



Environmental Product Declaration

as per ISO 14025

Vacuum Insulation Panels

Vacupor[®] NT-B2-S / Vacuspeed[®]

Vacupor[®] PS-B2-S

Vacupor[®] RP-B2-S

Porextherm Dämmstoffe GmbH

Declaration number

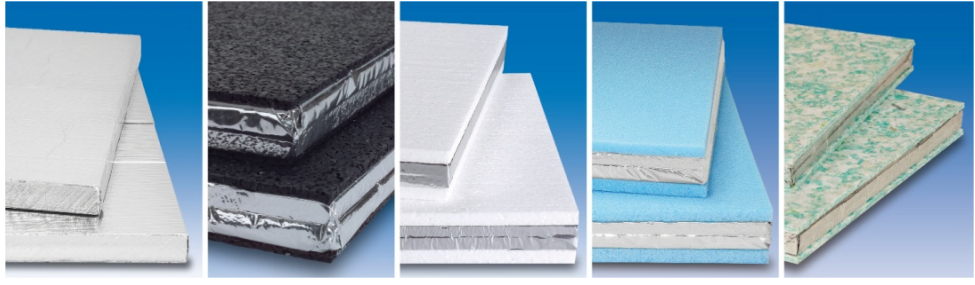
EPD-PDG-2011111-E


Institut Bauen und Umwelt e.V.

www.bau-umwelt.com



Institut Bauen
und Umwelt e.V.

	<p style="text-align: center;">Brief version Environmental Product Declaration <i>Environmental Product Declaration</i></p>
--	--

<p>Institut Bauen und Umwelt e.V. www.bau-umwelt.com</p> 	<p style="text-align: right;">Programme holder</p>
--	---

<p>Porextherm Dämmstoffe GmbH Heisinger Strasse 8/10 D-87437 Kempten Internet: www.porextherm.com</p>	<p style="text-align: right;">Declaration holder</p>
---	---


<p>EPD-PDG-2011111-E</p>	<p style="text-align: right;">Declaration number</p>
---------------------------------	---

<p>Vacuum Insulation Panels (VIP)</p> <p>This Declaration is an Environmental Product Declaration in accordance with ISO 14025 and describes the environmental features of the construction products outlined here. It is supposed to support the sustainable development of environmental and health friendly construction. All relevant environmental data is contained in this validated declaration.</p> <p>The declaration is based on the "Vacuum Insulation Panels" PCR document, version 2011-08.</p>	<p style="text-align: right;">Declared construction products</p>
--	---


<p>This validated declaration entitles the holder to bear the symbol of the Institut Bauen und Umwelt e.V. It exclusively applies to the mentioned products, three years from the date of issue. The declaration holder is liable for underlying data and supporting documents.</p>	<p style="text-align: right;">Validity</p>
---	---

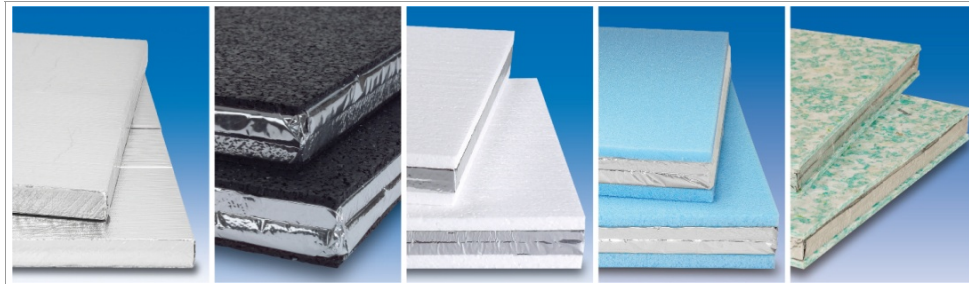
<p>The declaration is complete and comprises in detail:</p> <ul style="list-style-type: none"> • Product definition and physical construction data • Details on base materials and material origin • Description of the product manufacturing process • Information on product processing • Data on the utilisation status, extraordinary effects and re-use phase • Results of the Life Cycle Assessment 	<p style="text-align: right;">Content of the Declaration</p>
--	---

<p>20 October 2011</p>	<p style="text-align: right;">Issue date</p>
------------------------	---

	<p style="text-align: right;">Signatures</p>
<p>Prof. Dr.-Ing. Horst J. Bossenmayer (President of Institut Bauen und Umwelt)</p>	

