

# SILENCE DOES NOT STEAL SPACE



# Passion, Innovation, Strength. In acoustic insulation



# TECSOUND

... because silence does not steal space

TECSOUND® is a high-density, highly viscoelastic synthetic soundproofing membrane that offers excellent levels of acoustic insulation in traditional constructions, whilst hardly affecting thickness.

It is highly flexible and easily extendable, which means it can be adapted to any shape or surface, and allows to deal easily with complicated joints and lavouts.

TECSOUND® stands out due to its fire resistance and meets Euroclass standard UNE-EN 13501-1:2007 with an exceptional rating: Euroclass B, s2, d0 up to TECSOUND® SY 70

Available in a range of weights, also in self-adhesive, in specific sizes to match gypsum plasterboards or in combination with absorbent felt, TECSOUND® offers solutions for any kind of building system and also its application in the industrial field.

#### **Highly effective**

TECSOUND®'s high visco-elasticity makes it a barrier to sound, greatly reducing the level of noise transmitted.

Combined with absorbent material. such as mineral wools, it creates a mass spring effect which forces sound to travel through materials of different densities, thus reducing energy levels and ensuring high levels of soundproofing.

#### Minimum space

TECSOUND®'s high density makes it possible to add mass to traditional building/construction systems without occupying practically any space. This means that we can obtain high indexes of insulation with minimum thickness.

# Insulation throughout the whole frequency range

Thanks to its special characteristics TECSOUND®' reduces insulation leaks considerably, acting on the resonance frequency and coincidence frequency typical of traditional building systems. This allows for an increase in soundproofing against sounds throughout the whole frequency spectrum.

#### **Damping effect**

TECSOUND® offers excellent damping for the vibration of metal panels and lightweight materials, thus reducing the noise produced by atmospheric agents such as rain or wind on metal or timbered roofs, or the noise generated by vibration in premises with machinery.

#### **Easy and rapid application**

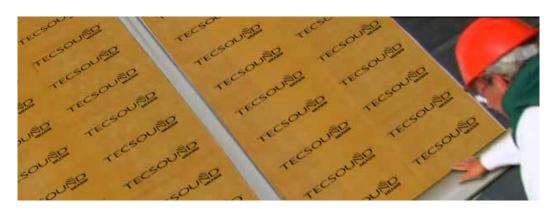
All the TECSOUND® products are easily applied and do not require special tools. In addition, products like TECSOUND®SY (self-adhesive with a width equal to that of gypsum boards), offer even faster application. Its 1.2 m. width allows it to have less joints and better installation ratios.

# Adaptable to uneven surfaces

TECSOUND®'s high elasticity and flexibility makes it totally adaptable to curved surfaces or difficult points, like angles or joints.

# Rot-proof and ageing-resistant

TECSOUND®'s properties remain unaltered with the ageing. The product does not absorb water or grow mould.





















# Acoustic insulation

# oplications

TECSOUND® covers a wide range of applications for acoustic insulation for both in terms of building such as in applications in the industrial sector.

#### **CONSTRUCTION SECTOR**

- Acoustic insulation in vertical walls made of gypsum plasterboard or fibre plasterboards, as well as ceramic brick, concrete blocks etc.
- Acoustic insulation of ceilings and flooring.
- Acoustic insulation of impact noise and vibrations in parquet, wooden, and floating floors as well as under mortar screed.
- Acoustic insulation of airborne noise in metal and timbered roofs.
- Acoustic insulation of rain-fall noise on metal and timbered roofs.
- Acoustic insulation of drainpipes and vents.

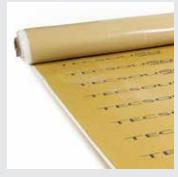
#### **INDUSTRIAL SECTOR**

- Acoustic insulation of vibrations of steel or aluminium metal plates,... for containing engines, compressors, air conditioning units...
- Soundproofing of gutter pipes...
- Dampens vibrations in cars, buses, tractors, etc...
- Acoustic insulation of prefabricated panels and moveable partition walls.
- Acoustic insulation of doors, shutter box, etc.

