

External louvres RIS
RIS external weather louvre of robust design
for air intake and discharge



RIS



RISJ



RISD

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FläktWoods

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Construction, dimensions and material

Construction

The RIS external louvre consists of louvre, installation frame and protective mesh. Large louvres are made as modul construction. Louvres can be continuous with active and non-active sections.

RIS-aaa-bbb:

General louvre for air intake or discharge. Minimum size for single louvre (width B x height H) is 200 x 200 mm and maximum is 1600 x 1200 mm. Larger louvres are made of moduls. Width and height can be supplied in 50 mm increments. The actual size for fitting is 7 mm less than the nominal size.

RIS-aaa-bbb-J:

Outer grille for exhaust air. Same as RIS, but the louvres are formed especially for exhaust air and directed upwards. Exhaust air louvre is designed to be used in equipment for continuous operation. For equipment for intermittent operation, the recommended installation includes either a rain cover above the grille or a drain in the connecting duct, leading out the possibly accumulated water during standstill periods.

RISD-aaa:

Circular RIS-type louvre. Rigid construction. Sizes from Ø200 up to Ø1400 as a single louvre (10 mm increments). Larger louvres are made of moduls.

RISV-aaa / RISV-aaa-J:

Louvre assembled with circular Veloduct jointing collars supplied with rubber sealing gaskets.

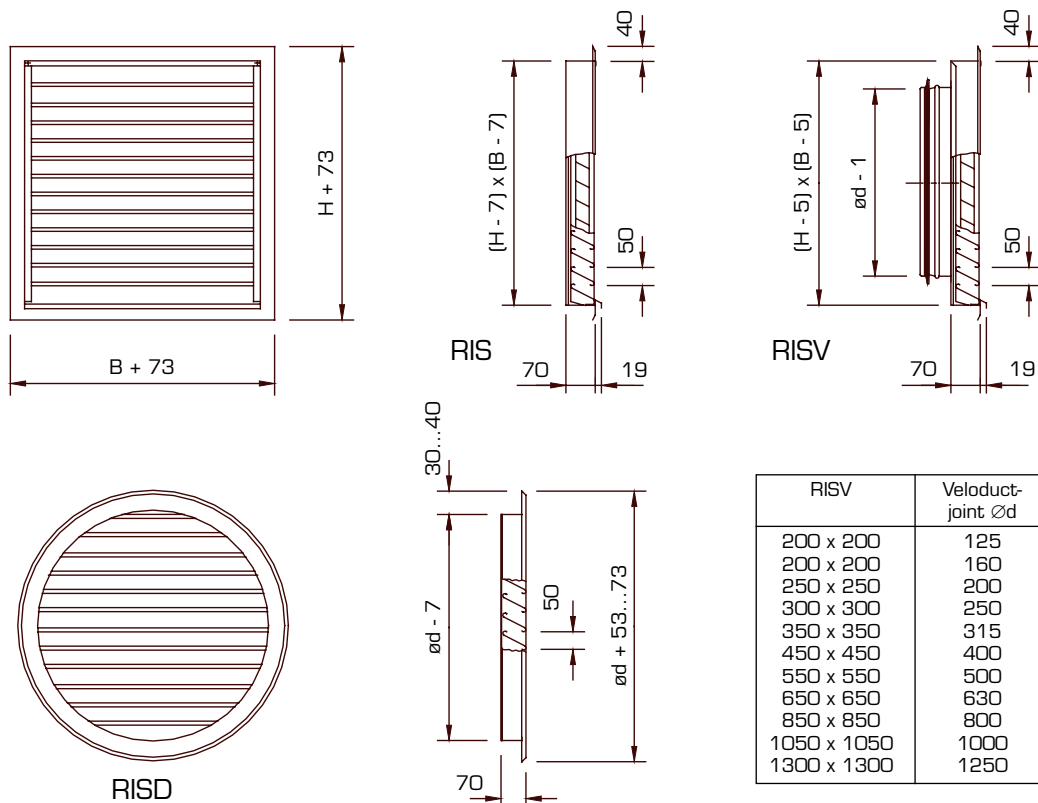
Material and surface finish

Hot dip galvanized steel	SFe (standard)
Aluminium profile	An
(no surface treatment, anodized or stove enamelled)	
Acid proof steel	Hst

Model RISD is available in hot dip galvanized steel only.

