Always. Reliable. Tight.

Bring the *Spectre* to an End!

THE MOST IMPORTANT INFORMATION AT A GLANCE!

RELIABLE PROTECTION AGAINST RADON GAS

Bring the spectre to an end!

UNPREDICTABLE GHOST RONNIE RADON

RONNIE RADON INTRODUCES HIMSELF

- Born: Discovered in 1900, I have been around since the beginning of time
- Profession: Radioactive noble gas
- Family: Uranium and Radium
- Habitat: Resident in the soil in different concentrations, depending on the region
- Properties: colourless, odourless, tasteless
- A pin hole gives me enough space to sneak into your house with 900.000 of my siblings to wreak havoc
- My strength: useful for pain therapy
- My weakness: I can cause lung cancer

European directive for protection against radiation

KEY FACTS ABOUT RADON

SAFETY STANDARDS FOR PROTECTION AGAINST THE DANGERS ARISING FROM EXPOSURE TO IONISING RADIATION, (COUNCIL DIRECTIVE 2013/59/EURATOM OF 5 DECEMBER 2013)

§ 74

Indoor exposure to radiation

1. Member States shall establish national reference levels for indoor radon concentrations. The reference levels for the annual average activity concentration in air shall not be higher than 300 Bq/m³.

Reference values:

in workplaces: 300 Bq/m³

indoors: 300 Bq/m³

§ 103

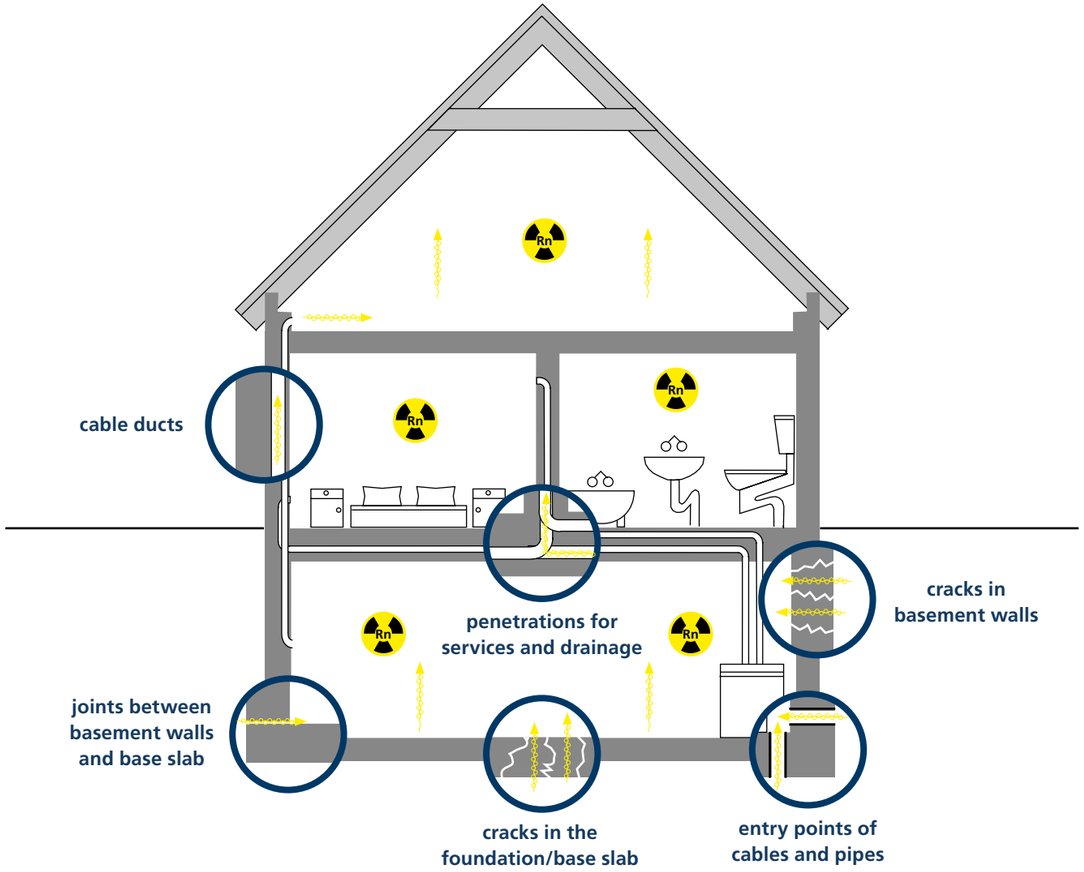
Radon action plan

1.[...], Member States shall establish a national action plan addressing long-term risks from radon exposures in dwellings, buildings with public access and workplaces for any source of radon ingress whether from soil, building materials or water [...]

2. Member States shall ensure that appropiate measures are in place to prevent radon ingress into new buildings. These measures may include specific requirements in national building codes.

