

## GLASS FABRIC COMBINATION FOR ACOUSTICS OF BUILDING INTERIOR

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### ABSTRACT

Materials that reduce the acoustic energy of a sound wave as the wave passes through it by the phenomenon of absorption are called sound absorptive materials. They are commonly used to soften the acoustic environment of a closed volume by reducing the amplitude of the reflected waves. Absorptive materials are generally resistive in nature, either fibrous, porous or in rather special cases reactive resonators. Classic examples of resistive materials are nonwovens, fibrous glass, mineral wools, felts and foams. Porous materials used for noise control are generally categorized as fibrous medium or porous foam. Fibrous media usually consists of glass fiber, wool or polyester fibers due to have high acoustic absorption. The work has been done to study the behavior of different glass fabric and its combination with nonwoven on sound absorption behavior. The effect of Glass fabrics and its structures on sound absorption behavior and its advantage to use as wall covering applications has been described. Such types of materials with different structure are promising for home interiors, office interiors, and automobile interiors due to their good sound absorption and insulating properties.

**KEYWORDS:** Fibrous Material, Acoustics, Sound Absorption Coefficient, Porosity, Nonwoven