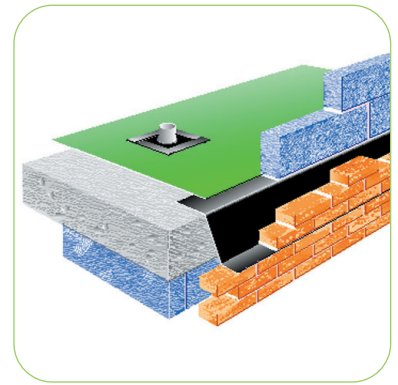


# Gas barrier systems

Active-guard high quality barrier systems to protect buildings from radon, methane, CO2 and hydrocarbon gases



## Requirements

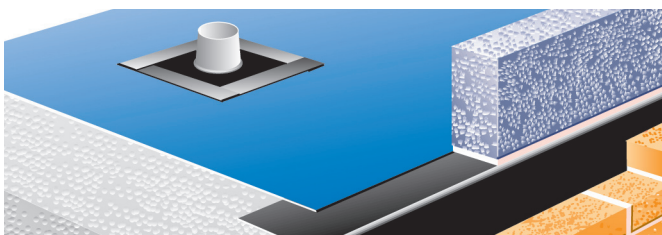
- The Building Regulations Approved Document C stipulates that reasonable precautions shall be taken to avoid danger to health and safety caused by contaminants in the ground when covered by the building
- The specifier/contractor's responsibility is to diagnose by risk assessment if there is a contamination issue on site and then implement adequate measures that will protect occupants against health risks associated with building on contaminated land
- Timloc's Active-guard range of gas barrier systems will offer full protection against the four commonly encountered gases on development sites: radon, methane, carbon dioxide (CO2) & hydrocarbon



## Radon

Radon is a naturally occurring radioactive gas formed by the breakdown of uranium and can be found in subsoil and rock almost everywhere. Concentrations are particularly high in granite, which is rich in uranium and therefore some areas of the country are more at risk than others. It is widely held that the risk of contracting lung cancer increases through exposure to radon gas. Radon gas is colourless and odourless, and can penetrate buildings through cracks and fissures in the subsoil and so into the atmosphere in dwellings.

**Protection: Active-guard RB (Green)**



## Methane

Methane is a gas which is created by the decomposition of organic wastes. This odourless, flammable and explosive gas is produced by waste undergoing decomposition and is emitted from such areas as solid waste landfills and animal waste grounds. If the gas is allowed to migrate uncontrolled into enclosed areas, it can explode in concentrations greater than 5%.

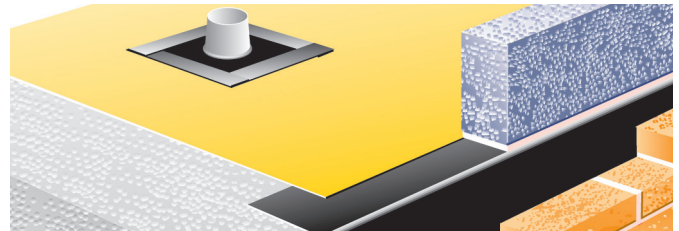
**Wilson & Card protection, NHBC traffic light classification:**

**Active-guard MB (Blue/Silver)**

Suitable for gas characteristic 1-5 or Green, Amber 1, Amber 2

**Active-guard LMB 2000g (Yellow)**

Suitable for gas characteristic 1-3 or Green & Amber 1



## Carbon dioxide (CO2)

Carbon dioxide commonly known as CO2 is a naturally occurring colourless, tasteless and odourless gas. The hazard posed by Carbon dioxide is that in high concentrations it can result in asphyxiation. The gas is formed in areas where oxidation of carbon compounds could be found such as landfill sites, coal and gas mining areas etc.

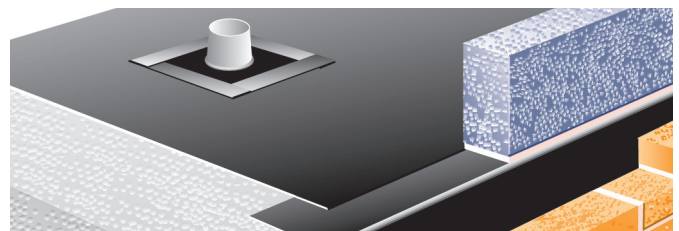
**Wilson & Card protection, NHBC traffic light classification:**

**Active-guard RB (Green)**

Suitable for gas characteristic 1 & 2 or Green & Amber 1

**Active-guard LLMB (Yellow)**

Suitable for gas characteristic 1 & 2 or Green & Amber 1



## Hydrocarbon

Hydrocarbon is an organic compound containing only carbon and hydrogen. Hydrocarbons generally occur in petroleum products, natural gas and coals. Hydrocarbons emit a flammable vapour that can be found in areas particular where the storage of petroleum based products are or were stored or used like petrol stations and commercial transport and agricultural sites.

**Protection: Active-guard HB (Black)**