# PRODUCT RANGE



TECSOUND®



**TECSOUND® SY** 



TECSOUND® FT



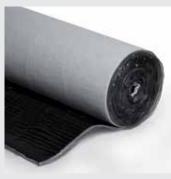
TECSOUND® 2FT



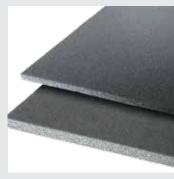
TECSOUND® FT AL



TECSOUND® TUBE



**TEXFON** 



**TEXSIMPACT** 



TECSOUND® S BAND





- - Acoustic insulation throughout the frequency range.
  - > Easy to handle and cut.
  - > High performance acoustic insulation combined with pliable components (gypsum, plasterboard, carrier board etc.)
  - > Flexible and adaptable to uneven surfaces.
  - > High elongation capacity.
  - > Fire rating: B, s2, d0. In other words, it does not contribute to the fire (it does not spread the flames, it does not drop and it does not give off molten particles).
  - > Hot and cold-resistant.
- > Excellent ageing-resistance.
- > Rot-proof.
- > Admits all habitual types of construction supports (gypsum plasterboard, metal, carrier board, plastics).





#### **ACOUSTIC INSULATION**

### Tecsound®

TECSOUND® is a viscoelastic, high density polymer based and highly adaptable membrane providing good levels of soundproofing in different construction elements without increasing thickness.

#### **APPLICATIONS**

- Airborne noise insulation for vertical surfaces with low surface mass (lightweight partitions or panels in various materials).
- Airborne noise insulation for ceilings and roofs.
- Reduction of impact noise level in floating
- Damping of impact noise produced by atmospheric agents in metals roofs.
- In combination with sound-absorbent materials, it results in products with high acoustic performance characteristics.
- Its applications in the industrial sector range from machine enclosures, drainpipes, acoustic damping of metal sheets, etc.

#### Synthetic soundproofing membrane

Code	Product	Weight Kg/m <sup>2</sup>	Thickness mm	Presentation
00070808	TECSOUND® 35	3.5	1.75	8 m x 1.22 m (r)
00070820	TECSOUND® 50	5	2.5	6 m x 1.22 m (r)
00070843	TECSOUND® 70	7	3.5	5 m x 1.22 m (r)
00070842	TECSOUND® 100	10	5	4 m x 1.2 m (r)

## Tecsound® SY

TECSOUND® SY is the self-adhesive version of TECSOUND® membrane. Once peeled off the removable film it can be applied straight onto most surfaces. Dimensions designed specially for application on gypsum plasterboards.

#### **APPLICATIONS**

- · Specially for gypsum plasterboard applications.
- · Airborne noise insulation in vertical surfaces with low surface mass (lightweight partitions or panels in various
- Airborne noise insulation in ceilings.
- In combination with sound-absorbent materials, it results in products with high acoustic performance characteristics.

#### Self-adhesive, synthetic soundproofing membrane

Code	Product	Weight Kg/m <sup>2</sup>	Thickness mm	Presentation
00070840	TECSOUND® SY 35	3.5	1.75	8.05 m x 1.22 m (r)
00070807	TECSOUND® SY 50	5	2.5	6.05 m x 1.22 m (r)
00070828	TECSOUND® SY 70	7	3.5	5.05 m x 1.22 m (r)
00070830	TECSOUND® SY 100	10	5	4 m x 1.20 m (r)

# Tecsound® S Band

TECSOUND® S Band is a synthetic tape made of TECSOUND® membrane, with a built-in self-adhesive layer enabling it to be applied straight onto metals structures subject to vibrations.

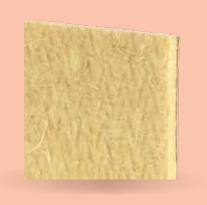
#### **APPLICATIONS**

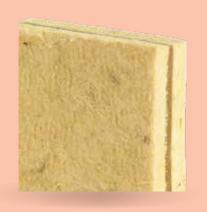
• Damping of vibrations of the metal structure in gypsum plasterboards partitions.

