# GlasPave® Paving Mat Installation Supplement

## SURFACE PREPARATION

As stated in the GlasPave® Installation Guide, it is recommended that GlasPave® be installed over a new asphalt layer for optimal performance and ease of installation. However, GlasPave® can be placed over a properly prepared existing surface or milled surface.

Localized repairs shall be carried out wherever deficiencies in the pavement exist. This may include crack sealing, patching, or removal and replacement of problem areas.

Generally, a new asphalt leveling layer or skin patch below the GlasPave® can address many of the surface deficiencies associated with aged existing or milled asphalt pavement surfaces.

## FOR SUCCESSFUL INSTALLATION OVER MILLED SURFACES:

- Failed pavement sections shall be removed and replaced to a sufficient depth, restoring structural integrity to the pavement.
- All loose pavement sections shall be removed and patched.
- Mill to a depth sufficient to remove the old overlay, without leaving uneven edges from patches, pop-outs, or loose pavement.
- The vertical variation – ridge to valley – of the milled surface shall possess a surface texture not to exceed 0.25” (6mm).
- Tapered milling into the curb is a common practice. The milled depth is deepest at the curb and shallows out towards the midpoint of the lane. Sufficient material must be removed to ensure a 2” (50mm) overlay can be placed, ensuring sufficient asphalt lift between the wheel paths.
- Any remaining cracks >¼” (6mm) must be filled with suitable material that will remain stable throughout the paving process.
- Milled surfaces are inherently difficult to clean. Therefore, additional effort and proper equipment is required to be effective at removing fine dust and debris. Asphalt tack will “bead” up around dust and interfere with the adhesion of GlasPave®, as well as the bonding of the wearing course. Use a functional vacuum truck (with blowers) to ensure removal of all dust and debris.
- Given the increased surface area associated with milled surfaces, a higher application rate of asphalt tack is required. The rate should be increase 0.20 to 0.22 gal/yd² (0.9-1.0 l/m²) using a calibrated distributor truck that is accurate within +/- 0.01 gal/yd² (0.045 l/m²).
- For improved adhesion of GlasPave® to the milled pavement surface, it is recommended to run a pneumatic tire roller over the GlasPave® (DO NOT USE STEEL DRUM ROLLERS).

# Quality Milling

» Achieving a quality surface starts with a well-maintained milling unit. The cutting teeth should have the same level of wear and cut to a consistent depth.

» The Asphalt Recycling and Reclaiming Association (ARRA) recommends that the forward rate of progress for a conventional milling process [in feet/min] should not exceed 66% of the cutter drum's RPM or < 66 ft./min @ 100 rpm drum rate.

» For GlasPave® and other interlayers, it is recommended to limit the advancement of the milling operation to <50 ft./min. to achieve a resulting texture depth of 0.25" (6mm) trough to the crest and permit a ⅓ overlap in cutting between adjacent teeth.

## IF A SMOOTH SURFACE CANNOT BE ACHIEVED THROUGH MILLING, THEN A LEVELING COURSE SHALL BE REQUIRED.

Examples of acceptable smooth / level milled surfaces

# Deviations in Milling

The following conditions should be corrected as suggested.

**Issue:**
Failed asphalt/exposed aggregate base

**Corrective Action:**
Patch exposed areas with asphalt.

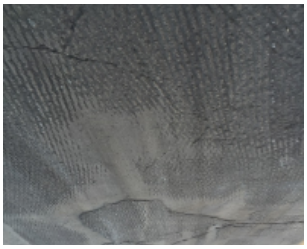

**Issue:**
Network of cracking in binder layer

Corrective Action:
Deeper mill if possible, crack fill and/or leveling course.


**Issue:**
Areas with grade variation due to patches

**Corrective Action:**
Mill to a depth to remove uneven patches of old overlay that remain or add a leveling course.






**Issue:**
Water in cracks expanding the material below the pavement

Corrective Action:
Local base repair. This expansive material will continue to push up if left in place.


Corrective actions in these situations will improve the performance of the GlasPave® reinforced pavements. Failure to address these deficiencies may affect performance to varying degrees and is dependent on the type and severity of the deficiency.