

CORK

ECOLOGICAL PANEL FOR ACOUSTIC INSULATION



SUSTAINABLE BUILDING

It significantly reduces the transmission of airborne and structural noise. Natural VOC-free cork is ideal for structures where the goal is to minimise environmental impacts during construction.

PACKAGING

Marketed both in 10 x 100 cm strips and in 50 x 100 cm panels that can be easily shaped.

It can be used as a wall profile or floor layer.

TESTED

Natural cork agglomerate mechanically tested by Industrial Research Centre of the University of Bologna.



CODES AND DIMENSIONS

CODE	version	B [mm]	L [m]	s [mm]	B [in]	L [in]	s [in]	pcs
CORK410	SOFT	500	1	5	19 3/4	39 3/8	3/16	1
CORK410100	(410 kg/m ³)	100	1	5	4	39 3/8	3/16	1
CORK850	HARD	500	1	5	19 3/4	39 3/8	3/16	1
CORK850100	(850 kg/m ³)	100	1	5	4	39 3/8	3/16	1

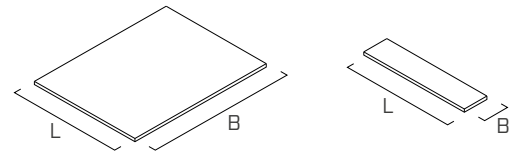


TABLE OF USE⁽¹⁾

CODE	B [mm]	load for acoustic optimisation ⁽²⁾ [kN/m] [lb/ft]				compression for acoustic optimisation ⁽²⁾ [N/mm ²] [psi]				reduction [mm] [mil]			
		min		max		min		max		min		max	
CORK410	100	20	14751	75	55317	0,2	29	0,75	109	0,25	10	1,5	59
CORK850	100	75	55317	300	221269	0,75	109	3	435	0,25	10	1	39

⁽¹⁾The load ranges reported here are optimised with respect to the static behaviour of the material assessed under compression, considering the effect of friction and the system resonance frequency, which falls between 20 and 30 Hz, with a maximum deformation of 12%. See the manual or use MyProject to view transmissibility and attenuation graphs.

⁽²⁾Resilient profiles must be properly loaded in order to isolate medium/low frequency vibrations transmitted structurally. It is advisable to assess the load according to the operating conditions because the building must be acoustically insulated under everyday load conditions (add the value of the permanent load to 50% of the characteristic value of the incidental load $Q_{linear} = q_{gk} + 0.5 q_{vk}$).

TECHNICAL DATA

CORK SOFT (410 kg/m³) [0.24 oz/in³]

Properties	standard	value	USC conversion
Dynamic stiffness s'	UNI 29052	246 MN/m ³	-
Density	-	410 kg/m ³	0.24 oz/in ³
Maximum permissible load	-	0,75 N/mm ²	109 psi
Tensile strength	-	1,25 N/mm ²	181 psi
Water absorption 48h	-	15%	-
Reaction to fire	EN 13501-1	class E	-
Max processing temperature	-	≥ 100°C	-

CORK HARD (850 kg/m³) [0.49 oz/in³]

Properties	standard	value	USC conversion
Dynamic stiffness s'	UNI 29052	1211 MN/m ³	-
Density	-	850 kg/m ³	0.49 oz/in ³
Maximum permissible load	-	6,5 N/mm ²	943 psi
Tensile strength	-	1,5 N/mm ²	218 psi
Water absorption 48h	-	15%	-
Reaction to fire	EN 13501-1	class E	-
Max processing temperature	-	≥ 100°C	-



LIVING COMFORT

The compactness of the cork agglomerate makes it waterproof, so it can be used both on concrete and masonry for protection against rising damp and as a wall barrier.