

STC61 Double Timber Stud Wall Assembly



Dimensions

- **Weight:** 33.32kg/m²
- **Thickness:** 247.65mm
- **Content:** 43% recycled materials

Assembly Construction

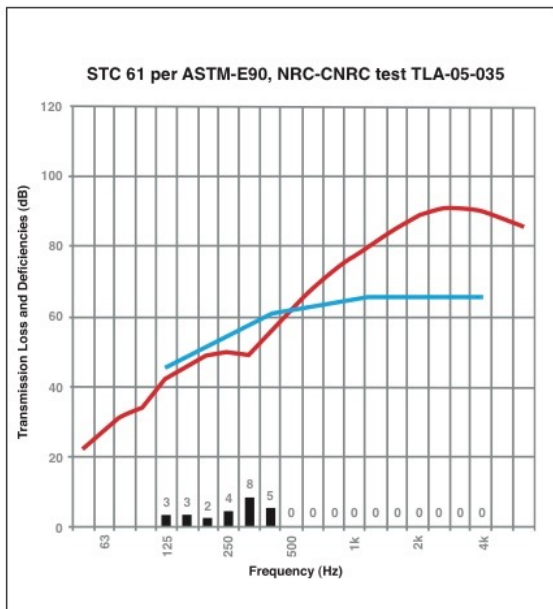
- 15mm Drywall Plasterboard attached with 25mm screws/nails at 450o/c.
- 3mm/4.88kg/m² Acoustiblok Sound Isolation material attached to vertical studs with screws and collars.
- Double 70mm/100mm TimberStuds 25mm air space apart with R-13 fibreglass insulation in cavity.
- 3mm/4.88kg/m² Acoustiblok Sound Isolation material attached to vertical studs with screws and collars.
- 15mm Drywall Plasterboard attached with 25mm screws/nails at 450o/c.

Testing Establishment

UL approved for use in walls, floors and ceilings
National Research Council – IRC –
Test Certificate No. TLA-05-035

Performance

| Independently Tested Sound Transmission Loss Reference | | | | | | | | |
|--------------------------------------------------------|------|------|-------|-------|-------|--------|--------|--------|
| Frequency | 50Hz | 80Hz | 125Hz | 250Hz | 500Hz | 1000Hz | 2500Hz | 5000Hz |
| T.L | 22dB | 32dB | 42dB | 50dB | 62dB | 77dB | 90dB | 88dB |



SOUND TRANSMISSION CLASS is a single number that represents the sound blocking capacity of a partition such as a wall or ceiling.

STC numbers are often referred to in architectural specifications, to assure that partitions will reduce noise levels adequately. For performance similar to laboratory test numbers, it is necessary to adhere closely to the construction materials and techniques used in the tested partition.

STC is calculated by comparing the actual sound loss measured when 18 test frequencies pass through a partition, with fixed values for each STC level. The highest STC curve that the measured sound loss numbers fit under, determines the STC rating of the tested partition.

STC calculations emphasize sound frequencies that match the human voice. A high STC partition will block the sound of human speech, and block noise that interferes with human speech. A high STC number may not indicate a partition that is effective in blocking very low or very high pitched sound. To estimate high and low frequency performance, consult the Sound Transmission Loss graph included in STC test reports. STC does not indicate how well a partition can block impact noise (objects striking the far side of the wall), or directly transmitted noise such as machinery mounted on the far side of the wall. Impact Insulation Class (IIC) measures transmitted impact noise, and is normally specified for floor/ceiling configurations only.