

# Understanding Asphalt Pavement Composition and Traffic Marking Systems

**Asphalt Pavement Composition:** *Asphalt pavement is a carefully formulated mixture comprising thick, heavy residues from distilled petroleum or coal tar hydrocarbons, combined with additional aggregate. The thermoplastic surface applied in its soft, heated state, ensuring proper adhesion and durability.*

**Latex Zone/Traffic Marking Systems:** *MPI Systems EXT 2.1A LATEX ZONE / TRAFFIC MARKING and EXT 2.1B LATEX ZONE / TRAFFIC MARKING are used on asphalt walking and parking surfaces for marking or graphics such as taxi and handicap areas. Also, for coating asphalt or concrete, traffic lanes, streets, highways, parking spaces, airports and shopping centers.*

*Both systems are available in the standard yellow and white, but some manufacturers also offer blue, green and red for various types of graphics, and black for 'hiding' old lines.*

**Traffic Marking Paint Categories** *There are two traffic marking paint categories in the MPI Approved Products List, these are [MPI #32](#), a solvent-based Alkyd paint category available in standard yellow and white for roads or parking areas, and [MPI #97](#), a water-based, latex-type pigmented coating suitable for interior or exterior zone and parking line marking. Both paints can be used with or without reflecting glass beads.*

*These coatings are resistant to moderate amounts of abrasion, but the alkyd shows better early water resistance. Latex has longer bead retention, less cracking, and equal wear to alkyds.*

**Application Recommendations:** *For the most part, these coatings are applied by spray machines designed to apply uniform stripes of adjustable width, or by spraying over a stencil. Small areas such as curbs can be accomplished using a brush. The minimum recommended dry film thickness for these paints is 7 mils.*

*Latex and alkyd zone/traffic marking paints are specifically formulated for asphalt surfaces, ensuring adequate performance. It is crucial to exercise caution to allow sufficient drying time for the asphalt pavement.*

**Surface Preparation:** *For successful application, surfaces must be dry and free from dust, dirt, and loose contaminants. Most asphalt pavements exhibit sufficient surface roughness, eliminating the need for abrasive preparation techniques.*

**Solvent Considerations:** *Slow-evaporating hydrocarbon solvents, such as mineral spirits, require careful consideration. These solvents can solubilize and dissolve the asphalt binder, leading to the bleeding of stains on light-colored alkyd paint surfaces.*

**Manufacturer's Instructions:** *Understanding that coatings and application procedures may vary among manufacturers, strict adherence to the manufacturer's instructions and any accompanying guarantees is imperative. This ensures the optimal performance and longevity of the applied traffic markings.*



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## Professional Tip

*Most concrete and masonry surfaces are somewhat alkaline; therefore, it is always good practice to test for alkalinity prior to the application of any finishing system.*