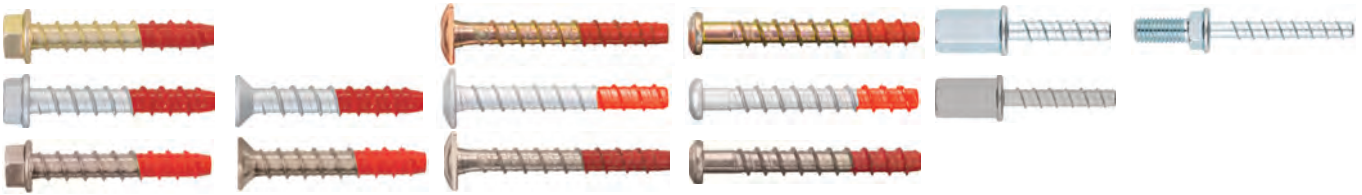




THUNDERBOLT®
PRO



5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 MM



FEATURES & BENEFITS

- Optimum high-performance concrete and masonry screw-bolt anchor
- AS 5216:2021 compliant
- ETA assessed for cracked concrete and fire performance
- Flanged hex head design with "lightning bolt" locking serrations for a secure fix
- Also available in CSK, internal thread, external thread, pan and truss head designs
- Stamped head markings for easy identification and traceability
- Zinc, galvanised, Stainless Steel and corrosion resistant Nautilus® C coating options (refer to offering)
- Fast installation at reduced torque
- No expansion, ideal for close to edge applications
- Suitable for installation with impact drivers
- Removable
- Tamperproof option
- Available on ICCONS Design Pro AS 5216:2021 compliant software

APPLICATIONS

- Structural fixings in cracked and uncracked concrete.
- Glazing, windows and storefronts
- Racking and shelving
- Attaching railings, handrails and balustrades
- Timber frame construction to concrete
- Steel frame construction to concrete
- Facades, scaffolding, Stadium seating
- HVAC and fire services

ETA 20/0902-Option 1

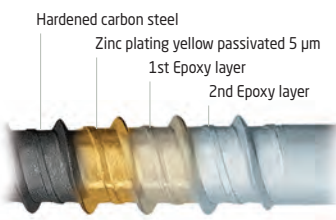
ETA 20/0901 (RNSS)

RNSS = Redundant Non-Structural Systems

RANGE IDENTIFICATION

Code	Size		Description	Material
SXTB_____	Ø5 - Ø18		Hexagonal head with flange Screw-Bolt anchor	Carbon Steel Zinc Yellow Coating ≥ 5 µm plus Red Tip
SXTB_____G	Ø5 - Ø18		Hexagonal head with flange Screw-Bolt anchor	Carbon Steel NAUTILUS®C Coating plus Red Tip
SXTBCS_____G	Ø6 - Ø12		Countersunk Screw-Bolt anchor	Carbon Steel NAUTILUS®C Coating plus Red Tip
SXTBP_____	Ø8		Pan Head Screw-Bolt anchor	Carbon steel zinc yellow coating ≥ 5 µm plus Red Tip
SXTBP_____G	Ø8		Pan Head Screw-Bolt anchor	Carbon Steel NAUTILUS®C Coating plus Red Tip
SXTBTR_____	Ø6		Truss Head Screw-Bolt anchor	Carbon steel zinc yellow coating ≥ 5 µm plus Red Tip
SXTBTR_____G	Ø6		Truss Head Screw-Bolt anchor	Carbon Steel NAUTILUS®C Coating plus Red Tip
SXTB-IM_____	Ø6 - Ø8		Rod hanger internal thread Screw-Bolt anchor	Carbon steel, zinc clear plated coating ≥ 5 µm
SXTB-IM_____G	Ø6 - Ø8		Rod hanger internal thread Screw-Bolt anchor	Carbon Steel Mechanical Galvanised Zinc Coating ≥ 40 microns (min.) (45 microns average)
SXTB-B_____	Ø6		Rod hanger external thread Screw-Bolt anchor	Carbon steel, zinc clear plated coating ≥ 5 µm
SXTB_____SS	Ø6 - Ø12		Hexagonal head with flange Screw-Bolt anchor	Shaft and Head-316 (A4) & Tip- Hardened carbon steel
SXTBCS_____SS	Ø6 - Ø12		Countersunk Screw-Bolt anchor	Shaft and Head-316 (A4) & Tip- Hardened carbon steel
SXTBP_____SS	Ø8		Pan Head Screw-Bolt anchor	Shaft and Head-316 (A4) & Tip- Hardened carbon steel
SXTBTR_____SS	Ø6		Truss Head Screw-Bolt anchor	Shaft and Head-316 (A4) & Tip- Hardened carbon steel

ICCONS Nautilus® C corrosion resistant coating



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.



Thunderbolt® PRO Hex Head



Ceiling Angle Bracket
Refer to ICCONS product guide (IPG) for further details.



1/2" Impact Sockets
Refer to ICCONS product guide (IPG) for further details.



Zinc Yellow - Internal Use

Part No.	Description	Drill Diameter (mm)	Min. Drill Depth (mm)	Min. Anchor Embedment (mm)	Max. Fixture Thickness (mm)	Clearance Hole in Fixture (mm)	Head Size (mm)	Socket Part No.	Max. Impact Tool Torque Tmax (Nm)	ETA Option	SEISMIC Assessment	qty	qty									
SXTB05050	5 x 50mm	5	45	35	15	8	8	BTISS0838	250	RNSS	n/a	100	1600									
SXTB06040	6 x 40mm		45	35	5							9	10	BTISS1038	250	Option 1 & RNSS	n/a	100	1200			
SXTB06045	6 x 45mm	50	40	5	100	1200																
SXTB06050	6 x 50mm			10			100	1200														
SXTB06060	6 x 60mm	65	55	5	100	600																
SXTB06075	6 x 75mm			20			100	600														
SXTB06100	6 x 100mm	45	8	60	50	12			13	BTISS1338	350							Option 1	C1 & C2	100	600	
SXTB08055	8 x 55mm	5					100	600														
SXTB08060	8 x 60mm																			10	100	400
SXTB08070	8 x 70mm	20					100	400														
SXTB08075	8 x 75mm	25										100	400									
SXTB08100	8 x 100mm	75					65	35						25	150							
SXTB08140	8 x 140mm		75	10	65	55		14	17	BTISS1738	600	Option 1	n/a			50	300					
SXTB10060	10 x 60mm	20	50				200															
SXTB10075	10 x 75mm													5	50	200						
SXTB10090	10 x 90mm	15	85				200															
SXTB10100	10 x 100mm													35	50	200						
SXTB10120	10 x 120mm	65	25				100															
SXTB10150	10 x 150mm													115	25	100						
SXTB10200	10 x 200mm	5	12				90							75			16	19	BTISS1938	600	Option 1	n/a
SXTB12080	12 x 80mm	25													50	100						
SXTB12100	12 x 100mm																					
SXTB12120	12 x 120mm	45		105	100																	
SXTB12150	12 x 150mm		95			25	150															
SXTB12200	12 x 200mm	20	25	80																		
SXTB14080	14 x 80mm	14			90	75	18	21	BTISS2138	600	Option 1	n/a	25	150								
SXTB14100	14 x 100mm		15	100											100							
SXTB14130	14 x 130mm															35	25	100				
SXTB14150	14 x 150mm		115	25											100							
SXTB16100	16 x 100mm	16	100		80	20	24	BTISS2440	600	Option 1	Pending	15	90									
SXTB16150	16 x 150mm			70								15	60									
SXTB16200	16 x 200mm			80										10	40							
SXTB18100	18 x 100mm	18	160	140	10	22	26	BTISS2643	600	Option 1	n/a	20	80									
SXTB18150	18 x 150mm											30	15	60								
SXTB18170	18 x 170mm														60	15	60					
SXTB18200	18 x 200mm											160	10	40								
SXTB18300	18 x 300mm														160	5	20					

Max. power output of impact screw gun | RNSS = ETA Redundant non-structural systems | Option 1 = ETA Option 1 = AS 5216 Compliant
 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.
 C1 Seismic assessment only valid for the following embedment depths: Anchor size 6 - 40 & 55mm / Anchor size 8 - 50mm & 65mm / Anchor size 10 - 85mm / Anchor size 12 - 105mm / Anchor size 14 - 115mm / Anchor size 18 - 140mm
 C2 Seismic assessment only valid for the following embedment depths: Anchor size 8 - 50mm & 65mm / Anchor size 10 - 85mm / Anchor size 12 - 105mm / Anchor size 14 - 115mm / Anchor size 18 - 140mm



SCREW-BOLT ANCHOR

TDS | 1032.12



Thunderbolt® PRO Hex Head



Ceiling Angle Bracket
Refer to ICCONS product guide (IPG) for further details.



1/2" Impact Sockets
Refer to ICCONS product guide (IPG) for further details.



