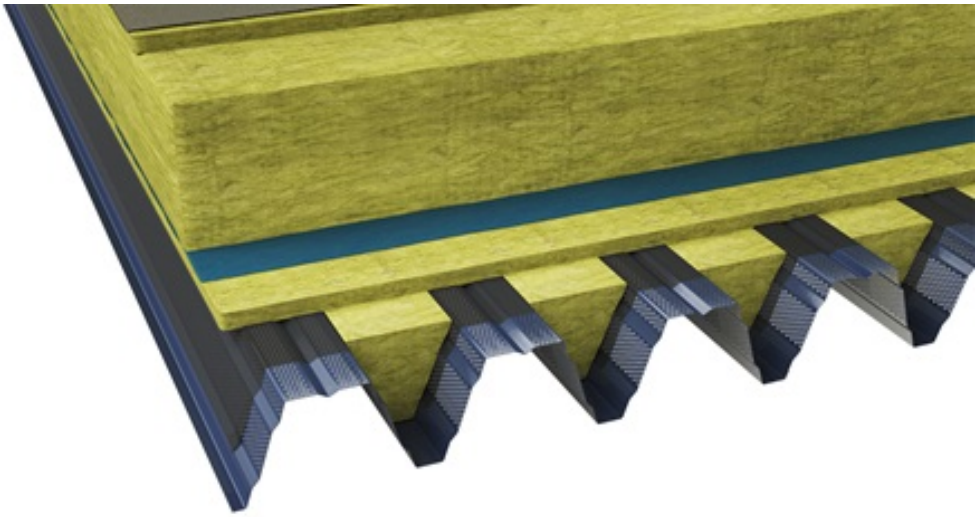
Ruukki T153 4/30 web and flange perforated + acoustic infill

Load bearing T153 profile with web and flange perforation is a top class solution to improve roof sound absorption properties to extremely absorbing level. Solution is integrated and efficient as normal mineral wool layers above the sheeting are utilized for sound absorption indoors. There is no need to assemble large amount of sound absorption materials afterwards to cover the ceiling structure for acoustic reasons.

Infill product in the profile groove improves sound absorption coefficient about 10 % to reach sound absorption class A level, α_w = 0.9. It improves also roof thermal insulation properties.

Ruukki® LowCarbon
Also available as Ruukki® LowCarbon, helping to reduce embodied carbon and made with high recycled content. See the Ruukki® LowCarbon pages and product-specific EPDs for details.

Availability and delivery time for different thickness/coating combinations varies.



SEND CONTACT REQUEST

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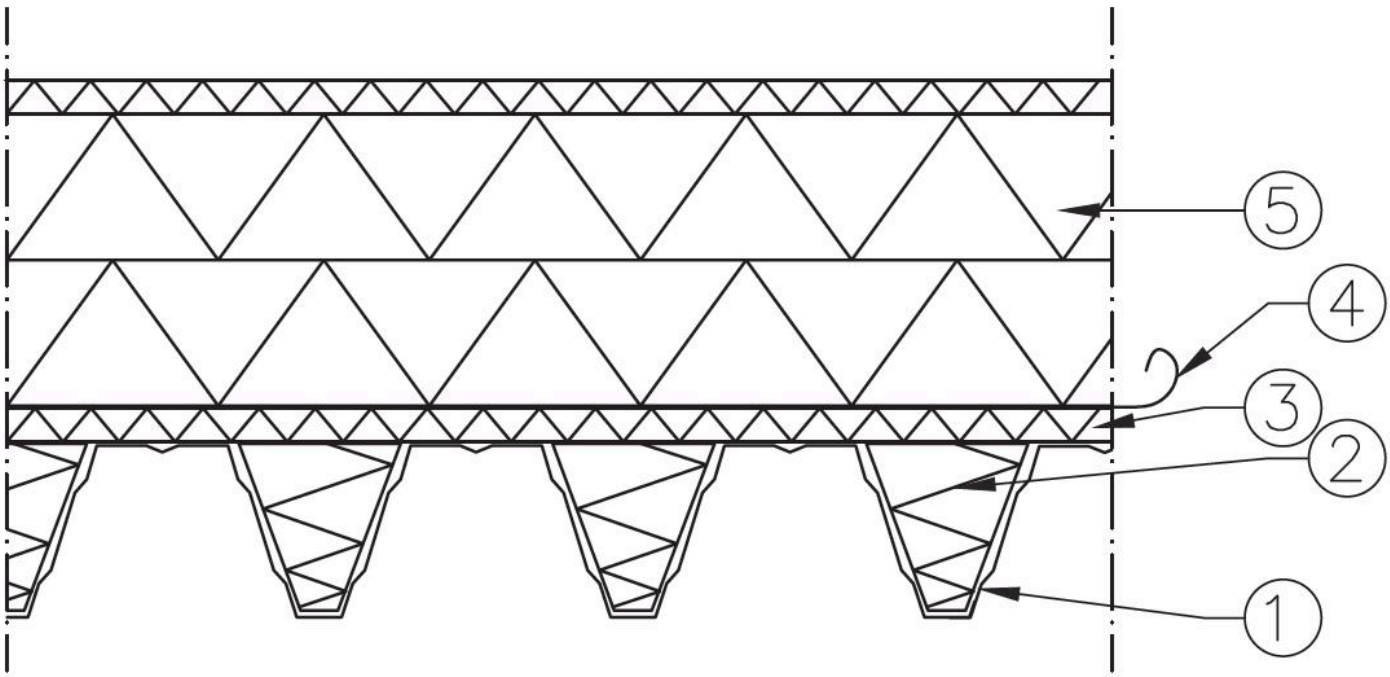
Structure



