



European Radon Solutions Database

Prepared by
: ERRICCA 2 *European Radon Research and Industry Collaboration Concerted Action*
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Existing Buildings

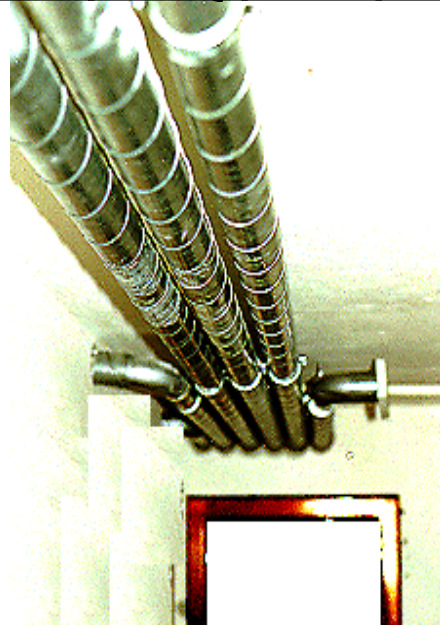
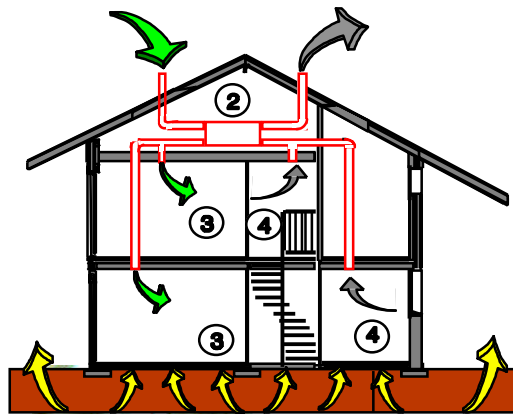
Case Study

Sheet N°

Type | Controlled ventilation

Country | Switzerland

Illustration



Description

First effect: "*dilution*" this system renews room air in a controlled way and mixes it with fresh air. If the quantity of air is doubled, the pollutants in the room air are reduced by a factor of 2.

Second effect: "*pressurisation*" there is also a change in the pressures inside the house. If the quantity of supply air is slightly greater than the quantity of exhaust air, there is a slightly overpressure (0.5 to 2 Pascals) compared with that of the soil and less radon is transported into the house this effect is more important than the dilution.

If this system is installed only in the lowest inhabited storey and automatically reduces the radon concentration of higher storeys. Radon concentrations in the next storey up are generally 15% lower.

Selection

This remediation is adapted for airtight houses.

Pre-installation Diagnosis

Test the efficiency with a blower door system.
It is better to effectuate this simulation in the cold period.

Radon reduction achieved

Radon reduction from 7500 Bq/m³ down to 150 Bq/m³

Problems

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

System enhancements

This system could be sufficient to be installed only on the lowest floor

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
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