

**Changes to BS 8102:2009 BS 8102:2022**

Section	Overview of Section	Aims of the update	What is applicable
1	Scope	Additional design clarity	<p>Clarification within the scope of BS 8102:2022 has been expanded to include ground gas contamination along with flooding.</p> <p>Specifically, consideration to end uses/users.</p> <p>Recognition, for example in civil engineering or energy sector works, the guidance on acceptable levels of water ingress can be contrasting from those given in the standard.</p>
2	Normative References	Updated to reflected newer approaches to waterproofing design	<p>Previous references to material specification standards for damp proof courses, bitumen or mastic asphalt products have been removed in favour of a more detailed approach which has been covered in later sections (particularly sections 6, 8 and 9) that cover water resistant design and Type A (barrier protection).</p>
3	Terms and Definitions	<p>Clarification on existing references</p> <p>Introduction of new references and removal of some which are considered technically inadequate</p>	<p>In recognition of the revised Scope, new references have been included, whilst only small changes, these changes reflect the widespread adoption of terminology used in the industry, for example (buried decks and ground gas barriers). Further new references are included in a technical context (these include fully bonded and water resisting admixtures), to reflect their common use, and to cover similarly used hydrological terms, for example hydrostatic pressure.</p> <p>Ground barrier and vapour check have both been removed in favour of more detailed technical references (both in this section and throughout the standard).</p>
4	Design Philosophy	Clarification in design approaches	<p>Emphasis is added to the scope of the waterproofing designer role.</p> <p>A waterproofing design specialist should be consulted at the earliest stage of a project, ideally before the technical design stage and to be consulted and approve of any amendments which may impact on the overall waterproofing design.</p> <p>Design approaches should include:</p> <ul style="list-style-type: none"> <li>• principal considerations for a robust waterproofing design</li> <li>• a continuous waterproofing design</li> <li>• manufacturers recommendations</li> <li>• BS8102:2022 and its requirements</li> <li>• desk top studies</li> <li>• risk assessment</li> <li>• include end use/users of the structure</li> <li>• devised remedial measures</li> </ul>



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5	Site Evaluation	Updated to reflect a more defined approach	Simplification to primary and secondary research, ensuring studies are in all parts relevant to Eurocodes. Minimal approaches that should be undertaken include desk study, risk assessment of potential effects of climate change along with water table classification, inclusion of ground gas contamination and external risk. The assessment of risk to provide the justification for the proposed waterproofing design.
6	Water-Resisting Design	Updated to reflect continuous approaches	Whilst only small changes, reflect the requirement for a continuous waterproofing solution and for design requirements to encompass ground water encountered and expected to be encountered. References to structural elements, both in new and existing have been incorporated. Including heritage and listed buildings along with specific reference to podium decks and buried roofs. Both Tables 1 and 2 have been updated to reflect new references, along with schematics. Further new inclusions include ground gas protection along with design approaches to buried decks.
7	General Construction Issues	Amended to include good practice approaches	Inclusions relate to best practices in construction along with the uses of the structure with clarity on chronicling discoveries during construction.
8	Type A (Barrier) Protection	Introduction of new references and removal of some which are considered technically inadequate	In recognition of new technical approaches and materials, reflect the widespread adoption of bonded systems used in the industry and approaches to continuity of systems. New definitions to bonded systems and their uses are highlighted throughout. Elements are connected to ensure the required structural integrity along with compatibility of solution are adequate in offering a suitable design approach.
9	Concrete	Introduction of new references and inclusion of Euro classifications	New references are incorporated to reflect water resisting admixtures and their common use in the industry along with approaches to remedial waterproofing. Improvements in construction practice and performance, combined make water resisting admixtures a very attractive solution for both construction and civil engineering construction.
10	Type C (drained) Protection	Updated to reflect continuous approaches	Particularly aimed at multi-level systems, amendments focus on continuity of systems. The waterproofing designer who is responsible for design must ensure that the design complies with all applicable requirements and uses of the structure. More specific details on pump systems and discharge of these are included. Maintenance and repair are featured, along with due considerations to drainage and discharge.
11	Remedial	Updated to reflect amendments in Sections 1-10	The full Standard provides guidance for continuous approaches and remedial measures which should be factored into the initial design.

