

LIQUID ROC® 300 CAPSULE

AVAILABLE MATERIALS

- Capsules – polyester resin base, quartz sand, benzoyl peroxide hardener
- Chamfer cut rods – A307 steel, zinc plated. Other sizes, materials and finishes available upon request

FEATURES/ADVANTAGES

- Pre-measured adhesive
- No expensive dispensing tools
- Sand and aggregate mixture is closest to natural concrete

CONCERNS

- Hole must be of correct diameter and depth
- Do not use overhead
- Must use chamfer cut or chisel pointed rod
- 24 month shelf life
- For short term loading only

APPROVALS/LISTINGS

- Contact customer service for approvals/listings for state D.O.T's



CAPSULE ACCESSORIES

(Capsule Setting tool for threaded rod)

Order Code	Desc.
3200020	SDS +Drill Driver
3200030	SDS MAX

NOTE: Use with Appropriate Size 1/2" Square Drive Socket

+ Not available once stock is depleted

CURE TIME

Concrete Temperature	Time
Over 68°F.	10 min.
50° to 68°F.	20 min.
32° to 50°F.	1 hr.
23° to 32°F.	5 hrs.

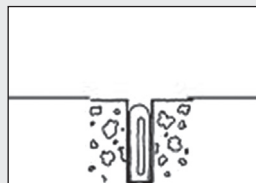
ORDER DETAIL

Capsule Order Code	Chamfer Cut Rod (2)	Anchor Size	Hole Dia.	Impact Socket Size	Min. Embedment	Ultimate Tensile & Shear Loads in Lbs.* Concrete Strength (P.S.I.)			Capsule Box Quantity	Capsule Master Quantity	Rod	
						Tension	Tension	Shear			Box Quantity	Master Quantity
3206000	3206020	3/8" x 5"	7/16"	9/16"	3-1/2"	7,800	7,420	3,983	10	560	10	80
3208000	3208025	1/2" x 6-1/4"	9/16"	3/4"	4-1/2"	9,820	15,720	7,323	10	560	10	50
3210000	3210030	5/8" x 7-1/2"	11/16"	15/16"	5"	19,360	20,180	11,757	10	560	10	50
3212000	3212041	3/4" x 10-1/4"	7/8"	1-1/8"	6-1/2"	23,880	30,060	17,257	6	60	6	12
3214000	3214047	7/8" x 11-3/4"	1"	1-5/16"	7-1/2"	23,880	39,280	24,338	6	60	6	12
3216000	3216047	1" x 11-3/4"	1-1/8"	1-1/2"	8-1/2"	38,280	47,900	29,128	6	60	6	12

*Load values based on A-193, B7 Rods. (2) Rods may be cut to order Metric sizes available upon request

INSTALLATION

- 1 Drill hole to correct size and depth using rotary-hammer.
- 2 Remove dust and rubble from the hole with compressed air, a brush and water. Excess water must be removed although the hole may be damp.
- 3 Insert the capsule in the hole, either end first.
- 4 Double nut the threaded rod, and insert the chamfered stud into the hole to break the capsule. Under power, hammer drill the chamfered stud to full depth, maintaining power for two or three seconds after the chamfered stud bottoms.
- 5 Promptly and carefully remove the drive socket from the stud, leaving it undisturbed through the prescribed curing time consistent with onsite temperature.



ADHESIVE VOLUME ESTIMATING GUIDE

Type Package	Liquid Roc 200 Single Tube	Liquid Roc 200 Twin Tube	Liquid Roc 300 Pouch	Liquid Roc 300 Twin Tube	Liquid Roc 500+ Single Tube	Liquid Roc 500+ Twin Tube	VME Twin Tube	VMZ Internal Thread Injection System	Liquid Roc 700+ Single Tube	Liquid Roc 700+ Twin Tube
Net Contents	10 fl. oz.	28 fl. oz.	5.5 fl. oz.	28 fl. oz.	8.5 fl. oz.	22 fl. oz.	13oz.	20 oz.	10 fl. oz.	28 fl. oz.
Useable Vol.	15 cu. in.	45 cu. in.	10 cu. in.	45 cu. in.	13 cu. in.	34 cu. in.	20 cu. in.	31 u. in.	15 cu. in.	45 cu. in.
Rod Diameter	Linear inches of embedment into solid base material									
3/8"	63	133	105	312	91	237	140	215	63	133
1/2"	45	95	75	225	65	169	100	153	45	95
5/8"	35	73	38	172	50	130	76	118	35	73
3/4"	28	58	30	137	40	104	61	94	28	58
7/8"	23	49	25	115	33	87	51	79	23	49
1"	19	40	21	92	27	71	42	64	19	40
1-1/4"	14	30	16	71	20	54	32	49	14	30
Rod Diameter	Linear inches of embedment using screens into hollow base material									
3/8"	-	-	-	296	-	-	-	-	-	-
1/2"	-	-	-	172	-	-	-	-	-	-
5/8"	-	-	-	112	-	-	-	-	-	-
3/4"	-	-	-	62	-	-	-	-	-	-

