



European Radon Solutions Database

Prepared by
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Existing Buildings

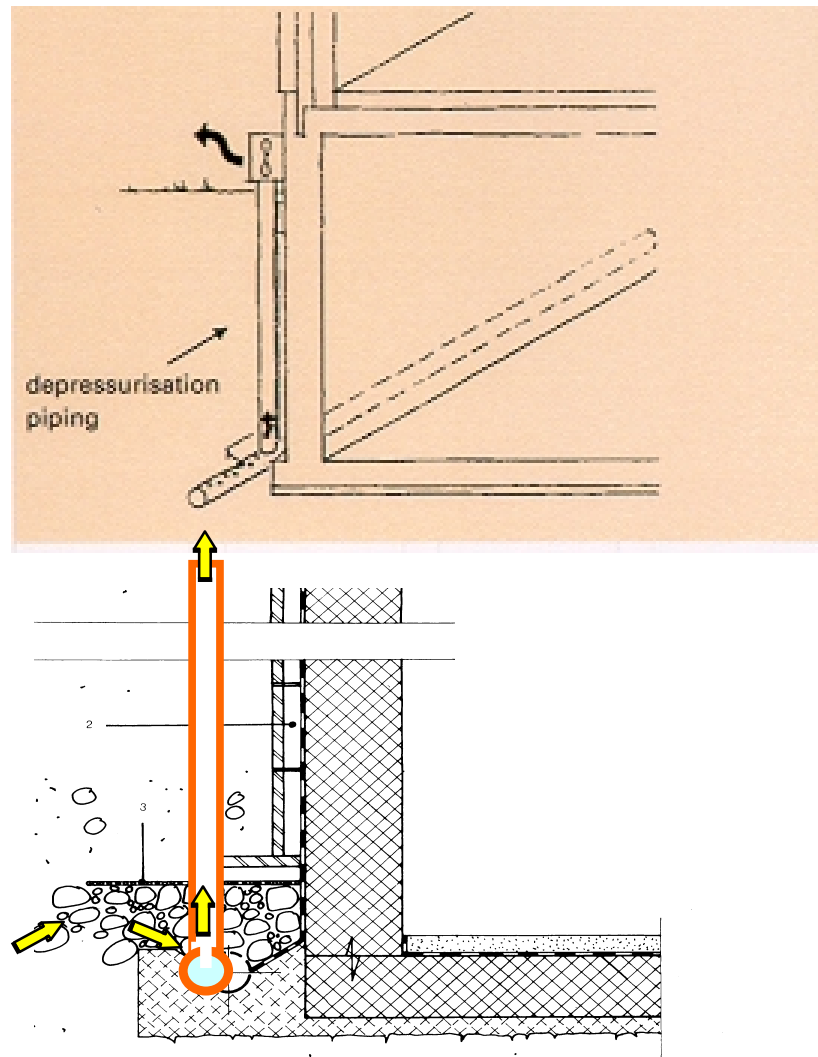
Case Study

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 effectuate 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

or direct from

Swiss Federal Office of Public Health

Division of Radiation protection

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