#### Self-adhesive, synthetic soundproofing tape

Code	Product	Weight Kg/m <sup>2</sup>	Thickness mm	Presentation
00070827	TECSOUND® S50 BAND 50	5	2.5	6 m x 0,05 m (r)









### Tecsound® FT

TECSOUND® FT is a soundproofing complex including a porous felt and the TECSOUND® synthetic membrane to be used in different construction elements both horizontal and vertical.

- High performance acoustic insulation, combined with all types of building systems.
- Easy handling and application.
- Joins easy to execute.
- Excellent ageing-resistance.
- Rot-proof.
- · Hot and cold-resistant.

#### **APPLICATIONS**

- Soundproofing of horizontal (ceilings) and vertical enclosures, where high acoustic insulation against transmission of airborne noises is required.
- Airborne noise insulation in vertical surfaces.
- Airborne noise insulation in ceilings.
- Reduction of impact noise level in all types of floors and crossbeams.
- Its main applications include new construction and refurbishment work, industries, cinemas, theatres, sports complexes, night clubs, bars, restaurants, hotels, shopping centres, etc.

# Soundproofing complex made of Tecsound® membrane bonded to a porous felt

Code	Product	Weight Kg/m <sup>2</sup>	Thickness mm	Presentation
00070801	TECSOUND® FT 40	4.1	12	6 m x 1.20 m (r)
00070805	TECSOUND® FT 55	5.6	12.5	5.50 m x 1.20 m (r)
00070802	TECSOUND® FT 75	7.6	14	5.50 m x 1.20 m (r)

### Tecsound® 2FT

TECSOUND® 2FT is a soundproofing complex including TECSOUND® synthetic membrane placed between two porous felts to be used in different construction elements both horizontal and vertical.

- High acoustic insulation, combined with all types of construction/building systems.
- Easy handling and application.
- · Joins easy to execute.
- Excellent ageing-resistance.
- Rot-proof.
- · Hot and cold-resistant.

#### **APPLICATIONS**

- Soundproofing of horizontal (ceilings) and vertical enclosures, where high acoustic insulation against transmission of airborne noises is required.
- Specially recommended in partition walls.
- Airborne noise insulation in vertical surfaces.
- Airborne noise insulation in ceilings.
- Its main applications include new construction and refurbishment work, industries, cinemas, theatres, sports complexes, night clubs, bars, restaurants, hotels, shopping centres, etc.

#### Soundproofing complex made of Tecsound® membrane between two porous felts

Code	Product	Weight Kg/m <sup>2</sup>	Thickness mm	Presentation
00070794	TECSOUND® 2FT 80	8.2	24	5.50 x 1.20 m (r)

## Tecsound® FT 55 AL

TECSOUND® FT 55 AL is a soundproofing complex comprising a porous felt and the TECSOUND® synthetic membrane, coated on the outside with a reinforced aluminium foil.

 Increases acoustic insulation of the pipe it is applied to, its effect based on an absorbent element and a highly elastic, high-density insulating membrane.

#### **APPLICATIONS**

- Acoustic insulation of drainpipes.
- Acoustic insulation of air conditioning vents.
- Acoustic insulation of industrial pipes.
- In combination with sound-absorbent materials, it results in products with high acoustic performance characteristics.

# Soundproofing complex made of Tecsound® membrane finished with aluminium foil and porous felt

Code	Product	Weight Kg/m <sup>2</sup>	Thickness mm	Presentation
00070804	TECSOUND® FT 55 AL	5.5	12.5	5.50 m x 1.20 m (r)







> High performance acoustic and vibration insulation in pipes. IL 13-15 dBA

 Low thickness which helps its installation and makes it suitable for refurbishing and framing pathways

- > Does not crack or break at low temperatures
- > Flexible and adaptable to elbows and bifurcations.
- > Excellent ageing resistance.
- > Easy to handle and cut.
- > Rot-proof.





#### **PROPERTIES**

- > High impact noise insulation capacity.
- > High resistance to compression and tearing.
- > Durability and stability with the ageing.
- > Easy and quick to install.
- > Unrolled in the direction it is installed.
- > Self-adhesive tape incorporated, for the most secure installation and overlap.
- > Waterproof.
- > High resistance to water vapour.
- > Rot-proof.
- > Resistant to the majority of chemical agents.
- > Tested product, millions of m2 installed.

