

SONOPHONE

PREMIXED PLASTER COMPOSED OF GYPSUM AND CELLULOSE FOR THE ACOUSTIC CORRECTION

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DESCRIPTION	Sonophone is a sound absorbing plaster to be sprayed on internal surfaces. It makes the surface white and pleasing. It only requires the addition of water on site to create a mixture to be pumped and applied by machine. It is perfect for new buildings and the refurbishment or renovation of the existing ones. It can be applied on plaster board sheets, on cement and steel surfaces. It is mainly used for convention centers, schools, canteens, religious buildings and places where it's necessary to correct the internal acoustic reverberation.							
CHARACTERISTICS AND ADVANTAGES	Sonophone has excellent characteristics of fire reactivity and combustion. Sonophone belongs to A1 fire reactivity class (UNI EN 13501-1), so it is incombustible. Sonophone has reached a score of flame and smoke spread of 0 (test conforming to ASTM E 84). The index of light reflectance is excellent, it reached 86 if it is smoothed and 83 with the finishing by spraying application (test conforming to ASTM C 523). It has excellent sound absorbing characteristics too. It was tested conforming to ASTM C 423 and E 795 and it has already a NRC of 0,75 with 25 mm of product, fully bonded to the structure. Sonophone requires only the addition of water and the use of mixing machines and traditional equipment for the mechanical application of lightweight plasters. It can be applied in layers from 13 mm of thickness. The application is fast and efficient.							
	Before the application of Sonophone it is necessary to check that the surface is suitable for it. The surface must be clean, dry and free from soluble matter in water, oil and other contaminants. It must also be sufficiently solid and adherent to the substrate and able to carry the weight of the moistened Sonophone.							
SURFACE PREPARATION	Gypsum plasterboards: partition walls and ceilings built with gypsum plasterboards must be carefully treated with a suitable waterproofing primer before the application of Sonophone (Sinprimer W of Zetagi or something). This must be done using a sealing product for plasterboard. Lay a layer of binder, approved by Edilteco, on the whole surface before applying Sonophone. It is recommended not to make a Sonophone layer greater than 25 mm.							
	Concrete surfaces: the new concrete must cure at least 60 days before applying Sonophone. Growth and remaining parts must be removed in order to get a smooth surface. Dust and other extraneous material must be removed before the application of Sonophone.							
	Galvanized steel surfaces: remove the possible dirt or oils on the galvanized steel surface.							
	All (non galvanized) steel surfaces: remove the dust, mill scales, dirt and oils on the surface. All non galvanized steel surfaces must be painted with a suitable anti-rust paint.							
MIXING	Sonophone can be mixed within the mixer of a traditional or continuous plastering machine, suitable to apply cement-based lightweight plasters. The mixer must be clean and free of previous mixed material. The mixing time and the number of turns must be adjusted in order to give the right texture to the mix, with a density of the wet product of 610-720 kg/m³. With a traditional mixer use a measuring tool to measure the right mixing water quantity and add the water. Use approximately from 20,5 to 24,5 L each bag of Sonophone. Continue to mix until the material is completely wet and the mixture without grains and with a pasty texture.							
APPLICATION	The application thickness of Sonophone can be done following this order: 1) For thickness up to 13 mm: only one layer. 2) For thickness equals or greater than 14 mm: apply other layers after the dry of the previous ones. Sonophone must not be used if it contains partially frozen or encrusted material. Sonophone can be applied spraying standard plasters or in continuum with a wide range of pumping. The dimensions of the nozzle's hole and the air pressure must be regulated to get the desired surface finishing. On Sonophone it is possible to use mineral-based painting (ECAP STP or similiar) only by the spraying method.							











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TEMPERATURE AND VENTILATION	 The minimum air and surface temperature for the application is 4 °C, which must be maintained during the Sonophone application and the next 24 hours. It is necessary to guarantee the ventilation in order to correctly dry the plaster after the application. It is recommended not to create closed areas preventing the air circulation and ventilation. The right hour air circulation is 4 times the air volume in the room. 							
DELIVERY AND STORAGE	Sonophone must be dry until its use. The material's pallets must be kept high from the ground, under a roofing and away from moist surfaces. All the material exposed to water must be eliminated. The material must be used before the expiry date.							
SAFETY	After the use of Sonophone the surfaces are slippery. The contractor and the applicator will be responsible to signal the slippery surfaces. The signals must be in all areas where there is wet material. All the working areas must use the non-slip protective systems.							

