

# GN22: BREEAM and HQM recognised schemes for emissions from construction products

## Introduction

Within the Health and Wellbeing category of a number of BREEAM schemes, credits are awarded for specifying materials that minimise emissions from construction products, e.g. formaldehyde, volatile organic compounds (VOCs). These criteria involve meeting emission level performance requirements in accordance with compliant performance and testing standards. Similar criteria have been included in the Home Quality Mark (HQM) scheme.

The purpose of this Guidance Note is to publish a list of schemes that show equivalent or better performance than the current BREEAM and HQM criteria, and therefore can be used to demonstrate compliance with the criteria. This note should be read in conjunction with the relevant assessment issue guidance provided in the appropriate BREEAM scheme or HQM technical manual.

## Scope

The BREEAM and HQM recognised schemes for emissions from construction products documented in this Guidance Note are applicable to the following BREEAM and HQM schemes and assessment issues, and can also be retrospectively applied to previous versions that include similar criteria:

- SD5075 BREEAM International New Construction 2013 (Hea 02 Indoor air quality)
- SD5076 BREEAM UK New Construction 2014 (Hea 02 Indoor air quality)
- SD5077 BREEAM UK Domestic Refurbishment 2014 (Hea 03 Volatile organic compounds)
- SD216 BREEAM UK Non-Domestic Refurbishment and Fit-out 2014 (Hea 02 Indoor air quality)
- SD225 BREEAM International Non-Domestic Refurbishment and Fit-out 2015 (Hea 02 Indoor air quality)
- SD232 Home Quality Mark Beta 2015 (09 Indoor Pollutants)
- SD233 BREEAM International New Construction 2016 (Hea 02 Indoor air quality)
- SD5078 BREEAM UK New Construction 2018 (Hea 02 Indoor air quality)

## BREEAM and HQM recognised schemes

Table 1 and Table 2 provide a list of BREEAM recognised schemes for emissions from construction products that are applicable for BREEAM compliance purposes. Table 1 applies to BREEAM schemes launched before the end of November 2015.

- SD5075 BREEAM International New Construction 2013
- SD5076 BREEAM UK New Construction 2014
- SD5077 BREEAM UK Domestic Refurbishment 2014
- SD216 BREEAM UK Non-Domestic Refurbishment and Fit-out 2014
- SD225 BREEAM International Non-Domestic Refurbishment and Fit-out 2015

Table 2 applies to BREEAM and HQM schemes launched since the beginning of December 2015:

- SD232 Home Quality Mark Beta 2015
- SD233 BREEAM International New Construction 2016
- SD5078 BREEAM UK New Construction 2018

The versions of the recognised schemes for emissions from construction products listed in Table 1 and Table 2 are those that were in operation at the time of publication of this version of GN22.

When using certification documentation from any of the recognised schemes listed in Table 1 and Table 2 to demonstrate compliance with the BREEAM or HQM scheme criteria, assessors must ensure that the certification is valid under the current version of the recognised scheme.

This Guidance Note will be re-issued as necessary from time to time to include any other approved schemes that demonstrate equivalent or better performance than the current BREEAM criteria and/or to take account of any changes to the currently recognised schemes.

Please note that the list of schemes is based on those that had been the subject of BREEAM technical queries. As such, there will be other operational schemes that could potentially be recognised in BREEAM and HQM. If assessors, clients or scheme operators wish to seek recognition for other schemes not currently listed, the scheme operator must complete an application form (BF1648) giving full details of the scheme, and submit it to BRE Global for technical approval. A flat rate charge is payable to cover the costs of administering and reviewing the application. GN22 will be updated following approval of any schemes as part of this process. The BF1648 application form, which provides full details of the application process, is available from the BREEAM office ([breeam@bre.co.uk](mailto:breeam@bre.co.uk)).

