



Boral Asphalt
in your Community



Asphalt

IN YOUR COMMUNITY

The difference between asphalt and bitumen

Although often used as names for the same thing, asphalt and bitumen are in fact entirely separate materials.

Asphalt is the paving surface commonly seen on the roads people use every day. Bitumen is a black or dark brown sticky by-product of processing crude oil for petrol. The link between the two is that to make asphalt, first you need bitumen as an ingredient.

Asphalt is made by mixing bitumen with rock aggregates, sand and 'fillers' (such as lime) at around 160 degrees Celsius. The heated asphalt is then laid on a road base and cools to form road pavement. Asphalt pavement can be profiled, reheated with additional bitumen and

aggregates, and recycled as fresh pavement. Use of recycled asphalt product (RAP) is now common place and reduces the need for additional raw resources and energy.

Sometimes asphalt is referred to as 'tar', but this is not correct. Early asphalts (pre-1980s) were often made with tar derived from coal rather than bitumen, hence the name.

Modern bitumen asphalts are much safer to use from a worker health perspective, and old coal-tar based asphalt pavements are specifically excluded from today's modern asphalt processes and asphalt recycling processes.

What happens at a Boral asphalt plant?

Quarry aggregates (stone, sand) are dried and heated in a rotating drum, then mixed with fillers (such as lime) and coated with bitumen in a mill.



The drying of the aggregates generates steam which can be seen being emitted from the stack of the plant. This may sometimes appear dark if the sun is sitting behind the stack.

The hot mix asphalt (HMA) produced at the plant is then taken by truck immediately to the paving site, or may be put into silos for short-term storage.

Why do we need an asphalt plant near our community?

Asphalt is usually mixed at temperatures between 150 and 180 degrees Celsius and must be placed, or laid, while hot. If it gets too cool it sets and is no longer useful for paving. Accordingly, asphalt facilities must be located within a reasonable distance of the paving site.

This is why you will often see a mobile asphalt plant at major road project sites where large amounts of asphalt are needed.







What happens






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