



**Erstellen einer Projektberechnung für
den Innenbereich mit der Acoustic
Design Analysis**



Welcome Test user

Klicken Sie auf Analyse, um ein neues Projekt zu erstellen



Products



Select and configure noise control product without conducting a duct analysis.

Analysis



Analyze a duct system for noise levels in occupied spaces.

Projects



Create or open a project in your account for duct analysis or product selection.

Recent Projects

Project Name	Type	Revision	Created	Last Edited ▾
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Need help?



Contact your local Swegon representative for assistance.
<https://www.swegon.com/contact/>

Select project...

Projects

Search lastEdited Anytime showRevisions No ownedBy Me

Klicken Sie auf "Neues Projekt"



New Project

Select project...

Projects

Search lastEdited Anytime

New Project

Project Name

AHU project 123

AHU Silencer

Cancel

Create

Geben Sie ihm einen Namen und klicken Sie auf "Erstellen"



New Project

Cancel

Analysis

Views

- [Analysis](#)
- [Filter](#)

Libraries

- [Library](#)
- [Receivers](#)

Product Configurators

- [Swegon Silencers](#)

Calculation Modules

- [Rectangular Breakout In-Line](#)
- [Circular Breakout In-Line](#)

Library Element Quick Add

Straight Duct

Flexible Duct

Elbow

Branching

★ [AHU project 123](#)

Path (1) [Add Path](#)

	dBA	63	125	250	500	1k	2k	4k	8k
Frequency									
Total	7	-	-	-	-	-	-	-	-
Required Insertion Loss	-	-	-	-	-	-	-	-	-
Receiver: default (dBA)	7	-	-	-	-	-	-	-	-

Dadurch wird der Arbeitsbereich geöffnet.
 Beginnen Sie mit dem Klicken auf Bibliothek, um sie zu öffnen.

The screenshot shows the Swegon Library interface. On the left is a dark sidebar with navigation options: Analysis, Views, Libraries, Product Categories, Calculators, Library Elements, Straight Ducts, Flexible Ducts, Elbow, and Branching. The main area is titled 'Library' and has a close button (x) in the top right. Below the title are two tabs: 'Project' (active) and 'Organization'. A list of categories is shown with expand/collapse arrows: Air Terminal, Ceilings, Doors, Electrical Equipment, Floors, Mechanical Equipment (expanded), Roofs, User Defined, Walls, and Windows. Under 'Mechanical Equipment', the following items are listed: Air Conditioner, Air Handling Unit (highlighted), Boiler, Chiller, Coil, Condensing Unit, Cooling Tower, Damper, Energy Recovery Ventilator, Fan, Fan Coil Unit, Filter, Heat Pumps, Pump, Rooftop Unit, and VAV Box. A 'Properties' section is empty on the right. At the bottom, there are three buttons: 'New Folder', 'New Element', and 'Close'. Three green arrows originate from a text box on the right and point to 'Mechanical Equipment', 'Air Handling Unit', and 'New Element'.

Library

Category

Project Organization

- Air Terminal
- Ceilings
- Doors
- Electrical Equipment
- Floors
- Mechanical Equipment
 - Air Conditioner
 - Air Handling Unit
 - Boiler
 - Chiller
 - Coil
 - Condensing Unit
 - Cooling Tower
 - Damper
 - Energy Recovery Ventilator
 - Fan
 - Fan Coil Unit
 - Filter
 - Heat Pumps
 - Pump
 - Rooftop Unit
 - VAV Box
- Roofs
- User Defined
- Walls
- Windows

Properties

New Folder New Element Close

Hinzufügen eines neuen Lüftungsgeräts zur Bibliothek, wählen Sie "Mechanische Ausrüstung" dann "Lüftungsgerät" und klicken Sie auf "Neues Element"

Library

x

TU

- Analysis
- Views
- Analysis
- Filter
- Libraries
- Library
- Receive
- Product Co
- Swegon
- Calculation
- Recta
- Circul
- Library Ele
- Straight Du
- Flexible Du
- Elbow
- Branching

Category

Project Organization

- Air Terminal
- Ceilings
- Doors
- Electrical Equipment
- Floors
- Mechanical Equipment
 - Air Conditioner
 - Air Handling Unit
 - AHU 123
 - Boiler
 - Chiller
 - Coil
 - Condensing Unit
 - Cooling Tower
 - Damper
 - Energy Recovery Ventilator
 - Fan
 - Fan Coil Unit
 - Filter
 - Heat Pumps
 - Pump
 - Rooftop Unit
 - VAV Box
- Roofs
- User Defined
- Walls
- Windows

Properties

Name

AHU 123

Project Tag

AHU 123

Schreiben Sie einen Namen und ein Projekt-Tag

Dimensions

Height

Length

Width

Add Parameter

Identity Data

Area Served

Location

Manufacturer

Model

URL

Add Parameter

Mechanical - Loads

Total Cooling Capacity

Duplicate Element

Delete Element

Copy to Organization

Close

Library

- Boiler
- Chiller
- Coil
- Condensing Unit
- Cooling Tower
- Damper
- Energy Recovery Ventilator
- Fan
- Fan Coil Unit
- Filter
- Heat Pumps
- Pump
- Rooftop Unit
- VAV Box
- Roofs
- User Defined
- Walls
- Windows

Height Length

Width

Add Parameter

Identity Data

Area Served Location

Manufacturer Model

URL

Add Parameter

Mechanical - Loads

Total Cooling Capacity

Add Group Add Parameter

Acoustic data

Data	Metric	Dist (m)	Airflow (l/s)	63	125	250	500	1k	2k	4k	8k
Supply	Sound R _c		3000	85	83	82	82	82	78	78	76
Extract	Sound R _c		3000	82	81	80	80	80	76	75	74

Add Data

Scrollen sie zu den akustischen Daten und geben Sie Name, Luftstrom und Schalleistungspegel ein.

Beenden Sie mit dem Klicken auf Änderungen speichern

New Folder New Element Save Changes

Close

Analysis

Views

[Analysis](#)[Filter](#)

Libraries

[Library](#)[Receivers](#)

Product Configurators

[Swegon Silencers](#)

Calculation Modules

[Rectangular Breakout In-Line](#)[Circular Breakout In-Line](#)

Library Element Quick Add



Straight Duct



Flexible Duct



Elbow



Branching



* AHU_project 123

Path (1)									Add Path	
	Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Total	7	-	-	-	-	-	-	-	-	-
Required Insertion Loss	-	-	-	-	-	-	-	-	-	-
Receiver: default (dBA)	7	-	-	-	-	-	-	-	-	-

Move to head of path 

Ziehen Sie das Symbol „Schallquelle“ per Drag & Drop in das gestrichelte Quadrat

Analysis

Views

- Analysis
- Filter

Libraries

- Library
- Receivers

Product Configurators

- Swegon Silencers

Calculation Modules

- Rectangular Breakout In-Line
- Circular Breakout In-Line

Library Element Quick Add

- [Icons for various duct and fitting types]

Straight Duct

- [Icons for straight duct types]

Flexible Duct

- [Icon for flexible duct type]

Elbow

- [Icons for elbow types]

Branching

- [Icons for branching types]

★ AHU project

Path (1)

- Frequency Total Receiver: defa
- Noise Source No data set se

Noise Source

Properties

Category

Mechanical Equipment/Air Handling Unit

Element

AHU 123

Data Set

Supply

Airflow and Velocity

Override Airflow & Velocity

Airflow (l/s)	Velocity (m/s)
3000	0

Acoustic Data

Project Tag

Data Set

Details

Noise sources (from the Library).

[Add Attachment](#)

Wählen Sie Ihr Lüftungsgerät und den korrekten Datensatz Und klicken Sie auf Speichern

Previous Next Cancel Save

Analysis

- Views
- Analysis
 - Filter
- Libraries
- Library
 - Receivers**
- Product Configurators
- Swegon Silencers
- Calculation Modules
- Rectangular Breakout In-Line
 - Circular Breakout In-Line
- Library Element Quick Add
- -
 -
 -
 -
 -
- Straight Duct
- -
- Flexible Duct
-
- Elbow
- -
 -
 -
 -
- Branching
- -
 -
 -

AHU project 123

Path (1)

Frequency	dB	63	125	250	500	1k	2k	4k	8k
Total	87	85	83	82	82	82	78	78	76
Required Insertion Loss	-	-	-	-	-	-	-	-	-
Receiver: default (dB)	87	85	83	82	82	82	78	78	76
AHU 123 Supply	87	85	83	82	82	82	78	78	76

[Add Path](#)

Fügen Sie Ihren Empfänger hinzu, indem Sie auf "Empfänger" klicken"

Receivers

Geben Sie Name, Abmessungen, Absorptions- und Empfängerkriterien ein und klicken Sie auf Speichern.

