IAF - Radioökologie GmbH

Radionuclide Laboratory | Radiation Safety | Radiological Consultants

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DOYMA GmbH & Co
Dichtungssysteme
Brandschutzsysteme
Industriestraße 43-57
28876 Oyten

Radeberg, 2017-06-29

Certificate

Determination of the Radon Diffusion Coefficient

The radon diffusion coefficient D of the sealing system "Curaflex Nova® Multi" as supplied by the client

DOYMA GmbH & Co
Industriestraße 43-57
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has been experimentally determined by IAF-Radioökologie GmbH using a double chamber system. The results are provided in the following table.

Description of variables	**Measured values**
Diffusion coefficient D	$1.43 \cdot 10^{-10}$ m²/s
Diffusion length L_D	8.26 mm
Material thickness d	45 mm
Area of the material F	314 cm²
Test parameter $R = d/L_D$	5.45
Result	**R > 3, i.e., radon tight**

A sealing system is rated "radon tight" if its thickness exceeds the radon diffusion length of the material at least by a factor 3. Otherwise the sealing system is rated “not radon tight”. A "radon tight" sealing system is defined by a material which, when covering a radon-exhaling surface, reduces the exhalation rate by at least 95% compared to the bare surface.

Dr. rer. nat. habil. Hartmut Schulz
Managing Director