**Table 1: BREEAM recognised schemes for emissions from construction products for BREEAM schemes launched before December 2015**

Product Type	Approved Alternative VOC Scheme	General level - One credit	Exemplary level - One credit*	Exemplary level - Two credits*
Paints and varnishes	<ul style="list-style-type: none"> <li>– Indoor Advantage™ Gold - Building Materials<sup>5</sup></li> <li>– EU Ecolabel for paints and varnishes</li> <li>– NF Environnement 130</li> <li>– Indoor Air Comfort®/Indoor Air Comfort Gold®</li> </ul>	<p>Yes Yes Yes Yes/Yes</p>	<p>N/A N/A N/A N/A</p>	<p>N/A N/A N/A N/A</p>
Wood panels	<ul style="list-style-type: none"> <li>– GREENGUARD Certified/GREENGUARD Gold</li> <li>– Indoor Advantage™ Gold - Building Materials</li> <li>– French VOC Regulation - Class A+/Class A/Class B</li> <li>– AgBB</li> <li>– M1 Emission Classification of Building Materials</li> <li>– Indoor Air Comfort®/Indoor Air Comfort Gold®</li> <li>– eco-INSTITUT-Label</li> </ul>	<p>Yes/Yes Yes Yes/Yes/Yes Yes Yes Yes/Yes Yes</p>	<p>Yes/Yes Yes Yes/Yes/No No Yes Yes/Yes Yes</p>	<p>No/Yes Yes Yes/No/No No Yes No/Yes No</p>
Timber structures	<ul style="list-style-type: none"> <li>– GREENGUARD Certified/GREENGUARD Gold</li> <li>– Indoor Advantage™ Gold - Building Materials</li> <li>– French VOC Regulation - Class A+/Class A/Class B</li> <li>– AgBB</li> <li>– M1 Emission Classification of Building Materials</li> <li>– Indoor Air Comfort®/Indoor Air Comfort Gold®</li> <li>– eco-INSTITUT-Label</li> </ul>	<p>Yes/Yes Yes Yes/Yes/Yes Yes Yes Yes/Yes Yes</p>	<p>Yes/Yes Yes Yes/Yes/No No Yes Yes/Yes Yes</p>	<p>No/Yes Yes Yes/No/No No Yes No/Yes No</p>
Wood flooring	<ul style="list-style-type: none"> <li>– GREENGUARD Certified/GREENGUARD Gold</li> <li>– FloorScore®</li> <li>– French VOC Regulation - Class A+/Class A/Class B</li> <li>– AgBB</li> <li>– M1 Emission Classification of Building Materials</li> <li>– Indoor Air Comfort®/Indoor Air Comfort Gold®</li> <li>– EU Ecolabel for wooden floor coverings</li> <li>– Belgian VOC Regulation<sup>†</sup></li> <li>– eco-INSTITUT-Label</li> </ul>	<p>Yes/Yes Yes Yes/Yes/Yes Yes Yes Yes/Yes Yes Yes</p>	<p>Yes/Yes Yes Yes/Yes/No No Yes Yes/Yes Yes Yes</p>	<p>No/Yes Yes Yes/No/No No Yes No/Yes No No</p>
Resilient, textile and laminated floor coverings	<ul style="list-style-type: none"> <li>– GREENGUARD Certified/GREENGUARD Gold</li> <li>– FloorScore®</li> <li>– French VOC Regulation - Class A+/Class A/Class B</li> <li>– AgBB</li> <li>– M1 Emission Classification of Building Materials</li> <li>– Green Label Plus™</li> <li>– GUT</li> <li>– Indoor Air Comfort®/Indoor Air Comfort Gold®</li> <li>– Belgian VOC Regulation<sup>†</sup></li> <li>– eco-INSTITUT-Label</li> </ul>	<p>Yes/Yes Yes Yes/Yes/Yes Yes Yes Yes Yes Yes/Yes Yes Yes</p>	<p>Yes/Yes Yes Yes/Yes/No No Yes Yes Yes Yes/Yes No Yes</p>	<p>No/Yes Yes Yes/No/No No Yes Yes Yes No/Yes No No</p>
Suspended ceiling tiles	<ul style="list-style-type: none"> <li>– GREENGUARD Certified/GREENGUARD Gold</li> <li>– Indoor Advantage™ Gold - Building Materials</li> <li>– French VOC Regulation - Class A+/Class A/Class B</li> <li>– AgBB</li> <li>– M1 Emission Classification of Building Materials</li> <li>– Indoor Air Comfort®/Indoor Air Comfort Gold®</li> <li>– eco-INSTITUT-Label</li> </ul>	<p>Yes/Yes Yes Yes/Yes/Yes Yes Yes Yes/Yes Yes</p>	<p>Yes/Yes Yes Yes/Yes/No No Yes Yes/Yes Yes</p>	<p>No/Yes Yes Yes/No/No No Yes No/Yes No</p>
Flooring adhesives	<ul style="list-style-type: none"> <li>– AgBB</li> <li>– M1 Emission Classification of Building Materials</li> <li>– EMICODE EC 1<sup>PLUS</sup>/EMICODE EC 1/EMICODE EC 2</li> <li>– Indoor Air Comfort®/Indoor Air Comfort Gold®</li> <li>– Belgian VOC Regulation<sup>†</sup></li> <li>– eco-INSTITUT-Label</li> <li>– GREENGUARD Certified/GREENGUARD Gold<sup>f</sup></li> <li>– FloorScore®</li> <li>– Indoor Advantage™ Gold - Building Materials<sup>5</sup></li> </ul>	<p>Yes Yes Yes/Yes/Yes Yes/Yes Yes Yes Yes/Yes Yes Yes</p>	<p>N/A N/A N/A N/A N/A N/A N/A N/A N/A</p>	<p>N/A N/A N/A N/A N/A N/A N/A N/A N/A</p>
Wall coverings	N/A	N/A	N/A	N/A

