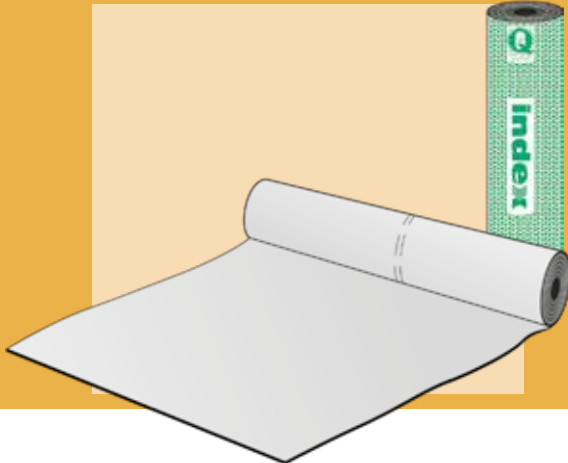







FONOSTOPTile Biadhesive

MULTIFUNCTIONAL, UNDERFLOOR, DOUBLE-SIDED SELF-ADHESIVE FOR ACOUSTIC INSULATION AGAINST FOOT TRAFFIC NOISE FOR DIRECT APPLICATION OF CERAMIC, WOOD AND NATURAL STONES WITH NO NEED FOR CERAMIC ADHESIVE, HAVING WATERPROOFING AND ANTI-CRACKING PROPERTIES FOR INDOORS FLOORS

Patent Pending

GRANTS LEED CREDITS



CHARACTERISTICS		ENVIRONMENTAL		
				
ACOUSTIC INSULATION	REACTION TO FIRE	ECO GREEN	RECYCLABLE	SAFE WASTE

1 PROBLEM

In civil building a requirement arose to guarantee acoustic insulation against foot traffic noise and the waterproofing of internal slabs as well as protecting the flooring from the cracks and damp that could be transmitted from the laying surface to the floor itself.

A further requirement, which regards both new buildings and to an even greater extent the refurbishment of old floors, is that of using insulation materials and systems that make it possible to reduce the thicknesses of the under-floor layers. Particularly in the case of rigid marble, ceramic and stone floors, the problem is even more accentuated because a higher degree of insulation against foot traffic noise is normally obtained by laying a floating screed between the layer of acoustic insulation and flooring, making laying times longer and the process more complicated and reducing the living volumes due to the high thickness (at least 4 cm).

both of the insulating membrane and an exclusive and innovative laying system which produces an “insulating membrane – floor” layered arrangement that occupies very little space but can provide high water and vapour tightness, mechanical resistance and acoustic insulation properties.

The functionality of the product is based on the high water and vapour proof characteristics of the two self-adhesive layers of mainly elastomeric nature formulated to extend the adhesiveness also at low temperatures and to allow the cold self-adhesion characteristics to be maintained over time. This is combined with the special foot traffic insulation properties determined by the thickness of the non-woven fibres that are free to be deformed elastically under the action of the foot traffic generated on the flooring under which it is applied.

It also has very high tensile strength and perforation resistant properties that prevent the transmission of the cracks in the laying surface to the flooring above.

The very high adhesion of the faces of the membrane allow it to be glued to the laying layer as well as enabling it to act as an adhesive for floors in ceramic, prefinished wooden slats, marble and stone, which can be laid on it without the need for conventional adhesives.

Laying ceramic, marble and stone floors without adhesives makes the floor immediately passable during all the laying operations without any limitations connected with the setting times of traditional adhesives (from 3 to 24 h according to the type) and, until the final filling stage of the joints, the operators can freely walk across the tiles bonded by simple self-adhesion.

The space taken up by the system is only the thickness of the sheet to which the

thickness of the pre-chosen flooring must be added.

The reduction in thickness of the layered arrangement leads to the great advantage of allowing the refurbishment of an old ceramic, marble or stone floor, without having to demolish the existing one but simply by bonding the membrane onto it and then the new floor, also eliminating the thickness of traditional glue.

For new buildings to be floored with ceramics, marble or stone, the elimination of the floating screed and the traditional resilient layer due to the use of the membrane and the laying system, subject to a patent application, allows the great advantage of a reduction in thickness of at least 4 cm per floor and the elimination of the screed setting times (at least 72 h).

FONOSTOPTile Biadhesive is supplied in rolls with both sides covered in adhesive protected by a non-stick silicone coated film, for the lower face, split into two overlapping halves in order to make it easier to remove when laying.