# Tecsound® TUBE

TECSOUND® TUBE is a complex made of TECSOUND membrane bonded to a high tenacity non-woven polyester mat.TECSOUND® TUBE is specially designed for soundproofing of ducts in buildings.Increase in acoustic insulation is due to the combined effect of the absorbing element and of the visco-elastic high density membrane

#### **APPLICATIONS**

- Soundproofing of ducts.
- Reduction of vibration and transmission levels.

#### **REGULATIONS**

In conformity with EN ISO 14366

Quality Management System according to ISO:9001

# Soundproofing complex made of Tecsound® membrane bonded to a high tenacity non-woven polyester mat

Code	Product	Weight Kg/m <sup>2</sup>	Thickness mm	Presentation
00115472	TECSOUND® TUBE	3,75	4.75	8 m x 0.4 m (r)

### **IMPACT NOISE INSULATION**

## Texfon

Is an impact noise insulation layer for floors, comprising a high tenacity, polyester-based non-woven felt laminated to a bituminous protection. It offers an impact noise insulation of  $\Delta L_{\rm w}$  22 dB.

#### **APPLICATIONS**

- Under loads of up to 500 kg/m<sup>2</sup>.
- Underneath flooring.
- Under 5 cm thick (325 g/m²) reinforced mortar screed or under 6 cm thick non-reinforced mortar screed.

#### **INSTALLATION**

The installation of the insulation systems with TEXFON must be carried out by experienced staff.

- Apply directly to the support (so that the bituminous protection is on the upper side). Overlap and seal the joints using the part of the roll designed for this.
- In perimeters and joints with vertical surfaces, the Texfon self-adhesive disconnection tape will be installed.
- It must be protected until the final upper layer has been applied.

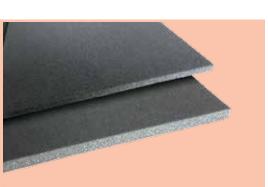
#### STANDARD AND CERTIFICATIONS

In compliance with the standards: EN ISO 140-1, EN ISO 140-3, EN ISO 140-6, EN ISO 140-8, EN 20140-2 and EN ISO 717/1/2.

 Quality system in accordance with the ISO: 9001 standard.

Code	Product	Weight Kg/m <sup>2</sup>	Thickness mm	Presentation
00101689	TEXFON	Impact noise insulation layer through a polyester-based non-woven felt on a bitumi- nous support	20 m x 1 m 16 rolls/pallet 3.4 mm thickness	Underneath floating parquet flooring and traditional flooring







TEXSIMPACT is an high performance cross-linked polyethylene closed cells membrane for impact noise reduction in floors. It is available in 5 and 10 mm thickness providing a high level of compressive stength and excellent soundproofing characheristics.

- High impact noise reduction
- Very high compressive strenght.
- Durable mechanical properties.
- Minimum loose of thickness under loading
- Lightweight, flexible, easy to handle, cut and to adapt to any surface.

- Waterproofed
- Underfloor heating approved.
- CFCs- free.

#### **APPLICATIONS**

- Impact noise insulation in any kind of floors.
- Separating/dampening layer in those applications where is required to disconnect different construction elements.

#### 100% recyclable cross-linked polyethylene membranes

Code	Product	Thickness (mm)	Description	Presentation
00071533	TEXSIMPACT	5	100% recyclable polyethylene foam	2 x 50 m rolls
00071534	TEASIMPAGE	10	membranes, for impact noise insulation	2 x 50 III I0IIS

#### **AUXILIARY PRODUCTS**

# Texsimpact disconnection bands

Texsimpact disconnection bands are bands made of cross-linked polyethylene foam to be placed under the partition walls to break the acoustic bridge between wall and floor.

