CIS Threaded Inserts

Technical Information

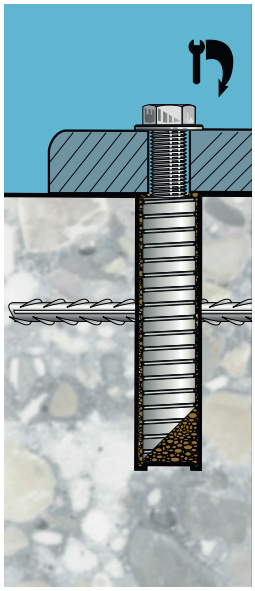
TDS | 2009.6

ICCONS® CIS Threaded Insert Anchor is installed using an adhesive. When set, produces a removable and/or flush setting adhesive anchor, the CIS is available in Both Carbon Steel or 316(A4-70) Stainless Steel.

Features:

- Included in ICCONS DesignFix software.
- Adhesive Anchor for Flush Anchoring in Cracked or Non-Cracked Concrete.
- For Installation in Dry or Flooded Holes.
- Anchor Range: M8 up to M20.
- Zinc Clear Carbon Steel or 316 Stainless Steel.

ICCONS DesignFix Software

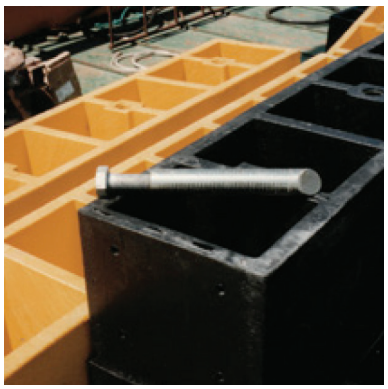


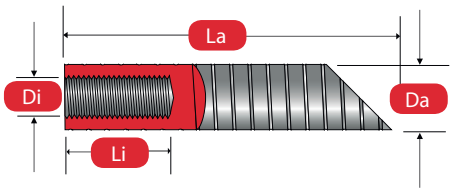
Usability

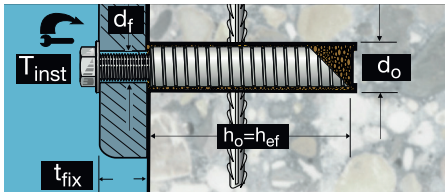
- Cracked & Non-Cracked Concrete
- Under Static Load
- Under Vibratory Load
- Fire Resistance

Typical Applications

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







Part No.		Description	Drill Diameter (mm) mm	Da metric	La mm	Di mm	Li mm	qty
CIS08090		M8 X 90mm	14	12	90	M8	30	50
	CIS08090SS	M8 X 90mm Stainless Steel						5
CIS10090		M10 X 90mm	18	16	90	M10	35	30
	CIS10090SS	M10 X 90mm Stainless Steel						5
CIS12090		M12 X 90mm	22	20	90	M12	40	25
	CIS12090SS	M12 X 90mm Stainless Steel						5
CIS12125		M12 X 125mm	22	20	125		40	15
	CIS12125SS	M12 X 125mm Stainless Steel						5
CIS16125		M16 X 125mm	28	24	125	M16	40	10
	CIS16125SS	M16 X 125mm Stainless Steel						5
CIS20180		M20 X 180mm	35	30	180	M20	60	5
	CIS20180SS	M20 X 180mm Stainless Steel						5

Performance in Concrete

BIS-HY GEN2 HYBRID

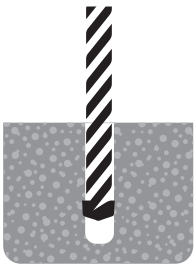
BIS-PE GEN3 Pure Epoxy

Di Insert Size (metric)	Da Anchor size (mm)	d_o Hole Size (mm)	h_o Depth (mm)	d_f Min. Fixture Clearance (mm)	BIS-HY GEN2 HYBRID TENSION Design Capacity N_{rd} (kN) 20MPa	32MPa	40MPa	BIS-HY GEN2 HYBRID SHEAR Design Capacity V_{rd} (kN) 20, 32 & 40 MPa	BIS-PE GEN3 Pure Epoxy TENSION Design Capacity N_{rd} (kN) 20MPa	32MPa	40MPa	BIS-PE GEN3 Pure Epoxy SHEAR Design Capacity V_{rd} (kN) 20, 32 & 40 MPa
M8	12	14	90	10	11.33	11.33	11.33	7.2	11.33	11.33	11.33	7.2
M10	16	18	90	12	19.33	19.33	19.33	12.0	19.33	19.33	19.33	12.0
M12	20	22	90	14	28.00*	28.00	28.00	16.8	28.00*	28.00	28.00	16.8
M12	20	22	125	14	28.00	28.00	28.00	16.8	28.00	28.00	28.00	16.8
M16	24	28	125	18	45.83*	50.67	50.67	30.4	45.83*	50.67	50.67	30.4
M20	30	35	180	22	79.20*	82.00	82.00	48.8	79.20*	82.00	82.00	48.8

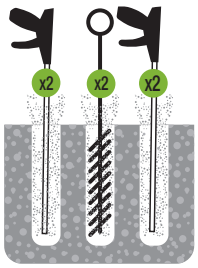
Values with "*" are governed by concrete failure.

Note: 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

General Installation Guide in Solid Base Material *(Detailed installation instructions contained in ETA)*

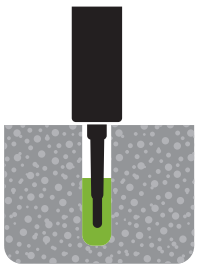


- Hole preparation should be to correct diameter and depth.

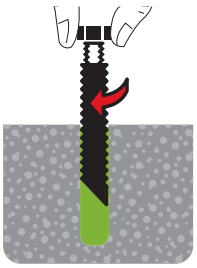


- Clean out hole thoroughly of dust and spoil by repeat blowing and brushing action.
- Unscrew Cap and screw on mixing nozzle supplied and place in suitable applicator tool.

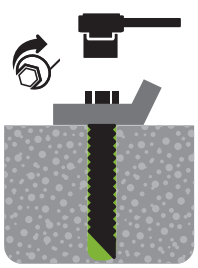
- For new cartridges dispense a bead of adhesive until even and consistent colour is present to ensure correct mix of adhesive



- 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.



- 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.



- Once installed, do not touch or load the anchor until the adhesive is fully cured. (See appropriate adhesive label for curing times).
- When cured tighten bolt to the correct torque.