

Data Sheet

Radon Sump Unit

The Radoncare and Cavity Gas Vent System is manufactured by a rotational moulding process from heavy duty polythene. The Sump is constructed with a solid roof and base and is provided with 40mm diameter holes in the walls.

Spigots for 100mm pipe connections are provided at each end of the sump but are blanked off with knock outs to allow choice of direction for extract pipe. The cavity gas vent comes with a detachable polyethylene cap, which can be removed if an extraction system has to be attached.



Application

The system is designed to offer two main function:

- 1) The system is designed to reduce the pressure of radon or other soil gas laden air under the substructure of a building.
- 2) The system offers a facility to the installation of an extraction system if required on the basis of subsequent radon level testing or the introduction of safer concentration levels in future.

The Radon sump is designed to be located above the water table in permeable soil.



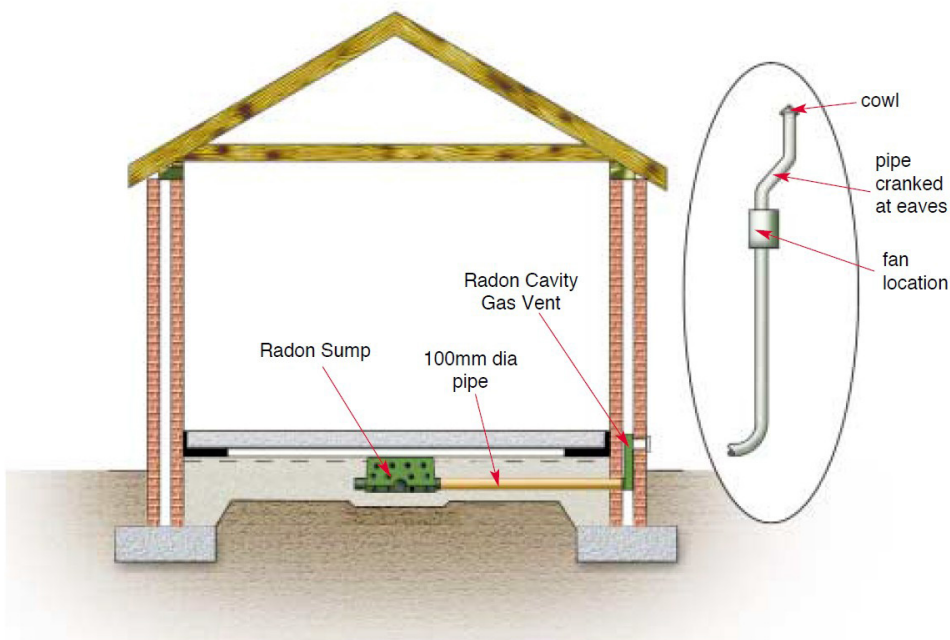
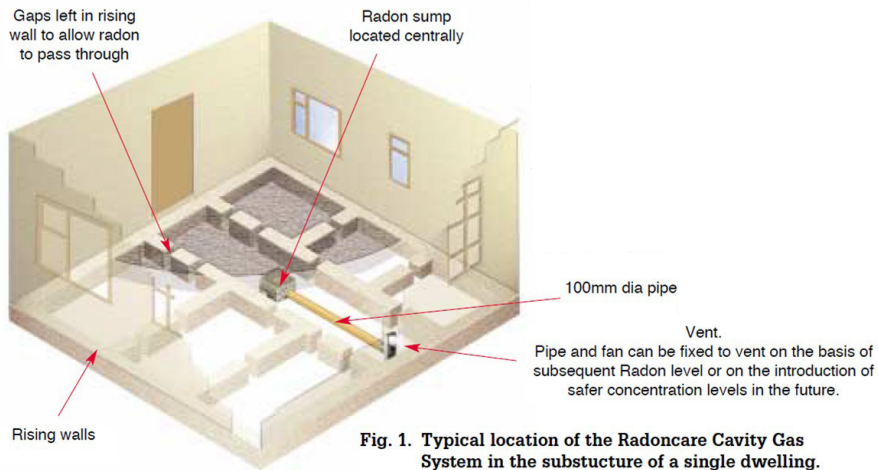
Installation

Sumps and vents should be stored in dry conditions below 60°C and protected from UV light.

Site Handling and storage

Every ground floor must include a radon sump and provide the facility for extracting "dangerous substances" e.g radon, methane. Where it is shown that protection from dangerous substances is required, an IAB approved gas resistant membrane must be provided under the ground floor of a building. Sumps must be placed in an area of maximum percolation, that is, in the upper levels of hardcore.

The sump should be placed as close as possible to the centre of the floor plan of the building and positioned so it will be tight up against the IAB approved radon barrier. One sump is sufficient for approximately 250m² and for a distance not more than 15m from a sump to the nearest external wall once clean permeable hardcore is used. However it is recommended that when calculating the number of sumps for a building, a factor of approximately 200m² should be taken for each sump allowing for a safety factor.



Technical Data

Physical Properties	Typical Value	Unit	Test Method
Melt Flow Rata (190 C 2.16 kg)	35	g/10 min	ISO 1133
Density	934	g/m ³	ISO 1183
Tensile Modulus (1mm/min)	500	Mpa	ISO 527-2
Stress at Yield (550 mm/min)	16	Mpa	ISO 527-2
Strain at Yield (550 mm/min)	12	%	ISO 527-2
Flexural Modulus (2 mm/min)	550	Mpa	ISO 178
Hardness Shore D	55	-	ISO 868
Heat Deflection Temperature (0.45 N/mm ²)	58	°C	ISO 75-2
Brittleness Temperature	<70	°C	ISO 974
ESCR	5	*	-

* Grades ranged 1 to 5.5 is best