



## The role of the Waterproofing Design Specialist

There has been a fundamental change in recent years in the way that we approach waterproofing design for underground structures. Traditionally it had been the Architect's role to draw up and design Structural Waterproofing schemes for below ground projects. However, the majority of Architects will readily acknowledge that they do not have the specialist training or expertise to undertake this function. The only reason they were doing this work was because there were few people recognised to undertake this specialist role.

When the British Standard for Waterproofing was revised in 2009 - BS 8102:2009 *Code of Practice for protection of below ground structures against water from the ground*, it recognised this problem and addressed it by recommending that every design team must incorporate a Waterproofing Design Specialist.

This stated in section 4.2 of BS 8102:2009 under the heading "Design Team" that:-

*"A waterproofing specialist should be included as part of the design team so that an integrated waterproofing solution is created. The waterproofing specialist should:-*

- a) be suitably experienced;*
- b) be capable of devising solutions that accommodate the various project constraints and needs;*
- c) provide the design team with information and guidance that assists with and influences the design, installation and future maintenance of the waterproofed structure."*

### **What is a Waterproofing Design Specialist?**

Waterproofing design specialists can, in theory, be anybody who is able to provide expertise in structural waterproofing. However, identifying those that have the appropriate skills and knowledge from those who don't can be difficult and daunting. Even the most experienced Architects and Building Developers can struggle to single out those that can be trusted to give the correct information.

BS8102:2009 guidance advises that the Waterproofing Design Specialist should have knowledge of the following:

1. The waterproofing systems available.
2. An in-depth understanding of the requirements of BS 8102.
3. Sources of water and how it flows through the soil and interacts with the structure.
4. Sufficient structural knowledge to be able to discourse meaningfully with the structural engineer.
5. Sufficient Geotechnical knowledge to be able to understand the implications of a soil report, and to discourse meaningfully with the Geotechnical Engineer.

### **Who can be a Waterproofing Design Specialist?**

This can be anybody who is able to demonstrate that they have the requisite knowledge described above. There are many people who may be able to act in this capacity, such as Architects and Engineers who have specialist training in the field. Equally, there are many Surveyors or Suppliers who operate within the structural waterproofing industry who already have this knowledge and apply it as part of their everyday work.

### **How does the leader of the design team find a Waterproofing Design Specialist?**

Whilst there may be many people who are able to fulfil the function of Waterproofing Design Specialist, the leader of the design team will need to know who they are.

Previously the only way to identify an individual who has put himself through the rigours of study and qualification in this specialist Waterproofing field was to look for those who have attained the Property Care Association (PCA) - Certificated Surveyor in Structural Waterproofing (CSSW) qualification. Most surveyors who have attained this qualification work for PCA Contractor companies and so finding qualified people, quickly and efficiently could be difficult.

The PCA's Structural Waterproofing Group, in 2010, recognised a need for forming a special register of Waterproofing Design Specialists that have demonstrated they have the requisite competence, skill and knowledge.

This register of recognised Waterproofing Design Specialists is accessible to the leader of the design team via the PCA website ([www.property-care.org](http://www.property-care.org)) - look for the Register of Waterproofing Design Specialists (WDS) where you will find a list of WDS members, together with a description of their expertise.

### **What is needed to be recognised as a PCA Waterproofing Design Specialist?**

To become recognised as a Waterproofing Design Specialist, applicants must be able to demonstrate that they have the necessary skills in:

- Understand all the aspects of BS8102- 2009 and other relevant industry standards
- Demonstrate a full understanding of all types of Waterproofing (Types A, B and C)
- Building construction and waterproofing techniques
- Knowledge of the products and techniques commonly used in waterproofing
- Certificated Surveyor in Structural Waterproofing (CSSW) certificate or evidence of attainment of any other relevant academic or industry qualification
- Evidence of site experience (min. 5 years)
- Diagnostic investigation and problem solving
- Report writing
- Commitment to a Continuing Professional Development (CPD) scheme
- Hold adequate Professional Indemnity Insurance cover