

# LIQUID ROC® 700+

## AVAILABLE MATERIALS

- Twin/Single Tube–acrylic resin base, benzoyl peroxide hardener
- Square cut rods–A307 steel, zinc plated. Other sizes, materials and finishes available

## FEATURES/ADVANTAGES

- Multi temperature formulation is suitable for use down to 14°F (-10°C)
- Fast cure time even at the coldest temperatures
- Styrene free formula is low odor and VOC free
- Ideal for bonding a wide variety of material to concrete
- Nozzle provided for dispensing

## CONCERNS

- 18 month shelf life

## CURE TIME

Concrete Temperature	Gel Time	Cure Time
14° F (-10° C)	60 minutes	15 Hours
41° F (5° C)	20 minutes	2 Hours
59° F (15° C)	7 minutes	1 Hour
86° F (30° C)	2 minutes	20 Minutes



10 Oz. Single Tube



28 Oz. Twin Tube

## ORDER DETAIL

Order Number	Description	Size	Quantity
7620010	Single Tube	10 oz.	12
7620028	Twin Tube	28 oz.	4

## LOAD AND PERFORMANCE DATA

Anchor Size	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1 1/4"								
Effective emb.	2 3/8"	4 1/2"	2 3/4"	6"	3 1/8"	7 1/2"	3 1/2"	9"	3 1/2"	10 1/2"	4"	12"	5"	15"	
Characteristic Tension - Cracked															
2500 psi	na	na	1,834 lbs	4,002 lbs	2,713 lbs	6,511 lbs	3,618 lbs	9,376 lbs	3,618 lbs	12,762 lbs	4,420 lbs	16,871 lbs	6,177lbs	26,361 lbs	
4000 psi	na	na	1,950 lbs	4,254 lbs	2,884 lbs	6,922 lbs	3,876 lbs	9,967 lbs	4,522 lbs	13,566 lbs	5,591 lbs	17,934 lbs	7,814 lbs	28,022 lbs	
Characteristic Tension - Uncracked															
2500 psi	1,978 lbs	3,747 lbs	3,053 lbs	6,662 lbs	4,309 lbs	10,410 lbs	5,107 lbs	14,990 lbs	5,107 lbs	20,403 lbs	6,240 lbs	23,984 lbs	8,721 lbs	29,578 lbs	
4000 psi	2,102 lbs	3,984 lbs	3,246 lbs	7,082 lbs	4,611 lbs	11,065 lbs	6,197 lbs	15,934 lbs	6,460 lbs	21,688 lbs	7,893 lbs	25,495 lbs	10,480 lbs	31,441 lbs	
Characteristic Shear															
Effective emb.	3 1/2"	4 1/2"	5"	6 1/2"	8"	10"	11"								
2500 psi	3,778 lbs	6,918 lbs	9,284 lbs	14,765 lbs	20,160 lbs	28,174 lbs	32,505 lbs								
4000 psi	3,778 lbs	6,918 lbs	11,018 lbs	16,282 lbs	22,522 lbs	29,542 lbs	41,115 lbs								

1) The above loads are based on a temperature range of max short term 104°F & max long term 75°F, hammer drilled holes that are dry, supplemental reinforcement present and for a single anchor design. No reductions have been taken for edge distance or anchor spacing. Verify that strength of the steel used is capable of supporting the desired load for each application.

## INSTALLATION

- 1 Drill hole to recommended diameter and depth.
- 2 Clean dust from hole using a round wire brush. Use pressurized air to blow dust out of hole.
- 3 Open cartridge by either cutting sealed tip or removing the twist-off cap and divider plug.
- 4 Place static mixing nozzle over cartridge opening and tighten. Load assembly into dispensing tool.
- 5 Dispense adhesive filling from bottom of hole to avoid air pockets  
NOTE: Dispense and discard a bead of material to achieve proper mix, indicated by uniform color before starting.
- 6 Insert anchor rod into hole with a slight twisting motion.



## ACCESSORIES



**7500100**  
Caulking Gun for 10 oz. Single Tube



**7521096**  
Pneumatic Dispensing Tool for 28 oz. Twin Tube



**7521026**  
Replacement Nozzle for 10 oz. Single Tube



**7521095**  
Manual Dispensing Tool for 28 oz. Twin Tube

**7521027**  
Replacement Nozzle for 28 oz. Twin Tube

**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.

