

GN22: Recognised schemes for emissions from construction products in BREEAM and HQM

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 are included in the Home Quality Mark (HQM).

The purpose of Guidance Note 22 (GN22) is to publish a list of schemes that show equivalent or better performance than the current BREEAM and HQM criteria, and can therefore be used to demonstrate compliance with the criteria. This guidance note should be read in conjunction with the assessment issue guidance provided in the relevant BREEAM or HQM technical manual.

Scope

The recognised schemes for emissions from construction products listed 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:

- BREEAM International New Construction 2013 (SD5075), Hea 02 Indoor air quality
- BREEAM International New Construction 2016 (SD233), Hea 02 Indoor air quality
- BREEAM International New Construction Version 6 (SD250), Hea 02 Indoor air quality
- BREEAM International Refurbishment and Fit-out 2015 (SD225), Hea 02 Indoor air quality
- BREEAM UK New Construction 2014 (SD5076), Hea 02 Indoor air quality
- BREEAM UK New Construction 2018 (SD5078), Hea 02 Indoor air quality
- BREEAM UK New Construction Version 6 (SD5079), Hea 02 Indoor air quality
- BREEAM UK Refurbishment and Fit-out 2014 (SD216), Hea 02 Indoor air quality
- BREEAM UK Domestic Refurbishment 2014 (SD5077), Hea 03 Volatile organic compounds
- Home Quality Mark Beta (SD232), 09 Indoor Pollutants
- Home Quality Mark ONE (SD239), 4.1 Indoor Pollutants

Recognised schemes

Table 1 and Table 2 provide a list of recognised schemes for emissions from construction products that are applicable for BREEAM compliance purposes.

Table 1 applies to BREEAM schemes launched before December 2015:

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

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

- Home Quality Mark Beta (SD232)
- Home Quality Mark ONE (SD239)
- BREEAM International New Construction 2016 (SD233)
- BREEAM International New Construction Version 6 (SD250)
- BREEAM UK New Construction 2018 (SD5078)
- BREEAM UK New Construction Version 6 (SD5079)

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 application form (BF1648), which provides full details of the application process, is available from the BREEAM office (breeam@bregroup.com).

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

Product type	Approved scheme	General level - One credit	Exemplary level - One credit [1]	Exemplary level - Two credits [1]
Paints and varnishes [2]	Indoor Advantage™ Gold - Building Materials [4]	Yes	N/A	N/A
	EU Ecolabel for paints and varnishes	Yes	N/A	N/A
	NF Environnement 130	Yes	N/A	N/A
	Indoor Air Comfort®/Indoor Air Comfort Gold®	Yes/Yes	N/A	N/A
	TÜV SÜD Mark "Low emission, Pollutant tested and Production monitored":			
	TM-07 Emulsion paints	Yes	N/A	N/A
	TM-09 Emulsion paints free of preservatives	Yes	N/A	N/A
	TM-10 Dispersion interior plasters	Yes	N/A	N/A
	TM-18 Fillers	Yes	N/A	N/A
Wood panels [3]	GREENGUARD Certified/GREENGUARD Gold	Yes/Yes	Yes/Yes	No/Yes
	Indoor Advantage™ Gold - Building Materials	Yes	Yes	Yes
	French VOC Regulation - Class A+/Class A/Class B	Yes/Yes/Yes	Yes/Yes/No	Yes/No/No
	AgBB	Yes	No	No
	M1 Emission Classification of Building Materials	Yes	Yes	Yes
	Indoor Air Comfort®/Indoor Air Comfort Gold®	Yes/Yes	Yes/Yes	No/Yes
	eco-INSTITUT-Label	Yes	Yes	No
	natureplus® eco-label	Yes	Yes	No
Timber structures	Danish Indoor Climate Labelling-Class 1/Class 2/Class 3	Yes/Yes/Yes	Yes/Yes/No	Yes/No/No
	GREENGUARD Certified/GREENGUARD Gold	Yes/Yes	Yes/Yes	No/Yes
	Indoor Advantage™ Gold - Building Materials	Yes	Yes	Yes
	French VOC Regulation - Class A+/Class A/Class B	Yes/Yes/Yes	Yes/Yes/No	Yes/No/No
	AgBB	Yes	No	No
	M1 Emission Classification of Building Materials	Yes	Yes	Yes
	Indoor Air Comfort®/Indoor Air Comfort Gold®	Yes/Yes	Yes/Yes	No/Yes
	eco-INSTITUT-Label	Yes	Yes	No
natureplus® eco-label	Yes	Yes	No	
Danish Indoor Climate Labelling-Class 1/Class 2/Class 3	Yes/Yes/Yes	Yes/Yes/No	Yes/No/No	

