PRODUCT DATA SHEET

HammerHead Point Repair Solutions

HammerHead® Point Repair Solutions

HammerHead Point Repair Solutions are used to repair point defects or localized damage to sections of buried pipelines 3 to 72 inches in diameter without excavation. The repair is made by the installation of a resin-saturated fiberglass fabric which is wrapped around an inflatable packer, pushed or pulled into an existing pipeline to position at the defect, expanded against the interior of the existing pipe with air pressure, and held until cured. The finished repair is tight-fitting and continuous over its installed length with a smooth transition from the existing pipe to the repair.

Applications for Use

HammerHead Point Repair Solutions are certified by NSF International for compliance with NSF Standard 14, the International Plumbing Code, and the Uniform Plumbing Code to provide a watertight, structural repair to point defects and damage within existing pipelines, including storm and sanitary sewers, drainage, vents, and other piping systems. The point repairs are resistant to municipal sewage, acids, and alkalis commonly found in drains, sewers, and commercial wastewater in accordance with ASTM F1216 Appendix X2. Point repairs may be used to repair existing piping in straight sections, pipe diameter or material transitions, and bends up to 90 degrees. HammerHead Trenchless provides detailed guidelines and instructions for use and makes training available in support of quality management.

DWV SEWER I.P. Code U.P. Code

Technical Data

HammerHead Point Repair Solutions are an engineered composite consisting of a specialized fiberglass fabric and proprietary styrene free, sodium silicate thermoset resin system designed for installation in existing pipelines with damp or moisture filled surfaces. This system relies on conditions within the ambient pipeline environment for cure. Resin system are selected based on installation conditions and the desired working and cure times. The selection of fabric and design of the point repair takes into consideration the configuration of the pipeline, type of defect or damage, as well as relevant hydrostatic, soil, and live loads in accordance with ASTM F1216 or ASCE MOP 145.

Resin System

Mix Ratio A:B	1:2 by volume
Components	HammerHead Point Repair Silicate Catalyst Winter Express, Winter, or Summer (Part A); HammerHead Point Repair Silicate Resin (Part B)
Cure	Ambient cure – see detailed information below

Type	Diameter	Application
1815	3 in. to 24 in.	Straight-line
3610	24 in. to 60 in.	Straight-line
Elbow	3 in. to 6 in.	Bends and Elbows
EZ	18 in. to 72 in.	Straight-line

PRODUCT DATA SHEET

HammerHead Point Repair Solutions

Working and Cure Times

Ambient temperature: Temperature of work area where resin system is mixed, and fabric is saturated and loaded onto the packer.

Working time: Time from the start of mixing resin to the repair being positioned at the defect and expanded within the pipe.

Cure time: Time from the start of mixing resin to the time of substantial completion of cure of the point repair whereby the packer may be deflated and removed. Listed cure times are based on pipe temperature of 65°F (18°C). Higher pipe temperature will reduce cure time and lower pipe temperature will increase cure time.

IMPORTANT: Working and cure times are greatly affected by temperature. Warmer temperatures result in less working and cure times. Colder temperatures increase working and cure times. Resin components and packer equipment should be conditioned 24 hours prior to use within a 72-75°F (22-24°C) temperature range for optimum control during installation.

Placement and Cure Time at Ambient Temperatures

HammerHead Resin System	50°F (10°C)		59°F (15°C)		68°F (20°C)		86°F (30°C)	
	Working	Cure	Working	Cure	Working	Cure	Working	Cure
Winter Express	15	50	10	40	5	35	*Not Recommended*	
Winter	35	150	30	120	25	90	15	60
Summer	40	275	35	200	30	150	20	100

Structural Properties

HammerHead Point Repair Solutions provide a structural repair with a watertight frictional fit throughout the length of the repair. Repairs can be made in existing pipe of circular or oval cross section constructed of concrete, vitrified clay, PVC, asbestos cement, cast iron, ductile iron, and other constructions 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 through compression as the repair is made while being expanded tightly against the walls of the existing pipe, at the same time locking the repair into place as resin is anchored into irregularities and defects in the wall of the existing pipe. Dependent upon the number of layers and type of fiberglass fabric used, the minimum structural properties in the following table are achieved when HammerHead installation guidelines are followed.

Property	Test Method	HH Properties *	ASTM F1216 (minimum)
Flexural Modulus	ASTM D790	Up to 1,300,000 psi	250,000 psi
Flexural Strength	ASTM D790	Up to 20,000 psi	4,500 psi

*Properties vary based on specific design.

Shelf Life and Storage

Point Repair Resin/Catalyst: One year when stored in original sealed packaging at 65-80°F (18-27°C) and less than 65% relative humidity.

Point Repair Fiberglass: One year when stored protected from light at 65-80°F (18-27°C) and less than 65% relative humidity.

PRODUCT DATA SHEET

HammerHead Point Repair Solutions

Safety

Refer to the Safety Data Sheets for these products for safety and health information prior to use. Follow all notices on the Safety Data Sheets (SDS). If you do not understand or cannot adhere to the guidelines and procedures for handling and use of these products in strict accordance with the SDS, do not use these products. Contact HammerHead at 800-331-6653 for a copy of the SDS.

The information contained herein is offered without charge for use by technically qualified personnel at their discretion and risk. All statements, technical information and recommendations contained herein are based on test and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and no warranty of any kind is made with respect thereto. Always read, understand, and comply with hazard warnings described in the products' Safety Data Sheet(s) before use.

© 2022 HammerHead Trenchless
Ver: 11.10.2026