Standard colour is grey RAL 7000 (stove enamelled), other colours as special order.

Dimensions and weight

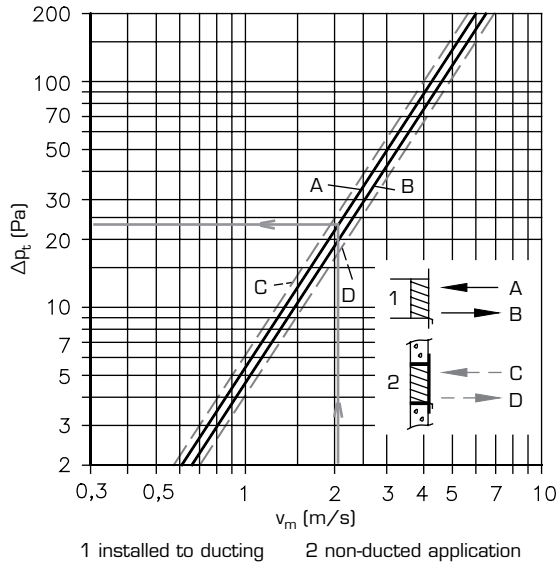


RISV	Veloduct-joint Ød
200 x 200	125
200 x 200	160
250 x 250	200
300 x 300	250
350 x 350	315
450 x 450	400
550 x 550	500
650 x 650	630
850 x 850	800
1050 x 1050	1000
1300 x 1300	1250

