# Typology Application

# INDOOR AIRBORNE NOISE HOLLOW SPACE

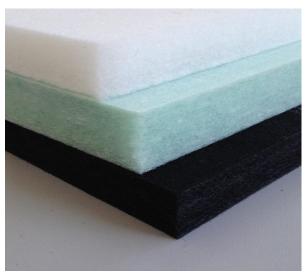
# ARCO WALL FIBER

## 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 between different housing units.

## GENERAL INFORMATION AND ADVICE

The airborne wall insulation between different housing units  $[{\sf R'w}]$  will be obtained using ARCO WALL FIBER, a product by ARCOACUSTICA Company. The product will inserted in hollow space of the double walls between different housing units. Airborne wall insulation  $({\sf Rw})$  56.0 dB, thermal resistance (R) 1.31 m²K/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>	U.M.
Nominal thickness	IM/AL 2014	S	40.0	mm
Panel length	IM/AL 2014	L	60.0	cm
Panel height	IM/AL 2014	W	120.0	cm
Surface mass	IM/AL 2014	Ms	0.8	Kg/m <sup>2</sup>
Density	IM/AL 2014	Mv	20.0	Kg/m <sup>3</sup>
Thermal conductivity	EN 12667 ISO 8302	λ <sub>D</sub>	0.035	W/mK
Polyester D.S.C.	ISO 11357/1 ISO 357/2	Cp	1500	J/kgK
Water vapour transmission resistance	EN 12086	μ	3.2	/
Product thermal resistance	ISO 13786 ISO 6946	R	1.31	m²K/W
Fire reaction class	EN 13501/1	Classe	1	/
Elastomer lower heating value	/	LHV	26000	kJ/kg

## ACOUSTIC PROPERTY

Evaluation criterion	Procedure	Simbolo	Fiber <sup>4</sup>	U.M.
Airborne wall insulation	ISO 12354/1/3	Rw	56.0	dB
Airborne facade insulation	ISO 140/5 ISO 717/1	R'w	51.0	dB
Panel's airborne noise insulation	ISO 140/4 ISO 717/1	R'w	22.0	dB
Airflow resistance	ISO 29053	r	3.2	kPa*s/m²
Rating of sound absorption	ISO 11654 ISO 354	αw	0.80	/
Apparent dynamic stiffness	ISO 29052/1 ISO 29053	s' <sub>t</sub>	2.5	MN/m <sup>3</sup>
Dynamic stiffness	ISO 29052/1	s'	/	MN/m <sup>3</sup>

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

PACKING					
Evaluation criterion	Fiber <sup>4</sup>	U.M.			
Pallet size	Pack	cm			
Product weight on pallet	11.52	kg			
Number of meters per pallet	14.40	m²			
Number of panel per pallet	20	Panel			

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

Via dell'Industria 3140Rev. 02-02-2015Boinfo@arcoacustica.comP.

40138 Bologna P.I. 02286061201