Name

Receiver Properties

Name
Office Room 123

Receiver Type
Indoor

Length (m) Width (m) Height (m)
4 3 3

Notes

Room Absorption
Absorption Coefficients
Office room

63	125	250	500	1000	2000	4000	8000
0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15

Receiver Criteria

Metric	Value
A	30 dB(A) (30)

Close New Reset Save

☰ ☱

Straight Duct

☐ ☉

Flexible Duct

☐

Elbow

☐ ☐ ☐ ☐ ☐

Branching

☐ ☐ ☐ ☐

End Reflection

☐ ☐

Noise Control

☐

Duct Breakin/Breakout

☐ ☐ ☐ ☐

Sound Transmission

☐

Room Effect

☐ ☐ ☐ ☐

Outdoor Noise

☐ ☐

★ **AHU project 123**

Path (1)	dB	63	125	250	500	1k	2k	4k	8k
Frequency	dB	63	125	250	500	1k	2k	4k	8k
Total		87	85	83	82	82	82	78	78
Required Insertion Loss		-	-	-	-	-	-	-	-
Receiver: default (dBA)		87	85	83	82	82	78	78	76

[Add Path](#)

Move to head of path

☉ AHU 123 Supply	87	85	83	82	82	82	78	78	76
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☐ Branch →

Ziehen Sie das Symbol "Raumeffekt – Klassisches Feld" per Drag & Drop in das gestrichelte Quadrat

Straight Duct
 Flexible Duct
 Elbow
 Branching
 End Reflection
 Noise Control
 Duct Breakin/ Breakout
 Sound Transmission
 Room Effect
 Outdoor Noise

AHU project
 Path (1)
 Frequency
 Total
 Required Inser
 Receiver: defa
 AHU 123
 Supply
 Room Effect -
 No receiver se

Room Effect - Classic Field

Wählen Sie Ihren Empfänger
Klicken Sie auf Speichern

Edit properties

Receiver name: Office Room 123

Receiver Distance (m): 1.5 Air Outlets (Path): 1

Directivity Factor: 2
 (Weitere Informationen zur Richtwirkung finden Sie hier. Faktoren, indem Sie auf diesen Link klicken)

Use Thompson Modification
 Use Room Constant

Airflow and Velocity

Override Airflow & Velocity
 Airflow (l/s): 3000 Velocity (m/s): 0

For a point source in an enclosed space, classical diffuse-field theory predicts that as the distance between the source and point of observation is increased, the sound pressure level initially decreases at the rate of 6 dB per doubling of distance. At some point, the reverberant sound field begins to dominate and the sound pressure level remains at a constant level.

Additional Resources

Calculation References
[2015 ASHRAE Applications Handbook, Chapter 48, Noise and Vibration Control](#)

[Add Attachment](#)

Previous Next Cancel Save



Receivers

Product Configurators

Swegon Silencers

Calculation Modules

Rectangular Breakout In-Line

Circular Breakout In-Line

Library Element Quick Add



Straight Duct



Flexible Duct



Elbow



Branching



End Reflection



Noise Control



AHU project 123

Path (1) 📄 ✎ 🔗 🗑️ [Add Path](#)

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Total	83	81	79	78	78	78	74	74	72
Required Insertion Loss	30	-	-	-	-	-	-	-	-
Receiver: Office Room 123 (30 dB(A))	83	81	79	78	78	78	74	74	72
AHU 123 Supply	87	85	83	82	82	82	78	78	76
Room Effect - Classic Field Office Room 123	83	-4	-4	-4	-4	-4	-4	-4	-4

Bauen Sie Ihr Kanalsystem zwischen der Geräuschquelle und dem Empfänger durch Ziehen und Ablegen von Elementen aus den Bibliothekselementen

swegon systems

Calculation Modules

- Rectangular Breakout In-Line
- Circular Breakout In-Line

Library Element Quick Add

Straight Duct

Flexible Duct

Elbow

Branching

End Reflection

Noise Control

Duct Breakin/Breakout

Sound Transmission

★ AHU_project 123

Path (1)

	Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Total	58	53	53	53	54	54	50	50	48	
Required Insertion Loss	30	-	-	-	-	-	-	-	-	-
Receiver: Office Room 123 (30 dB(A))	58	53	53	53	54	54	50	50	48	
AHU 123 Supply	87	85	83	82	82	82	78	78	76	
Rectangular Duct 1600mm x 800mm x 3m	86	-2	-1	-1	-0	-0	-0	-0	-0	
Branch - Takeoff 1600mm x 800mm / 400mm x 400mm	77	-10	-10	-10	-10	-10	-10	-10	-10	
Rectangular Duct 400mm x 400mm x 3m	76	-4	-2	-1	-0	-0	-0	-0	-0	
Branch - Takeoff 400mm x 400mm / 200mm	68	-8	-8	-8	-8	-8	-8	-8	-8	
Circular Duct 200mm x 3m	68	-0	-0	-0	-0	-1	-1	-1	-0	
Branch - Takeoff 200mm / 125mm	62	-6	-6	-6	-6	-6	-6	-6	-6	
Room Effect - Classic Field Office Room 123	58	-4	-4	-4	-4	-4	-4	-4	-4	

Add Path

Wählen Sie die Richtung in der Verzweigung und die Bemaßung aus.

Branch - Takeoff

200

Override Airflow & Velocity

Airflow (l/s) 55 Velocity (m/s) 2

Upstream Turbulence?

Main Continuation

Selected Branch

Diameter (mm) 200

Override Airflow & Velocity

Airflow (l/s) 39 Velocity (m/s) 1

Takeoff

Selected Branch

Diameter (mm) 125

[Add Attachment](#)

When sound traveling in a duct encounters a junction, the sound power is distributed between the branches according to the ratio of the cross-sectional area of an individual branch.

Additional Resources

ASHRAE Research Projects

- ASHRAE RP-37
- ASHRAE RP-1408

Calculation References

- 2015 ASHRAE Applications Handbook, Chapter 48, Noise and Vibration Control
- Algorithms for HVAC Acoustics

[Previous](#) [Next](#) [Close](#)

Auswählen, ob die Abzweigung rechteckig oder kreisförmig ist

Geben Sie dem Luftauslass ein Projekt-Tag und wählen Sie ein Produkt aus

Product Configurators

- Swegon Silencers

Calculation Modules

- Rectangular Breakout In-Line
- Circular Breakout In-Line

Library Element Quick Add

- Straight Duct
- Flexible Duct
- Elbow
- Branching
- End Reflection
- Noise Control
- Duct Breakin/Breakout

AHU project 123

Path (1)

	Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Total	45	37	42	45	38	36	38	39	37	
Required Insertion Loss	30	-	-	-	-	-	-	-	-	-
Receiver: Office Room 123 (30 dB(A))	45	37	42	45	38	36	38	39	37	

AHU 123 Supply	87	85	83	82	82	82	78	78	76	
Rectangular Duct 1600mm x 800mm x 3m	86	-2	-1	-1	-0	-0	-0	-0	-0	-0
Branch - Takeoff 1600mm x 800mm/400mm x 400mm	77	-10	-10	-10	-10	-10	-10	-10	-10	-10
Rectangular Duct 400mm x 400mm x 3m	76	-4	-2	-1	-0	-0	-0	-0	-0	-0
Branch - Takeoff 400mm x 400mm/200mm	68	-8	-8	-8	-8	-8	-8	-8	-8	-8
Circular Duct 200mm x 3m	68	-0	-0	-0	-0	-1	-1	-1	-1	-0
Branch - Takeoff 200mm/125mm	62	-6	-6	-6	-6	-6	-6	-6	-6	-6
Supply Diffuser 1 EAGLE Ceiling C	49	-16	-11	-8	-16	-18	-12	-11	-11	-10
Room Effect - Classic Field Office Room 123	45	-4	-4	-4	-4	-4	-4	-4	-4	-4

Add Path

Damper 1

Project Tag: Supply diffuser

Product line: EAGLE CCo

Airflow: 16

Total pressure drop: 50

Product Configuration Variant: Normal (N)

