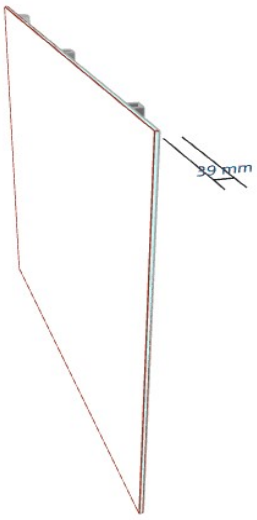
INSUL Sound Insulation Prediction (v9.0.19)

Authorised INSUL user:Roldan

Notes:

- Key No.
Job Name:
Job No.:
Date:28/2/2020
File Name:est-140.ixl

Acoustic prediction STC 34

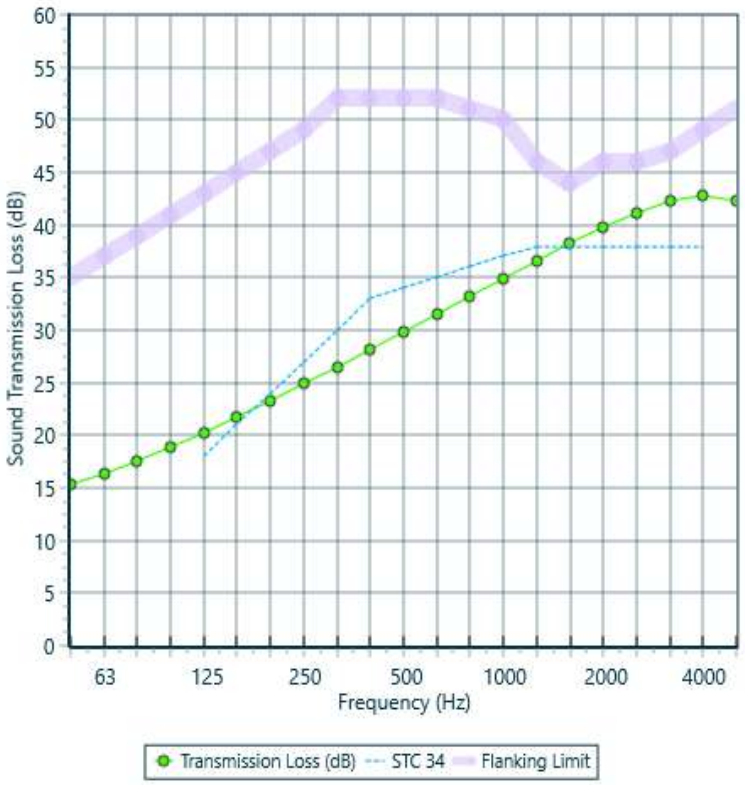


System description (from left to right side of graphic)

Panel 1 : 1 x 8 mm Lexan (Polycarbonate)
+ 1 x 3 mm Concrete
Frame Furring Channel (28mm x 0.55mm) (28 mm x 38 mm)
Stud spacing 600 mm
Partition surface mass = 16,6 kg/m²
Partition width = 11 mm

freq.(Hz)	TL(dB)	Deviations
50	15	
63	16	
80	17	
100	19	
125	20	0
160	22	0
200	23	-1
250	25	-2
315	27	-3
400	28	-5
500	30	-4
630	32	-3
800	33	-3
1000	35	-2
1250	37	-1
1600	38	0
2000	40	0
2500	41	0
3150	42	0
4000	43	0
5000	42	
Sum		-24

Panel Size : 2,7 m x 4,0 m



Authorised INSUL user:Roldan

Notes:

- Key No.
Job Name:
Job No.:
Date:28/2/2020
File Name:est-140.ixl

Glossary

dB	Decibel. The unit of sound level.
Frequency	The number of pressure fluctuation cycles per second of a sound wave. Measured in units of Hertz (Hz).
Octave band	Sound, which can occur over a range of frequencies, may be divided into octave bands for analysis. The audible frequency range is generally divided into 7 octave bands. The octave band frequencies are 63Hz, 125Hz, 250Hz, 500Hz, 1kHz, 2kHz and 4kHz.
Transmission loss (TL)	The attenuation of sound pressure brought about by a building construction. Transmission loss is specified at each octave or one third octave frequency band.
STC	Sound Transmission Class A single number system for quantifying the transmission loss through a building element. STC is based upon typical speech and domestic noises, and thus is most applicable to these areas. STC of a building element is measured in approved testing laboratories under ideal conditions. (refer to ASTM E413 Classification for Rating Sound Insulation)