



lind**QST** 5.1 User Manual



Lindab Quick
SelectionTool

Including:

- ↳ Indoor Climate Designer
- ↳ Lindab Fan Selection Tool

for lindQST version 5.1
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1 Start page



1: User account and general settings.

2: Main menu that provides quick access to different options inside lindQST environment.

3: Search bar and market choice.

4: Find solutions related to:

- Airborne solutions
- Waterborne solutions
- Acoustic solutions
- Fire protection solutions
- Industrial fan solutions

5: Calculate products (used when you know the product's configuration):

- Airborne products
- Waterborne products
- Acoustic products
- Fire protection products
- Duct leakage
- Wiring schemes

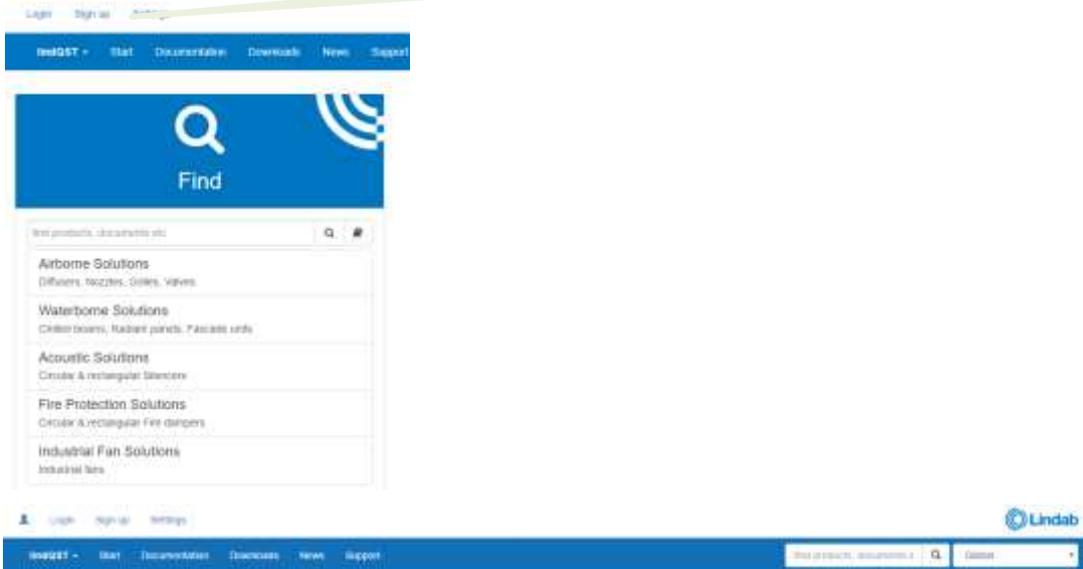
6: Projects: Quick access to your projects and the Indoor Climate Designer.



2 My profile

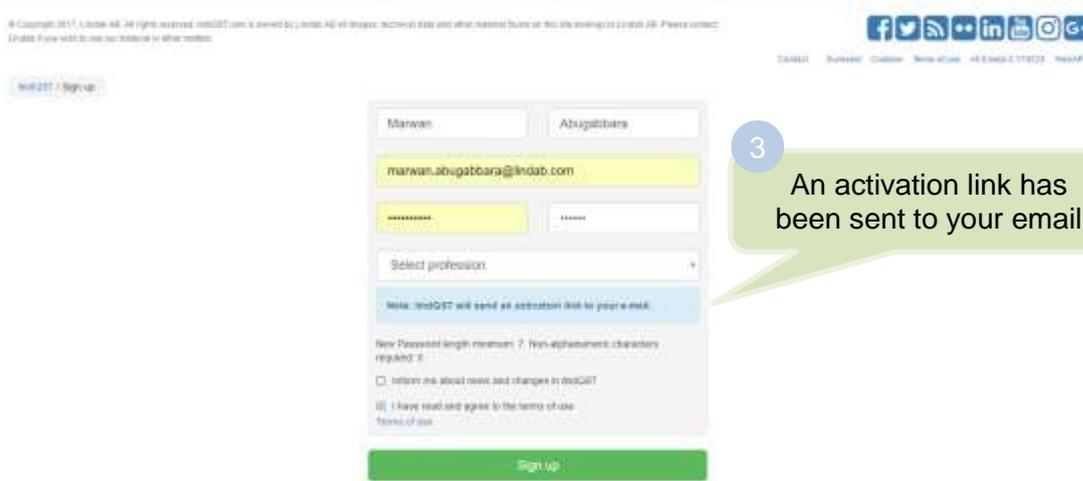
2.1 Sign up

1 Click on Sign up



2 Register for account

3 An activation link has been sent to your email





no_reply@lindqst.com
to me

4
Open your email inbox and click on the activation link

Thank you for creating an account at lindqst.com

Please click the link to activate your account.

