

MagiCAD plugin for AutoCAD

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1 General

About this document

This document contains the instructions for using the EKOVENT MagiCAD plugin with Autodesk AutoCAD application. Plugin application is an add-in application in AutoCAD and requires that MagiCAD is also installed. Plugin application integrates the EKOVENT Roof hood and roof inlet selection tool to AutoCAD and MagiCAD.

With the plugin user can:

- Do the EKOVENT roof hood and inlet product selection with the EKOVENT product selection web application.
- Selection can be done in three different categories for:
 - o Exhaust products.
 - Outdoor supply products.
 - Combination products with exhaust and outdoor supply connections.
- Insert the selected product into MagiCAD project and AutoCAD drawing.

After insert operation, user will attach the inserted product into MagiCAD ventilation ductwork and is able to see the technical data of the products and see the product related results of the MagiCAD specific calculations.

Note that plugin will check that the operation and product specific MagiCAD systems (ventilation outdoor supply / exhaust) are available in MagiCAD project. If the systems are missing, user is informed about that. User can still view the products in the EKOVENT product selection even the insert operation is not possible.



Installing the software

EKOVENT MagiCAD plugin for AutoCAD supports the following MagiCAD and AutoCAD versions:

- MagiCAD 2025 and AutoCAD 2021-2025
- MagiCAD 2026 and AutoCAD 2023-2026

Before the installation

- 1. Workstation administrator privileges are recommended for installation.
- Notice if you have several AutoCAD versions on your workstation. Before running the plugin installer, start MagiCAD to make sure that EKOVENT MagiCAD Plugin for AutoCAD installs on the same AutoCAD platform version where MagiCAD is installed.

Installation

- Download the plugin installer file from MagiCAD portal to your workstation: https://portal.magicad.com/Download/ProductSearch?searchStr=EKOVENT&categoryId=3
- 2. Run the EKOVENT MagiCAD for AutoCAD plugin installer on your workstation and follow the instructions in installer.



Start and using of the application

The plugin is automatically loaded and is ready to be used once MagiCAD and AutoCAD is started next time after the plugin installation.

Before you start using the EKOVENT plugin, create or open a MagiCAD ventilation project in AutoCAD. All the necessary ventilation systems should be available in the project.

Locate the MagiCAD Connect tab from the AutoCAD ribbon. Once the EKOVENT plugin is loaded, the EKOVENT ribbon panel and split button can be found from MagiCAD Connect tab. Split button contains separate buttons for different functions: "Insert Exhaust", "Insert Outdoor Supply" and "Insert Combination".



Figure 1 EKOVENT panel and split button functions



2 Functions

EKOVENT plugin user interface overview

EKOVENT plugin contains three different functions with buttons in the AutoCAD UI. Buttons exists in the MagiCAD plugin tab and EKOVENT specific panel.

Insert Exhaust function



With this command, user can select the roof hood products for exhaust systems from EKOVENT selection tool web application. In addition, user can select also a suitable roof inlet for the roof hood.

After the selection, user can insert the selected product(s) into MagiCAD project and AutoCAD drawing as a 3D geometry object which contains all the HVAC specific data offered by EKOVENT selection tool.

For more information see chapter Detailed Insert Exhaust function.

Insert Outdoor Supply function



With this command, user can select the roof hood products for outdoor supply systems from EKOVENT selection tool web application. In addition, user can select also a suitable roof inlet for the roof hood.

After the selection, user can insert the selected product(s) into MagiCAD project and AutoCAD drawing as a 3D geometry object which contains all the HVAC specific data.

For more information see chapter Detailed Insert Outdoor Supply function.



Insert Combination function



With this command, user can select the combination roof hood products for exhaust and outdoor supply systems from EKOVENT selection tool web application. In addition, user can select also a suitable roof inlet for the roof hood.

After the selection, user can insert the selected product(s) into MagiCAD project and AutoCAD drawing as a 3D geometry object which contains all the HVAC specific data.

For more information see chapter Detailed Insert Combination function.



Detailed Insert Exhaust function

Pre-requirement for inserting the exhaust type roof hoods and inlets is to have the MagiCAD project with at least one exhaust system. Without the system, user can view the products in EKOVENT selection tool with plugin but insert function is not available. If the required system is missing, plugin will inform user about this with a specific dialog.

