

Pervious Paving DTLR response

Building Regulations 2000, Approved Document H

Section 3.25

This section states that infiltration drainage should not be built within 5m of a building or road or in areas of unstable land.

This statement could effectively prohibit the use of pervious pavement systems unless they are sealed and used as storage devices. It will also seriously limit the use of conventional soakaways in developments as the majority of the land take in a new development is either building or road.

No. As pervious paving permits dispersed absorption of rainfall it should not create any problems with concentrated outflow of water gathered over an area but discharged at a single point as in the case of soakaways. If the paving is combined with a storage system the outlet must be at a sufficient distance to ensure that discharged water does not impair the stability of any building. 5 metre is given as a guideline if foundation details and geotechnical data are available to show that a shorter distance is safe then it can be used.

Clarification is required on:

- Definition of road – does this mean main roads or any road including small estate roads and culs-de-sacs?
- ***For Building Regulations purposes we can only comment on roads and paths in and around the building which are dedicated to that building. However, it would be misleading to say nothing about highways as they could be vulnerable to subsoil erosion. Perhaps the County Surveyors' Society has a view on this***
- The implications of this for car parks and other hardstanding areas. In the minds of many designers the statement will cast doubt on the use of infiltration drainage below any trafficked area.
- ***There should not be a problem with hardstandings that use permeable systems. The absorption rate into the ground should not be much more than it would be if it were covered by vegetation. This is another case of diffuse systems not being problem. Difficulties only arise where flows are concentrated to a single point.***
- Why has the statement been included? – the risk of instability caused by infiltration drainage is much more significant to buildings than to roads. In addition the risk of instability in unsuitable ground is much smaller from a diffuse system such as a pervious pavement, than from a point source such as a soakaway.
- ***I agree concentrated flow is more damaging to buildings than roads but some highway authorities are concerned about SUDS devices particularly soakaways close to roads. Because of this we included roads as well as buildings.***

- Providing the designer takes account of ground conditions below the pervious pavement there is no reason to apply a blanket prohibition such as this to the use of infiltration below roads with pervious surfaces.
- ***As indicated above there is no intention to have a blanket prohibition of pervious systems. If designers use geotechnical and hydrological data the systems should be acceptable in most areas.***

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