# **EcoTouch®** Acoustic Insulation

EcoTouch acoustic products are acoustically designed to control noise transmission between rooms, absorbing sound vibrations within the wall cavity to control noise in your buildings. They provide excellent in-place acoustical performance, and are as easy to install as regular insulation.

As the acoustical material, EcoTouch Acoustic Insulation can be filled in the internal space of the wall, ceiling and floor. Depending on the construction method used, EcoTouch Acoustic Insulation can improve Sound Transmission Class (STC) ratings by 4 to 10 decibels. It is ideal for improving the thermal and acoustical performance of wall and floor structure. It can also be used to create privacy in offices, hotels, meeting room, or other areas where peace and quiet is desired.

\*Accepted acoustics standard is that a 10 dB increase doubles perceived sound and a 10 dB decrease halves it. EcoTouch offers a 6 dB increase in sound reduction, which equals a 30% decrease in perceived sound.











Owens Corning EcoTouch® Acoustic Insulation



Owens Corning (China) Investment Co.,LTD. www.owenscorning.com

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- Owens Corning and its family of companies is a leading global producer of residential and commercial building materials, glass-fiber reinforcements, and engineered materials for composite systems. A Fortune<sup>®</sup> 500 company for 61 consecutive years, the Company is committed to driving sustainability by delivering solutions, transforming markets, and enhancing lives. Owens Corning has earned its reputation as a market-leading innovator of glass-fiber technology by consistently providing new solutions that deliver a strong combination of quality and value to its customers across the world. Owens Corning has approximately 15,000 employees in 25 countries on five continents.
- Owens Corning **EcoTouch**® insulation fuses the industry-leading thermal and acoustical performance characteristics of Owens Corning PINK FIBERGLAS insulation with the innovative, new PureFiber Technology. The result is a new class of high-performance residential and commercial insulation made with natural materials and a minimum of 30 percent post-consumer recycled content and 50 percent total recycled content – the highest certified percentage in the fiber-glass insulation industry.











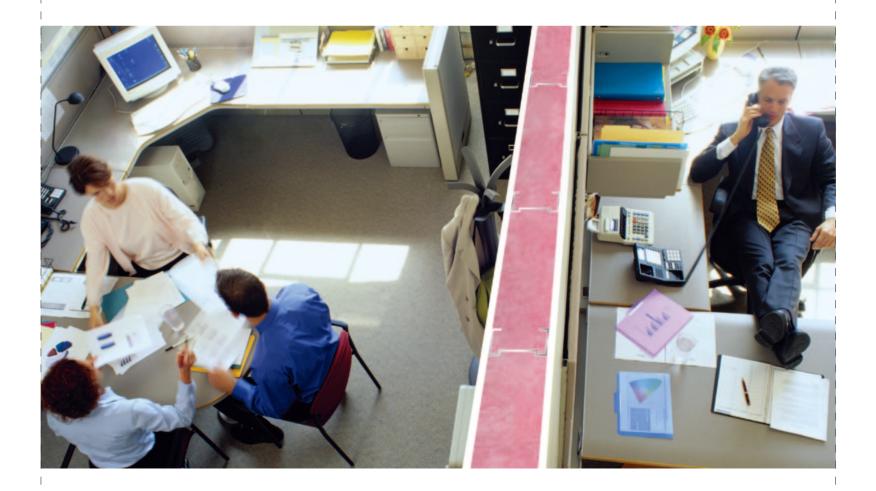






#### **Design Considerations**

STC	Test No.	Construction Description	
59dB	OC0506	Double layer wall, two layers of 12mm type gypsum, two rows of 50mm steel stud with 400mm spacing, filled two layers of 24kg/m3 50mm EcoTouch Acoustic Batt Insulation with 12mm inner gypsum.	
58dB	OC0505	Double layer wall, two layers of 12mm type gypsum, two rows of 50mm steel stud with 600mm spacing, filled two layers of 24kg/m3 50mm EcoTouch Acoustic Batt Insulation with 20mm inner air space.	188
53dB	OC0503	Double layer wall, two layers of 12mm type gypsum, two rows of 50mm steel stud with 600mm horispacing and 20mm inner air space, filled one layer of 24kg/m3 50mm EcoTouch Acoustic Batt Insulation.	12 20 22 22 22 22 22 22 22 22 22 22 22 22
51dB	OC0502	Double layer wall, two layers of 12mm type gypsum, 100mm steel stud with 600mm spacing, filled one layers of 24kg/m3 50mm EcoTouch Acoustic Batt Insulation.	148
49dB	OC0501	Double layer wall, two layers of 12mm type gypsum one side, one layer of 12mm type gypsum another side, 75mm steel stud with 600mm spacing, filled one layers of 24kg/m3 50mm EcoTouch Acoustic Batt Insulation.	2 2512



### Acoustic Rerformance

With finer and longer fiber, (~6 µm, 100~200 mm), EcoTouch Acoustic Insulation has excellent sound absorption and noise reduction performance.

#### **Physical Properties**

Property	Test Method	Value		
Bulk Density (kg/m³)		16	24	
Thermal Conductivity (K) (W/m·℃)  @24℃ Mean	ASTM C177	0.039	0.036	
Fungi Resistance	ASTM C665	Pass		
Corrosion Resistance	ASTM C665	Pass		
Water Vapor Sorption	ASTM C1104	<5% by weight		
Combustibility Character	ASTM E84 B.S.476 Part4	Flame Spread 25, Smoke Development 50 Pass		
Formaldehyde	UL 2818	GreenGuard Certified Formaldehyde-free		
TVOC	UL 2818	GreenGuard Certified 0.22mg/ m³		

#### **Acoustical Properties**

	Desity (kg/m³)	Thickness (mm)	Sound Absorption Coefficient $ lpha $					NRC	
			Octave band center frequency(Hz)						
			125	250	500	1000	2000	4000	
	16	50	0.24	0.55	0.89	0.99	1.02	1.06	0.86
	24	50	0.17	0.60	0.95	1.04	1.04	1.07	0.91

# Ease of Installation

than alternative construction methods.

## User Friendly

EcoTouch Acoustic Insulation is lightweight, soft and easy to handle.











<sup>\*1.</sup> Test method: Reverberation chamber method
\*2. Mounting Type A: material placed against a solid backing such as a block wall.