Follow these steps to insert the roof hood and inlet products to AutoCAD drawing and MagiCAD project.

- 1. Start the insert operation from EKOVENT panel button or type the command *EKOVENT_INS_EXH*.
- 2. If MagiCAD project contains the required exhaust system, the EKOVENT selection tool is opened in plugin and all the exhaust type roof hoods and suitable inlets are available for selection. User can filter the products with technical data or select a specific product.

EKOVENT MagiCAD Plugin for AutoCAD 2024.9.1				_	\times
Takhuvar - Sök produkt Ange önskade egenskaper och prestanda nedan för att l	itta lämplig produkt.				*
Form Design					
Alla V Alla V					
Luftflöde (l/s)					
Tryckfall (Pa)					
Sök produkt Rensa					
EKO-HJ Huven är utformad så att luffströmmen rik	as uppåt och ger luften en hög utloppshastighet.				
Storlek	Tryckfall Pa	Ljudnivå dBA			
EKO-HJ-100	-	-			
EKO-HJ-125	-	-			
EKO-HJ-160	-	-			
EKO-HJ-200	-	-			
EKO-HJ-250	-	-			
Ytterligare 11 storlekar					
ЕКО-НУТ					
Storlek	Tryckfall	Ljudnivå			
EKO-HYT-4	Pa	dBA			
EKO-HYT-5					
EKO-HYT-6	-				
EKO-HYT-7	-				
EKO-HYT-8	-				
Ytterligare 11 storlekar					
MagiCAD					

Figure 2 EKOVENT Selection tool with exhaust roof hoods



3. After the desired product family and variant is selected, user can see the product variant specific data according to given air flow value. Finally, user starts the insert function of the roof hood or the combination of roof hood and inlet from dedicated button in selection tool.

S EKOVENT MagiCAD Plugin for AutoCAD 2024.9.1	-	×
		•
Här kan du beräkna tryckfall och ljud samt se driftpunkten i ett diagram		
EKO-HYT-6-1-1		
Enligt tabell Material Ytbehandling 6 Y ZinkMagnesium ZMI20 (C4) Obehandlad Y		
Lägg till takhuv till MagiCAD		
EKO-T-5-1-1-1-0		
Lägg till takhuv med takgenomföring till MagiCAD		
Bertahnigsmetod Luttitode till tryckfall ↓ 250 Rema EKO-TS-11110 ▲ Ladda ner diagram som SVG		
100 100 1000 1000		Ţ

Figure 3 EKOVENT Selection tool with product view



- 4. Next plugin shows the Insert roof hood dialog where user can:
 - See the product codes of the selected products.
 - Change the plugin generated user code for roof hood.
 - Change the offset (product height level) values for roof hood.
 - Change the inlet user code, if inlet was selected.
 - Change the offset values for inlet, if inlet was selected.
 - Select the exhaust ventilation system and air flow.

Insert function is finalized with insert button.

Insert roof hood - EKOVEN	NT MagiCAD Plugin for Aut	oCAD 2024.9.1	×
Roof hood		Ventilation systems	
Product code: EKO-HYT	-6-1-1	Exhaust	
User code: EKOH83	2384	System name: Exhaust 1 V	
Top offset: 1330	mm	Air flow: 250 I/s	
Bottom offset: 1000	mm		
Roof inlet Product code:		Outdoor System name:	
User code:		Air flow: 0 I/s	
Top offset:	mm		
Bottom offset:	mm		
		Insert Cancel	

Figure 4 EKOVENT plugin dialog with exhaust product



5. Finally, user is able to drag and drop the 3D geometry object in the AutoCAD drawing and rotate the product. Product is connected to exhaust ventilation ductwork with its bottom connector.

