

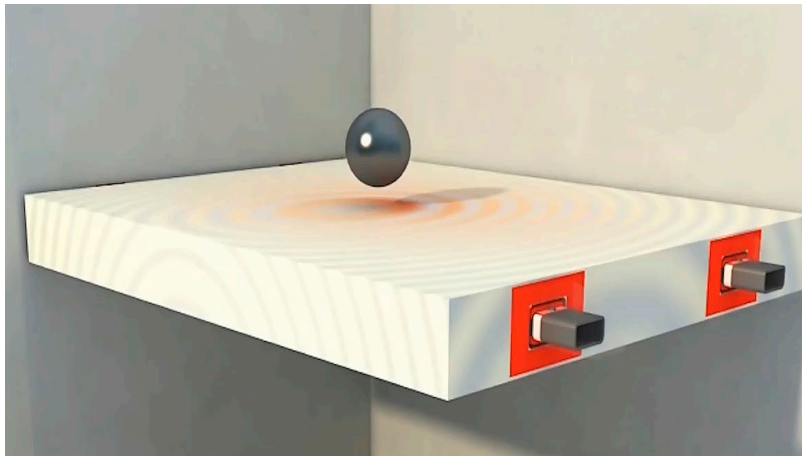
MEMO 34
IMPACT SOUND TRANSMISSION

Dato: 23.06.2022
Siste rev.: 28.06.2022
Dok. nr.: K3-10/13

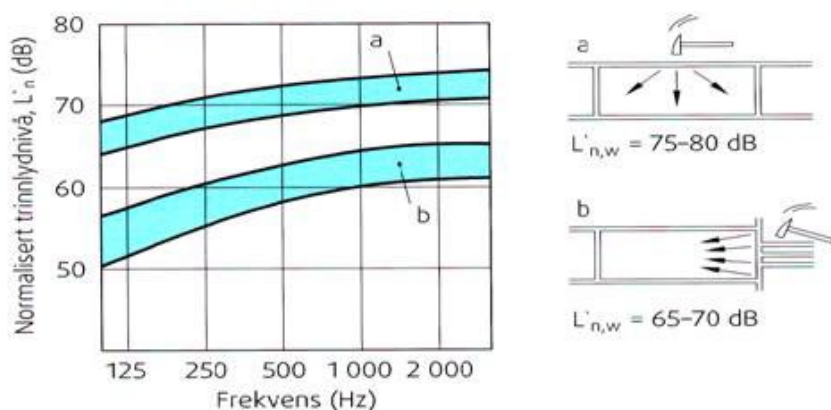
Sign.: ELS
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IMPACT SOUND TRANSMISSION

- ✓ Step sound is much more in focus, increasing interest
- ✓ Most constructions can't meet the new building standards
- ✓ Step sound transmission from stairs to adjacent rooms
- ✓ Reduces the quality and the value of the building
- ✓ Contractual liability for the contractor towards building standards



Stepsound from concrete stairs without sound reducing efforts



Limit values for apartments

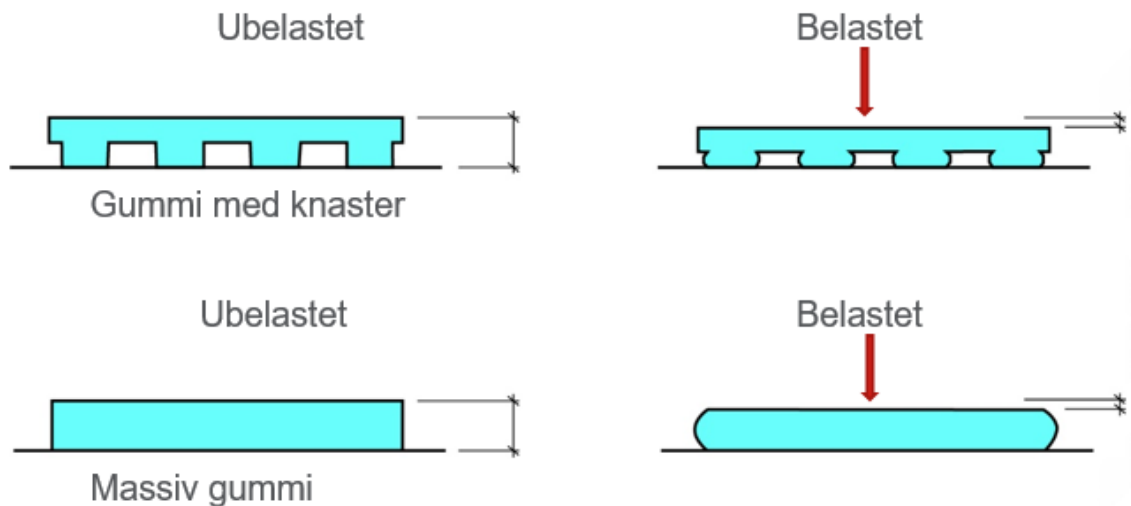
Room type	Class B dB	Class C dB
Between residential units, a unit from common areas / common hallway / stairwell	48	53
To a unit from toilet, storage, balcony, terrace etc.	53	58
To a residential unit from business, service business, public garage, roof terrace etc.	43	48

We have since 2007 been testing and developing products that reduce stepsound.

