



USED FOR



Waterproofing



Chip Loss

ENVIRONMENTS



Residential



Rural



Ports



Roundabouts
& Intersections



Motorway



Industrial



Airports

WeatherBarrier

Accelerate chip seal curing.

Weather Barrier is an eco-friendly nano-material designed to speed up the curing of chip seal bitumen emulsions.

Applied as a liquid via a sprayer to newly sprayed emulsion seals, Weather Barrier enhances the coalescence of bitumen, enabling faster setting and improved performance.

Don't let slow curing and unpredictable conditions hold your projects back. Weather Barrier accelerates chip sealing, enhances productivity, and reduces risks — giving you confidence in every application.

Where to use Weather Barrier

- Chip sealing projects requiring rapid curing with standard Road Science emulsions or polymer-modified emulsions
- High-risk areas needing early trafficking, such as shaded zones
- Challenging conditions like cooler temperatures, high humidity, or night time applications

Benefits

- Enhanced efficiency by accelerating chip sealing operations
- Maximised productivity by extending seal-able hours
- Minimises failure risk in challenging areas like shaded zones
- Greater operational confidence on mobile patching applications
- Lower traffic management costs by allowing sites to reopen quickly

Handling

For safe handling of bituminous materials, please refer to the [Best practice guideline: Safe Handling of bituminous materials used for roading \(BPG01\)](#)

Refer to the Weather Barrier Safety Data Sheet for further handling information.

Weather Barrier	
Normal handling temperature	5 - 35°C
Normal spray temperature	5 - 35°C

Circulation

Settlement may occur in containers over time which can be remedied by gentle stirring / circulation or regular rotation of storage containers. Ensure all containers are well mixed prior to use.

Heating

No heating of Weather Barrier materials is required.

Storage

Weather Barrier	
Storage temperature	5 - 35°C

Ensure product is within its use by date prior to applying.

Application

Weather Barrier can be applied to both standard Road Science emulsions and polymer modified emulsions (PMEs). Apply by a specialty sprayer to the top of the seal as soon as the aggregate is spread, and before rolling. The recommended application rate for Weather Barrier is 4.5% of the application rate of emulsion.

Weather Barrier Application Rate

Emulsion application rate	Weather Barrier application rate
1L/m ²	0.045L/m ²
2L/m ²	0.090L/m ²
3L/m ²	0.135L/m ²

- Application rate tolerance $\pm 25\%$
- Not required on single coats with an application rate of less than 1L/m²
- Where multi-coat seals are being constructed on the same day using less than 1L/m² per layer, Weather Barrier can be applied to just the top seal layer.
- For multi-coat seals where the application rate for each layer is greater than 1L/m², then Weather Barrier should be applied to each layer.
- Emulsion selection should be the standard option for your weather and traffic conditions on site as per the seal design.

Note: The option of using Weather Barrier is available in [Zeus](#), Road Sciences targeted weather insights tool.

Equipment

Sprayer requirements: The sprayer must be able to provide accurate and even application over the surface of the seal.

Note: Over application of Weather Barrier can slow down the overall curing.

Need more information?

At Road Science, we're committed to providing innovative solutions backed by engineering expertise. If you have any questions about this product, need technical guidance, or want to discuss how it fits your specific project needs, our team is here to help. Contact us today for expert advice and tailored support. Contact us via **0800 180 200** or visit our website at roadscience.co.nz to learn more.

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