Nautilus® C - External Use

Part No.	Description	Drill Diameter (mm)	Min. Drill Depth (mm)	Min. Anchor Embedment (mm)	Max. Fixture Thickness (mm)	Clearance Hole in Fixture (mm)	Head Size (mm)	Socket Part No.	Max. Impact Tool Torque Tmax (Nm)	ETA Option	SEISMIC Assessment	qty	qty
SXTB05050G	5 x 50mm	5	45	35	15	8	8	BTISS0838	250	RNSS	n/a	100	1600
SXTB06040G	6 x 40mm	6	45	35	5	9	10	BTISS1038	250	Option 1 & RNSS	C1	100	1200
SXTB06045G	6 x 45mm		5	100	1200								
SXTB06050G	6 x 50mm		10	100	1200								
SXTB06060G	6 x 60mm		5	100	600								
SXTB06075G	6 x 75mm		20	100	600								
SXTB06100G	6 x 100mm		45	100	600								
SXTB06150G*	6 x 150mm		95	50	300								
SXTB08055G	8 x 55mm	8	60	50	5	12	13	BTISS1338	350	Option 1	C1 & C2	100	600
SXTB08060G	8 x 60mm				10							100	600
SXTB08070G	8 x 70mm				20							100	400
SXTB08075G	8 x 75mm				25							100	400
SXTB08100G	8 x 100mm				35							100	400
SXTB08140G	8 x 140mm				75							65	150
SXTB10060G	10 x 60mm				10							65	55
SXTB10075G	10 x 75mm	20	50	300									
SXTB10090G	10 x 90mm	5	50	200									
SXTB10100G	10 x 100mm	15	50	200									
SXTB10120G	10 x 120mm	35	50	200									
SXTB10150G	10 x 150mm	65	25	100									
SXTB10200G	10 x 200mm	115	25	100									
SXTB12080G	12 x 80mm	12	90	75	5	16	19	BTISS1938	600	Option 1	C1 & C2	50	200
SXTB12100G	12 x 100mm				25							50	100
SXTB12110G	12 x 110mm				5							25	150
SXTB12120G	12 x 120mm				15							25	150
SXTB12150G	12 x 150mm				45							25	100
SXTB12200G	12 x 200mm				95							20	80
SXTB14080G	14 x 80mm				14							90	75
SXTB14100G	14 x 100mm	25	25	150									
SXTB14130G	14 x 130mm	15	25	100									
SXTB14150G	14 x 150mm	35	25	100									
SXTB16100G	16 x 100mm	16	100	80	20	20	24	BTISS2440	600	Option 1	Pending	15	90
SXTB16150G	16 x 150mm				70							15	60
SXTB16200G	16 x 200mm				80							10	40
SXTB18100G	18 x 100mm	18	110	90	10	22	26	BTISS2643	600	Option 1	C1 & C2	20	80
SXTB18150G	18 x 150mm				15							15	60
SXTB18170G	18 x 170mm				30							15	60
SXTB18200G	18 x 200mm				60							10	40
SXTB18300G	18 x 300mm				160							5	20

Max. power output of impact screw gun | RNSS = ETA Redundant non-structural systems | Option 1 = ETA Option 1 = AS 5216 Compliant
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.
C1 Seismic assessment only valid for the following embedment depths: Anchor size 6 - 40 & 55mm / Anchor size 8 - 50mm & 65mm / Anchor size 10 - 85mm / Anchor size 12 - 105mm / Anchor size 14 - 115mm / Anchor size 18 - 140mm C2 Seismic assessment only valid for the following embedment depths: Anchor size 8 - 50mm & 65mm / Anchor size 10 - 85mm / Anchor size 12 - 105mm / Anchor size 14 - 115mm / Anchor size 18 - 140mm

* Available in New Zealand



Thunderbolt® PRO Hex Head Stainless Steel



Ceiling Angle Bracket
Refer to ICCONS product guide (IPG) for further details.



1/2" Impact Sockets
Refer to ICCONS product guide (IPG) for further details.



316 SS (A4) - Stainless Steel - External Use

Part No.	Description	Drill Diameter (mm)	Min. Drill Depth (mm)	Min. Anchor Embedment (mm)	Max. Fixture Thickness (mm)	Clearance Hole in Fixture (mm)	Head Size (mm)	Socket Part No.	Max. Impact Tool Torque Tmax (Nm)	ETA Option	SEISMIC Assessment	qty	qty
SXTB06045SS	6 x 45mm	6	50	40	5	9	10	BTISS1038	250	Option 1	C1	100	1200
SXTB06050SS	6 x 50mm				10							100	600
SXTB06060SS	6 x 60mm		5	100	600								
SXTB06075SS	6 x 75mm		20	100	600								
SXTB06100SS	6 x 100mm		45	100	600								
SXTB08055SS	8 x 55mm	8	60	50	5	12	13	BTISS1338	600	Option 1	C1	100	600
SXTB08070SS	8 x 70mm				5							100	400
SXTB08075SS	8 x 75mm		10	100	400								
SXTB08090SS	8 x 90mm		25	100	400								
SXTB08100SS	8 x 100mm		35	100	400								
SXTB10060SS	10 x 60mm	10	65	55	5	14	17	BTISS1738	600	Option 1	C1	50	300
SXTB10075SS	10 x 75mm				20							50	200
SXTB10080SS	10 x 80mm				25							50	200
SXTB10090SS	10 x 90mm		5	50	200								
SXTB10100SS	10 x 100mm		15	50	200								
SXTB10110SS	10 x 110mm		25	50	200								
SXTB10120SS	10 x 120mm		35	50	200								
SXTB12080SS	12 x 80mm	12	90	75	5	16	19	BTISS1938	600	Option 1	C1	50	200
SXTB12100SS	12 x 100mm				25							50	100
SXTB12120SS	12 x 120mm		15	25	150								
SXTB12150SS*	12 x 150mm		45	25	100								

Max. power output of impact screw gun | Option 1 = ETA Option 1 = AS 5216 Compliant

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.

C1 Seismic assessment only valid for the following embedment depths: Anchor size 6 - 40 & 55mm / Anchor size 8 - 50mm & 65mm / Anchor size 10 - 55 & 85mm /

Anchor size 12 - 75 & 105mm

* Available in New Zealand



T30 | T45 | T50 | T55
Torx Impact Driver
Refer to ICCONS product guide (IPG) for further details.



FASTDRIVE
Refer to ICCONS product guide (IPG) for further details.



Thunderbolt® PRO Countersunk Head



Nautilus® C - External Use

Part No.	Description	Drill Diameter (mm)	Min. Drill Depth (mm)	Min. Anchor Embed. (mm)	Max. Fixture in Fixture (mm)	Clearance Hole in Fixture (mm)	Dia. of CSK Drill Size (mm)	CSK Head Height (mm)	Drive Type Driver (Torx)	Torx Impact Tool Torque Part No.	Max. Impact Tmax (Nm)	ETA Option	SEISMIC Assessment	qty	qty
SXTBCS06050G	6 x 50mm	6	50	40	10	9	15	4.5	T30	BT1050T30	250	Option 1 & RNSS	C1	100	1200
SXTBCS06075G	6 x 75mm		65	55	20									100	600
SXTBCS06100G	6 x 100mm		45	100	600										
SXTBCS08060G	8 x 60mm	8	60	50	10	12	21	6.5	T45	BT1050T45	350	Option 1	C1 & C2	100	600
SXTBCS08075G	8 x 75mm				25									100	400
SXTBCS08100G	8 x 100mm				50									100	400
SXTBCS08130G	8 x 130mm				65									50	200
SXTBCS10060G	10 x 60mm	10	65	55	5	14	24.5	7.3	T50	BT1050T50	600	Option 1	n/a	50	200
SXTBCS10065G	10 x 65mm				10									50	200
SXTBCS10075G	10 x 75mm				20									50	200
SXTBCS10100G	10 x 100mm				15									50	200
SXTBCS12085G	12 x 85mm	12	90	75	10	16	28	8	T55	BT1050T55	600	Option 1	n/a	50	200
SXTBCS12100G	12 x 100mm				25									50	200
SXTBCS12150G	12 x 150mm				45									20	120

Max. power output of impact screw gun | RNSS = ETA Redundant non-structural systems | Option 1 = ETA Option 1 = AS 5216 Compliant
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.
C1 Seismic assessment only valid for the following embedment depths: Anchor size 6 - 40 & 55mm / Anchor size 8 - 50mm & 65mm / Anchor size 10 - 85mm / Anchor size 12 - 105mm
C2 Seismic assessment only valid for the following embedment depths: Anchor size 8 - 50mm & 65mm / Anchor size 10 - 85mm / Anchor size 12 - 105mm



Thunderbolt® PRO Countersunk Head - Stainless Steel



T30 | T45 | T50 | T55
Torx Impact Driver
Refer to ICCONS product guide (IPG) for further details.



FASTDRIVE
Refer to ICCONS product guide (IPG) for further details.



