

OPTAMARK® Installation Instructions

GENERAL REQUIREMENTS

Surface:

- **OPTAMARK®** is compatible with all asphalt surfaces. When applying on non-bituminous pavements (e.g. concrete, bricks and cobblestones) an approved **OPTAMARK®** sealer must be used. NOTE: Old and/or polished asphalt also requires the use of a sealer.
- **OPTAMARK®** can be applied on top of new and old thermoplastic markings. Prior to application on old thermoplastic markings scrape off loose material and remove the oxidized layer to expose new material. Make sure the new material is dry and free from dirt. Do not apply **OPTAMARK®** on top of paint or cold plastic tape.
- The surface must be dry before placing **OPTAMARK®** on the pavement. Moisture can be removed from the application area by using the propane fueled heat gun.
- The surface must be free of dirt, dust, chemicals, deicing agents and oily substances. Remove these by using a broom or grinding.

Temperature:

OPTAMARK® does not require the pavement to be preheated to a specific temperature prior to application.

Safety precautions:

- Protective clothing (leather boots/work shoes, safety goggles and long trousers) and a safety vest should be worn when applying **OPTAMARK®**
- The applicator should, if possible, always have their back up against the wind so that the propane fueled heat gun flame is kept away from the body.
- Do not touch the molten material. Flush the area immediately with plenty of water and get medical attention if you are in contact with the molten material. Do not pull it off your skin. If material gets in your eyes, flush with plenty of water immediately and seek medical assistance.

PRODUCT TRAINING

Product training is available free of charge for all **OPTAMARK®** end users.

INSTALLATION

Application on asphalt:

1. Clean application area thoroughly by removing all sand, dirt, chemicals, deicing agents and oily substances. Use a broom or compressed air to clean the surface.
2. Remove all moisture present (if any) in the surface

with a propane fueled heat gun prior to putting **OPTAMARK®** on the pavement.

3. Place **OPTAMARK®** material on the road surface with the beaded and skid resistant topcoat facing up. Make sure the individual pieces are positioned correctly and there are no gaps in-between the pieces before heating. Edges can be overlapped slightly. Inspect that the layout is correct before heating the material in place. NOTE: If several layers of **OPTAMARK®** are required (e.g. rumble bars) each layer must be heated in place separately.
4. Heat **OPTAMARK®** using an approved propane fueled heat gun. For a successful application and in order to apply sufficient heat, we recommend using a 20 lb propane bottle or bigger. If the propane bottle freezes, change to another propane bottle. Make sure the wind is at your back when you begin heating the material to minimize the heat going over your feet and to allow for more consistent heating of the material. Move the flame slowly but steadily 4 to 8 inches above the material in a sweeping motion so that heat is evenly applied. **OPTAMARK®** must be heated until all the material is liquid (approx. 400 F).
5. Sufficient heat has been applied when the following is evident on all parts of the material:
 - The material is liquid and starts to bubble (like it is boiling).
 - The color of the material has changed to a slightly darker color.
 - The edges of the material have settled/fallen down against the road surface.
 - The individual pieces have fused together into one marking.
6. Applying insufficient heat will result in inadequate bonding and failure. If overheated, superficial scorching of the material can occur by means of brown blotching, but this discoloring will soon disappear once the marking is exposed to traffic and weather. NOTE: Extra care must be taken when installing colored **OPTAMARK®** since the organic pigments are more sensitive to heat. "Slow cook" the material by holding the burner slightly higher and keep moving it consistently. If the material is heated too intensely, the top layer of the material will produce a color change (deep orange if originally yellow) which will normally wear off with traffic and the original color will be exposed. If significantly overheated organic pigments can have an irreversible color change.
7. Overheating of the material will sink some of the top pre-beaded layer of glass beads causing the

marking to be less retroreflective initially. If that occurs, drop on glass beads must be applied immediately after the end of the installation while the **OPTAMARK**[®] is still liquid to ensure desired initial retro reflectivity levels. Note that glass beads are dispersed throughout the material and maintained levels of retro reflectivity will not be affected by significant overheating of the material.

8. Depending on air temperature, **OPTAMARK**[®] will cool down and harden within 5-10 minutes after installation. If needed, the cooling down time can be decreased by spraying cold water or applying drop-on glass beads on the marking.
9. When **OPTAMARK**[®] has cooled down to near ambient temperature, inspect that the material has been applied correctly by trying to lift parts of the material from the surface using a knife or chisel. This should be done both at the edges and by making "V-shaped" cuts in the material. If the material can be lifted without evidence of asphalt on the underside, insufficient heat has been applied. Simply reapply heat until adequate bonding has occurred.

NOTE: Do not leave the job until a sufficient bond has been established. Attempts to reheat at a later date will be unsuccessful due to trapped moisture beneath the **OPTAMARK**[®] material.

Application on non-bituminous surfaces:

1. Follow steps 1 and 2 as stated for Application on asphalt.
2. Apply the recommended sealer onto the entire surface area where the marking is to be installed according to the sealer's installation manual. The more porous the surface, the more sealer is required. NOTE: Read the manual carefully before using the sealer for proper application technique and review the Material Safety Data Sheet for relevant safety measures. Do not speed up the drying process by using the propane fueled heat gun, as the sealer is flammable at this stage.
3. Continue with steps 3 to 9 as stated for Application on asphalt. NOTE: When trying to lift material parts in order to inspect for correct installation, concrete surface parts must be present on the material underside or, alternatively, some of the **OPTAMARK**[®] material must still be sticking to the road surface.

NOTE: Road markings on new concrete surfaces may generate adhesion difficulties even when using the recommended sealer. The drying time of the concrete and of the salts, alkalis and other additives or colored pigments can affect the adhesion of the material, and in the worst-case lead to complete failure of the marking. Before applying **OPTAMARK**[®] on new concrete, the concrete must be at least 45 days old. Generally, we recommend waiting as long as possible before applying on new concrete.



All materials should be disposed of according to federal, state and local requirements.

All Material Safety Data Sheets should be read before using products.

GEVEKO MARKINGS

Geveko Markings Inc. • 1883 New Harvest Road, Gainesville, GA 30507
770-847-9410 • sales@gevekomarkings.us • www.geveko-markings.us