



## CIS Threaded Insert Anchors



Insert design allows use of various bolt head styles.

Flush finish.

Available M8 - M20 in Class 5.8 zinc & 316 (A4) SS.

Anchor profile performs like threaded rod.

Recommended for use with BIS-HY GEN2 & BIS-PE GEN3 ETA certified Adhesives.



**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 Stainless Steel.**

### Features:

- Included in ICCONS® DesignPro 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.
- Dustless Drilling

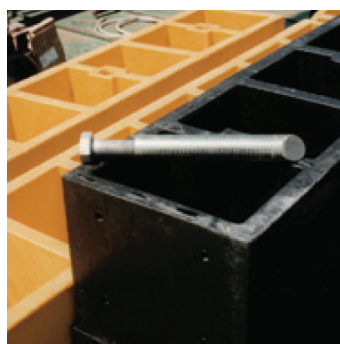
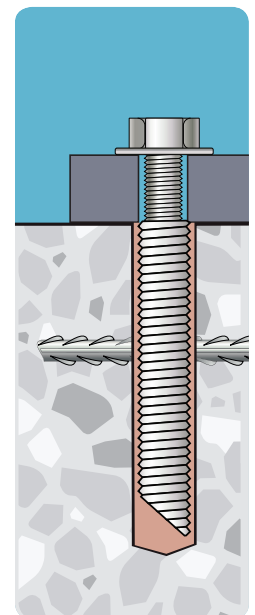


### Usability

- Cracked & Non-Cracked Concrete
- Under Static Load
- Under Vibratory Load
- Fire Resistance (BIS-PE Gen3 only)

### Typical Applications

- Infrastructure Construction where Flush Anchoring is selected
- Production Facilities (Crane, Robot, Conveyor Installation) etc.
- Bridges & Highways
- Balustrade & Removable Bollards
- Diamond Core Drilled Holes (BIS-PE Gen3 only)



# CIS Threaded Inserts

## Technical Information

**ICCONS®**  
Serious Connections

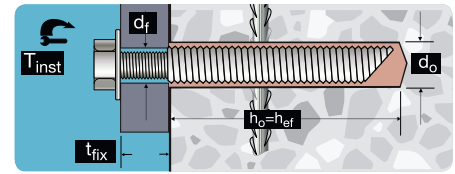
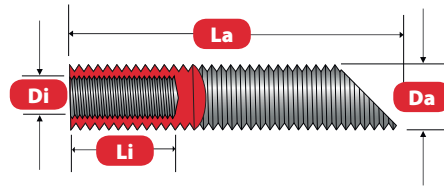
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ZINC INTERNAL

