

Jeven

Top ventilation for top chefs

Supply air hood JSI





Table of Contents

Product description & Product code	3
Functioning principle, Parts	4
Dimensions	5
Positioning, Design Service	6
Exhaust air	7
Pressure loss & sound data	8
Supply air	9
Supply air distribution, Lights	10

We want to help you in design of ventilation by offering Jeven designer service to your disposal.

Design Service helps in design and makes unique proposal solution with Jeven products.

Contact us: jeven@jeven.fi
010 231 2030

Supply Air Hood JSI

PRODUCT DESCRIPTION

The Jeven JSI hood has been designed for kitchens where a comfortable, productive and healthy indoor climate is required.

JSI offers draught-free ventilation with first-class working conditions and thermal comfort.

The JSI hood is equipped with exhaust, supply and direction air, with damper plates and measurement taps. Supply air is introduced into the kitchen by supply air columns.

Supply air columns ensure controlled and flexible distribution of the supply air.

Modularity makes it easy to vary both the number and positioning of the supply air columns.

The actual supply air pattern can be manually adjusted when working near the canopy.

In island models the supply air columns can be located on all sides of the hood.

The columns and the filters are easy to wash in a dishwasher.

LIGHT AND FILTERS

All Jeven hoods come equipped with lights. Standard JSI hoods are equipped with cyclonic JCE grease filters.

MATERIAL

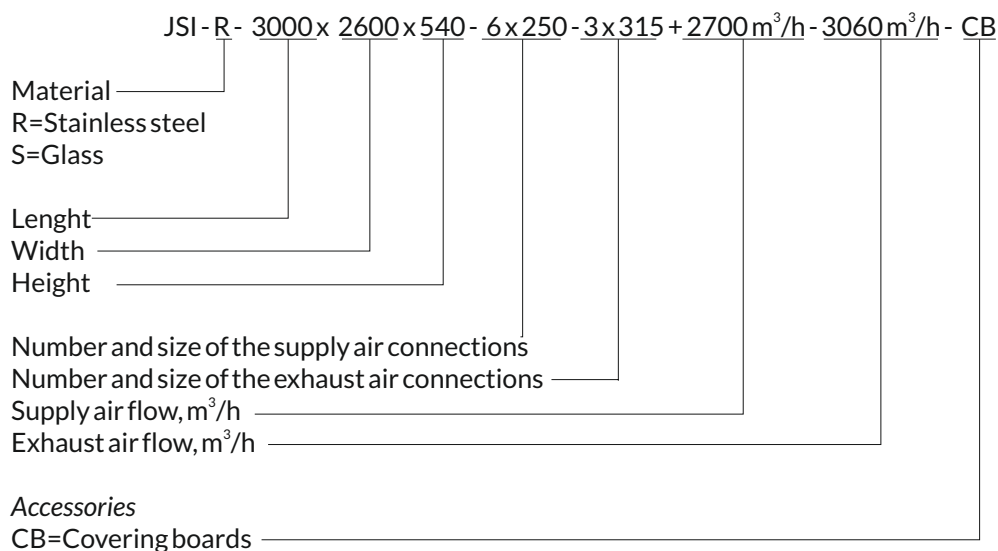
The hood's base material is stainless steel AISI 304. The side panels can be made of stainless steel (JSI-R) or laminated glass (JSI-S).

ACCESSORIES

Covering boards to enclose the area between the top of the hood and the ceiling.



