

# FONOPROTEX

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 cm<sup>2</sup> for every KW of installed thermal power, with a minimum surface area of 100 cm<sup>2</sup>.

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 cm<sup>2</sup>. FONOPROTEX is the soundproof silencer for ventilation holes that meets the insulation indexes of external walls ( $D_{2m,nT,w}$ ) requested by current standards. The silenced air in-take FONOPROTEX is made of plastic and, thanks to its compactness and regular shape, is easy and very straightforward to install on site.

FONOPROTEX is lined internally with expanded polyurethane (open cells on polyester base) and is considerably flexible, fireproof (UL94), waterproof and harmless (it does not let-off fibres or dust).

The excellent insulating properties of FONOPROTEX 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  $D_{n,e,w} = 53$  dB.

FONOPROTEX is the smallest silencer with the highest acoustic insulation index to be certified!

FONOPROTEX can be installed either vertically or horizontally, depending on the requirements of the site.

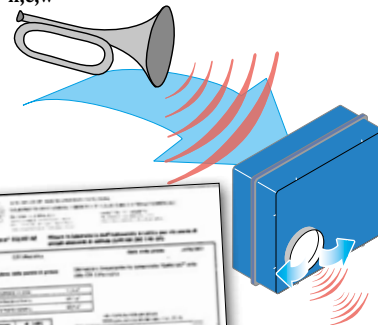
Thanks to its compactness, the silenced air in-take FONOPROTEX, strongly limits

thermal dispersions of perimeter walls (the particularly contained depth of just 15 cm means that it is easy and quick to lay, leaving plenty of space towards the outer part for thermal protection, in solutions either of single and double external walls).

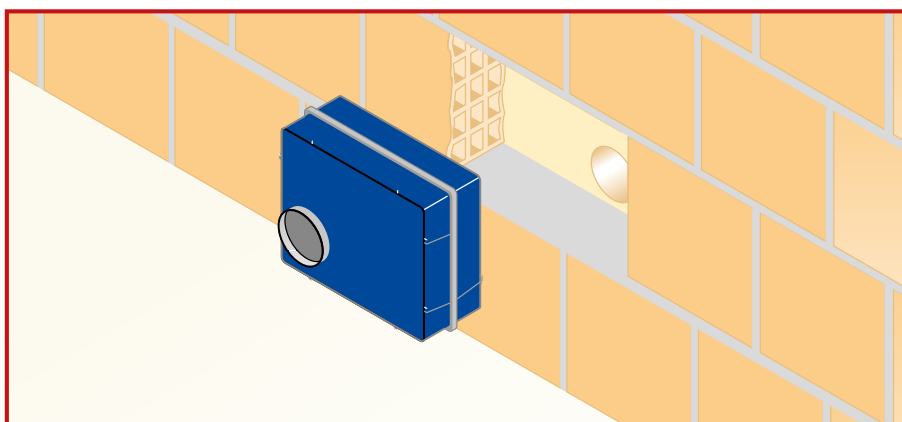
### University of Bologna - Dienca Certification n. 02A-12

SOUNDPROOFING POWER

$D_{n,e,w} = 53$  dB



## METHOD OF USE AND PRECAUTIONS



The hole inlets of FONOPROTEX on both sides are male and have outside diameter of 120 mm to be fitted in a  $\varnothing$  120 mm hole or inside the  $\varnothing$  125 mm pipe.

In all installations and even in kitchens with open flame gas appliances, FONOPROTEX FONOPROTEX can be fitted either with the holes arranged horizontally or vertically, because ventilation just has the function of feeding sufficient air for combustion and also to change the air.

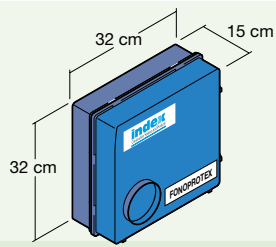


2<sup>nd</sup> DIVISION  
2<sup>nd</sup> LINE



5<sup>th</sup> DIVISION  
2<sup>nd</sup> LINE

**index**  
Construction Systems and Products

<h1>FONOPROTEX</h1>	
<p>Dimensions</p> <ul style="list-style-type: none"> <li>• height</li> <li>• length</li> <li>• depth</li> <li>• dimensions of aeration hole</li> </ul>	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>32 cm</p> <p>32 cm</p> <p>15 cm</p> <p>ø 12 cm</p> </div>  </div>
Air opening	100 cm <sup>2</sup>
Certification	Dienca Laboratory, University of Bologna

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](http://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><b>index</b> 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: <a href="http://www.index-spa.com">www.index-spa.com</a>                  Informazioni Tecniche Commerciali  <a href="mailto:tecom@indexspa.it">tecom@indexspa.it</a>                  Amministrazione e Segreteria  <a href="mailto:index@indexspa.it">index@indexspa.it</a>                  Index Export Dept.  <a href="mailto:index.export@indexspa.it">index.export@indexspa.it</a></p>		 <p>TOTAL QUALITY <b>index</b> UNI EN ISO <b>9001</b></p>	 <p>Environmental Management Systems <b>index</b> UNI EN ISO <b>14001</b></p>	 <p><b>index</b> "GBC Italia" Associated</p>	 <p><b>ANIT</b> Associated ANIT</p>
--	--	---	---	--	---	--