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R&D AKUSTIKA

Accredited method (see www.latak.gov.lv)

FACADE SOUND INSULATION MEASUREMENTS ON SITE (in situ)

STANDARD LVS EN ISO 16283-3:2016

Acoustics - Field measurement of sound insulation in buildings and of building elements - Part 3: Facade sound insulation (ISO 16283-3:2016).

Measured parameters :

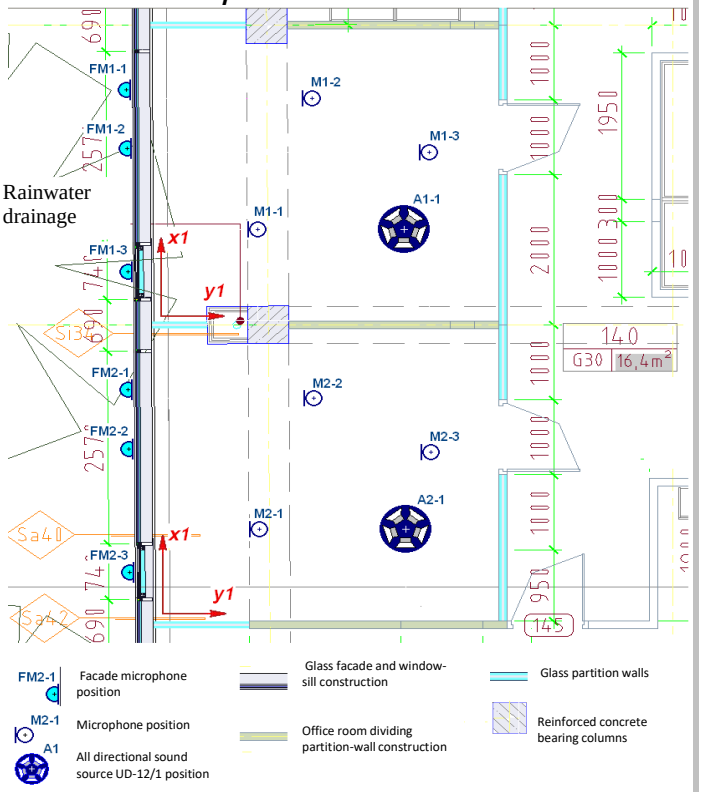
- ***R*'45°** – the actual (loudspeaker) sound attenuation index for facade in ⅓ octave bands
- ***R*' tr, s** – the actual transportation noise attenuation index for facade in ⅓ octave bands
- ***R*' rt, s** – the actual railroad noise attenuation index for facade in ⅓ octave bands
- ***R*' at, s** – the actual aircraft noise attenuation index for facade in ⅓ octave bands
- ***D*n ; *D*nT** – normalized and standardised level differences (for the 4 given noise sources)

Calculable parameters (in accordance with standard LVS EN ISO 717-1:2021) ***:***

***R*'45°,w**; ***R*'tr,s,w**; ***R*'rt,s,w**; ***R*'at,s,w** – the actual facade sound insulation indexes for noise sources

Construction legal act LBN 016-15 "Building acoustics" limits ***R*'tr,s,w** threshold values for outer enclosing structures – facades, windows, showcases etc. and provides recommendations for calculating this parameter. Whereas measured values of ***R*'tr,s,w** allow to evaluate building facade construction conformity with LBN 016-15 requirements for different building classes depending from level of environmental noise.

Measurement situation example



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FACADE SOUND INSULATION MEASUREMENTS ON SITE (in situ)

(Measurement result example (report with accreditation mark)

STANDARD LVS EN ISO 16283-3:2016: *Acoustics - Field measurement of sound insulation in buildings and of building elements - Part 3: Facade sound insulation (ISO 16283-3:2016).*

