

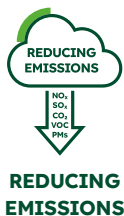
### Heidelberg Materials' range of CleanAir® products help to minimise the impact of asphalt production and laying on local air quality.

We have completed successful CleanAir trials using Shell Bitumen FreshAir, a specialist binder. This has shown to reduce specific gases and particulate matter from asphalt mixes by an average of 40% compared to conventional bitumen.

The technology can be used in all Heidelberg Materials asphalt products and does not adversely affect the properties of the bitumen or asphalt. It acts directly with some of the chemical compounds that affect air quality, as well as odour-releasing molecules. This helps to reduce release of specific gases and particulates (NO<sub>x</sub>, SO<sub>x</sub>, CO, VOC and PMs) into the air during production and paving.

CleanAir is particularly beneficial for ultra-low emission zones (ULEZ), sensitive areas and sites with poor air quality. Its use improves air quality during production and the road building phase – particularly in urban areas and tunnels, where ventilation is an issue.

Every kilometre switched to CleanAir is estimated to have a similar effect on particulate matter (PM10) as planting 16 trees and a reduction of nitrogen dioxide (NO<sub>2</sub>) emissions as removing 40 cars from the road.



### Benefits

- 40% reduction of particulate matter equivalent to planting 16 trees per lane km laid
- Reduced impact on air quality with substantial impact on NO<sub>x</sub>, SO<sub>x</sub>, CO, VOC and PMs
- Reduction of NO<sub>2</sub> equivalent to removal of 40 cars per lane km laid
- Active odour neutralisation of 95%-99%
- Perfect solution for ULEZ, tunnels and sensitive areas
- Can be used in Heidelberg Materials full asphalt range
- Suitable for all asphalt applications
- 100% recyclable

### Also available with the following options: era®/CarbonLock®/AgeLast®/Recycleplast®/RAP

Please see asphalt product matrix for further information or contact technical:

northasphaltsales@uk.heidelbergmaterials.com  
southwestasphaltsales@uk.heidelbergmaterials.com  
southwalesasphaltsales@uk.heidelbergmaterials.com  
southeastasphaltsales@uk.heidelbergmaterials.com

