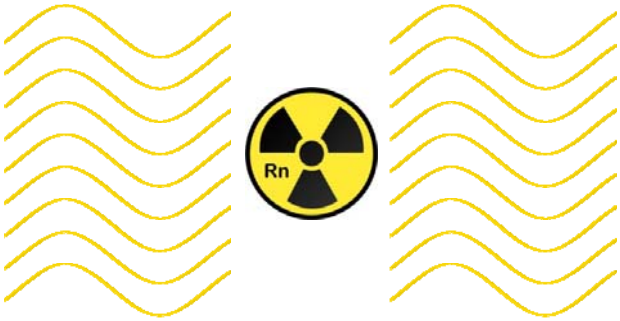



# Umodan® RadonProtect System

## Certified vapour barrier and protective foil against Radon gas

Manufacturer: WIKA Isolier- und Dämmtechnik GmbH, Germany
Measurement, Concepts, Building Biology: Dipl. Biol. Pamela Jentner, OrangePep GmbH & Co.KG, Germany
Technical Data: 01.06.2015

| | |
|---|---|
| Structure Umodan®RadonProtect Foil:<br>PE – film Thickness: approx. 40 µm<br>Lamination - PE Surface weight 23 g/m²<br>Aluminium foil Thickness: approx. 30 µm<br>Lamination – PE Surface weight 23 g/m²<br>PE - film Thickness: approx. 40 µm<br><br>Thickness: 0.17 mm<br>sd value: 1500 m<br>Fire classification E<br>Weight: Approx. 15 kg / roll | Delivery form Umodan®RadonProtect Foil:<br>1 Roll : 1 m wide, 50 m long = 50 m²<br>1 Pallet: 32 rolls = 1600 m²<br><br>DIN certified:<br>DIN EN 13967 Plastic material to protect the construction work from ascending soil moisture<br>DIN EN 13984 Moisture barrier product type A<br><br>Radon gas-tight certified by Radon-authority<br>Dr. Joachim Kemski, Bonn, Deutschland |
| Wikaflor protective membrane:<br>Polyester membrane 200 g/m²,<br>Thickness: approx. 1mm<br>Colour greenish | Delivery form Wikaflor protective membrane:<br>1 Roll: 1 m wide, 100 m long = 100 m²<br>Characteristics: tear-resistant, drill-resistant, hard-wearing |
| The Umodan®RadonProtect Foil system is used in sandwich construction with the protective membrane Wikaflor (200g / m²). This serves as protection from physical damage. | |

## Handling of the Umodan® RadonProtect Foil:

The **RadonProtect Foil** is to be rolled out, so that the imprinted side faces upwards. The **RadonProtect Foil** system is used in sandwich construction together with the protective membrane Wikaflor: one layer of Wikaflor protective membrane is placed under as well as on the **RadonProtect Foil**. Any physical damage must be avoided. No gaps, cracks, holes or leakages! .

The layers of **Radon Protect Foil** sheets should overlap 5 - 10 cm on each side. The sheets of foil are welded together by means of a hot air gun. If liquefaction of the plastic layer is visible, the two foil layers are pressed together by a metal roller. This technique creates an inseparable radon gas-tight and vapour and moisture-proof barrier layer. For welding the foil layers nothing but hot air is required. This saves time and costs.

For connections at culverts please form sealing sleeves with **RadonProtect Foil** and weld them to the **RadonProtect Foil** layers. The sealing sleeve has to be connected gas-tight and moisture proof.

For connecting the **RadonProtect Foil** to components the foil must be installed 5 cm up the wall from the bottom and glued with a hybrid-adhesive, such as Ottocoll HiTack.

Before doing further layer construction please visually check the **RadonProtect Foil**. If there is any damage, please eliminate it completely.

**Implementation under base plates:**

In new construction projects, the **Radon Protect Foil** should be installed as radon protection preferably below the base plate. The exact placement of **Radon Protect Foil** (e.g. above or below the insulation) must be coordinated with the responsible architects.
It must be cleared if a projection is desired. The entire system structure of Wikaflor protective membrane | **Radon Protect Foil**| Wikaflor protective membrane then protrudes about 1 m on each side beyond the planned base plate. It must be pointed out that possibly occurring moisture must be run off from the building.

One layer of the protective membrane Wikaflor must be placed under and on the **Radon Protect Film** in "sandwich" construction. Physical damage must be avoided.

For connections to culverts please form sleeves from **Radon Protect Foil** and weld them to the **Radon Protect Foil** layers. Each sleeve must be connected gas-tight to the culvert.

If necessary, the ventilation floor **WIKA HOBO** can be used as drainage under the **Radon Protect Foil.**

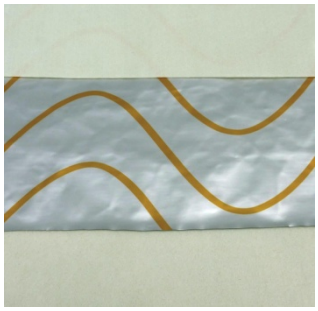
**Implementation above base plates:**

In remedial actions an installation above the existing concrete slab underneath the floor structure is necessary. The **Radon Protect Film** must be pulled up above the horizontal moisture barrier in the walls. The adhesive on the wall should be carried out over the entire surface with "Ottocoll HiTack hybrid adhesive".

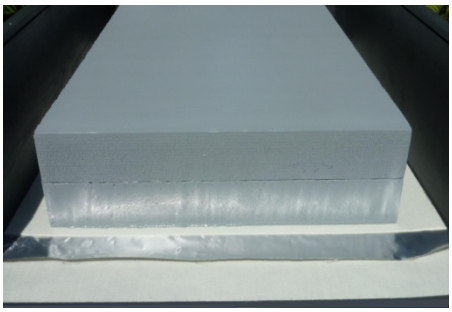
If necessary this remedial measure can be combined with the ventilation floor **WIKA HOBO.**

**Implementation under floor screed:**

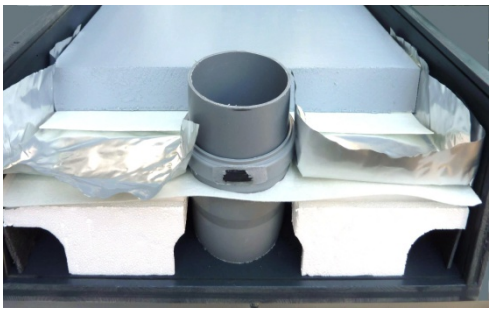
One layer of the protective membrane Wikaflor must be placed under and on the **Radon Protect Foil** in "sandwich" construction. Physical damage must be avoided. Please install the **Radon Protect Foil** shortly before implementing the floor screed. Construction work must not damage the **Radon Protect Foil**, no gaps, cracks, holes or leakages!



RadonProtect Foil with Wikaflor membrane



RadonProtect Foil
System below the base plate



RadonProtect Foil with ventilation floor WIKA HOBO

**Note:** All actions must be cleared with the responsible architects and planners. The operating specialist company is exclusively responsible for the professional installation of **Radon Protect Foil System.** Our information sheet is to advise you to the best of our knowledge. All included information is based on empirical values under normal conditions. This is not a legally binding warranty. Our application and processing guidelines are meant only to assist our customers when using our products.


| **Manufacturer** | **Sales • Measuring • Concepts • Building Biology** |
|---|---|
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