

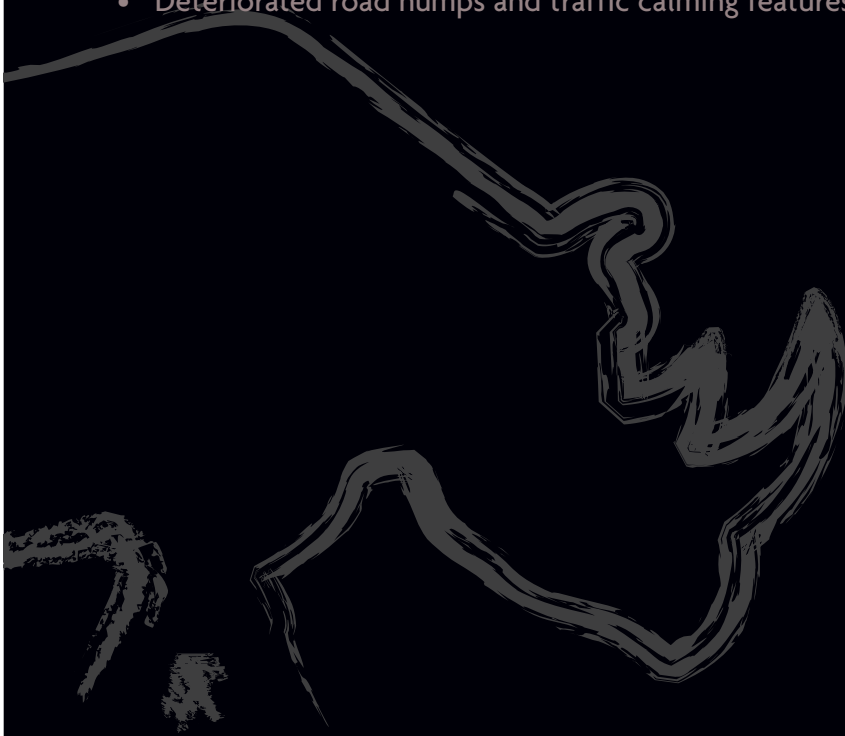


Masterscreed®

Fills and repairs surface defects on all types of road, improving ride quality and safety.

Ideal treatment for:

- Surface defects
- Ravelled asphalt, fretting and crazing
- Chipping loss
- Lane joint raveling
- Potholes
- Vehicle burn out patches
- Scars
- Delaminations
- Pre-surface treatment patching
- Damage caused by removal of road markings
- Lost texture
- Deteriorated road humps and traffic calming features



Masterscreed® System Application

THIN VENEER SURFACE DETERIORATION

Ideal treatment for aggregate and chipping loss. A single screed of hot Masterscreed® over the defective area and 30 minutes later it can be opened to traffic. Combined with the versatility to repair deeper potholes, Masterscreed® restores the texture and profile of the road quickly. Ideal for use on busy trunk roads, country lanes and urban spaces alike.

Delaminating multiple surface layers



Before

After

PATCHING OF POTHoles

A quick and easy solution for repairing potholes. Used extensively in pre-surface dressing programmes. High volumes can be treated quickly compared to traditional methods without losing the benefits of a hot repair system. Quickly restores a safe running profile.

Potholes, texture loss and ravelling



Before

After

LOSS OF ROAD PROFILE

Restoring the road profile and ensuring safe passage for road users. Whether from chipping loss, ravelling or fretting, Masterscreed® fills the voids and restores the profile of the road.

VEHICLE BURNOUTS AND SCARS

A thin screed over the surface of the damaged asphalt. Optional scabbling of the surface to remove melted plastics etc. An economic way of restoring road profile without the need for full lane resurfacing.

LANE JOINT RAVELLING

Ravelling of cold butt joints between asphalt mats can be quickly repaired by sealing with Masterscreed® (in layers if necessary) arresting further deterioration.

Potholes, texture loss and ravelling



Before

After

DAMAGE FROM REMOVAL OF ROAD MARKINGS

High pressure water systems can remove more than just the white line. Masterscreed® quickly repairs the road surface, restoring the road profile by filling the defect.

TEXTURE LOSS

Surfaces suffering from loss of texture can be treated with a single screed of Masterscreed® which will restore texture to the running surface.

DETERIORATED ROAD HUMPS AND TRAFFIC CALMING FEATURES

Road humps, cushions and speed tables can pothole with the added complications of narrowed roads, busy traffic and shapes/profiles to maintain. The high performance binder characteristics of Masterscreed® and quick setting times make it an ideal treatment to repair these features.

Repair and reprofile road humps



Before

3 years later

Masterscreed® is a proprietary highway patching and repair material. The High performance synthetic binder combines the coarse and fine aggregate matrix into a hot, pourable compound which is screeded over the defective area. The voids are filled and the surface sealed in one operation. The voidless repair needs no compaction and is simply opened to traffic once cool.

Motorway hard shoulder vehicle burn outs



Before

After

SAFE RUNNING SURFACE

- High (>60) PSV aggregates & high performance binders.
- Good skid resistant repair (SRV>60).
- Finish consistent with the surrounding surface.

FILLS AND SEALS

- Hot pour mixture eliminates voids.
- Good resistance to wheel tracking.
- No compaction required.
- High binder content seals all edges.
- Good adhesion & seal against water.

