

USE OF

POLYESTER FIBRE PANELS

FOR

ACOUSTIC CORRECTION

OF INDOOR ENVIRONMENTS

Sara Casini Co-owner - R&D Manager 31/01/2019 Context - Barcellona



MAIN MARKETS OF PRODUCTS APPLICATION



Manifattura Maiano produces **nonwovens** for technical applications in different markets



THERMAL AND ACOUSTIC INSULATIONS

IN NATURAL OR RECYCLED TEXTILE FIBERS FOR BUILDING SECTOR

RECYCLED POLIESTER





RECYCLED TEXTILES





HEMP FIBER





SHEEP WOOL











YEAR: 2015-2017

OBJECTIVE: DESIGN AND DEVELOPMENT OF **POLYESTER FIBER PANELS** FOR

ACOUSTIC CORRECTION OF INDOOR QUALITY

The research has demonstrated that Polyester fiber panels can **absorbs noises** and improve the **acoustic quality** of interior environments.

Even at low frequencies by adopting specific criteria for installation

Study presented at International Congress on Sound and Vibration







FROM RESEARCH TO THE MARKET





















PANEL FOR ACOUSTIC CORRECTION TO SIGHT OF INDOOR ENVIRONMENTS

Manufactured using 85% recycled polyester fibers made from plastic bottles





Example of installation













Example of installation









NANECO

YEAR: 2017-2019

Co-financed

PROGRAMMA
OPERATIVO REGIONALE
CTEO CRESCITA
e OCCUPAZIONE

OBJECTIVE: Definition and testing of an innovative kit for

acoustic correction of schools.

To solve the main acoustic problems of school buildings

PARTNERS:









Co-financed



NANECO

Main points of the project:

- The new insulating panel will combines superior noise absorption with aesthetic finishing.
- Easy installing kit for schools
- Investigation on acoustic performances of panels empowered with nanofibers layers





Co-financed

NANECO

Polyester panel suspension system Predictive calculation of product quantity needed



Lesson noise and Tmf

80

75

65

60

0.00 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60

Installation kit specific for schools







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