

Watertight 2K Technical Data Sheet



Watertight 2K is a water-based two component spray-applied system, which cures INSTANTLY to form a seamless, highly elastic, waterproofing membrane.

The two components are sprayed simultaneously through separate nozzles, allowing intimate mixing to occur within the spray. This produces an instantaneous solid membrane which bonds to the substrate.

Watertight 2K is principally used in areas where fast curing is essential. **Watertight 2K** provides an ideal solution for situations where there is a high degree of water ingress.

A water-based system, **Watertight 2K** can be applied directly to damp surfaces, whilst the coating's instant-cure properties mean that measures to reduce water flow can be kept to a minimum. Examples of such applications are roofing works to underground structures, canals and reservoirs, where extensive pumping is normally necessary to prevent incoming water from damaging ordinary waterproofing products.

Watertight 2K can also be used for general tanking works to wet areas such as basements, bathrooms and kitchens. It is ideal for waterproofing all types of roofs - particularly flat roofs - where its great strength, elasticity and resistance to UV light ensure very long-term durability. With the addition of aggregate and a 4mm coating thickness, **Watertight 2K** can take the place of high-performance torch-on and other membranes, if required. It has the added benefits of being seamless and safe, with no requirement for flame torches or hot-melt adhesive.

Due to its spray application, Watertight 2K is highly versatile and can be used on structures of any shape. The system is suitable for both remedial or new work and can be applied to the following:

- * Built-up felt roofs
- * Asbestos cement cladding and roof sheets
- * Metal cladding and roof sheet
- * Mastic asphalt
- * Concrete roof decks
- * Timber roof decks
- * Most types of roof insulation
- * Underground structures
- * Reservoirs and canals
- * Tunnels and basements

SPECIAL FEATURES

- * Instant membrane formation; instant waterproofing
- * Seamless finish provides total waterproofing
- * Highly Elastic: Elongation in excess of 1,000%
- * Environmentally-friendly: Cold-applied, non-hazardous and fume-free
- * Applied in a SINGLE high-build layer, making it very cost effective
- * High UV resistance
- * Resistant to both high and low temperatures
- * Lifelong puncture resistance with highly effective self-healing properties
- * Exceptional anti-corrosion properties due to its high pH value



- * Suitable for use in contact with drinking water
- * Excellent slump resistance
- * Can be applied directly to "green" (uncured) concrete

HOW IT WORKS

Watertight 2K works by a process in which there is an instant chemical reaction between the two components. This reaction causes the water in the material to separate, leaving a solidified membrane. This is known as "breaking". The excess water remains on the surface until it drains away or evaporates.

Despite this surface water and its wet appearance, the membrane instantly solidifies immediately, attaining its protective and waterproofing properties.

When the membrane forms, it has an open textured surface. This gradually closes and becomes smooth over a period of about 3 weeks. This open texture does not affect the attributes of the membrane.

TECHNICAL DATA

Properties of the Emulsion:

Colour:	Brown
Method of Application	Spray only
Specific Gravity:	1.003 ± 0.002
Solids:	60% ± 1%
pH:	Approximately 12
Application Temperature Range:	+3 C to + 40°C
Properties of the Dried Film:	
Colour:	Black
Heat Flow Resistance:	No slump after 2 hours at 80 °C on a vertical surface
Cold Temperature Resistance:	No slump after 4 hours at 130°C on a 75° slope
Elongation at Break:	- 20°C (180° bend over 20 mm diameter mandrel) 1000 % (Did not break when tested to ASTM: D412) Withstood
Water Tightness:	60kPa (0.6 bar) water pressure (DIN 53363)
Weathering Resistance	After 2000 hours of QUV testing (equivalent to 10 years) elongation was still > 1000 %
Physiological Properties:	Non-toxic during application and as dried film. No Plasticizers or fillers



STORAGE

Protect from frost. Store between 5°C and 30°C. Shelf life is a minimum of 12 months in tightly sealed containers. Agitate regularly if in storage for a lengthy period.

SURFACE PREPARATION

All surfaces should be sound and firm. Correct preparation is necessary to ensure that substrates are free from dust, dirt, oil or grease, and fungus growth.

It may be necessary to apply a primer to porous substrates before coating with **Watertight 2K**. For roofing substrates: Any cracked or porous surfaces must first be sealed to prevent the water which breaks from the **Watertight 2K** from penetrating the building.

COVERAGE DATA

A coverage rate of 7kg of material per m² is normally recommended. This gives a dry membrane thickness of about 4.2 mm. The coverage rate can be reduced depending on the application, for example 4kg per m² is used on pitched metal roofing.

APPLICATION

Watertight 2K is applied using specially designed spray equipment. The diesel spray machine weighs about 150 kg, and the electric weighs 75 kg. Both are mounted on wheels and are extremely versatile.

All coating works can be achieved with a crew of only 3 people and is even possible with only 2, making the method mobile and fast. Up to 800 m² can be applied in a single day, whether on horizontal, vertical or overhead surfaces.

FINISHING

The membrane can be left exposed or finished with **Watertight SP Topcoat** for decorative purposes. Alternatively, stone mineral can be added to a second, thin, spray coat after the membrane has fully dried.

HEALTH AND SAFETY

Watertight 2K is non-flammable and non-hazardous.

The product can be removed from the skin with soap and water when wet, and by using a proprietary hand cleanser when dry. In the event of contact with eyes, wash with clean water.

All *Trident Coatings* product information is given in good faith and every effort is made to ensure that it is accurate at time of issue. It is, however, the customer's responsibility to ensure that products are suitable for the required purpose and if in doubt, sample orders should be taken for trial purposes.

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