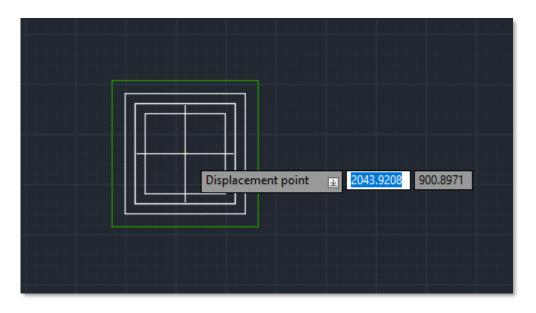


Figure 5 Exhaust roof hood product placement in AutoCAD drawing

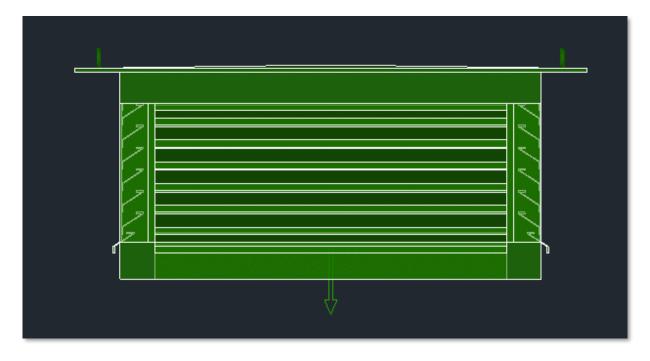


Figure 6 Exhaust roof hood product 3D geometry in AutoCAD drawing



Grille direction

 \bigcirc

90.00 deg

14

Ok

8k

Cancel

- MagiCAD V&P Part Properties × 7 Filter Preview Properties Ventilation Property Value EKO-HYT-6-1-1 100 General Part type Exhaust air device MC LOD MC LOD 350 50 EH1 "Exhaust 1" System (ductwork) Location 30 Storey Storey 1 Top of part 1280 mm Apt [Pa] 20 Connection level 1000 mm Installation level 1000 mm Bottom of part 950 mm 10 Top of part, absolute [m] 21.2800 Connection level, absolute [m] 21.0000 Installation level, absolute [m] 21.0000 5 Bottom of part, absolute [m] 20.9500 Position of part 3427.9496, 1255.3986, 1000.0000 Product 200 Type name EKO-HYT-6-1-1 300 500 200 8 Product (exhaust air) EKOH832384 "EKO-HYT" Size (exhaust air) EKO-HYT-6-1-1 \sim qv [l/s] Connection size (air device) 400x400 mm 22 22 22 21 Manufacturer EKOVENT 21
- 6. Product specific technical data is visible in the MagiCAD part properties dialog and also in MagiCAD ductwork balancing report after the balancing calculation is run.



250

500

1k Sound power level [dB]

4

🙆 Mag	iCAD - I	Duct	twork E	Balancii	ng Repo	rt															×
Edit																					
⊖ Sup	ply						Ou	itdoor suj	pply					(Gene	ral resu	lts				Calculate resulting flow for unbalanced terminals
OExt	act						O Ou	itdoor ex	haust												
																					Update balancing
Locatio	Level	No	Zone	Syste	Туре	Series	Product	Size	L	Insula q	v se av	, ,	v	dot	Kfact	dp/L	ot	pst	adj.	qv Wami	nas
									[m]		/s] [[/:	's]	[m/s]	[Pa]		dp/L [Pa/m	[Pa]	[Pa]		[%]	
	Storey Storey	1		EH1 EH1	ROOT DUCT	Rect		400x40	10		50, 25 50, 25		1,6	0,1		0.08	6,5	5,1			
🔶	Storey	2		EH1	EXHAU		EKO-H	400x40			50, 25		1,6	6,5		0,00	6,5	3,1		10	
	Pr	revio	us warr	ning/err	or				Next	warning/e	error										Ok - Update to model Cancel

Figure 8 MagiCAD Ductwork balancing report



Detailed Insert Outdoor Supply function

Pre-requirement for inserting the outdoor supply type roof hoods and inlets is to have the MagiCAD project with at least one outdoor supply system. Without the system, user can view the products in EKOVENT selection tool with plugin but insert function is not available. If the required system is missing, plugin will inform user about this with a specific dialog.

Follow these steps to insert the roof hood and inlet products to AutoCAD drawing and MagiCAD project.

- 1. Start the insert operation from EKOVENT panel button or type the command *EKOVENT_INS_OUT*.
- 2. If MagiCAD project contains the required outdoor supply system, the EKOVENT selection tool is opened in plugin and all the outdoor supply type roof hoods and suitable inlets are available for selection. User can filter the products with technical data or select a specific product.

