

HM-500 Epoxy Injectable Adhesive Non-sag Gel

Description HM-500 Epoxy Injectable Adhesive is a multi-purpose, two components, high strength, high modulus moisturetolerant adhesive, used for anchoring

Application Characteristics Planting steel bars and bolts in concrete structure Modified epoxy resin, no styrene Curtain wall & stone dry hanging brackets' reinforcement High strength&modulus,good toughness Building structure reinforcement&framework anchoring Aging, heat resistance Various equipments' basic fixation Moisture tolerant, long term load stability in a damp environment

Steel structures and concrete structures anchoring connection Acid&alkali,seismic resistance,no expansion

Excellent thixotropy, especially suitable for anchoring the side or top. Reinforcement for highway, bridges, water conservancy projects rebuilding

Simple straight mixed package, with special glue mixing nozzle Reinforcement for advertisement boards the noise barriers&barricades

HM-500 will cure underwater & retain its strength, however hole needs to be clean and free of particles, mud or debris and NOT in flowing water

TXDOT Approved for Type III, Class C Epoxy adhesives a	and can be used on any Texas Highway	Project applica	able to th	ese Type/	Class requ	uirement	5
Technical data Viscosity of Mixture	18-22Pa•S	Cure Ta	ble	Pot life & curii (according to the temper of			_
Splitting tensile strength	≥8.5MPa	T(°C)	-5	0	10	20	≥30
Bending strength	≥50MPa	Ot (min)	60	45	30	25	20
Compressive strength	≥60MPa	Ct(h)	72	48	24	12	6
Thixotopy index	≥4.0	2	Part Ep	oxy Tube	e and Inj	ector	
Distortion temperature	≥65℃						
Steel-steel tensile shear strength C30.625.	≥16MPa			1			

≤25mm

≥11MPa L=150mm condition tensile strength ≥17MPa C30,φ25, L=125mm condition bonding strength

HM-500 Pricing

Steel-steel T impact stripping length

Packing (1 Case minimum) 390ml/pc & 30pcs/ctn \$20.00 USD each

(2-part epoxy tube and injector) Every Case comes with 1 FREE Standard applicator gun

1-Pallet 2.5% Discount Qty 10 cases per 300pcs/pallet \$19.50 USD each

Every Pallet comes with 10 FREE Standard applicator guns

Additional Qty Discounts

2-Pallets 5% Discount Qty 10 cases per 600pcs \$19.00 USD each 5+ Pallets 7.5% Discount Qty 3000+ pcs \$18.50 USD each

Applicator guns

\$30.00 USD Standard applicator gun (carbon steel & plastic parts) \$60.00 USD Superintendent High Quality gun (Aluminum/carbon steel & Stainless construction)

INTERNATIONAL

HORS

Application Procedure

Remarks & Specifics

Mix ratio: A:B=3:1 Density after curing: 1.5±0.1g/cm^3 **Usage:** $\pi*1/2d^2*h*2/3$ (D=depth/H=dia)











depth of hole hole with air & wire brush

Use the injector nozzle fill 2/3 of hole

twist ONE direction push & insert rebar/bolt to bottom

Use curing time table for proper use before loading



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

bar diameter	The diameter of drilled hole D(mm)			s (kN)	The anchoring adhesion (characteristic value) RK(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							94.2	100.5	105.2	105.2	105.2								220
22	28	127.3								112.5	126.6	127.3	127.3	127.3		3					240
25	32	164.4									144.8	160.8	164.4	164.4	164.4	164.4					270
28	35	206.3										175.9	193.4	206.3	206.3	206.3	206.3				305
32	40	269.4									7			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 b	ar buried dep	oth(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/mm². 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)		The yield characteristic value of steel bars (kN)			The anchoring adhesion (designed value)Rd(kN)														The steel bar yield planting depth lb(mm)		
10 13		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	10											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		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 II steel bar is 310 N/mm². The designed safety coefficient of steel bar ys=1.15, the designed safety coefficient of concrete yc=1.5.

Comparison

Test below represents data received by research via web and competitors product details.



COMPARISON OF EPOXY ADHESIVE HM500 WITH OTHER COMPARABLE PRODUCTS

CHARACTERISTIC	Manufacturer	Bond Strength (ASTM882)	Water Absorption (ASTM D570)	Tensile Strength (ASTM D638)	Heat Deflection Temperature (ASTM D648)	Compressive Strength (ASTM D695)	Shear Strength (ASTM D732)	Flexural Strength (ASTM D790)
UNITS		MPa	%	MPa	°C	MPa	MPa	MPa
HM500	Horse	26.28	0.053	70.18	78	152.65	34.09	54.65
HIT-RE 500	Hilti	12.4	0.06	43.5	63	82.7		
Anchorfix 500	Sika	17.23	0.08		50	68.9		
Anchorfix 3001	Sika	18.6	0.08		50	89.6		
SET-3G	Simpson	22.79	0.13		63.9	106		
AT-XP	Simpson	24.5	0.1			130		
SET-XP	Simpson	20.1	0.1			97.3		

ASTM test reports for Horse brands were used and where available competitors test reports coincided were used.

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