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**Technical Bulletin** 

## Armor Patch - K-062

**Description:** 

Armor Patch is a two component, VOC free, non-sag paste epoxy system ideal for many typical maintenance uses such as repairing leaking pipe fittings, underwater repairs, or leaking tanks.

Product Advantages:

- CURES UNDERWATER
- ADHERES TO WET SURFACES
- EASY TO APPLY
- FRIENDLY 1/1 MIX RATIO
- RESISTANT TO MANY CHEMICALS
- MACHINABLE

Handling **Properties:** 

MIX RATIO, pbv or pbw 1/1
CONSISTENCY Non-sag paste
WORKING TIME\*, min 50
CURING TIME\*\*, h 24
MAXIMUM SERVICE TEMPERATURE, °F (°C) 200 (93)
VOLUME per kit, in.<sup>3</sup> Contact Copps

\*The working time of the Armor Patch (the time you have to apply the material before it sets) will vary according to the air temperature. The temperature of the material itself, and the surface to which it is applied.

\*\*Ultimate hard cure is obtained in 18 to 24 hours depending on the system being used, the air temperature, and the temperature of the surface being coated

Physical Properties:

COMPRESSIVE STRENGTH, psi (MPa)	6,200	(43)	ASTM D 695
COMPRESSIVE MODULUS, psi (MPa)	255,000	(1759)	<b>ASTM D 695</b>
TENSILE STRENGTH, psi (MPa)	1,800	(12)	ASTM D 638
FEXURAL STRENGTH, psi (MPa)	3,800	(26)	ASTM D 790
HARDNESS, Shore D	87		ASTM D 2240

Surface Preparation:

The surface to be coated must be free of all rust, scale, dirt, dust, grease, oil, release agents or other contaminants. Armor Patch may be applied to wet surfaces such as leaking pipes.

For smooth surfaces or where vibration is a concern, tack weld an open mesh screen or expanded metal approximately 1/16 to 1/18 inch (2-4 mm) above the surface. Chip off weld slag.

Mixing:

Armor Patch is supplied in pre-measured, ready-to-use kits. Simply empty all the hardener into the resin and mix with a putty knife until uniform in color (usually 1 to 2 minutes). If less than a full kit is required, measure out resin and hardener onto a mixing board or flat surface following the mixing ratio shown under Handling Properties. Mix together with a trowel until uniform in color (usually 1 to 2 minutes).

Incomplete mixing will result in poor cure and soft spots.

If the kit becomes colder than 60 °F (16 °C) preheat the cans in hot tap water to maximum of 90 °F (32 °C). Excessive heat will reduce the working time. Heating the cans with a torch is **NOT** recommended.

**Application:** 

Apply the mixture immediately with a trowel or putty knife. Cover large holes or cracks with screen, paper or fiberglass cloth and apply Armor Patch over the patch and onto an adjacent sound area.

**Curing Procedures:** 

Cure at least 24 hours at 77 °F (25 °C) before returning the equipment to service.

Curing procedure may be shortened by applying heat with a heat gun or heat lamp. **DO NOT EXCEED 120** °F (49 °C).

**NOTE:** Curing time will be lengthened if Armor Patch is applied underwater.

## **SAFETY PRECAUTIONS**

Avoid breathing of vapors. Forced local exhaust is recommended to effectively minimize exposure. NIOSH approved, organic vapor respirators and forced exhaust are recommended in confined areas, or when conditions (such as heated polymers, sanding) may cause high vapor concentrations. Do not weld on, burn or torch Armor Patch or any epoxy material. Hazardous vapor is released when an epoxy is burned. Avoid skin or eye contact. Wash skin with soap and water if contact occurs. If eye contact occurs flush with water for 15 minutes and obtain medical attention. Read and understand all cautions on can labels and safety data sheets before using this material.

## FOR INDUSTRIAL USE ONLY

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