

Special installation instructions

Due to the high processing temperature of mastic asphalt, the following points must be observed:

01. The calculated heating circuit lengths from the MULTIBETON design must be strictly observed.
02. A maximum of one heating circuit per connection may be connected to the heating manifold. Y-pieces must not be used.
03. If the MB Euro System pipe (MB-ER17) is damaged during installation or mechanical damage occurs due to external impact, the affected heating circuit must be re-installed before the mastic asphalt is laid.
04. After the heating circuits have been laid, the construction site must be closed to third parties until the mastic asphalt has been installed. To avoid damage, no work may be carried out by e.g. contactors, electricians, drywall builders, etc. The installed system may no longer be entered.
05. After the mastic asphalt has cooled down, all heating circuits must be checked for leak tightness in accordance with the applicable standard.
06. During the placement of the asphalt, the MB Euro System pipes (MB-ER17) must be constantly flushed with fresh cold water below 20 °C. This requires an upstream pressure of 4 bar at the manifold inlet or a flow pressure of approx. 2 bar; if necessary, the pressure reducing valve and flushing filter must be removed. If the house connection pressure is less than 6 bar, the cooling water is provided by the MB-KWS (cooling water station for MGA-40 & MWA) or a standpipe.
07. Only suitable pressure hoses with secured hose clamps should be used.
08. The laying temperature of the mastic asphalt must never exceed 230 °C when it is applied.
09. Only MB Euro System pipes (MB-ER17) and MULTIBETON manifolds are used.
10. All valve inserts, flow indicators or constant flow regulators must be replaced with end plugs before the mastic asphalt is placed.
11. The supply line of the manifold is designed with min. 1" without any taper! The manifold outlet must also be 1", without any resistances, so that a free flow or outflow is possible. A cooling water circuit is not permitted. The paths of the inlet and outlet hoses must be kept as short as possible and, if necessary, protected by bridges.
12. A maximum of two manifolds may be open for flushing at the same time.
13. After completion of the asphalt paving, the heating circuits must be flushed with cold water for at least 90 minutes.
14. After the flushing process, it is necessary to ensure that the drains of the manifolds or the ball valves remain open so that any water that is heated later can still expand.
15. It must be ensured that all heating circuits of the laying section as well as the adjacent heating circuits, with or without cooled asphalt, are permanently flushed with fresh cold water during the entire laying and cooling phases of the asphalt.

Further recommendations & tips

01. If the mastic asphalt is laid in one layer, shading/unevenness of the heating circuits will become visible.
02. For sanded mastic asphalt, it is recommended to lay it in two layers, as otherwise a colour difference in the area of the system pipes is to be expected.
03. The minimum layer thickness when applying the mastic asphalt is 2.5 times the grain size (8 mm grain = 2 cm mastic asphalt).
04. The maximum layer thickness when applying the mastic asphalt is 5 times the grain size (8 mm grain = 4 cm mastic asphalt).
05. The weight is approx. 25 kg/m² per 1 cm construction height.
06. If a linoleum floor or other vapour-impermeable covering is to be installed, the mastic asphalt must first be provided with a suitable levelling compound (usually 5 mm thick) as levelling and moisture absorption.
07. In the case of two-layer insulation, the top insulation layer (approved for mastic asphalt) should have the same thickness as the mastic asphalt. The temperature on the underside of the insulation board must not exceed 150 °C for 20 minutes. The bottom insulation layer should also be heat-resistant.
08. The pipe coverage must be at least 15 mm.
09. The compressibility of the insulation layers must not exceed 3 mm.
10. Windows, doors and building services installations must be protected from heat during the laying and cooling phase of the asphalt.