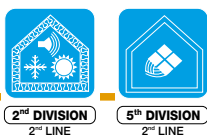
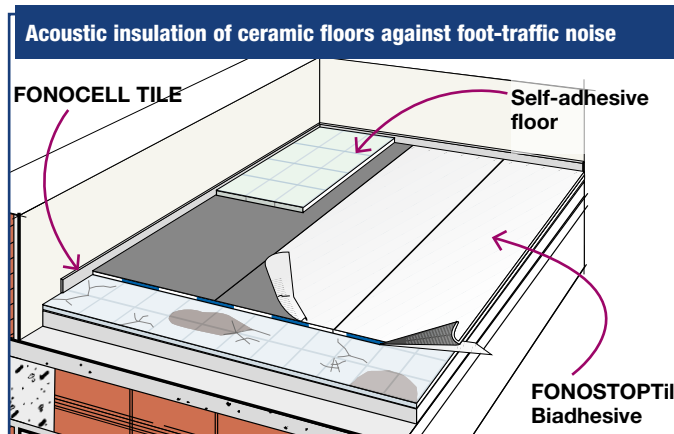
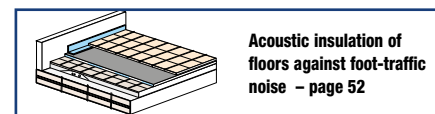
(See following)

2 SOLUTION

FONOSTOPTile Biadhesive is a double-sided adhesive membrane of just 2 mm, which is laid without adhesives and does not only offer waterproofing but also high insulation against foot traffic noise. It is an effective vapour barrier and has high mechanical resistance preventing the transmission of the cracks in the slab to the flooring, but is also adhesive at room temperature to the extent that wooden and ceramic, marble or stone floors can be laid without adhesives, with the sole requirement of sealing the joints in the latter types.

The essential condition for the use of “FONOSTOPTile Biadhesive” type is that the laying surface and the flooring elements are both perfectly level.

FONOSTOPTile Biadhesive is the result of joint research between the different INDEX divisions, which has led to the definition



		FONOSTOPTile Biadhesive
Mass per unit area		1.35 kg/m ²
Roll size		1.00 x 15.0 m
Thickness	UNI 9947	approx. 2.0 mm
Impermeability	EN 1928	60 KPa
Aqueous vapour diffusion coefficient		μ 50 000
Thermal conductivity λ		0.170 W/mK
Cold flexibility		-25°C
Traction resistance (L/T)		800/650 N/5 cm
Ultimate failure elongation (L/T)		30/35%
Peel test on steel		117 N/5cm
• new		92 N/5cm
• after thermal ageing of 30 d at 70°C		
Fire reaction class	EN 13501-1	Euroclass C _{fi} -s1 (*)
Certification		LAPI

(*) LAPI certificate n. 1167.0DC0055/11 equivalent to Class 1 pursuant to Ministerial Decree 10-03-2005 latest edition, dated 16-02-2009.

(See previous)

APPLICATION FIELDS

FONOSTOPTile Biadhesive is used to insulate and protect the internal slabs of buildings, both in new jobs and for refurbishments of old rigid floors as long as they are uniform enough and the elements of the new flooring are level. Maximum applicable format: 30x30 cm.

METHOD OF USE

Unroll **FONOSTOPTile Biadhesive** onto the laying surface lining it up with one of the walls and cut to measure. Remove the half silicone coated film from the lower face opposite the wall taking care not to move the insulation so that the alignment remains in place. Exert suitable pressure on the half of the roll where the silicone coated film has been removed so that it sticks to the surface. Remove the other half of the silicone coated film on the lower face. Exert suitable pressure on the whole roll so that it sticks fully to the surface. Proceed with the application repeating the laying, cutting, alignment, silicone coated film removal and pressure operations,

keeping the sheets perfectly lined up alongside each other. Remove the top silicone film only in the laying area and apply the flooring. Before applying pressure to the floor, make sure it is properly aligned and squared. To improve the adhesion of the product, apply a coat of PRIMER U adhesion promoter to smooth substrates, or PRIMER FIX fixer to porous substrates.

DETERMINATION OF FOOT TRAFFIC NOISE ON SITE

On an existing clay cement floor slab 20+4 cm, floored with ceramic tiles, we measure the foot traffic noise before and after installation of **FONOSTOPTile Biadhesive** and the new ceramic flooring. We used a room on the 1st floor as the source and made the measurement in the room directly below it (ground floor) for a volume of 314 m³.

FONOSTOPTile Biadhesive

Existing floor **L_{n,w} = 69 dB**

Renewed floor, insulated with **FONOSTOPTile Biadhesive L_{n,w} = 56 dB**

Benefit **ΔL' _{n,w} = 13 dB**

• 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 •

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

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