EKOVENT MagiCAD Plugin for AutoCAD 20	24.9.1		_	×
Takhuvar - Sök produkt Ange önskade egenskaper och prestanda nedan för al	t hitta lämplig produkt.			
Form Design Alla Alla				1
Luttflöde (l/s)				L
Sök produkt Rensa				
EKO-HYT				
Storiek	Tryckfall Pa	Ljudnivå dBA		
EKO-HYT-4	-	-		
EKO-HYT-5	-	-		
EKO-HYT-6	-	-		
EKO-HYT-7	-	-		
EKO-HYT-8		-		
Ytterligare 11 storlekar				
ЕКО-НУҮТ				
Storlek	Tryckfall Pa	Ljudnivå dBA		
EKO-HVYT-5200	84 -	UDA		
EKO-HVYT-5200				
EKO-HVYT-6300				
EKO-HVYT-7300	-	-		
EKO-HVYT-8300	-			
Ytterligare 22 storlekar				
MagiCAD				•

Figure 9 EKOVENT Selection tool with outdoor supply roof hoods



3. After the desired product family and variant is selected, user can see the product variant specific data according to given air flow value. Finally, user starts the insert function of the roof hood or the combination of roof hood and inlet from dedicated button in selection tool.

C EKOVENT MagiCAD Plugin for AutoCAD 2024.9.1	-	• ×
✔ Tillbaka till sök EKO-HYT - Diagram Här kan du beräkna tryckfall och ljud samt se driftpunkten i ett diagram	+ 1 + Hitta storiek <u>▲∎</u> Diagram	A
EKO-HYT-6-1-1		- 1
Enligt tabell Material Ytbehandling 6 V ZinkMagnesium ZM120 (C4) V Obehandlad V Lägg till takhuv till MagiCAD		- 1
соуд ин колич ин моделее ЕКО-Т-5-11-11-10		- 1
Lägg till takhuv med takgenomföring till MagiCAL		- 1
Luttilde till trycktall ↓ Luttilde (I/s) 500 Rensa EKO-HYT-6-11 EKO-T-5-1-1-1-10 Å Ladda ner diagram som SVG Å Ladda ner diagram som SVG	1 SVG	
No exommenderat arbetsområde 10 10 10 10 10 10 10 10 10 10 10 10 10		·
MagiCAD		

Figure 10 EKOVENT Selection tool with product view



- 4. Next plugin shows the Insert roof hood dialog where user can:
 - See the product codes of the selected products.
 - Change the plugin generated user code for roof hood.
 - Change the offset (product height level) values for roof hood.
 - Change the inlet user code, if inlet was selected.
 - Change the offset values for inlet, if inlet was selected.
 - Select the outdoor supply ventilation system and air flow.

Insert function is finalized with insert button.

🙆 Insert roof hood	d - EKOVENT MagiCAD Plugin fo	r AutoCAD 2024.9.1	\times
Roof hood		Ventilation systems	
Product code:	EKO-HYT-6-1-1	Exhaust	
User code:	EKOH342677	System name:	
Top offset:	1330 mm	Air flow: 0 I/s	
Bottom offset:	1000 mm		
Roof inlet Product code: User code: Top offset:	EKO-T-5-1-1-1-0 EKOI342677	Outdoor System name: Outdoor air 1 ~ Air flow: 500 I/s	
Bottom offset:	165 mm		
		Insert Cancel	

Figure 11 EKOVENT plugin dialog with outdoor supply and inlet products



5. Finally, user is able to drag and drop the 3D geometry object in the AutoCAD drawing and rotate the product. Product is connected to exhaust ventilation ductwork with its bottom connector.

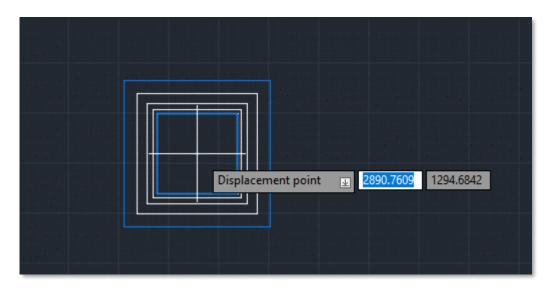


Figure 12 Outdoor supply roof hood and inlet products placement in AutoCAD drawing

