

watco GUIDE TO ASPHALT AND TARMAC REPAIRS

THIS GUIDE WILL HELP YOU IDENTIFY DIFFERENT TYPES OF DAMAGE TO ASPHALT AND TARMAC SURFACES, AND PROVIDES ADVICE ON MAINTENANCE AND REPAIR SOLUTIONS.

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1 | INTRODUCTION

Asphalt and tarmac are widely used for surfacing roads, pavements, loading areas, external yards, car parks and driveways as they provide a durable, long lasting finish.

Tarmac, tarmacadam to it give its correct name, is crushed stone or aggregate coated with tar. It has excellent weather and water resistant properties and can withstand heavy traffic. However, it is prone to damage from petrol and diesel spills. Asphalt is a combination of aggregates (crushed rock gravel, sand or slate), binder (bitumen) and filler materials which makes it extremely hard wearing.

Both are highly resilient, but, as with any surface, they can become worn and damaged over time through every day wear and tear from pedestrians, vehicles, heavy equipment and weather.

Areas where vehicles turn frequently or focal wear points, such as in a loading bay or outside a warehouse door, are also susceptible to damage from the rigours of a busy environment. You may start to notice cracking around your warehouse roller shutter tracks or find your forklift's hard, small wheels sinking into the surface, even gouging it. Once the damage has occurred, it can quickly worsen as rainwater gets in and erodes the surface further, and the freeze/ thaw cycle over winter causes additional degradation.

Regular inspections will help you to spot any early signs of damage and repair the surface before it deteriorates further.

The idea of repairing the damage can be daunting. But, with the right product, you can do it quickly and easily without needing a specialist contractor, unnecessary expense or downtime.

In this Guide to Asphalt and Tarmac Repair, we look at some common types of damage and offer tips to repair them before they become a significant problem, leading to costly repairs and inconvenience. problems before they become a major issue, resulting in unnecessary downtime and high repair costs.



PART 2 TYPES OF DAMAGE AND HOW TO REPAIR THEM



HEAVY DUTY REPAIR

Gone are the days when you need to call in the experts to dig up the asphalt or tarmac to its full length to repair your exterior surfaces. Thanks to today's extensive range of products, even heavy duty repairs can be carried out quickly and easily by yourself, with minimal disruption.

When selecting a product, make sure you choose one that is designed for your specific environment; otherwise, you may find yourself carrying out another repair sooner than you had wanted to.

For example, most asphalt repair materials stay slightly soft once applied, which makes them unsuitable for areas where heavy or narrow wheeled trolleys are regularly used. So make sure you select a product that can withstand the heaviest use. You also want to go for something that is easy to apply and cures quickly to avoid too much repair downtime.

Before repairing, brush out loose material from the damaged surface and clean out any oil or water.



Shop now

Concrex® Asphalt Repair



- Enables ultra-strong repairs to damaged concrete and asphalt.
- · High strength epoxy resin with aggregate.
- · Can withstand the heaviest use, including forklifts and heavy trolleys.
- Suitable for depths of 15mm-100mm.
- The area will be ready for use in 12 hours.

Shop now



Bitu-Mend® Advanced

- Ideal for asphalt repair in heavily trafficked areas, including car parks and loading bays.
- · Epoxy resin formulation is more robust and longer lasting than traditional bitumen based products.
- Superior strength allows for thinner repairs than most conventional products.
- · Cures to a hard, black, slip resistant finish.
- · Good general resistance to most chemicals.
- · Suitable for repairs 25mm-75mm thick.

HANDY TIP: You can use a trowel wiped with white spirits to achieve a smooth finish once you've applied Concrex Asphalt Repair.

RESURFACING WORN PATCHES



When asphalt is laid, it contains oils which bind the aggregates and filler together to provide a flexible and resilient surface that can withstand heavy loads and traffic for many years. However, over time the surface will start to dry out and become less flexible and less resilient to the elements and impact damage.

As the surface becomes dry and dusty, the finer aggregates can start to dust away, exposing the larger stones. These can then pop out with wear, and what was once a worn patch can quickly develop into a hole, causing substantial damage to tyres and wheels as vehicles pass over it or a trip hazard for pedestrians.

Once you notice worn patches on your surface, you must repair them to prevent further deterioration. For heavy wear areas, instead of the traditional method of cutting out around the damaged asphalt and refilling with a similar material, we recommend you use a mortar repair that you can pour straight over the top of the surface erosion.

Not all heavy wear areas are suitable for a pourable epoxy mortar, for example, on a ramp or against a metal threshold door. Any worn patches in these places can be repaired easily with a trowellable epoxy resin with aggregate formulation.

Shop now



Flowpatch Asphalt Repair

- Fast, pourable, strong repairs for asphalt and tarmac surfaces.
- · Provides tough fibre reinforced repairs for heavy wear areas.
- · Just add water, mix and pour.
- · Can accept heavy traffic, including forklifts, in just 2 hours.
- · Will resist oil and grease.
- · Will not dust or deteriorate with freeze/thaw conditions.
- · Suitable for filling holes and damage up to 100mm deep.

