Institut für **Baubiologie** Rosenheim GmbH

Certificate of Award

Based on the excellent test results, the Seal of Approval

is hereby awarded to

Knauf Integral KG
D-74589 Satteldorf

for the tested product

Knauf gypsum fibreboards

(Certification-No. 3019 - 1032)

by the Institut für Baubiologie Rosenheim GmbH.

Reimut Hentschel, Managing Director
Rosenheim, February 2019

The Seal of Approval is awarded for 2 years. In the interest of consumers, follow-up testing of the products must be performed in due time before the Seal of Approval expires. The applicant will have to reapply for these tests.

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Annex to the Award Certificates
KNAUF gypsum fibre boards
(acc. to Expert Report no. 3019-1032)

Applicants:

Knauf Integral KG
Am Bahnhof 16
D-74589 Satteldorf

Knauf Gips KG
Postfach 10
D-97343 Iphofen

Knauf Ges. m. b. H
Strobachgasse 6
A-1050 Wien

Knauf AG
Kägenstrasse 17
CH-4153 Reinach

The Seal of Approval

It is the objective of the IBR to identify non-polluting building products for healthy living for the consumer by awarding the seal of approval "TESTED AND APPROVED BY THE IBR".

The seal of approval was created by the Institut für Baubiologie Rosenheim GmbH in 1982 to enable consumers with awareness for health and ecological matters to protect themselves against health hazards caused by building materials and furniture in their residential environment.

The seal of approval is awarded to products which ensure healthy living with respect to building biology and at the same time protect the environment. When awarding the seal of approval, we only use scientific and technical analysis methods which are based on normative regulations as well as the current state-of-the-art of laboratory analytics so that they should be understood both by third-party experts and by end consumers.

The aim of awarding the seal of approval "TESTED AND RECOMMENDED BY THE IBR" to as many products as possible is to enable an increasing number of consumers and end users to make criteria related to building biology a critical part of their decision when purchasing products for building and furnishing their homes.

The tests listed in our expert reports are not supposed to supersede the requirements in terms of building physics, supervision, legal regulations, or safety. They are merely a complementary set of tests related to health, physiology, building biology, and ecology aspects which have been neglected.

The seal of approval "TESTED AND APPROVED BY THE IBR" is based on a holistic perspective. Besides its focus on the tests that determine the potential physiological impact of the products on

human beings and/or the environment, the expert report associated with granting the seal also honours any product whose production, processing, use, and ecological recycling have no or only a limited, tolerable adverse effect on the environment.

The emission of harmful substances, e.g. with a carcinogenic and/or mutagenic potential, is always to be considered as a criterion for exclusion. The seal of approval will under no circumstances be awarded to such products.

Any names of companies, products or brands mentioned in our expert reports are protected by copyright. The fact that we mention them is neither to be construed as a valuation nor as a recommendation in this context.

Product description and manufacturing plants

As part of the award of the test seal, the companies commissioned us to subject their products to building biology tests.

The product submitted for testing is gypsum fibreboard made of hardened gypsum with approx. 10-20 % cellulose fibres and small additions of production aids and hydrophobing agents. These are processed into rigid board material for the execution of wall, ceiling and floor constructions.

After the panel has set, it is dried, sanded and cut to the final size. The addition of further binding agents is not necessary.

The elements are available in different versions of compaction or bulk density in order to meet different building physics requirements.

In terms of strength, the gypsum matrix is responsible for the stiffness and compressive strength of the material, while the fibre additives made of cellulose fibres are necessary for the bending tensile strength and shear strength of the material.

With the use of panel materials, constructions with a fire resistance expectation are possible. Some products have an ETA/abZ for static applications.

All tests have been carried out for the following manufacturing plants and products:

Manufacturing plants	**Satteldorf (Germany)**	**Rottleberode (Germany)**	**Vidin (Bulgaria)**
Products	GIFAfloor…	GIFAfloor…	-
	GIFAboard…	GIFAboard…	-
	Brio…	Brio…	Brio…
	Vidifloor…	Vidifloor…	Vidifloor…
	Vidiwall…	Vidiwall…	Vidiwall…
	GIFAmarine…	-	Vidifire…
	Torro…	-	Vidiphonic…

The necessity of personal protective equipment for processing the material within the framework of the regulations of the professional associations is expressly pointed out.

A wide range of constructive assistance is available to processors. Comprehensive product information and processing instructions can be found on the manufacturer's website or in the product-specific brochures.

The production is subject to constant internal and external monitoring.

The local transport of any necessary additives or coatings is not part of the inspection. Further technical specifications should be requested from the manufacturer. The necessary safety data sheets were available for inspection. There is no problem with disposal. No hazardous substances are to be identified.