



Water Guard 791 is an enhanced, high-performance, two-component polymer-modified flexible cementitious waterproofing system designed for the protection of concrete, masonry and cementitious substrates against water penetration and hydrostatic pressure.

Its advanced formulation provides excellent adhesion, flexibility, crack-bridging capability and long-term durability while offering enhanced resistance to water pressure.

Water Guard 791 can be used for **waterproofing basements, underground structures, bathrooms, wet areas, swimming pools, roofs, water tanks, drainage structures, foundations and other concrete or masonry surfaces exposed to moisture or water pressure.** It is non-toxic and suitable for use in **potable-water-retaining structures.**

ADVANTAGES

- ✓ High-performance two-component flexible cementitious waterproofing system.
- ✓ Excellent elongation and flexibility.
- ✓ Excellent adhesion to concrete, plaster, screed and masonry substrates.
- ✓ Resistant to water pressure of **70 PSI (±5%)**.
- ✓ Capable of resisting a water head of **170 ft (52 m)**.
- ✓ Excellent crack-bridging and sealing properties.
- ✓ Provides a continuous and seamless waterproof barrier.
- ✓ Highly resistant to long-term weathering and natural climatic conditions.
- ✓ Suitable for internal and external applications.
- ✓ Suitable for water-retaining and water-excluding structures.
- ✓ Non-toxic and suitable for contact with potable water.
- ✓ Excellent resistance to dampness and water penetration.
- ✓ Easy to mix and apply.
- ✓ Can be applied onto properly prepared damp cementitious substrates.
- ✓ Durable protection for concrete and masonry surfaces.

TYPICAL PROPERTIES AT 25°C

Component	Two: Part A – Liquid Part B – Powder
Mixed Form	Slurry
Color	Grey, white, or other pigmentation
Toxicity	Non-Toxic (Tested as per BS EN 6920-1)
Working time	30-60 Mins
Elongation	200% ± 20% (Neat material) – (Tested as per ASTM D2370 – 16)
Setting time	Approx. 3–4 Hours
Water Pressure Resistance	70 PSI (±5%)
Water Head Resistance	Approx 170 ft (52 m) Water Head

*Typical results under laboratory conditions. Actual performance may vary depending upon substrate condition, application thickness, workmanship, curing conditions and site environment.



SURFACE PREPARATION

The substrate must be sound, clean and structurally suitable for the application of **Water Guard 791**. All surfaces must be free from dust, loose or friable material, laitance, grease, oil, curing compounds, existing coatings, bituminous materials and other contaminants that may adversely affect adhesion. Any weak, damaged or contaminated concrete should be removed back to a sound substrate and repaired using an appropriate **Ressichem repair mortar**. Cracks, holes, honeycombs, voids and other surface defects must be properly repaired before commencement of waterproofing works. Brick and block masonry surfaces should be properly prepared, with joints evenly filled and finished to provide a continuous surface suitable for receiving the waterproof coating. Sharp projections should be removed and internal corners, penetrations, construction joints and other critical locations should be appropriately detailed before application. These preparation principles follow the requirements of the existing Water Guard 491 system, including removal of contaminants and repair of cracks, holes and honeycombs before application.

MIXING

Water Guard 791 is supplied as a **pre-measured two-component system** consisting of a liquid polymer component (Part A) and powder component (Part B).

Pour Part A into a clean mixing container. Gradually add Part B while continuously mixing using a **slow-speed electric drill fitted with a suitable mixing paddle**. Continue mixing until a smooth, homogeneous and lump-free slurry is obtained. Additional Water may be added to the mix if the viscosity increases, and brush coat becomes difficult. Please consult Ressichem Team prior to the increase of water.

Mix only sufficient material that can be applied within the stated working time of approximately **30–60 minutes at 25°C**.

Do not attempt to rework material that has started to stiffen or set. Working time may be reduced under high ambient or substrate temperatures.

APPLICATION

Prior to application, thoroughly pre-wet absorbent cementitious substrates with clean water. At the time of application, the substrate should be in a **saturated surface-dry condition**, with no standing or ponded water.

Apply **Water Guard 791** uniformly using a **stiff-bristle brush, roller or suitable trowel**, ensuring complete and continuous coverage of the substrate.

The waterproofing system should normally be applied in **multiple coats** to achieve the required overall thickness. Subsequent coats should be applied only after the preceding coat has sufficiently set to accept the next application without damage.

Where multiple coats are applied, subsequent coats should preferably be applied in a direction perpendicular to the preceding coat to minimize the possibility of pinholes, holidays or discontinuities within the waterproofing membrane.

Particular attention should be given to corners, joints, penetrations, repaired cracks, wall-to-floor junctions and other areas susceptible to water penetration.

For water-retaining structures or applications subjected to significant water pressure, sufficient material must be applied to form a **continuous and fully bonded waterproof barrier** over the prepared substrate.

CURING

Freshly applied **Water Guard 791** must be protected from **rain, running water and rapid moisture loss** during the initial curing period.

The coating should be allowed to cure adequately before being subjected to water pressure, immersion, backfilling or other service conditions.

Where ambient temperatures are high or rapid drying conditions exist, appropriate measures should be taken to prevent premature drying of the coating.

Water-retaining structures should only be filled or subjected to water pressure after the waterproofing system has achieved adequate curing.

PACK SIZE

Water Guard 791 is available in the following pack sizes.

3.2 KG pack size	Part A – 1 KG Liquid Part B – 2.2 KG Powder
16 KG pack size	Part A – 5 KG Liquid Part B – 11 KG Powder
20 KG Pack Size	Part A – 6.25 KG Liquid Part B – 13.75 KG Powder

These are the same pack configurations currently specified for Water Guard 491.



COVERAGE

10 – 16 SFT / KG. Actual coverage depends upon the porosity and texture of the substrate, required application thickness, application method and site conditions.

SHELF LIFE

12 months from date of manufacture when stored under warehouse conditions in original un-opened packing. Extreme temperature / humidity may reduce shelf life.

STORAGE

Store **Water Guard 791** in its original unopened packaging in a **cool, dry and covered location**, protected from direct sunlight, rain, moisture and extreme temperatures.

Part B must be protected from moisture and kept dry during storage. Part A should be protected from excessive heat and freezing conditions.

HEALTH & SAFETY

Water Guard 791 is non-toxic when used as intended; however, normal precautions applicable to cementitious and polymer-modified construction materials should be observed during handling and application.

Avoid prolonged contact with skin and eyes. Appropriate gloves, protective clothing and eye protection should be used during mixing and application. In case of accidental contact with eyes, rinse immediately with clean water and seek medical attention where necessary.

Keep out of reach of children.