



IMPROVED SOUND INSULATION IN LIGHTWEIGHT BUILDINGS



Problem: Poor low frequency sound insulation is commonly found in lightweight buildings.

RQ: What additional material, *hybrid material*, can be added to the lightweight building for adequately improving sound insulation?

RQ: How effective is a Mie absorber, *meta material*, compared to a Helmholtz absorber for improving sound insulation?

Problem: Building acoustic measurements need to be performed below 50 Hz.

RQ: If you need to measure reverberation time according to ISO standard, how to include frequencies below 50 Hz?

