# TECHNICAL BULLETIN 8

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FINEXPERT FIBER CEMENT FLAT BOARD(6 mm)

# NOICE ISOLATION CLASS (NIC) 35

Given SAE J1400 test procedures for Sound Transmission Loss Testing, it was possible to perform small scale testing to obtain a Noise isolation Class (NIC) of 35 for the FINEXPERT Board (1/4''). The NIC value is similar to the commonly used term Sound Transmission Class (STC) evaluated by ASTM.

The need for such a test was initiated by a manufacturer of acoustical panels. They are designing moveable sandwich wall sections with a fibreglass core.

The objective of measuring the NIC value of a material is to determine how much sound the material can reflect. The greater the NIC value, the more sound is reflected from the material. Acoustic panel manufacturers stipulate that a minimum STC value of 35 will classify a material as a reflector. Given this minimum requirements, the FINEXPERT board (1/4'') can be used as a reflector in a wall assembly with an acoustical panel on the reverberant side and fibreglass insulation within a core. As a result, the FINEXPERT board (1/4'') would reflect back into the core of the wall assembly the sound that reaches the FINEXPERT board (1/4'') after it passed through the acoustic panel and the insulation. The sound would then be contained within the wall assembly.

Weight, mass, stiffness, continuity of the sound transmission path through the wall and the sound absorption within the space, are all factors which affect the sound transmission of a wall system or an individual component of a wall system.