

HBE Repair Products

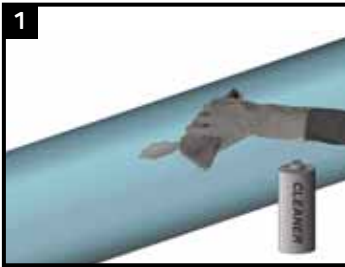
High Build Epoxy Coating (HBE-95, HBE-HT)

Configurations (Options A and B)

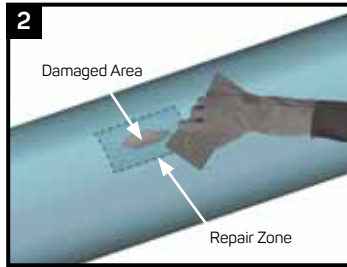


HBE products specified are two part epoxy coatings used for FBE pipeline repair. HBE is supplied in pre-measured components of Part A - HBE Cure and Part B - HBE Base in a 2-component 3:1 ratio cartridge, or bubble pack. All styles are supplied with Installation Guides and MSDS's.

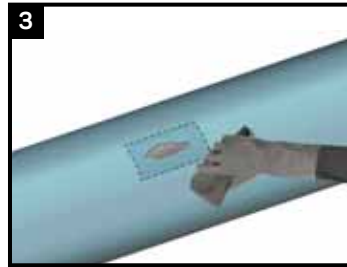
Surface Preparation



Clean exposed steel and adjacent pipe coating according to SSPC SP 1 to remove the presence of oil, grease, and other contaminants. Ensure that the pipe is at least 3°C (5°F) above the dew point before cleaning.

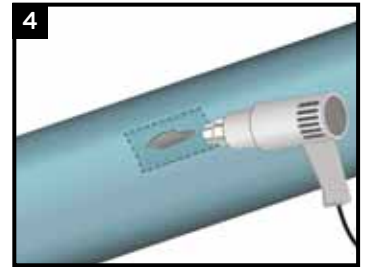


For repair of holidays, pinholes or low film thickness, lightly abrade with clean abrasive sand paper, approximately 25 mm (1.0") around the repair area.



Wipe clean with a lint-free cloth or air blast the steel and pipe coating to remove foreign contaminants. Surface must be clean and dry prior to application of HBE products.

Pre-Heat



Prior to HBE application, pre-heat the repair zone with a hot air tool or propane torch until a minimum surface temperature of 10°C (50°F) is reached. For faster HBE cure time, the recommended pre-heat range is 80°C (176°F) to 90°C (194°F).

Option A

HBE Repair Cartridge



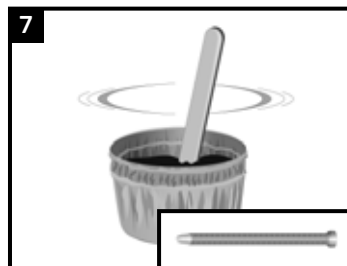
Canusa's HBE is available in a 2-component 400mL cartridge. Typical use is as a holiday repair coating on FBE coated pipe. The cartridge fits into a universal 2-component cartridge dispenser.

Dispensing



To dispense, unscrew the cap, remove the two small plugs in each side of the cartridge and replace cap. Squeeze the trigger of the cartridge dispenser and dispense a desired amount of material into a mixing cup. The cartridge dispenser will automatically dispense the correct ratio of base and cure.

Mixing



With a clean stir stick mix thoroughly to create one uniform colour with no streaks. Alternately for larger projects, a static mixer nozzle (available from Canusa) allows for direct application onto pipe.

