

# COMPUTATION OF SOUND TRANSMISSION LOSS

Modeling and computation done by Saint-Gobain CRDC

Computation hypothesis defined to model a measurement according to EN ISO 140

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**Ratings:** According to ISO 717-1 100Hz - 3150Hz ASTM E413 125Hz - 4000Hz ASTM E1332 80Hz - 4000Hz

**R<sub>w</sub>(C;Ctr) = 43 (-2;-6) dB   R<sub>A</sub> = 41 dB   R<sub>A,tr</sub> = 37 dB   STC = 43.0 dB   OITC = 34.0 dB**

**Results:** Sound Transmission Loss by third-octave band



Frequency (Hz)	R (dB)
50	15.8
63	27.3
80	29.2
100	30.9
125	20.7
160	26.7
200	29.1
250	33.9
315	35.8
400	40.3
500	44.4
630	47.1
800	48.4
1000	51.2
1250	53.7
1600	51.3
2000	46.2
2500	42.3
3150	42.2
4000	47.5
5000	53.2

**Computation details:**

- Date of computation: 09/30/16
- Overall dimensions: 1.48m x 1.23m
- SGG details:
  - GLASS 5 mm
  - VET\_CF 3 mm
  - GLASS 4 mm
  - VET\_CF 3 mm
  - GLASS 4 mm
  - VET\_CF 3 mm
  - GLASS 5 mm
  - AR 14 mm
  - GLASS 6 mm