

SOCKETFAST™ RESIN COMPOUND

SAFE, CONVENIENT, POURABLE RESIN FOR WIRE ROPE!

Independent tests show that ESCO® SOCKETFAST resin, when properly applied, provides 100% of rated break strength and maximum resistance to shock and fatigue.

Part Number	Type	Case Vol.	Standard Package
ESCO SOCKETFAST			
4055376	300 Gram Kit	15	20
4055377	1,000 Gram Kit	33.5	11
4055378	4,000 Gram Kit	41	4

Tip: SOCKETFAST resin has a 1 year shelf life. Resin should be stored at temperatures less than 85°F / 29°C. SOCKETFAST resin

MAXIMIZES FATIGUE LIFE OF WIRE ROPE ASSEMBLIES

Test results show that SOCKETFAST resin wire rope assemblies withstand more repeated shock loads due to elasticity at the termination transition points (for direct correlation of results, all tests were conducted on bright wire rope).

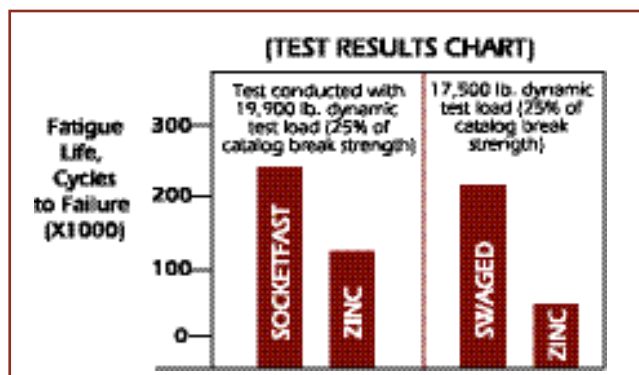
WITHSTANDS SEVERE ENVIRONMENTS

SOCKETFAST resin is extremely reliable over a wide range of temperatures – from 200°F to -65°F / 95°C to -55°C. This resin socketing system is not affected by electrolysis or by immersion in most corrosive fluids.

IS EASY TO USE ANYWHERE

All installations, in the shop or in the field, are made quickly and efficiently with standard socket and rope preparation. Uniform dispersion of filler throughout the SOCKETFAST resin compound makes SOCKETFAST resin the only socketing system that can be applied horizontally for large sockets. In cramped locations, (ventilate as necessary) the two liquids are easily mixed, then poured into prepared sockets.

For elevator installations, follow preparation guideline in ANSI Code A17.1. Rule 212.9e, page 82.



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REDUCES INSTALLATION HAZARDS

ESCO® SOCKETFAST resin is a convenient two-part liquid system. There are; NO dry powders to become airborne and create health hazards, NO acid etching, NO open flames, NO hot melting pots, NO handling hazardous molten metal, NO risk of accidental smoke alarm activation.

CURES QUICKLY TO PROVIDE FULL RATED BREAK STRENGTH

Using SOCKETFAST resin, wire rope assemblies develop full catalog break strength after curing for one hour at 70°F / 21°C; or they are ready for service after curing for only 5-10 minutes at 250°F / 120°C using a wraparound electric heater. With either ambient or elevated temperature cures, there is 30% less “bedding in” on initial loading than with zinc or babbitt metal.

GREATER PROTECTION FROM HIGH TEMPERATURE PULLOUTS

Utilizing standard elevator fittings, this convenient resin socketing system will withstand fire 50% longer than babbitt. ESCO SOCKETFAST resin equals or exceeds other performance characteristics of babbitt, and combines superior performance with a material cost only one-fifth that of babbitt.

QUANTITIES OF ESCO SOCKETFAST RESIN REQUIRED PER SOCKET SIZE

Rope or Strand Size	Rope Fittings			Elevator Shackles		
	in. ³	grams	cc	in. ³	grams	cc
1/4"	0.5	15	9			
5/16"	1.1	30	17			
3/8"	1.1	30	17	1.1	32	19
7/16"	2.1	60	35			
1/2"	2.1	60	35	2.1	60	35
9/16"	3.2	90	52	2.1	60	35
5/8"	3.2	90	52	3.5	100	58
11/16"				4.6	130	75
3/4"	5.3	150	86	5.1	145	84
7/8"	7.5	215	125			
1"	9.7	275	160			
1-1/8"	13	365	210			
1-1/4"	21.5	610	350			
1-3/8"	21.5	610	350			
1-1/2"	26	735	420			