Klients:		**Mērījumu datums:**	

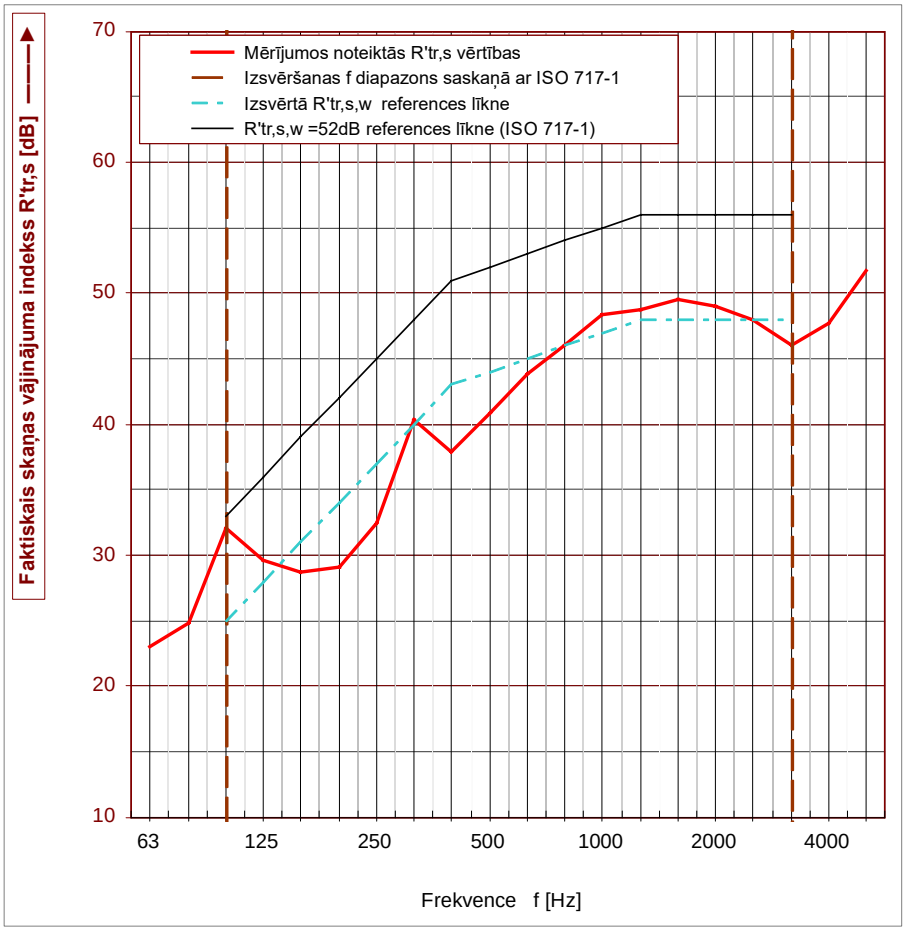
Mērāmā objekta identifikācija un apraksts:

Fasādes konstrukcijas laukums	**9,5**	**m²**
Skaņas avota telpas tilpums	**-**	**m³**
Uztvērēja telpas tilpums	**47,9**	**m³**

Paraugs Nr. 1, īslaicīgās uzturēšanās ēka, Rīga. **Skaņas izolācija starp telpām:**

Skaņas avota telpa:	teritorija
Uztvērēja telpa:	2.stāva Nr.17 istaba

Frekvence ***f***	***Ln'***
[Hz]	⅓ oktāvās [dB]
50	23,6
63	23,0
80	24,9
100	32,1
125	29,6
160	28,7
200	29,1
250	32,4
315	40,3
400	37,9
500	40,8
630	43,9
800	46,0
1000	48,3
1250	48,7
1600	49,5
2000	49,0
2500	47,9
3150	46,1
4000	47,8
5000	51,7
6300	-
8000	-
10000	-



Faktiskais skaņas izolācijas indekss, ***R'*****,w (*C*;*C*tr)**, kas izsvērts atbilstoši LVS ISO 717-1:2021 prasībām:

R'45°,W (*C*;*C*tr) = 44 (-1 ; -5) dB

C 50-3150 = **-2 dB** ***C*** 50-5000 = **-1 dB** ***C*** 100-5000 = **-1 dB**

Ctr 50-3150 = **-7 dB** ***C***tr 50-5000 = **-7 dB** ***C***tr 100-5000 = **-5 dB**

Novērtēts pamatojoties uz inženiermetodes mērījumu rezultātiem ekspluatācijas apstākļos (*in situ*)

SIA "R&D Akustika" Akustikas laboratorija T-282

Izsniegšanas datums:

Operatora paraksts :