

# GN22: BREEAM Recognised Schemes for Emissions from Building Products

## Introduction

Within the Health and Wellbeing category of a number of BREEAM schemes, credits are awarded for specifying materials that minimise emissions from building 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 building 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 2015 (09 Indoor Pollutants)
- SD233 BREEAM International New Construction 2016 (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 building products that are applicable for BREEAM compliance purposes. Table 1 applies to BREEAM schemes launched before the end of November 2015. Table 2 applies to BREEAM and HQM schemes launched since the beginning of December 2015.

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 building products for pre-December 2015 launched BREEAM schemes**

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>§</sup> (2014 version)</li> <li>EU Ecolabel for paints and varnishes (2014 version)</li> <li>NF Environnement 130 (2015 version)</li> <li>Indoor Air Comfort®/Indoor Air Comfort Gold® (2015 version)</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes/Yes</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>
Wood panels	<ul style="list-style-type: none"> <li>GREENGUARD Certified/GREENGUARD Gold (2013 version)</li> <li>Indoor Advantage™ Gold - Building Materials (2014 version)</li> <li>French VOC Regulation - Class A+/Class A/Class B (2011 version)</li> <li>AgBB (2015 version)</li> <li>M1 Emission Classification of Building Materials (2015 version)</li> <li>Indoor Air Comfort®/Indoor Air Comfort Gold® (2015 version)</li> <li>eco-INSTITUT-Label (2015 version)</li> </ul>	<p>Yes/Yes</p> <p>Yes</p> <p>Yes/Yes/Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes/Yes</p> <p>Yes</p>	<p>Yes/Yes</p> <p>Yes</p> <p>Yes/Yes/No</p> <p>No</p> <p>Yes</p> <p>Yes/Yes</p> <p>Yes</p>	<p>No/Yes</p> <p>Yes</p> <p>Yes/No/No</p> <p>No</p> <p>Yes</p> <p>No/Yes</p> <p>No</p>
Timber structures	<ul style="list-style-type: none"> <li>GREENGUARD Certified/GREENGUARD Gold (2013 version)</li> <li>Indoor Advantage™ Gold - Building Materials (2014 version)</li> <li>French VOC Regulation - Class A+/Class A/Class B (2011 version)</li> <li>AgBB (2015 version)</li> <li>M1 Emission Classification of Building Materials (2015 version)</li> <li>Indoor Air Comfort®/Indoor Air Comfort Gold® (2015 version)</li> <li>eco-INSTITUT-Label (2015 version)</li> </ul>	<p>Yes/Yes</p> <p>Yes</p> <p>Yes/Yes/Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes/Yes</p> <p>Yes</p>	<p>Yes/Yes</p> <p>Yes</p> <p>Yes/Yes/No</p> <p>No</p> <p>Yes</p> <p>Yes/Yes</p> <p>Yes</p>	<p>No/Yes</p> <p>Yes</p> <p>Yes/No/No</p> <p>No</p> <p>Yes</p> <p>No/Yes</p> <p>No</p>
