

What is Hot Mix Asphalt?

Hot Mix Asphalt (HMA) is a mixture of mostly aggregate with a substance called asphalt cement. This contains asphalt and different glues added to bind together.



Figure 2: Hot mix asphalt: ("Warm Mix Asphalt")

What does Overlay mean?

A overlay is a layer of pavement mix used to improve a worn out road ("Asphalt Overlay").

Further Information

For more information on Hot Mix Overlay process :

- Visit the LA DOTD web site at <http://www.dotd.state.la.us/>
- Email LA DOTD at dotdpi@la.gov
- Visit the Federal Highway Administration at <http://www.fhwa.dot.gov/>



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Work Cited

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Figure 1



Figure 2

Figure 3

Figure 1:("Gallery Panel"), Figure 2: ("Gallery Panel"), Figure 3:("Processing Reclaimed Asphalt.")

HOT MIX ASPHALT OVERLAY

Louisiana's on the
move...DOTD builds the
way.



How does this help our life?

When roads have become worn out and unsafe for the public to travel on there is need to fix the situation. In many cases the LA DOTD uses the method of Hot Mix Asphalt Overlay. HMA overlay is at this time the cheapest method of surface treatment and allows to make the worn out road:

- Structurally stable
- A smoother road
- Increases the longevity
- Ensures the public's safety

("Asphalt Overlay").



Figure 3: Old worn out road surface:
(Road Science)

What is the Hot Mix Asphalt Overlay process?

1. The existing pavement is removed using a milling machine. This material is either hauled to the plant to recycle or to another site.



Figure 4: Road being milled:(My construction Photos.)

2. Cracks are then filled in (patched) with a substance to enhance the base surface.
3. The milled surface is cleaned of all debris using a mechanical sweeper.
4. A tack coat is then sprayed over the surface to act as a glue between the old surface and the new hot mix asphalt.

5. A smooth layer, usually a thickness of 1.5 in , of hot mix asphalt is laid. The truck carrying the HMA is either backed into the paver and dumps the material into the hopper which transfers the mix through the paver ("Asphalt Industry Update and Overview Straight Answers.")
6. The hot mix asphalt is then compacted using multiple rollers.

Specifications

- The mix may not be laid on any wet surface.
- The temperature can not be below 50 degrees F when being laid.
- The mixture can not cool below 25 degree F after it leaves the plant to the paver.
- Once in the paver, the temperature can not fall below 250 degree F.

(LA DOTD)