

ABSTRACT

Music studio is a specific room for playing music instrument. Wall's room ability to perform sound insulation on music studio become an important factor and should be known well. Wall's sound insulation performance can be known with determining Weighted Standardized Level Difference's value plus correction factor for low frequency sound ($D_{nT_w}+C_{tr}$). Recommended $D_{nT_w}+C_{tr}$ value for room for music is 50 dB or higher. UKM Telkom University's music studio was taken as the object for this research. This room has four wall partition which room's volume is 49 m^3 . Based on measurement, $D_{nT_w}+C_{tr}$ value for every wall still lower than 50 dB. This value show that sound insulation performance on each wall is not matching the standart, so that the simulation for the walls has been runned. The simulation process give the best result with $D_{nT_w}+C_{tr}$ value that higher than 50 dB for each wall. This simulation result could give the studio room's wall a sound insulation performance that match with the standart.

Keyword: sound insulation, music studio, wighted standardized level difference