Polywater®
Solutions at work.

**INSTRUCTIONS** FOR USE

# AIRREPAIR®
# LEAK REPAIR SYSTEM (AR)

## AIRREPAIR LEAK REPAIR SYSTEM

AirRepair repairs pressurized telephone cables, load coils, and splices. Use AirRepair putty to seal active leaks and follow with sealant for a permanent repair. It is durable and withstands environmental extremes. AirRepair bonds to polyethylene, lead, metals, and ceramic.

## INSTALLATION

Installation temperature:
40°F to 120°F (4°C to 50°C)
In-service temperature:
-40°F to 250°F (-40°C to 120°C)

- Good surface preparation is critical.
- Add entire contents of the Part B cup to the Part A cup. Make sure product is well mixed and is a uniform gray color.

## SAFETY

- Wear eye protection.
- Use protective gloves and protect bare skin.

Damaged and leaking cable

**1.** Cable should be as dry as possible. Pump standing water out of manhole if water is present. Wear nitrile gloves (provided) and safety glasses. Clean and dry the area around the leak with a dry rag.

Sanding cable for repair

**2.** Scrub the cable with a steel brush or sandpaper (provided) to remove loose particles approximately 3 inches (7.5 cm) around the leak. Follow prescribed work methods to avoid exposure to lead dust. The lead should be shiny. Polyethylene cables should be scuffed; 80-grit sandpaper works well.

Cleaning cable with cleaning wipe

**3.** Wipe cable with cleaning wipe to clean the surface and displace any remaining water.

Primer wipe

**4.** Polyethylene (plastic) jacketed cables and plastic enclosures: Wipe with Plastic Primer wipe. Area should be completely coated. Seal within one hour of application.
Do not use Plastic Primer when sealing leaks on lead or other metal products.

Removing Air Pressure

**5.** RELEASE AIR PRESSURE OR SHUT OFF PRESSURE DURING THE REPAIR PROCESS.

Eliminate any back pressure in the area of the leak. Do not bleed other sections of the cable that are underwater. If pressure can be released, continue to step 9.

## Applying Polywater Putty

If pressure cannot be released, use the Polywater® Putty for a short-term seal. Pressure must be reduced below 5 psi (0.3 bars). Important: Steps 6 - 7 must be done quickly. If there is no pressure or air flow, continue to step 9.

Cutting Putty

**6.** Cut off a portion of the Putty Stick needed, remove plastic and knead in hand approximately 2 minutes until material is well mixed and of uniform color.


Rolling Putty

**7.** After approximately 2 minutes of kneading/mixing, material will feel warm to the hand. Roll the Putty into a rope about ¼ inch (6 mm) thick or a small ball the size of a pea ¼ inch (6 mm) for pin hole leaks. Apply the putty over leak and push putty so it covers about ½ inch (13 mm) from all points of the leak area with a thickness of approximately $^{1}/_{8}$ inch (3 mm).


Holding Putty during curing

**8.** Apply constant pressure to this Putty patch with the palm of the hand for 2–3 minutes until material feels firm. Save a piece of the mixed putty to use as an indicator to tell when the putty is hard. For the best long-term seal, limit quantity of Putty.

If the putty is leaking remove and try again.

## Applying AirRepair Paste


Mixing AirRepair

**9.** Open one Part A Sealant Cup (Black) and one Part B Sealant Cup (White). A yellow skin or crust may form on Part B. This will not harm the performance of the material. Remove the layer of hard skin and discard. Empty all the contents of the Part B Sealant Cup into the larger, Part A Sealant Cup. Mix for about 30-60 seconds until the mixture is a uniform color of gray. For larger repairs, multiple sets of part A and B cups may be necessary

Applying AirRepair

**10.** Immediately apply the sealant to the cleaned surface, covering the leak or Putty and surrounding area (approximately 1-inch (2.5-cm) radius). Build a layer ¼ inch (6-mm) thick over the repair area.

Application of the Sealant should take less than 2-3 minutes. The Sealant will cure in approximately 7 minutes and fully harden in 2 hours.

Additional kits may be need for large repairs. AirRepair adheres to itself.

