## OUTDOOR AIRBORNE NOISE HOLLOW SPACE

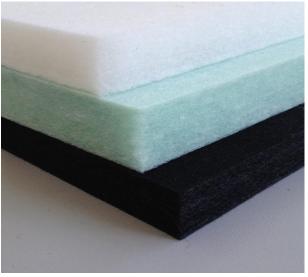
## **ARCO WALL FIBER**

## PRODUCT DESCRIPTION AND APPLICATION

ARCO WALL FIBER is an eco-friendly soundproofing obtained by recycling the polyester fiber. The product is rot-resistant, it is not water-soluble, and it is not irritating to skin contact, eyes and the respiratory system. The article keeps its technical performance over time. The product is applied in hollow space of double brick walls for building's facade noise insulation.

## **GENERAL INFORMATION AND ADVICE**

The facade sound insulation  $[D_{2m,nTW}]$  will be obtained using ARCO WALL FIBER, a product by ARCOACUSTICA Company. The product will inserted in hollow space of the double walls that separate the building with the external environment. Airborne wall insulation  $(R_w)$  57.0 and 58.0 dB, thermal resistance (R) 1.31 and 1.88  $m^2K/W,$  water vapour transmission resistance  $(\mu)$  3.2. The system implementation will have to be carried out in compliance with the instructions specified in installation procedure by the manufacturer.



Picture of the product

SUMMARY OF MAIN FEATURES					
Evaluation criterion	Procedure	Symbol	Fiber <sup>4</sup>	Fiber <sup>6</sup>	U.M.
Nominal thickness	IM/AL 2014	S	40.0	60.0	mm
Panel length	IM/AL 2014	L	120.0	120.0	cm
Panel height	IM/AL 2014	W	60.0	60.0	cm
Surface mass	IM/AL 2014	Ms	0.8	1.2	Kg/m²
Density	IM/AL 2014	Mv	20.0	20.0	Kg/m³
Thermal conductivity	EN 12667 ISO 8302	$\lambda_{D}$	0.035	0.035	W/mK
Polyester D.S.C.	ISO 11357/1 ISO 357/2	Cp	1500	1500	J/kgK
Water vapour transmission resistance	EN 12086	μ	3.2	3.2	/
Product thermal resistance	ISO 13786 ISO 6946	R	1.31	1.88	m²K/W
Water vapour transmission resistance	EN 12086	Sd	0.20	0.30	m
Fire reaction class	EN 13501/1	Class	B-s1	B-s1	/
Elastomer lower heating value	/	LHV	26000	26000	kJ/kg
Application product	/	/	ad. foam	ad. foam	s

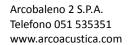
Warning: Other sizes are available upon request

ACOUSTIC PROPERTY					
Evaluation criterion	Procedure	Symbol	Fiber⁴	Fiber <sup>6</sup>	U.M.
Airborne wall insulation	ISO 12354/1/3	Rw	57.0	58.0	dB
Airborne facade insulation	ISO 140/5 ISO 717/1	D <sub>2m,nTW</sub>	/	/	dB
Panel's airborne noise insulation	ISO 140/4 ISO 717/1	R'w	22.0	24.0	dB
Airflow resistance	ISO 29053	r	3.2	3.2	kPa*s/m²
Rating of sound absorption	ISO 11654 ISO 354	$\alpha_{W}$	0.80	0.80	/
Apparent dynamic stiffness	ISO 29052/1 ISO 29053	s' <sub>t</sub>	2.5	2.0	MN/m³
Dynamic stiffness	ISO 29052/1	s'	/	/	MN/m³

Warning: ArcoAcustica disclaims any civil or criminal liability arising from not compliant products using

PACKING			
Evaluation criterion	Fiber⁴	Fiber <sup>6</sup>	U.M.
Pallet size	Pack	Pack	cm
Product weight on pack	11.52	12.10	kg
Number of meters per pack	14.40	10.08	m <sup>2</sup>
Number of panels per pack	20	14	pannelli

Warning: ArcoAcustica reserves to change the technical specifications of all products without prior notice.



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