

Building Product Information Sheet

Class 1

Product Name:

Chemselect CIS Threaded Inserts

Date of Report:

22 / 09 / 2023

Product Line:

ICCONS Chemselect

Product Description and its intended use:

The ICCONS CIS Threaded Insert Anchor provides high durability and fixing loads where an internal thread is required and is installed using ICCONS Chemselect adhesive injections range. When set, the threaded insert anchor produces a removable and/or flush setting adhesive anchor. The CIS Threaded Insert Anchor is available in Zinc Clear Carbon Steel or 316(A4-70) Stainless Steel.

Key technical specifications:

- Product type: Threaded insert anchor
- Finish options: Carbon steel zinc clear, Stainless steel 316 A4.
- Head options: flush finish.
- Material specifications: drill diameter, internal metric thread, overall length, width and internal thread length varies based on part.

Refer to document 'CIS Threaded Insert Tech Data' for specific values per part:

https://sestofasteners.co.nz/products/chemselect-cis-threaded-inserts?_pos=1&_sid=0bab8d314&_ss=r

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
- 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 CIS Threaded Inserts have been designed to be installed using an adhesive. When set, produces a removable and/or flush setting adhesive anchor.

- Anchor profile performs like a threaded rod.

- Insert design allows use of various bolt head styles.

- ICCONS CIS Threaded Inserts have been assessed for performance in concrete using BIS-HY GEN2 Hybrid adhesive and BIS-PE GEN3 Pure Epoxy. Design capacity values are available for tension and shear with 20MPa, 32MPa and 40MPa concrete. Performance values vary based on adhesive used, concrete values, and insert dimensions. Refer to document 'CIS Threaded Insert Tech Data' (page 2) for specific values per part, available in the link below:

https://sestofasteners.co.nz/products/chemselect-cis-threaded-inserts?_pos=1&_sid=06a4d553f&_ss=r

- Load Performance has been determined in accordance with AS 5216 and relevant ETA-16/0958 & ETA-19/0850. All loads are representative of a single anchor (Steel Grade 5.8 bolt insert) installed in a hammer drilled, dry/wet hole remote from an edge in non-cracked concrete with ST / LT temperature +80°C / +50°C (BIS-HY GEN2) & ST / LT temperature + 40°C / + 24°C (BIS-PE GEN3).

ICCONS® has taken extreme care in compiling the above information, ICCONS® may change its products at any time. ICCONS® believes the information is true and correct as at the date of the publication. Higher capacities may be achieved with the use of class 8.8 bolt for more details contact engineering@iccons.com.au

- ICCONS CIS Threaded Inserts are compliant to the requirements referenced in NCC Standard AS 5216 (Design of post-installed and cast-in fastenings in concrete, and European Assessment Documents and Guidelines).

- Hole size, depth, minimum fixture clearance and other design details vary based on part. Refer to document 'CIS Threaded Insert Tech Data' (page 2) for specific dimensions per part, available in the link below:

https://sestofasteners.co.nz/products/chemselect-cis-threaded-inserts?_pos=1&_sid=06a4d553f&_ss=r

- B2 Durability: Performance clauses B2.2

- Available in both Carbon Steel or 316(A4-70) Stainless Steel.

- ICCONS Chemical anchoring products, including BIS-HY GEN 2 Hybrid and BIS-PE GEN 3 Pure Epoxy hold European Technical Assessment, and are compliant for C1 and C2 certifications for seismic performance. These products comply with the requirements referenced in the National Construction Code (NCC), standard AS 5216 (Design of post-installed and cast-in fastenings in concrete) and European Assessment Documents and Guidelines. Testing and assessment reports are available per part, values vary based on adhesive selected. Refer to documents available in the links below for specific data:

https://sestofasteners.co.nz/products/bis-hy-gen-2-hybrid-injection-adhesive?_pos=1&_sid=da10e086d&_ss=r

https://sestofasteners.co.nz/products/bis-pe-gen-3-pure-epoxy?_pos=3&_sid=da10e086d&_ss=r

- ICCONS Chemselect range offers 100 Year design life.

- F2 Hazardous Building Materials: Performance clause F2.3.1

- ICCONS CIS Threaded inserts are safe when handled.

