

All you need to know about structural waterproofing...

Along with damp proofing, ground gas protection and flood resilience...

The object of structural waterproofing is to protect a structure for its lifetime from water ingress. Waterproofing is the process of making an object or structure waterproof or water-resistant, so that it remains relatively unaffected by water or is able to resist the ingress of water under specified conditions. Buildings all around the world rely on structural waterproofing systems.

There are many ways to waterproof a structure and, similarly, there are many different ways to construct a structure too. Structural waterproofing is largely associated with basements and below ground structures, the construction method will in part, influence the types of waterproofing solution required and contribute to the overall project strategy.

Structural waterproofing falls into 3 categories:

Type A – Barrier Protection

Type B – Structurally Integral Protection

Type C – Drained Protection

With 3 grades:

Grade 1

Some water seepage and damp are tolerable depending on the intended use

Grade 2

No water penetration is acceptable

Grade 3

No dampness or water penetration is acceptable and dehumidification

Some below ground construction projects require protection from both water ingress and gas contamination. With innovations in new products, it is now possible to produce a waterproofing design which incorporates both a waterproof and gas proof protection system, however these types of projects require a different strategy and methodology to what would be classed as a typical waterproofing design. Both BS 8102:2009 and BS 8485:2015+A1:2019 are intertwined. Basements and below ground structures which need to be watertight and gas proof are not anymore complex to design but require further considerations at the design phase and throughout the project.

The object of ground gas protection is to prevent a build-up of gasses against a structure and to prevent gas pervading the internal atmosphere.

While structural waterproofing protects a structure's integrity at below ground level, likewise, damp proofing will also protect a structures integrity above ground level.

Dampness can be harmful to the

integrity of a building. If not treated, water ingress can cause cracks in masonry along with extensive damage to bricks and mortar. Damp also changes the atmosphere of a structure. If a damp problem is not remedied, it may lead to more serious complications.

Which leads us into flood resilience. The specification for resilience, resistance and recoverability are simple, using tried and tested technology that Delta has used for many years, historically in basements or below ground structures/situations. Consideration is also given to how we could adapt these products to work in flood situations while incorporating British Standards to ensure structures with flood resilience, resistance and recoverability measures would meet third party warranty providers requirements.

A number of flood resilient measures can be put in place to reduce flood damage to a structure.

Customer support

Delta is always happy to help. Specifications are an incredibly important part of construction projects. Specifications must comply with the broad legal obligations and it is equally important that each specification is drafted by an appropriately skilled person with knowledge of the specific subject matter. The technical team is always on hand to ensure your specifications are suitable for each project and delivered in a timely manner.



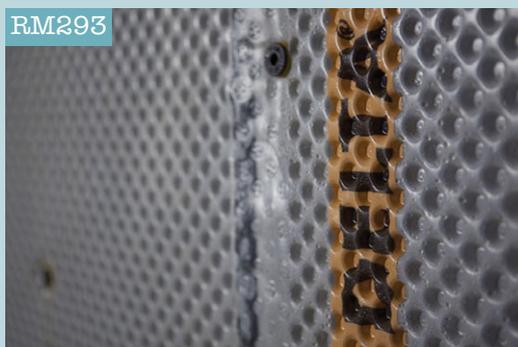


Brochures

Delta's brochures offer a lot of information for their size! Visit the company website to see for yourself: www.deltamembranes.com/technical/delta-brochures/. All brochures are free to download with hard copies available. The brochures focus on best practice and design considerations with a snapshot of products and services available.

Membranes

With over 125 years of manufacturing experience, **Delta** is an impeccable partner on every project. The company delivers quality over cost to provide the best solution for the project. Its range of waterproofing and damp proofing is suitable for new, retrofit and refurbishment construction and in flood resilience. Delta also supplies ground gas protection membranes protecting structures from harmful ground gases such as radon, carbon dioxide, methane and hydrocarbons.



Materials

Firstly, material shortages. **Delta**, as with most of the construction sector, has been working throughout the coronavirus pandemic. While there are acknowledged shortages of materials, the company is thankful that it is well stocked. Delta feels truly humbled to assist customers on procuring difficult products during the pandemic. Please do contact the Delta HQ for product, project advice and guidance.



Adjusting and adapting to the new

Delta is at the helm of shifting all things waterproofing online. To help keep projects moving, the company has now introduced real time software to enable its technical team to offer video conferencing, CPD seminars, training workshops, document exchange and to ensure approachability is maintained whilst collaborating with your entire team, no matter where they are. Delta's technical team is on hand to assist with specifications and project queries. Whilst the team is working remotely, contact can be made via email, phone (whether it be calling, Facetime, Video via WhatsApp or Zoom). Please do keep in contact, the team hopes to serve you as close to business as normal as it can and where it cannot, is keen to explore alternatives.



Business specific education

Delta has successfully launched its FREE LIVE Seminars during lockdown. Held every Tuesday and Thursday at 11 am. The company has been blown away by the unprecedented attendance and is now looking at ways it can progress this further, such as developing other training programmes and making seminars available on catch up. From RIBA accredited CPD's to How To – please do get in contact if you would like to attend.

The entire #DeltaTeam would like to send a heartfelt thank you to all the key workers who are working tirelessly from delivery drivers to care workers. The team appreciate all your efforts in this pandemic for the betterment of our communities.