

**DRESSED STONE / COBBLE STONE PAVING**

**(SURFACE OPTION No. S 11)**



**INTRODUCTION**

Dressed or Cobble Stone Paving is one of a number of road surface improvement or paving options that use **natural stone** and are suitable for construction using **labour** and **simple equipment**. Other options are Water Bound Macadam (WBM), Dry Bound Macadam, Hand Packed Stone, Telford Paving, Irregular Cobble Stone, Stone Setts or Pavé and Stone Chippings. None of these options require the use of expensive bitumen or cement binders, or high-cost equipment. Therefore a high proportion of the costs may be spent in, and benefit, the local community. Dressed Stone Paving is suitable for use as a surfacing in appropriate circumstances.

**DESCRIPTION**

Dressed or Cobble Stone Paving has been used for centuries as a strong, durable road surface. The technique is similar to Stone Setts or Pavé, however the individual stones are larger, normally of size 100 – 300mm. They are cut from suitable hard rock and ‘dressed’ manually to a cubic shape with a smooth, flat finish **on at least one** face using hammers and chisels. The dressed stones are laid on a bedding sand layer (20 – 70mm) and tapped into final position with a hammer. Sand is brushed into the joints between the stones. Covering with loose sand and compacting with a heavy roller can improve durability. An edge restraint or kerb constructed (for example) of large or mortared stones is required for durability. Sand-cement mortar joints and bedding can be used to improve durability and prevent water penetrating to the foundation layers and weakening them. Dressed Stone Paving is normally laid on a sub base layer over the soil foundation.

**ADVANTAGES**

- Proven performance in all climates.
- Suitable for light to heavy traffic.
- Does not require heavy compaction equipment or any other expensive equipment to construct or maintain.
- It is suitable for construction by small contractors or communities themselves, or in remote areas with access problems for crushing equipment or heavy plant.
- Erosion resistant, durable, not damaged by diesel/lubricant spillage.
- Can be constructed at any gradient.
- Minimal maintenance required, easily repairable.
- Surface easy to clean, suitable also for urban use.
- High residual value; the materials can be recycled into other types of paving, or be overlaid with another surface.

**DISADVANTAGES**

- Requires hard stone to be available locally.
- Stone must be suitable for dressing by hand into a cubic shape.
- Requires skill in laying to achieve a smooth finished surface.
- Surface is porous (unless mortar jointed), so foundations should not be liable to severe weakening when wet.
- Smooth to high surface roughness, depending on skill of dressing/laying. Rough surface can be uncomfortable for traffic, especially bicycles, motorcycles or carts.
- Stones that ‘polish’ by traffic, or are slippery when wet, must not be used.

*To Be Completed*