



Rayolite Product Installation Procedure Templine Removable Pavement Marking System

Rayolite Templine is not a conventional permanent waterborne roadmarking paint. The system is designed to be removed with minimal damage to the road surface when it is no longer required.

THE FOLLOWING IMPORTANT DIRECTIONS MUST BE FOLLOWED IN APPLYING AND REMOVING RAYOLITE TEMPLINE

Rayolite Templine is supplied ready to use in 20 litre pails, for application utilising commercial linemarking equipment. Templine provides a pavement marking system with good durability and glass bead retention (where required) that may be easily removed following the short-term traffic scheme change or special event.

Appropriate temporary traffic control must be in place prior to any work being undertaken in an area under traffic. Check appropriate PPE for installation and removal is in use.

Equipment Required

We recommend an airless paint pump of minimum 4 litres per minute capacity (single gun), 30 mesh gun filter element, with a minimum 21 thou (0.53mm) spray nozzle e.g.: 321, 421. Common 100 mesh (white) gun filters used in pedestrian linemarking machines will block. Greater pumping capacity with higher flow nozzles are preferred. Conventional air atomised equipment may also be used although regular stirring and checking material will be hampered in a pressure vessel.



Material requires circulating back to tank (through gun) immediately prior to spraying. Ideally this is via a flow through (recirculating type) gun or remove tip and pump to paint pail.

Gun example.

Paint pail drill mixer.





The removable marking system requires hot water/steam of $>90^{\circ}\text{C}$ to soften material which is macerated by the water flow. 275 bar (4000psi) water pressure through a rotary head has been found ideal for the process. Waterblast lances may also be used. Units with vacuum recovery are preferred.

Refer Roadmarking Industry Association of Australia, Industry Guide 3.1 Pavement Marking Removal Systems Cl. 12.1 – Class A.

Note:

Class B high pressure water blasters are NOT suitable for this system as pavement damage will result.

Application Process

- Step 1.** Ensure suitable Class A steam cleaner/washer is available for removal process prior to applying Templine.
- Step 2.** Check weather is suitable for application with no rain expected for several hours. Ambient and pavement temperature >15°C, relative humidity <50%, with air movement > 10kph. Night work may not be suitable as temperature lowers and humidity increases through night with potential to reach dew point.
- Step 3.** Prepare surface and equipment as per normal linemarking procedures.
- Step 4.** Ensure no residual wash water in machine, do not thin product. **Stir Templine thoroughly for approximately 5 minutes.** Recirculate through machine. Prime gun.
- Step 5.** Immediately prior to spraying recirculate via gun to tank or paint pail without tip. This will prevent agglomeration of elements in the pressure hose that may cause tip blockages. Repeat after stopping for a few minutes.
- Step 6.** Where optioned, apply a full film Templine black basecoat at approximately 500um to 700um wet film thickness (WFT) to line/markings locations. **Stir Templine frequently during application (minimum hourly).**
- Apply Templine basecoat to approx. 150% of the marking area to ensure any deviation in marking placement is well within the marking basecoat area. Base coat may be applied well ahead of marking coat when a traffic switch is time critical.
- Step 7.** Allow Templine basecoat to fully dry prior to marking coat application.
- Step 8.** Prepare for marking coat as per Step 2 & 3.
- Apply Templine marking as per normal pavement marking procedures, **stirring Templine frequently during process (minimum hourly).**
- Where Templine basecoat has been applied, ensure markings are wholly over the basecoat.
- Application rate of Templine marking coat should be relative to substrate texture and grade of glass bead e.g.: Type B bead 350 um to 400 um WFT for optimum 60% embedment of glass beads.
- Step 9.** Protect markings during dry through period to prevent damage and tracking of material. Templine dry-through time is typically 10 minutes at 20°C, 40% RH, with some air movement, until trafficable.

Notes:

1. Templine basecoat is intended to seal substrate voids to prevent ingress of white (colour) marking coats into pores of surface, thereby causing difficulty with removal, and errant residual colour flecks in substrate.
2. Conventional waterborne roadmarking paint may be used over Templine basecoat for fully compliant markings.
3. Templine black basecoat may be used to temporarily mask redundant markings that may be easily re-exposed through Templine removal process when returning to original traffic configuration.

4. For expediency of traffic switches, Templine black basecoat may be applied over temporary markings to allow switch to occur without delay. Black basecoat, together with the temp marking is then removed at first opportunity as per process described with less time pressures.

Spray Equipment Clean-up Process

The Templine material is compatible with the currently used conventional acrylic based waterborne roadmarking paints.

1. If the line marking machine is a pedestrian type and the next colour to be used is the same as Templine, then it is simply a matter of placing the uptake tube into the next pail of Waterborne Roadmarking Paint, and pumping out the TEMPLINE until the new Waterborne Roadmarking Paint is in the lines.
2. If a complete wash out is required ensure all TEMPLINE is removed from the application equipment pumps and lines. Remember to clean filters.
3. Setting up, reverse of the clean-up if paints are the same colour.

Removal Process

The Templine system is intended to provide durable pavement markings that, when no longer required, are removed by the approved method. This results in a cleaned surface rather than a very damaged, trenched surface.

Step 1. Ensure suitable Class A steam cleaner/washer with adequate water supply is ready for removal process.

Step2. Check process preparation for recovery of waste – bunding or vacuum recovery.

Step 3. Operate steam cleaner as per manufacturers procedures and safety instructions. Heat water flow to operating temperature >90°C.

Step 4. Pass washer head over marking at a slow walking pace in 1 – 2 m sections to preheat marking material, immediately followed by a ‘cutting’ pass to remove softened material.

Step 5. Repeat passes until sufficient material has been removed. Continue along markings.

Step 6. Check for any remnant markings. Repeat Step 5 as necessary.

Step 7. Ensure all removed material is recovered for disposal.

Notes:

1. Templine black basecoat is not intended to be fully removed as this will blend to substrate voids in a short time. This is particularly important for highly textured substrates. Full removal may remove more of the substrate fines than intended.
2. Recovered Templine material will not redissolve in water. Solids will settle out or filter allowing for disposal as solid landfill.