Size: 600 mm

Duct connection: 160 mm

Commissioning box: 1-step



Total pressure drop: 50.0

Sound table	63	125	250	500	1k	2k	4k	8k	Lw(A)
Sound power	0	2	3	0	0	0	0	0	1
Sound attenuation	16	11	8	16	18	12	11	11	-

Product Configurators

Swegon Silencers

Calculation Modules

Rectangular Breakout In-Line

Circular Breakout In-Line

Library Element Quick Add



Straight Duct



Flexible Duct



Elbow



Branching



End Reflection



Noise Control



Duct Breakin/Breakout

AHU_project 123

Path (1)		dB(A)							
		63	125	250	500	1k	2k	4k	8k
●	Total	45	37	42	45	38	36	38	39
●	Receiver: Office Room 123 (30 dB(A))	45	37	42	45	38	36	38	39
🎯	AHU 123 Supply	87	85	83	82	82	82	78	78
📦	Rectangular Duct 1600mm x 800mm x 3m	86	-2	-1	-1	-0	-0	-0	-0
📏	Branch - Takeoff 1600mm x 800mm/400mm x 400mm	77	-10	-10	-10	-10	-10	-10	-10
📦	Rectangular Duct 400mm x 400mm x 3m	76	-4	-2	-1	-0	-0	-0	-0
📏	Branch - Takeoff 400mm x 400mm/200mm	68	-8	-8	-8	-8	-8	-8	-8
📏	Circular Duct 200mm x 3m	68	-0	-0	-0	-0	-1	-1	-1
📏	Branch - Takeoff 200mm/125mm	62	-6	-6	-6	-6	-6	-6	-6
📡	Supply Diffuser 1 EAGLE Ceiling C	49	-16	-11	-8	-16	-18	-12	-11
🏠	Room Effect - Classic Field Office Room 123	45	-4	-4	-4	-4	-4	-4	-4

Add Path

Wenn Sie Schalldämpfer hinzufügen möchten Wählen Sie den Ort (klicken Sie auf highlight) im Kanalsystem wo Sie einen Schalldämpfer platzieren wollen

Klicken Sie dann auf Swegon Schalldämpfer

Schreiben Sie ein Tag und wählen Sie Form und Abmessungen
 Wählen Sie einen Schalldämpfer aus der Liste aus (klicken Sie auf highlite) und klicken Sie auf Erstellen

Silencer Selection

Identity

Tag: Quantity:

Dimensions & Airflow

Shape:

Duct Width: mm Duct Height: mm

Max Length: mm

Override Airflow & Velocity

Silencer Flow Rate: l/s Velocity: m/s

Maximum Pressure Drop: Pa

System Effects

Silencer Inlet Condition

Override Required Inserti...

Required Insertion Loss

Frequency	dB(A)	63	125	250	500	1k	2k	4k	8k
Sound Before Attenuator	87	85	83	82	82	82	78	78	76
Required Insertion Loss	30	-	-	-	-	-	-	-	-
Calculated Insertion Loss	-	-	-	-	-	-	-	-	-
Safety Factor	0	0	0	0	0	0	0	0	0

Silencer Selection

Model	Octave Midband Frequency, Hz											
	L	PD	w/SE	A	63	125	250	500	1k	2k	4k	8k
CALMO a-1611-1600-800-650	650	6	6		5	10	15	23	27	27	15	10
Generated Noise					28	28	24	22	19	16	15	13
End Result				30	32	32	30	15	9	11	24	27
CALMO a-1621-1600-800-1250	1250	7	7		7	15	24	39	45	40	23	17
Generated Noise					28	28	24	22	19	16	15	13
End Result				22	30	27	21	1	0	0	16	20
CALMO a-1622-1600-800-1250	1250	3	3		4	9	16	21	25	18	11	11
Generated Noise					11	11	<10	<10	<10	<10	<10	<10
End Result				32	33	33	29	17	11	20	28	26

Options

Uninsulated Cleaning Cover:

Fire-Resistant Insulated Cleaning Cover:

Insulated 50mm Stone Wool

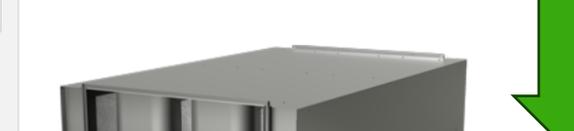
Perforated Sheet Metal Lining

Flange Connection

Resources

- Product Sheet
[Attenuator with recessed connection for rectangular ducts](#)
- Brochure
[Acoustics Overview](#)
- Instruction
[Installation, commissioning, maintenance](#)
- Quality
[Approval 2706/92, Duct insulation](#)
[Building product declaration](#)

Image



Druckverlust

Schallpegel im Empfänger
 Raum mit diesem Schalldämpfer

Um den Pfad zu kopieren, klicken Sie auf die Schaltfläche "Diesen Pfad duplizieren"

Product Configurators

Swegon Silencers

Calculation Modules

Rectangular Breakout In-Line

Circular Breakout In-Line

Library Element Quick Add



Straight Duct



Flexible Duct



Elbow



Branching



End Reflection



Noise Control



Duct Breakin/Breakout

AHU_project 123

Path (1)		dB(A)	63	125	250	500	1k	2k	4k	8k
●	Total	22	30	27	21	1	-	-	16	20
	Required Insertion Loss	30	-	-	-	-	-	-	-	-
●	Receiver: Office Room 123 (30 dB(A))	22	30	27	21	1	-	-	16	20
🎯	AHU 123 Supply	87	85	83	82	82	82	78	78	76
📦	Silencer 1 CALMO a-1621-1600-800-1250	62	-7	-15	-24	-39	-45	-40	-23	-17
📦	Rectangular Duct 1600mm x 800mm x 3m	61	-2	-1	-1	-0	-0	-0	-0	-0
📦	Branch - Takeoff 1600mm x 800mm/400mm x 400mm	52	-10	-10	-10	-10	-10	-10	-10	-10
📦	Rectangular Duct 400mm x 400mm x 3m	51	-4	-2	-1	-0	-0	-0	-0	-0
📦	Branch - Takeoff 400mm x 400mm/200mm	43	-8	-8	-8	-8	-8	-8	-8	-8
📦	Circular Duct 200mm x 3m	42	-0	-0	-0	-0	-1	-1	-1	-0
📦	Branch - Takeoff 200mm/125mm	37	-6	-6	-6	-6	-6	-6	-6	-6
📶	Supply Diffuser 1 EAGLE Ceiling C	26	-16	-11	-8	-16	-18	-12	-11	-11
📦	Room Effect - Classic Field Office Room 123	22	-4	-4	-4	-4	-4	-4	-4	-4

Add Path



Jetzt haben Sie eine Kopie des ersten Pfades

Product Configurators

Swegon Silencers

Calculation Modules

Rectangular Breakout In-Line

Circular Breakout In-Line

Library Element Quick Add



Straight Duct



Flexible Duct



Elbow



Branching



End Reflection



Noise Control



Duct Breakin/Breakout

AHU_project 123

Path (1)		dB(A)	63	125	250	500	1k	2k	4k	8k
Frequency										
● Total		22	30	27	21	1	-	-	16	20
● Required Insertion Loss		30	-	-	-	-	-	-	-	-
● Receiver: Office Room 123 (30 dB(A))		25	33	30	24	4	-	3	19	23
AHU 123 Supply		87	85	83	82	82	82	78	78	76
Silencer 1 CALMO a-1621-1600-800-1250		62	-7	-15	-24	-39	-45	-40	-23	-17
Rectangular Duct 1600mm x 800mm x 3m		61	-2	-1	-1	-0	-0	-0	-0	-0
Branch - Takeoff 1600mm x 800mm/400mm x 400mm		52	-10	-10	-10	-10	-10	-10	-10	-10
Rectangular Duct 400mm x 400mm x 3m		51	-4	-2	-1	-0	-0	-0	-0	-0
Branch - Takeoff 400mm x 400mm/200mm		43	-8	-8	-8	-8	-8	-8	-8	-8
Circular Duct 200mm x 3m		42	-0	-0	-0	-0	-1	-1	-1	-0
Branch - Takeoff 200mm/125mm		37	-6	-6	-6	-6	-6	-6	-6	-6
Supply Diffusor 1 (Copy) EAGLE Ceiling C		26	-16	-11	-8	-16	-18	-12	-11	-11
Room Effect - Classic Field Office Room 123		22	-4	-4	-4	-4	-4	-4	-4	-4