MINIMAL DISRUPTION

- Daily crew outputs vary from a few sq.m to a few hundred sq.m.
- High outputs = reduced time on site, lower traffic management costs & reduced disruption.
- Road surface opened to traffic on cooling (typically 30 minutes).
- Work can be completed between peak hours or overnight to reduce traffic congestion.

QUICK AND EFFICIENT

- No need for cutting out.
- Surface is cleaned and dried with a hot air lance.
- Masterscreed® applied directly to the defective area.
- Finish flush with the surrounding surface.

FLEXIBLE AND VERSATILE

- Can treat shallow surface defects from just 4mm.
- Deeper defects treated by applying in layers incorporating Jointmaster IMP fill material.
- Numerous defect types treated by the same crew in the same working shift.
- Restores the road profile improving ride quality.

COST EFFECTIVE FOR SMALL AREAS

- Materials heated & mixed in lorry mounted boiler/pre-heaters on site.
- Only the materials necessary for the contract are heated, minimising waste and providing an ideal solution for patching smaller areas.



Repaired asphalt seam joint

MATERIAL CHARACTERISTICS

Polished Stone Value	60 PSV
Skid Resistance Value	SRV >60
Aggregate Abrasion Value	AAV 4.9
Initial texture depth	1.5mm typical
Softening Point	85°C min
Depth range	From 4mm to full depth repair
Appearance	Dark Grey

SUITABLE SITES

- Motorways & Trunk Roads
 - ‘A’ Roads
 - Roundabouts
 - Hard shoulders
 - High stress areas
- Junctions
 - Highways
 - Road humps, speed cushions and table tops
 - Housing estate roads
 - Rural roads



Treatment of complete lane

WHAT MAKES MASTERSCREED® DIFFERENT?

	CAUSES OF FAILURE FROM TRADITIONAL PATCHING	ADVANTAGES OF MASTERSCREED®
COMPACTION	Small volume repairs and temperature loss lead to insufficient compaction and hence cracking. ❌	No compaction required. Masterscreed® is hot, molten, self-levelling and cures on cooling. Fills and seals voids. ✔️
MATERIALS	Variable heat loss between edge and centre, low binder content, edges unsealed = cracking. ❌	High binder content (12%), heavily polymerised. Fills and seals in one operation. ✔️
INSTALLATION	Preparation, dirty and/or wet, presence of water. ❌	All surfaces cleaned and dried with hot compressed gas and air lance. ✔️
RESULT	Water ingress, freeze/thaw, expansion/contraction, cracking & premature failure. ❌	Masterscreed® is a sealed repair and a problem solved. ✔️



Top 5 - Why is Masterscreed® different from other patching / repair products?

01

HOT POUR COMPOUND:

Masterscreed® is applied as a hot wet slurry mixture. This fills and seals all the voids in the surface. No compaction is required as the material is binder-rich, self-levelling and merely needs to cool before being opened to traffic.

02

SYNTHETIC BINDER:

Specifically designed for high levels of adhesion with excellent stone retention and hence texture. The result is a skid resistant, textured finish.

03

THIN BOND REPAIRS:

Masterscreed® treats thin surface layer failures from 4mm to full depth without any cutting out or squaring-off required. Deeper 'traditional potholes' are similarly treated without the need for saw cutting and squaring-off patches.

04

HIGH VOLUMES OF WORK:

Daily crew outputs can vary from just a few sq.m to a few hundred sq.m depending on the site. Add in multiple crew options and outputs are far in excess of alternative systems. Masterscreed® can be trafficked within 30 minutes of finishing the work. All of this combines to minimise traffic disruption and traffic managements costs.

05

NIGHT WORKS AND SMALL VOLUMES ACCOMMODATED:

Traditional repairs with asphalt require manufacturing plants to stay open at night which for small volumes is costly or just not possible. Masterscreed® is a bagged material which is heated to temperature on site in custom boilers, ensuring the right amount of material for each job is available whenever required.





Masterscreed®

Approved system for repairing and reinstating surface cracks and joints

MASTERSCREED® - THE FACTS

1. **Fills voids:** Seals the surface and provides a skid resistant running surface.
2. **Hard wearing:** Durable thin bond repair.
3. **Quick to apply:** Rapid cure, road open to traffic at the end of the shift.
4. **Restores running surface:** Quick application up to 200sq.m in a shift. Material cure time from just 30 minutes.
5. **Cost effective** alternative to full depth asphalt patching.
6. **Versatile and adaptable:** suitable for deterioration from 4mm to full depth.
7. **High performance:** History of effectively treating difficult defects on high traffic density roads.
8. **Long Lasting:** Increases the life of the road pavement, delaying the requirement for resurfacing.
9. **Strong bond:** Supports the surrounding surface, retaining the integral strength of the road surface.

OUR PROMISE

Our senior management team has over 100 combined years experience of the highways & structures repair and maintenance market, so we know the industry's 'best', as well as its 'worst' practices. When we set up Rhino, we were adamant that we would build a business based on:

- Excellent customer service.
- Providing a highly responsive service.
- Being flexible to meet customers' specific requirements.

Therefore, when you deal with Rhino, you are guaranteed that there are no hidden extras. The price we quote includes:

- All materials, labour and plant necessary to complete the work.
- A site inspection - to assess the work prior to quotation.
- A programme which specifies timescales required to complete the works.
- A clear unambiguous, firm quotation which we honour.

Our pledge to you is that we will always provide you with a highly responsive and flexible service, use the best material for the job and never over promise and under deliver.

Steve Loader
Director



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