<http://testlindqst.lindab.com/ActivateUser.aspx?userName=marwanabuiubara@gmail.com&id=3354fd2b-8db6-4350-afeb-117378a5fa8>

5
Now you're logged in

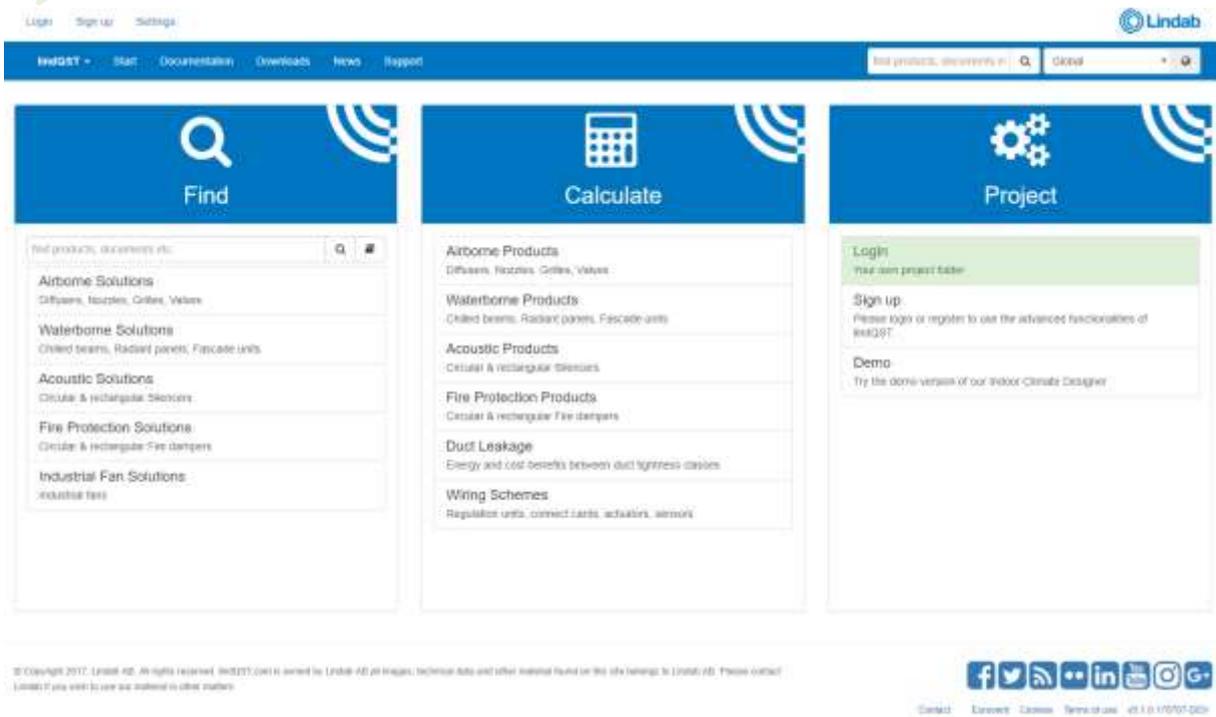
The screenshot shows the Lindab website dashboard. At the top, there is a navigation bar with the Lindab logo and a search bar. Below the navigation bar, there are three main sections: Find, Calculate, and Project. The Find section contains a search bar and a list of product categories: Airborne Solutions, Waterborne Solutions, Acoustic Solutions, Fire Protection Solutions, and Industrial Fan Solutions. The Calculate section contains a list of product categories: Airborne Products, Waterborne Products, Acoustic Products, Fire Protection Products, Duct Leakage, and Wiring Schemes. The Project section contains a list of product categories: Hotel Solution, My Projects, Indoor Climate Designer, and Recent open projects. At the bottom of the page, there is a footer with copyright information and social media icons.