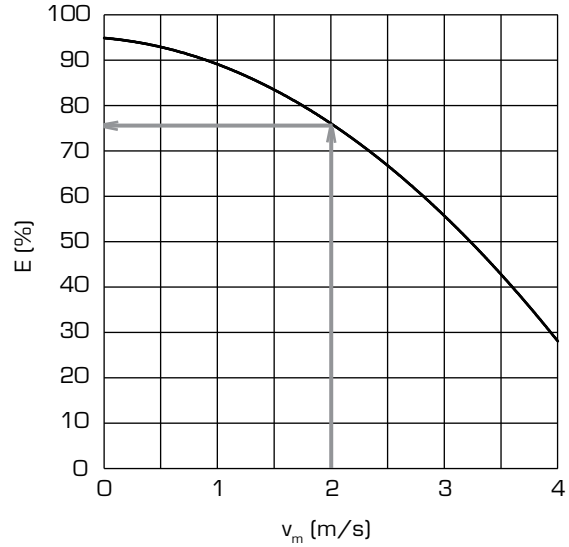
Weight: ~ 20 kg/m²

Pressure drop, selection diagram

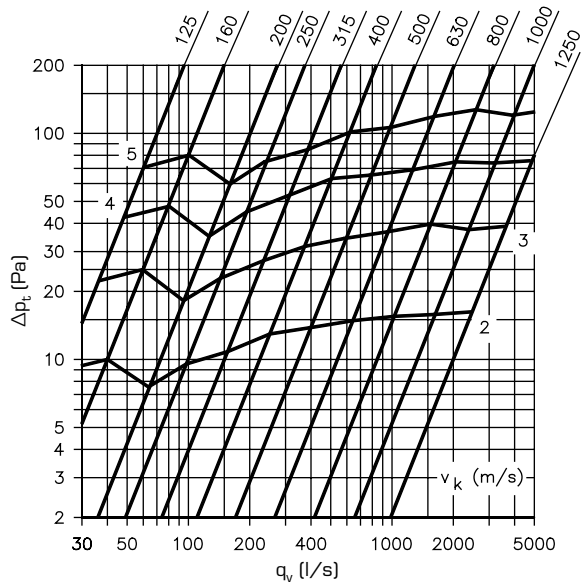
Pressure drop RIS, RISD



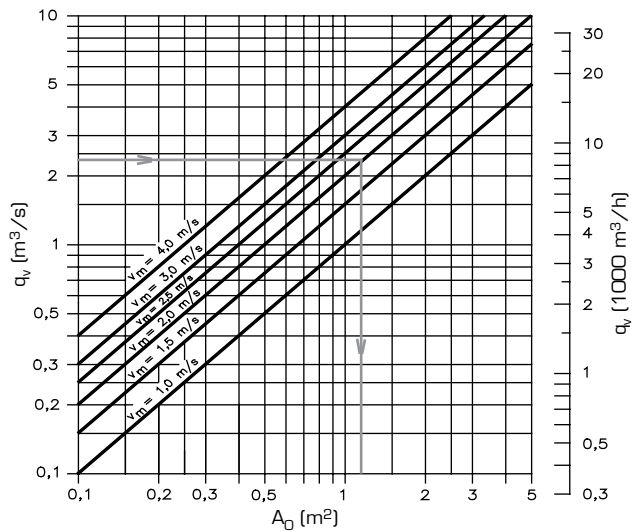
The efficiency of rainwater rejection RIS, RISD



Pressure drop RISV



Selection diagram



Pressure drop of RISJ is 50% of the RIS pressure drop.

Rainwater rejection performance and air flow performance characteristics are determined based on EN 13030:2001.

Selection example

Air volume $q_v = 2,3 \text{ m}^3/\text{s}$, specified face velocity $v_m = 2 \text{ m/s}$.

From above diagrams can be read pressure drop $\Delta p_t = 23 \text{ Pa}$ and $E = 76\%$.

From selection diagram can be read the required face area $A_0 = 1,2 \text{ m}^2$.

Selection examples are RIS-1100x1100 or RIS-1200x1000 etc.

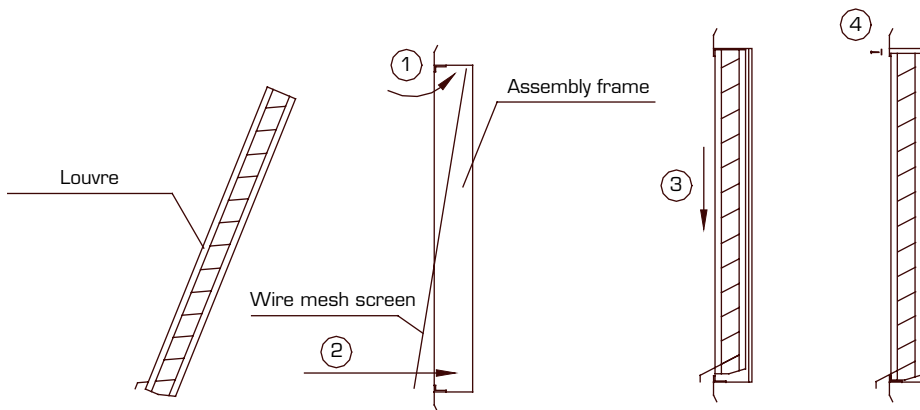
Fitting and assembly, modular construction

