

## BRITISH STANDARD BS 8102 (2009)

**Table 1: Use of different protection types based on water table classification**

Risk associated with water table	Water table classification (see note)	Waterproofing protection			
		Type A	Type B		Type C
			Piled wall	Reinforced concrete wall to BS EN 1992	
Low	Low	Acceptable	Acceptable	Acceptable	Acceptable
	Variable	Acceptable if the "variable" classification is due to surface water. The manufacturer's advice should be sought.	Acceptable where: a) the piled wall is directly accessible for repair and maintenance from inside the structure; or	Acceptable	Acceptable
	High	Acceptable where: a) an appropriate cementitious multi-coat render or cementitious coatings are used; b) the wall is of concrete to BS EN 1992.	b) the piled wall is combined with a fully bonded waterproofing barrier; or c) the piled wall is faced internally with a concrete wall to BS EN 1992.	Acceptable	Acceptable
<b>Measures to reduce risk</b>		<ul style="list-style-type: none"> <li>• Use combined protection (see 6.2.2).</li> <li>• Incorporate appropriately designed sub-surface drainage and ensure that this is maintained (see 6.4).</li> <li>• Use a fully bonded waterproofing barrier (see figure 6).</li> <li>• Lower the permeability of the main structural wall.</li> <li>• Use concrete with a waterproofing admixture, e.g. to BS EN 934 (see 9.2.1.5).</li> <li>• Ensure that discharge systems, e.g. pumps, are maintained so that the system remains effective (see 10.3.1).</li> </ul>			

Note: The water table classifications are defined as follows (see also 5.1.3).

- Low – where the water table or perched water table is assessed to be permanently below the underside of the base slab. This only applied to free-draining strata.
- Variable – where the water table fluctuates.
- High – where the water table or perched water table is assessed to be permanently above the underside of the base slab.

Ground permeability might affect risk under a low or variable water table (see 5.1).