

## Acoustic Performance and Application of Three Personalized Sound-Absorbing Materials

**Authors :** Fangying Wang, Zhang Sanming, Ni Qian

**Abstract :** In recent years, more and more personalized sound absorbing materials have entered the Chinese room acoustical decoration market. The acoustic performance of three kinds of personalized sound-absorbing materials: Flame-retardant Flax Fiber Sound-absorbing Cotton, Eco-Friendly Sand Acoustic Panel and Transparent Micro-perforated Panel (Film) are tested by Reverberation Room Method. The sound absorption characteristic curves show that their performance match for or even exceed the traditional sound absorbing material. Through the application in the actual projects, these personalized sound-absorbing materials also proved their sound absorption ability and unique decorative effect.

**Keywords :** acoustic performance, application prospect personalized sound-absorbing materials

**Conference Title :** ICBDAME 2018 : International Conference on Building Design, Architecture and Materials Engineering

**Conference Location :** Toronto, Canada

**Conference Dates :** June 21-22, 2018