# Exemplary level credits do not apply to the BREEAM UK Domestic Refurbishment scheme

\* Manufacturer must also confirm that the product is fungal and algal resistant in wet areas (e.g. bathrooms, kitchens, utility rooms)

^ Manufacturer must also confirm the absence of prohibited wood preservatives/biocides from the product

\$ Only for products certified through Indoor Advantage™ Gold - Building Materials for the European market

† There is no labelling/certification scheme associated with the regulation. However, manufacturers are required to prepare a Product Emission File (PEF) to demonstrate compliance. Therefore, assessors may use a manufacturer's PEF and/or written declaration of conformity with the regulation as evidence to demonstrate compliance with the BREEAM criteria.

£ GREENGUARD certification must confirm that there are no measured carcinogens

@ Products must comply with SCS Global's "Verification Guidelines: Post-November 2015 Launched BREEAM and HQM scheme requirements for Emissions from Building Products - ECS Indoor Air Quality Technical Guidance Document 002", and product certification must state: "Category 1A and 1B Carcinogens are less than 0.001 mg/m<sup>3</sup>"

**Table 2: BREEAM recognised schemes for emissions from construction products for BREEAM and HQM schemes launched after November 2015**

Product Type	Approved Alternative VOC Scheme	BREEAM & HQM General level criteria	BREEAM Exemplary level criteria
Interior paints and coatings*	– eco-INSTITUT-Label	Yes	No
	– EMICODE EC 1 <sup>PLUS</sup>	Yes	Yes
	– EMICODE EC 1	Yes	Yes
	– EMICODE EC 2	Yes	Yes <sup>#</sup>
	– GREENGUARD Certified <sup>†</sup>	Yes	No
	– GREENGUARD Gold <sup>†</sup>	Yes	No
	– Indoor Advantage™ Gold - Building Materials	Yes <sup>§</sup>	No
	– Indoor Air Comfort <sup>®</sup>	Yes	No
	– Indoor Air Comfort Gold <sup>®</sup>	Yes <sup>^</sup>	Yes <sup>^</sup>
– M1 Emission Classification of Building Materials	Yes	No	
Wood-based products	– eco-INSTITUT-Label	Yes	No
	– GREENGUARD Certified <sup>†</sup>	Yes	No
	– GREENGUARD Gold <sup>†</sup>	Yes	No
	– Indoor Advantage™ Gold - Building Materials	Yes <sup>§</sup>	No
	– Indoor Air Comfort <sup>®</sup>	Yes	No
	– Indoor Air Comfort Gold <sup>®</sup>	Yes	Yes
– M1 Emission Classification of Building Materials	Yes	No	
Flooring materials (including floor levelling compounds and resin flooring)	– eco-INSTITUT-Label	Yes	No
	– EMICODE EC 1 <sup>PLUS</sup>	Yes	Yes
	– EMICODE EC 1	Yes	Yes
	– EMICODE EC 2	Yes	Yes
	– FloorScore <sup>®</sup>	Yes <sup>§</sup>	No
	– GREENGUARD Certified <sup>†</sup>	Yes	No
	– GREENGUARD Gold <sup>†</sup>	Yes	No
	– GUT	Yes	Yes
	– Indoor Air Comfort <sup>®</sup>	Yes	No
	– Indoor Air Comfort Gold <sup>®</sup>	Yes	Yes
– M1 Emission Classification of Building Materials	Yes	No	
Ceiling, wall, and acoustic and thermal insulation materials	– eco-INSTITUT-Label	Yes	No
	– GREENGUARD Certified <sup>†</sup>	Yes	No
	– GREENGUARD Gold <sup>†</sup>	Yes	No
	– Indoor Advantage™ Gold - Building Materials	Yes <sup>§</sup>	No
	– Indoor Air Comfort <sup>®</sup>	Yes	No
	– Indoor Air Comfort Gold <sup>®</sup>	Yes	Yes
– M1 Emission Classification of Building Materials	Yes	No	
Interior adhesives and sealants (including flooring adhesives)	– eco-INSTITUT-Label	Yes	No
	– EMICODE EC 1 <sup>PLUS</sup>	Yes	Yes
	– EMICODE EC 1	Yes	Yes
	– EMICODE EC 2	Yes	Yes
	– FloorScore <sup>®</sup>	Yes <sup>§</sup>	No
	– GREENGUARD Certified <sup>†</sup>	Yes	No
	– GREENGUARD Gold <sup>†</sup>	Yes	No
	– Indoor Advantage™ Gold - Building Materials	Yes <sup>§</sup>	No
	– Indoor Air Comfort <sup>®</sup>	Yes	No
	– Indoor Air Comfort Gold <sup>®</sup>	Yes	Yes
– M1 Emission Classification of Building Materials	Yes	No	