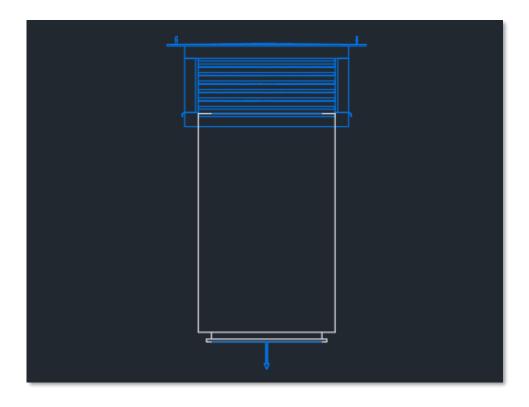


Figure 13 Outdoor supply roof hood and inlet products 3D geometry in AutoCAD drawing



- MagiCAD V&P Part Properties × 7 Filter Preview Properties Ventilation Property Value EKO-HYT-6-1-1 100 General Part type Outdoor air device MC LOD MC LOD 350 50 O1 "Outdoor air 1" System (ductwork) Location 30 Storey Storey 1 Top of part 1280 mm Apt [Pa] 20 Connection level 1000 mm Installation level 1000 mm Bottom of part 950 mm 10 Top of part, absolute [m] 21.2800 Connection level, absolute [m] 21.0000 Installation level, absolute [m] 21.0000 5 Bottom of part, absolute [m] 20.9500 Position of part 3425.4112, 1594.2772, 1000.0000 Product Type name EKO-HYT-6-1-1 300 500 8 Product (outdoor air) EKOH642184 "EKO-HYT" 20 Size (outdoor air) EKO-HYT-6-1-1 \sim qv [l/s] Connection size (air device) 400x400 mm 40 40 39 39 Manufacturer EKOVENT 40 32 Grille direction 90.00 deg 23 \bigcirc 4 500 1k Sound power level [dB] Ok Cancel
- 6. Product specific technical data is visible in the MagiCAD part properties dialog and also in MagiCAD ductwork balancing report after the balancing calculation is run.



Supply O Outdoor supply O General results Extract O Utdoor exhaust
Extract Outdoor exhaust
atio Level No Zo Syste Type Series Produc Size L Insula qvs qv v dpt [rs] [radi dp/L pt pst adj. qv] Wamings
Storey 1 01 ROOT 500, 500,0
Storey O1 DUCT Rect 400x40 5.4 500. 500.0 3.1 1.6 0.30 -45.2 -51.1
Storey O1 BEND- Rect 400x40 500, 500,0 3,1 4,2 0.720 -43,6
Storey 01 DUCT Rect 400x40 0.8 500, 500,0 3,1 0,2 0,30 -39,4 -45,2
Storey O1 COMP 400x40 500, 500,0 3.1 25.0 -39,1
Storey O1 DUCT EKOVE 400x40 0.0 500. 500.0 3.1 0.0 0.30 -14.1 -20.0
\Storey 2 01 OUTD EKO+H 400x40 500, 500,0 3,1 14,1 -14,1 10

Figure 15 MagiCAD Ductwork balancing report



Detailed Insert Combination function

Pre-requirement for inserting the combination type roof hoods and inlets is to have the MagiCAD project with at least one exhaust system and outdoor supply system. Without the systems, user can view the products in EKOVENT selection tool with plugin but insert function is not available. If the required systems are missing, plugin will inform user about this with a specific dialog.

Follow these steps to insert the roof hood and inlet products to AutoCAD drawing and MagiCAD project.

- 1. Start the insert operation from EKOVENT panel button or type the command *EKOVENT_INS_COMBI*.
- 2. If MagiCAD project contains the required exhaust and outdoor supply systems, the EKOVENT selection tool is opened in plugin and all the combination type roof hoods and suitable inlets are available for selection. User can filter the products with technical data or select a specific product.

