

INLAID GROOVING

General Application Specification Supplement

A. DESCRIPTION

This specification describes the equipment and grooving requirements for recessing Epoplex plural component materials with double drop glass bead and GLOMARC® reflective media systems.

B. GROOVE DIMENSIONS

1. **Width.** The groove shall exceed the width of the marking material by 1 inch (2.54 cm).
2. **Depth.**

Pavement Marking System	Groove Depth
GLOMARC®50, GLOMARC®60, GLOMARC®65 and GLOMARC®90	70 mils +/- 10 mils (1.78 cm +/- .25 cm)
LS50, LS60, LS65 and LS90	70 mils +/- 10 mils (1.78 cm +/- .25 cm)

3. **Position.** The groove shall be placed where the edge of the groove is a minimum of 2 inches (5.08 cm) from the edge of concrete joints or asphalt seams along edge or centerlines.

C. GROOVING EQUIPMENT

The grooving equipment shall be equipped with a free-floating, depth controlled head to provide a consistent groove depth over irregular pavement surfaces. The grooving head shall be equipped with diamond saw blades, steel star cutters and/or carbide tipped star cutters. The grinder head configuration shall be as specified by the engineer or specifications.

D. GROOVING METHODS

1. **Wet Saw Blade Operation.** When water is required or used to cool the saw blades, such as during a continuous edge line grooving operation, the groove shall be flushed with high pressure water immediately following the cut to avoid build up and hardening of slurry in the groove. The pavement surface shall be allowed to dry for 24 hours prior to the application of the pavement markings following a wet saw blade operation.
2. **Dry Saw Blade Operation.** If the grooving is done with dry saw blades, the groove shall be flushed with high-pressure air to remove debris and dust generated during the cutting operation.

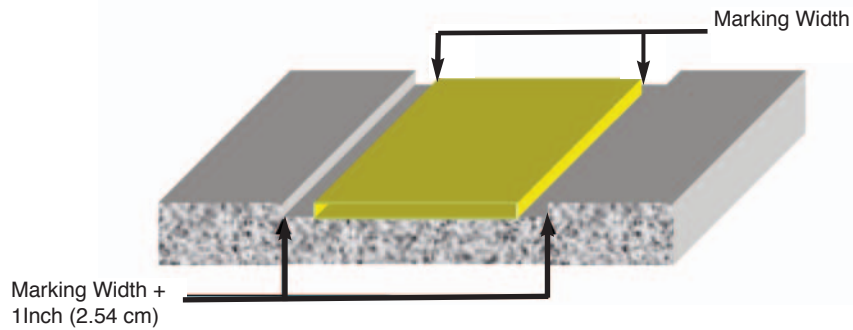
E. APPLICATION OF PAVEMENT MARKINGS

When water has been used to cool the saw blades during the grooving operation, the contractor shall allow the pavement to dry for 24 hours prior to the application of the markings. Immediately prior to the application of the pavement markings the groove shall be cleaned with high-pressure air blast.

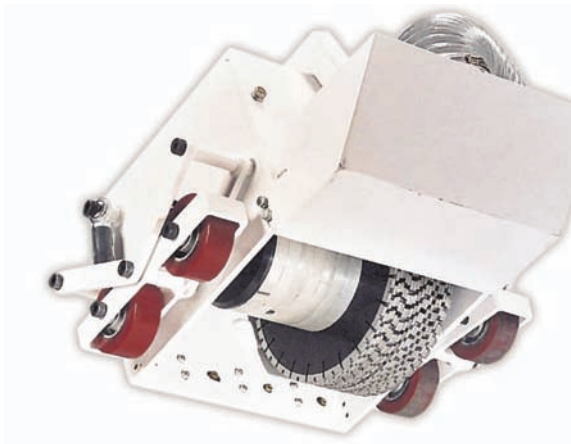
F. STRUCTURAL INTEGRITY OF ASPHALT SURFACES

1. **New.** In general, the grooving application may begin 24 hours after the asphalt overlay. The engineer shall determine if the new asphalt has achieved the necessary strength and hardness to support grooving prior to the start of a grooving operation.
2. **Existing.** The engineer shall determine if the existing asphalt has the necessary strength and hardness to support

EXAMPLE OF PAVEMENT MARKING IN A GROOVE



EXAMPLES OF GROOVING METHODS



Diamond blade saw cutting head consists of several diamond blades each 12 to 18 inches in diameter and 1/8-inch (0.30 cm) to 1/4 inch (1.3 cm) wide carbide or diamond tipped cutting blades with spacers in between. This method generates a fairly smooth surface with a stripe pattern, unless wide spacers are used.

(Photo Courtesy of Dynatech Diamond - www.dynatech-diamond.com)



Grinder heads with full face star cutters can also be used. Full face cutters with carbide tips produce a consistent groove pattern.

(KR16 Photo Courtesy of Kut-Rite Mfg. Co. www.kutritemfg.com)



Groove with high ridges. This is the result of wide spacers used between the blades. Ridges should not exceed 20% groove depth.

(Photo Courtesy of Kut-Rite Mfg. Co. www.kutritemfg.com)



Inconsistencies in the cut. This is the result of using standard and not full face star cutters.

(Photo Courtesy of Kut-Rite Mfg. Co. www.kutritemfg.com)



Consistent groove. Achieved with full face carbide cutters.

(KR16 Photo Courtesy of Kut-Rite Mfg. Co. www.kutritemfg.com)



Consistent groove achieved with Diamond Blade saw

(Photo Courtesy of MRL Equipment Mfg. Co. www.mrl equipment.com)

MIL THICKNESS REFERENCE



Represents 120 mils groove depth.

(KR16 Photo Courtesy of Kut-Rite Mfg. Co. www.kutritemfg.com)

GLOMARC® is registered trademark of Epoplex, division of Stoncor Group, Inc., 1000 East Park Avenue, Maple Shade, NJ 08052

IMPORTANT:

Epoplex believes the information contained here to be true and accurate. Information contained here is for evaluation only. Epoplex makes no warranty, expressed or implied, based on this literature. We further reserve the right to modify and change products or literature at any time.

8/11
Rev. 8/11



1000 East Park Avenue, Maple Shade, NJ 08052 • 856.667.8399 • FAX 856.779.2963 • Toll Free 800.822.6920