Rope or Strand Size	Rope Fittings		
	in. ³	grams	cc
1-5/8"	30	860	495
1-3/4"	43	1220	700
1-7/8"	43	1220	700
2"	78	2200	1265
2-1/8"	78	2200	1265
2-1/4"	86	2450	1410
2-3/8"	86	2450	1410
2-1/2"	112	3180	1830
2-5/8"	112	3180	1830
2-3/4"	137	3910	2250
3"	193	5500	3160
3-1/4"	232	6600	3795
3-1/2"	300	8560	4920
3-3/4"	365	10,400	5980
4"	472	13,450	7730

Note: When using SOCKETFAST resin with galvanized wire rope, strip the galvanizing off prior to using SOCKETFAST resin.

Continued here.

All dimensions are for reference only.

▲ WARNING: Give particular attention to selecting sockets designed for resin socketing. Avoid using sockets with rings. If sockets with rings are used, the rings should be filled prior to pouring

▲ WARNING: SOCKETFAST resin has not been tested with stainless steel wire rope.

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SIX EASY STEPS FOR SOCKETFAST RESIN INSTALLATION



1. Slide the socket or fitting onto the wire rope, then place a wire seizing on the rope at the point where it will emerge from the base of the socket. For elevator applications, allow for turned-back strand.

Note: Only use ESCO® SOCKETFAST resin with fittings having tapered bowls such as rope and strand sockets. Do not use with straight sided fittings such as zinc ferrules.



2. Open the rope strands and broom, the individual strand wires, including the IWRC completely down to the seizing. Remove any fiber core in the length of the broom area. Clean the broomed wires with a solvent or degreasing agent that complies with EPA rules. Consult the wire rope supplier or manufacturer for recommended cleaning substances and methods.

IMPORTANT: It is important to remove all petroleum residue and any other coating from the broomed wires to assure satisfactory SOCKETFAST resin performance.



3. Position the broom in the socket bowl.

IMPORTANT: Make sure that the broomed wires are spread uniformly throughout the socket bowl area and the ends of the wires are level with the top of the socket bowl.

Mount the assembly securely and align the axis of the rope and the fitting. Make sure that there is a minimum straight run of at 30 rope/strand diameters from the fitting. Most sockets will be poured vertically, as shown, but larger ones may be filled horizontally. Seal the socket neck with putty, duct tape, or a similar material to prevent leakage. Make sure the socket temperature is a least 65°F / 18°C and preferably 75-85°F / 25-30°C.

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CAUTION: Socket temperatures above 100°F / 38°C may cause premature hardening.

4. Select the appropriate ESCO SOCKETFAST resin kit size, and make certain that the temperature of both liquid components is between 65-90°F / 18-32°C. If necessary, warm both sealed components by immersing in hot, not boiling, water.

Note: Do not open the SOCKETFAST resin container until needed. Once opened, be prepared to use the entire container.

With a stick or mixing blade, mix resin for a minute or two, being careful to scrape the sides and bottom of the container, to assure a uniform consistency with all filler in suspension. Next, add all of the catalyst to the container of resin and mix thoroughly. The large 4000 gram unit should be power mixed with an electric drill and Jiffy mixing blade.

IMPORTANT: Work safely. Wear appropriate goggles and protective clothing, and ventilate the work area appropriately when handling the resin and/or catalyst. Avoid contacting the skin or eyes with these materials. Avoid inhaling vapors or ingesting materials. If these do occur: Flush eyes with clean water for at least 15 minutes; remove contaminated clothing and wash with soap and water; remove patient to fresh air; do not induce vomiting. Give patient milk or water to dilute. Provide immediate medical attention.

5. Immediately pour the mix carefully into one side of the fitting, allowing the catalyzed liquid resin to displace the air. Fill to the top of the cone. Take a stiff wire strand and slowly work it up and down between the strands at several points to remove entrapped air.

6. At 75°F / 25°C, ESCO® SOCKETFAST resin will harden in 15 minutes to the point where the socket may be moved to a more convenient area to cure completely. One hour after initial gelation, ESCO SOCKETFAST resin, when properly applied, will develop the full listed catalog break strength of the wire rope or strand. If a faster cure is required, heating the socket to 250°F / 120°C while using a Tempilstik to monitor the temperature, will cure the resin completely in 5 minutes. Heat the socket only: Preferred method is to use a wraparound electric heater pad. Never aim an open flame at the ESCO SOCKETFAST Resin. In hazardous locations, hot water heating, or low pressure steam may be used.