<p>This Declaration and the regulations upon which it is based have been tested by the independent Committee of Experts (SVA) in line with ISO 14025.</p>	<p style="text-align: right;">Verification of the Declaration</p>
---	--

		<p style="text-align: right;">Signatures</p>
<p>Prof. Dr.-Ing. Hans-Wolf Reinhardt (Chairman of the SVA)</p>	<p>Dr.-Ing. Wolfram Trinius (tester appointed by the SVA)</p>	



**Brief version
Environmental
Product Declaration
*Environmental
Product Declaration***

This EPD relates to 1 m ² of vacuum insulation panels with and without lamination.	Product description
<p>Vacupor[®] insulation panels are used as follows:</p> <ul style="list-style-type: none"> • The Vacupor[®] NT-B2-S, Vacupor[®] RP-B2-S and Vacuspeed[®] products are used for thermal insulation of walls, ceilings, roofs and foundations in buildings. • Vacupor[®] PS-B2-S is used for thermal insulation of walls, ceilings, roofs and foundations in buildings. • All of the declared VIPs may be used in prefabricated façade panels with a design which is similar to that of insulating glass. 	Area of application
<p>The Life Cycle Assessment has been performed in accordance with DIN EN ISO 14040 and DIN EN ISO 14044, the requirements of the IBU Guidelines as regards Type III Declarations and the specific rules governing vacuum insulation panels. Specific plant data on the products tested as well as data from the "GaBi 4" data base was applied. The Life Cycle Assessment comprises the life cycle stages of raw material and energy exploitation, raw material transport, the actual manufacturing phase as well as disposal and/or recycling of the declared VIPs.</p>	Scope of the Life Cycle Assessment

Results of the Life Cycle Assessment

Evaluation factor and unit per m ² VIP	Vacupor [®] NT-B2-S/Vacuspeed [®] (VIP without lamination)			Vacupor [®] PS-B2-S (VIP EPS lamination)			Vacupor [®] RP-B2-S (VIP rubber lamination)		
	Manu- facture	Utilisa- tion	Total	Manu- facture	Utilisa- tion	Total	Manu- facture	Utilisa- tion	Total
Primary energy deployment from resources (lower heating value) [MJ]	98.19	-72.47	25.72	81.83	-54.10	27.73	104.35	-74.19	30.16
Primary energy deployment from regenerative resources (lower heating value) [MJ]	27.63	-23.33	4.30	20.85	-16.82	4.03	29.36	-23.35	6.01
Global Warming Potential (GWP 100 years) [kg CO ₂ equiv.]	4.82	-3.27	1.54	4.05	-2.25	1.80	5.26	-3.00	2.26
Ozone Depletion Potential (ODP, catalytical) [kg R11 equiv.]	7.3E-07	-5.0E-07	2.3E-07	5.5E-07	-3.7E-07	1.9E-07	7.7E-07	-5.0E-07	2.6E-07
Acidification Potential (AP) [kg SO ₂ equiv.]	1.7E-02	-1.3E-02	3.8E-03	1.3E-02	-9.7E-03	3.8E-03	1.9E-02	-1.3E-02	5.4E-03
Eutrophication Potential (EP) [kg phosphate equiv.]	1.5E-03	-1.1E-03	3.4E-04	1.3E-03	-7.9E-04	5.0E-04	1.7E-03	-1.1E-03	6.5E-04
Photochemical Ozone Creation Potential (POCP) [kg ethene equiv.]	1.3E-03	-9.5E-04	3.0E-04	1.1E-03	-6.9E-04	4.1E-04	1.4E-03	-9.4E-04	4.4E-04

Created by: PE INTERNATIONAL AG, Leinfelden-Echterdingen



According to the PCR, no documentation is required.

Evidence and tests



Institut Bauen
und Umwelt e.V.

Publisher:

Institut Bauen und Umwelt e.V.

Rheinufer 108

D-53639 Königswinter

Tel.: +49 (0)2223 296679-0

Fax: +49 (0)2223 296679-1

E-mail: info@bau-umwelt.com

Internet: www.bau-umwelt.com

Layout:

PE INTERNATIONAL AG

Photo credits:

Porextherm Dämmstoffe GmbH

Heisinger Strasse 8/10

D-87437 Kempten

Internet: www.porextherm.com