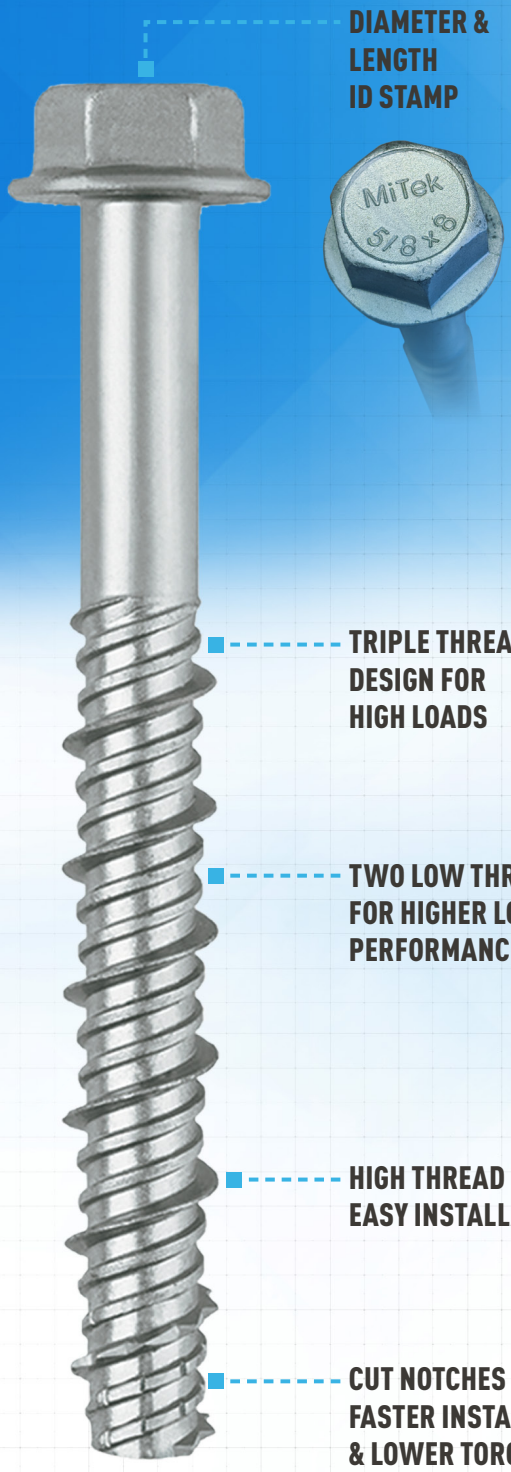
SCREW ANCHOR
(SACH) MECHANICAL ANCHORS

MiTek® PRO SERIES™

HIGH CORROSION RESISTANCE



- Screw anchor for temporary or permanent attachment to uncracked and cracked concrete
- No special drill bit required; install using standard-sized ANSI tolerance drill bits
- Code evaluated to IBC/IRC in accordance with ICC-ES AC193 and ACI 355.2 for cracked and uncracked concrete
- Approved for use in wind and seismic applications
- Fully removable for temporary anchoring or applications where fixtures may need to be moved (e.g. formwork, bracing)
- Suitable for closer edge distance or tight spacing applications
- **CODE REPORTS:** IBC, FL, LA (3/8", 1/2", and 5/8" sizes)

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(SACH) MECHANICAL ANCHORS

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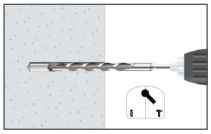
APPLICATIONS

- Structural fixings in cracked and uncracked concrete
- Formwork and fixing
- Racking and shelving
- Attaching railings, handrails, ledgers and sill plates
- Fixings of steel beams, channels, boilers, signals, stadium seatings, façade substructures, etc.

See detailed installation and design instructions at MiTek-US.com to ensure proper installation and to reduce risk failure which could result in injury and/or property damage. MiTek will not be liable for any anchor failure due to defective substrate material or improper installation

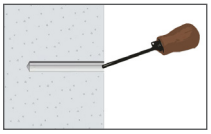
INSTALLATION

1. DRILL



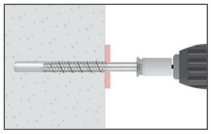
Drill a hole into the base material of the correct diameter and depth found in ICC-ES ESR-4419 using a drill bit that meets the requirements of ANSI B212.15-1994.