Product type	Approved scheme	General level - One credit	Exemplary level - One credit [1]	Exemplary level - Two credits [1]
Wood flooring	GREENGUARD Certified/GREENGUARD Gold	Yes/Yes	Yes/Yes	No/Yes
	FloorScore®	Yes	Yes	Yes
	French VOC Regulation - Class A+/Class A/Class B	Yes/Yes/Yes	Yes/Yes/No	Yes/No/No
	AgBB	Yes	No	No
	M1 Emission Classification of Building Materials	Yes	Yes	Yes
	Indoor Air Comfort®/Indoor Air Comfort Gold®	Yes/Yes	Yes/Yes	No/Yes
	EU Ecolabel for wooden floor coverings	Yes	Yes	No
	Belgian VOC Regulation [5]	Yes	No	No
	eco-INSTITUT-Label	Yes	Yes	No
	natureplus® eco-label	Yes	Yes	No
Danish Indoor Climate Labelling-Class 1/Class 2/Class 3	Yes/Yes/Yes	Yes/Yes/No	Yes/No/No	
Resilient, textile and laminated floor coverings	GREENGUARD Certified/GREENGUARD Gold	Yes/Yes	Yes/Yes	No/Yes
	FloorScore®	Yes	Yes	Yes
	French VOC Regulation - Class A+/Class A/Class B	Yes/Yes/Yes	Yes/Yes/No	Yes/No/No
	AgBB	Yes	No	No
	M1 Emission Classification of Building Materials	Yes	Yes	Yes
	Green Label Plus™	Yes	Yes	Yes
	GUT	Yes	Yes	Yes
	Indoor Air Comfort®/Indoor Air Comfort Gold®	Yes/Yes	Yes/Yes	No/Yes
	Belgian VOC Regulation [5]	Yes	No	No
	eco-INSTITUT-Label	Yes	Yes	No
natureplus® eco-label	Yes	Yes	No	
Danish Indoor Climate Labelling-Class 1/Class 2/Class 3	Yes/Yes/Yes	Yes/Yes/No	Yes/No/No	
Suspended ceiling tiles	GREENGUARD Certified/GREENGUARD Gold	Yes/Yes	Yes/Yes	No/Yes
	Indoor Advantage™ Gold - Building Materials	Yes	Yes	Yes
	French VOC Regulation - Class A+/Class A/Class B	Yes/Yes/Yes	Yes/Yes/No	Yes/No/No
	AgBB	Yes	No	No
	M1 Emission Classification of Building Materials	Yes	Yes	Yes
	Indoor Air Comfort®/Indoor Air Comfort Gold®	Yes/Yes	Yes/Yes	No/Yes
	eco-INSTITUT-Label	Yes	Yes	No
	natureplus® eco-label	Yes	Yes	No
Danish Indoor Climate Labelling-Class 1/Class 2/Class 3	Yes/Yes/Yes	Yes/Yes/No	Yes/No/No	