316 SS (A4) - Stainless Steel - External Use

Part No.	Description	Drill Diameter (mm)	Min. Drill Depth (mm)	Min. Anchor Embed. (mm)	Max. Fixture in Fixture (mm)	Clearance Hole in Fixture (mm)	Dia. of CSK Drill Size (mm)	CSK Head Height (mm)	Drive Type Driver (Torx)	Torx Impact Tool Torque Part No.	Max. Impact T _{max} (Nm)	ETA Option	SEISMIC Assessment	qty	qty
SXTBCS06050SS	Ø6 x 50	6	50	40	10	9	15	4.5	TX30	BT1050T30	250	Option 1	C1	100	1200
SXTBCS06075SS	Ø6 x 75		65	55	20									100	600
SXTBCS06100SS	Ø6 x 100		45	100	600										
SXTBCS08075SS	Ø8 x 75	8	60	50	25	12	21	6.5	TX45	BT1050T45	600	Option 1	C1	100	400
SXTBCS08100SS	Ø8 x 100		75	65	35									100	400
SXTBCS10075SS	Ø10 x 75	10	65	55	20	14	24.5	7.3	TX50	BT1050T50	600	Option 1	C1	50	200
SXTBCS10100SS	Ø10 x 100		95	85	15									50	200
SXTBCS12100SS	Ø12 x 100	12	90	75	25	16	28	8	TX55	BT1050T55	600	Option 1	C1	50	200
SXTBCS12150SS	Ø12 x 150		120	105	45									20	120

Max. power output of impact screw gun | Option 1 = ETA Option 1 = AS 5216 Compliant

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.

C1. Seismic assessment only valid for the following embedment depths: Anchor size 6 - 40 & 55mm / Anchor size 8 - 50mm & 65mm / Anchor size 10 - 55 & 85mm /

Anchor size 12 - 75 & 105mm



SCREW-BOLT ANCHOR

TDS | 1032.12



Thunderbolt® PRO Pan Head



Ceiling Angle Bracket
Refer to ICCONS product guide (IPG) for further details.



T45 Torx Impact Driver
Refer to ICCONS product guide (IPG) for further details.



FASTDRIVE
Refer to ICCONS product guide (IPG) for further details.



Zinc Yellow - Internal Use

Part No.	Description	Drill Diameter (mm)	Min. Drill Depth (mm)	Min. Anchor Embed. (mm)	Max. Fixture Thickness (mm)	Clearance Hole in Fixture (mm)	Drive Type (Torx)	Torx Impact Driver Part No.	Max. Impact Tool Torque Tmax (Nm)	ETA Option	SEISMIC Assessment	qty	qty
SXTBP08060	8 x 60mm	8	60	50	10	12	T45	BT1050T45	350	Option 1	C1 & C2	100	600
SXTBP08080	8 x 80mm				30							50	200
SXTBP08100	8 x 100mm				35							65	200

Max. power output of impact screw gun | Option 1 = ETA Option 1 = AS 5216 Compliant
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.
C1 Seismic assessment only valid for the following embedment depths: Anchor size 8 - 50mm & 65mm
C2 Seismic assessment only valid for the following embedment depths: Anchor size 8 - 50mm & 65mm

Thunderbolt® PRO Pan Head



Ceiling Angle Bracket
Refer to ICCONS product guide (IPG) for further details.



T45 Torx Impact Driver
Refer to ICCONS product guide (IPG) for further details.



FASTDRIVE
Refer to ICCONS product guide (IPG) for further details.



NAUTILUS® C - External Use

Part No.	Description	Drill Diameter (mm)	Min. Drill Depth (mm)	Min. Anchor Embed. (mm)	Max. Fixture Thickness (mm)	Clearance Hole in Fixture (mm)	Drive Type (Torx)	Torx Impact Driver Part No.	Max. Impact Tool Torque Tmax (Nm)	ETA Option	SEISMIC Assessment	qty	qty
SXTBP08060G	8 x 60mm	8	60	50	10	12	T45	BT1050T45	350	Option 1	C1 & C2	100	600
SXTBP08080G	8 x 80mm				30							200	
SXTBP08100G	8 x 100mm				35							65	200

Max. power output of impact screw gun | Option 1 = ETA Option 1 = AS 5216 Compliant
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.
C1 Seismic assessment only valid for the following embedment depths: Anchor size 8 - 50mm & 65mm
C2 Seismic assessment only valid for the following embedment depths: Anchor size 8 - 50mm & 65mm

Thunderbolt® PRO Pan Head



Ceiling Angle Bracket
Refer to ICCONS product guide (IPG) for further details.



T45 Torx Impact Driver
Refer to ICCONS product guide (IPG) for further details.



FASTDRIVE
Refer to ICCONS product guide (IPG) for further details.



Stainless Steel - External Use

RANGE COMING SOON

Part No.	Description	Drill Diameter (mm)	Min. Drill Depth (mm)	Min. Anchor Embed. (mm)	Max. Fixture Thickness (mm)	Clearance Hole in Fixture (mm)	Drive Type (Torx)	Torx Impact Driver Part No.	Max. Impact Tool Torque Tmax (Nm)	ETA Option	SEISMIC Assessment	qty	qty
SXTBP08060SS	8 x 60mm	8	60	50	10	12	T45	BT1050T45	600	Option 1	C1	100	600
SXTBP08080SS	8 x 80mm				30							200	
SXTBP08100SS	8 x 100mm				35							65	200

Max. power output of impact screw gun | Option 1 = ETA Option 1 = AS 5216 Compliant
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.
C1 Seismic assessment only valid for the following embedment depths: Anchor size 8 - 50mm & 65mm



SCREW-BOLT ANCHOR

TDS | 1032.12



Thunderbolt® PRO Truss Head



Ceiling Angle Bracket
Refer to ICCONS product guide (IPG) for further details.



T30 Torx Impact Driver
Refer to ICCONS product guide (IPG) for further details.



Zinc Yellow - Internal Use

Part No.	Description	Drill Diameter (mm)	Min. Drill Depth (mm)	Min. Anchor Embed. (mm)	Max. Fixture Thickness (mm)	Clearance Hole in Fixture (mm)	Drive Type (Torx)	Torx Impact Driver Part No.	Max. Impact Tool Torque Tmax (Nm)	ETA Option	SEISMIC Assessment	qty	qty
SXTBTR06045	6 x45mm	6	50	40	5	9	T30	BTI050T30	250	Option 1 & RNSS	C1	100	1200
SXTBTR06060	6 x60mm				5							100	600
SXTBTR06080	6 x80mm		25	100	600								
SXTBTR06100	6 x100mm		45	100	600								

Max. power output of impact screw gun | RNSS = ETA Redundant non-structural systems | Option 1 = ETA Option 1 = AS 5216 Compliant
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.
C1 Seismic assessment only valid for the following embedment depths: Anchor size 6 - 40 & 55mm

Thunderbolt® PRO Truss Head



Ceiling Angle Bracket
Refer to ICCONS product guide (IPG) for further details.



T30 Torx Impact Driver
Refer to ICCONS product guide (IPG) for further details.



NAUTILUS® C - External Use

Part No.	Description	Drill Diameter (mm)	Min. Drill Depth (mm)	Min. Anchor Embed. (mm)	Max. Fixture Thickness (mm)	Clearance Hole in Fixture (mm)	Drive Type (Torx)	Torx Impact Driver Part No.	Max. Impact Tool Torque Tmax (Nm)	ETA Option	SEISMIC Assessment	qty	qty
SXTBTR06045G	6 x45mm	6	50	40	5	9	T30	BTI050T30	250	Option 1 & RNSS	C1	100	1200
SXTBTR06060G	6 x60mm				5							100	600
SXTBTR06080G	6 x80mm		25	100	600								
SXTBTR06100G	6 x100mm		45	100	600								

Max. power output of impact screw gun | RNSS = ETA Redundant non-structural systems | Option 1 = ETA Option 1 = AS 5216 Compliant
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.
C1 Seismic assessment only valid for the following embedment depths: Anchor size 6 - 40 & 55mm

Thunderbolt® PRO Truss Head



Ceiling Angle Bracket
Refer to ICCONS product guide (IPG) for further details.



T30 Torx Impact Driver
Refer to ICCONS product guide (IPG) for further details.



Stainless Steel - External Use **RANGE COMING SOON**

Part No.	Description	Drill Diameter (mm)	Min. Drill Depth (mm)	Min. Anchor Embed. (mm)	Max. Fixture Thickness (mm)	Clearance Hole in Fixture (mm)	Drive Type (Torx)	Torx Impact Driver Part No.	Max. Impact Tool Torque Tmax (Nm)	ETA Option	SEISMIC Assessment	qty	qty
SXTBTR06045SS	6 x45mm	6	50	40	5	9	T30	BTI050T30	250	Option 1	C1	100	1200
SXTBTR06060SS	6 x60mm				5							100	600
SXTBTR06080SS	6 x80mm		25	100	600								
SXTBTR06100SS	6 x100mm		45	100	600								

Max. power output of impact screw gun | Option 1 = ETA Option 1 = AS 5216 Compliant
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.
C1 Seismic assessment only valid for the following embedment depths: Anchor size 6 - 40 & 55mm



Thunderbolt® PRO Rod Hangerz™



Each bucket contains 3 x Socket Drivers (HZCM10-D) and 3 x 6mm Drill Bits



Socket Driver
Refer to ICCONS product guide (IPG) for further details.