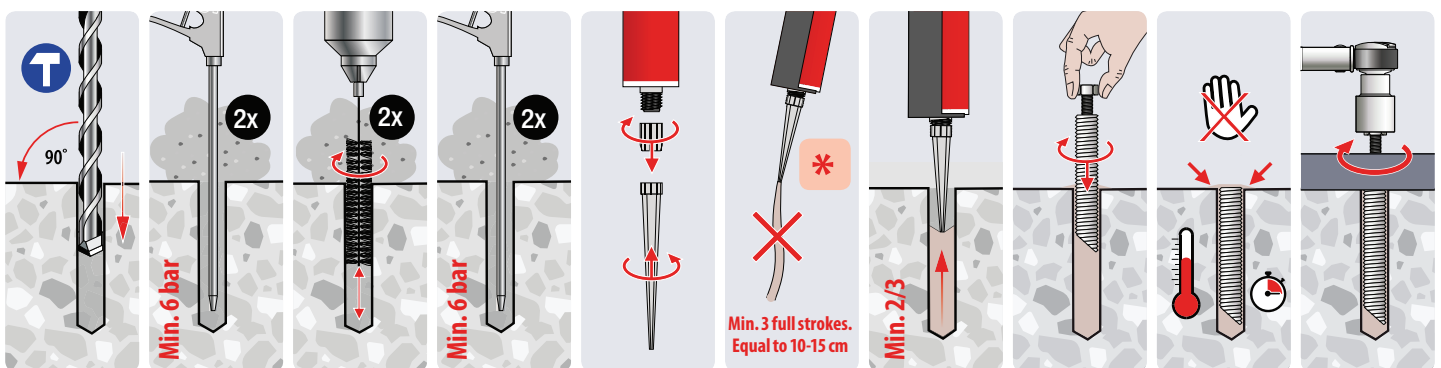


316 SS EXTERNAL



Part No.	Description	Drill Diameter (mm)	Da	La	Di	Li	Max T <sub>inst</sub> S	qty
<b>CIS08090</b>	M8 X 90mm	14	12	90	M8	30	10	50
<b>CIS08090SS</b>	M8 X 90mm A4-70 Stainless Steel							5
<b>CIS10090</b>	M10 X 90mm	18	16	90	M10	35	20	30
<b>CIS10090SS</b>	M10 X 90mm A4-70 Stainless Steel							5
<b>CIS10110</b>	M10 X 110mm	18	16	110	M10	25	20	30
<b>CIS10110SS</b>	M10 X 110mm A4-70 Stainless Steel							5
<b>CIS12090</b>	M12 X 90mm	22	20	90	M12	40	40	25
<b>CIS12090SS</b>	M12 X 90mm A4-70 Stainless Steel							5
<b>CIS12125</b>	M12 X 125mm	22	20	125	M12	40	40	15
<b>CIS12125SS</b>	M12 X 125mm A4-70 Stainless Steel							5
<b>CIS16125</b>	M16 X 125mm	28	24	125	M16	40	60	10
<b>CIS16125SS</b>	M16 X 125mm A4-70 Stainless Steel							5
<b>CIS16170</b>	M16 X 170mm	28	24	170	M16	32	60	10
<b>CIS16170SS</b>	M16 X 170mm A4-70 Stainless Steel							5
<b>CIS20180</b>	M20 X 180mm	35	30	180	M20	60	100	5
<b>CIS20180SS</b>	M20 X 180mm A4-50 Stainless Steel							5
<b>CIS20205</b>	M20 X 205mm	35	30	205	M20	40	100	5
<b>CIS20205SS</b>	M20 X 205mm A4-50 Stainless Steel							5

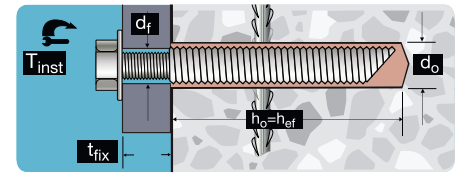
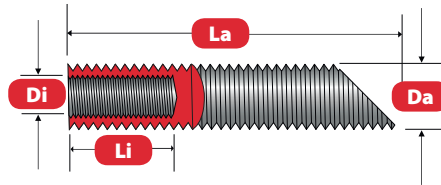
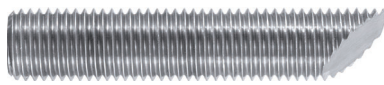
## General Installation Guide in Solid Base Material *(Detailed installation instructions contained in ETA)*



\* Squeeze out separately a minimum of 3 full strokes (Equal to 10-15 cm ) until the mortar shows a consistent colour.



### Zinc Clear Class 5.8



### Performance in concrete - Zinc 5.8, 50 year design life

BIS-HY GEN2 HYBRID



BIS-PE GEN3 Pure Epoxy



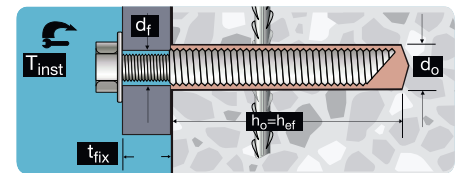
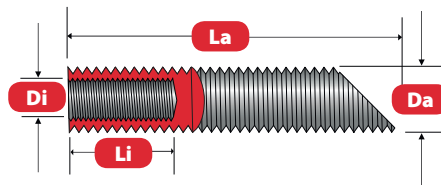
Di	Da	do	ho	df	TENSION			SHEAR	TENSION			SHEAR
Anchor size	Outer Diameter	Hole Size	Hole Depth	Min. Fixture Clearance	Design Capacity $N_{ax}$ (kN)			Design Capacity $V_{ax}$ (kN)	Design Capacity $N_{ax}$ (kN)			Design Capacity $V_{ax}$ (kN)
(metric)	(mm)	(mm)	(mm)	(mm)	20MPa	32MPa	40MPa	20, 32 & 40 MPa	20MPa	32MPa	40MPa	20, 32 & 40 MPa
M8	12	14	90	10	11.3	11.3	11.3	7.2	11.3	11.3	11.3	7.2
M10	16	18	90	12	19.3	19.3	19.3	12.0	19.3	19.3	19.3	12.0
M10	16	18	110	12	19.3	19.3	19.3	12.0	19.3	19.3	19.3	12.0
M12	20	22	90	14	28.0	28.0	28.0	16.8	28.0	28.0	28.0	16.8
M12	20	22	125	14	28.0	28.0	28.0	16.8	28.0	28.0	28.0	16.8
M16	24	28	125	18	45.8	50.7	50.7	30.4	45.8	50.7	50.7	30.4
M16	24	28	170	18	50.7	50.7	50.7	30.4	50.7	50.7	50.7	30.4
M20	30	35	180	22	79.2	82.0	82.0	48.8	79.2	82.0	82.0	48.8
M20	30	35	205	22	82.0	82.0	82.0	48.8	82.0	82.0	82.0	48.8

