



Rigidur gypsum fibre boards
Rigidur flooring elements

Environmental Product Declaration according ISO 14025 and CEN/TC 59 SC 17 sustainability in building construction

for environmental sustainability of the listed products

Independent examination according to ISO 14025 environmental product declaration

Holder of data

German association of gypsum industry



Holder of the declaration



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Declaration number

EPD-Rigips-40-2011-1

Declared building products

Rigidur gypsum fibre boards according DIN EN 15283-2

Rigidur gypsum fibre flooring elements according general approval for building products

The generic data of the Bundesverband der Gipsindustrie are the basis for the product groups gypsum fibre boards and gypsum fibre flooring elements, which are complemented by examination of the product definition and the production process.

Validity

This declaration is valid only for the mentioned products 5 years beginning from the date of issue.

Content of the declaration

The complete environmental product declaration can be downloaded from the web portal of the Bundesverband der Gipsindustrie:

http://www.gips.de/content/publikationen/allgemein/umwdeklara/Produktdeklaration_D_09.06.09.pdf

The declaration is complete and contains all required information according ISO 14025. The abridged version is added.

Examination of the declaration

The declaration and the basic product category rules are examined according to ISO 14025 by the wissenschaftlichen Beirat der Forschungsvereinigung der Gipsindustrie e.V. and certified with this document by Forg Bauconsult as independent expert.

Date of issue

11.05.2011

Signature

Geschäftsstelle der Forschungsvereinigung der Gipsindustrie e.V.

Independent auditor
Gerhard Forg
Forg Bauconsult
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Short version of the environmental product declaration

Product description

Rigidur gypsum fibre boards are standardised building products according EN 15283-2. They are declared as non combustible. The behavior to fire is classified as A1 according to EN 13501-1. Rigidur gypsum fibre flooring elements are non regulated building products with a certificate of use in the form of a general approval for building products by the supervisory authority for building products.

Conformity

The examination of product specific characteristics (raw material, production process, material composition) gives no hints for any difference to the environmental product declaration for gypsum-based products.

Results of the life cycle assessment

Rigidur gypsum fibre boards	
Primary energy, non-renewable (MJ)	4.90
Primary energy (MJ)	0.06
Global warming potential (GWP 100) (kg CO ₂ -eq.)	0.308
Ozone depletion potential (ODP) (kg R 11-eq)	12.4E-09
Acidification potential (AP) (kg SO ₂ -eq.)	0.39E-03
Eutrophication potential (EP)(kg PO ₄ -eq.)	6.55E-05
Photochemical ozone creation potential (POCP)(kg C ₂ H ₄ -eq.)	3.70E-05

Rigidur gypsum fibre flooring elements	
Primary energy, non-renewable (MJ)	4.89
Primary energy (MJ)	0.06
Global warming potential (GWP 100) (kg CO ₂ -eq.)	0.303
Ozone depletion potential (ODP) (kg R 11-eq)	12.4E-09
Acidification potential (AP) (kg SO ₂ -eq.)	0.38E-03
Eutrophication potential (EP)(kg PO ₄ -eq.)	6.33E-05
Photochemical ozone creation potential (POCP)(kg C ₂ H ₄ -eq.)	3.76E-05

Tests and analyses

Radioaktivität

The measured values of specific radioactivity lead to the evaluation according to RP 112 (EU-recommendation "radiation protection 112") "applicable without restrictions" because the dose contribution is clearly below <0.3 mSv/a.

Emission test in compliance with DIN EN ISO 16000-9/-11

The requirements following the testing scheme of the AgBB-version 2008 regarding all existing test points are met:

TVOC₃ ≤ 10 mg/m³

Carcinogenic substances₃ EU-cat. 1 and 2 ≤ 0.01 mg/m³

TVOC₂₈ < 1.0 mg/m³, SVOC₂₈ ≤ 0.1 mg/m³

Carcinogenic substances₂₈ EU-cat. 1 and 2 ≤ 0.001 mg/m³

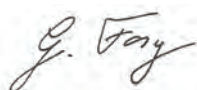
Assessable substances: Observation of all VOC with $NIK R = \sum C_i / NIK_i \leq 1$

Non-assessable substances: Sum of all VOC without NIK $\sum VOC_{28} \leq 0.1 \text{ mg/m}^3$

All listed values are clearly below the relevant criteria. Thus the products do not have a negative impact on the indoor air quality.

Date/signature

11.05.2011



Gerhard Forg, Diplom-Mineralogist, independent auditor

Disclaimer

The declaration is based on our actual knowledge and describes the declared product exclusively with regard to environmental impairment potential. The declaration doesn't deliver assurance of properties of the declared product. It is not allowed to change the declaration or transfer to other products.



Rigips. Nachhaltig gut.

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