## <u>Tender Specification Language</u> <u>Accosound</u>

## **DUCT ACOUSTIC LINING**

Duct acoustic lining material shall be Nitrile Rubber open cell foam. Thermal conductivity of the insulation material shall not exceed 0.047~W/moK at an average temperature of 20oC. Density of the nitrile rubber shall be 140-180~Kg/m3. The material should withstand maximum surface temperature of +85oC and minimum surface temperature of -20oC. The material should conform to Class 1 rating for surface spread of Flame in accordance to BS 476 Part 7 & fire safe as per IS 15061.

Thickness of the material shall be 15 mm thick specified for the individual application. The insulation should be installed as per manufacturer's recommendation.

The Sound Absorption Coefficient values (SAC values); tested as per IS:8225/ISO:354/ASTM 423C, should be minimum as per following chart

Freq (Hz)	125	250	500	1000	2000	4000	5000
NRC	0.23	0.24	0.65	1.06	0.99	1.01	1.01

Ducts so identified and marked on Drawings and included in Schedule of Quantities shall be provided with 15 mm thick acoustic lining of thermal insulation material for a distance of minimum 5 meters (or 30% of the duct length whichever is more).

## **Installation Procedure**

The inside surface for the ducts shall be covered with adhesive recommended by the manufacturer. Cut Foamed sheets into required sizes apply adhesive on the foam and stick it to the duct surface. The edges should be framed with aluminium channels to prevent delamination of acoustic liner from the edges due to air flow.