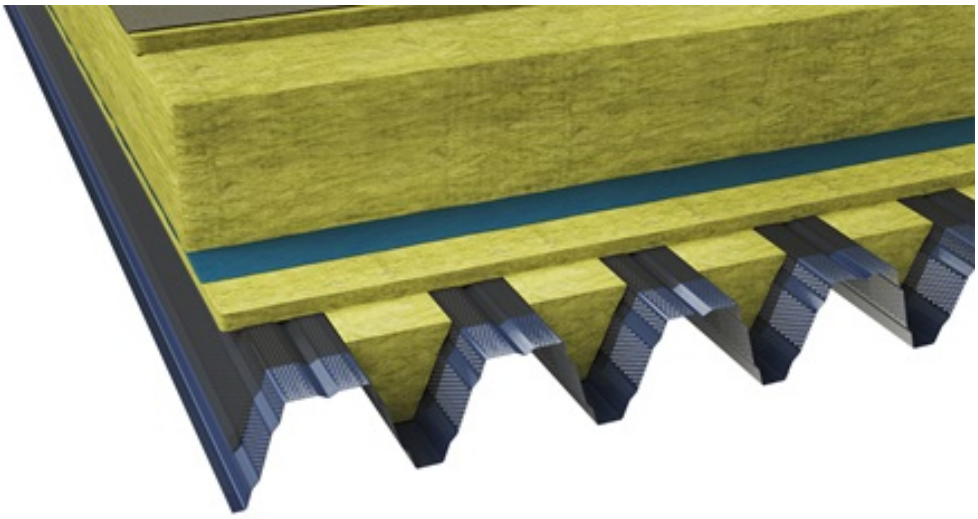
Ruukki T153Acub 4/30 Web and flange perforated + infill - Mineral wool

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.

This solution is optionally available with following sustainable features:

- Steel facings made of recycled steel (SSAB Zero) for significantly lower CO_2 emissions and high circularity (Ruukki LowCarbon)



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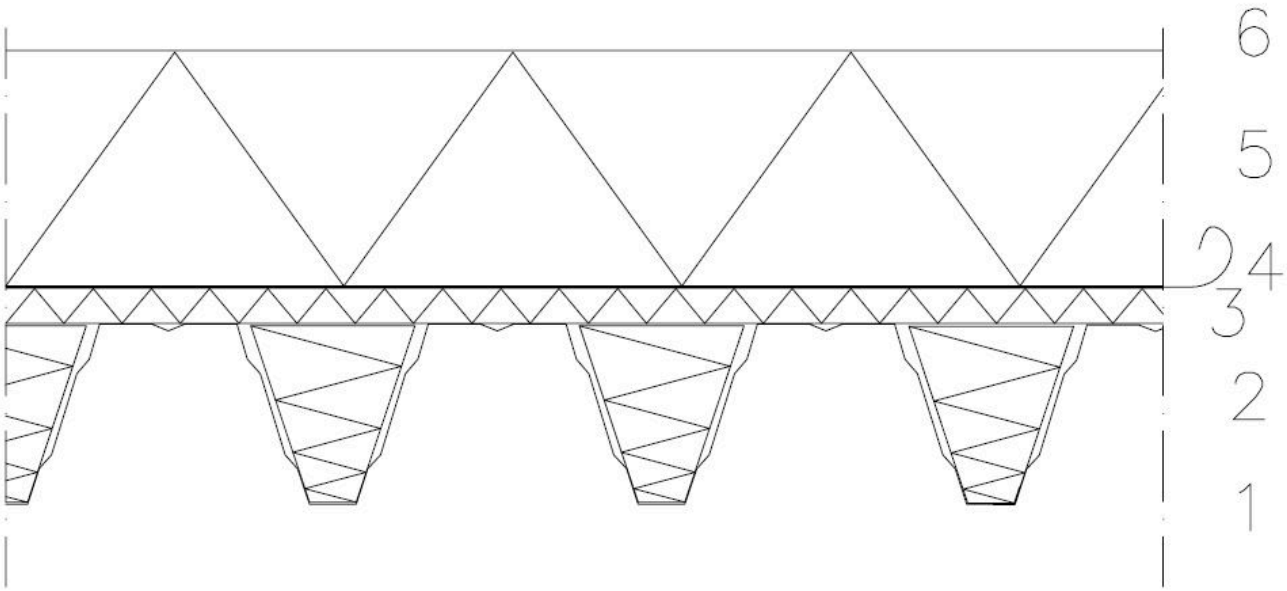
Structure



