



Liquid epoxy coating with Quick Application and Long Term Corrosion Protection of Bare Steel



POWERCRETE R-65/F1

GEL, RE-COAT AND CURING TIME CHART

This chart provides approximate Gel, Re-coat, and Curing Time based on conditions and procedures outlined below:

1. Keep Part A at 77 °F (25°C) for hand application and 140°F (60°C) for spray application, keep Part B at 77°F (25°C) and warm/cool the High Density Polyethylene Sheet to be used as substrate to the designated temperature.
2. Mix Part A and Part B thoroughly, and pour the mixture on the substrate, spread to about 60 mils thick.
3. Set the mixtures in oven/refrigerator to maintain the temperature of testing.
4. Touch with finger to check gel time and dry time.
5. Cool down/warm up the coating mixture to room temperature 77° F (25° C) and measure the hardness with a Durometer Type "D" that has stabilized after 3 seconds and remains a constant reading of Shore 65 or Shore 75.

Testing Temperature	Application Procedure	Gel Time Unit in minutes	Re-coat Time Window (In minutes from application time of previous coating pass)	Dry Time Unit in minutes	65 Shore "D" Reading Unit in min. except indicated	75 Shore "D" Reading Unit in minutes except indicated
WARNING: UNDER 40°F (4°C) COATING MIXTURE IS FROZEN AND NO CHEMICAL REACTION WILL OCCUR.						
40 °F (4 °C)	Hand Spray	MATERIAL IS TOO VISCOUS, FROZEN LIKE, HARD TO DIFFERENTIATE GELING AND DRYING.			72 hours (Passed Impact 1in-#/mil) 72 hours (Passed Impact 1in-#/mil)	
50 °F (10 °C)	Hand Spray	40 20	35th-----85th 12th-----60th	180 135	9 hrs 7 hrs	12 hrs; 16 hours (Shore 78) 10 hrs; 16 hours (Shore 82)
60 °F (18 °C)	Hand Spray	23 13	20th-----70th 10th-----50th	103 75	216 185	273 245
70 °F (21 °C)	Hand Spray	17 11	15th-----30th 9th-----28th	40 38	104 90	122 100
77 °F (25 °C)	Hand Spray	12 10	10th-----27th 8th-----17th	37 25	68 55	75 70
80 °F (27 °C)	Hand Spray	13 8	9th-----27th 6th-----13th	35 23	68 50	75 63
90 °F (32 °C)	Hand Spray	12 7	9th-----16th 5th-----10th	30 14	56 22	69 34
100 °F (38 °C)	Hand Spray	11 6	8th-----14th 4th-----9th	23 16	32 26	38 36
110 °F (43 °C)	Hand Spray	10 5	7th-----12th 3rd-----6th	17 9	26 17	32 20

* Coating hardness to be at 75 Shore D reading prior to handling. Coating temperatures lower than 77° F (25° C) will give a false hardness reading. Using a grinder with grinding disk, a cured coating will give out dust particles, while an uncured coating will melt like gum.