

Waterproofing / Watertight

To facilitate this ambition of getting the quality right, these checks should take place:

- Beware of water test requirements – the loss has to go somewhere! Allow for evaporation
- Has the type of waterstop been specified / agreed?
- Watertight tanks with walls more than 6-8m high generally will need lining
- Only use wire brush, water jetting or needle gun for joint preparation. Preparation must be 100% across whole section of joint
- Take care not to damage waterbars when striking forms and preparing joints
- Hydrophilic waterbars should ideally be placed in small rebates, or applied to a smooth trowelled margin in the centre of the section and fixed to manufacturer's recommendations.
- They will not perform fixed to a rough surface
- Will integral kickers be used (min 150mm)? These are more difficult to compact
- Good compaction is essential for watertight concrete
- Any slight honeycombing makes the waterbar useless
- Ensure size of pour is compatible with amount of reinforcement detailed. To minimise shrinkage, wall bays should be limited in size and cast sequentially, not hit and miss
- Consider thermocouples to monitor temperature and so avoid thermal shock. Insulation may be required to control temperature differential
- Good curing is essential
- Shutters must be grout tight. Dampen joints before concrete
- Ensure adequate method statement for making good bolt holes and remember to cure. Consider special shutter ties
- Ensure that precise requirements for any waterproofing are known
- Does the basement need to be vapour proof? Has sufficient ventilation been designed? Are damp patches acceptable?
- Do not assume that ground water will stay as it was before construction
- Bituthene or similar needs perfect conditions for application, protecting before backfill and should be kept under load to work long term. Beware creases to joints
- Waterproofing systems which are not held in place by water pressure rarely work properly
- Do not store applied materials, liquid or otherwise, in cold conditions
- Liquid applied membranes – ensure preparation, thickness, penetration details, corner details, protection, etc are as detailed

Important

Water or the effects of water cause the majority of defects in construction. Ensure all details concerning watertightness are clear, achievable and understood.

Our Quality vision:

We will get it right first time on all our projects
by delivering exceptional customer service

