



## Data Sheet for Block Paving

### **Planning your new driveway**

On October 1<sup>st</sup> 2008 Planning law changed regarding the permitted development rights that allow householders to pave their front garden for hard standing without planning permission.

In essence this was to reduce the flow of uncontrolled runoff of rainwater from front gardens onto roads, because this can contribute to flooding and pollution of watercourses.

Full details are available by logging on to the following website: - [www.communities.gov.uk/documents/planningandbuilding/pdf/pavingfrontgardens.pdf](http://www.communities.gov.uk/documents/planningandbuilding/pdf/pavingfrontgardens.pdf)

Basically planning permission is required if you are planning to change and existing or put down a new hard standing area between the principal elevation (i.e. the front of your house) and the road. If your driveway is to the side of your house then you do not need to seek planning permission.

Following discussions with the local planning office we have been told that providing new or replacement drives, (irrespective of their position in relation to the front of the house and the road), are designed in order to allow water runoff to flow into existing flower beds, gravel traps, soak-away or basically any where other than the main road then they will have no need for plans to be submitted. They have told us that even if we do submit plans they will simply come back and ask us to design the driveway in such a way as described above, so in their words, providing it is designed correctly in the first place planning is not required.

## **Remove your existing driveway**

The first stage is to remove your existing driveway; this could be concrete, tarmac or concrete flags. The use of a mini digger makes this easier and is normally completed within one day with all the debris will be taken away.

The minimum depth that we will remove from the top of your existing driveway is 200mm (8"), this allows for 100mm (4") of hardcore, 50mm (2") of sand and 50mm (2") for your block paving.



**Note:** 200mm overall is the minimum depth of ground what needs removing, if the ground is soft under your driveway we will need to remove more earth or clay and replace with additional hardcore which needs to be compacted in layers of no more than 75mm - 100mm at a time.

After excavating to the required depth the total area of your driveway will be covered with a protective layer which helps prevent the intermixing of the sub soil or clay and the hardcore yet still permits water to flow freely.



## Building the sub base

Once the protective layer is down we will use MOT type 1 hard core to make up a firm sub base for your driveway or patio.

The hard core is laid across the total area of your new driveway to a minimum depth of 100mm (4 inches). Once in place it needs to be compacted to give a stable sub base for your new block paving, this can be achieved with either a vibrating roller or a vibrating plate.



On larger areas or where heavy vehicular access is needed we always use the vibrating roller to ensure the sub base is very well compacted.

For smaller areas, or if we are unable to gain access with a large roller a vibrating plate will be used to compact the hardcore. The compacting of the hardcore is completed when we are satisfied that the sub base of your new drive is firm and has no soft spots.

If any area is still soft it will need to be dug out and removed and replaced with more hardcore which we will then compact until we are satisfied it will be a solid, firm base for the laying course.

## Preparing the edge restraints

Any area of block paving must be surrounded by a firm edge restraint to prevent the blocks and the sand on which they are laid from creeping, this can either be the house walls, fence base panel or new edgings and kerbs.



Using a tight string line to keep the front edge of the edging block in a straight line, the blocks are laid on a semi dry mix of 3 parts grit sand to 1 part cement and haunched front and back to hold in place.



We offer a wide range of kerbs and edgings that can be used to create attractive features to your garden.

## Preparing the laying course

50mm (2 inches) of Zone 2 grit sand is laid to the entire area approx. 20mm higher than the finished height to allow for compacting. It is important to use course grit sand rather than fine grain sand.

We will not use standard building sand as it is too soft plus when it gets wet it turns into a slurry and over a period of time the sand laying coarse may start to wash away underneath the block paved driveway, the driveway will start to lose its flat appearance and start to hold water in the low area.



Once entire area has been covered with sand it needs to be compacted, we will either use a vibrating plate or a vibrating roller. We will continue this process until the entire surface has been compacted down to the sufficient depth, a minimum of 50mm (2 inches).



We will use a block as a guide to ensure that we have the correct level and will push it back and forwards and down into the sand until it is 5mm higher than the finished height, this allows for the final compacting once all the block paving has been laid.

## Laying the blocks

To get a perfectly flat bed for your pavers to lay on we use screeding rails, these enable us to get the sand to the correct finished height and also to enable us to build in the correct fall towards the designed drainage system.



Once the screeding rails are in place we begin to screed the sand to the correct height prior to laying your blocks. When the screeding is finished we remove the steel screeding rails and fill this gap with grit sand using a steel trowel to give a smooth flat finish.

Next we lay the block paving, the full blocks are laid first to a straight line either using a string line or an aluminum straight edge, we continue until the total area of your drive is completed.

Once we have completed laying all the full blocks we go back to fill in any gaps with cut blocks.



## Finished off the blocked area

When all the cut blocks are in place we will brush the whole area to remove any broken pieces of block or dust to ensure they don't get down the joints between the block paving.

We can then brush kiln dried sand (silver sand) over the entire area making sure all the joints are full to the top prior to giving them a final compacting with the plate vibrator.