1. T153 (Perforation 30%), Ruukki delivery
2. Acoustic infill with dustproof, Ruukki delivery
3. Mineral wool (30 mm), needed for acoustic performance
4. Vapor barrier
5. Mineral wool (total of 130-400 mm)

Sound absorption values

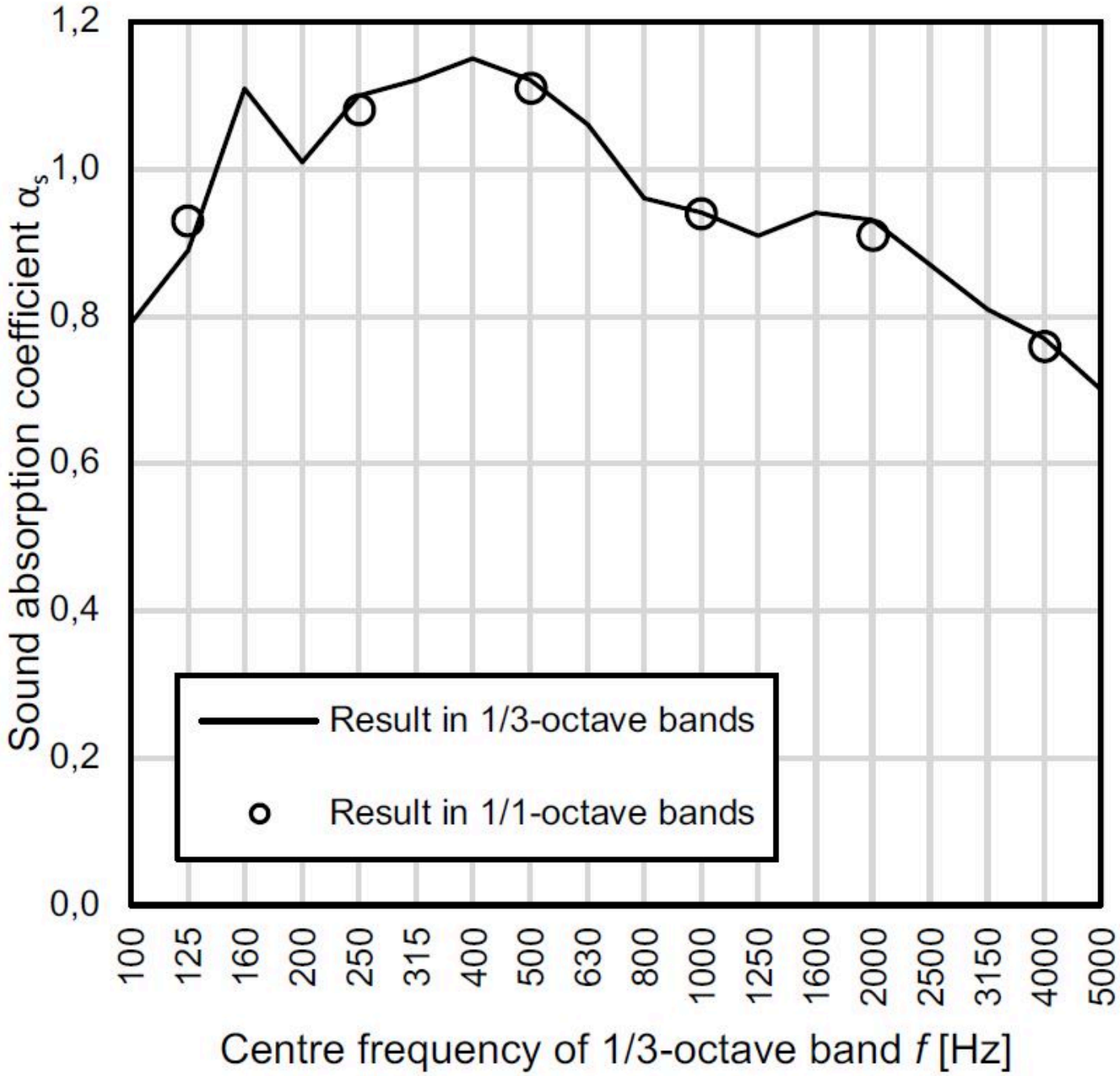
Absorption coefficient and class for construction

