTB bolts are safe when handled.

Limitations on the use of the building product:

- Excessive torque during installation may damage the anchor. Training, expertise and good judgment is required. Always adhere to anchor installation impact tool torque guidelines.
- The use of the appropriate socket driver size is advised when installing.
- Drill diameter, drill depth, head socket size and maximum impact tool torque varies based on part. Refer to document 'Thunderbolt®PRO-XTB Technical Data Sheet' for information per part, available in the link below:
<https://sestofasteners.co.nz/products/thunderbolt%C2%AEpro-xtm-rod-hanger?variant=43219435913385>
- 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.
- ICCONS Thunderbolt PRO bolts cut a thread in the base material drilled hole during installation and do not require an installation torque setting to ensure proper installation.

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

- ICCONS Thunderbolt Pro Rod Hangerz have been designed for use in the following applications:
 - Suspending threaded rod
 - Suspending conduit
 - HVAC ductwork and strut channels
 - AC ducting
 - Hanging pipe
 - Fire protection
 - Cable tray applications
 - Pipeline fastening
 - Ceiling suspension fastening
 - Suitable for concrete substrates
- ICCONS Thunderbolt Pro Rod Hangerz features that support its use:
 - National Code Compliant (NCC)
 - ETA Approved
 - Seismic Rated
 - Fire Rated
 - CE Certified
 - Quick and safe installation
 - High load capacities in both cracked and non-cracked concrete
 - Easily removed and does not leave residue or metal components
 - Loads can be achieved immediately upon installation

Refer to document 'ThunderBolt®PRO Catalogue' for full design requirements across the Thunderbolt range, available in the link below:

<https://sestofasteners.co.nz/products/thunderbolt%C2%AEpro-xtm-rod-hanger?variant=43219435913385>

Installation requirements:

Refer to document 'Thunderbolt®PRO-XTB Technical Data Sheet' and 'ThunderBolt®PRO Catalogue' pages 8, 14 to 18) for installation requirements and design resistance capacities for Rod Hangerz per size. Available in the link below:

<https://sestofasteners.co.nz/products/thunderbolt%C2%AEpro-xtm-rod-hanger?variant=43219435913385>

Installation steps:

1. With the correct diameter drill bit, drill a hole to a depth of at least one diameter of the anchor deeper than the required embedment.
 2. Clean dust and other material from the hole.
 3. Install with either a socket or cordless impact driver. Apply pressure against the fixing and rotate to engage the first thread
 4. Continue to tighten the anchor until flanged head is firmly seated against fixture. 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
 - When using an impact driver DO NOT overtighten! Follow the torque guidance table, failure to comply may result in anchor breakage. Refer to ICCONS TDS for further information, available in the link below:
<https://www.iccons.com.au/support/downloads?type=tech>

Maintenance requirements:

N/A, no on-going maintenance required.

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

No

