

FREQUENTLY ASKED QUESTIONS

What is Aqua Patch?

Aqua Patch is a liquid-activated asphalt mixture suitable for use as a permanent repair solution for asphalt and concrete applications. Aqua Patch is a blend of asphalt aggregates, asphalt cement binder and organic additives that react with liquids, typically water, to create a chemical reaction that causes the asphalt mixture to rapidly harden and become asphalt pavement.

Aqua Patch produces no hydrocarbon leaching or evaporation into the soil or atmosphere.

Aqua Patch can be used in all types of weather – cold or warm, wet or dry. Water or moisture in the repair area is not a problem. Since Aqua Patch is liquid-activated, water actually helps accelerate the bonding and hardening process. No tack coat is required, streamlining the repair process.

How does Aqua Patch differ from cold-mix asphalt products?

Aqua Patch is a liquid-activated asphalt mixture that starts to harden immediately after adding liquid, usually water. It also has excellent durability and the same eventual strength as that of hot-mix asphalt.

How does Aqua Patch harden? How is it different from conventional asphalt patch repair products?

Conventional cold asphalt patch (volatile hardening type) - Mineral-based lubricating oils are added during the mixing and manufacturing process to ensure sufficient workability at normal temperatures. The mix hardens as the lubricating oils volatilize after being applied. In actual repair scenarios, the lubricating oil often remains in the mix to some extent, never really allowing the cold mix patch to harden entirely.

Aqua Patch (chemical reaction hardening type) - A special lubricating oil is used instead of a mineral-based lubricating oil. The main feature of this lubricating oil is that it hardens when mixed with activating liquids and organic additives (added during the manufacturing stage). Adding the activating liquid, usually water, to the mix during the installation process causes this special lubricating oil to undergo a chemical reaction with the accelerant, which hardens the repaired patch. The fast speed of this chemical reaction results in the mix rapidly hardening.

APPLICATIONS

What are the typical applications for Aqua Patch?

- Repairing potholes in asphalt and concrete pavements
- Areas where hot-mix asphalt (HMA) is difficult to use (such as narrow roads and areas where open flames are prohibited)
- Asphalt road patching
- Concrete road repairs

- Driveways, walkways and parking lots
- Utility cuts and manhole repairs
- Bridge joints

How thick should Aqua Patch be applied in a hole?

Aqua Patch should be applied in layers of 25mm (1") to 50mm (2") thick. Apply Aqua Patch in two layers if each layer exceeds 50mm (2") in thickness. The second layer must be applied immediately after the first layer, and twice the amount of water is added over the repair area. Tamp the entire surface.

How about adhesion to the surface underneath (installation surface)?

You can install Aqua Patch over ordinary asphalt pavement. Aqua Patch cannot be installed over steel, plastic, or concrete materials due to poor adhesive characteristics. Aqua Patch can be used in either asphalt or concrete potholes. Aqua Patch can be applied in a concrete pothole because it binds to the concrete edges through mechanical bonding.

Can Aqua Patch be applied directly onto soil?

It is not recommended to apply Aqua Patch directly onto loose soil. Applying Aqua Patch directly onto soft surfaces can cause sagging and premature cracking. Application on to a well compacted granular surface is acceptable.

Can Aqua Patch be spread out thinly?

Aqua Patch cannot be used in a thin layer, so it should not be spread over a shallow hole. The minimum depth requirement of the hole is 40mm (1.5"). If the hole is greater than 55mm (2") deep, apply multiple layers of Aqua Patch, add water, and compact the layers together.

INSTALLATION

What machinery or equipment is required during the installation process?

The mixture can be compacted by stepping on it, so only a shovel and water are required. Using mechanical compaction (such as a plate compactor or tamper) helps to improve durability.

How much water is required and how do you apply the water over the repair area?

Water should be applied as evenly as possible using a funnel or plastic water bottle. It is advised that one litre of water is required per 15.9kg (35 lbs) bag, but there are no issues using more water exceeding this amount.

Can Aqua Patch be applied if it is raining?

Yes, you can use it in the rain. Note that the mixture will harden in rainwater, so it is recommended to quickly compact the material after application.

Do water puddles need to be drained before starting repair work?

It is not necessary to drain puddles. You can use the standing water in the puddles and add less water before compacting Aqua Patch.

Can Aqua Patch be applied in winter?

As long as the container of Aqua Patch is not frozen, you can use Aqua Patch at any temperature. The warmer the temperature of the Aqua Patch, the quicker it will harden when the activating liquid is applied. The activation liquid must not freeze at the ambient temperature, so brine or non-toxic plumbers anti-freeze can be used at extremely low temperatures.

Are there any issues handling Aqua Patch with bare hands?

No, it is safe to touch Aqua Patch with bare hands. To protect from dirt, wear gloves and protective eye wear when handling Aqua Patch.

After Aqua Patch is installed, can it be seal coated?

Yes, Aqua Patch can be seal coated.

TRAFFIC-READY

How long does Aqua Patch need to cure before it is ready for vehicle or pedestrian traffic?

- Straight roads and long curved roads: ready for traffic immediately after installation – About one hour curing is recommended at the site where vehicles make sharp turns
- Areas where car tires can push up against the repaired patch (like parking areas): ready for traffic after two hours.
- Sidewalks: 30 minutes - See the Technical Data Sheet for details.

DURABILITY & SERVICE LIFE

How long will Aqua Patch last after being installed?

Aqua Patch will generally last as long as ordinary hot-mix asphalt. The service life of the repaired area can be affected by the volume of traffic, or by the structural integrity and extent of damage of the surrounding asphalt surface. The patch may become quickly damaged if the repaired area is structurally damaged, or if there is a lack of support (such as areas where there is major sagging along the finished surface due to vehicle movement, or from being applied directly on top of mud). Premature cracks may appear if Aqua Patch is used over an area that is already cracked.

STORAGE

What is the best way to store Aqua Patch?

Store bags of Aqua Patch indoors or in outdoor areas that are protected from the rain. Avoid direct exposure to sunshine and rain.

What is the shelf life for unopened bags of Aqua Patch?

The product is best before six months from the date of manufacture, however can be viable for over one year.

Can extra Aqua Patch be used again after the bag is opened?

It is recommended to use the entire bag of Aqua Patch in one use. If you want to use any of the remaining quantity of Aqua Patch, seal the bag properly and use it as soon as possible (within one day). Before reusing the material, check that it has not begun to harden.

To speak to someone about Aqua Patch, please contact us at:

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