Wood flooring	<ul style="list-style-type: none"> <li>GREENGUARD Certified/GREENGUARD Gold (2013 version)</li> <li>FloorScore® (2014 version)</li> <li>French VOC Regulation - Class A+/Class A/Class B (2011 version)</li> <li>AgBB (2015 version)</li> <li>M1 Emission Classification of Building Materials (2015 version)</li> <li>Indoor Air Comfort®/Indoor Air Comfort Gold® (2015 version)</li> <li>EU Ecolabel for wooden floor coverings (2010 version)</li> <li>Belgian VOC Regulation<sup>¶</sup> (2014 version)</li> <li>eco-INSTITUT-Label (2015 version)</li> </ul>	<p>Yes/Yes</p> <p>Yes</p> <p>Yes/Yes/Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes/Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>Yes/Yes</p> <p>Yes</p> <p>Yes/Yes/No</p> <p>No</p> <p>Yes</p> <p>Yes/Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>No/Yes</p> <p>Yes</p> <p>Yes/No/No</p> <p>No</p> <p>Yes</p> <p>No/Yes</p> <p>No</p> <p>No</p>
Resilient, textile and laminated floor coverings	<ul style="list-style-type: none"> <li>GREENGUARD Certified/GREENGUARD Gold (2013 version)</li> <li>FloorScore® (2014 version)</li> <li>French VOC Regulation - Class A+/Class A/Class B (2011 version)</li> <li>AgBB (2015 version)</li> <li>M1 Emission Classification of Building Materials (2015 version)</li> <li>Green Label Plus™ (2015 version)</li> <li>GUT (2010 version)</li> <li>Indoor Air Comfort®/Indoor Air Comfort Gold® (2015 version)</li> <li>Belgian VOC Regulation<sup>¶</sup> (2014 version)</li> <li>eco-INSTITUT-Label (2015 version)</li> </ul>	<p>Yes/Yes</p> <p>Yes</p> <p>Yes/Yes/Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes/Yes</p> <p>Yes</p> <p>Yes</p>	<p>Yes/Yes</p> <p>Yes</p> <p>Yes/Yes/No</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes/Yes</p> <p>Yes</p> <p>Yes</p>	<p>No/Yes</p> <p>Yes</p> <p>Yes/No/No</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No/Yes</p> <p>No</p> <p>No</p>
Suspended ceiling tiles	<ul style="list-style-type: none"> <li>GREENGUARD Certified/GREENGUARD Gold (2013 version)</li> <li>Indoor Advantage™ Gold - Building Materials (2014 version)</li> <li>French VOC Regulation - Class A+/Class A/Class B (2011 version)</li> <li>AgBB (2015 version)</li> <li>M1 Emission Classification of Building Materials (2015 version)</li> <li>Indoor Air Comfort®/Indoor Air Comfort Gold® (2015 version)</li> <li>eco-INSTITUT-Label (2015 version)</li> </ul>	<p>Yes/Yes</p> <p>Yes</p> <p>Yes/Yes/Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes/Yes</p> <p>Yes</p>	<p>Yes/Yes</p> <p>Yes</p> <p>Yes/Yes/No</p> <p>No</p> <p>Yes</p> <p>Yes/Yes</p> <p>Yes</p>	<p>No/Yes</p> <p>Yes</p> <p>Yes/No/No</p> <p>No</p> <p>Yes</p> <p>No/Yes</p> <p>No</p>
Flooring adhesives	<ul style="list-style-type: none"> <li>AgBB (2015 version)</li> <li>M1 Emission Classification of Building Materials (2015 version)</li> <li>EMICODE EC 1<sup>PLUS</sup>/EMICODE EC 1/EMICODE EC 2 (2015 version)</li> <li>Indoor Air Comfort®/Indoor Air Comfort Gold® (2015 version)</li> <li>Belgian VOC Regulation<sup>¶</sup> (2014 version)</li> <li>eco-INSTITUT-Label (2015 version)</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes/Yes/Yes</p> <p>Yes/Yes</p> <p>Yes</p> <p>Yes</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>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.