Code	Product	Description	<b>Application</b>	Presentation
00071535	TEXSIMPACT 10 mm BANDS FOR WALLS	Disconnection bands made of cross-linked polyethylene foam	Impact noise insulation	50 m x 11 cm x 10 mm Bag with 9 rolls: 450 ml

# Texfon disconnection bands

Texfon tapes are self-adhesive polyethylene foam disconnection tapes, closed-cell, used to prevent the transmission of impact noise between floating floors and vertical surfaces and structural elements.

- Elastic.
- Rot-proof.
- Practical conditioning for application.
- Self-adhesive format, facilitating application.

Code	Product	Description	Application	Presentation
00011275	TEXFON DISCONNECTION SELF- ADHESIVE BANDS	Polyethylene foam, closed-cell, self-adhesive tapes	Impact noise insulation for flooring	50m x 145mm x 3mm Box with 4 rolls: 200m



### **Fasteners**

Code	Product	Application	Presentation
00071426	FASTENERS PT-H 70		
00071427	FASTENERS PT-H 90	Fixing of the Tecsound FT, Tecsound 2FT	Box with 250 uds.
00071428	FASTENERS PT-H 120		

# Acoustic insulation

## **SOLUTIONS GUIDE**

Code	Product Weight Kg/m <sup>2</sup>		Thickness mm	Presentation	
00101689	TEXFON	Impact noise insulation layer through a polyester-based non-woven felt on a bitumi- nous support	20 m x 1 m 16 rolls/pallet 3.4 mm thickness	Underneath floating parquet flooring and traditional flooring	

	SUPPORT	USE	TAPE	VERTICAL SURFACE	HORIZONTAL SURFACE	DESIGNATION
NEW CONSTRUCTION	GYPSUM Plasterboards	INTERIOR PARTITIONS	TECSOUND S BAND 50	TECSOUND SY 70	TEXSIMPACT	PI-1
	CERAMIC BRICK	PARTITION WALLS	-	TECSOUND 2FT	TEXSIMPACT	PM-2
	GYPSUM		TECSOUND S BAND 50	TECSOUND SY 50	TEXSIMPACT	PM-5
	PLASTERBOARDS		TECSOUND S BAND 50	TECSOUND SY 50	TECSOUND FT 75 / TECSOUND SY 70"	FT-2
	CEILING AND ROOFS CONCRETE FRAMEWORK	CEILING AND ROOFS	-	-	TEXFON	S-1
		-	-	TECSOUND 70 / TEXFON	S-3	
	DRA	INPIPES	-	TECSOUND FT 55 AL	-	BJ-1
	METAL DECK	IETAL DECK DECK ROOFS	-	-	TECSOUND 100	NT-2-0a
	PROFILE	DEON NOOF 3	-	-	TECSOUND 100	NT-2-10
KEFUKBISHIMENI	CERAMIC Brick	PARTITION WALLS	-	TECSOUND FT	-	TR-3

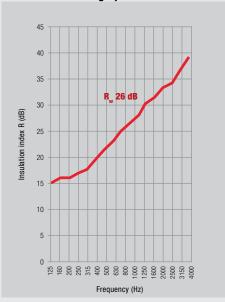


The acoustic insulation level obtained will always depend on the building system employed.

For this reason, a few building solutions are given with TECSOUND® products of different types and using different applications, with the corresponding airborne noise insulation index  $\mathbf{R}_{\mathbf{w}}$  (dB) or impact noise insulation index  $\mathbf{\Delta L}_{\mathbf{w}}$  (dB).

Even so, it is worth describing the material in terms of acoustics, therefore, acoustic insulation tests have been carried out on these products as shown in the graphs attached:

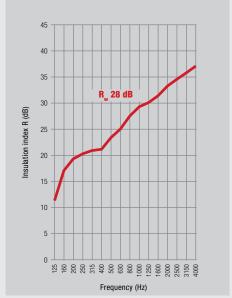
#### Acoustic insulation graph TECSOUND® 50



#### — **Applus (Spain)** nº 4.042.669

Frec. (Hz)	125	250	500	1000	2000	4000
- R (dB)	15.0	16.8	21.6	26.5	31.2	36.3

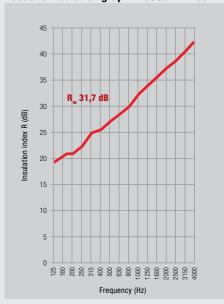
#### Acoustic insulation graph TECSOUND® 70



