

TACK COAT

Thin Liquid Asphalt Layer

A tack coat, or bond coat, is a light application of an asphalt emulsion designed to ensure a strong bond between asphalt pavement layers to prevent slippage or de-lamination. This acts as additional glue for the overall structure and supports compaction.



THE PROCESS

Tack coat is a thin coating of bituminous liquid asphalt emulsion sprayed on an existing road surface before a layer of hot mix asphalt (HMA) is placed. The existing base is generally prepared by brooming to ensure the base surface is clean and dry. An asphalt distributor sprays the bond coat at a specified, uniform rate.

*BENEFITS

- Prevents debonding and road failure, saving up to 100% of the cost of a top lift
- Many emulsions used for bond coat have little or no petroleum solvents or hydrocarbon emissions
- Can double the life-span of a standard HMA road
- Adds stability

*ISSUES ADDRESSED

- Debonding
- Slipping
- Shoving & Rutting
- Delamination

MATERIALS USED

- **Tack Coat (Emulsion):** Liquid asphalt emulsion, which is a combination of paving grade asphalt binder blended with water and an emulsifying agent. When the emulsion breaks and cures, water leaves the system and the residual asphalt binds pavement layers together
- **Non-Tracking Tack Coat:** Liquid asphalt emulsion designed for a quicker cure time allowing for faster return to traffic
- **Tack Coat (Hot Applied):** Neat or polymer-modified liquid asphalt, which does not include water and therefore does not need to break and cure prior to hot mix paving. It must be heated to over 300 degrees for application

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