Shop now



Concrex® Asphalt Repairs

- For ultra-strong repairs to damaged asphalt and concrete.
- · Ideal for shallow repairs such as resurfacing worn patches on asphalt and tarmac.
- The coarse texture blends with existing asphalt.
- Extremely hard wearing so suitable for heavy traffic, including forklifts and trolleys.
- Quick and easy trowel application.

HANDY TIP: You can carry out resurfacing and repair work to damp (not wet) asphalt and tarmac surfaces with Flowpatch Asphalt Repair.

REPAIRING POTHOLES

We're all familiar with potholes on our roads, particularly in the winter months. Early signs of a pothole forming include loose material around the surface, water pooling and cracks appearing. As well as looking unsightly and giving the impression of a poorly maintained environment, they are a slip and trip hazard and can cause costly damage to vehicles and equipment. So potholes need to be dealt with as soon as they start to form before they become even bigger.

Potholes form when water gets into a crack in the surface. As the water freezes and contracts again, it weakens the asphalt or tarmac material around it.

Vehicles, equipment and/or pedestrians passing over the weakened area cause further damage until, eventually, the crack widens and quickly turns into a pothole.

Damage is made worse in cold weather when rock salt is

used to melt frozen water, frost or snow on roads, pavement and pedestrian areas to prevent them from becoming slippery. The freeze-thaw process is accelerated, causing further damage to the affected area.

You can repair a pothole easily yourself before it becomes a severe problem. Just clear the surface of any loose material, surface water or oil, fill the hole with a suitable bitumen and aggregate blend and then compress the mix with the back of a shovel or a tamper. Finally, sweep away any loose dirt and grit from the hole.

If you need to repair a pothole during the cold, wet winter months, look for a product that can be applied in cold conditions and is fast curing so the area can be brought back into use quickly.



Shop now



Bitu-Mend® Pothole Repair

- For use on exterior potholed asphalt and concrete.
- Durable, bitumen-based patch repair material for roads, car parks and paths.
- Compacts to a dense, hard surface that withstands heavy vehicle and pedestrian traffic.
- · Repairs can be driven over immediately.
- Ideal for potholes up to 100mm.

Shop now



Bitu-Mend® Deep Fill

- Fills holes in asphalt, tarmac and concrete up to 200mm deep in one application.
- Ideal for deep holes in heavily trafficked areas, including car parks and loading bays.
- Epoxy resin formulation provides high strength throughout the depth of the repair.
- It can be walked on after 8 hours and subjected to heavy traffic in 12 hours.

Enquire now



Road Patch Rapid

- Provides rapid hole repairs to concrete and asphalt.
- Made from pre-mixed magnesium phosphate cement blended with aggregate.
- Can be used all year round and can be applied in temperatures as low as -20°C.
- Fast curing so ready for traffic in just 2 hours.
- · Powder is easy to mix and apply and cures to a granite like finish.

HANDY TIP: Bitu-Mend products are also ideal for filling potholes in concrete surfaces.

REPAIRING HEAVILY USED AREAS ON RAMPS AND FLOORS



Special attention must be paid to areas subjected to regular impact from forklifts and trolleys as they are common areas for damage to occur.

The regular impact from forklift and trolley wheels can cause asphalt ramps to fail at the base of the ramp. At the same time, conventional repair methods can be

damaged by the small, hard wheels of forklifts, particularly at focal wear points such as a turning circle.

Here, the correct product specification is essential if you want to achieve a robust and long-lasting repair.

Shop now



Bitu-Mend® Advanced

- Epoxy resin with aggregate formulation can take the point loading and impact that other repair methods will not.
- Its exceptional strength allows for thinner repairs (as little as 15mm thick), or even for a heavy duty, forklift-proof repair.
- Overcomes the need to dig out the asphalt to accommodate the repair as with conventional products.
- · Ideal for use along the base of asphalt ramps to repair and protect the ramp from further damage.

HANDY TIP: You can mix Bitu-Mend in the plastic container provided, but you may find it easier to mix the 2 part epoxy resin on a board.

LOCALISED REPAIRS – DOOR THRESHOLDS AND MANHOLE COVERS

Asphalt failure is common when it butts up to a different material such as metal or concrete around manhole covers, drainage gullies, door thresholds or by metal tracks for roller shutter doors.

These areas tend to shift under traffic or movement from the shutters operating, so conventional asphalt repair products will not be able to provide a long lasting solution. With regular movement, the sand and cement will merely break away, leaving an exposed area needing further repair.

You can carry out localised repairs with a powerful epoxy resin that will stick to metal and hold the repair in place.



Shop now



Concrex® Asphalt Repair

- For ultra-strong repairs to damaged asphalt and concrete.
- The powerful epoxy resin formulation sticks to metal and holds repairs firmly in place.
- · Strong enough to hold posts and guide rails.
- Its coarse texture blends in with existing asphalt.
- Withstands forklifts bumping over a door threshold or manhole frame.