Carbon Steel Zinc Clear - Internal Use

Part No.	Description	Drill Diameter (mm)	Drill Depth (mm)	Head / Socket Size (mm)	Internal Thread (metric)	Socket Part No.	Max. Impact Tool Torque Tmax (Nm)	ETA Option	SEISMIC Assessment	qty	qty
SXTB-IM06035	6 X 35 Rod Hanger (M8/M10)	6	45	13	M8/M10	HZCM10-D	250	Option 1 & RNSS	n/a	50	400
SXTB-IM06035-BK	6 X 35 Rod Hanger (M8/M10) Bucket		500		n/a						
SXTB-IM06040-M10	6 X 40 Rod Hanger (M10)		100		400						
SXTB-IM06040-M10-BK	6 X 40 Rod Hanger (M10) Bucket		500	n/a							
SXTB-IM06055	6 X 55 Rod Hanger (M8/M10)		65	13	M8/M10			Option 1 & RNSS	C1	50	400
SXTB-IM06055-BK	6 X 55 Rod Hanger (M8/M10) Bucket		500		n/a						
SXTB-IM08050-M10	8 X 50 Rod Hanger (M10)	8	60	13	M10	BTIDS1778	350	Option 1	C1 & C2	100	400
SXTB-IM08050-M12	8 X 50 Rod Hanger (M12)			17	M12					100	400

RNSS = ETA Redundant non-structural systems | Option 1 = ETA Option 1 = AS 5216 Compliant

Excessive torque during installation may damage the anchor. Training, expertise and good judgment is required. Always adhere to anchor installation impact tool torque guidelines.

Thunderbolt® PRO Rod Hangerz™



Socket Driver
Refer to ICCONS product guide (IPG) for further details.



Mechanical Galvanised - External Use

Part No.	Description	Drill Diameter (mm)	Drill Depth (mm)	Head / Socket Size (mm)	Internal Thread (metric)	Socket Part No.	Max. Impact Tool Torque Tmax (Nm)	ETA Option	SEISMIC Assessment	qty	qty
SXTB-IM06040G-M10	6 X 40 ETA Rod Hanger (M10)	6	50	13	M10	HZCM10-D	250	Option 1	C1	100	400
SXTB-IM08050G-M10	8 X 50 ETA Rod Hanger (M10)	8	60	13	M10	HZCM10-D	350	Option 1	C1 & C2	100	400
SXTB-IM08050G-M12	8 X 50 ETA Rod Hanger (M12)	8	60	17	M12	BTIDS1778	350	Option 1	C1 & C2	100	400

Option 1 = ETA Option 1 = AS 5216 Compliant

Excessive torque during installation may damage the anchor. Training, expertise and good judgment is required. Always adhere to anchor installation impact tool torque guidelines.

Thunderbolt® PRO Hangerz™



1/2" Impact Sockets
Refer to ICCONS product guide (IPG) for further details.



Carbon Steel Zinc Clear - External Thread

Part No.	Description	Drill Diameter (mm)	Drill Depth (mm)	Head / Socket Size (mm)	External Thread (metric)	Socket Part No.	Max. Impact Tool Torque Tmax (Nm)	ETA Option	SEISMIC Assessment	qty	qty
SXTB-B06040-M10	6 X 40 External Thread Hanger	6	50	13	M10	BTIDS1378	250	Option 1	C1	100	400

Option 1 = ETA Option 1 = AS 5216 Compliant

Excessive torque during installation may damage the anchor. Training, expertise and good judgment is required. Always adhere to anchor installation impact tool torque guidelines.

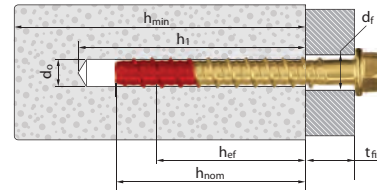
Thunderbolt® PRO

INSTALLATION DATA



TDS | 1032.12

For Thunderbolt® PRO Hex Head
Zinc Yellow and NAUTILUS® C



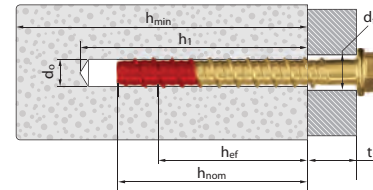
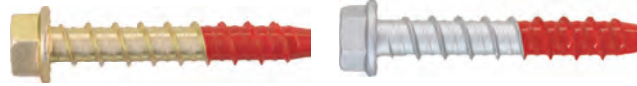
- d_0 : Nominal diameter of drill bit
- d_f : Fixture clearance hole diameter
- h_{ef} : Effective anchorage depth
- h_1 : Depth of drilled hole
- h_{nom} : Overall fastener embedment depth in the concrete
- h_{min} : Minimum thickness of concrete member
- t_{fix} : Fixture thickness

General Installation parameters									Standard Installation depth ($h_{ef, std}$)								Reduced Installation depth ($h_{ef, red}$)									
Thunderbolt® PRO	Size	Assessed	Drill bit diameter	Fixture clearance hole	Spanner	Impact tool torque	Minimum allowable spacing	Minimum allowable edge distance	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)
Part No	[-]	ETA	d_0 (mm)	d_f (mm)	SW/Tx [-]	T_{max} [Nm]	S_{min} (mm)	C_{min} (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)
SXTB05050/G	Ø5 x 50	RNSS ✓	5	8	SW 8	250	35	35	80	55	45	35.0	5	105	53	105	53	80	45	35	26.5	15	80	40	80	40
SXTB06040/G	Ø6 x 40	✓	6	9	SW 10	250	35	35	100	65	55	43.0	5	129	65	170	85	100	45	35	26.0	5	78	39	90	45
SXTB06045/G	Ø6 x 45	✓											10													
SXTB06050/G	Ø6 x 50	✓											15													
SXTB06060/G	Ø6 x 60	✓											25													
SXTB06075/G	Ø6 x 75	✓											40													
SXTB06100/G	Ø6 x 100	✓											65													
SXTB08055/G	Ø8 x 55	✓	8	12	SW 13	350	35	35	100	75	65	50.5	5	152	76	200	100	100	60	50	37.5	5	113	57	130	65
SXTB08060/G	Ø8 x 60	✓											10													
SXTB08070/G	Ø8 x 70	✓											20													
SXTB08075/G	Ø8 x 75	✓											25													
SXTB08100/G	Ø8 x 100	✓											50													
SXTB08140/G	Ø8 x 140	✓											90													
SXTB10060/G	Ø10 x 60	✓	10	14	SW 17	600	50	40	135	95	85	67.0	5	201	101	210	105	100	65	55	41.5	5	125	63	140	70
SXTB10075/G	Ø10 x 75	✓											20													
SXTB10090/G	Ø10 x 90	✓											35													
SXTB10100/G	Ø10 x 100	✓											45													
SXTB10120/G	Ø10 x 120	✓											65													
SXTB10150/G	Ø10 x 150	✓											95													
SXTB10200/G	Ø10 x 200	✓	145																							

Note: Add "G" to the part no for Nautilus® C option, e.g. SXTB05050G.



For Thunderbolt® PRO Hex Head
Zinc Yellow and NAUTILUS® C



- d_0 : Nominal diameter of drill bit
- d_f : Fixture clearance hole diameter
- h_{ef} : Effective anchorage depth
- h_1 : Depth of drilled hole
- h_{nom} : Overall fastener embedment depth in the concrete
- h_{min} : Minimum thickness of concrete member
- t_{fix} : Fixture thickness

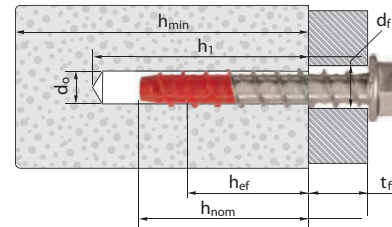
General Installation parameters									Standard Installation depth ($h_{ef, std}$)								Reduced Installation depth ($h_{ef, red}$)									
Thunderbolt® PRO	Size	Assessed	Drill bit diameter	Fixture clearance hole	Spanner	Impact tool torque	Minimum allowable spacing	Minimum allowable edge distance	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)
Part No	[-]	ETA	d_0 (mm)	d_f (mm)	SW/Tx [-]	T_{max} [Nm]	S_{min} (mm)	C_{min} (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)
SXTB12080/G	Ø12 x 80	✓	12	16	SW 19	600	75	45	-	-	-	-	-	-	-	-	-	120	90	75	580	5	174	87	190	95
SXTB12100/G	Ø12 x 100	✓							25																	
SXTB12110/G	Ø12 x 110	✓							35																	
SXTB12120/G	Ø12 x 120	✓							45																	
SXTB12150/G	Ø12 x 150	✓							75																	
SXTB12200/G	Ø12 x 200	✓							125																	
SXTB14080/G	Ø14 x 80	✓	14	18	SW 21	600	80	50	-	-	-	-	-	-	-	-	-	120	90	75	580	5	174	87	190	95
SXTB14100/G	Ø14 x 100	✓							25																	
SXTB14130/G	Ø14 x 130	✓							55																	
SXTB14150/G	Ø14 x 150	✓							75																	
SXTB16100/G	Ø16 x 100	✓	16	20	SW 24	600	80	50	-	-	-	-	-	-	-	-	-	115	100	80	58	20	174	87	180	90
SXTB16150/G	Ø16 x 150	✓							70																	
SXTB16200/G	Ø16 x 200	✓							120																	
SXTB18100/G	Ø18 x 100	✓	18	22	SW 26	600	90	55	-	-	-	-	-	-	-	-	-	140	110	90	695	10	209	105	230	115
SXTB18150/G	Ø18 x 150	✓							60																	
SXTB18170/G	Ø18 x 170	✓							80																	
SXTB18200/G	Ø18 x 200	✓							110																	
SXTB18300/G	Ø18 x 300	✓							210																	

Note: Add "G" to the part no for Nautilus® C option, e.g. SXTB12080G.