All the indications provided in this technical data sheet are purely approximate and not binding for legal purposes. The data listed has been gathered from laboratory tests and it hence follows that in practical applications on buildings sites the final characteristics of the products may be subject to substantial variations depending on the meteorological conditions and the installations. The user must always check suitability of the product for its specific use, undertaking all liability implicit in and deriving from use of the product, as well as comply with all the methods and instructions for use generally referable to "workmanlike" execution. Editeco S.p.A. reserves the right to change the contents of this technical data sheets on its final judgements. The spreading of this data sheet through any media, supersedes and cancels the validity of any other technical data sheet previously published.

SOUND ABSORBING FEATURES

			COEFFICIENT OF SOUND ABSORBING ASTM C 423 - UNI EN ISO 11654 - UNI EN ISO 354																			
		FREQUENCY (HZ)											INDEV	ABSORBING								
	APPLICATION		100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	INDEX	CLASS
	Thick. 13 mm	$\alpha_{_{S}}$	0,07	0,02	0,02	0,02	0,1	0,19	0,23	0,28	0,41	0,6	0,7	0,84	0,91	0,94	0,91	0,86	0,88	0,89	NRC = 0,50	-
1	adherence	α_{p}		0,05			0,10			0,30			0,70			0,90			0,90		$\alpha_{\rm W}^{} = 0.35 ({\rm MH})$	D
2	Thick. 25 mm	$\alpha_{_{\rm S}}$	0,06	0,04	0,14	0,15	0,3	0,44	0,6	0,8	0,91	1,05	1	0,93	0,91	0,88	0,9	0,92	0,93	0,99	NRC = 0,75	-
۷	adherence	α_{p}		0,10			0,30			0,80			1,00			0,90			0,95		$\alpha_{\rm W}$ = 0,60 (MH)	С
3	Thick. 13 mm semi-adher- ence	$\alpha_{_{\rm S}}$	0,17	0,19	0,29	0,35	0,56	0,61	0,63	0,68	0,7	0,72	0,72	0,78	0,77	0,79	0,82	0,86	0,89	0,92	NRC = 0,70	-
		α_{p}		0,20			0,50			0,65			0,75			0,80			0,90		$\alpha_{\rm W}^{} = 0.70 ({\rm H})$	С
	Thick. 50 mm semi-adher-	$\alpha_{_{\rm S}}$	0,24	0,3	0,38	0,49	0,64	0,84	0,85	0,85	0,82	0,79	0,81	0,86	0,82	0,86	0,86	0,86	0,92	0,95	NRC = 0,80	-
4	ence	α_{p}		0,30			0,65			0,85			0,80			0,85			0,90		$\alpha_{\rm W}$ = 0,85	В
5	Thick. 25 mm	$\alpha_{_{S}}$	0,25	0,28	0,37	0,52	0,74	0,73	0,73	0,8	0,8	0,82	0,82	0,87	0,93	0,91	0,91	0,93	0,94	0,99	NRC = 0,80	-
٥	semi-adher- ence	α_{p}		0,30			0,65			0,80			0,85			0,90			0,95		$\alpha_{_{\rm W}}$ = 0,85 (H)	В
6	cavitu wall	$\alpha_{_{S}}$	0,96	0,44	0,42	0,46	0,53	0,48	0,5	0,64	0,71	0,82	0,88	0,94	0,97	0,96	0,98	1,01	0,98	1,08	NRC = 0,75	-
		α_{p}		0,60			0,50			0,60			0,90			0,95			1,00		$\alpha_{W} = 0.7 (H)$	С











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CHARACTERISTIC	VALUE	NORM				
Colour:	White	-				
Packaging:	Bags of 20,5 kg	-				
Dry density:	368 kg/m³	ASTM E605				
Wind erosion:	0,003 g/m²	ASTM E859				
Adherence resistance:	1173 kg/m²	ASTM E736				
Compressive strength:	0,17 Mpa	ASTM E761				
Fire reactivity:	A1	UNI EN 13501-1				
Consumption:	4 - 4,5 kg each cm of thickness according to the surface irregularity	-				











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