We will leave surplus sand on top of the block paving driveway so when the vibrating plate passes over it will spread it about filling any joint which may require more sand.

The vibrating plate will then be run over the total area 2/3 times to ensure that the blocks are fully bedded into place and any surface sand is then removed.

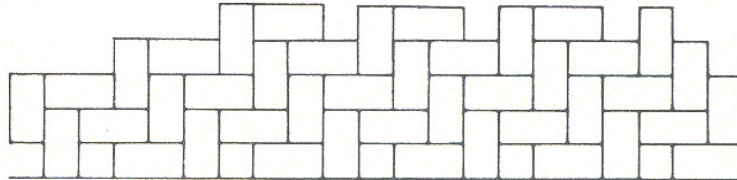


The block paved area is now ready for use!

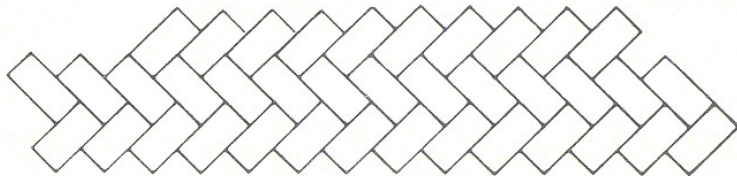


**LAYING PATTERNS**

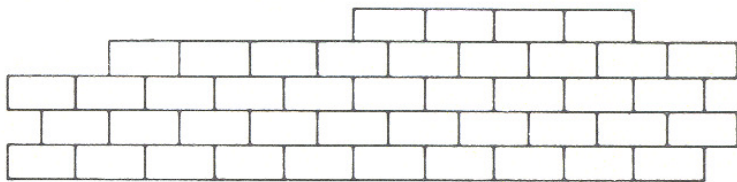
90° herringbone.



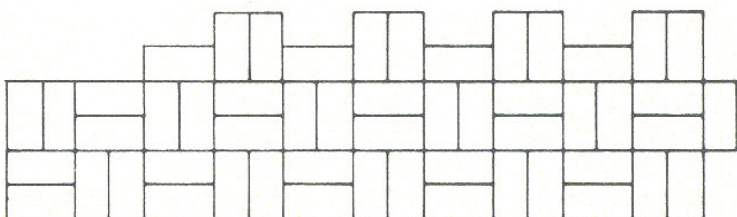
45° herringbone.



Stretcher bond.

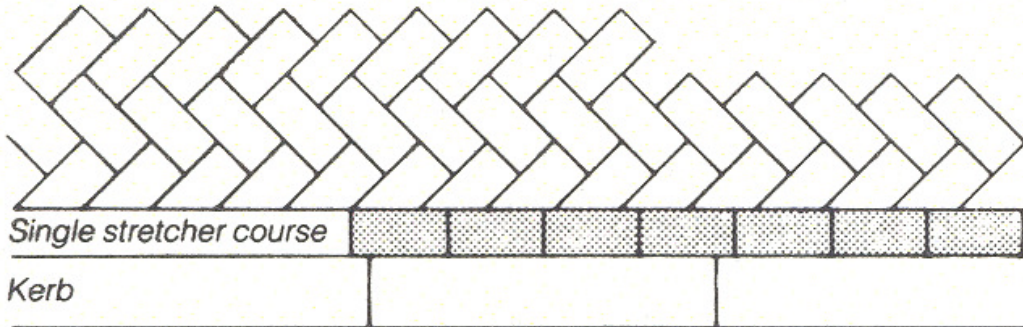


Basket weave.