INSTALLATION DATA

TDS | 1032.12

For Thunderbolt PRO
Stainless Steel 316 SS (A4) - HEX

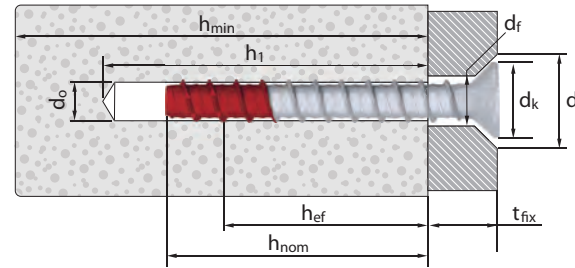
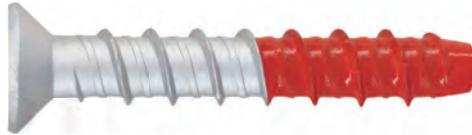


- d_0 : Nominal diameter of drill bit
- d_f : Fixture clearance hole diameter
- h_{ef} : Effective anchorage depth
- h_1 : Depth of drilled hole
- h_{nom} : Overall fastener embedment depth in the concrete
- h_{min} : Minimum thickness of concrete member
- t_{fix} : Fixture thickness

General Installation parameters									Standard Installation depth ($h_{ef, std}$)								Reduced Installation depth ($h_{ef, red}$)										
Thunderbolt® PRO	Size	Assessed	Drill bit diameter	Fixture clearance hole	Spanner	Impact tool torque	Minimum allowable spacing	Minimum allowable edge distance	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)	
Part No	[-]	ETA	d_0 (mm)	d_f (mm)	SW/Tx [-]	T_{max} [Nm]	S_{min} (mm)	C_{min} (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)	
SXTB06045SS	Ø6 x 45	✓	6	9	SW 10	250	35	35	-	-	-	-	-	-	-	-	-	80	45	35	26.0	10	78	39	90	45	
SXTB06050SS	Ø6 x 50	✓							15																		
SXTB06060SS	Ø6 x 60	✓							25	20	129	65	190	95	40												
SXTB06075SS	Ø6 x 75	✓							45	65	55	43.0	5	20	65	190	95					40					
SXTB06100SS	Ø6 x 100	✓																									
SXTB08055SS	Ø8 x 55	✓	8	12	SW 13	600	35	35	-	-	-	-	-	-	-	-	-	80	60	50	37.5	5	113	57	130	65	
SXTB08070SS	Ø8 x 70	✓							20																		
SXTB08075SS	Ø8 x 75	✓							10	152	76	220	110	25													
SXTB08090SS	Ø8 x 90	✓							25	76	220	110	40														
SXTB08100SS	Ø8 x 100	✓																									
SXTB10060SS	Ø10 x 60	✓	10	14	SW 17	600	50	40	-	-	-	-	-	-	-	-	-	80	65	55	41.5	5	125	63	140	70	
SXTB10075SS	Ø10 x 75	✓							20																		
SXTB10080SS	Ø10 x 80	✓							25																		
SXTB10090SS	Ø10 x 90	✓							5	201	101	230	115	35													
SXTB10100SS	Ø10 x 100	✓																									
SXTB10110SS	Ø10 x 110	✓																									
SXTB10120SS	Ø10 x 120	✓																									
SXTB12080SS	Ø12 x 80	✓	12	16	SW 19	600	75	45	-	-	-	-	-	-	-	-	-	120	90	75	58.0	5	174	87	190	95	
SXTB12100SS	Ø12 x 100	✓							25																		
SXTB12120SS	Ø12 x 120	✓							15	251	126	240	120	45													
SXTB12150SS	Ø12 x 150	✓							45	251	126	240	120	75													

INSTALLATION DATA

For Thunderbolt® PRO Countersunk Head
NAUTILUS® C



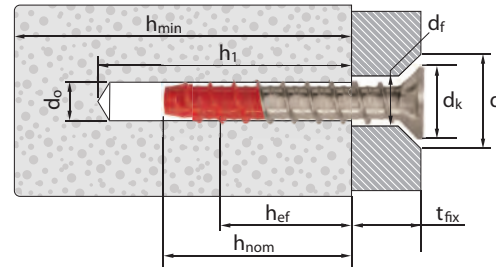
- d_k : Diameter of CSK head
- d_0 : Nominal diameter of drill bit
- d_f : Fixture clearance hole diameter
- h_{ef} : Effective anchorage depth
- h_1 : Depth of drilled hole
- h_{nom} : Overall fastener embedment depth in the concrete
- h_{min} : Minimum thickness of concrete member
- t_{fix} : Fixture thickness
- d_1 : Diameter of CSK drill size

General Installation parameters											Standard Installation depth ($h_{ef, std}$)								Reduced Installation depth ($h_{ef, red}$)									
Thunderbolt® PRO	Size	Assessed	Drill bit diameter	Fixture clearance hole	Diameter of CSK Head	Diameter of CSK drill hole	Spanner	Impact tool torque	Minimum allowable spacing	Minimum allowable edge distance	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)
Part No	[-]	ETA	d_0 (mm)	d_f (mm)	d_k (mm)	d_1 (mm)	SW/Tx [-]	T_{max} [Nm]	S_{min} (mm)	C_{min} (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)
SXTBCS06050G	Ø6 x 50	✓									-	-	-	-	-	-	-	-	-	100	45	35	26.0	15				
SXTBCS06075G	Ø6 x 75	✓	6	9	12.4	15	TX30	250	35	35	100	65	55	43.00	20	129	65	170	85	100	45	35	26.0	40	78	39	90	45
SXTBCS06100G	Ø6 x 100	✓												45										65				
SXTBCS08060G	Ø8 x 60	✓									-	-	-	-	-	-	-	-	-	100	60	50	37.5	10				
SXTBCS08075G	Ø8 x 75	✓												10						100	60	50	37.5	25	113	57	130	65
SXTBCS08100G	Ø8 x 100	✓	8	12	18	21	TX45	350	35	35	100	75	65	50.5	35	152	76	200	100	100	60	50	37.5	50	113	57	130	65
SXTBCS08135G	Ø8 x 135	✓												70										85				
SXTBCS10060G	Ø10 x 60	✓									-	-	-	-	-	-	-	-	-	100	65	55	41.5	5				
SXTBCS10065G	Ø10 x 65	✓																		100	65	55	41.5	10	125	63	140	70
SXTBCS10075G	Ø10 x 75	✓	10	14	21	24.5	TX50	600	50	40														20				
SXTBCS10100G	Ø10 x 100	✓									135	95	85	67.0	15	201	101	210	105					45				
SXTBCS12085G	Ø12 x 85	✓									-	-	-	-	-	-	-	-	-	120	90	75	58	10				
SXTBCS12100G	Ø12 x 100	✓	12	16	24	28	TX55	600	75	45										120	90	75	58	25	174	87	190	95
SXTBCS12150G	Ø12 x 150	✓									170	120	105	83.5	45	251	126	220	110					75				



INSTALLATION DATA

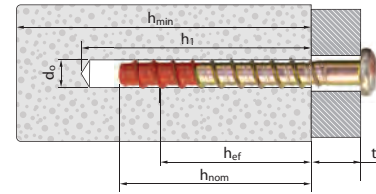
For Thunderbolt PRO Countersunk Head
Stainless Steel 316 SS (A4)



- d_k : Diameter of CSK head
- d_0 : Nominal diameter of drill bit
- d_f : Fixture clearance hole diameter
- h_{ef} : Effective anchorage depth
- h_1 : Depth of drilled hole
- h_{nom} : Overall fastener embedment depth in the concrete
- h_{min} : Minimum thickness of concrete member
- t_{fix} : Fixture thickness
- d_1 : Diameter of CSK drill size