HANDY TIP: Priming first with Tack Coat will make the job easier and provide a strong, permanent repair.

FILLING AND WATERPROOFING CRACKS



Despite being strong and durable, asphalt will crack over time, even under general wear and tear conditions.

As it ages, the asphalt becomes less flexible, leading to cracks of 5-20mm randomly forming. Constant exposure to the elements, including hot sunlight and wet and freezing weather, will cause the surface to crack and deteriorate. Once rainwater gets into a crack, it washes the aggregate away, and if the water freezes, it will cause the crack to widen. Further pressure can be applied to the damaged surface as pedestrians, vehicles, and heavy equipment pass over it.

You should repair a crack as soon as it starts to form; otherwise, what was initially a minor problem will quickly deteriorate, and before you know it, the crack will have turned into a pothole (see Page 9 Repairing potholes).

When selecting a filler for your crack repairs, choose one that waterproofs and fills; otherwise, water can quickly penetrate the area again, leading to further repair requirements.

Shop now



Asphalt Crack Filler

- Rubberised bitumen emulsion that fills, waterproofs and protects cracks in asphalt and tarmac.
- Provides long lasting protection against water ingress.
- · Simply pour the liquid into the crack with a watering can or spouted jug.
- Flexible, so it allows expansion and movement.



HANDY TIP: Asphalt Crack Filler can quickly fill gaps or old expansion joints in external concrete surfaces such as loading bays and yards.

If you have cracks between 3-25mm wide, you can mix Asphalt Crack Filler with sand for a long lasting repair.

3 | IMPROVING THE APPEARANCE

As asphalt ages, it fades and turns from a rich, dark colour to a lighter grey, especially when exposed to sunlight. This is natural, and although faded asphalt is not a problem, you will find that any repair work will become obvious and stand out as black patches.

You may not worry when this is on the road or in a yard out of public sight, but if the asphalt fades and patches become visible at the front by the entrance, it can look unsightly. A well maintained facility gives a good impression of your business to visitors and creates a pleasant working environment for your staff, so you will probably want to improve the appearance of your old asphalt surfaces.

You can go to the expense and inconvenience of resurfacing the asphalt, but applying a bitumen based surface dressing is far more economical. It will quickly bring your surface back to life, giving it a fresh black appearance and covering any repair patches or old line markings.



Shop now

Black Top Black

Black Top

- A bitumen based dressing that makes your old asphalt and tarmac look as good as new.
- Dries to a black finish with a low sheen.
- It covers old stains and marks.
- Extends the life of your asphalt surfaces in just a single application.
- Avoids costly, disruptive and time-consuming resurfacing.



HANDY TIP: Black Top will also fade over time, but the finish will remain uniform. If you want to maintain the black finish, we recommend applying a coat of Watco Road Paint Rapid instead of Black Top and using the available colours to mark safe pedestrian routes or parking spaces.

	SUITABLE FOR				CAN BE APPLIED TO					
	Exterior use	Interior use	Pedestrian/ Light wheeled traffic	Medium traffic	Heavy forklift traffic	Movement or Vibration	Concrete	Asphalt	Tarmac	Sand & cement
DEEP SURFACE REPAIRS										
Concrex® Asphalt Repair		•			•		•	•	•	
Bitu-Mend® Advanced	•	•			•		•	•	•	•
RESURFACING WORN PATCHES										
Flowpatch® Asphalt Repair		•			•		•	•	•	
Concrex® Asphalt Repair		•			•		•	•	•	
POTHOLES										
Bitu-Mend® Pothole Repair	•				•		•	•		•
Bitu-Mend® Deep Fill		•			•		•	•	•	
Road Patch Rapid		•			•		•	•		
HEAVILY USED RAMPS AND FLOORS										
Bitu-Mend® Advanced	•	•			•		•	•	•	•
LOCALISED REPAIRS DOOR THRESHOLDS & RAMPS										
Concrex® Asphalt Repair		•			•		•	•	•	
FILLING & WATERPROOFING CRACKS										
Asphalt Crack Filler		•				•		•	•	
IMPROVING THE APPEARANCE										
Black Top		•		•	•			•		
Asphalt Paint Anti Slip		•					•	•		

5 FOR FURTHER INFORMATION







VISIT OUR WEBSITE

When it comes to protecting people from slips and trips in your premises, or even outside, prevention is the best approach. If you would like further information on how maintain a safe environment, please visit the "Help & Advice" section on our website.

Go to website

SPEAK TO AN EXPERT

Contact our expert advisors using the details below:

Email: sales@watco.co.uk
Telephone: 01483 418 418
Live Chat: watco.co.uk
Virtual Site Visit:
watco.co.uk/watco-virtual-site-visits

For more information on our full range of products, or for additional advice on what product is best for your requirements, we're here to help.

Book a Virtual site visit

DOWNLOAD THE APP

You can also download the Watco app for instant help and support on the go, including live chats and video calls with our technical advisors, easy and instant quote management, and even virtual site visits.

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