Patching & reinstatement techniques

Mastic asphalt paving grade is an ideal material for the reinstatement of all high quality wearing surfaces.

As mastic asphalt is available in both hot charge and block format, (gritless blocks are remelted and the specified quantity of coarse aggregate added on site) reinstatement can be completed in any quantity and at any time in a mastic asphalt grade which matches the existing wearing course.

Red Routes and Proprietorial Materials
Red asphalt for the patching of red routes is readily available as are polymer grades, acid resisting and other colours. Precoated chippings to match the existing surfacing can be supplied.

Reinstatement around street ironwork
Since mastic asphalt requires no compaction, it is the ideal material for reinstatement around ironwork.

150mm width is the minimum reinstatement width required and because no compaction equipment is needed, damage to the ironwork bedding mortar is eliminated.The recommended grade is BS EN 13108-6 Type T50 Grade S 40% 6 or 10mm aggregate laid in lifts not exceeding 50mm with 14 or 20mm precoated chippings applied.

Removal of mastic asphalt: It should be appreciated that mastic asphalt paving, like all other trafficked surfaces will require maintenance. All repair work to mastic asphalt must be completed by a specialist mastic asphalt contractor. When it is necessary to remove an area of mastic asphalt the perimeter of the patch or reinstatement should first be cut along the pre-marked lines, with a diamond saw disc cutter prior to the removal of the defective area by jackhammer. Under no circumstances should a hammer and cold chisel be used as this may cause uncontrolled cracking to adjacent areas of mastic asphalt.

Defective material should be carefully removed and all exposed vertical faces should be coated with a suitable bituminous jointing compound and the horizontal faces primed with a tack coat to BS434 (bitumen emulsion grade K1-40). When jointing new work to old the principle of the lapped joint should be observed. In multi-layer reinstatements the existing perimeter of the mastic asphalt should be softened to permit removal of the material to the depth of the original coarse thickness for a width not exceeding 75mm. New mastic asphalt should then be applied in the traditionally approved method.

Traffic control

Newly laid sections should not be opened to traffic until the mastic asphalt has cooled to the prevailing atmospheric temperature.

Skid resistance

Unless otherwise specified by the client, the asphalt for footways and lightly trafficked roads should be finished in one of the two following ways:

a) A sanded finish should be obtained by applying sand to the mastic asphalt while it is still plastic and rubbing it well in by means of wooden floats.

b) An indented finish should be obtained by rolling with an indenting or crimping roller while the mastic asphalt is still plastic enough after sand rubbing to take the impression of the roller.

When surface texture depth and higher skid resistance is required on roads and bridges, then coated chippings of 14mm or 20mm nominal size with a flakiness index not exceeding 25 should be considered.The client may wish to specify the polished stone or aggregate abrasion values of the precoated chippings specified.

Coated chippings may also be specified for highly stressed areas where a heavy rate of spread, but not deep texture is desired e.g. to provide low speed skid resistance.