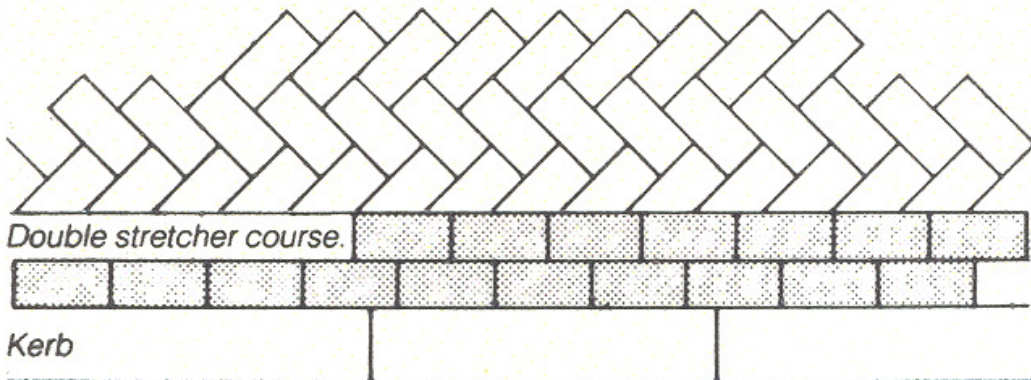


## EDGE DETAILS

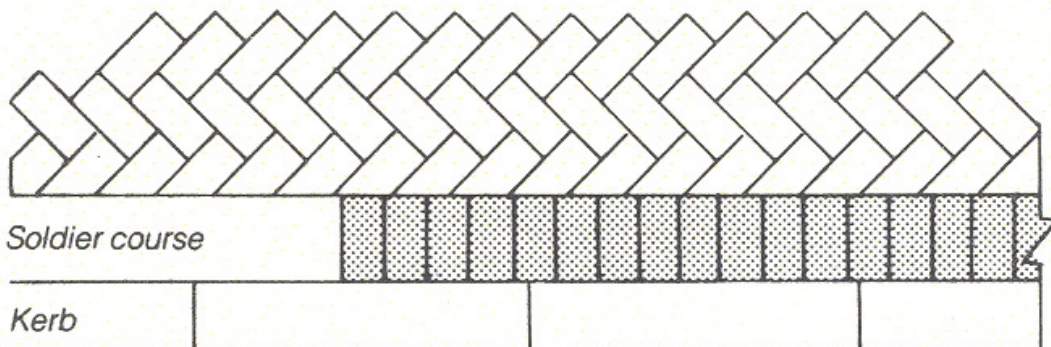
**Single stretcher course.**



**Double stretcher course.**

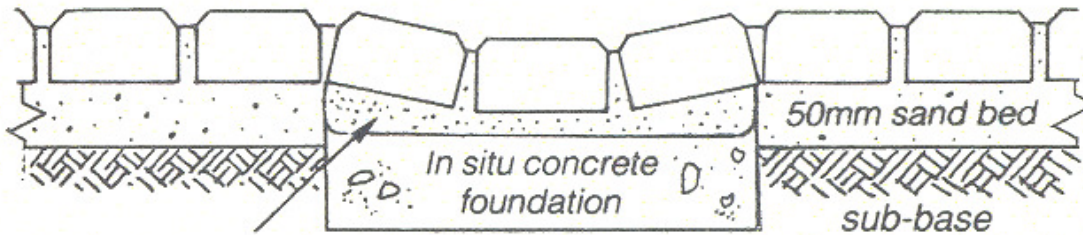


**Soldier course.**



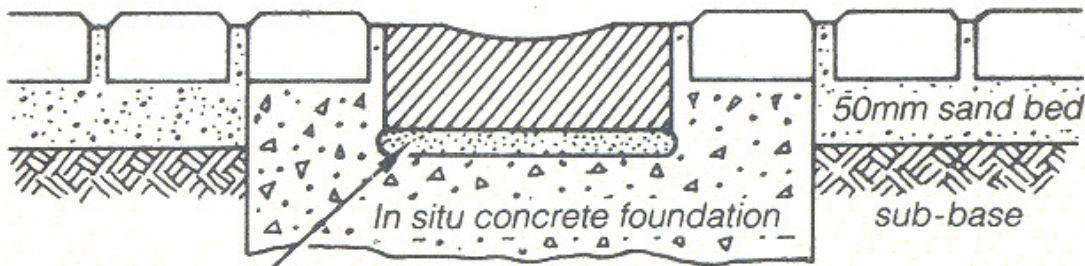
## DRAINAGE CHANNELS

Laying **BLOCK PAVING**  
to form a channel.



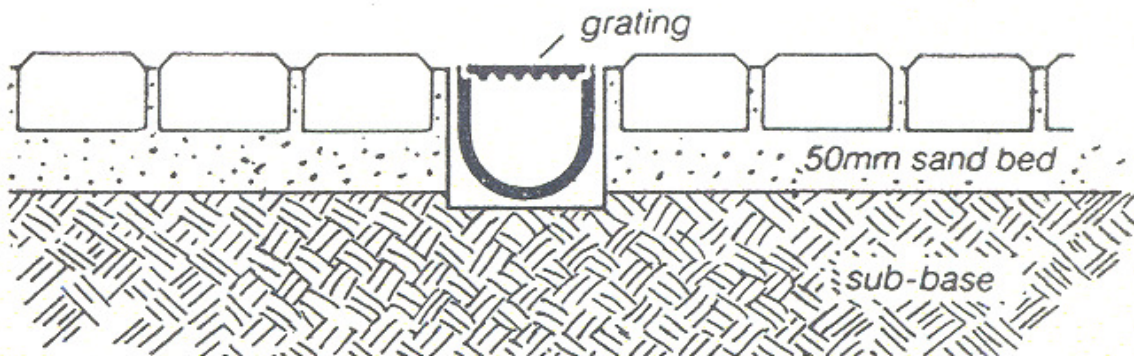
1:3 cement & sand mortar bed

### DISHED CHANNEL



1:3 cement & sand mortar bed

**G.R.C. drainage channel with  
concrete surround.**



In all cases, where the block paving abuts the channel the surface of the paving should be kept 5mm above the edge of the channel to allow for any future settlement.

## Block pavement construction with a road-base.

