IGGA
International Grooving & Grinding Association
Your Pavement Preservation Resource® since 1972

safety grooving

Grooving Roadways Decreases Accidents and Saves Lives

RAIN, SNOW AND ICE CAUSE A LOSS OF FRICTION between a tire and the pavement. Wet weather accident rates can sharply increase as pavements become worn and polished. Experience has shown that grooving a pavement's surface is a very effective method to increase traction, reduce hydroplaning and minimize spash and spray while providing a more effective braking surface. This easily constructed and economical surface treatment provides the superior traction needed for vehicles to maintain control while driving in wet, dangerous conditions. It channels water from the pavement surface, improves friction and decreases accidents during inclement weather.

» THE PROCESS

Grooving machines with circular diamond-tipped saw blades are used to saw grooves into the pavement surface. These discrete channels can be constructed transversely or longitudinally into both concrete and asphalt surfaces depending upon the need, although research shows that tire treads embed in longitudinal grooves and are then able to resist a vehicle's lateral motion, providing additional stability in both wet and dry conditions. Studies conducted by Caltrans concluded that longitudinal grooving produced an overall average 69% decrease in accident rates for the highways studied, in both wet and dry conditions.

Engineers typically specify grooves 1/8-inch to 3/16-inch deep and approximately 1/10-inch wide, with spacing 3/4-inch center-to-center.

THE ADVANTAGES OF GROOVING

Reduced accidents
Reduced hydroplaning
Reduced splash and spray
Faster braking
Safer driving
Easy to construct
Economical
No adverse effect on pavement fatigue life

Combined with other CPP techniques, the result is a pavement rehabilitation project that is:

SMOOTH · SAFE · FLEXIBLE · COST EFFECTIVE · LONG LASTING · ENVIRON-MENTALLY FRIENDLY · TRAFFIC FRIENDLY · EASY TO BID

For more information on safety grooving, **click here**. For complete information on CPP, visit **igga.net**.

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