2.2 Login

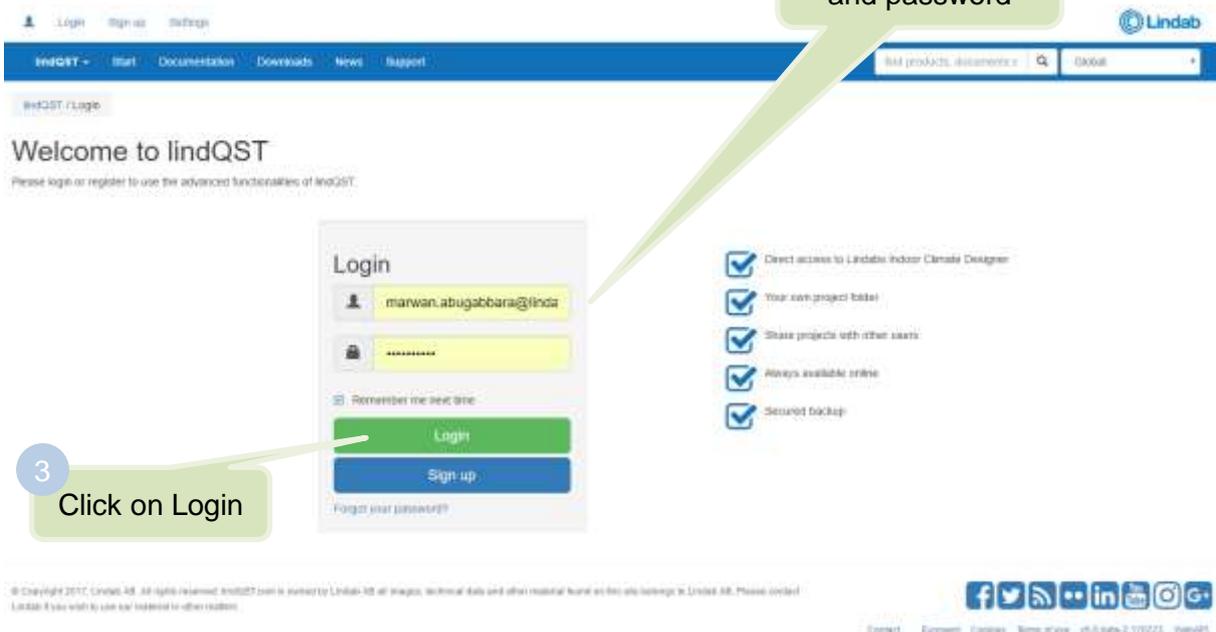
1

Click on login



2

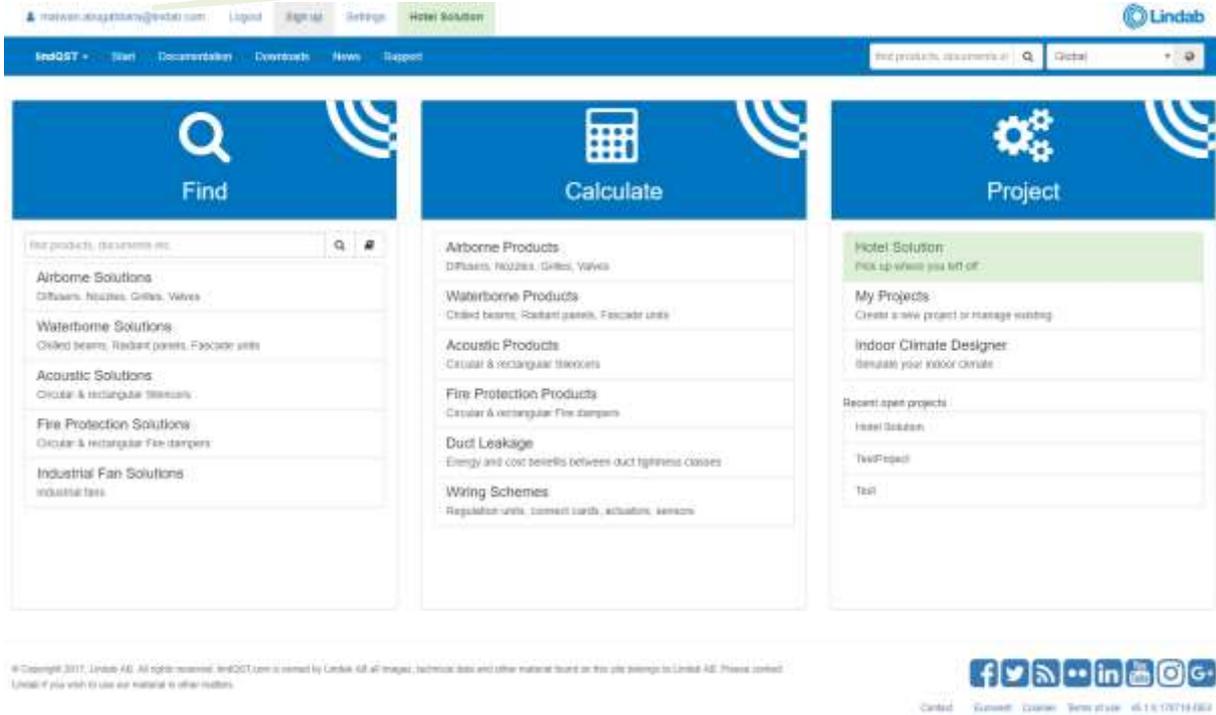
Write your email and password



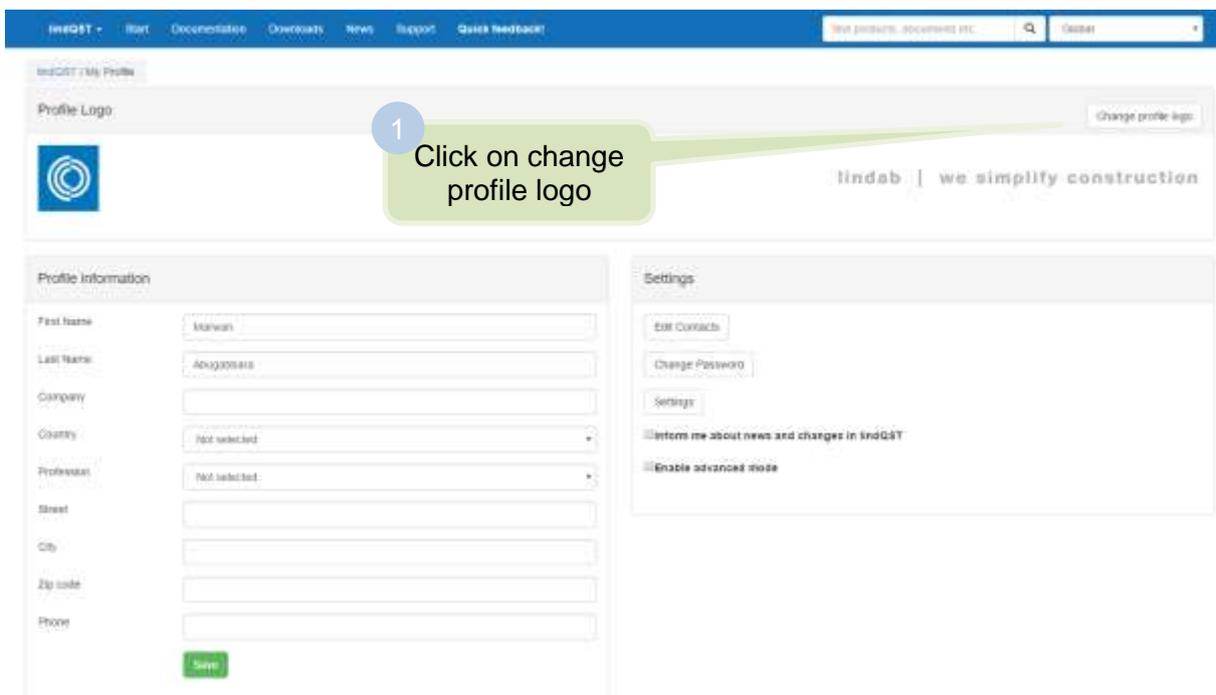


2.3 Edit profile

Click on your profile



2.3.1 Profile logo





Change profile logo

★ You can download Lindab's logo from here

Here you can upload a profile logo to use in your print-outs. Logo must be .png-format and 2160x150 pixels is recommended. Max 4 personal logo uploads.