Fitting and assembly

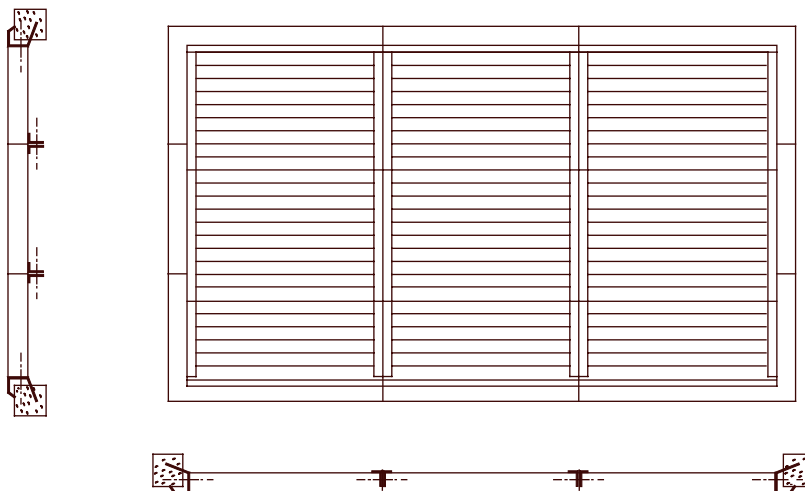
The louvre frame is attached with screws on steel and wooden structure. On brick and concrete structures the louvre is fitted by means of fix arms in the frame. The assembly of the louvre is made according to the picture below.

Definitions

v_m	average face velocity	(m/s)
Δp_t	total pressure drop	(Pa)
q_v	air volume	(l/s)
v_k	velocity in duct	(m/s)
E	efficiency of rainwater rejection	(%)



Modular construction



The modular construction is used when the dimension of the louvre exceeds the maximum dimension of a separate louvre.

Fitting margin is the same as with a single louvre.

Product code

Product code

Standard external louvre, hot dip galvanized steel
RIS-aaa-bbb

External louvre, aluminium profile
RIS-aaa-bbb-A

External louvre, acid proof steel
RIS-aaa-bbb-H

Width, mm (aaa)
Height, mm (bbb)

External louvre for exhaust air
RIS-aaa-bbb-J

External louvre for exhaust air, aluminium profile
RIS-aaa-bbb-J-A

External louvre for exhaust air, acid proof steel
RIS-aaa-bbb-J-H

Width, mm (aaa)
Height, mm (bbb)

Circular external louvre
RISD-aaa

Size, mm
200 - 1250

External louvre with Veloduct joint
RISV-aaa

External louvre with Veloduct joint for exhaust air
RISV-aaa-J

Size, mm
125 - 1250

We Bring Air to Life

Fläkt Woods is a global leader in air management. We specialise in the design and manufacture of a wide range of air climate and air movement solutions. And our collective experience is unrivalled.

Our constant aim is to provide systems that precisely deliver required functions and performance, as well as maximise energy efficiency.

Solutions for all your air climate and air movement needs

Fläkt Woods is providing solutions for ventilation and air climate for buildings as well as fan solutions for industry and infrastructure.

● Air Handling Units (AHUs)

Modular, compact and small AHU units. Designed to ensure optimisation of indoor air quality, operational performance and service life.

● Air Terminal Devices and Ducts

Supply and exhaust diffusers and valves for installation on walls, ceiling or floor are all included in our large range and fit all types of applications.

● Chilled Beams

Active induction beams for ventilation, cooling and heating, and passive convection beams for cooling. For suspended or flush-mounted ceiling installation - and multi-service configuration. With unique Comfort Control and Flow Pattern Control features.

● Residential ventilation

A complete range of products for residential ventilation. Consists of ventilation units, exhaust air fans and cooker hoods designed to optimise indoor comfort and save energy.

● Fans

Advanced axial, centrifugal and boxed fans for general and specialist applications. Comprehensive range including high temperature and ATEX compliant options. Engineered for energy efficiency and minimised life cycle cost.

● Chillers

Air-cooled and water-cooled chillers with cooling capacity up to 1800 kW. Designed to minimise annual energy consumption in all types of buildings.

● Controls and drives

Variable speed drives and control systems, all tested to ensure total compatibility with our products. Specialist team can advise on energy saving and overall system integration.

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The logo for Fläkt Woods, featuring the company name in a bold, green, sans-serif font. A stylized green swoosh or arc is positioned above the 't' in 'Woods' and below the 'ä' in 'Fläkt'.