EKOVENT MagiCAD Plugin for AutoCAD 2024	9.1	-	×
Takhuvar - Sök produkt Ange önskade egenskaper och prestanda nedan för att h	tta lämplig produkt.		*
Form Design			ł
Luftflöde (l/s)			ł
Tryckfall (Pa)			l
Sök produkt Rensa			
EKO-HKE EKO-HKE är en kombihuv för användning	komfort och industrianläggningar.		l
Storiek	Tryckfall Ljudnivâ Pa dBA		
EKO-HKE-20			
EKO-HKE-30			
EKO-HKE-40			
EKO-HKE-50			
EKO-HKE-60			
Ytterligare 19 storlekar			
	- avluttshuv för användning i komfort- och industrianläggningar. Kombihuven har V-HUAS och används därför ofta tillsammans med dessa när man vill uppnå		
Storlek	Tryckfall Ljudnivå Pa dBA		
EKO-HKAS-20			
EKO-HKAS-30			
EKO-HKAS-40			
EKO-HKAS-50			
EKO-HKAS-60			-
MagiCAD			

Figure 16 EKOVENT Selection tool with combination roof hoods



3. After the desired product family and variant is selected, user can see the product variant specific data according to given air flow value. Finally, user starts the insert function of the roof hood or the combination of roof hood and inlet from dedicated button in selection tool.

EKOVENT MagiCAD Plugin for AutoCAD 2024.9.1	– o x
	Hitta storiek Diagram
EKO-HIKE-40-1-1	
Enligt tabell Luttström Material Ytbehandling 40 V Avlutt V ZinkMagnesium ZM120 (C4) V Obehandlad V Lägg till takhuv till MagiCAD	
EKO-TD-16-11-1-10	
Lägg till takhuv med takgenomföring till MagiCAD	
Beräkningsmetod Luttriöde till trycktall 🗸 Luttriöde (l/s) 700 Rensa	
EKO-HKE-40-1-1 EKO-TD-16-1-1-1-0 Ladda ner diagram som SVG Ladda ner diagram som SVG	
f_{1} f_{2}	
MagiCAD	

Figure 17 EKOVENT Selection tool with product view



- 4. Next plugin shows the Insert roof hood dialog where user can:
 - See the product codes of the selected products.
 - Change the plugin generated user code for roof hood.
 - Change the offset (product height level) values for roof hood.
 - Change the inlet user code, if inlet was selected.
 - Change the offset values for inlet, if inlet was selected.
 - Select the exhaust and outdoor supply ventilation system and air flow values.

Insert function is finalized with insert button.

🙆 Insert roof hood - Ek	OVENT MagiCAD Plugin for AutoCAD 20	24.9.1		×
Roof hood		Ventilation systems		
Product code: EKC	D-HKE-40-1-1	Exhaust		
User code: EK	OH863932	System name:	Exhaust 1 v	
Top offset: 16	91 mm	Air flow:	700 l/s	
Bottom offset: 10	00 mm			
User code: EK	D-TD-16-1-1-1-0 OI863932 00 mm 5 mm	Outdoor System name: Air flow:	Outdoor air 1 v 700 l/s	
			Insert Cancel	

Figure 18 EKOVENT plugin dialog with combination and inlet products



5. Finally, user is able to drag and drop the 3D geometry object in the AutoCAD drawing and rotate the product. Product is connected to exhaust ventilation ductwork with its bottom connector.

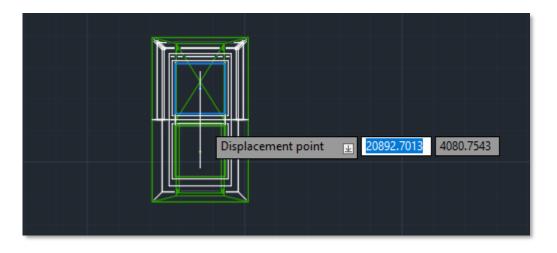


Figure 19 Combination roof hood and inlet products placement in AutoCAD drawing

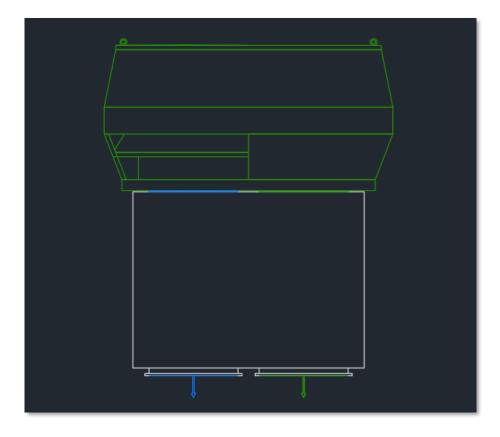


Figure 20 Combination roof hood and inlet products 3D geometry in AutoCAD drawing



