HORSE CONSTRUCTION



# HM-500

# Epoxy Injectable Adhesive Non-sag Gel

Description	HM-500 Epoxy Injectable Adhesive is a moisture-tolerant adhesive,used for a		ose,two	compon	ents, hig	gh stren	gth,high mo	dulus							
Application	Planting steel bars and bolts is	n concrete	structu	ıre											
	■ Curtain wall & stone dry hangin	g brackets'	reinfo	orcement											
	■ Building structure reinforcemen	t&framework	anchor	ring											
	■ Various equipments' basic fixat	ion													
	■ Steel structures and concrete s	tructures a	nchorin	ng conne	ction										
	■ Reinforcement for highway, brid	ges, water	conserv	ancy pr	ojects 1	rebuildi	ng								
	Reinforcement for advertisement boards, the noise barriers&barricades														
Characteristics	■ Modified epoxy resin, no styren	2													
	■ High strength&modulus, good toug	nness													
	■ Ageing, heat resistance														
	■ Moisture tolerant, long term lo	ad stabilit	y in a	damp en	vironmen	nt									
	Acid&alkali, seismic resistance, no expansion														
	Excellent thixotropy, especially suitable for anchoring the side or top.														
	Binocular straight mixed package, with special glue gun without prepare manually														
Technical data	Viscosity of Mixture														
	Splitting tensile strength	≥8.5MPa													
	Bending strength				≥50M	Pa									
	Compressive strength				≥60M	Pa									
	Thixotopy index				≥4.	0									
	Distortion temperature				≥65°	С									
	Steel-steel tensile shear strength	$\geq 16 \mathrm{MPa}$													
	C30, $\phi$ 25, L=150mm condition tensile strength C30, $\phi$ 25, L=125mm condition bonding				≥11M ≥17M										
	strength Steel-steel T impact stripping length				≤25n	ım									
		T(℃)	-5	0	10	20	≥30								
	Pot life&curing time	Ot	60	45	30	25	20								
	(according to the temperature)	(min) Ct(h)	72	48	24	12	6								

Attention	Proctive measures such as wearing masks, gloves, goggles etc., is necessary. Do not expose outside for long time. If it is swallowed or dipped into eyes, please seek medical service at once
Remarks	Mix ratio: A:B=3:1
	Density after curing: $1.5\pm0.1$ g/cm <sup>3</sup>
	Usage: $\pi *1/2d^2*h*2/3$ d: hole diameter h: hole depth

Procedure

1. Drill hole→2. Clean hole→3. Brush hole→4. Inject glue→5. Plant bar→6. Curing



### Bonding Force Renference Sheet

### >> The reference table of HM-500 injection-type anchor adhesive planting and anchoring binding force \*The anchoring adhesion when planting steel bars

	The diameter of drilled hole D(mm)	10,000,000,000,000		s (kN)					Tł	ne anch	noring	adhesio	on (cha	racteris	stic valu	ie) RK(I	KN)				The steel bar yield planting depth lb(mm)
10	13	26.3	26.1	26.3	26.3	26.3															105
12	16	37.9		36.2	37.9	37.9	37.9														125
14	18	51.6			45.2	49.8	51.6	51.6	51.6												150
16	20	67.4					60.3	67.4	67.4	67.4	67.4										175
18	22	85.2						74.6	82.9	85.2	85.2	85.2									200
20	25	105.2		<u> </u>					94.2	100.5	105.2	105.2	105.2								220
22	28	127.3		1						112.5	126.6	127.3	127.3	127.3							240
25	32	164.4								-	144.8	160.8	164.4	164.4	164.4	164.4					270
28	35	206.3								2		175.9	193.4	206.3	206.3	206.3	206.3				305
32	40	269.4												241.3	251.3	269.4	269.4	269.4			350
40	50	421.0														339.3	383.3	421.0	421.0	421.0	440
The steel bar buried depth(mm)		80	90	100	110	120	135	150	160	180	200	220	240	250	270	305	350	400	440		

Notes: 1. Concrete strength is C30, || grade steel yield strength is 335 N/mm<sup>2</sup>. 2. The diameter of drilling holes in the table is the best recommended value, the nearest bit can be selected according to the actual situation. 3. The yield buried depth value of the steel bars should consider safety factors, and select the design values.

#### \* The anchoring adhesion when planting steel bars

The steel bar diameter φ (mm) 10		of drilled hole	of drilled hole	meter of drilled hole value of steel bars The anchoring adhesion (designed value)Rd(kN)											yield	teel bar planting n lb(mm)					
		22.9	17.4	19.6	21.8	22.9															105
12	16	33.0		24.1	26.8	29.5	33.0														125
14	18	44.8			30.1	33.2	36.2	40.7	44.8												150
16	20	58.5					40.2	45.1	50.1	53.5	58.5										175
18	22	74.1						49.7	55.3	59.0	66.4	74.1									200
20	25	91.5							62.8	67.0	75.3	83.7	91.5								220
22	28	110.7	-							75.0	84.4	93.8	103.2	110.7							240
25	32	143.0									96.5	107.2	118.0	128.7	134.0	143.0					270
28	35	179.3	· · · · · ·									117.2	128.9	140.6	146.5	158.3	179.3				305
32	40	234.2												160.8	167.3	181.0	204.4	234.2			350
40	50	365.9														226.2	255.5	293.1	334.9	365.9	440
The steel bar buried depth(mm) 80 90		90	100	110	120	135	150	160	180	200	220	240	250	270	305	350	400	440			

Notes: Concrete strength is C30, The designed strength of grade || steel bar is 310 N/mm<sup>2</sup>. The designed safety coefficient of steel bar ys=1.15, the designed safety coefficient of concrete yc=1.5.