

# UNISORB® CAPSULE ANCHOR SYSTEMS



## CAPSULE ANCHOR WITH STUD ASSEMBLY

This system provides a superior method of heavy duty anchoring using a high strength adhesive to retain a threaded rod and other materials such as rebar in concrete or other masonry material. The system consists of a glass capsule containing the proper proportion of base resin, hardener and aggregate for the anchor, an appropriate length stud with washer and nut and a drive unit to allow the stud to be inserted into a standard hammer drill.

To install the anchor a clearance hole is prepared and a capsule is inserted. The stud is driven into the hole with a standard hammer drill using the drive unit.

This action breaks the glass capsule and mixes the premeasured components. At room temperature the anchor nuts may be torqued down within approximately 30 minutes.

Extensive testing and field trials have proven the UNISORB Capsule Anchor Systems are among the most dependable on the market. They are far superior to expansion type anchoring systems, and stronger than the concrete itself.

SPECIFICATIONS						
Anchor Size	Capsule Number	Drill Dia.	Hole Depth	Anchor No. & Length	*Allowable Tensile Load	*Allowable Shear Load
in.		in.	in.	in.	lbs.	lbs.
mm		mm	mm	mm	kg.	kg.
3/8"	C-38	7/16	3-1/2	S-38 x 5-1/8	2115	1090
9.5		11	89	S-38 x 130	961	495
1/2"	C-12	9/16	4-1/4	S-12 x 6-1/2	3755	1940
12.7		14	108	S-12 x 165	1707	882
5/8"	C-58	11/16	5	S-58 x 7-5/8	5870	3025
15.9		17	127	S-58 x 194	2668	1375
3/4"	C-34	7/8	6-5/8	S-34 x 9-1/2	8455	4355
19.1		22	168	S-34 x 241	3843	1980
7/8"	C-78	1	7	S-78 x 10-1/4	11510	5930
22.2		25	178	S-78 x 260	5232	2695
1"	C-100	1-1/8	8-1/4	S-100 x 12	15035	7745
25.4		29	210	S-100 x 305	6834	3520
1-1/4"	C-114	1-1/2	10-1/4	S-114 x 15	23485	12100
31.8		38	260	S-114 x 381	10675	5500

Metric dimensions are for reference only.

### \*ALLOWABLE LOAD DATA

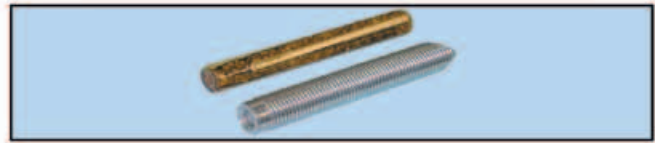
-Tensile loads are based on a 4:1 safety factor applied to the tested bond strength of the adhesive to 4,000 psi (279.9 kg/cm<sup>2</sup>) concrete.

-Shear loads are based on an F 1554 Gr. 36 anchor and are based on the methods described in the AISC Manual of Steel Construction (Ninth Edition).

-Greater allowable loads are possible by using different anchor materials and by altering the embedment depth. Please contact the factory for information on custom anchoring applications.

Contact factory for information for drive unit models available for all drill types.

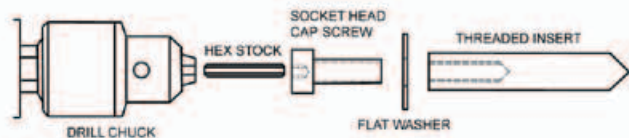
To order specify capsule, stud and driver (if required).



## CAPSULE ANCHOR WITH INTERNALLY THREADED INSERT

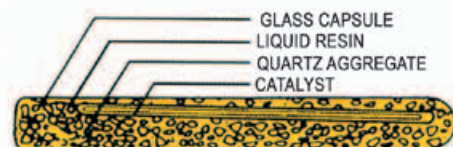
This system provides a superior method of heavy duty anchoring using a high strength adhesive to retain a threaded insert in concrete or other masonry material. The system consists of a glass capsule containing the proper proportion of base resin, hardener and aggregate for the anchor and an appropriately sized threaded insert. The customer provides an appropriately sized socket head cap screw and washer, along with a short length of hex stock to be used as a driver when inserted into the chuck of a standard hammer drill. The cap screw can then be used to secure the machine.

To install the anchor a clearance hole is prepared and a capsule inserted. The threaded insert is driven into the hole with a standard rotary hammer drill using the equipment shown in the illustration below. This action breaks the glass capsule and mixes the pre-measured components. At room temperature the anchor bolts may be torqued down in approximately 30 minutes.



SPECIFICATIONS						
Insert Size	Capsule No.	Drill Dia.	Hole Depth	Thread Length	*Allowable Tensile Load	*Allowable Shear Load
in.		in.	in.	in.	lbs.	lbs.
mm		mm	mm	mm	kg.	kg.
3/8 x 4-1/4	C-12	11/16	4-1/4	7/8	3755	1090
10 x 108		17	108	22	1707	495
1/2 x 5	C-58	7/8	5	1-1/4	5870	1940
13 x 127		22	127	32	2668	882
5/8 x 6-5/8	C-78	1-1/8	6-5/8	1-5/8	11510	3025
16 x 168		29	168	41	5232	1375
3/4 x 8-1/4	C-100	1-1/4	8-1/4	2	15035	4355
19 x 210		32	210	51	6834	1980

Metric dimensions are for reference only.



MINIMUM CURE TIMES	
CONCRETE TEMPERATURE	CURE TIME
68° F (20° C) & Over	20 Minutes
50° F to 68° F (10° C to 20° C)	30 Minutes
32° F to 50° F (0° C to 10° C)	1 Hour
23° F to 32° F (-5° C to 0° C)	5 Hours
14° F to 23° F (-10° C to -5° C)	10 Hours

Cure time should be doubled for wet concrete.

To order specify capsule and threaded insert.