General Installation parameters											Standard Installation depth ($h_{ef, std}$)								Reduced Installation depth ($h_{ef, red}$)									
Thunderbolt®PRO	Size	Assessed	Drill bit diameter	Fixture clearance hole	Diameter of CSK Head	Diameter of CSK drill hole	Spanner	Impact tool torque	Minimum allowable spacing	Minimum allowable edge distance	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)
Part No	[-]	ETA	d_0 (mm)	d_f (mm)	d_k (mm)	d_1 (mm)	SW/Tx [-]	T_{max} [Nm]	S_{min} (mm)	C_{min} (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)
SXTBCS06050SS	Ø6 x 50	✓									-	-	-	-	-	-	-	-	-	80	45	35	26	15				
SXTBCS06075SS	Ø6 x 75	✓	6	9	12.4	15	TX30	250	35	35	80	65	55	43	20	129	65	190	95	80	45	35	26	40	78	39	90	45
SXTBCS06100SS	Ø6 x 100	✓												45										65				
SXTBCS08075SS	Ø8 x 75	✓									80	75	65	50.5	10	152	76	220	110	80	60	50	37.5	25	113	57	130	65
SXTBCS08100SS	Ø8 x 100	✓												35										50				
SXTBCS10075SS	Ø10 x 75	✓									-	-	-	-	-	-	-	-	-	80	65	55	41.5	20	125	63	140	70
SXTBCS10100SS	Ø10 x 100	✓	10	14	21	24.5	TX50	600	50	40	100	95	85	67	15	201	101	230	115					45				
SXTBCS12100SS	Ø12 x 100	✓									-	-	-	-	-	-	-	-	-	120	90	75	58	25	174	87	190	95
SXTBCS12150SS	Ø12 x 150	✓	12	16	24	28	TX55	600	75	45	160	120	105	83.5	45	251	126	240	120					75				

INSTALLATION DATA for Thunderbolt® PRO Pan Head Zinc Yellow and NAUTILUS® C



- d_0 : Nominal diameter of drill bit
- d_f : Fixture clearance hole diameter
- h_{ef} : Effective anchorage depth
- h_1 : Depth of drilled hole
- h_{nom} : Overall fastener embedment depth in the concrete
- h_{min} : Minimum thickness of concrete member
- t_{fix} : Fixture thickness

General Installation parameters									Standard Installation depth ($h_{ef, std}$)								Reduced Installation depth ($h_{ef, red}$)									
Thunderbolt® PRO	Size	Assessed	Drill bit diameter	Fixture clearance hole	Drive type	Impact tool torque	Minimum allowable spacing	Minimum allowable edge distance	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)
Part No	[-]	ETA	d_0 (mm)	d_f (mm)	Torx [-]	T_{max} [Nm]	S_{min} (mm)	C_{min} (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)
SXTBP08060/G	Ø8 x 60	✓	8	12	T45	350	35	35	-	-	-	-	-	-	-	-	-	100	60	50	37.5	10	113	57	130	65
SXTBP08080/G	Ø8 x 80	✓							15	152	76	200	100	30												
SXTBP08100/G	Ø8 x 100	✓							35	35	50	50	50													

Note: Add "G" to the part no for Nautilus® C option, e.g. **SXTBP08080G**.

INSTALLATION DATA for Thunderbolt PRO Pan Head SS

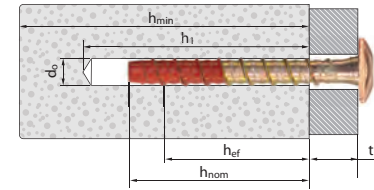


RANGE COMING SOON

General Installation parameters									Standard Installation depth ($h_{ef, std}$)								Reduced Installation depth ($h_{ef, red}$)									
Thunderbolt® PRO	Size	Assessed	Drill bit diameter	Fixture clearance hole	Drive type	Impact tool torque	Minimum allowable spacing	Minimum allowable edge distance	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)
Part No	[-]	ETA	d_0 (mm)	d_f (mm)	Torx [-]	T_{max} [Nm]	S_{min} (mm)	C_{min} (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)
SXTBP08060SS	Ø8 x 60	✓	8	12	T45	600	35	35	-	-	-	-	-	-	-	-	-	80	60	50	37.5	10	113	57	130	65
SXTBP08080SS	Ø8 x 80	✓							15	152	76	200	100	30												
SXTBP08100SS	Ø8 x 100	✓							35	35	50	50	50													



INSTALLATION DATA for Thunderbolt® PRO Truss Head Zinc Yellow and NAUTILUS® C



- d_0 : Nominal diameter of drill bit
- d_f : Fixture clearance hole diameter
- h_{ef} : Effective anchorage depth
- h_1 : Depth of drilled hole
- h_{nom} : Overall fastener embedment depth in the concrete
- h_{min} : Minimum thickness of concrete member
- t_{fix} : Fixture thickness

General Installation parameters									Standard Installation depth ($h_{ef, std}$)								Reduced Installation depth ($h_{ef, red}$)									
Thunderbolt® PRO	Size	Assessed	Drill bit diameter	Fixture clearance hole	Drive type	Impact tool torque	Minimum allowable spacing	Minimum allowable edge distance	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)
Part No	[-]	ETA	d_0 (mm)	d_f (mm)	Torx [-]	T_{max} [Nm]	S_{min} (mm)	C_{min} (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)
SXTBTR06045/G	Ø6 x 45	✓	6	9	T30	250	35	35	-	-	-	-	-	-	-	-	-	100	45	35	26	10	78	39	90	45
SXTBTR06060/G	Ø6 x 60	✓							5																	
SXTBTR06080/G	Ø6 x 80	✓							25	129	65	170	85	45												
SXTBTR06100/G	Ø6 x 100	✓							45																	

Note: Add "G" to the part no for Nautilus® C option. e.g. **SXTBTR06080G**.

INSTALLATION DATA for Thunderbolt PRO Truss Head SS

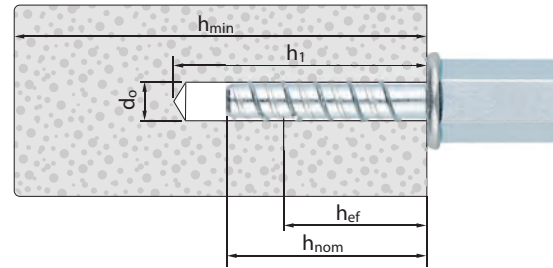
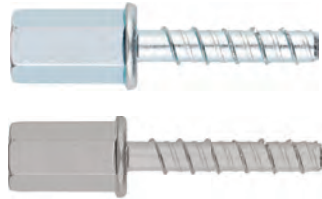


RANGE COMING SOON

General Installation parameters									Standard Installation depth ($h_{ef, std}$)								Reduced Installation depth ($h_{ef, red}$)									
Thunderbolt® PRO	Size	Assessed	Drill bit diameter	Fixture clearance hole	Drive type	Impact tool torque	Minimum allowable spacing	Minimum allowable edge distance	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Thickness of fixture	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)
Part No	[-]	ETA	d_0 (mm)	d_f (mm)	Torx [-]	T_{max} [Nm]	S_{min} (mm)	C_{min} (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	t_{fix} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,sp}$ (mm)	$C_{cr,sp}$ (mm)
SXTBTR06045SS	Ø6 x 45	✓	6	9	T30	250	35	35	-	-	-	-	-	-	-	-	-	80	45	35	26	10	78	39	90	45
SXTBTR06060SS	Ø6 x 60	✓							5																	
SXTBTR06080SS	Ø6 x 80	✓							25	129	65	190	95	45												
SXTBTR06100SS	Ø6 x 100	✓							45																	

INSTALLATION DATA

For Thunderbolt® PRO Rod Hangerz™
Zinc clear and Galvanised - INTERNAL Thread



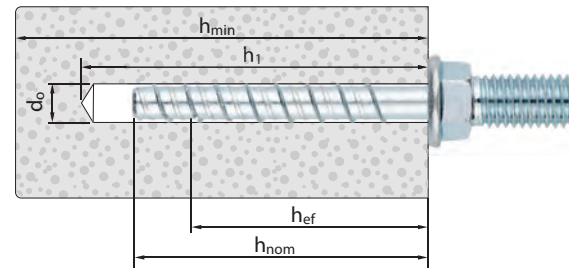
- d_0 : Nominal diameter of drill bit
- h_{ef} : Effective anchorage depth
- h_1 : Depth of drilled hole
- h_{nom} : Overall fastener embedment depth in the concrete
- h_{min} : Minimum thickness of concrete member

General Installation parameters								Standard Installation depth ($h_{ef, std}$)							
Thunderbolt® PRO	Size	Assessed	Drill bit diameter	Spanner	Impact tool torque	Minimum allowable spacing	Minimum allowable edge distance	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)
Part No	[-]	ETA	d_0 (mm)	SW/Tx [-]	T_{max} [Nm]	S_{min} (mm)	C_{min} (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	$S_{cr,N}$ (mm)	$C_{cr,N}$ (mm)	$S_{cr,SP}$ (mm)	$C_{cr,SP}$ (mm)
SXTB-IM06035	Ø6 x 35 (M8-M10)	✓	6	SW13	250	35	35	100	45	35	26.0	78	39	90	45
SXTB-IM06040/G-M10	Ø6 x 40 (M10)	✓						100	50	40	30.0	90	45	90	45
SXTB-IM06055	Ø6 x 55 (M8-M10)	✓						100	65	55	43.0	129	65	170	85
SXTB-IM08050/G-M10	Ø8 x 50 (M10)	✓	8	SW13	350	35	35	100	60	50	37.5	113	57	130	65
SXTB-IM08050/G-M12	Ø8 x 50 (M12)	✓		SW17											

Note: Add "G" to the part no for Galvanised option. e.g. SXTB-IM06040G-M10.

