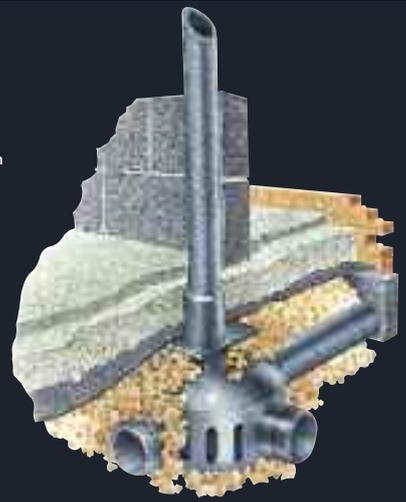


# Sump Provision Under The Building

- One-piece easy placement
- Passive or active extraction
- Interconnecting facility

In this example, the membrane is shown under the oversite slab, rather than above it. Whichever option is selected to suit the construction in question, the outlet from the reception sump is always linked to the membrane using a service pipe flashing.

Both outlet options are illustrated. Vertical stack or up to four horizontal connections are possible. Thus gas evacuation can be to perimeter walls if appropriate, terminating with round converter and Cavitybrick.



## USE

The radon sump is a moulded vessel with inhalation apertures that is located under a building. Its purpose is to reduce Radon gas pressure by receiving and routing the gas via an outlet pipe to the exterior where it discharges.

## SOLUTION

Moulded from polypropylene, the Radon Sump may be located within the granular fill underneath a building footprint. It is normally suitable for use where the ground is capped – a concrete ground bearing slab being an example. It is inappropriate for timber floors laid over soil or natural loose stone fill unless work is first carried out to cap over.

The sump can be installed to function either passively or actively. A passive sump relies on the natural stack effect to draw the radon whereas with an appropriate electric fan incorporated along the exterior outlet pipe the system can actively extract. Passive extraction is less effective than active extraction.

One Radon sump is intended for use and is generally sufficient for a typical dwelling. A granular area of up to 250m<sup>2</sup> but at no point more than 9 metres radius from the sump can be serviced but performance will be affected by ground conditions, sump location, building footprint shape and layout, obstructions etc. The effectiveness of any installation is an unknown and sumps should be considered as a means of reducing pressure under the building only to provide a marginal reduction. Accompanying measures to prevent Radon from entering the building envelope should be incorporated. Additional sumps can be interconnected using the integrally moulded porthole spurs.

## DESIGNERS' COMMENTS

Public Health England (HPA) advises the only way of knowing the actual radon presence within a building is to test the building once it has been constructed. If a high reading then registers, corrective measures should be sought! It is preferable when constructing from new to remove uncertainty by protecting the entire building footprint. So doing using an appropriate gas grade oversite membrane linked to Radon Cavity Barriers reduces an addressable risk.

## REFERENCES

The Environmental Industries Commission

[www.eic-uk.co.uk](http://www.eic-uk.co.uk)

TheRadon Council

[www.radoncouncil.org](http://www.radoncouncil.org)

Public Health England

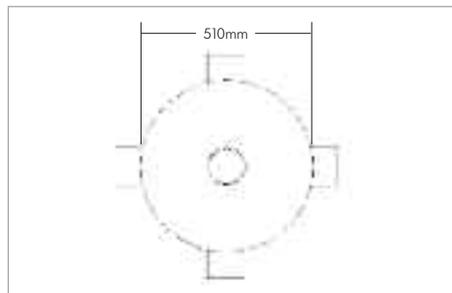
[www.gov.uk/government/organisations/public-health-england](http://www.gov.uk/government/organisations/public-health-england)

## DETERMINING YOUR REQUIREMENTS

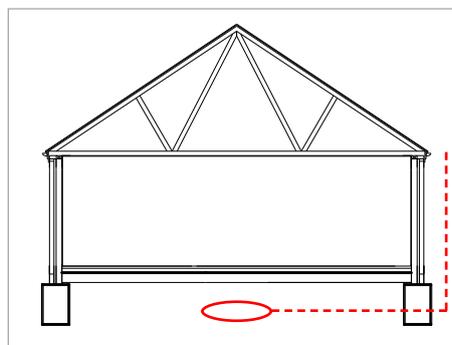
We recommend advantage is taken of our take-off service. We will be pleased to calculate your requirements and submit a proposal and scheduled for your consideration.

## SPECIFICATION WORDING

Radon Gas reception sump by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769).



Each sump has four side connections and one top connection. This permits interconnection if a large area involving multiples of sumps is required.



### PRODUCT NAME

Radon / Methane gas reception sump

### DIMENSIONS

510mm x 240mm + 110mm porthole projections x 5

### GAS EXIT RATIO

4:1

### MAXIMUM SERVICEABLE AREA

>250m<sup>2</sup>

### MAXIMUM SUMPS PER OUTLET PIPE

5

### SUMP TO FAR LIMIT OF ANY AREA

Not more than 9 metres

### OUTLET

Via soil / drain 110mm nom pipe

### MATERIAL

Polypropylene