

FONOPROTEX CYLINDER

SMALL DIAMETER SILENCED AIR IN-TAKE FOR VENTILATION HOLES OF KITCHENS WITH HIGH ACOUSTIC INSULATION INDEX



1 PROBLEM

For kitchens where open flame gas appliances, ovens or hobs are installed, Italian safety standards (UNI CIG 7129/92) impose the creation of ventilation openings in the external walls of buildings to guarantee the inflow of air required for combustion. Holes in perimeter walls must have a net cross section of 6 cm² for every KW of installed thermal power, with a minimum surface area of 100 cm². Seeing as these openings let air through, they represent points of transmission of external noise into the home and therefore deteriorate the soundproofing performance of the external walls of our buildings.

2 SOLUTION

In order to limit the exposure of human beings to noise, the outline law concerning acoustic pollution (447/95) and subsequent amendment DPCM 5/12/97 on the passive acoustic requirements of buildings, establish the observance of a minimum level of insulation for the perimeter walls of buildings (the requirement depends on the category of use of the building itself).

To obtain the correct level of comfort for those living in the buildings and to comply with these legislative requirements, a silenced air in-take shall be installed in the perimeter walls by the kitchen that

limits the transmission of noise but still guarantees a free surface area of 100 cm².

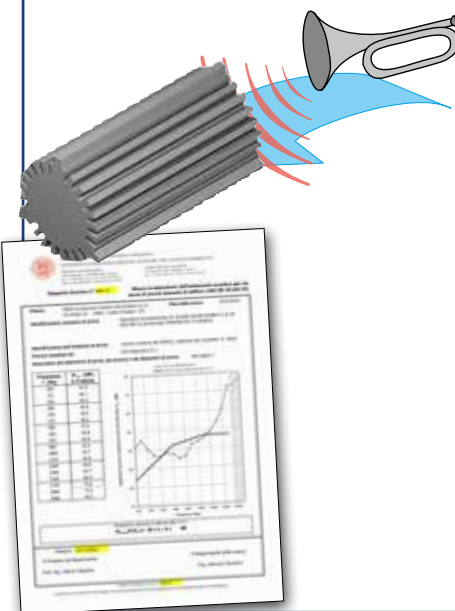
FONOPROTEX CYLINDER is the soundproof silencer for ventilation holes that meets the insulation indexes of external walls ($D_{2m,nT,w}$) requested by current standards. The FONOPROTEX CYLINDER silenced air intake is made of polyurethane foam, and thanks to its very small size and ease of installation, significantly reduces work on site; using FONOPROTEX CYLINDER means there is no need to provide for the installation while the outer walls are being constructed, it is sufficient to bore a hole (ø 160 mm) in the finished wall, insert FONOPROTEX CYLINDER and apply the grilles; quick, easy and no need for service lines.

FONOPROTEX CYLINDER is made entirely of flexible expanded polyurethane, of density 50-60 kg/m³. External diameter of silencer 154 mm. The silencer has 21 radial blades. The excellent insulating properties of **FONOPROTEX CYLINDER** are certified by the University of Bologna (Dienca), where testing pursuant to UNI EN ISO 7171-1 and ISO 140-10 resulted in an insulation index of $D_{n,e,w} = 43$ dB. **FONOPROTEX CYLINDER is the smallest silencer with the highest acoustic insulation index to be certified!**

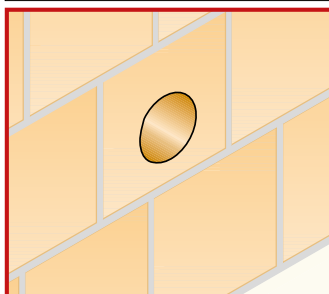
Due to its small size, the **FONOPROTEX CYLINDER** silenced air intake significantly reduces heat loss through the outer walls and can be installed without any change in method in both new and existing buildings.

University of Bologna - Dienca Certification
n. 04A-12

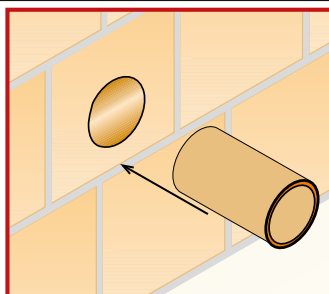
SOUNDPROOFING POWER
 $D_{n,e,w} = 43$ dB



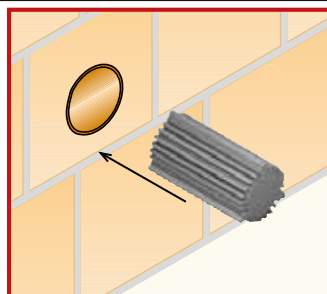
METHOD OF USE AND PRECAUTIONS



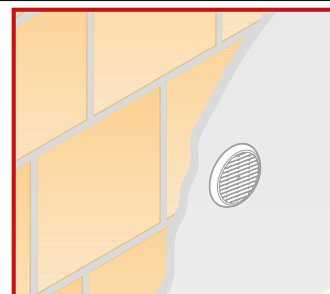
Bore a 160 mm diameter hole in the wall (plastered or unplastered) with a core drill.



Insert a ø 160 PVC pipe into the hole.



Insert **FONOPROTEX CYLINDER** into the pipe.



After plastering, fit the grilles (*not included*)



2nd DIVISION
2nd LINE



5th DIVISION
2nd LINE

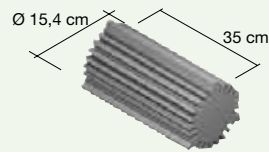
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Construction Systems and Products

FONOPROTEX CYLINDER

Dimensions

- length
- dimensions of aeration hole

35 cm
 ø 16 cm



Air opening

100 cm²

Insulation index (*)

$D_{n,w} = 41$ dB

Fire reaction (internal method)

class 1

Certification



(*) University of Bologna (D.I.E.N.C.A.) certificate n. 003A/12.

the numerous possible uses and the possible interference of conditions or elements beyond our control, we assume no responsibility regarding the results which are obtained. The purchasers, of their own accord and under their own responsibility, must establish the suitability of the product for the envisaged use.

The figures shown are average indicative figures relevant to current production and may be changed or updated by INDEX at any time without previous warning. The advice and technical information provided, is what results from our best knowledge regarding the properties and the use of the product. Considering

• THE TECHNICAL SPECIFICATIONS MAY BE VIEWED AND DOWNLOADED ON THE RELEVANT PRODUCT DATA SHEET AT www.indexspa.it •

• FOR THE CORRECT USE OF OUR PRODUCTS, CONSULT INDEX TECHNICAL SPECIFICATIONS • FOR FURTHER INFORMATION OR SPECIAL USES, CONSULT OUR TECHNICAL OFFICE •

 <p>index Construction Systems and Products</p> <p>Via G. Rossini, 22 - 37060 Castel D'Azzano (VR) - Italy - C.P.67 T. +39 045 8546201 - F. +39 045 518390</p>	<p>Internet: www.index-spa.com Informazioni Tecniche Commerciali tecom@indexspa.it Amministrazione e Segreteria index@indexspa.it Index Export Dept. index.export@indexspa.it</p>		<p>TOTAL QUALITY index</p>  <p>UNI EN ISO 9001</p>	<p>Environmental Management Systems index</p>  <p>UNI EN ISO 14001</p>	 <p>index "GBC Italia" Associated</p>	 <p>Associated ANIT</p>
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