

Lafrentz Road Marking

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Sample Specification

MMA Skid Resistant Safety Surface for use in Vehicle Traffic Areas

The finished product must provide a highly skid resistant surface with a consistent texture across the application that is bonded to the asphalt or concrete substrate. The material shall be comprised of a MMA (methyl methacrylate) resin pigmented base coat homogenously mixed with bauxite.

Surface Preparation:

The asphalt surface must be clean, free of dust or compacted material. Any oil residue must be removed. Mechanical grinding or sandblasting is suggested for oil removal. The surface should be completely dry. Any surface moisture will act as a bond breaker.

Equipment Preparation:

Inspect and clean all tools. The application tool(s) can be a gauge rake and/or drag box. Ensure they are set to ensure proper application. Typical clearance is 3.0 to 4.0mm.

Color:

Typical colors are close to the listed Pantone numbers. A color sample shall be provided and approved by the owner prior to application. For a complete list of available colours consult the current colour palette.

Color	Pantone
Black	-
Chrome Green	3415
Florescent Green	368
Brick Red	1807
Bright Red	185

Note: Slight variations in color can be expected. Substrate color, lighting, aggregate loading and other environmental conditions can affect color.

Base Coat Physical Properties:

Viscosity:	
Daniel Flow Gauge	Between 14 – 16
Haake VT 02, Spindle 2	Approx. 17,000 mPa'
Density	1.80 – 1.90 kg/l
Shore D Harness	50 – 60
Boiling Point	100 – 101 °C
Flash Point	10 °C (closed cup)
Freezing Point	-48 °C
Specific Gravity	2.0 g/ml
Volatile Organic Compounds	Zero



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Bauxite Physical Properties:

Gradation – 100% angular	1.0mm x 3.0mm
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Mixing Base Coat and Bauxite:

Combine the base coat and bauxite using a poly-drum mixer. The blending ratio of 30kg of base coat to 25kg of bauxite should be maintained. Mix for a minimum of 2 minutes to ensure a homogenous mix is attained.

Catalyst Doping:

Pour the blended base coat/bauxite mixture from the mixer into a pail. The catalyst BPO should be added gradually while mixing with a drill. Refer to the manufacturer’s BPO doping chart for recommended ratio. Typically doping is 0.5% to 2.0%

Material Application:

Ambient and surface temperature should be: 5°C to 30°C

Using the drag box and/or gauge rake apply the material evenly on the asphalt. As soon as the raking is complete a medium pile paint roller should be used to remove any rake marks and provide a consistent texture.

Finished Product:

The surface should be protected until cured. Material cure time should be under 1 hour with vehicle traffic allowed on it at that time.

Testing and Verification:

Each application location should be tested using a British Pendulum Tester to verify the skid resistant properties of surface using ASTM E303-93 test method to the following value.

BPN (British Pendulum Number) ASTM E303-93	>70 BPN
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Warranty:

Material and installation shall be warranted for 12 months. The material should not peel or debond from the asphalt surface. 100% of the installation shall be in place at 12 months. Any missing material shall be replaced using the original application process. Cracking or material loss due to asphalt deterioration are not covered under this warranty.

Repair:

All repairs should follow the standard application process including substrate preparation.

Refresh / Renew:

If an area has aggregate starting to show or the colour needs to be renewed; intact, clean, well bonded material can be recoated. MMA material will chemically soften the material below it and the polymer chains will form providing a monolithic repair. Typical application is to apply a material formulated to be rolled on. Care should be taken to apply enough material to entirely recoat the surface while not flooding the aggregate and losing the skid resistant characteristics of the surface. Typical application is 0.5mm to 0.8mm.