**RANGE OF HEARING FOR HUMAN EAR**

**0Db to 120Db**

**Safest**

**0-85Db**

**MATERIALS TO BE USED**

**GLASS**

**WOOD**

**CONCRETE**

* SOUND RETENTION CAPACITY OF DIFFERENT MATERIALS
* GLASS
  + THICKNESS AND DENSITY MATTER

THINGS THAT DETERMINE THE ABILITY OF MATERIALS TO BLOCK NOISE

1. Mass : The heavier and denser a material is tends to provide a better insulation. E.g Concrete, Brick or Dense wood
2. Thickness: Thickness of a material improves its sound insulation capabilities. Thicker barriers result in Greater Attenuation. E.g Multiple layers in a material.
3. Air Tightness : Gaps, Cracks or openings in a material significantly compromises its ability to block noise.

Sealing these Cracks using materials with good-air tightness properties e.g Acoustic Seals can improve the effectiveness of sound insulation.

1. Resonance and Vibration : Materials that are prone to Vibrating or Resonating transmits noise more easily.