Path (1) (Copy)		dB(A)	63	125	250	500	1k	2k	4k	8k
Frequency										
● Total		22	30	27	21	1	-	-	16	20
● Required Insertion Loss		30	-	-	-	-	-	-	-	-
● Receiver: Office Room 123 (30 dB(A))		25	33	30	24	4	-	3	19	23
AHU 123 Supply		87	85	83	82	82	82	78	78	76
Silencer 1 CALMO a-1621-1600-800-1250		62	-7	-15	-24	-39	-45	-40	-23	-17
Rectangular Duct 1600mm x 800mm x 3m		61	-2	-1	-1	-0	-0	-0	-0	-0
Branch - Takeoff 1600mm x 800mm/400mm x 400mm		52	-10	-10	-10	-10	-10	-10	-10	-10
Rectangular Duct 400mm x 400mm x 3m		51	-4	-2	-1	-0	-0	-0	-0	-0
Branch - Takeoff 400mm x 400mm/200mm		43	-8	-8	-8	-8	-8	-8	-8	-8
Circular Duct 200mm x 3m		42	-0	-0	-0	-0	-1	-1	-1	-0
Branch - Takeoff 200mm/125mm		37	-6	-6	-6	-6	-6	-6	-6	-6
Supply Diffusor 1 (Copy) EAGLE Ceiling C		26	-16	-11	-8	-16	-18	-12	-11	-11
Room Effect - Classic Field Office Room 123		22	-4	-4	-4	-4	-4	-4	-4	-4

[Add Path](#)

Ändern Sie den Namen, indem Sie auf die Schaltfläche Bearbeiten klicken

Product Configurators

Swegon Silencers

Calculation Modules

Rectangular Breakout In-Line

Circular Breakout In-Line

Library Element Quick Add

Straight Duct

Flexible Duct

Elbow

Branching

End Reflection

Noise Control

Duct Breakin/Breakout

AHU_project 123

Supply air ✎ 🗑

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Total	22	30	27	21	1	-	-	16	20
Required Insertion Loss	30	-	-	-	-	-	-	-	-
Receiver: Office Room 123 (30 dB(A))	25	33	30	24	4	-	3	19	23

AHU 123 Supply	87	85	83	82	82	82	78	78	76
Silencer 1 CALMO a-1621-1600-800-1250	62	-7	-15	-24	-39	-45	-40	-23	-17
Rectangular Duct 1600mm x 800mm x 3m	61	-2	-1	-1	-0	-0	-0	-0	-0
Branch - Takeoff 1600mm x 800mm/400mm x 400mm	52	-10	-10	-10	-10	-10	-10	-10	-10
Rectangular Duct 400mm x 400mm x 3m	51	-4	-2	-1	-0	-0	-0	-0	-0
Branch - Takeoff 400mm x 400mm/200mm	43	-8	-8	-8	-8	-8	-8	-8	-8
Circular Duct 200mm x 3m	42	-0	-0	-0	-0	-1	-1	-1	-0
Branch - Takeoff 200mm/125mm	37	-6	-6	-6	-6	-6	-6	-6	-6
Supply Diffuser 1 (Copy) EAGLE Ceiling C	26	-16	-11	-8	-16	-18	-12	-11	-11
Room Effect - Classic Field Office Room 123	22	-4	-4	-4	-4	-4	-4	-4	-4

Extract Air ✓ ✕

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Total	22	30	27	21	1	-	-	16	20
Required Insertion Loss	30	-	-	-	-	-	-	-	-
Receiver: Office Room 123 (30 dB(A))	25	33	30	24	4	-	3	19	23

AHU 123 Supply	87	85	83	82	82	82	78	78	76
Silencer 1 CALMO a-1621-1600-800-1250	62	-7	-15	-24	-39	-45	-40	-23	-17
Rectangular Duct 1600mm x 800mm x 3m	61	-2	-1	-1	-0	-0	-0	-0	-0
Branch - Takeoff 1600mm x 800mm/400mm x 400mm	52	-10	-10	-10	-10	-10	-10	-10	-10
Rectangular Duct 400mm x 400mm x 3m	51	-4	-2	-1	-0	-0	-0	-0	-0
Branch - Takeoff 400mm x 400mm/200mm	43	-8	-8	-8	-8	-8	-8	-8	-8
Circular Duct 200mm x 3m	42	-0	-0	-0	-0	-1	-1	-1	-0
Branch - Takeoff 200mm/125mm	37	-6	-6	-6	-6	-6	-6	-6	-6
Supply Diffuser 1 (Copy) EAGLE Ceiling C	26	-16	-11	-8	-16	-18	-12	-11	-11
Room Effect - Classic Field Office Room 123	22	-4	-4	-4	-4	-4	-4	-4	-4

[Add Path](#)

Name hier speichern

Product Configurators

Swegon Silencers

Calculation Modules

Rectangular Breakout In-Line

Circular Breakout In-Line

Library Element Quick Add



Straight Duct



Flexible Duct



Elbow



Branching



End Reflection



Noise Control



Duct Breakin/Breakout

AHU project 123

Supply air		dBA	63	125	250	500	1k	2k	4k	8k
●	Frequency									
●	Total	22	30	27	21	1	-	-	16	20
●	Required Insertion Loss	30	-	-	-	-	-	-	-	-
●	Receiver: Office Room 123 (30 dB(A))	24	30	27	24	12	10	2	17	22
🎯	AHU 123 Supply	87	85	83	82	82	82	78	78	76
📦	Silencer 1 CALMO α-1621-1600-800-1250	62	-7	-15	-24	-39	-45	-40	-23	-17
📦	Rectangular Duct 1600mm × 800mm × 3m	61	-2	-1	-1	-0	-0	-0	-0	-0
📦	Branch - Takeoff 1600mm × 800mm/400mm × 400mm	52	-10	-10	-10	-10	-10	-10	-10	-10
📦	Rectangular Duct 400mm × 400mm × 3m	51	-4	-2	-1	-0	-0	-0	-0	-0
📦	Branch - Takeoff 400mm × 400mm/200mm	43	-8	-8	-8	-8	-8	-8	-8	-8
📦	Circular Duct 200mm × 3m	42	-0	-0	-0	-0	-1	-1	-1	-0
📦	Branch - Takeoff 200mm/125mm	37	-6	-6	-6	-6	-6	-6	-6	-6
📶	Supply Diffuser 1 (Copy) EAGLE Ceiling C	26	-16	-11	-8	-16	-18	-12	-11	-11
🏠	Room Effect - Classic Field Office Room 123	22	-4	-4	-4	-4	-4	-4	-4	-4

Extract Air		dBA	63	125	250	500	1k	2k	4k	8k
●	Frequency									
●	Total	20	16	14	11	5	4	3	16	19
●	Required Insertion Loss	30	-	-	-	-	-	-	-	-
●	Receiver: Office Room 123 (30 dB(A))	24	30	27	24	12	10	2	17	22
🎯	AHU 123 Extract	84	82	81	80	78	78	74	74	72
📦	Silencer 1 CALMO α-1621-1600-800-1250	59	-7	-11	-18	-24	-28	-24	-14	-11
📦	Rectangular Duct 1600mm × 800mm × 3m	59	-2	-1	-1	-0	-0	-0	-0	-0
📦	Branch - Takeoff 1600mm × 800mm/400mm × 400mm	49	-10	-10	-10	-10	-10	-10	-10	-10
📦	Rectangular Duct 400mm × 400mm × 3m	48	-4	-2	-1	-0	-0	-0	-0	-0
📦	Branch - Takeoff 400mm × 400mm/200mm	41	-8	-8	-8	-8	-8	-8	-8	-8
📦	Circular Duct 200mm × 3m	40	-0	-0	-0	-0	-1	-1	-1	-0
📦	Branch - Takeoff 200mm/125mm	35	-6	-6	-6	-6	-6	-6	-6	-6
📶	Extract Diffuser 1 ALG	24	-28	-22	-18	-15	-15	-15	-15	-15
🏠	Room Effect - Classic Field Office Room 123	20	-4	-4	-4	-4	-4	-4	-4	-4

Klicken Sie auf die Schallquelle, um den Datensatz zu ändern

AHU 123

Properties

Category: Mechanical Equipment/Air Handling Unit

Element: AHU 123

Data Set: Supply

Airflow (l/s): 3000

Velocity (m/s): 0

Acoustic Data

Project Tag:

Data Set:

Previous Next Close

Klicken Sie auf den Luftauslass, um das Produkt zu wechseln



Extract Air										
Frequency	dBA	63	125	250	500	1k	2k	4k	8k	
Total	20	16	16	20	12	10	-	12	17	
Required Insertion Loss	30	-	-	-	-	-	-	-	-	
Receiver: Office Room 123 (30 dB(A))	24	30	27	24	12	10	2	17	22	
AHU 123 Extract	84	82	81	80	80	80	76	75	74	
Silencer 1 CALMO a-1621-1600-800-1250	59	-7	-15	-24	-39	-45	-40	-23	-17	
Rectangular Duct 1600mm x 800mm x 3m	59	-2	-1	-1	-0	-0	-0	-0	-0	
Branch - Takeoff 1600mm x 800mm/400mm x 400mm	49	-10	-10	-10	-10	-10	-10	-10	-10	
Rectangular Duct 400mm x 400mm x 3m	48	-4	-2	-1	-0	-0	-0	-0	-0	
Branch - Takeoff 400mm x 400mm/200mm	41	-8	-8	-8	-8	-8	-8	-8	-8	
Circular Duct 200mm x 3m	40	-0	-0	-0	-0	-1	-1	-1	-0	
Branch - Takeoff 200mm/125mm	35	-6	-6	-6	-6	-6	-6	-6	-6	
Extract Diffusor 1 ALG	24	-28	-21	-10	-11	-5	-13	-12	-12	
Room Effect - Classic Field Office Room 123	20	-4	-4	-4	-4	-4	-4	-4	-4	

Tag ändern

Project Tag: Extract Diffusor 1

Category: All

Product line: ALGe

Air

Airflow: 16

Total pressure drop: 30

Product Configuration

Width: 200 mm

Height: 100 mm

Duct connection: 125 mm

Commissioning box: Short side



Total pressure drop: 30.0

Sound table	63	125	250	500	1k	2k	4k	8k	Lw(A)
Sound power	15	15	23	13	10	2	0	0	18
Sound attenuation	28	21	10	11	5	13	12	12	-

Grün ist der Schalldruckpegel der Zuluft

Blau ist der Abluft-Schalldruckpegel

Orange ist der Gesamtschalldruckpegel (Zuluft+Abluft))

Analysis

Views

Analysis

Filter

Libraries

Library

Receivers

Product Configurators

Swegon Silencers

Calculation Modules

Rectangular Breakout In-Line

Circular Breakout In-Line

Library Element Quick Add



Straight Duct



Flexible Duct



Elbow



Branching



AHU_project 123

Supply air

	63	125	250	500	1k	2k	4k	8k	
● Total	22	30	27	21	1	-	-	16	20
● Receiver: Office Room 123 (30 dB(A))	24	30	27	24	12	10	2	17	22
🎯 AHU 123 Supply	87	85	83	82	82	82	78	78	76
📦 Silencer 1 CALMO a-1621-1600-800-1250	62	-7	-15	-24	-39	-45	-40	-23	-17
	28	28	24	22	19	16	15	13	
📦 Rectangular Duct 1600mm x 800mm x 3m	61	-2	-1	-1	-0	-0	-0	-0	-0
📦 Branch - Takeoff 1600mm x 800mm/400mm x 400mm	52	-10	-10	-10	-10	-10	-10	-10	-10
	18	12	<10	<10	<10	<10	<10	<10	<10
📦 Rectangular Duct 400mm x 400mm x 3m	51	-4	-2	-1	-0	-0	-0	-0	-0
📦 Branch - Takeoff 400mm x 400mm/200mm	43	-8	-8	-8	-8	-8	-8	-8	-8
	12	<10	<10	<10	<10	<10	<10	<10	<10
📦 Circular Duct 200mm x 3m	42	-0	-0	-0	-0	-1	-1	-1	-0
📦 Branch - Takeoff 200mm/125mm	37	-6	-6	-6	-6	-6	-6	-6	-6
	<10	<10	<10	<10	<10	<10	<10	<10	<10
📶 Supply Diffusor 1 (Copy) EAGLE Ceiling C	26	-16	-11	-8	-16	-18	-12	-11	-11
	<10	<10	<10	<10	<10	<10	<10	<10	<10
📦 Room Effect - Classic Field Office Room 123	22	-4	-4	-4	-4	-4	-4	-4	-4

Extract Air

	63	125	250	500	1k	2k	4k	8k	
● Total	20	16	16	20	12	10	-	12	17
● Receiver: Office Room 123 (30 dB(A))	24	30	27	24	12	10	2	17	22
🎯 AHU 123 Extract	84	82	81	80	80	80	76	75	74
📦 Silencer 1 CALMO a-1621-1600-800-1250	59	-7	-15	-24	-39	-45	-40	-23	-17
	28	28	24	22	19	16	15	13	
📦 Rectangular Duct 1600mm x 800mm x 3m	59	-2	-1	-1	-0	-0	-0	-0	-0
📦 Branch - Takeoff 1600mm x 800mm/400mm x 400mm	49	-10	-10	-10	-10	-10	-10	-10	-10
	18	12	<10	<10	<10	<10	<10	<10	<10
📦 Rectangular Duct 400mm x 400mm x 3m	48	-4	-2	-1	-0	-0	-0	-0	-0
📦 Branch - Takeoff 400mm x 400mm/200mm	41	-8	-8	-8	-8	-8	-8	-8	-8
	12	<10	<10	<10	<10	<10	<10	<10	<10
📦 Circular Duct 200mm x 3m	40	-0	-0	-0	-0	-1	-1	-1	-0
📦 Branch - Takeoff 200mm/125mm	35	-6	-6	-6	-6	-6	-6	-6	-6
	<10	<10	<10	<10	<10	<10	<10	<10	<10
📶 Extract Diffusor 1 ALG	24	-28	-21	-10	-11	-5	-13	-12	-12
	15	15	21	15	13	<10	<10	<10	<10
📦 Room Effect - Classic Field Office Room 123	20	-4	-4	-4	-4	-4	-4	-4	-4

Add Path

Drucken Sie das Ergebnis aus, indem Sie den Mauszeiger über "Berichte" bewegen und auf "Zusammenfassung der Berechnung" klicken

- Calculation Summary
- Silencer Schedule
- Silencer Submittal

Analysis

Views

- Analysis
- Filter

Libraries

- Library
- Receivers

Product Configurators

- Swegon Silencers

Calculation Modules

- Rectangular Breakout In-Line
- Circular Breakout In-Line

Library Element Quick Add

Straight Duct

Flexible Duct

Elbow

Branching

Supply air		dB(A)	63	125	250	500	1k	2k	4k	8k
●	Frequency	22	30	27	21	1	-	-	16	20
	Total	30	-	-	-	-	-	-	-	-
●	Required Insertion Loss	30	-	-	-	-	-	-	-	-
●	Receiver: Office Room 123 (30 dB(A))	24	30	27	24	12	10	2	17	22
🎯	AHU 123 Supply	87	85	83	82	82	82	78	78	76
📦	Silencer 1 CALMO a-1621-1600-800-1250	62	-7	-15	-24	-39	-45	-40	-23	-17
📦	Rectangular Duct 1600mm x 800mm x 3m	61	-2	-1	-1	-0	-0	-0	-0	-0
📏	Branch - Takeoff 1600mm x 800mm/400mm x 400mm	52	-10	-10	-10	-10	-10	-10	-10	-10
📦	Rectangular Duct 400mm x 400mm x 3m	51	-4	-2	-1	-0	-0	-0	-0	-0
📏	Branch - Takeoff 400mm x 400mm/200mm	43	-8	-8	-8	-8	-8	-8	-8	-8
📏	Circular Duct 200mm x 3m	42	-0	-0	-0	-0	-1	-1	-1	-0
📏	Branch - Takeoff 200mm/125mm	37	-6	-6	-6	-6	-6	-6	-6	-6
📡	Supply Diffusor 1 (Copy) EAGLE Ceiling C	26	-16	-11	-8	-16	-18	-12	-11	-11
🏠	Room Effect - Classic Field Office Room 123	22	-4	-4	-4	-4	-4	-4	-4	-4

Extract Air		dB(A)	63	125	250	500	1k	2k	4k	8k
●	Frequency	20	16	16	20	12	10	-	12	17
	Total	30	-	-	-	-	-	-	-	-
●	Required Insertion Loss	30	-	-	-	-	-	-	-	-
●	Receiver: Office Room 123 (30 dB(A))	24	30	27	24	12	10	2	17	22
🎯	AHU 123 Extract	84	82	81	80	80	80	76	75	74
📦	Silencer 1 CALMO a-1621-1600-800-1250	59	-7	-15	-24	-39	-45	-40	-23	-17
📦	Rectangular Duct 1600mm x 800mm x 3m	59	-2	-1	-1	-0	-0	-0	-0	-0
📏	Branch - Takeoff 1600mm x 800mm/400mm x 400mm	49	-10	-10	-10	-10	-10	-10	-10	-10
📦	Rectangular Duct 400mm x 400mm x 3m	48	-4	-2	-1	-0	-0	-0	-0	-0
📏	Branch - Takeoff 400mm x 400mm/200mm	41	-8	-8	-8	-8	-8	-8	-8	-8
📏	Circular Duct 200mm x 3m	40	-0	-0	-0	-0	-1	-1	-1	-0
📏	Branch - Takeoff 200mm/125mm	35	-6	-6	-6	-6	-6	-6	-6	-6
📡	Extract Diffusor 1 ALG	24	-28	-21	-10	-11	-5	-13	-12	-12
🏠	Room Effect - Classic Field Office Room 123	20	-4	-4	-4	-4	-4	-4	-4	-4

[Add Path](#)

Der Bericht zeigt den Zuluftpfad, den Abluftpfad und den summierten Schallpegel in einem Diagramm.

