

AN EXPERIMENTAL STUDY OF SOUND ABSORPTION
PROPERTIES OF RUBBERISED COIR

M. Kadiragamanathan, L.S. Kariyawasam, S.K. Seneviratne
Dept. of Mechanical Engineering, University of Peradeniya

This paper presents a comparative study of sound absorption property of rubberised coir of 50 mm thickness of different densities; in order to select the one with good absorption characteristics. The sound reflection property of materials is considered since the standard test facility as specified by ASTM is not available in this country.

The test rig is based on the measurement of sound reflection property of materials.

The sound reflected by the rubberised coir was compared with that of plywood. The variation of this ratio with the frequency in the audio range is presented. It is shown that rubberised coir of appropriate characteristics for specific purpose can be chosen from the results.

References

1. American Society for Testing Materials (ASTM) C 423
2. Burris - Meyer, H and Goodfriend, L.S. Acoustics of architects