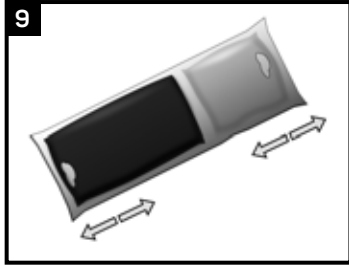
Option B

HBE Repair Pack



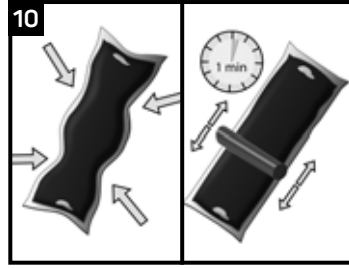
Canusa's HBE is available in a 50 mL bubble pack. Typical use is as a holiday repair coating on FBE coated pipe. Repair Packs come with an applicator pad and gloves.

Clip Removal



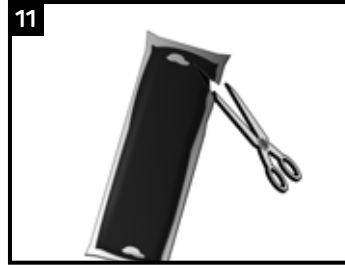
With a gloved hand, remove the clip that separates the base from the cure by pulling on both ends of the package.

Mixing



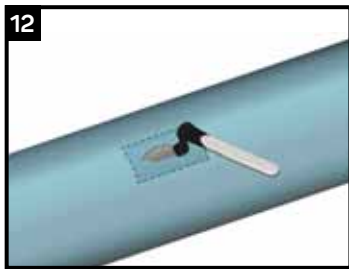
Mix the contents together by kneading the package. Ensure to work the material from the corners. Continue mixing by laying the package on a flat surface and, using the plastic clip or roller, press the contents back and forth from one end to the other. Complete mixing in 1 minute.

Bag Opening

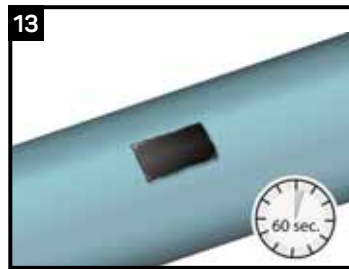


Cut corner to open package. Caution, contents may become hot.

HBE Repair Application

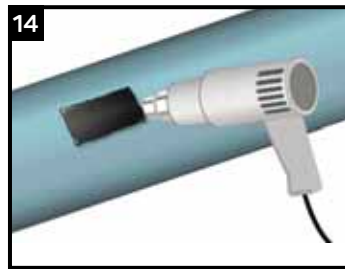


Use clean trowel, brush, stir stick or other application tool to apply HBE to repair area plus abraded perimeter to specified minimum thickness.



After coating application, wait and allow the wet HBE to setup for 30-60 seconds.

Post-Heat (Optional)



To expedite the HBE cure schedule, force cure the coating using a hot air tool (950°C setting) or propane torch for 1-3 minutes.

Useful Application Information

The ideal mixing and application temperature of HBE material is between 20°C (68°F) and 40°C (105°F).

The workable pot life after mixing is approximately 10 minutes at 20°C (70°F). Pot life will be extended at lower temperatures and shortened at higher temperatures.

HBE coating should only be applied at temperatures above 10°C (50°F) and when the pipe surface is 3°C (5°F) above the dew point.

Avoid prolonged storage at temperatures below 5°C (41°F) or above 40°C (104°F). Do not freeze Canusa HBE products.

Storage & Safety Guidelines

To ensure maximum performance, store Canusa products in a dry, ventilated area. Keep products sealed in original cartons and avoid exposure to direct sunlight, rain, snow, dust or other adverse environmental elements. Avoid prolonged storage at temperatures above 40°C (104°F) or below 5°C (41°F). Product installation should be done in accordance with local health and safety regulations.

These installation instructions are intended as a guide for standard products. Consult your Canusa representative for specific projects or unique applications.

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**Quality Management system
registered to ISO 9001**

Canusa warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the installation guide when used in compliance with Canusa's written instructions. Since many installation factors are beyond our control, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection therewith. Canusa's liability is stated in the standard terms and conditions of sale. Canusa makes no other warranty either expressed or implied. All information contained in this installation guide is to be used as a guide and is subject to change without notice. This installation guide supersedes all previous installation guides on this product. E&OE

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