- MagiCAD V&P Part Properties \times 7 Filter Preview Properties Ventilation Property Value EKO-HKE-40-1-1 200 General Part type Exhaust air device MC LOD MC LOD 350 100 System (ductwork) EH1 "Exhaust 1" Location 50 Storey Storey 1 Top of part 1690 mm 30 ∆pt [Pa] Connection level 1000 mm 20 Installation level 1000 mm Bottom of part 1000 mm Top of part, absolute [m] 21.6900 10 Connection level, absolute [m] 21.0000 Installation level, absolute [m] 21.0000 Bottom of part, absolute [m] 21.0000 5 Ŧ Position of part 16834.8900, 3829.4372, 1000.0000 3 Ŧ Product Type name EKO-HKE-40-1-1 ą 8 200 500 300 1000 2000 Product (exhaust air) EKOH863932 "EKO-HKE" Size (exhaust air) EKO-HKE-40-1-1 \sim qv [l/s] Connection size (air device) 400x400 mm Manufacturer EKOVENT 44 42 38 32 Grille direction 90.00 deg \bigcirc 500 4 1k Sound power level [dB] Ok Cancel
- 6. Product specific technical data is visible in the MagiCAD part properties dialog and also in MagiCAD ductwork balancing report after the balancing calculation is run.

Figure 21 MagiCAD Part properties dialog

t																						
Supp	y					00	Outdoor si	upply					Ger	ieral res	ults							Calculate resulting flow for unbalanced terminals
Extra	act					0	Dutdoor e	xhaust														
																						Update balancing
cation	Level	No	d Zone	System	Туре	Series	Product	Size	L [m]	Insulati	qv set [l/s]	qv [l/s]	v [m/s]	dpt [Pa]	Kfacto	dp/L [Pa/m]	pt [Pa]	pst [Pa]	adj.	qv [%]	Warnings	
1	Storey 1	1	1	01	ROOT N	1					700,0	700,0										
	Storey 1			01	DUCT	Rect		400x400	2,4		700,0	700,0	4,4	1,3		0,56	-68,9	-80,3				
< _	Storey 1			01	BEND-9			400x400			700,0	700,0	4,4		0.720		-67,5					
T	Storey 1			01	DUCT	Rect		400x400			700,0	700,0	4,4	0,5		0,56	-59,3	-70,7				
Ų.	Storey 1			01	COMPO			400x400			700,0	700,0	4,4	49,0			-58,8					
	Storey 1	-		01	DUCT	EKOVE		400x400						0,0		0,56		-				
Δ_{-}	Storey 1		2	01	OUTDO			400x400			700,0	700,0	4,4	9,8			-9,8		(L)	100		

Figure 22 MagiCAD Ductwork balancing report for outdoor part



						-							~									
) Supp	ly					00	Outdoor su	pply					() Gen	neral res	ults						Ĺ	Calculate resulting flow for unbalanced terminals
Extra	ct					00	Outdoor e	daust														
																						Update balancing
cation	Level	Noc	Zone	System	Туре	Series	Product	Size	L [m]	Insulati	qv set [l/s]	qv [l/s]	v [m/s]	dpt [Pa]	Kfacto	dp/L [Pa/m]	pt [Pa]	pst [Pa]	adj.	qv [%]	Warnings	
1	Storey 1	1		EH1	ROOT N	l					700,0	700,0										
	Storey 1				DUCT	Rect		400x400			700,0	700,0	4,4				110,7	99,2				
(Storey 1				BEND-9			400x400			700,0	700,0	4,4		0.720		108,4					
	Storey 1				DUCT	Rect		400x400			700,0	700,0	4,4	0,5		0,56	100,1	88,7				
Ļ	Storey 1				COMPO			400x400			700,0	700,0	4,4	49,0			99,7					
	Storey 1			_	DUCT	EKOVE		400x400			700,0	700,0	4,4	0,0		0,56		39,2				
\sim	Storey 1	2		EH1	EXHAU		EKO-HK	400x400			700,0	700,0	4,4	50,7			50,7			100		

Figure 23 MagiCAD Ductwork balancing report for exhaust part