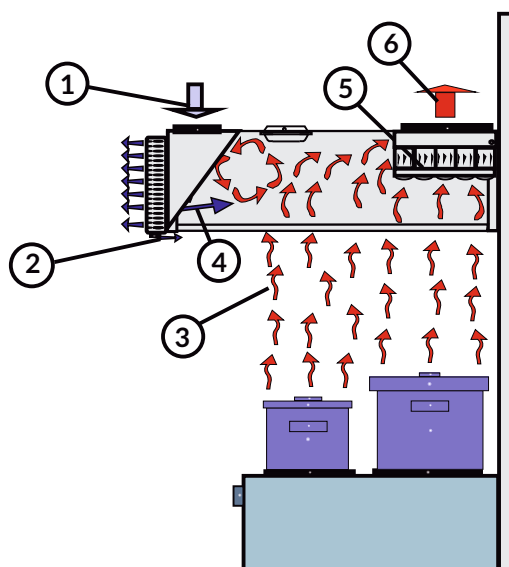
PRODUCT CODE



Supply Air Hood JSI

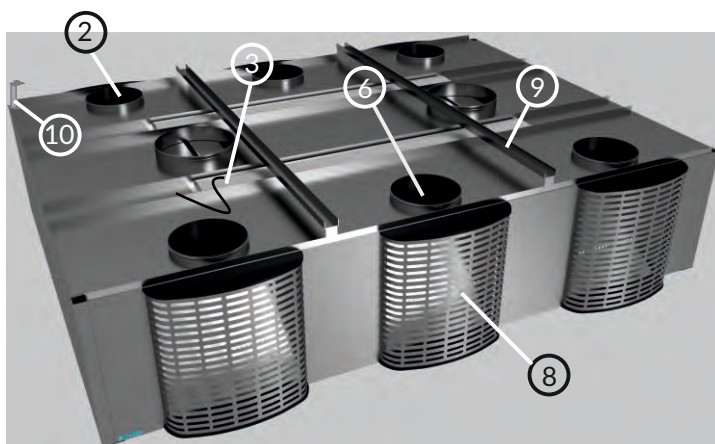
FUNCTIONING PRINCIPLE

1. Supply air is introduced through the supply air columns.
2. The air pattern can be adjusted at the column.
3. Heat and impurities rise into the hood.
4. Direction air prevents leakage and directs heat and impurities towards grease filters.
5. Grease particles are removed in the filter.
6. Clean air is exhausted.



PARTS

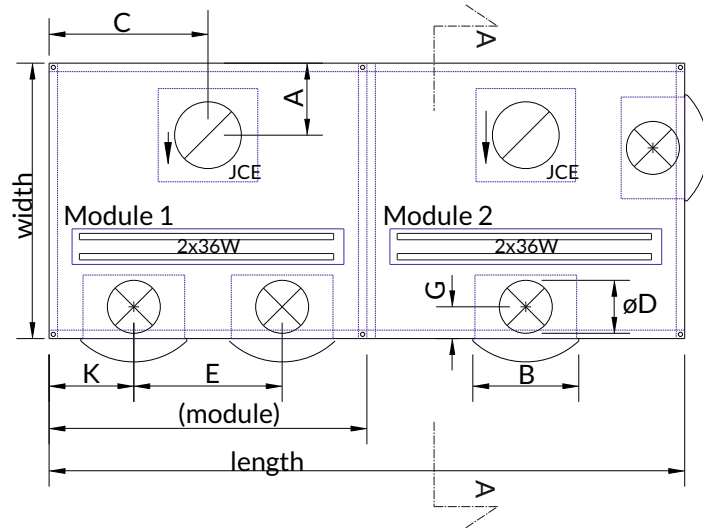
1. Outer casing
2. Supply air connection and damper unit
3. Light fixture with cable
4. Grease filters and measurement tap for the exhaust air
5. Direction air unit with measurement tap for the supply air
6. Exhaust air connection and damper plate
7. Personal supply air nozzle
8. Supply air unit
9. Ceiling console
10. Hanging bracket



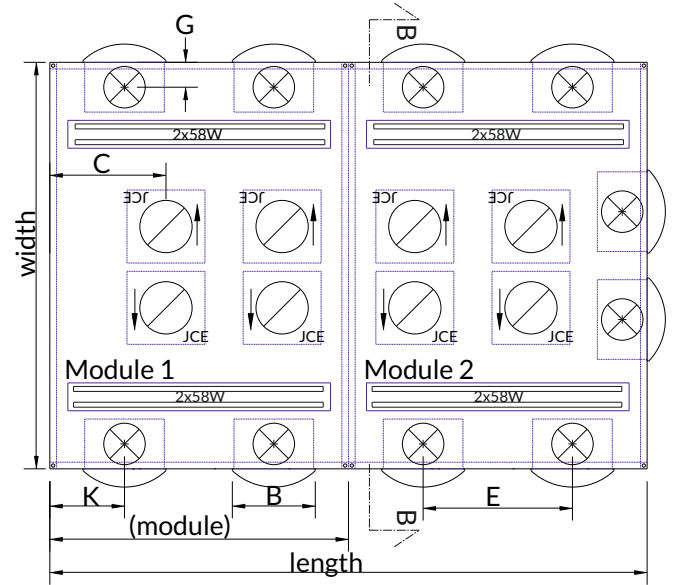
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DIMENSIONS