Calculation Summary

Project: AHU project 123

Office Room 123

Length (m)	4
Width (m)	3
Height (m)	3
Area	12.0
Volume	36.0

PathName: Sypply air

Duct detail	Airl/s	63	125	250	500	1k	2k	4k	8k	dB(A)	
AHU 123	3000	Ld	-	-	-	-	-	-	-	-	
Data set: Supply; Metric: Sound Power Level		Lw	85	83	82	82	82	78	78	76	
Silencer 1	3000	Ld	-7	-15	-24	-39	-45	-40	-23	-17	
Model: CALMO a-1621-1600-800-1250; Size (W x H): 1600mm x 800mm; Length: 1250mm; Velocity: 2m/s; Pressure Drop: 7Pa		Lw	28	28	24	22	19	16	15	13	
Rectangular Duct	3000	Ld	-2	-1	-1	-0	-0	-0	-0	-0	
Size (W x H): 1600mm x 800mm; Length: 3m		Lw	-	-	-	-	-	-	-	-	
Branch: Takeoff	333	Ld	-10	-10	-10	-10	-10	-10	-10	-10	
Size (Main): 1600mm x 800mm; Size (Main Continuation): 1600mm x 800mm; Bend Radius (Main Continuation): 0mm; Size (Takeoff): 400mm x 400mm; Bend Radius (Takeoff): 0mm		Lw	18	12	<10	<10	<10	<10	<10	<10	
Rectangular Duct	333	Ld	-4	-2	-1	-0	-0	-0	-0	-0	
Size (W x H): 400mm x 400mm; Length: 3m		Lw	-	-	-	-	-	-	-	-	
Branch: Takeoff	55	Ld	-8	-8	-8	-8	-8	-8	-8	-8	
Size (Main): 400mm x 400mm; Size (Main Continuation): 400mm x 400mm; Bend Radius (Main Continuation): 0mm; Size (Takeoff): 200mm; Bend Radius (Takeoff): 0mm		Lw	12	<10	<10	<10	<10	<10	<10	<10	
Circular Duct	55	Ld	-0	-0	-0	-0	-1	-1	-1	-0	
Size (Diameter): 200mm; Length: 3m		Lw	-	-	-	-	-	-	-	-	
Branch: Takeoff	16	Ld	-6	-6	-6	-6	-6	-6	-6	-6	
Size (Main): 200mm; Size (Main Continuation): 200mm; Bend Radius (Main Continuation): 0mm; Size (Takeoff): 125mm; Bend Radius (Takeoff): 0mm		Lw	<10	<10	<10	<10	<10	<10	<10	<10	
Supply Diffusor 1 (Copy)	16	Ld	-16	-11	-8	-16	-18	-12	-11	-11	
Data set: Supply Diffusor 1 - DataSet IL; Metric: Insertion Loss		Lw	0	2	3	0	0	0	0	0	
Room Effect: Classic Field	16	Ld	-4	-4	-4	-4	-4	-4	-4	-4	
Size (W x H x L): 3m x 3m x 4m; Number of Inlets/Outlets: 1; Receiver Distance (Average): 1.5m; Room Absorption: Office room; Directivity Factor: 2		Lw	-	-	-	-	-	-	-	-	
Demand		Lk	55	44	36	29	25	22	20	18	30
Level		Lp	30	27	21	1	-	0	16	20	22
Damping requirement		Ld	-	-	-	-	-	-	-	3	

Calculation Summary

Project: AHU project 123

Office Room 123

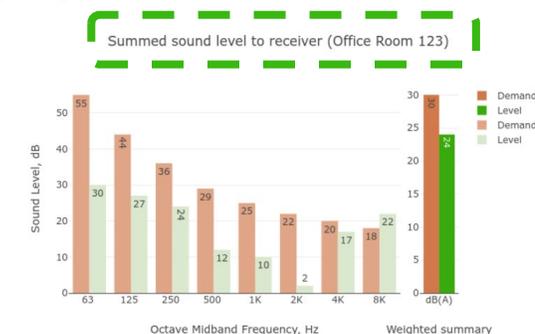
Length (m)	4
Width (m)	3
Height (m)	3
Area	12.0
Volume	36.0

PathName: Extract Air

Duct detail	Airl/s	63	125	250	500	1k	2k	4k	8k	dB(A)	
AHU 123	3000	Ld	-	-	-	-	-	-	-	-	
Data set: Extract; Metric: Sound Power Level		Lw	82	81	80	80	80	76	75	74	
Silencer 1	3000	Ld	-7	-15	-24	-39	-45	-40	-23	-17	
Model: CALMO a-1621-1600-800-1250; Size (W x H): 1600mm x 800mm; Length: 1250mm; Velocity: 2m/s; Pressure Drop: 7Pa		Lw	28	28	24	22	19	16	15	13	
Rectangular Duct	3000	Ld	-2	-1	-1	-0	-0	-0	-0	-0	
Size (W x H): 1600mm x 800mm; Length: 3m		Lw	-	-	-	-	-	-	-	-	
Branch: Takeoff	333	Ld	-10	-10	-10	-10	-10	-10	-10	-10	
Size (Main): 1600mm x 800mm; Size (Main Continuation): 1600mm x 800mm; Bend Radius (Main Continuation): 0mm; Size (Takeoff): 400mm x 400mm; Bend Radius (Takeoff): 0mm		Lw	18	12	<10	<10	<10	<10	<10	<10	
Rectangular Duct	333	Ld	-4	-2	-1	-0	-0	-0	-0	-0	
Size (W x H): 400mm x 400mm; Length: 3m		Lw	-	-	-	-	-	-	-	-	
Branch: Takeoff	55	Ld	-8	-8	-8	-8	-8	-8	-8	-8	
Size (Main): 400mm x 400mm; Size (Main Continuation): 400mm x 400mm; Bend Radius (Main Continuation): 0mm; Size (Takeoff): 200mm; Bend Radius (Takeoff): 0mm		Lw	12	<10	<10	<10	<10	<10	<10	<10	
Circular Duct	55	Ld	-0	-0	-0	-0	-1	-1	-1	-0	
Size (Diameter): 200mm; Length: 3m		Lw	-	-	-	-	-	-	-	-	
Branch: Takeoff	16	Ld	-6	-6	-6	-6	-6	-6	-6	-6	
Size (Main): 200mm; Size (Main Continuation): 200mm; Bend Radius (Main Continuation): 0mm; Size (Takeoff): 125mm; Bend Radius (Takeoff): 0mm		Lw	<10	<10	<10	<10	<10	<10	<10	<10	
Extract Diffusor 1	16	Ld	-28	-21	-10	-11	-5	-13	-12	-12	
Data set: Supply Diffusor 1 (Copy) - DataSet IL; Metric: Insertion Loss		Lw	15	15	21	15	13	0	0	0	
Room Effect: Classic Field	16	Ld	-4	-4	-4	-4	-4	-4	-4	-4	
Size (W x H x L): 3m x 3m x 4m; Number of Inlets/Outlets: 1; Receiver Distance (Average): 1.5m; Room Absorption: Office room; Directivity Factor: 2		Lw	-	-	-	-	-	-	-	-	
Demand		Lk	55	44	36	29	25	22	20	18	30
Level		Lp	16	16	20	12	10	-	12	17	20
Damping requirement		Ld	-	-	-	-	-	-	-	-0	