2. BLOW & CLEAN



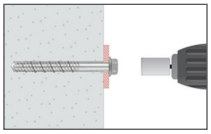
Remove dust and debris from hole using a blow bulb, compressed air or vacuum to remove the loose particles left from drilling.

3. INSTALL



Select a powered impact wrench that does not exceed maximum torque impact wrench torque rating or a torque wrench that is able to be set to the maximum installation torque found in ICC-ES ESR-4419. Attach an appropriate sized hex socket to the wrench. Mount the screw anchor head in the socket.

4. APPLY TORQUE



Drive the anchor with an impact driver or a torque wrench through the fixture and into the hole until the anchor head washer comes in contact with the fixture. the anchor must be snug after installation. Do not spin the hex socket off the anchor to disengage.

LOAD TABLE

Size (in)	MiTek Stock No.	Ref. No.	Drill Bit Dia. (in)	Head Size (in)	Minimum Anchor Embedment (in)	Maximum Installation Torque (ft-lbs)	Uncracked Concrete		Cracked Concrete		Ordering MiTek Stock No.	Pieces per Selling Unit	Selling Unit per Master Carton
							Allowable Tension (lbs)	Allowable Shear (lbs)	Allowable Tension (lbs)	Allowable Shear (lbs)			
5/16 x 2-1/4	SACH516214-EXT	--	5/16	1/2	1-1/2	10	1235	1330	--	--	SACH516214-EXTR20	20	6
5/16 x 3	SACH516300-EXT	--	5/16	1/2	2	10	1235	1330	--	--	SACH516300-EXTR20	20	6
3/8 x 3	SACH038300-EXT	THD37300HMG	3/8	9/16	2-1/2	35	1885	1955	1190	1280	SACH038300-EXTR10	10	6
3/8 x 4	SACH038400-EXT	THD37400HMG	3/8	9/16	2-1/2	35	1885	1955	1190	1280	SACH038400-EXTR10	10	4
											SACH038400-EXTR40F	40	1
1/2 x 4	SACH012400-EXT	THD50400HMG	1/2	3/4	3	45	2465	2655	1535	2065	SACH012400-EXTR20F	20	1
1/2 x 5	SACH012500-EXT	THD50500HMG	1/2	3/4	3	45	2465	2655	1535	2065	SACH012500-EXTR20F	20	1
1/2 x 6	SACH012600-EXT	THD50600HMG	1/2	3/4	3	45	2465	2655	1535	2065	SACH012600-EXTR20	20	3
											SACH012600-EXTR20F	20	1
5/8 x 6	SACH058600-EXT	THD62600HMG	5/8	15/16	3-1/4	85	2415	2605	1710	1845	SACH058600-EXTR10	10	3
											SACH058600-EXTR12F	12	1
5/8 x 6-1/2	SACH058612-EXT	THD62612HMG	5/8	15/16	3-1/4	85	2415	2605	1710	1845	SACH058612-EXTR10	10	3
											SACH058612-EXTR10F	10	1
5/8 x 8	SACH058800-EXT	THD62800HMG	5/8	15/16	3-1/4	85	2415	2605	1710	1845	SACH058800-EXTR8	8	--
											SACH058800-EXTR8F	8	1

1) Example Allowable Stress Design (ASD) values include an approximate safety factor of 4.
2) Values based on single anchor installations and do not consider critical edge distance or spacing. For full design information on 3/8", 1/2", and 5/8" sizes refer to ICC-ES ESR-4419.
3) Values in table assume concrete strength f'c = 4,000 psi.
4) ASD values derived from the assumption of a single anchor with 30% dead load and 70% live load, and a controlling load combination of 1.2D+ 1.6L.
5) Values are for shear or tension only and do not work for a combination of such.