**Table 2: BREEAM recognised schemes for emissions from building products for post-November 2015 launched BREEAM and HQM schemes**

Product Type	Approved Alternative VOC Scheme	BREEAM & HQM General level criteria	BREEAM Exemplary level criteria
Interior paints and coatings*	– eco-INSTITUT-Label (2015 version)	Yes	No
	– EMICODE EC 1 <sup>PLUS</sup> (2015 version)	Yes	Yes
	– EMICODE EC 1 (2015 version)	Yes	Yes
	– EMICODE EC 2 (2015 version)	Yes	Yes*
	– GREENGUARD Certified <sup>†</sup> (2013 version)	Yes	No
	– GREENGUARD Gold <sup>†</sup> (2013 version)	Yes	No
	– Indoor Advantage™ Gold - Building Materials (2014 version)	Yes <sup>§</sup>	No
	– Indoor Air Comfort® (2015 version)	Yes	No
	– Indoor Air Comfort Gold® (2015 version)	Yes <sup>^</sup>	Yes <sup>^</sup>
– M1 Emission Classification of Building Materials (2015 version)	Yes	No	
Wood-based products	– eco-INSTITUT-Label (2015 version)	Yes	No
	– GREENGUARD Certified <sup>†</sup> (2013 version)	Yes	No
	– GREENGUARD Gold <sup>†</sup> (2013 version)	Yes	No
	– Indoor Advantage™ Gold - Building Materials (2014 version)	Yes <sup>§</sup>	No
	– Indoor Air Comfort® (2015 version)	Yes	No
	– Indoor Air Comfort Gold® (2015 version)	Yes	Yes
– M1 Emission Classification of Building Materials (2015 version)	Yes	No	
Flooring materials (including floor levelling compounds and resin flooring)	– eco-INSTITUT-Label (2015 version)	Yes	No
	– EMICODE EC 1 <sup>PLUS</sup> (2015 version)	Yes	Yes
	– EMICODE EC 1 (2015 version)	Yes	Yes
	– EMICODE EC 2 (2015 version)	Yes	Yes
	– FloorScore® (2014 version)	Yes <sup>§</sup>	No
	– GREENGUARD Certified <sup>†</sup> (2013 version)	Yes	No
	– GREENGUARD Gold <sup>†</sup> (2013 version)	Yes	No
	– GUT (2010 version)	Yes	Yes
	– Indoor Air Comfort® (2015 version)	Yes	No
	– Indoor Air Comfort Gold® (2015 version)	Yes	Yes
– M1 Emission Classification of Building Materials (2015 version)	Yes	No	
Ceiling, wall, and acoustic and thermal insulation materials	– eco-INSTITUT-Label (2015 version)	Yes	No
	– GREENGUARD Certified <sup>†</sup> (2013 version)	Yes	No
	– GREENGUARD Gold <sup>†</sup> (2013 version)	Yes	No
	– Indoor Advantage™ Gold - Building Materials (2014 version)	Yes <sup>§</sup>	No
	– Indoor Air Comfort® (2015 version)	Yes	No
	– Indoor Air Comfort Gold® (2015 version)	Yes	Yes
– M1 Emission Classification of Building Materials (2015 version)	Yes	No	
Interior adhesives and sealants (including flooring adhesives)	– eco-INSTITUT-Label (2015 version)	Yes	No
	– EMICODE EC 1 <sup>PLUS</sup> (2015 version)	Yes	Yes
	– EMICODE EC 1 (2015 version)	Yes	Yes
	– EMICODE EC 2 (2015 version)	Yes	Yes
	– FloorScore® (2014 version)	Yes <sup>§</sup>	No
	– GREENGUARD Certified <sup>†</sup> (2013 version)	Yes	No
	– GREENGUARD Gold <sup>†</sup> (2013 version)	Yes	No
	– Indoor Advantage™ Gold - Building Materials (2014 version)	Yes <sup>§</sup>	No
	– Indoor Air Comfort® (2015 version)	Yes	No
	– Indoor Air Comfort Gold® (2015 version)	Yes	Yes
– M1 Emission Classification of Building Materials (2015 version)	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® meet the BREEAM maximum TVOC content limits

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

- AgBB (2015 version)
- Belgian VOC regulation (2014 version)
- EU Ecolabel for paints and varnishes (2014 version)
- EU Ecolabel for wooden floor coverings (2010 version)
- French VOC regulation (2011 version)
- Green Label Plus™ (2015 version)
- NF Environnement 130 (2015 version)

## 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 approved 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 approved 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 approved schemes in Table 2