Technical Data Sheet



HammerHead Point Repair Solutions

Introduction

HammerHead Point Repair Solutions are used to repair short lengths of damaged sewer pipelines. The point repair system is a composite made of two basic materials – a fiberglass liner impregnated with an ambient curing two-part resin system

Technical Data:

- Point Repair Fiberglass Matting
- Two (2) silicate resin systems are available
 - Part A Summer or Winter
 - Part B

The resin is selected for each installation based on the desired curing time and ambient temperature. All the resins, when used with fiberglass matting and properly cured, will meet or exceed the minimum physical properties listed below.

Handling & Cure Times

Important: Pot life and cure time are greatly affected by temperature. Warmer temperatures result in less pot life and less cure time. Colder temperatures provide more pot life and require longer working times. Always read, understand and comply with hazard warnings described in Safety Data Sheet(s) before use.

Summer

Ambient Temperature	Pot Life* (Minutes)	Cure** (Minutes)
50°F (10°C)	35-50	270-290
68°F (20°C)	25-38	120-140
86°F (30°C)	20-25	85-150

Winter

Ambient Temperature	Pot Life* (Minutes)	Cure** (Minutes)
41°F (5°C)	40	180
59°F (15°C)	30	120
68°F (20°C)	25	90
86°F (30°C)	15	50

^{*}Pot Life: Approximate time available after resin has been mixed to complete installation before resin starts to set.

^{**}Cure Time: Time for resin to cure after resin has been mixed.



Physical Properties:

TRENCHLESS EQUIPMENT	
----------------------	--

	Test Method	Minimum Value
Flexural Modulus	ASTM D 790	1,200,000 psi
Flexural Strength	ASTM D 790	30,000 psi

HammerHead Point Repair Solutions exceed the structural requirements of ASTM F 1216.

Comparison of initial minimum structural properties ASTM F 1216 vs HammerHead Point Repair Solutions			
Structural Property	ASTM F 1216	HammerHead	
Flexural Strength ASTM D790 (psi)	4,500	30,000	
Flexural Modulus ASTM D 790 (psi)	250,000	1,200,000	

HammerHead Point Repair systems provide a structural repair with a "frictional/interference" fit in sewer pipes, and are suitable for repairs in pipes of circular or egg-shaped cross section composed of concrete, reinforced concrete, vitrified clay, PVC or asbestos cement, where the structural stability of the point repair is not dependent upon its bond to the host pipe. Structural stability of the point repair is achieved by pressing the fiberglass matting tightly against the walls of the host pipe and thereby forcing excess resin into irregularities and defects in the old pipe. When the excess resin is cured, it forms a tight interference fit with the host pipe, even without the formation of a chemical bond.