#### **Applus (Spain)** nº 40.042.666

Frec. (Hz)	125	250	500	1000	2000	4000	
R (dB)	11,7	20,1	23,6	28,7	33,0	36,8	

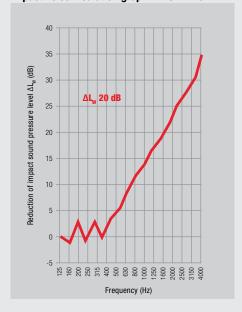
#### Acoustic insulation graph TECSOUND® 100



#### — Applus (Spain) nº 4.042.668

Frec. (Hz)	125	250	500	1000	2000	4000
- R (dB)	19,6	22,4	27,2	32,3	37,4	42,8

#### Impact noise insulation graph TEXSIMPACT



#### --- LGAI (Spain) nº 23.020.014

Frec. (Hz)	125	250	500	1000	2000	4000
$-\Delta L_W$ (dB)	-3,8	7,4	10,6	18,9	26,9	35,5





- 1. 13 mm gypsum plasterboard
- 2. TECSOUND® S BAND 50
- 3. TECSOUND® SY 70
- 4. Mineral wool (thickness: 50 mm; density: 15 kg/m³)
- 5. Flooring
- 6. Reinforced mortar screed
- 7. TEXSIMPACT 5 mm
- 8. Support
- **PM-5** Vertical partitions, partition walls R<sub>w</sub> 60 dB 0 6 0 8 2
- 1. 13 mm gypsum plasterboard
- 2. TECSOUND® S BAND 50
- 3. TECSOUND® SY 50
- 4. 13 mm gypsum plasterboard
- 5. Mineral wool

(thickness: 40 mm; density: 30 kg/m³)

- 6. Flooring
- 7. Reinforced mortar screed
- 8. TEXSIMPACT 5 mm
- 9. Support



- 1. Existing partition wall
- 2. TECSOUND® FT
- 3. Omega profile
- 4. Plasterboard

### Façades and ceilings 3 4 6 8 0 8 9

- 1. Support
- 2. Plaster coast
- 3. TECSOUND® FT 75
- 4. Air cavity (thickness: 200 mm)
- 5. Dampers
- 6. TECSOUND® SY 70
- 7. TECSOUND® S BAND 50
- 8. 13 mm gypsum plasterboard
- 9. Brick wall (thickness: 13 cm)
- 10. Mineral wool

(thickness: 50 mm; density: 70 Kg/m³)

11.Mineral wool

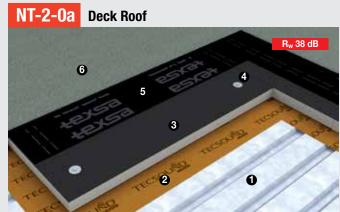
(thickness: 50 mm; density: 40 Kg/m³)



- 1. Plaster coast (thickness: 1,5 cm)
- 2. Brick wall (thickness: 7 cm)
- 3. TECSOUND® 2FT
- 4. Flooring
- 5. Reinforced mortar screed
- 6. TEXSIMPACT 5 mm
- 7. Support

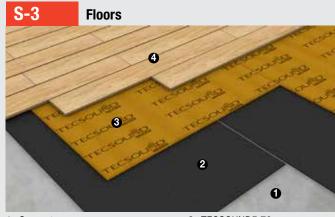


- 1. Drainpipe
- 2. TECSOUND® FT 55 AL
- 3. Plastic flange
- 4. Aluminium tape



- 1. Metal deck profile (thickness: 0,7 mm)
- 2. TECSOUND® 100
- 3. AISLADECK BV
- 4. Fixings

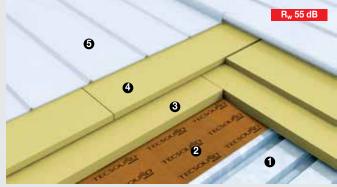
- 5. MORTERPLAS SBS FV 3 kg 6. MORTERPLAS SBS FP 4 Kg
- Mineral