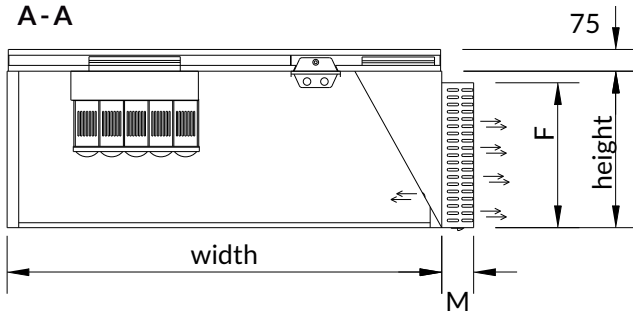
Wall hood



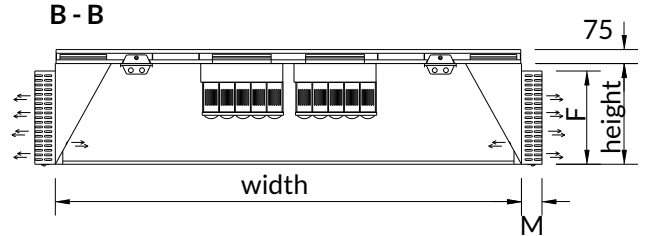
Island type hood



A - A



B - B



Hoods length, width and C, E-dimensions can be chosen freely.

Max. module size is 3000mm x 1800mm.

Filters require 440 mm of free space to open.

B mm	height mm	F mm	øD mm	G mm	Emin mm	Kmin mm	M mm
200	330	290	160	100	400	340	65
	540	500	160	100	400	340	65
500	330	290	200	12	550	350	110
	540	500	250	15	550	350	110

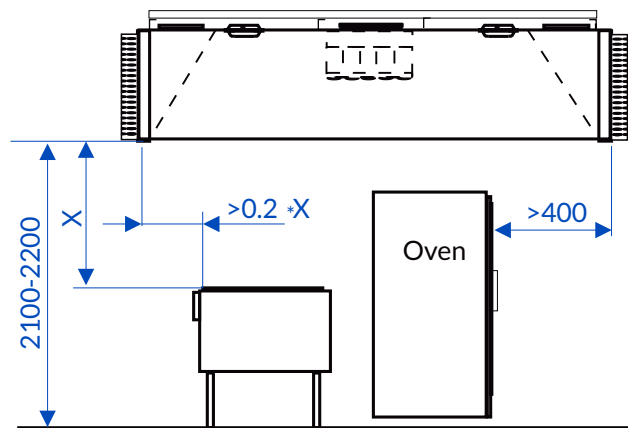
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POSITIONING

The size of the canopy is determined by the size of the kitchen equipment. The overhang depends on the type of equipment and the distance between the hood and the equipment. For this type of equipment, the overhang should be at least 300 mm.

The typical distance between the hood side and the floor is 2100-2200 mm.

If the equipment has any doors that open upwards, make sure there is enough distance to the canopy.