Product type	Approved scheme	General level - One credit	Exemplary level - One credit ^[1]	Exemplary level - Two credits ^[1]
Flooring adhesives	AgBB	Yes	N/A	N/A
	M1 Emission Classification of Building Materials	Yes	N/A	N/A
	EMICODE EC 1 ^{PLUS} /EMICODE EC 1/EMICODE EC 2	Yes/Yes/Yes	N/A	N/A
	Indoor Air Comfort®/Indoor Air Comfort Gold®	Yes/Yes	N/A	N/A
	Belgian VOC Regulation ^[5]	Yes	N/A	N/A
	eco-INSTITUT-Label	Yes	N/A	N/A
	GREENGUARD Certified/GREENGUARD Gold ^[6]	Yes/Yes	N/A	N/A
	FloorScore® ^[7]	Yes	N/A	N/A
	Indoor Advantage™ Gold - Building Materials ^[7]	Yes	N/A	N/A
	natureplus® eco-label	Yes	N/A	N/A
	Danish Indoor Climate Labelling-Class 1/Class 2/Class 3	Yes/Yes/Yes	N/A	N/A
Wall coverings	TÜV SÜD Mark "Low emission, Pollutant tested and Production monitored":			
	TM-22 Wallpapers	Yes	N/A	N/A
	TM-24 Acoustic panels	Yes	N/A	N/A

Notes to Table 1

1. Exemplary level credits do not apply to the BREEAM UK Domestic Refurbishment scheme.
2. Manufacturer must also confirm that the product is fungal and algal resistant in wet areas (e.g. bathrooms, kitchens, utility rooms).
3. Manufacturer must also confirm the absence of prohibited wood preservatives/biocides from the product.
4. Only for products certified through Indoor Advantage™ Gold - Building Materials for the European market.
5. 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.
6. GREENGUARD certification must confirm that there are no measured carcinogens.
7. 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/m³".

Table 2: Recognised schemes for emissions from construction products for BREEAM and HQM schemes launched since December 2015

Product type	Approved scheme	BREEAM & HQM General level criteria	BREEAM Exemplary level criteria	
Interior paints and coatings ^[1]	Danish Indoor Climate Labelling-Class 1	Yes	No	
	Danish Indoor Climate Labelling-Class 2	Yes	No	
	eco-INSTITUT-Label	Yes	No	
	EMICODE EC 1 ^{PLUS}	Yes	Yes	
	EMICODE EC 1	Yes	Yes	
	EMICODE EC 2	Yes	Yes ^[4]	
	GREENGUARD Certified ^[3]	Yes	No	
	GREENGUARD Gold ^[3]	Yes	No	
	Indoor Advantage™ Gold - Building Materials	Yes ^[2]	No	
	Indoor Air Comfort®	Yes	No	
	Indoor Air Comfort Gold®	Yes ^[5]	Yes ^[5]	
	M1 Emission Classification of Building Materials	Yes	No	
	natureplus® eco-label	Yes	No	
	TÜV SÜD Mark "Low emission, Pollutant tested and Production monitored":			
		TM-07 Emulsion paints	Yes	No
		TM-09 Emulsion paints free of preservatives	Yes	No
		TM-10 Dispersion interior plasters	Yes	No
	TM-18 Fillers	Yes	No	
Wood-based products	Danish Indoor Climate Labelling-Class 1	Yes	No	
	Danish Indoor Climate Labelling-Class 2	Yes	No	
	eco-INSTITUT-Label	Yes	No	
	GREENGUARD Certified ^[3]	Yes	No	
	GREENGUARD Gold ^[3]	Yes	No	
	Indoor Advantage™ Gold - Building Materials	Yes ^[2]	No	
	Indoor Air Comfort®	Yes	No	
	Indoor Air Comfort Gold®	Yes	Yes	
	M1 Emission Classification of Building Materials	Yes	No	
	natureplus® eco-label	Yes	No	

