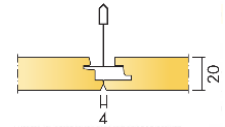# HYGIENE PROTEC DS

Visual design edge

The ceiling should consist of suspended glass fiber ceiling panels Ecophon Hygiene Protec (edge Ds) with a concealed grid and symmetrical edge design, allowing easier assembly. The ceiling has an even appearance, with the beveled edges forming a discreet groove between the tiles. Format 600 x 600 x 20 mm and 1200 x 600 x 20 mm, installed with Ecophon Connect grid system: Connect T24 Main runner HD suspended every 1200 mm with Connect Adjustable hanger and Connect Space Bar installed every 1500 mm.

The weight of the system (including suspension grid) should be approximately 3-4 kg/m². The visible surface of the ceiling tile should be Akutex™ HP, colour White 500, water-based painted surface intended for clean rooms where disinfection and/or cleaning is required on a regular basis. The edges should be painted. The rear surface of the ceiling tile should be cleanable. Connect grid system colour should be Connect White 01.

Installation: The system should be installed according to Ecophon installation guide M468. Edges of cut perimeter tiles should be coated with Edge Sealant. The panels should be easily removable but can be immobilized with Ecophon Connect Hold down clip Ds. The minimum height of demountability should be according to the chosen installation method.

Visual appearance: The closest NCS colour of the white visible surface of the panels and the grids should be S 0500-N. The ceiling surface should have a light reflectance of 84%.

Acoustic absorption: The ceiling should be of sound absorption class B and have a weighted sound absorption coefficient αw of 0.85 and octave band practical sound absorption coefficients (overall depth of system: 200mm) of:

125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
0.55	0.80	0.80	0.85	0.95	0.90

Values should be measured according to EN ISO 354 and classification according to EN ISO 11654.

Fire safety: The ceiling tiles should be classified A2-s1, d0 according to EN 13501-1; the grid system should be A1. The glass wool core should be tested and classified as non-combustible according to EN ISO 1182.

Mechanical Stability: panels should remain 100% stable in environments reaching up to 95% relative humidity and 30°C temperature. They should be tested according to EN 13964:2014, Annex F.

Indoor Health and Wellbeing: Ceilings panels should comply with the French regulation on VOC emissions, A level. They should also be certified by the Finnish Building Information Group (RTS) with the M1 label. The panels should be free from Substances of Very High Concern (SVHC) above 100 ppm as defined by the European REACH regulation (No 1907/2006).

Mould and Bacterial Resistance: Ceilings panels should have mould and bacterial resistance classification 0 from method A and C according to ISO 846.

Circularity: The minimum post-recycled content of ceiling tiles should be 47%. Tiles and grids should be 100% recyclable.

CE marking: The ceiling system should be CE-marked according to the harmonised standard EN 13964:2014 ("Suspended ceilings, requirements and tests methods"), with relevant Declarations of Performance (DoPs) issued.

Cleaning: The ceiling tiles should withstand daily dusting and vacuum cleaning. The ceiling tiles should withstand wet wiping and the use of hydrogen peroxide vapour. Detailed cleaning protocols to be followed are available on ecophon.com.

Surface Endurance: The ceiling tiles should be able to withstand 200 scrubbing cycles, tested according to ISO 11998.

Chemical Resistance and Disinfection: The ceiling tiles should withstand the use of Etanol, Chlorine, Virkon S and Isopropanol. Resistance tested according to ISO 11998.

Clean Room: The ceiling tiles should be classified as ISO 3 in standard conditions according to ISO 14644-1:2015. The ceiling tiles should be approved for rooms of risk zone 4 according to NF S90-351 and should also be verified to meet particle elimination kinetics corresponding to CP(0,5)1.