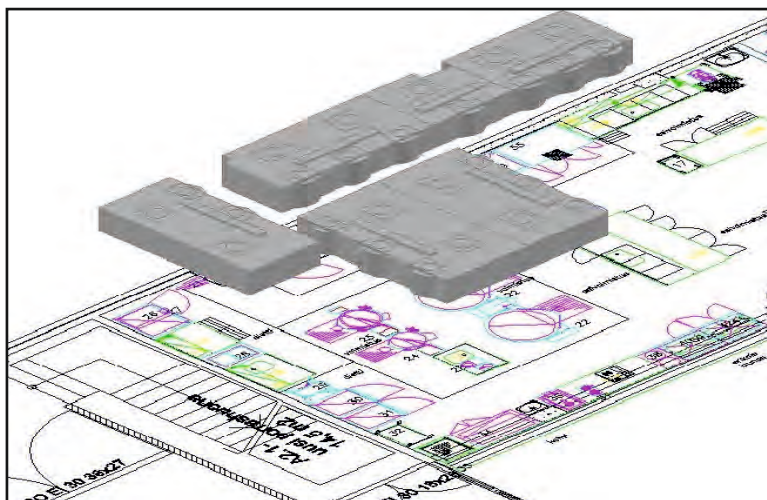
DESIGN SERVICE

Jeven Design Service helps you choose the best solution for your professional kitchen project.

Simply email us a drawing of the kitchen lay-out and a list of the cooking equipment to jeven@jeven.fi

We will do all the calculations and prepare all the necessary drawings of the canopies.

This service is always free of charge to you.



Supply Air Hood JSI

EXHAUST AIR

The recommended exhaust airflow rate is max. 340 l/s per 315 mm spigot, with a duct velocity of 4.4 m/s.

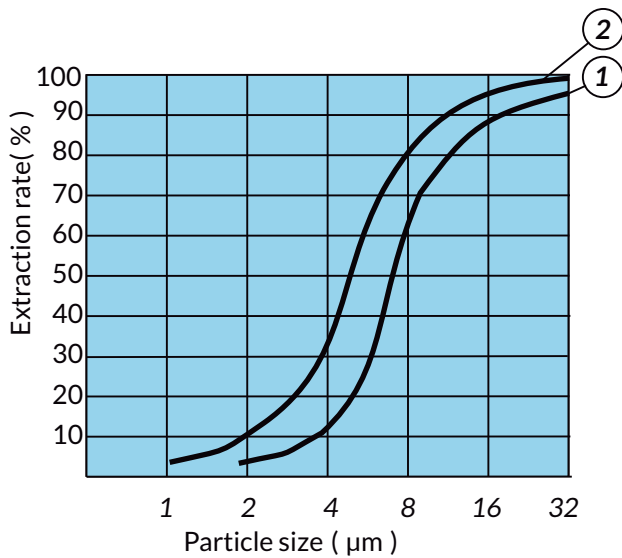
By default, the canopies come with a suitable number of filter units so that the pressure level will be between 40 and 60 Pa.

The nominal airflow of the filter units is 60 l/s per filter module.

Recommended exhaust flow / spigot

Spigot size \varnothing	Exhaust flow	
	l/s	m ³ /h
200	40 - 140	145 - 500
315	140 - 340	500 - 1225
400	340 - 530	1225 - 1910

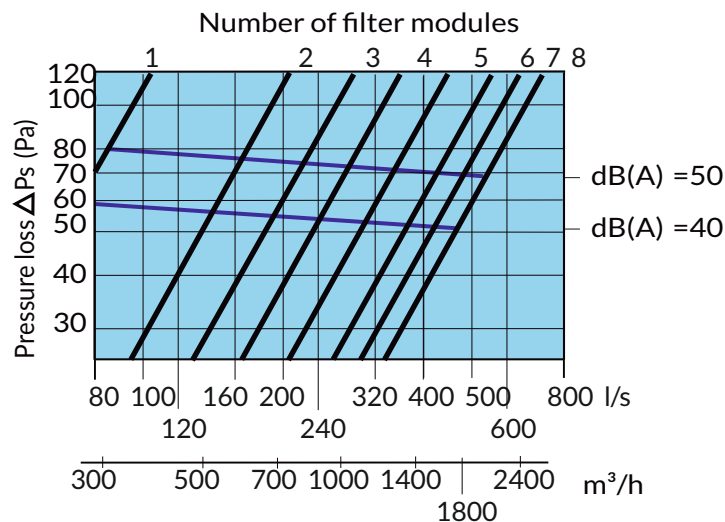
GREASE FILTER EXTRACTION RATE



- ① Pressure loss > 50 Pa
- ② Pressure loss > 200 Pa

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PRESSURE LOSS AND SOUND DATA



Sound power level L_w in each octave band is computed by adding the corresponding factor, K_{ok} to the sound power level L_{pA} . $L_w = L_{pA} + K_{ok}$.

