

TECHNICAL DATA SHEET

RADON BLOCK LVM

WHAT IS RADON GAS?

Radon is a naturally occurring radioactive element nine times heavier than air and develops as uranium-238 decays. Uranium-238 can be found in all rocks and some soils, in varying amounts. As the decay process occurs, radon is produced in a gas form. Although radon is probably older than man himself, it's become more of a menace in recent years.

What makes the issue pressing and ominous today is that most people these days keep their homes more tightly sealed than they used to, in order to conserve energy. Instead of opening windows and doors, people turn on the air conditioning and in winter they weather strip windows and doors so the heat stays in (and so does the radon, which can build up over time, become more concentrated and more dangerous). Radon gas does not smell and you cannot see it, in certain areas of the UK it is more of a problem than others (see map). **Research has found that domestic exposure to radon gas is responsible for a significant number of lung cancer deaths.** The risk appears to be much higher for smokers.

Construction Chemicals UK recognises this problem and as a result we have modified our current product Liquid Vapour Membrane to RADON BLOCK standard to give protection against radon gas. This product has been tested by Professor Dr. Gert Keller for its suitability for Radon Gas protection, his conclusions were that when RADON BLOCK LVM is applied at 2mm thickness it will give a RADON TIGHT seal on the substrate that it is applied to, a full copy of this report is available on request.

Description

Radon Block LVM (RBLVM) is a ready to use modified SBR Liquid Vapour Membrane. Applied by brush roller or airless spray it provides a continuous, seamless waterproof membrane to the area applied, this product also provides basic RADON protection. In new constructions it offers a waterproof membrane as well as RADON PROTECTION, it conforms to C2 and C4 of schedule 1 of Building Regulations 1991. An elastic membrane which is waterproof, abrasion resistant and resistant to UV and conforms to **BS 3177**. Construction Chemicals LVM can be used to protect building surfaces from moisture ingress, this include tanking problems and floors where there is no membrane, the application of LVM followed by Construction Chemicals self levelling compound provides the perfect dry surface to tile, carpet or lay timber floors without the loss of ceiling height.

The attached map of the UK shows where a geological assessment is necessary dependant on the risks involved.

APPLICATION

The subsurface should be clean and free from dust and loose debris, the surface should be smooth or a light texture and cracks in floors or walls should be pointed before application of LVM, there should be no surface water. LVM should not be applied in the wet or when wet conditions are forecast or when the temperature may fall below 7 °C. Pre wetting a dry surface may improve adhesion and the application, always test an area first if you are unsure of the background.

Apply LVM by brush roller or airless spray, LVM may be let down with water to assist spraying, however the operator must ensure enough coats are applied to achieve the desired thickness. Note that the thicker the coat the longer drying time will be needed. Subsequent coats should be at right angles to the previous coat, allow at least one hour between coats and ensure subsequent coats do not drag the previous coat. When the application is complete, leave for 24 hours before testing or applying a screed or self levelling compound. Floor and wall joints should be supported with plastering scrim or similar products. Bed scrim into the wet LVM and then overcoat when dry.

Wet applied cement based products bond well to RBLVM if they contain polymers however polymer free materials such as plaster, screed or render should be applied on Liquid Vapour Membrane that has been blinded with clean sharp sand. Tiling can be carried out direct onto LVM but care should be taken when using notched trowels.

COVERAGE

Typically a 10lt tub will cover 11.25 square meters at 1mm thick.

PRIMING

Some substrates such as concrete or building blocks will benefit from priming with Construction Chemicals SBR, care should be taken not to puddle a priming mix.

FIRE PRECAUTIONS

Dry LVM is combustible. It should not be used to coat inflammable materials.

CLEANING

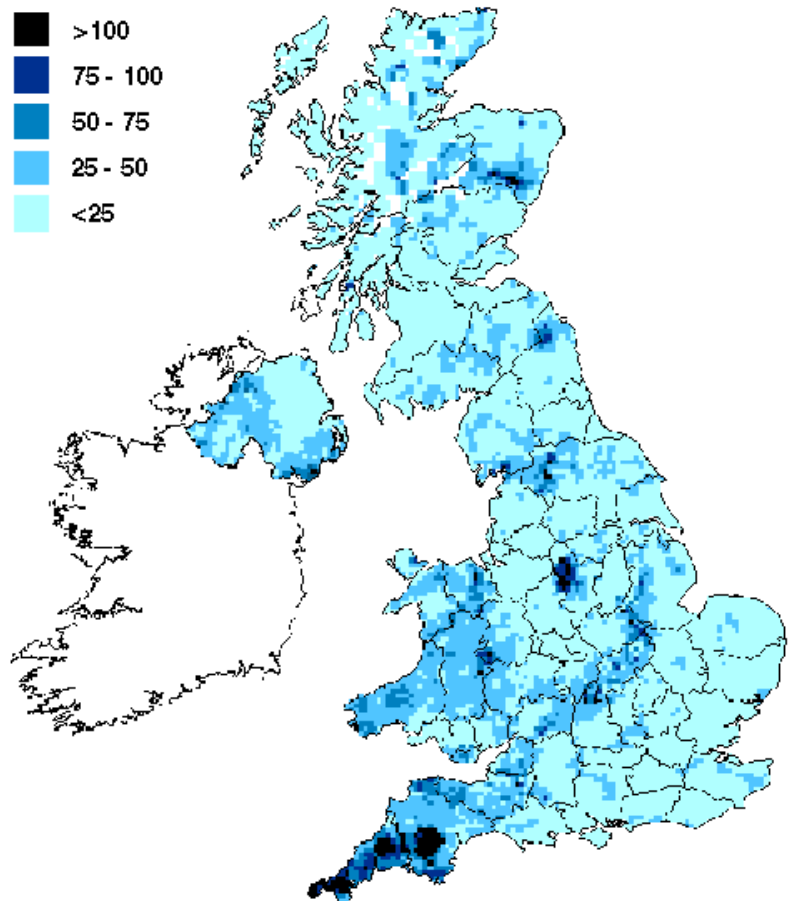
Clean all tools with water after use.

SHELF LIFE

12 months in unopened containers, store over 5°C and below 30°C.

SAFETY PRECAUTIONS

Avoid skin and eye contact, wear protective clothes and clothing, wash splashes with soap and water, flush eyes with copious amounts of water and seek medical attention. For full health and safety refer to LVM HSDS.



Geometric mean radon, Bq m⁻³