

VERSION: 1.0

Requirements as per BREEAM-NOR v6.0 Technical Manual SD5076NOR Version 1.0/28.02.2022

Self-declaration that the named construction product complies with the exemplary emission level for indoor air quality in BREEAM-NOR v6.0 in compliance with HEA 02

MANUFACTURER:

ZAPP-ZIMMERMANN GmbH

PRODUCT TRADE NAME:

ZZ(R) 530 Fire Protection Joint Seal (formerly: ZZ-joint seal

PRODUCT ID:

various, depending on size

This form must be filled out and signed by a legally responsible person for the construction product manufacturer, if the product is within the limit values of the current standard.

The declaration applies to the following products from Table Hea 02-02.

| | Wood-based products (including wood flooring) |
|---|----------------------------------------------------------------|
| | Flooring materials (including floor leveling compounds) |
| V | Ceiling, wall, acoustic and thermal insulation materials |
| | Interior adhesives and sealants (including flooring adhesives) |

Limit values Table Hea 02-02 (see the extract from the manual on the next page)

Formaldehyd ≤0,02 mg/m³ (Wood-based products (including wood flooring))

Formaldehyd $\leq 0.01 \text{ mg/m}^3$ (Flooring materials (including floor leveling compounds), Ceiling, wall, acoustic and thermal insulation materials, Interior adhesives and sealants (including flooring adhesives)) Total volatile organic compounds (TVOC) $\leq 0.3 \text{ mg/m}^3$,

Total semivolatile organic compounds (TSVOC) ≤0,1 mg/m³,

Category 1A and 1B carcinogens ≤0,001 mg/m³

Testing Requirement minimum requirements

Are pointed per product type in Table Hea 02-02 and are repeated further down on this document (see the referred manual).

Documentation which can serve as basis for the self-declaration could be emission tests and/or test reports which prove that the product fulfills the standards, and the emission limits the manual requires. If in doubt, the manufacturer must consult with their own internal and external experts. An auditor may ask to see the basis for the self-declaration. Providing incorrect and deceptive information can have legal consequences. The filled-out form should be signed by a legally responsible person for the manufacturer. It is confirmed that emissions from the construction product do not surpass the limit given in Table Hea 02-02 in the manual.

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Legally responsible: Dr. Philipp Toth

Position:

product management

Manufacturer: ZAPP-ZIMMERMANN Gu

Business registration number: HRB-Nr. 20819

Date:

18.01.2023

Signature:

Note:

product testing dates back to 2017 and is based on the then prEN 16516. Results of the test chamber measurements after 28 days are as follows:

formaldehyde: 0.003 mg/m³

TVOC: 0.006 mg/m³ TSVOC: $< 0.005 \text{ mg/m}^3$ CMR1 VOC: < 0.001 mg/m³

This self declaration is based solely on this results as reported in UL test report 52349-004 and the standards used therein.

BREEAM-NOR v6.0 Self-declaration Hea 02 Indoor air quality - exemplary level

BREEAM®NOR

Hea 02 Indoor air quality

Table Hea 02-02: Exemplary level emission criteria by product type

| Emission limit* | | | | | | |
|----------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Formaldehyde | Total volatile organic compounds (TVOC)*** | Total semi- volatile organic compounds (TSVOC) | Category 1A and 1B carcinogens (see Definitions) | Testing requirement** | | |
| Wood-based products including wood flooring | | | | | | |
| ≤ 0.02 mg/m³ | ≤ 0.3 mg/m³ | ≤ 0.1 mg/m³ | ≤ 0.001 mg/m³ | NS-EN ISO 16000-9:2006 and NS-EN ISO 16000- 9:2016/AC:2007 OR NS-EN 16516:2017+A1:2020 OR CDPH Method v1.2 OR EN 717-1 (formaldehyde emissions only) | | |
| Flooring materials (including floor levelling compounds) | | | | | | |
| ≤ 0.01 mg/m³ | ≤ 0.3 mg/m³ | ≤ 0.1 mg/m³ | ≤ 0.001 mg/m³ | ISO 10580 OR NS-EN ISO 16000-9:2006 and NS-EN ISO 16000- 9:2016/AC:2007 OR NS- EN 16516:2017 + A1:2020 OR CDPH Standard method v1.2 | | |
| Ceiling, wall and acoustic and thermal insulation materials | | | | | | |
| ≤ 0.01 mg/m³ | ≤ 0.3 mg/m³ | ≤ 0.1 mg/m³ | ≤ 0.001 mg/m³ | ISO 10580 OR NS-EN ISO 16000-9:2006 and NS-EN ISO 16000- 9:2016/AC:2007 OR NS-EN 16516:2017+A1:2020 OR CDPH Standard method v1.2 | | |
| Interior adhesives and sealants (including flooring adhesives) | | | | | | |
| ≤ 0.01 mg/m³ | ≤ 0.3 mg/m³ | ≤ 0.1 mg/m³ | ≤ 0.001 mg/m³ | NS-EN 13999 (Parts 1-4) OR NS-EN ISO 16000-9:2006 and NS-EN ISO 16000- 9:2016/AC:2007 OR NS-EN 16516:2017+A1:2020 OR CDPH Standard method v1.2 | | |

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