\* BREEAM: Manufacturer must also confirm: (i) products meet relevant maximum TVOC content limit specified in the technical manual; and (ii) where relevant, products intended for use in wet areas (e.g. bathrooms, kitchens, utility rooms) protect against mould growth. HQM: Manufacturer must also confirm that, where relevant, products intended for use in wet areas (e.g. bathrooms, kitchens, utility rooms) protect against mould growth

§ Products must comply with SCS Global's "Verification Guidelines: Post-November 2015 Launched BREEAM and HQM scheme requirements for Emissions from Building Products - ECS Indoor Air Quality Technical Guidance Document 002", and product certification must state: "Measured concentration of Total Volatile Organic Compounds (TVOC) is less than/equal to 0.5 mg/m<sup>3</sup> for the school classroom and private office parameters" AND "Category 1A and 1B Carcinogens are less than 0.001 mg/m<sup>3</sup>"

† GREENGUARD certification must confirm that there are no measured carcinogens

# Parquet lacquers with EC 2 classification do not meet the BREEAM exemplary level requirements

^ Wall paints certified to Indoor Air Comfort Gold<sup>®</sup> meet the BREEAM maximum TVOC content limits

The following schemes have been assessed as not demonstrating compliance with the BREEAM and HQM requirements:

- AgBB
- Belgian VOC regulation
- EU Ecolabel for paints and varnishes
- EU Ecolabel for wooden floor coverings
- French VOC regulation
- Green Label PlusTM
- NF Environnement 130

**Schedule of changes**

Guidance Note Version	Release Date	Description of changes from previous version
1.0	August 2015	First version of GN22
1.1	January 2016	Inclusion of Belgian VOC Regulation and eco-INSTITUT-Label as recognised schemes in Table 1. Addition of exemplary level credit information to Table 1.
2.0	April 2016	Minor amendments to title of GN22 and text to include HQM. Addition of version details for recognised schemes in Table 1. Addition of Table 2 covering recognised schemes for post-November 2015 launched BREEAM and HQM schemes.
2.1	October 2016	Addition of Indoor Advantage Gold™ – Building Materials and FloorScore® schemes as recognised schemes in Table 2
2.2	August 2017	Addition of FloorScore®, GREENGUARD Certified, GREENGUARD Gold and Indoor Advantage Gold™ - Building Materials schemes to the 'Flooring adhesives' category in Table 1.
2.3	March 2018	Inclusion of BREEAM UK New Construction 2018 as an applicable scheme. Clarification of which BREEAM and HQM schemes apply to each of the tables. Removal of version details for recognised schemes and inclusion of text stating versions of recognised schemes are those that were in operation at the time of publication of this version of GN22. Replacement of the term 'building product' with 'construction product'.