1. T153AcuB (web and flange perforated 4 mm/30%)
2. Dust proofed acoustic infill, mineral wool, filling the groove, density 120...150 kg/m^3
3. Absorption layer: Mineral wool 30 mm, density > 120 kg/m^3
4. Vapor barrier, e.g. PE, t= 0,2 mm
5. Mineral wool 130...400 mm, density > 70 kg/m^3
6. Upper layers and roof membrane according to project

Sound absorption values

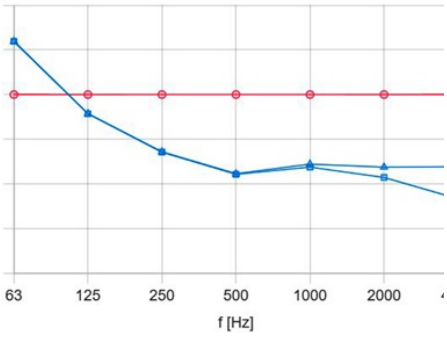
Absorption coefficient and class for construction

Class A, α_w 0,90

f(Hz)	α_p 1/1
125	0,95

250	1,00
500	1,00
1000	0,95
2000	0,90
4000	0,75

Design tools



Ruukki Acoustic Estimator

Try our estimator for your next project. With our estimation tool you can calculate which product configuration provides you with optimal results.

Go to estimation tool here

Poimu software for dimensioning load-bearing sheets

Dimensioning software, Poimu, allows you to optimise product choice according to the Eurocode. Simply by defining some basic input data you can select a load-bearing sheet for their needs from Ruukki's selection. This quick optimisation tool covers 1-, 2-span and continuous structures and gives the exact solution as to what sheet should be used, as well as its length.

Go to Poimu software

Download BIM objects to your desktop

ProdLib brings Ruukki products as BIM models directly to your desktop in 3D form for design programs AutoCAD, Autodesk Revit, Archicad and Tekla Structures. Product libraries compile all necessary design models and detailed drawings in one place. Library updates are automatically notified, so as a user you can be sure that your product information is constantly up to date. ProdLib can also be used as a standalone desktop application.

Go to BIM library

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 09_2022
PDF, 1.5 MB

Design instruction

Ruukki sound environment solution - Design instructions 10_2022
PDF, 5.5 MB

Sound insulation values for sandwich panels and various structures 02_2023
PDF, 5.9 MB

Installation instruction

Load bearing profiled sheet - Installation instructions 10_2022
PDF, 1.1 MB

Detail drawings

Load bearing sheets absorption structures
PDF, 281.8 KB

Load bearing sheet absorption structures
DWG, 405.7 KB

Acoustic cladding structure drawing
DWG, 313.5 KB

Acoustic cladding structure drawing
PDF, 389.1 KB

Accessories

Facade cladding accessories 02_2025
PDF, 4.1 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

Declaration of Performance 12/LBS/VIM - Load bearing products
PDF, 494.1 KB

Ruukki Cor-Ten facades - Certification
PDF, 31.8 KB

Declaration of Performance 10/PP/ZYR - Low profiles
PDF, 56.5 KB

Declaration of Performance 28/PP/VIM - Low profiles
PDF, 42.7 KB

Declaration of Performance 8/PP/VIM - Low profiles
PDF, 43.2 KB

Declaration of Performance 25/PP/PAR - Cladding products
PDF, 43.7 KB

Environmental product declaration

EPD Facade claddings 03_2023
PDF, 3.5 MB

RTS-EPD_49-20_RC_Colour_coated_EN
PDF, 1.0 MB

RTS_EPD_48-20_RC_Hot_dip_galvanised_EN
PDF, 0.5 MB