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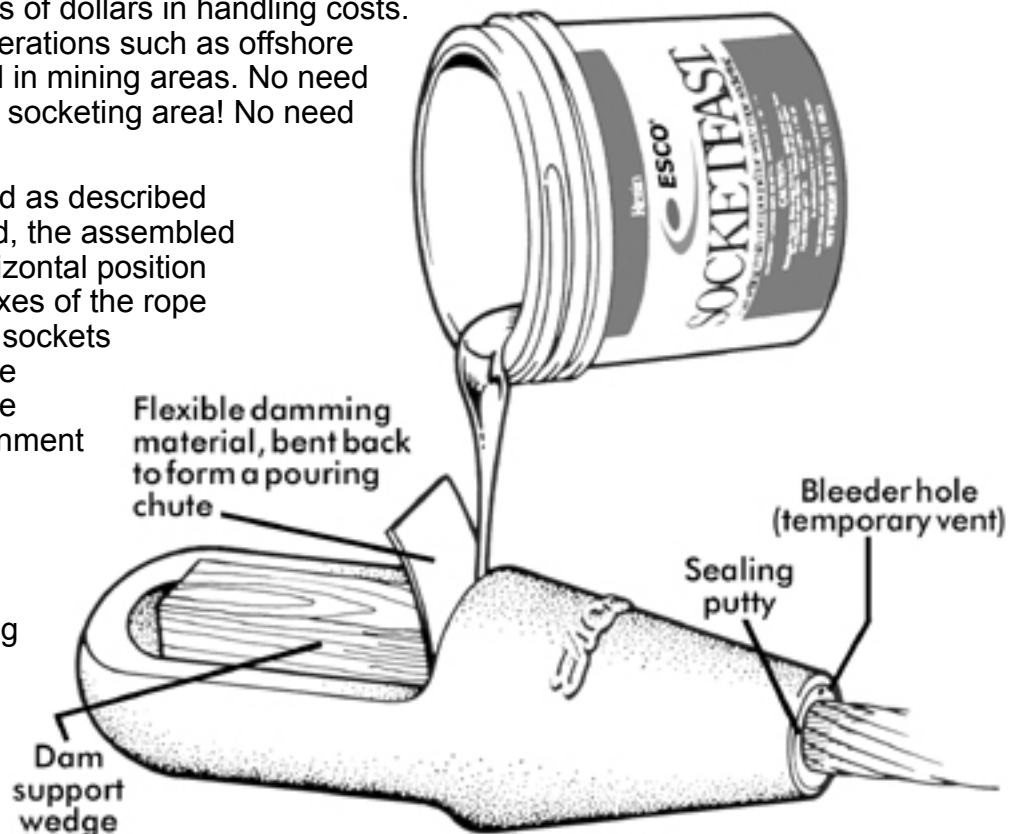
HORIZONTAL SOCKETING

In shops or storage areas where reels of large-diameter wire rope are stored, on-site socketing can save thousands of dollars in handling costs.

This is also true in remote operations such as offshore drilling rigs and platforms and in mining areas. No need for transportation to a special socketing area! No need for elevated pouring towers!

After the wire rope is prepared as described and after the fitting is installed, the assembled termination is placed in a horizontal position and blocked up to align the axes of the rope and the fitting. If a number of sockets are to be installed on a routine basis, a suitable cradle can be fabricated to simplify this alignment procedure.

After checking the broom for uniform wire distribution, the annular space between the rope and the base of the fitting should be sealed with putty, leaving a small bleeder hole at the 12 o'clock position. This temporary vent, which later will be sealed with putty, will allow air to escape during the pouring of the ESCO® SOCKETFAST resin, thus assuring complete saturation of the resin at the apex of the broom.



Insert a piece of damming material, such as cardboard or other flexible gasket material, and a wooden wedge at the larger end of the basket, as illustrated. Place the cut-to-size dam over the opening, bending back the upper portion to form a chute, and wedge it tightly in place. For open spelter sockets, insert a pin or dowel through the ears to serve as a pressure point for the block.

FILL THE BASKET COMPLETELY

Continue pouring until the resin begins to come out of the bleeder hole at the base of the fitting. Then, seal that hole with putty and continue pouring until the basket is filled completely – and the level of ESCO SOCKETFAST resin in the chute remains constant. Excess material may be trimmed off after hardening, if desired.