Calculation Summary

Project: AHU project 123



Analysis

Views

Analysis

Filter

Libraries

Library

Receivers

Product Configurators

Swegon Silencers

Calculation Modules

Rectangular Breakout In-Line

Circular Breakout In-Line

Library Element Quick Add



Straight Duct



Flexible Duct



Elbow



Branching



Calculation Summary

Silencer Schedule

Silencer Submittal

AHU project 123

Drucken Sie die Schalldämpferinformationen aus, indem Sie den Mauszeiger über "Berichte" bewegen und auf "Schalldämpfer einreichen" klicken

Supply air										
Frequency	dB(A)	63	125	250	500	1k	2k	4k	8k	
Total	22	30	27	21	1	-	-	16	20	
Required Insertion Loss	30	-	-	-	-	-	-	-	-	
Receiver: Office Room 123 (30 dB(A))	24	30	27	24	12	10	2	17	22	
AHU 123 Supply										
	87	85	83	82	82	82	78	78	76	
Silencer 1 CALMO a-1621-1600-800-1250										
	62	-7	-15	-24	-39	-45	-40	-23	-17	
		28	28	24	22	19	16	15	13	
Rectangular Duct 1600mm x 800mm x 3m										
	61	-2	-1	-1	-0	-0	-0	-0	-0	
Branch - Takeoff 1600mm x 800mm/400mm x 400mm										
	52	-10	-10	-10	-10	-10	-10	-10	-10	
		18	12	<10	<10	<10	<10	<10	<10	
Rectangular Duct 400mm x 400mm x 3m										
	51	-4	-2	-1	-0	-0	-0	-0	-0	
Branch - Takeoff 400mm x 400mm/200mm										
	43	-8	-8	-8	-8	-8	-8	-8	-8	
		12	<10	<10	<10	<10	<10	<10	<10	
Circular Duct 200mm x 3m										
	42	-0	-0	-0	-0	-1	-1	-1	-0	
Branch - Takeoff 200mm/125mm										
	37	-6	-6	-6	-6	-6	-6	-6	-6	
		<10	<10	<10	<10	<10	<10	<10	<10	
Supply Diffusor 1 (Copy) EAGLE Ceiling C										
	26	-16	-11	-8	-16	-18	-12	-11	-11	
		<10	<10	<10	<10	<10	<10	<10	<10	
Room Effect - Classic Field Office Room 123										
	22	-4	-4	-4	-4	-4	-4	-4	-4	

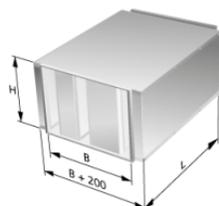
Extract Air										
Frequency	dB(A)	63	125	250	500	1k	2k	4k	8k	
Total	20	16	16	20	12	10	-	12	17	
Required Insertion Loss	30	-	-	-	-	-	-	-	-	
Receiver: Office Room 123 (30 dB(A))	24	30	27	24	12	10	2	17	22	
AHU 123 Extract										
	84	82	81	80	80	80	76	75	74	
Silencer 1 CALMO a-1621-1600-800-1250										
	59	-7	-15	-24	-39	-45	-40	-23	-17	
		28	28	24	22	19	16	15	13	
Rectangular Duct 1600mm x 800mm x 3m										
	59	-2	-1	-1	-0	-0	-0	-0	-0	
Branch - Takeoff 1600mm x 800mm/400mm x 400mm										
	49	-10	-10	-10	-10	-10	-10	-10	-10	
		18	12	<10	<10	<10	<10	<10	<10	
Rectangular Duct 400mm x 400mm x 3m										
	48	-4	-2	-1	-0	-0	-0	-0	-0	
Branch - Takeoff 400mm x 400mm/200mm										
	41	-8	-8	-8	-8	-8	-8	-8	-8	
		12	<10	<10	<10	<10	<10	<10	<10	
Circular Duct 200mm x 3m										
	40	-0	-0	-0	-0	-1	-1	-1	-0	
Branch - Takeoff 200mm/125mm										
	35	-6	-6	-6	-6	-6	-6	-6	-6	
		<10	<10	<10	<10	<10	<10	<10	<10	
Extract Diffusor 1 ALG										
	24	-28	-21	-10	-11	-5	-13	-12	-12	
		15	15	21	15	13	<10	<10	<10	
Room Effect - Classic Field Office Room 123										
	20	-4	-4	-4	-4	-4	-4	-4	-4	

[Add Path](#)

Silencer Submittal

Project: AHU project 123

CALMO a-1621-1600-800-1250



Path

Supply air

Position

Silencer 1

Quick facts

- Included in the MagiCAD database
- Excellent aerodynamic characteristics
- Available with cleaning cover
- Available in an insulated version with 50 mm thick fire-resistant stone wool
- Connection sizes ranging from 400x300 to 2200x2200
- Remarkably space-saving rectangular sound attenuator
- Extremely low pressure drop via tapered acoustic baffle surfaces
- Type-approved, environmentally friendly sound attenuating material, ISOVER Cleantec® PLUS
- ISOVER Cleantec® PLUS is cleanable using a wet method.

General

- The CALMO is, due to its unique design with connections facing the side baffles, suitable for use both in ducts and in direct connection to ventilation units.

Dimensions

Width, B	1600mm
Height, H	800mm
Length, L	1250mm
Weight	111.57kg

Data

Inlet	Ideal Outlet Conditions - 3 to 4 diameters of straight duct
Outlet	Ideal Outlet Conditions - 3 to 4 diameters of straight duct
Air flowl/s	3000
Velocity(m/s)	2
Pressure drop(Pa)	7

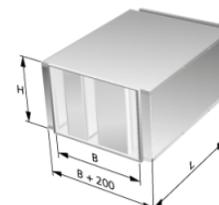
Frequency band	63	125	250	500	1k	2k	4k	8k	Sum db(A)
Lw before attenuator	40	46	49	42	40	42	43	41	49
Attenuation (Ld)	7	15	24	39	45	40	23	17	
Sound generation (Lw)	28	28	24	22	19	16	15	13	
Lw after attenuator	35	32	27	22	19	16	21	24	28

Date: 8/10/2023 - Version: 1.1.22.56531

Silencer Submittal

Project: AHU project 123

CALMO a-1621-1600-800-1250



Path

Extract Air

Position

Silencer 1

Quick facts

- Included in the MagiCAD database
- Excellent aerodynamic characteristics
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- Available in an insulated version with 50 mm thick fire-resistant stone wool
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Width, B	1600mm
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Data

Inlet	Ideal Outlet Conditions - 3 to 4 diameters of straight duct
Outlet	Ideal Outlet Conditions - 3 to 4 diameters of straight duct
Air flowl/s	3000
Velocity(m/s)	2
Pressure drop(Pa)	7

Frequency band	63	125	250	500	1k	2k	4k	8k	Sum db(A)
Lw before attenuator	26	34	45	45	51	39	39	38	52
Attenuation (Ld)	7	15	24	39	45	40	23	17	
Sound generation (Lw)	28	28	24	22	19	16	15	13	
Lw after attenuator	28	28	26	22	19	16	18	22	27

Date: 8/10/2023 - Version: 1.1.22.56531



Tipps und Tricks

Sie können Objekte stummschalten, indem Sie auf das Stummschaltssymbol
 Dann wird das Objekt grau und wird nicht mehr in die Schallberechnung einbezogen.
 Sie können die Stummschaltung auf die gleiche Weise aufheben.