Class A, α_w 0,90

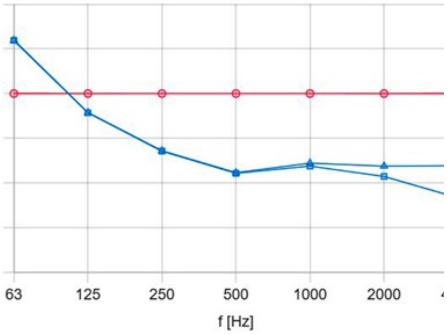
f(Hz)	α_s 1/3	α_s 1/1	α_p 1/1
100	0,79	0,93	0,95
125	0,89	0,93	0,95
160	1,11	0,93	0,95
200	1,01	1,08	1,00

250	1,10	1,08	1,00
315	1,12	1,08	1,00
400	1,15	1,11	1,00
500	1,12	1,11	1,00
630	1,06	1,11	1,00
800	0,96	0,94	0,95
1000	0,94	0,94	0,95
1250	0,91	0,94	0,95
1600	0,94	0,91	0,90
2000	0,93	0,91	0,90
2500	0,87	0,91	0,90
3150	0,81	0,76	0,75
4000	0,77	0,76	0,75
5000	0,70	0,76	0,75

Note: Sound absorption values apply with insulation thickness 130 - 400 mm


1,2
1,0
0,8
0,6
0,4
0,2
0,0
Sound absorption coefficient α_s
Result in 1/3-octave bands
Result in 1/1-octave bands
100
125
160
200
250
315
400
500
630
800
1000
1250
1600
2000
2500
3150
4000
5000
Centre frequency of 1/3-octave band *f* [Hz]

Design tools



Ruukki Acoustic Estimator

Zistite, aký materiál je pre vás najlepší. Vyskúšajte našu kalkulačku pre váš ďalší projekt. Pridaním rozmerov budovy a vyplnením nastavení materiálu v nástroji Ruukki Acoustic Estimator môžete zistiť, ktorá konfigurácia produktu poskytuje optimálne výsledky pre váš projekt.

Prejsť na kalkulačku

Stiahnite si BIM objekty do vášho počítača

ProdLib prináša produkty Ruukki ako modely BIM v 3D pre návrhové programy AutoCad, Autodesk Revit, Archicad a Tekla priamo na plochu vášho počítača. Knižnice produktov sústreďujú všetky potrebné návrhové modely a detailné výkresy na jednom mieste. Aktualizácie knižnice sú automaticky oznámené, takže ako používateľ si môžete byť istý, že k dispozícii sú vždy najnovšie informácie o produkte. ProdLib je možné použiť aj ako samostatnú desktopovú aplikáciu.

Prejsť do knižnice BIM

Software Poimu pre dimenzovanie nosných trapézových profilov

Software Poimu vám umožňuje optimalizovať výber produktov podľa Eurokódu. Jednoducho, zadefinovaním niektorých základných vstupných údajov viete zvoliť potrebný nosný profil z ponuky Ruukki. Tento rýchly optimalizačný nástroj zahŕňa 1-, 2- a viac- polové konštrukcie a poskytuje presné riešenie, aký profil a v akej dĺžke by sa mal použiť.

Prejsť k softvéru Poimu

Technical documents

Here you can find all technical documents related to Ruukki's sound environment solutions. Documents are organised by document type.

Product description

Ruukki sound environment solutions - Product description 10_2025
PDF, 1,6 MB

Design instruction

Installation instruction

Detail drawings

Accessories

Facade cladding accessories 11_2025 ENG
PDF, 2,8 MB

Profiled sheets and purlins accessories 01_2024
PDF, 4,0 MB

Certificates and approvals

Here you can find all certificates and approvals related to Ruukki's sound environment solutions. Documents are organized by document type.

Declaration of performance

Ruukki Cor-Ten facades - Certification
PDF, 31,8 KB

Declaration of Performance 28/PP/VIM - Low profiles
PDF, 41,3 KB

Declaration of Performance 8/PP/VIM - Low profiles
PDF, 43,6 KB

Environmental product declaration

EPD Ruukki colour-coated products
PDF, 1,1 MB

EPD Ruukki LowCarbon colour-coated products
PDF, 0,8 MB