Our experience is that if you want to have good sound reduction, you have to use soft rubber eg 58 shore.

Then you must have an area of 250 mm² pr. kN breaking load.

The principle for effective sound reduction



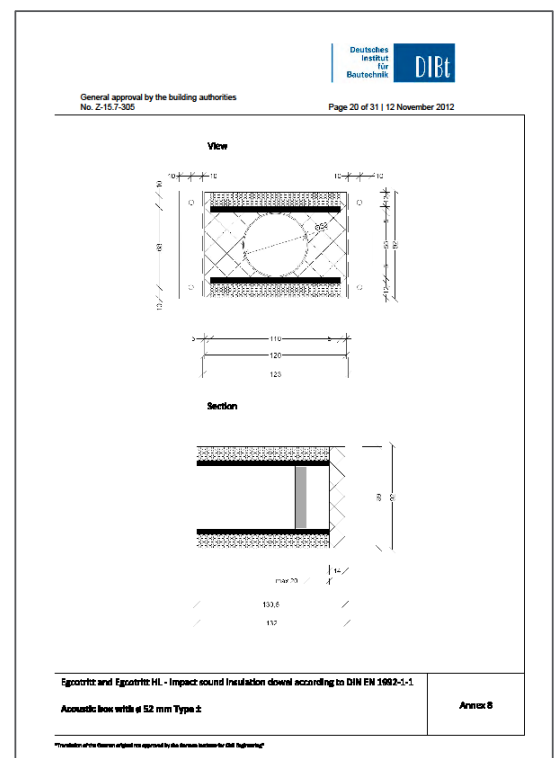
Conclusion:

To reduce impact sound you need square
200-250 mm²/ kN ultimate load.

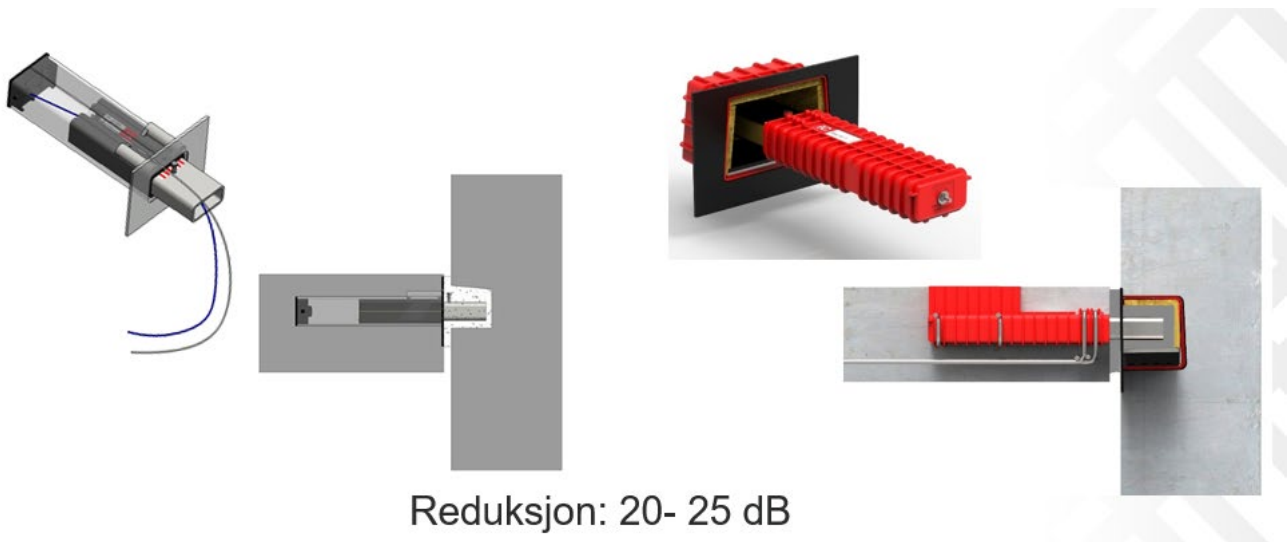
Reduction : 30 dB = 60 kN ultimate load

Area : $115 \times 110 = 12650 \text{ mm}^2 / 60 \text{ kN} = 210 \text{ mm}^2 / \text{kN}$
TSS 102 = 25 dB. 100 kN

Area : $25000 \text{ mm}^2 = 250 \text{ mm}^2 / \text{kN}$



Recomended solution for apartments TSS 102 orr RVK/TSS with IC Box SRU



Recomended solution for offices and public buildings. TSS with vertical rubber flange.



Important hints regarding step sound reduction

See also IC academy instalation of stairs

<https://www.invisibleconnections.no/category/ic-akademiet/>

1. No casting wider than vertical rubber flange
W= 250 x H=200
2. Elastic joint between landing and wall minimum
10 mm
3. Tiles must not be in contact with the wall,
minimum 10 mm joint
4. base tiles forbidden



Foto 13. Oversikt



Foto 15. Detalj skiferfliser på trapp og sokkellist



Foto 14. Detalj skiferfliser på trapp og sokkellist



Foto 16. Detalj skiferfliser på trapp og sokkellist
Et område manglet skifer og avslørte lim som rent ned i fugen.

REVISJON	
Dato:	Beskrivelse:
23.06.2022	Preliminary
28.06.2022	Change memo nb. from memo 34 to memo 47