Smoothing edges

**11.** Smooth the repair and taper the edge of the seal to the cable.

Finished repair

**12.** If the cable has been moved out of its normal position for repair, the best time to reposition is immediately after you have applied the sealant. Don't wait for full cure. The repair will be most effective if movement is limited.


AirRepair Kit

**13.** Pressure to the cable may be turned back on in approximately 10 minutes after repair is done..

All used materials may be placed in disposal bag (provided) for cleanup.

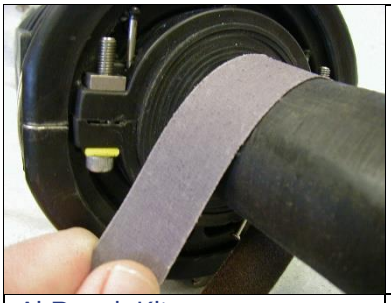
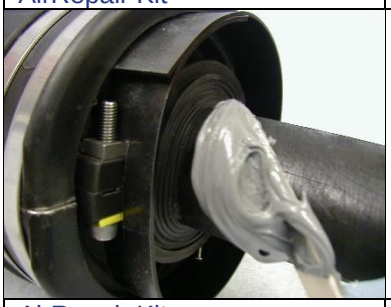
| AMBIENT TEMPERATURE | WORKING TIME | FUNCTIONAL CURE TIME* |
|---|---|---|
| 35°F (2°C) | 40 Minutes | 7 hours |
| 52°F (11°C) | 20 Minutes | 3½ hours |
| 60°F (16°C) | 10 Minutes | 1½ hours |
| 70°F (21°C) | 6 Minutes | 60 minutes |
| 88°F (31°C) | 4 Minutes | 40 minutes |
| Note*: Functional cure is the time it takes to hold 10 PSI (0.7 bars). For higher pressure additional curing time is needed. | | |

**END PLATE APPLICATION INSTRUCTIONS**

AirRepair Kit

**1.** Cable and end plate should be as dry as possible. Pump standing water out of manhole as necessary.

Clean and dry the area around the leak with a dry rag. Wipe end plate and cable (DR Tape) with cleaning wipe to clean the surface and displace any remaining water.

| | | | |
|---|---|---|---|
|  | **2.** | | AirRepair will have good adhesion to DR Tape if it is primed. End plates should be scuffed with 80-grit sanding cloth. Prime the tape surface with the AirRepair Plastic Primer Wipe. Completely coat surface. Plastic Primer will dry quickly; it should be sealed within one hour of application.<br>*Do not use Plastic Primer when sealing leaks on lead or other metal products. Plastic Primer is not necessary for End Plate materials.* |
| AirRepair Kit | | | |
|  | **3.** | | *RELEASE AIR PRESSURE OR SHUT OFF PRESSURE DURING THE REPAIR PROCESS.*<br>Eliminate any back pressure in the splice closure. Do not bleed other sections of the cable that are underwater. |
| AirRepair Kit | | | Important: Steps 4 - 5 must be done quickly. |
|  | **4.** | | Open one part A sealant cup (black) and one part B sealant cup (white). A yellow skin or crust may form on the curing agent, part B. This will not harm the performance of the material. Remove the layer of hard skin and discard. Empty all the contents of the Part B sealant cup into the larger, part A sealant cup. Mix for about 30-60 seconds until the mixture is a uniform gray color. For larger repairs, two sets of part A and B cups may be necessary. |
| AirRepair Kit | | | |
|  | **5.** | | Immediately apply the sealant to the cleaned surface, covering the seam between the cable and end plate. Build a seal approximately ½ to ¾ inches (13 to 19mm) thick around cable and tapered to the end plate. Smooth and clean the repair.<br>Application of the AirRepair should take less than 2 - 3 minutes. The Sealant will cure in approximately 5 - 15 minutes and fully harden in 2 hours. |
| AirRepair Kit | | | |
|  | **6.** | | Pressure to the splice closure may be turned back on in approximately 10 minutes.<br>See chart above.<br>All used materials may be placed in disposal bag (provided) for cleanup. |
| AirRepair Kit | | | |

## CONTACT US

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Solutions at work.