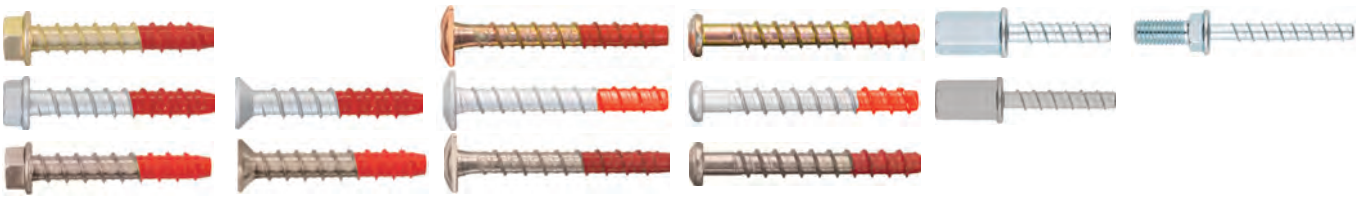
INSTALLATION DATA

For Thunderbolt® PRO Hangerz™
Zinc clear - External Thread



- d_0 : Nominal diameter of drill bit
- h_{ef} : Effective anchorage depth
- h_1 : Depth of drilled hole
- h_{nom} : Overall fastener embedment depth in the concrete
- h_{min} : Minimum thickness of concrete member

General Installation parameters								Standard Installation depth ($h_{ef, std}$)							
Thunderbolt® PRO	Size	Assessed	Drill bit diameter	Spanner	Impact tool torque	Minimum allowable spacing	Minimum allowable edge distance	Minimum concrete thickness	Depth of drill hole	Installation depth	Effective anchorage depth	Critical spacing (concrete cone)	Critical edge distance (cone)	Critical spacing (splitting)	Critical edge distance (splitting)
Part No	[-]	ETA	d_0 (mm)	SW/Tx [-]	T_{max} [Nm]	s_{min} (mm)	c_{min} (mm)	h_{min} (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	$s_{cr,N}$ (mm)	$c_{cr,N}$ (mm)	$s_{cr,sp}$ (mm)	$c_{cr,sp}$ (mm)
SXTB-B06040-M10	Ø6 x40 (M10)	✓	6	SW13	250	35	35	100	50	40	30.0	90	45	90	45



THUNDERBOLT® PRO Performance in accordance with AS 5216

Parameters: Qualification based on AS 5216

Concrete: 20 MPa

Conditions: Single anchor, no edge distance, min recommended concrete thickness

Design Resistance Capacities

Diameter (mm)	Installation Depth h_{nom} (mm)	Effective Depth h_{ef} (mm)	Uncracked concrete Tension N_{Rd} (kN)	Cracked concrete Tension N_{Rd} (kN)	Uncracked Concrete Shear V_{Rd} (kN)	Cracked concrete Shear V_{Rd} (kN)
6	35	26.0	2.8	2.5	8.4	6.2
	40	30.0	4.5	3.1	7.8	5.4
	55	43.0	9.2	6.5	8.4	7.4
8	50	37.5	6.3	4.4	13.0	9.5
	65	50.5	11.8	8.2	13.0	10.5
10	55	41.5	8.8	6.1	17.1	12.0
	75	58.5	14.7	10.3	18.3	13.6
	85	67.0	18.0	12.6	18.3	18.3
12	75	58.0	14.5	10.1	24.8	23.6
	105	83.5	25.0	17.5	24.8	24.8
14	75	58.0	14.5	10.1	35.1	25.9
	115	92.0	28.9	20.3	35.1	35.1
16	80	58.0	14.5	10.1	32.6	22.8
	120	92.0	28.9	20.3	38.6	38.6
18	90	69.5	19.0	13.3	50.5	35.4
	140	112.0	38.9	27.2	53.9	53.9

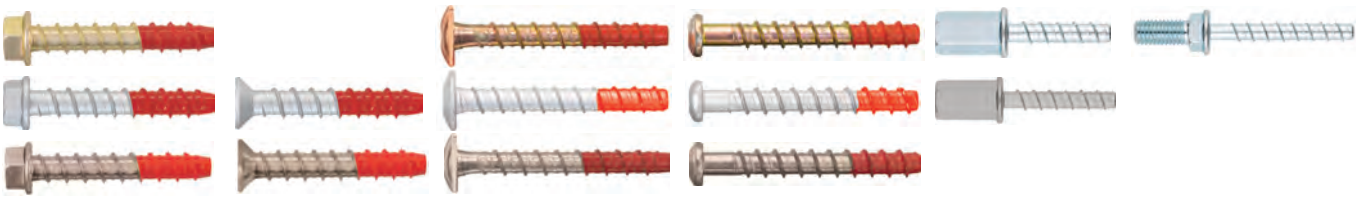
Information presented in the above table has been derived from the product ETA (ETA 20/0902) and in accordance with AS 5216:2021. Data is based on single anchor with no edge or spacing influence. For detailed calculations incorporating multiple anchors please download the ICCONS anchor software program for assistance, this download is available via the ICCONS website www.iccons.com.au

Performance for use in redundant non-structural systems - 20 MPa

Design Resistance Capacities

Diameter (mm)	Installation Depth h_{nom} (mm)	Effective Depth h_{ef} (mm)	Uncracked concrete Tension N_{Rd} (kN)	Cracked concrete Tension N_{Rd} (kN)	Uncracked Concrete Shear V_{Rd} (kN)	Cracked concrete Shear V_{Rd} (kN)
5	35	26.5	4.5	3.1	4.5	3.1
	45	35.0	6.8	4.8	5.5	4.8
6	35	26.0	3.6	2.5	4.3	3.0
	55	43.0	9.2	6.5	8.4	6.5

Information presented in the above table has been derived from the product ETA (ETA 20/0901) and in accordance with AS 5216:2021 for redundant non-structural systems. Redundant non-structural systems incorporate multiple fixings and fixing points please refer to product ETA and AS 5216:2021 for further details.

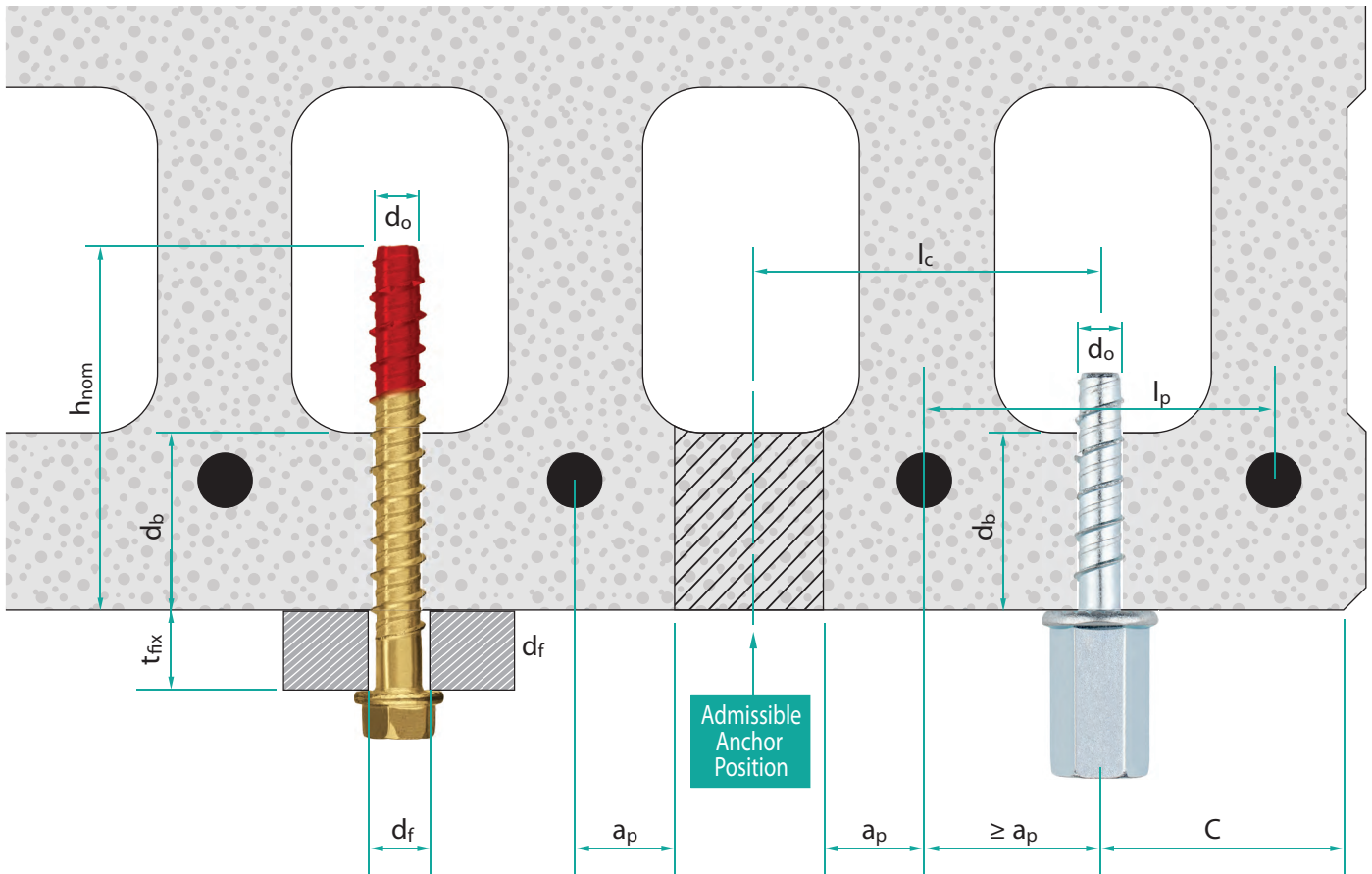


Thunderbolt®PRO Performance for use in redundant non-structural systems - prestressed hollow core slabs (C30/37 to C50/60)

