



**Sound reduction improvement index of a lining on standard heavy wall
according to EN ISO 10140-1:2016 Annex G
Laboratory measurements according to EN ISO 10140-2:2010**

Applicant: SUSPENSIONES ELÁSTICAS DEL NORTE, S.L. (SENOR)

Result No.: B2020-122-M760 MRA

Test date: 30th October 2020

Test specimen: ACOUSTIC DIRECT WALL LINING (SENOR + CHOVA): SE-FTD OMEGA; SE-BEC-10X100; SE-MONT-BICAPA-40; SE-BEC-10X100; CHOVA NAPA; CHOVA VISCOLAM.

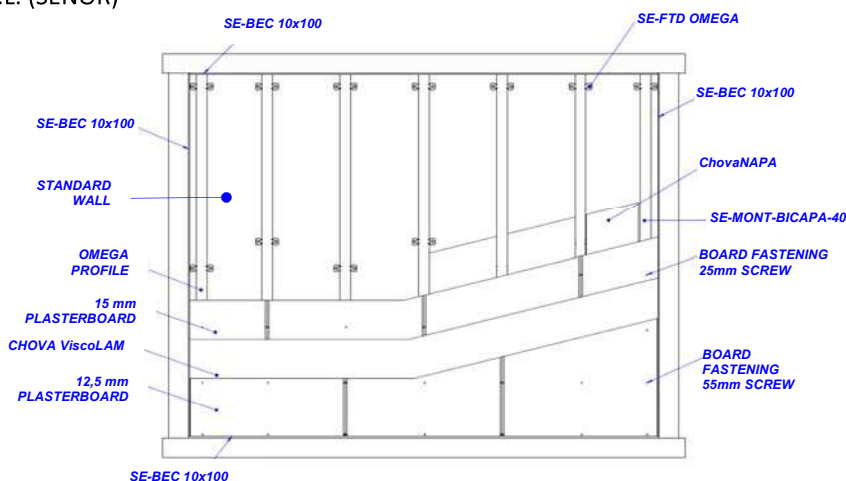
Standard heavy wall: Lined filled concrete block wall (300 kg/m²), tested on 19th October 2020 (R_{without})

Estimated superficial mass: 25 kg/m²

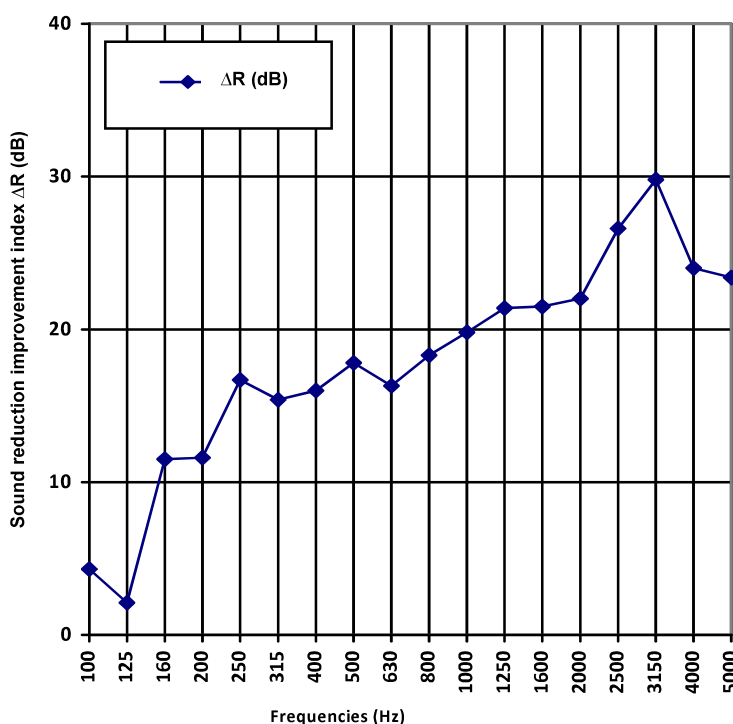
Test specimen area: 10,08 m² T_{rooms} : 20,3 °C

Source room volume: 66,5 m³ HR_{rooms} : 49 %

Receiving room volume: 55,2 m³ P_{rooms} : 967 mbar



f (Hz)	R_{with} (dB)	R_{without} (dB)	ΔR (dB)
100	39,7	35,4	4,3
125	38,1	36,0	2,1
160	46,3	34,8	11,5
200	46,0	34,4	11,6
250	50,9	34,2	16,7
315	53,4	38,0	15,4
400	57,3	41,3	16,0
500	61,0	43,2	17,8
630	62,6	46,3	16,3
800	67,2	48,9	18,3
1000	71,8	52,0	19,8
1250	75,6	54,2	21,4
1600	77,7	56,2	21,5
2000	78,7	56,7	22,0
2500	80,5	53,9	26,6
3150	82,6	52,8	29,8
4000	77,8	53,8	24,0
5000	77,7	54,3	23,4



$R_{w(C; C_{tr})\text{with}}$: 61(-2;-7) dB	$R_{w(C; C_{tr})\text{without}}$: 48(-2;-5) dB
$R_{A\text{with}}$: 60,2 dBA	$R_{A\text{without}}$: 47,1 dBA
$R_{A, tr, \text{with}}$: 53,7 dBA	$R_{A, tr, \text{without}}$: 42,9 dBA

Weighted indices according to EN ISO 10140-1:2016 Annex G:

$\Delta R_{w, \text{heavy}}$ = 13 dB / $\Delta(R_w + C)_{\text{heavy}}$ = 12 dBA / $\Delta(R_w + C_{tr})_{\text{heavy}}$ = 10 dBA

$\Delta(R_w + C_{100-5000})_{\text{heavy}}$ = 12 dBA / $\Delta(R_w + C_{tr, 100-5000})_{\text{heavy}}$ = 10 dBA

Evaluation based on laboratory measurement results obtained by an engineering method

