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DOYMA GmbH & Co  
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## Certificate

### *Determination of the Radon Diffusion Coefficient*

The radon diffusion coefficient  $D$  of the sealing system "Curaflex Nova<sup>®</sup> Senso" as supplied by the client

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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 $D$	$2.21 \cdot 10^{-10} \text{ m}^2/\text{s}$
Diffusion length $L_D$	10.26 mm
Material thickness $d$	45 mm
Area of the material $F$	314 $\text{cm}^2$
Test parameter $R = d/L_D$	4.38
Result	<b><math>R &gt; 3</math>, i.e., radon tight</b>

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.

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