Governed by concrete failure.

Governed by steel 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 and class 8.8 CIS threaded insert, for more details download Design PRO software. (Class 8.8 CIS threaded insert is a special order, please contact ICCONS® for further details). For detailed calculations incorporating multiple anchors please download ICCONS® Design PRO software for assistance, this download is available via the ICCONS® website [www.iccons.com.au](http://www.iccons.com.au)

### 316 Stainless Steel



### Performance in concrete - SS 316, 50 year design life

BIS-HY GEN2 HYBRID



BIS-PE GEN3 Pure Epoxy



Di	Da	do	ho	df	TENSION			SHEAR	TENSION			SHEAR
Anchor size	Outer Diameter	Hole Size	Hole Depth	Min. Fixture Clearance	Design Capacity $N_{ax}$ (kN)			Design Capacity $V_{ax}$ (kN)	Design Capacity $N_{ax}$ (kN)			Design Capacity $V_{ax}$ (kN)
(metric)	(mm)	(mm)	(mm)	(mm)	20MPa	32MPa	40MPa	20, 32 & 40 MPa	20MPa	32MPa	40MPa	20, 32 & 40 MPa
M8	12	14	90	10	13.9	13.9	13.9	8.3	13.9	13.9	13.9	8.3
M10	16	18	90	12	21.9	21.9	21.9	12.8	21.9	21.9	21.9	12.8
M10	16	18	110	12	21.9	21.9	21.9	12.8	21.9	21.9	21.9	12.8
M12	20	22	90	14	28.0	31.6	31.6	19.2	28.0	31.6	31.6	19.2
M12	20	22	125	14	31.6	31.6	31.6	19.2	31.6	31.6	31.6	19.2
M16	24	28	125	18	45.8	58.0	58.8	35.3	45.8	58.0	58.8	35.3
M16	24	28	170	18	58.8	58.8	58.8	35.3	58.8	58.8	58.8	35.3
M20	30	35	180	22	43.4	43.4	43.4	16.8	43.4	43.4	43.4	16.8
M20	30	35	205	22	43.4	43.4	43.4	16.8	43.4	43.4	43.4	16.8

Governed by concrete failure.

Governed by steel 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 SS 316 bolt insert, M8-M16= A4-70 and M20=A4-50) 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. For detailed calculations incorporating multiple anchors please download ICCONS® Design PRO software for assistance, this download is available via the ICCONS® website [www.iccons.com.au](http://www.iccons.com.au)



# Download DesignPRO

**AS5216:2021 COMPLIANT NCC ANCHOR DESIGN**

## IT'S EASY AND FREE

- ✓ Fast software download and it's easy and FREE!
- ✓ **ICCONS®** DesignPRO Anchoring Software complying with AS 5216:2021
  - Includes Design of fastenings under seismic actions
  - Includes Design of redundant non-structural system
  - Combined loading and displacement calculations
- ✓ Unique all-in-one screen interface with easy data input and results display
- ✓ Interactive 3D model display for clear anchor and baseplate layout including rotation functionality
- ✓ Integrated FEA (Finite Element Analysis) for quick base plate thickness calculations
- ✓ Offers design solutions for rigid and elastic baseplates
- ✓ Flexible custom anchor and base plate geometry design for complex shapes and applications
- ✓ Utilizes Australian steel profiles and material grades
- ✓ All products and all failure modes individually checked for precise anchor analysis and selection
- ✓ Summary or detailed design report options available to save or print

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