Factor, K_{ok}

Hz	125	250	500	1000	2000	4000
K_{ok}	6	5	4	-2	-9	-16
tol.	±3	±3	±2	±2	±3	±4

SOUND ATTENUATION

Exhaust

JCE-2, spigot = \varnothing 200 mm.

Sound attenuation, (dB)

Hz	125	250	500	1000	2000	4000
"Damper closed"	12	7	7	10	10	10
"Damper open"	11	6	6	6	6	5

Exhaust

JCE-4, spigot = \varnothing 315 mm.

Sound attenuation, (dB)

Hz	125	250	500	1000	2000	4000
"Damper closed"	3	5	4	11	10	10
"Damper open"	2	4	3	6	4	7

The average sound attenuation includes the end reflection of the connection spigot.

It is recommended to use "damper open" values when calculating sound attenuation

Supply Air Hood JSI

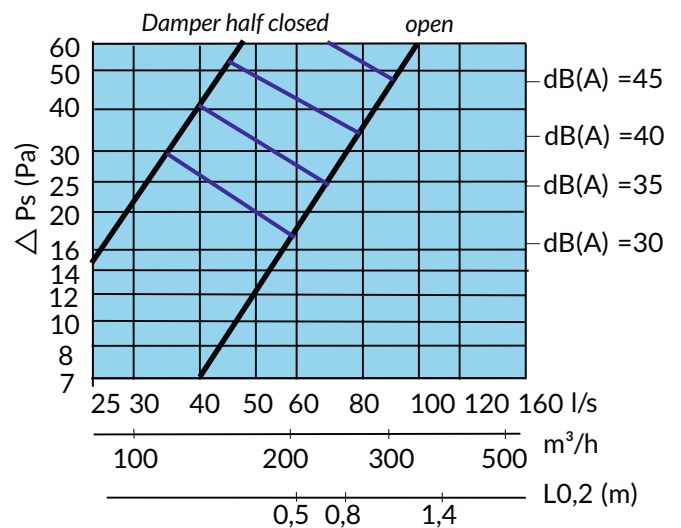
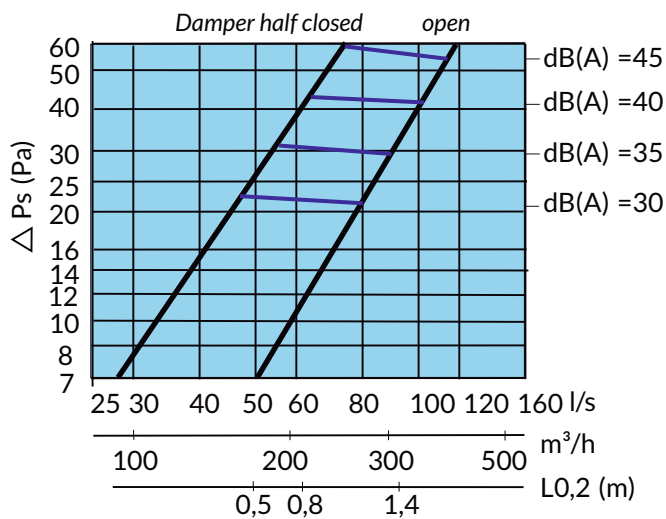
SUPPLY AIR

The canopies are supplied from the factory with suitable air flow rates for a pressure level of 25-35 Pa.

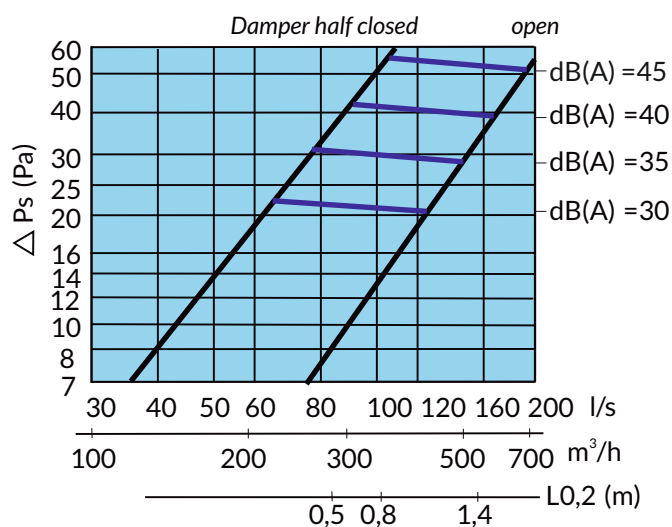
Hood height	Supply air unit width, B	
mm	200 mm	500 mm
330	-	50-90 l/s
540	40-70 l/s	100-150 l/s

