

IAF-Radioökologie GmbH | Wilhelm-Rönsch-Straße 9 | 01454 Radeberg

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



Radeberg, 2017-10-27

Certificate

Determination of the Radon Diffusion Coefficient

The radon diffusion coefficient D of the sealing system "Curaflex® Quick In A" as supplied by the client

DOYMA GmbH & Co
Industriestraße 43-57
28876 Oyten

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	$4.90 \cdot 10^{-11} \text{ m}^2/\text{s}$
Diffusion length L_D	4.83 mm
Material thickness d	27 mm
Area of the material F	314 cm ²
Test parameter $R = d/L_D$	5.59
Result	R > 3, i.e., radon tight

The result "radon tight" also applies to the sealing systems Curaflex® A, Curaflex® A/M, Curaflex® A/M/T, Curaflex® A/0, Curaflex® A/S, Curaflex® C, Curaflex® Quick In C, Curaflex® C/M, Curaflex® C/M/T, Curaflex® C/0, Curaflex® C/S, Curaflex® C/2/SD/5, Curaflex® C/2/SD/6, Curaflex® B, Curaflex® D, Curaflex® E und Curaflex® F.

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