Extract Air		dBA	63	125	250	500	1k	2k	4k	8k
●	Frequency									
●	Total	20	16	16	20	12	10	-	12	17
	Required Insertion Loss	30	-	-	-	-	-	-	-	-
●	Receiver: Office Room 123 (30 dB(A))	24	30	27	24	12	10	2	17	22
🎯	AHU 123 Extract	84	82	81	80	80	80	76	75	74
📦	Silencer 1 CALMO a-1621-1600-800-1250	59	-7	-15	-24	-39	-45	-40	-23	-17
📦	Rectangular Duct 1600mm x 800mm x 3m	59	-2	-1	-1	-0	-0	-0	-0	-0
📦	Branch - Takeoff 1600mm x 800mm/400mm x 400mm	49	-10	-10	-10	-10	-10	-10	-10	-10
📦	Rectangular Duct 400mm x 400mm x 3m	48	-4	-2	-1	-0	-0	-0	-0	-0
📦	Branch - Takeoff 400mm x 400mm/200mm	41	-8	-8	-8	-8	-8	-8	-8	-8
📦	Circular Duct 200mm x 3m	40	-0	-0	-0	-0	-1	-1	-1	-0

Add Path

Bewegen Sie den Mauszeiger über diesen Bereich um den Balken anzuzeigen

Schaltfläche "Stummschalten"

Extract Air		dBA	63	125	250	500	1k	2k	4k	8k
●	Frequency									
●	Total	48	22	30	41	41	47	35	35	34
	Required Insertion Loss	30	-	-	-	-	-	-	-	-
●	Receiver: Office Room 123 (30 dB(A))	48	30	32	41	41	47	35	35	34
🎯	AHU 123 Extract	84	82	81	80	80	80	76	75	74
📦	Silencer 1 CALMO a-1621-1600-800-1250	-	-7	-15	-24	-39	-45	-40	-23	-17
📦	Rectangular Duct 1600mm x 800mm x 3m	84	-2	-1	-1	-0	-0	-0	-0	-0
📦	Branch - Takeoff 1600mm x 800mm/400mm x 400mm	75	-10	-10	-10	-10	-10	-10	-10	-10
📦	Rectangular Duct 400mm x 400mm x 3m	74	-4	-2	-1	-0	-0	-0	-0	-0
📦	Branch - Takeoff 400mm x 400mm/200mm	66	-8	-8	-8	-8	-8	-8	-8	-8
📦	Circular Duct 200mm x 3m	66	-0	-0	-0	-0	-1	-1	-1	-0
📦	Branch - Takeoff 200mm/125mm	60	-6	-6	-6	-6	-6	-6	-6	-6
📶	Extract Diffusor 1 ALG	52	-28	-21	-10	-11	-5	-13	-12	-12
📦	Room Effect - Classic Field Office Room 123	48	-4	-4	-4	-4	-4	-4	-4	-4

Der Vorteil besteht darin, sehen zu können, was das Ergebnis ist, ohne z.B. einen Schalldämpfer, ohne ein Objekt zu löschen.

Schnelles Hinzufügen von Bibliothekselementen ohne Drag & Drop

Bewegen Sie den Mauszeiger über das Elementsymbol Schnelles Hinzufügen durch Klicken auf "Hinzufügen"

Extract Air		dB(A)								
Frequency		63	125	250	500	1k	2k	4k	8k	
Total		20	16	16	20	12	10	-	12	17
Required Insertion Loss		30	-	-	-	-	-	-	-	-
Receiver: Office Room 123 (30 dB(A))		24	30	27	24	12	10	2	17	22
AHU 123 Extract		84	82	81	80	80	80	76	75	74
Silencer 1 CALMO a-1621-1600-800-1250		59	-7	-15	-24	-39	-45	-40	-23	-17
Rectangular Duct 1600mm x 800mm x 3m		59	-2	-1	-1	-0	-0	-0	-0	-0
Branch - Takeoff 1600mm x 800mm/400mm x 400mm		49	-10	-10	-10	-10	-10	-10	-10	-10
Rectangular Duct 400mm x 400mm x 3m		48	-4	-2	-1	-0	-0	-0	-0	-0
Branch - Takeoff 400mm x 400mm/200mm		41	-8	-8	-8	-8	-8	-8	-8	-8
Circular Duct		40	-0	-0	-0	-0	-1	-1	-1	-0

Add Path

Bewegen Sie den Mauszeiger hierher, um die Leiste zu sehen

Löschen Redigieren

Schnelles Hinzufügen von Elementen

Swegon Silencers

Calculation Modules

- Rectangular Breakout In-Line
- Circular Breakout In-Line

Library Element Quick Add

Straight Duct

- Add** (highlighted)
- Branch

Flexible Duct

Elbow

Branching

End Reflection

Receiver: Office Room 123 (30 dB(A))		dB(A)								
		24	30	27	24	12				
AHU 123 Supply		87	85	83	82	82				
Silencer 1 CALMO a-1621-1600-800-1250		62	-7	-15	-24	-35	28	28	24	22
Rectangular Duct 1600mm x 800mm x 3m		61	-2	-1	-1	-0				
Branch - Takeoff 1600mm x 800mm/400mm x 400mm		52	-10	-10	-10	-10	18	12	<10	<10
Rectangular Duct 400mm x 400mm x 3m		51	-4	-2	-1	-0				
Branch - Takeoff 400mm x 400mm/200mm		43	-8	-8	-8	-8	12	<10	<10	<10
Circular Duct 200mm x 3m		42	-0	-0	-0	-0				
Branch - Takeoff 200mm/125mm		37	-6	-6	-6	-6	<10	<10	<10	<10
Supply Diffusor 1 (Copy) EAGLE Ceiling C		26	-16	-11	-8	-16	<10	<10	<10	<10
Room Effect - Classic Field Office Room 123		22	-4	-4	-4	-4				

Ermitteln des korrekten Druckabfalls für den Schalldämpfer mithilfe von Systemeffekten

Silencer Selection

Identity

Tag: Silencer 1 Quantity: 1

Dimensions & Airflow

Shape: Rectangular/CALMO

Duct Width: 1600 mm Duct Height: 800 mm

Max Length: 1250 mm

Override Airflow & Velocity

Silencer Flow Rate: 3000 l/s Velocity: 2.34 m/s

Maximum Pressure Drop: 50 Pa

System Effects

Silencer Inlet Condition: Axial Fan

Diameter from Silencer: 0 Transition Length:

Silencer Outlet Condition: Radius Elbow with no turning vanes

Override Required Inserti...

Required Insertion Loss

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Sound Before Attenuator	87	85	83	82	82	82	78	78	76
Required Insertion Loss	30	-	-	-	-	-	-	-	-
Calculated Insertion Loss	-	-	-	-	-	-	-	-	-
Safety Factor	0	0	0	0	0	0	0	0	0

Silencer Selection

Model	Octave Midband Frequency, Hz											
	L	PD	w/SE	A	63	125	250	500	1k	2k	4k	8k
CALMO a-1611-1600-800-650	650	6	12		5	10	15	23	27	27	15	10
Generated Noise			+9		28	28	24	22	19	16	15	13
End Result				30	32	32	30	15	9	11	24	27
CALMO a-1621-1600-800-1250	1250	7	14		7	15	24	39	45	40	23	17
Generated Noise			+9		28	28	24	22	19	16	15	13
End Result				22	30	27	21	1	0	0	16	20
CALMO a-1622-1600-800-1250	1250	3	7		4	9	16	21	25	18	11	11
Generated Noise			+9		11	11	<10	<10	<10	<10	<10	<10
End Result				32	33	33	29	17	11	20	28	26

Options

Uninsulated Cleaning Cover: None

Fire-Resistant Insulated Cleaning Cover: None

- Insulated 50mm Stone Wool
- Perforated Sheet Metal Lining
- Flange Connection

Resources

- Product Sheet: [Attenuator with recessed connection for rectangular ducts](#)
- Brochure: [Acoustics Overview](#)
- Instruction: [Installation, commissioning, maintenance](#)
- Quality: [Approval 2706/92, Duct insulation](#)
- [Building product declaration](#)

Image



Druckabfall mit Systemeffekten

Druckabfall bei idealen Bedingungen
(3-4 Durchmesser gerader Kanal)

Silencer Selection

Identity

Tag: Silencer 1 Quantity: 1

Dimensions & Airflow

Shape: Rectangular/CALMO

Duct Width: 1600 mm Duct Height: 800 mm

Max Length: 1250 mm

Override Airflow & Velocity:

Silencer Flow Rate: 3000 l/s Velocity: 2.34 m/s

Maximum Pressure Drop: 3 Pa

System Effects

Silencer Inlet Condition: Axial Fan

Diameter from Silencer: 0 Transition Length: [empty]

Silencer Outlet Condition: Radius Elbow with no turning vanes

Override Required Inserti...

Required Insertion Loss

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Sound Before Attenuator	87	85	83	82	82	82	78	78	76
Required Insertion Loss	30	-	-	-	-	-	-	-	-
Calculated Insertion Loss	-	-	-	-	-	-	-	-	-
Safety Factor	0	0	0	0	0	0	0	0	0

Silencer Selection

Model	Octave Midband Frequency, Hz											
	L	PD	w/SE	A	63	125	250	500	1k	2k	4k	8k
No silencers found matching your parameters												

Options

Please select a silencer to configure options

Wenn in der Liste keine Schalldämpfer angezeigt werden, Das liegt wahrscheinlich daran, dass der maximale Druckabfall zu niedrig eingestellt ist. Erhöhen Sie den Wert auf 50 Pa oder höher.

Swegon 