Reasons for radon inside buildings

ENTRY PATHS FOR RADON



Radon protection

THE THREE MOST COMMON DEFECTS

1. LEAKS IN BASEMENT SLABS AND WALLS

- Unprofessionally laid underground entry points of cables and pipes
- Cracks due to subsidence and building displacements

2. SEPARATING COMPONENTS BETWEEN THE FLOORS

- Doors to basement stairs
- Cracks and joints
- Unprofessionally laid entry points of cables and pipes

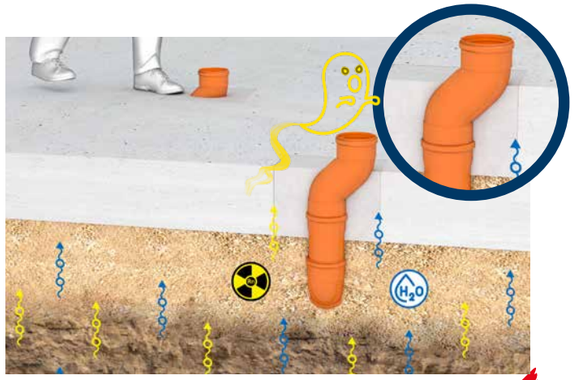
3. NO RADON BARRIER OR WATERPROOFING MEMBRANE

- Between blinding layer and base slab
- Between base slab and floor construction

Source:
Bundesamt für Gesundheit BAG (2018): faktor Architektur Technik Energie, Radon Praxis-Handbuch Bau. Auflage 1, Zürich.

Keep in mind!

SAFETY RISK RECTANGULAR RECESSES



- not watertight
- not radon-tight
- no safe connection for vapour barrier foil

Easy to use!

STEP SAFE AND RADON-THIGHT

- simple on-site installation without rectangular recesses
- non-trip installation according to DGUV 38 §12a thanks to step safe insert
- gastight and watertight connection to the base slab thanks to the integrated 3-ribbed seal

Keep in mind!

LACK OF PROFESSIONAL SEALING

- not watertight
- not radon-tight
- no connection to area sealing (PMBC)

Quick seal!

SECURE BONDING WITH THE PMBC COATING

- roughened surface for optimal bonding with the PMBC coating
- guaranteed gas-tightness and watertightness of the wall through attachment to the PMBC coating

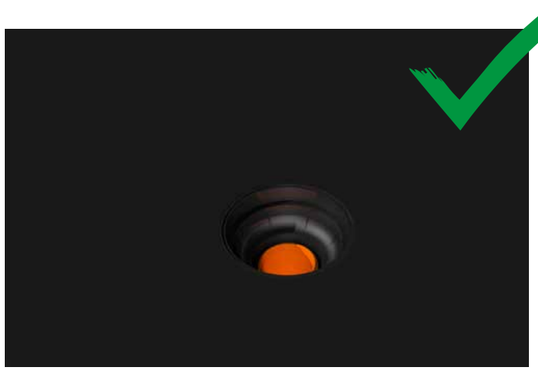
Keep in mind!

LACK OF PROFESSIONAL SEALING

- not watertight
- not radon-tight
- no safe connection for vapour barrier foil

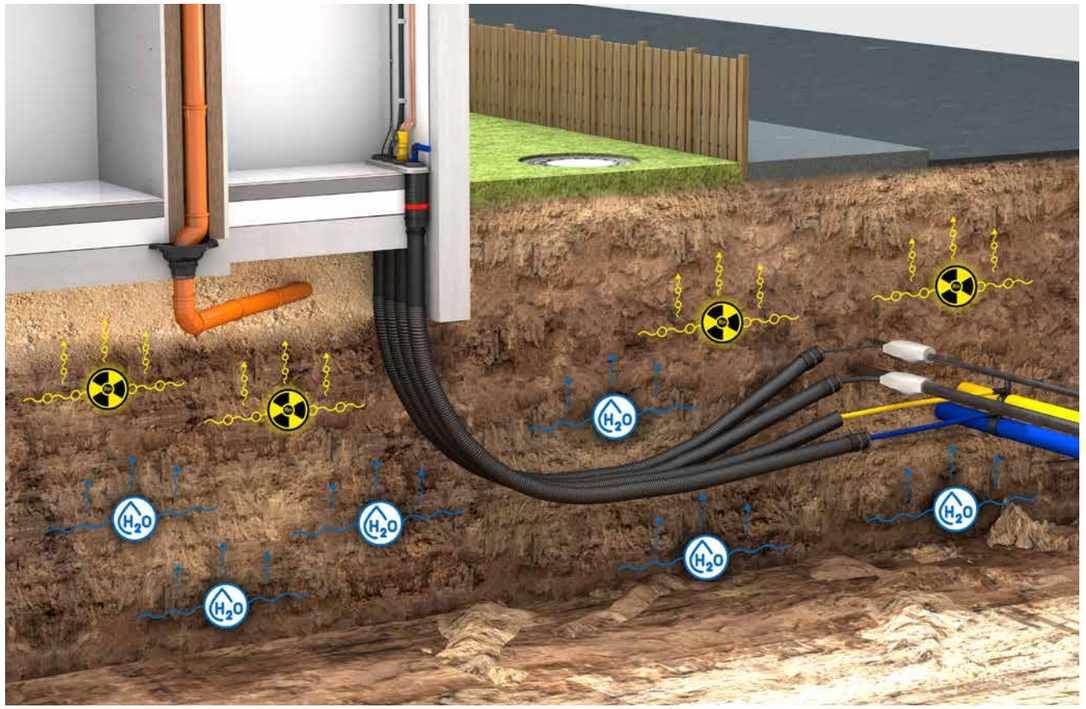
Quick seal!

