

## **Ecophon Hygiene Performance™ Plus A 20/40**

04/02

Edge design

The ceiling shall consist of suspended glass wool panels, Ecophon Hygiene Performance™ Plus A, with a straight edge design. The visible surface of the ceiling tile shall be Akutex™ HS, a white-painted glass fiber veil with water and stain-resistant properties and resistance to the most common detergents and disinfectants. The edges shall be painted, and the backside shall be covered with a painted glass fiber tissue, making it fully sealed and cleanable on both sides.

Format: 600x600x20, 600x600x40, 1200x600x20 or 1200x600x40

Installation: The panels shall be installed in the Ecophon Connect™ grid system using installation method M466. The system shall include Connect™ T24 main runners (C3), suspended every 1200 mm with Connect™ adjustable hangers (C3), and Connect™ cross tees (C3) of 1200 mm and 600 mm.

Panels shall be secured using Connect™ Hygiene clips (20 or 40), which shall be easily removable to allow full demountability. Where required, the installation should include Connect™ Inspection Hatch (C3). Minimum demounting depth shall follow the selected installation method.

**System weight:** The weight of the system (including suspension grid) shall be approximately  $2.5 \text{ kg/m}^2$  for 20 mm panels and  $3.5 \text{ kg/m}^2$  for 40 mm panels.

**Visual appearance:** The closest NCS colour of the surface shall be, NCS S 0500-N, with a light reflectance of 84%

**Fire safety:** The ceiling panels shall be classified as A2-s1,d0 according to EN 13501-1. The glass wool core of the panel shall be classified as non-combustible according to EN ISO 1182.

**Acoustic absorption:** The sound absorption shall be measured according to EN ISO 354 and classified according to EN ISO 11654

THK mm	o.d.s mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 HZ	4000 Hz	$\alpha_{w}$	sound absorption class
20	200	0.50	0.95	1.00	0.95	1.00	1.00	1.00	Α
46	266	0.60	0.95	1.00	1.00	1.00	0.90	1.00	Α

**Humidity resistance:** The panel must remain 100% stable in environments with up to 97% relative humidity and 50°C. The panels shall be classified as class D according to EN 13964:2014, Annex F.

**Mould and bacteria resistance:** The panels shall not serve as a breeding medium for mould and bacteria. The panels shall be tested and classified according to ISO 846:2019 methods C (bacteria) and ASTM D3273-16 (fungal growth). The panels shall be classified as



class 0 (No growth under the microscope) according to ISO 846:2019 and class 10 (0% growth on the surface) according to ASTM D3273-16

**Clean room:** The ceiling system shall be classified as ISO 4 according to ISO 14644-1:2015. The ceiling tiles shall be approved for rooms of risk zone 4 according to NF S90-351. The panels shall be classified CP(0.5)5 for particle elimination kinetics according to NF S90-351.

**Surface endurance:** To ensure durability of the surface, the panel shall be tested according to ISO 11998 and withstand 200 scrub cycles without any visible damage.

**Cleanability:** The ceiling panel shall withstand frequent and intensive cleaning procedures suitable for hygiene-critical environments. It shall be cleanable using the following methods with a maximum recommended frequency of:

- Daily dusting
- Weekly wet wiping
- Steam cleaning 4/year
- Low pressure cleaning 2/year
- High pressure cleaning 2/year

The panel shall also tolerate periodic disinfection using hydrogen peroxide vapor and be resistant to UV-C exposure as per BIFMA HCF 8.1-2019.

**Chemical resistance:** The ceiling panel shall be resistant to chemical exposure and maintain surface integrity when subjected to common disinfectants and cleaning agents. The product shall be tested according to ISO 11998, showing resistance to the following substances at the specified concentrations:

Chemical	Concentration			
Ethanol	70%			
Chlorine	2.5%			
Virkon S	1%			
Isopropanol	70%			
Actichlor plus	1%			
LifeClean	Undiluted			
Oxivir Excel	0.5%			
Sumabac D10	1%			
Suredis VT1	1%			
Enduro Chlor YES	1.5%			
Aciplusfoam VF59	5%			

The panel must not show visual damage, discoloration, or loss of function after exposure to these chemicals under standard test conditions.

**Indoor air quality:** The ceiling panel shall be classified as A+ according to the French VOC regulation and hold Eurofins Indoor Air Comfort Gold certification.

**Circularity:** The panels shall consist of a minimum 44% post-consumer recycled content and be fully recyclable

**Carbon footprint**: The environmental impact of the ceiling panels shall be assessed in accordance with ISO 14025 and EN 15804, covering life-cycle stages A1 to C4.



The global warming potential shall not be more than 3.22 kg  $\rm CO_2$ -equivalent per m $^2$  for 20 mm panels and 5.19 kg  $\rm CO_2$ -equivalent per m $^2$  for 40 mm panels.

**CE marking:** The ceiling system must be CE marked according to the European harmonized standard EN13964:2014.