- Refer to the relevant BPIR documents when handling ICCONS adhesives recommended for use with this product, available in the links below:

https://sestofasteners.co.nz/products/bis-hy-gen-2-hybrid-injection-adhesive?_pos=1&_sid=da10e086d&_ss=r

https://sestofasteners.co.nz/products/bis-pe-gen-3-pure-epoxy?_pos=3&_sid=da10e086d&_ss=r

Limitations on the use of the building product:

- Load Performance has been determined in accordance with AS 5216 and relevant ETA-16/0958 & ETA-19/0850. All loads are representative of a single anchor (Steel Grade 5.8 bolt insert) installed in a hammer drilled, dry/wet hole remote from an edge in non-cracked concrete with ST / LT temperature +80°C / +50°C (BIS-HY GEN2) & ST / LT temperature + 40°C / + 24°C (BIS-PE GEN3).

ICCONS® has taken extreme care in compiling the above information, ICCONS® may change its products at any time. ICCONS® believes the information is true and correct as at the date of the publication. Higher capacities may be achieved with the use of class 8.8 bolt for more details contact engineering@iccons.com.au

- ICCONS Chemselect CIS Threaded Inserts have been designed for recommended use with BIS-HY GEN2 and BIS-PE GEN3 ETA certified adhesives. Refer to the relevant BPIR documents for limitations and requirements for use for these products, available in the links below:

https://sestofasteners.co.nz/products/bis-hy-gen-2-hybrid-injection-adhesive?_pos=1&_sid=da10e086d&_ss=r

https://sestofasteners.co.nz/products/bis-pe-gen-3-pure-epoxy?_pos=3&_sid=da10e086d&_ss=r

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

ICCONS Chemselect CIS Threaded Inserts have been designed for use in the following typical applications:

- Infrastructure Construction where Flush Anchoring is selected
- Production Facilities (Crane, Robot, Conveyor Installation) etc.
- Bridges and Highways
- Balustrade and Removable Bollards

Features that support the use of the building product:

- Adhesive Anchor for Flush Anchoring in Non-Cracked Concrete
- Anchor Holes can be drilled using Rotary Hammers or Diamond Drilling Rigs
- Anchor Range: M8 up to M42.
- Available in: Zinc Clear Carbon Steel and Stainless Steel A4-70 (316)

Usability:

- Cracked and Non-Cracked Concrete
- Under Static Load
- Under Vibratory Load
- Fire Resistance

Installation requirements:

Installation steps:

1. Hole preparation should be to the correct depth.
2. Clean out hole thoroughly of dust and spoil by repeat blowing and brushing action.
3. Unscrew cap and screw on mixing nozzle supplied and place in suitable applicator tool.
4. For new cartridges dispense a bead of adhesive until even and consistent colour is present to ensure correct mix of adhesive.
5. Place nozzle to the rear of the hole and pump adhesive whilst slowly withdrawing the nozzle back, avoid creating air pockets and fill the hole at least half full.
6. With a bolt inserted, push the insert into the adhesive while turning one way slowly until correct embedment depth is reached and some adhesive has flowed to the top of the hole. Always ensure that inserts are clean and free from oil, grease and dirt.
7. Once installed, do not touch or load the anchor until the adhesive is fully cured. (See appropriate adhesive label for curing times).
8. When cured tighten bolt to the correct torque.

Refer to document 'CIS Threaded Insert Tech Data' for the above information, available in the link below:

https://sestofasteners.co.nz/products/chemselect-cis-threaded-inserts?_pos=1&_sid=a484249c0&_ss=r&variant=39952319578281

- Detailed installation instructions are available in the relevant ETA document for the adhesive used.

Refer to document 'BIS-HY Gen2 Hybrid European Technical Assessment - Seismic Approval' for detailed installation instructions when using BIS-HY Gen2 Hybrid adhesive, available in the link below:

https://sestofasteners.co.nz/products/bis-hy-gen-2-hybrid-injection-adhesive?_pos=1&_sid=da10e086d&_ss=r

Refer to document 'BIS-PE Pure Epoxy European Technical Assessment - Seismic Approval' for detailed installation instructions when using BIS-PE Gen 3 Pure Epoxy Injection Adhesive, available in the link below:

https://sestofasteners.co.nz/products/bis-pe-gen-3-pure-epoxy?_pos=3&_sid=da10e086d&_ss=r

Maintenance requirements:

N/A, no on-going maintenance required.

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

No