SECURE BONDING WITH THE VAPOUR BARRIER FOIL



- adhesive ribbon for simple integration of vapour barrier foil
- guaranteed gas-tightness and watertightness of the wall through attachment to the vapour barrier seal

BASE SLAB SECURE RADON-TIGHT



- tested watertightness
- tested radon tightness
- secure bonding with the vapour barrier foil

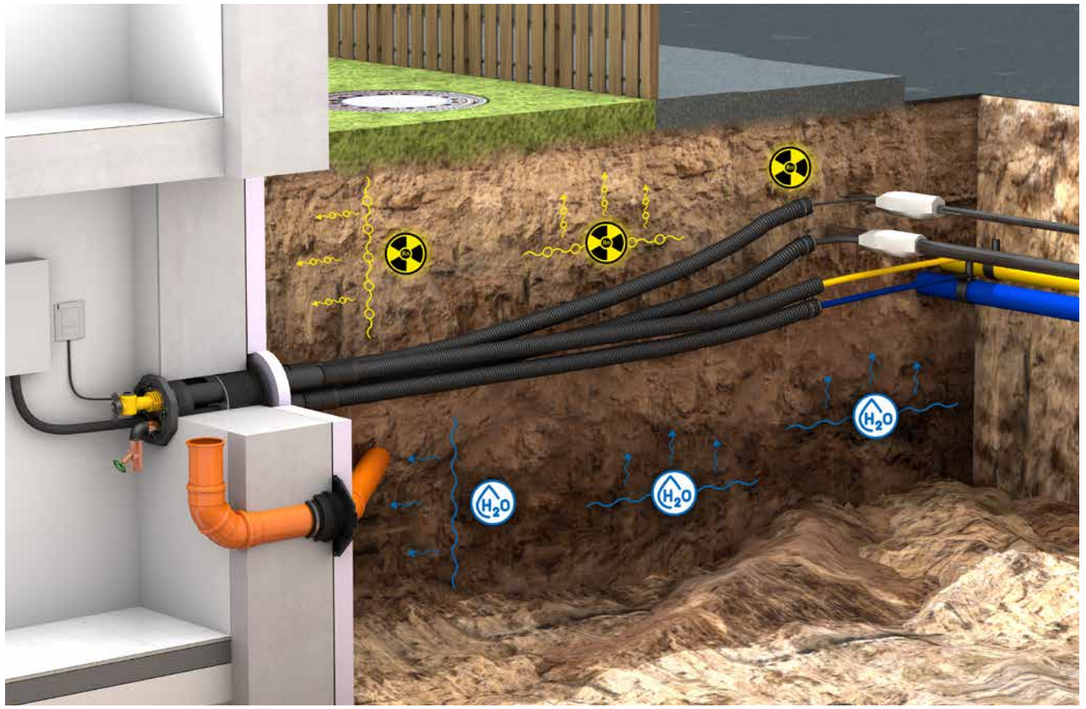
This is how it's done!

BASE SLAB SECURE RADON-TIGHT

MULTIPLE-SERVICE BUILDING ENTRY SYSTEM MSH BASIC FUBO-BHP

TUNDISH AT 110

BASEMENT SECURE RADON-TIGHT



- tested watertightness
- tested radon tightness
- safe connection of PMBC-Membranes
- tested according to DIN 18533 W1.1-E, W1.2-E und W2.1-E

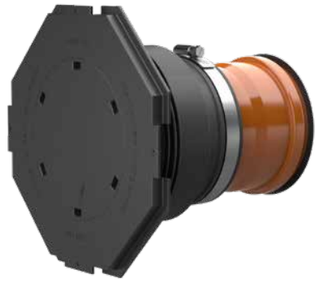
This is how it's done!

BASEMENT SECURE RADON-TIGHT

MULTIPLE-SERVICE BUILDING ENTRY SYSTEM MSH POLYSAFE WAND BHP

UNIVERSAL WALL SLEEVE UFR

UNIVERSAL WALL ENTRY UDM



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