Product type	Approved scheme	BREEAM & HQM General level criteria	BREEAM Exemplary level criteria
Flooring materials (including floor levelling compounds and resin flooring)	Danish Indoor Climate Labelling-Class 1	Yes	No
	Danish Indoor Climate Labelling-Class 2	Yes	No
	eco-INSTITUT-Label	Yes	No
	EMICODE EC 1 ^{PLUS}	Yes	Yes
	EMICODE EC 1	Yes	Yes
	EMICODE EC 2	Yes	Yes
	FloorScore®	Yes ^[2]	No
	GREENGUARD Certified ^[3]	Yes	No
	GREENGUARD Gold ^[3]	Yes	No
	GUT	Yes	Yes
	Indoor Air Comfort®	Yes	No
	Indoor Air Comfort Gold®	Yes	Yes
	M1 Emission Classification of Building Materials natureplus® eco-label	Yes	No
Ceiling, wall, and acoustic and thermal insulation materials	Danish Indoor Climate Labelling-Class 1	Yes	No
	Danish Indoor Climate Labelling-Class 2	Yes	No
	eco-INSTITUT-Label	Yes	No
	GREENGUARD Certified ^[3]	Yes	No
	GREENGUARD Gold ^[3]	Yes	No
	Indoor Advantage™ Gold - Building Materials	Yes ^[2]	No
	Indoor Air Comfort®	Yes	No
	Indoor Air Comfort Gold®	Yes	Yes
	M1 Emission Classification of Building Materials natureplus® eco-label	Yes	No
	TÜV SÜD Mark "Low emission, Pollutant tested and Production monitored":		
	TM-22 Wallpapers	Yes	No
	TM-24 Acoustic panels	Yes	No

Product type	Approved scheme	BREEAM & HQM General level criteria	BREEAM Exemplary level criteria
Interior adhesives and sealants (including flooring adhesives)	Danish Indoor Climate Labelling-Class 1	Yes	No
	Danish Indoor Climate Labelling-Class 2	Yes	No
	eco-INSTITUT-Label	Yes	No
	EMICODE EC 1 ^{PLUS}	Yes	Yes
	EMICODE EC 1	Yes	Yes
	EMICODE EC 2	Yes	Yes
	FloorScore®	Yes ^[2]	No
	GREENGUARD Certified ^[3]	Yes	No
	GREENGUARD Gold ^[3]	Yes	No
	Indoor Advantage™ Gold - Building Materials	Yes ^[2]	No
	Indoor Air Comfort®	Yes	No
	Indoor Air Comfort Gold®	Yes	Yes
	M1 Emission Classification of Building Materials	Yes	No
natureplus® eco-label	Yes	No	

Notes to Table 2

1. For BREEAM, the 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. For HQM, the manufacturer must also confirm that, where relevant, products intended for use in wet areas (e.g. bathrooms, kitchens, utility rooms) protect against mould growth.

2. 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/m³ for the school classroom and private office parameters" AND "Category 1A and 1B Carcinogens are less than 0.001 mg/m³".

3. GREENGUARD certification must confirm that there are no measured carcinogens.

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

5. Wall paints certified to Indoor Air Comfort Gold® meet the BREEAM maximum TVOC content limits.

6. The following have been assessed as not demonstrating compliance (with the requirements for BREEAM and HQM schemes launched since December 2015):

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

Schedule of changes

Version	Release date	Description of change
1.0	Aug 2015	First version of GN22.
1.1	Jan 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	Apr 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	Oct 2016	Addition of Indoor Advantage Gold™ – Building Materials and FloorScore® schemes as recognised schemes in Table 2.
2.2	Aug 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	Mar 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'.
2.4	Jul 2018	Inclusion of Home Quality Mark ONE as an applicable scheme.
2.5	Sep 2018	Addition of natureplus® eco-label as a recognised scheme in Table 1 and Table 2.
2.6	Jun 2021	Addition of Danish Indoor Climate Labelling (DICL, 7th edition).
2.7	Jan 2023	Addition of TÜV SÜD Mark "Low emission, Pollutant tested and Production monitored" as a recognised scheme in Table 1 and Table 2 for specific product types. List of applicable BREEAM schemes updated to include schemes launched since June 2021. Notes to tables updated to use numbers instead of symbols.

Find the latest version of this guidance note at: kb.breeam.com/knowledgebase/gn22