ENGINEERING DATA

HOW TO SPECIFY

- 1 Select anchor diameter based on loading requirements.
- 2 Determine thickness of material to be anchored (if grout or shimming is to be used between material and concrete surface, add thickness of grout/shims to thickness of material to obtain total thickness of material to be anchored.)
- 3 Select anchor length that will satisfy total thickness of material, head clearance and embedment of anchor diameter selected.

SPECIFICATIONS, LIQUID ROC 200, 300, 500+, 700+

B Nominal Diameter (in.)						
Bolt Size (in.)	Capsule or Pouch	Single or Twin Tube	E - Min Embedment (in.)	S - Anchor Spacing (in.)	M - Edge Distance (in.)	T - Maximum Tightening Torque (ft. lbs.)
3/8"	7/16"	1/2"	3-1/2"	3-1/2"	3-1/2"	13
1/2"	9/16"	5/8"	4-1/2"	4-1/2"	4-1/2"	22
5/8"	11/16"	3/4"	5-1/2"	5-1/2"	5-1/2"	55
3/4"	7/8"	7/8"	6-1/2"	6-1/2"	6-1/2"	106
7/8"	1"	1"	8"	8"	8"	135
1"	1-1/8"	1-1/8"	9"	9"	9"	184

REDUCTION FACTORS

Tension		Shear		
Spacing (S) and Edge Dist. (M)	Factor (F)	Spacing (S) and Edge Dist. (M)	Direction of load	Factor (F)
S min. = 0.50S	0.7	S min. = 0.50S	toward edge not toward edge	0.6 1.0
M min. = 0.50M	0.7	M min. = 0.50M	toward edge not toward edge	0.4 0.5

GENERAL SPECIFICATIONS

Adhesive resin anchor shall be (polyester) (epoxy) (acrylic) as manufactured by MKT Fastening, LLC, #1 Gunnebo Dr., Lonoke, AR 72086

INSTALLATION

Adhesive resin anchors shall be installed in holes drilled with carbide tipped bits conforming to ANSI specification B212.15-94. Minimum installation depth and hole preparation shall be as recommended by manufacturer.

LIQUID ROC 300 CAPSULE ANCHORS

Anchor Diameter	Hole Diameter	Embedment Depth	Capsules Required
3/8"	7/16"	3-1/2"	(1) 3/8"
3/8"	7/16"	5-1/4"	(2) 3/8"
3/8"	7/16"	7"	(2) 3/8"
1/2"	9/16"	4-1/2"	(1) 1/2"
1/2"	9/16"	6-3/4"	(1) 3/8" & (1) 1/2"
1/2"	9/16"	9"	(2) 1/2"
5/8"	11/16"	5"	(1) 5/8"
5/8"	11/16"	7-1/2"	(1) 1/2" & (1) 5/8"
5/8"	11/16"	10"	(2) 5/8"
3/4"	7/8"	6-1/2"	(1) 3/4"
3/4"	7/8"	9-3/4"	(1) 5/8" & (1) 3/4"
3/4"	7/8"	13"	(2) 3/4"
7/8"	1"	7-1/2"	(1) 7/8"
7/8"	1"	11-1/4"	(2) 3/4"
7/8"	1"	15"	(2) 7/8"
1"	1-1/8"	8-1/2"	(1) 1"
1"	1-1/8"	12-3/4"	(1) 3/4" & (1) 1"
1"	1-1/8"	17"	(2) 1"
1-1/4"	1-3/8"	7-1/4"	(2) 3/4"
1-1/4"	1-3/8"	11"	(1) 3/4" & (1) 1"

FOR REDUCED SPACING AND EDGE DISTANCES

- 1 Linear interpolation is allowed for edge distances falling between 0.50M and 1.00M, and anchor spacing falling between 0.50S and 1.00S.
- 2 Load reduction factors should be combined where applicable. Where three or more anchors are used, spacing reduction factors must be multiplied together. Where two or more edge distances affect performance, edge reduction factors must be multiplied together. When a group of anchors is affected by both reduced spacing and reduced edge distances, the edge and spacing reduction factors must be multiplied together.