Design Resistance Capacities

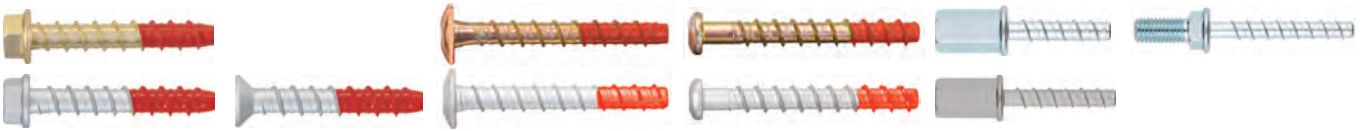
Diameter d_o (mm)	Min. Bottom Flange Thickness d_b (mm)	Effective Depth h_{ef} (mm)	Uncracked Concrete Tension N_{Rd} (kN)	Uncracked Concrete Shear V_{Rd} (kN)
5	25	20.0	2.4	2.4
	30	22.0	2.8	2.8
	40	26.5	3.7	3.7
6	25	20.0	2.4	2.4
	30	22.0	2.8	2.8
	40	26.0	3.6	3.6

Information presented in the above table has been derived from the product ETA (ETA 20/0901) and in accordance with AS 5216:2021 for redundant non-structural systems. Redundant non-structural systems incorporate multiple fixings and fixing points please refer to product ETA and AS 5216:2021 for further details.



- d_o : Nominal diameter of drill bit
- d_f : Fixture clearance hole diameter
- d_b : Bottom flange thickness
- a_p : Distance between anchor position and prestressing steel ≥ 50 mm

- l_c : Core spacing distance ≥ 100 mm
- l_p : Steel reinforcement spacing distance ≥ 100 mm
- t_{fix} : Fixture thickness
- C : Edge distance



Thunderbolt® PRO Seismic Performance in accordance with AS 5216:2021

Thunderbolt® PRO Seismic C1

Design Resistance Capacities - 20 MPa ($a_{gap} = 1.0$)

SXTB Screw-Bolt size	Embed. Depth (mm)	Effective Depth (min.)	Tension $N_{Rd,seis}$ (kN)	Shear $V_{Rd,seis}$ (kN)
6	40	30.0	2.8	3.9
6	55	43.0	3.3	6.3
8	50	37.5	3.4	5.8
8	65	50.5	5.9	7.8
10	85	67.0	9.8	12.8
12	105	83.5	12.1	15.7
14	115	92.0	15.5	21.1
18	140	112.0	23.1	29.4

→ $a_{Seis} = 0.85$ for tension → $a_{Seis} = 0.85$ for shear concrete pryout

Thunderbolt® PRO Seismic Performance in accordance with AS 5216:2021

Thunderbolt® PRO Seismic C2

Design Resistance Capacities - 20 MPa ($a_{gap} = 1.0$)

SXTB Screw-Bolt size	Embed. Depth (mm)	Effective Depth (min.)	Tension $N_{Rd,seis}$ (kN)	Shear $V_{Rd,seis}$ (kN)
8	50	37.5	1.3	5.6
8	65	50.5	2.3	7.8
10	85	67.0	4.6	12.8
12	105	83.5	7.0	15.7
14	115	92.0	10.2	21.1
18	140	112.0	21.0	29.4

→ $a_{Seis} = 0.85$ for tension → $a_{Seis} = 0.85$ for shear concrete pryout

Information presented in the above tables has been derived from the product ETA (ETA 20/0902) and in accordance with AS 5216:2021. Data is based on single anchor with no edge or spacing influence. For detailed calculations incorporating multiple anchors please download the ICCONS® anchor software program for assistance, this download is available via the ICCONS® website www.iccons.com.au.



THUNDERBOLT® PRO Stainless Steel (A4) Performance in accordance with AS 5216

Parameters: Qualification based on AS 5216

Concrete: 20 MPa

Conditions: Single anchor, no edge distance, min recommended concrete thickness

Design Resistance Capacities

Diameter (mm)	Installation Depth h_{nom} (mm)	Effective Depth h_{ef} (mm)	Uncracked concrete Tension N_{Rd} (kN)	Cracked concrete Tension N_{Rd} (kN)	Uncracked Concrete Shear V_{Rd} (kN)	Cracked concrete Shear V_{Rd} (kN)
6	35	26.0	3.1	0.6	6.1	4.3
	40	30.0	4.5	1.4	7.0	6.3
	55	43.0	6.7	5.4	7.0	5.7
8	50	37.5	5.6	4.4	10.7	7.5
	65	50.5	9.8	6.9	11.7	9.5
10	55	41.5	7.3	5.1	13.4	9.4
	85	67.0	15.0	10.5	19.2	19.2
12	75	58.0	12.1	8.5	26.4	18.5
	105	83.5	25.0	17.5	27.9	27.9

Information presented in the above table has been derived from the product ETA (ETA 20/0902) and in accordance with AS 5216:2021. Data is based on single anchor with no edge or spacing influence. For detailed calculations incorporating multiple anchors please download the ICCONS anchor software program for assistance, this download is available via the ICCONS website www.iccons.com.au



Thunderbolt Pro Stainless Steel (A4) Seismic Performance in accordance with AS 5216:2021

Thunderbolt Pro Stainless Steel Seismic C1

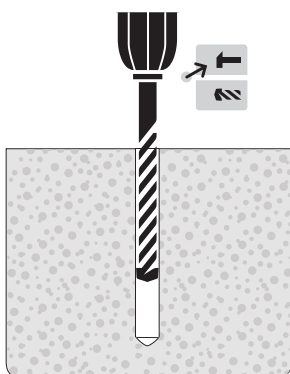
Design Resistance Capacities - 20 MPa ($a_{gap} = 1.0$)

SXTB Screw-Bolt size	Embed. Depth (mm)	Effective Depth (min.)	Tension $N_{Rd,seis}$ (kN)	Shear $V_{Rd,seis}$ (kN)
6	40	30.0	1.2	3.9
6	55	43.0	3.2	4.8
8	50	37.5	2.0	5.4
8	65	50.5	4.9	6.7
10	55	41.5	3.7	8.0
10	85	67.0	7.1	13.2
12	75	58.0	5.5	15.7
12	105	83.5	14.4	20.5

→ $a_{seis} = 0.85$ for tension → $a_{seis} = 0.85$ for shear concrete pryout

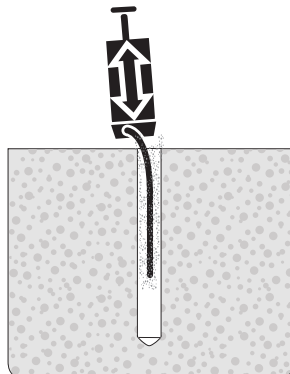
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INSTALLATION (SOLID CONCRETE)



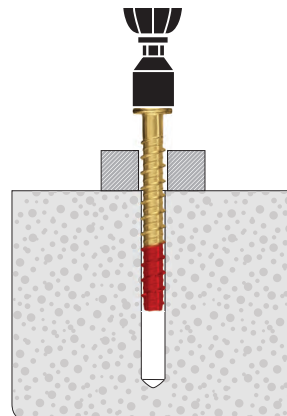
1. DRILL HOLE

With the correct diameter carbide drill bit, drill a hole into the base material to the correct depth using a hammer drill in rotary and hammer mode.



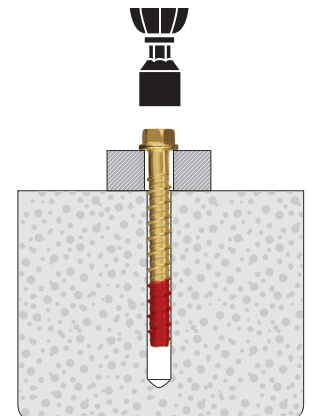
2. BLOW AND CLEAN

Using a hand pump, compressed air or a vacuum system, remove dust and debris from the drilled hole.



3. INSTALL

Use a correct powered impact driver or a torque wrench that does not exceed the maximum torque $T_{impact,max}$ or $T_{inst,max}$ respectively. Attach an appropriately sized hex socket or six lob bit to the impact driver. Mount the screw anchor head in the socket / bit.



4. APPLY TORQUE

Drive the screw anchor with an impact driver or a torque wrench through the fixture and into the drilled hole until the anchor head is seated against the fixture. The anchor must be snug tight after installation. Do not spin the socket off the anchor to disengage.



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