

Checklist for LJS / VRAM Application

Pre-Application

- **Thoroughly clean the existing surface of the application area, especially if milled, from dirt, dust and any debris and moisture.** Do not apply over temporary traffic control tape; ensure that it is removed prior to placement.
- Ensure that any depressions, potholes, wide cracks, etc. have been addressed with prep work through patching or sealing.¹
- The applicator and contractor should **discuss the location and marking** of LJS/VRAM prior to performing on the project.

Application

- **Tack must be thoroughly cured if applied before the LJS/VRAM.** If tack is applied after the LJS/VRAM, it should overlap the LJS/VRAM to ensure full coverage of the surface adjacent to the LJS/VRAM.
- Apply LJS/VRAM between 265F and 320F. If needed, reheat gradually with agitation to prevent localized overheating.
- Check the application rate within the first 1,000 feet of placement, then every 12,000 feet thereafter, or by specification.
- When sampling, it is recommended to use the sampling spigot and **not obtain the sample from the spray bar to minimize contamination.** It is suggested that sampling be done at the time of the first required field rate check and that the applicator **should** retain a sister sample of the material at the same time an agency sample is provided.
- Ensure the application width is within the acceptable parameters and the initial placement of the material does not flow more than 2" from that initial application.
- Public and construction vehicles may cross over the LJS/VRAM band once it has cooled to 130F or less. **Do not permit** public and construction vehicles to stop upon or drive longitudinally directly on top of the LJS/VRAM band.
- As with other asphalt construction requirements, **avoid using diesel in operations that could make contact with the applied LJS/VRAM.** Diesel will soften the layer and possibly result in decreased performance.

Paving and Compaction

- Align the paver screed edge end plate (aka: door, wing, end gate, slide plate) to split the finished application of LJS/VRAM so the new longitudinal joint will meet ½ way across the finished application of material.
- Ensure the paver end plate (aka: door, wing, end gate, slide plate) or grade ski, if used, is raised slightly above the finished LJS/VRAM to not drag on or through the material. **When paving over a fine-graded mix,** raise the end plate by at least ½-inch.
- In hot weather, a light mist of water on the surface of the LJS/VRAM is usually an adequate bond breaker.
- **Agency specifications typically waive density requirements** on the asphalt mixture within one foot on either side of the joint placed over the LJS/VRAM.
- Use the rolling pattern determined for the project, including the joint.
- **Carefully manage rolling patterns** when compacting SMA over LJS/VRAM joints to avoid flushing.
- Do not use pneumatic rollers on the asphalt mixture directly over the LJS/VRAM.
- When rolling the asphalt mixture over the LJS/VRAM, allow for the edge of the drum to overhang a few inches beyond the edge of the mat. Avoid placing the edge of the drum directly over the asphalt mixture on the inside edge of the LJS/VRAM.
- For a fine-graded mix, it is suggested that the breakdown roller(s) compact the mix over the VRAM/LJS close behind the screed for best performance.
- Newly compacted asphalt mixture directly above the LJS/VRAM may feel spongy to walk on for several minutes. This indicates that the LJS/VRAM is hot and migrating into the mix. This area will stiffen when cool.
- **Sanding is recommended if rain or dew is likely.** If sand is applied to the VRAM/LJS due to rain or is left open to traffic when hot surface temperatures are expected, an application of natural or crushed sand or lime, substantially passing a No. 16 screen, may be applied at a rate of 1 +/- ½ lb/SY with a spreading device (i.e.: push drop spreader) or by hand.

Rumble strips / raised pavement markers (RPMs)

- When installing Rumble Strips and/or RPM's and surface temperature is over 120°F prior to cutting, it is highly recommended watering the designated area to cool down the work area. Clean debris out of Rumble Strips as soon as possible with a power broom directly behind the milling machine before millings can bind together.

Warning: In the event of a rain or snow fall, the surface of the uncovered installed product may be slippery when wet.

Should you have any questions please feel free to contact any of the J-Band® representatives listed:



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FHWA Resources: click open in browser at bottom of screen



¹ Report No. FHWA-RD-99-168, *Materials and Procedures for Repair of Potholes in Asphalt-Surfaced Pavements*; Pavement Preservation Checklist Series No. 1, *Crack Seal Applications*.