# World Radon Solutions Database
## Existing Buildings
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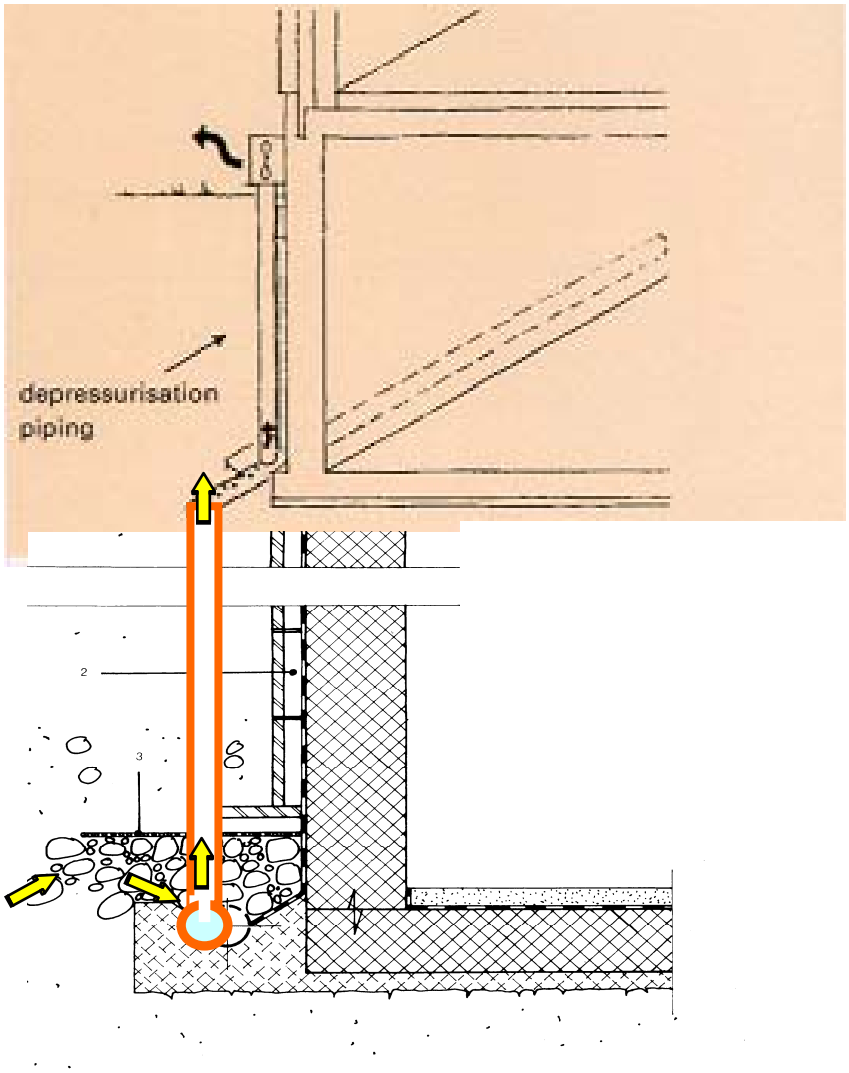
## Existing Buildings

## Case Study

Sheet N°

| | |
|---|---|
| **Type** | Depressurization on drainage system |
| **Country** | Switzerland |

### Illustration



## Description

Air is extracted from the drainage system by a fan. If the soil is very permeable the effect extends under the house.
Fan: Tube axial fan 10 to 100 W with variable frequency controls.

## Selection

Buildings with existing drainage system.

## Pre-installation Diagnosis

A temporary fan will be mounted on the drain pipe and measure the radon concentration in the inhabited room with a continuous monitor.
It is better to effect this simulation in the cold period.

## Radon reduction achieved

Radon reduction from 750 Bq/$m^3$ down to 220 Bq/$m^3$. This system is cheap and easy but is only effective in 10% of the cases.

## Problems

The exhaust vent should be at least 2 metres away from windows and doors, so that the severely contaminated air does not reinfiltrate the interior.

## System enhancements

Install a sealed valve at each exit of the drainage system. A sufficient quantity of water opens the valve against underpressure from the fan.

## Further Information

More information about this system in the “Swiss Radon Guide” could be bought or downloaded from our website WWW.CH-RADON.CH
www.bag.admin.ch/strahlen/ionisant/radon/pdf/d/Radonhandbuch-en.pdf

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