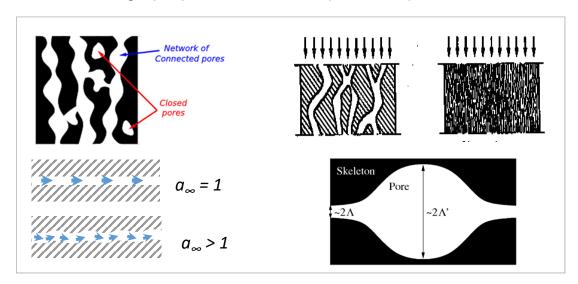


Acoustic Material Characterization -Biot Parameter

Alfa Acoustics also provides acoustic material characterization services in terms of Biot Parameters. Acoustic performance of sound absorbing porous materials is governed by its intrinsic parameters (Biot Parameters). These parameters are very important in material - component - product level simulation process.

Biot Parameters

- **Porosity** It is the ratio of the air volume inside to the total volume of the porous material.
- Airflow Resistivity It is defined as the frame resistance to steady state airflow through a porous material.
- Tortuosity It is defined as the ratio of actual path length through the material to the linear path length.
- Viscous Characteristic Length (VCL) It is the diameter of a channel connecting two pores inside a porous material.
- Thermal Characteristic Length (TCL) It is the diameter of a pore inside a porous material.



Field of Application

 Simulation – During simulation in softwares like α -sim, NOVA, VAOne, Virtual Lab, SEAM, etc.

Materials to be Tested

- Foam open cell, metallic, chipped foam, etc.
- Fiber glass wool, glass fiber, felt, cotton, fabrics, etc.