PRESSURE LOSS, SOUND DATA & THROW LENGHT / SUPPLY AIR UNIT

Spigot \varnothing 200 mm. Unit width 500 mm. Hood height 330 mm. Spigot \varnothing 160 mm. Unit width 200 mm. Hood height 540 mm.



Spigot \varnothing 250 mm. Unit width 500 mm. Hood height 540 mm.



Spigot \varnothing 200

Hz	125	250	500	1000	2000	4000
Kok	-2	7	4	-5	-19	-26
tol.	± 6	± 4	± 2	± 2	± 3	± 5

Spigot \varnothing 160

Hz	125	250	500	1000	2000	4000
Kok	-2	1	2	1	-7	-16
tol.	± 3	± 3	± 2	± 2	± 3	± 4

Spigot \varnothing 250

Hz	125	250	500	1000	2000	4000
Kok	6	8	4	-5	-10	-18
tol.	± 3	± 3	± 2	± 2	± 3	± 4

The sound power level (L_w) in each octave band is computed by adding the corresponding factor Kok to the sound pressure level (L_pA), as in $L_w = L_pA + Kok$

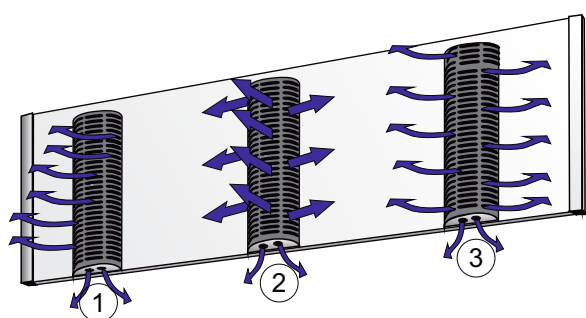
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DISTRIBUTION OF SUPPLY AIR

Jeven supply air columns deliver a controlled and flexible distribution of the supply air.

It is possible to wash the supply air columns in a dishwasher and the inside of the supply air chambers is easy to clean.

These columns allow individual adjustment of air patterns and airflows, which means better indoor climate for the kitchen staff

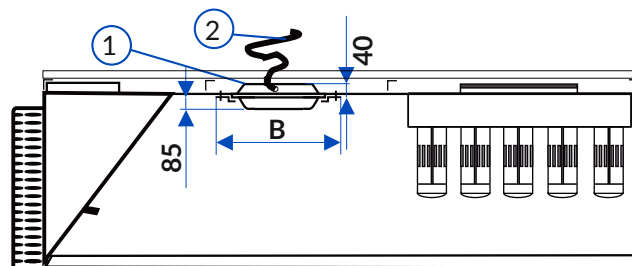


- ① Unidirectional throw pattern
- ② Displacement throw pattern
- ③ Bidirectional throw pattern

Supply air unit,
Damper open

Sound attenuation, dB		Hz					
Hood height	Spigot	125	250	500	1000	2000	4000
330 mm	ø 200	17	10	10	11	18	24
	ø 160	24	8	5	12	17	24
540 mm	ø 250	16	9	7	11	16	23

LIGHTS



- ① Light fixture as standard, IP 54-67

T8:

B=111mm, (1x18W, 1x36W, 1x58W)
B=168mm, (2x18W, 2x36W, 2x58W)

Colour temperature 840(Cool White)

- ② About 2m cable, type EKK 3x1,5

By default, every hood module comes with a light fixture. The light fixture has a cable which should be connected to a junction box with a cable lock. The junction box is not included.