- 1. Support
- 2. TEXFON

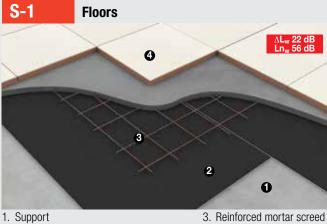
- 3. TECSOUND® 70
- 4. Parquet

### NT-2-10 Standing seam Roof



- 1. Metal deck profile (thickness: 0,7 mm)
- 2. TECSOUND® 100
- 4. Rock wool (30 Kg/m³) 5. Aluminium standing seam

- 3. Rock wool
  - (thickness: 100 mm; density: 150-220 Kg/m³)



- 2. TEXFON

- 3. Reinforced mortar screed
- 4. Flooring

#### **BJ-2 Drainpipes and vents**



- 1. Drainpipe
- 2. TECSOUND® TUBE
- 3. Plastic flange
- 4. TECSOUND® S50 band 50

For further information and building systems see our website: www.texsa.com



### **ACOUSTIC INSULATION**

# Reference jobs

- Congress Hall Seville
  - Arch. Guillermo Vázquez Consuegra
- Palasport Olímpic Torino (Italy)
  - Arch. Arata Isozaki
- City of Culture Santiago de Compostela
  - Arch. Peter Einsman
- Caja Mágica Madrid
  - Arch. Dominique Perrault

- Olympic Media Centre London
  - Arch. Allies and Morrison
- CCIB Convention Centre Barcelona
  - Arch. Herzog& De Mouron
- Exhibition centre Pavillion 0 La Fira Barcelona
  - Arch. Toyo Ito
- IKEA Tempe Sidney (Australia)



**T1 Barcelona Airport**– Arch. Ricardo Bofill



The Hydro Glasgow (Scotland)

– Arch. Foster and Partners

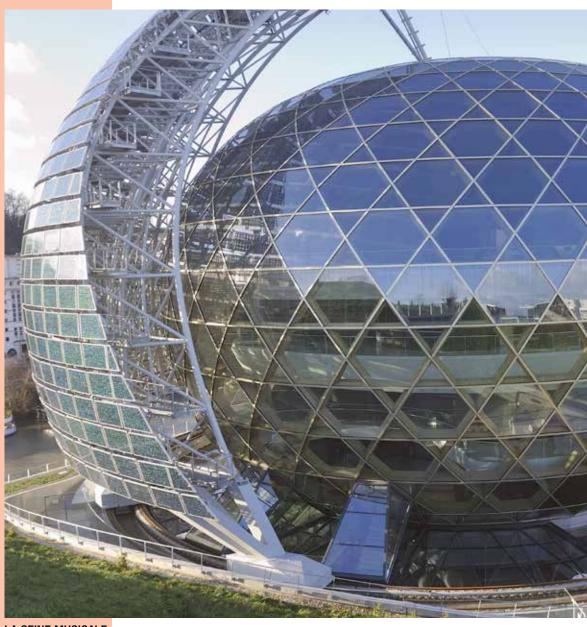


**O2 Arena London (UK)**– Arch. Richard Rogers



- The Copper Box Arena London (UK)
- Prime Minister Offices Brunei (Brunei)
- Manila Airport Philipines
- Congress Hall Port Aventura
- Hotel Far West Port Aventura
- Hotel ME Madrid Reina Victoria Madrid
- Hotel NH Constanza Barcelona
- Tarraco Arena Plaza Tarragona

- Production Centre Vicinay Cadenas Sestao
- Technogym Production Centre Italy
- Congress Hall Oran (Argelia)
- Philarmonic Concert Hall Szczecin (Poland)
- Niemeyer Avilés centre
- Olympic House Sede Del Coi (Fr)
- Bordeaux Metropol Arena
- Luma Arles (Fr)



LA SEINE MUSICALE

– Arch. Jean de Gastines / Shigeru Ban

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Any technical questions related to the implementation of our products?

Contact our Technical Service Tel.: (+34) 93 635 14 41

All the information is available on our website

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