

# UNISORB® CAPSULE ANCHOR SYSTEMS



## UNISORB 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 rotary hammer drill using the drive unit.

This action breaks the glass capsule and mixes the pre-measured 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 anchor systems available, far superior to expansion type anchoring systems, and stronger than the concrete itself.

| SPECIFICATIONS |                |                |            |                     |                          |                        |
|----------------|----------------|----------------|------------|---------------------|--------------------------|------------------------|
| Anchor Size    | Capsule Number | Drill Diameter | Hole Depth | Anchor No. & Length | † Allowable Tensile Load | † Allowable Shear Load |
| 3/8"           | C-38           | 7/16"          | 3-1/2"     | S-38x5-1/8"         | 2,190 lbs.               | 1,125 lbs.             |
| 1/2"           | C-12           | 9/16"          | 4-1/4"     | S-12x6-1/2"         | 3,390 lbs.               | 2,000 lbs.             |
| 5/8"           | C-58           | 11/16"         | 5"         | S-58x7-5/8"         | 4,655 lbs.               | 3,130 lbs.             |
| 3/4"           | C-34           | 7/8"           | 6-5/8"     | S-34x9-1/2"         | 7,135 lbs.               | 4,505 lbs.             |
| 7/8"           | C-78           | 1"             | 7"         | S-78x10-1/4"        | 8,140 lbs.               | 6,135 lbs.             |
| 1"             | C-100          | 1-1/8"         | 8-1/4"     | S-100x12"           | 11,675 lbs.              | 8,010 lbs.             |
| 1-1/4"         | C-114          | 1-1/2"         | 10-1/4"    | S-114x15"           | 17,850 lbs.              | 12,515 lbs.            |

### † ALLOWABLE LOAD DATA

-Tensile Loads are based on a 4:1 safety factor applied to the tested bond strength of the adhesive to 4000 psi concrete.

-Shear Loads are based on an A307 anchor and are based on the methods described in the AISC Manual of Steel Construction (Ninth Ed.).

-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.

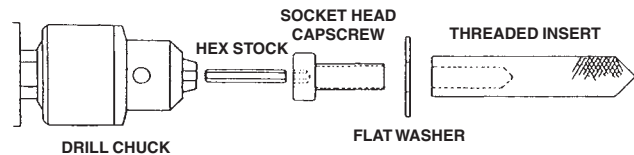
To order specify capsule, stud and driver (if required).



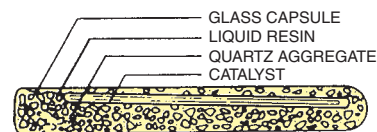
## CAPSULE ANCHOR WITH INTERNALLY THREADED INSERT

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    | Cap. No. | Drill Dia. | Minimum Depth | Thread Length | † Allowable Tensile Load | † Allowable Shear Load |
| 3/8" x 4-1/4"  | C-12     | 11/16"     | 4-1/4"        | 7/8"          | 3,390 lbs.               | 1,125 lbs.             |
| 1/2" x 5"      | C-58     | 7/8"       | 5"            | 1-1/4"        | 4,655 lbs.               | 2,000 lbs.             |
| 5/8" x 6-5/8"  | C-78     | 1-1/8"     | 6-5/8"        | 1-5/8"        | 7,135 lbs.               | 3,130 lbs.             |
| 3/4" x 8-1/4"  | C-100    | 1 1/4"     | 8-1/4"        | 2"            | 11,675 lbs.              | 4,505 lbs.             |



### MINIMUM CURE TIMES

| CONCRETE TEMPERATURE | CURE TIME  |
|----------------------|------------|
| 68°F & Over          | 20 Minutes |
| 50°F to 68°F         | 30 Minutes |
| 32°F to 50°F         | 1 Hour     |
| 23°F to 32°F         | 5 Hours    |
| 14°F to 23°F         | 10 Hours   |
| 5°F to 14°F          | 18 Hours   |
| 0°F to 5°F           | 24 Hours   |

To order specify capsule and threaded insert.