Download template

Active

Choose File No file chosen Upload

lindab | we simplify construction Download Delete

2 Choose a file on your hard drive that compiles to the mentioned format

Close

2.3.2 Profile information

Edit your contact details

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Profile Logo

Profile Information

First name: Marwan

Last name: Adigjossais

Company:

Country: Not selected

Profession: Not selected

Street:

City:

Zip code:

Phone:

Settings

Edit Contacts

Change Password

Settings

Inform me about news and changes in IndQ&T

Enable advanced mode

Save



2.3.3 Edit contacts

1 Click on edit contacts

2 When you create a project and share it with others, their contact detail will appear here so you can edit them later on

The screenshot shows the 'Profile Information' and 'Settings' sections of a user profile. In the 'Settings' section, the 'Edit Contacts' button is highlighted with a callout box. A modal dialog titled 'Edit Contacts' is open, displaying the message 'You don't have any contacts yet.' and a 'Close' button.

2.3.4 Change password

1 Click on change password

The screenshot shows the 'Profile Information' and 'Settings' sections of a user profile. In the 'Settings' section, the 'Change Password' button is highlighted with a callout box.



Change Password

Current password

New password

Confirm new password

Change Password

Close

- 2 Write your current password
- 3 Write the new password
- 4 Confirm the new password
- 5 Click on change password

Change Password

Your password has been changed!

Close

★ This message will appear when the password has changed successfully

2.3.6 Settings

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Profile Information

Settings

1 Click on settings



The image shows a 'Settings' dialog box with the following elements and callouts:

- Settings** (Title bar)
- General** (Section header)
 - Enable advanced mode
 - Advanced mode will display additional information and settings in lindQST.
- Units** (Section header)
 - Air volume: Liter per second [l/s]
- Buttons:** OK, Cancel

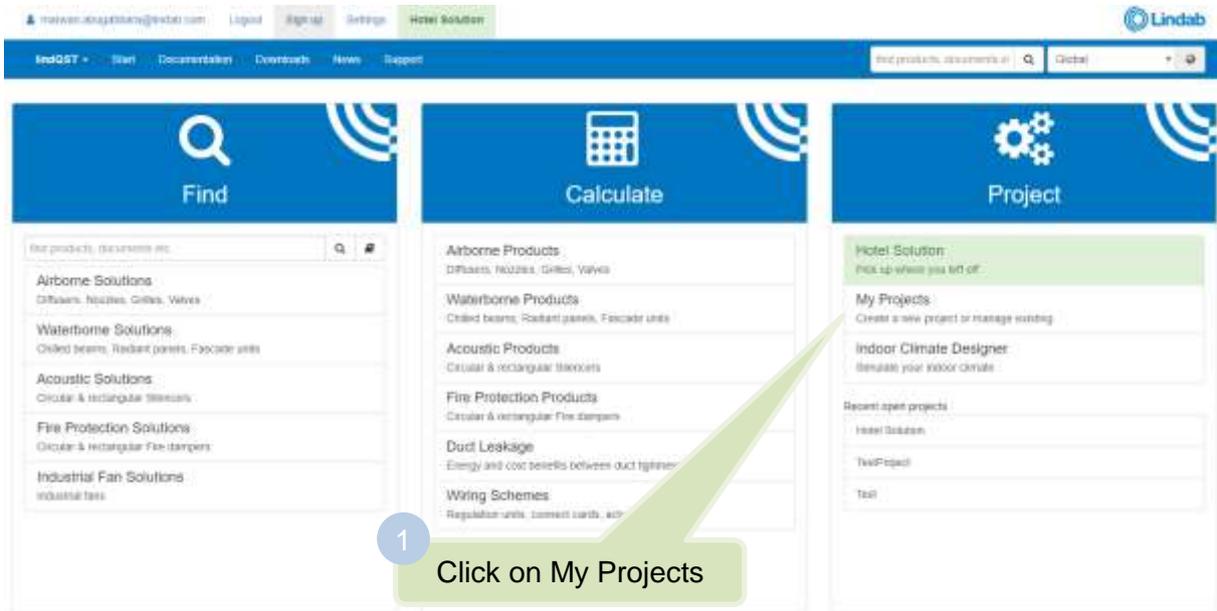
Callouts:

- 2: Check this box to enable the advanced mode (points to the 'Enable advanced mode' checkbox)
- 3: Select your preferred air volume unit (points to the 'Air volume' dropdown menu)
- 4: Click OK (points to the 'OK' button)



3 Create a project

3.1 lindQST – Indoor Climate Designer



3 Write a name for the project or leave the field blank

★ Blank field will give the project the default name "Project 1"

★ A detailed explanation on how to create a project in Indoor Climate Designer is shown in section 4

4 Click OK



3.2 Import CAD drawings using CADvent plugin

3.2.1 Installation and activation

The latest version of the CADvent Plug-in can be downloaded from <http://itsolution.lindab.com/downloads/cadventplugin/cadventplugin.exe>

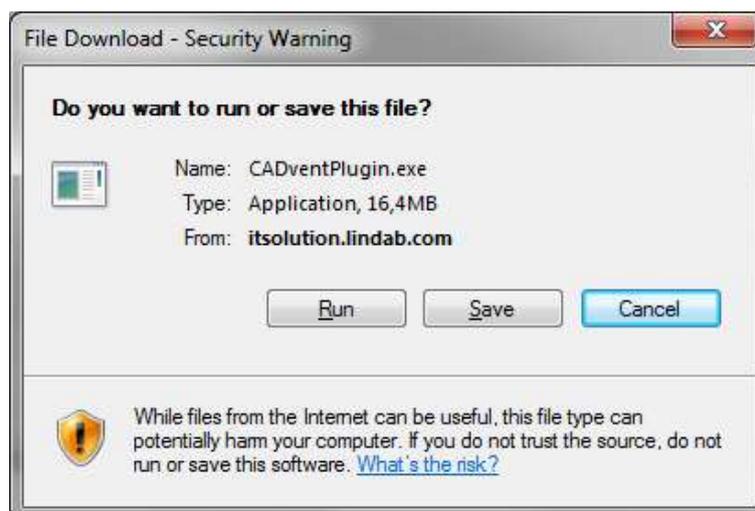
3.2.2 Installation requirements

The CADvent plugin supports AutoCAD 2010 to 2017 on 32 or 64 bit computer.

The plugin supports Windows 7, Windows 8, and Windows 10.

NOTE: You need to have local administrator rights to install the Plug-in on your computer.

3.2.3 Installation process



Download the installation file and save it on your computer for later installation or install it by pushing the “Run” button. If you have an earlier version of CADvent Plug-In installed the installation process first likes to uninstall the current version of the Plug-In.

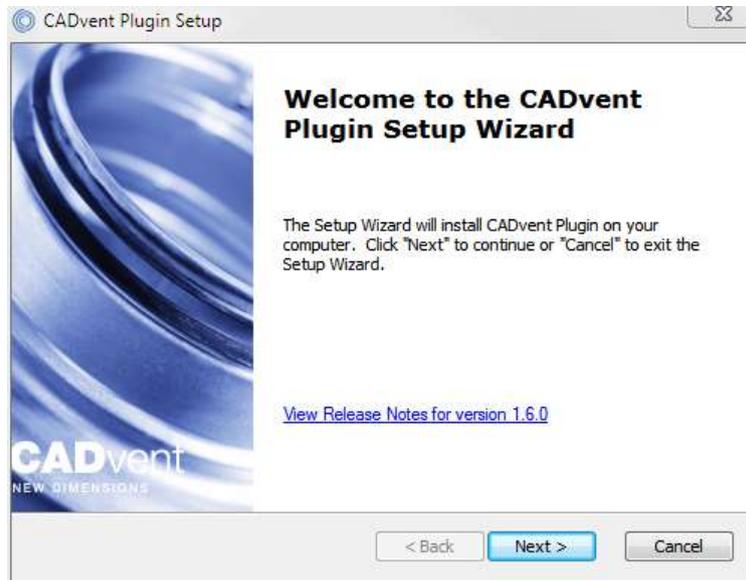


Press *Next* and in the following Window *Remove* to uninstall the current version.





Now you can install the software. Please activate the installation file again. The newest features can be listed up with the link you can find in the middle of the popup window.



The next dialog ask you to select a market area. The selection includes certain translations and local settings for the production such as standard duct lengths and flange types:



At the end of the installation process you will be asked to register the software. Enter your contact details and press “Activate”, the green tick confirms the activation. Then close the dialog by pressing the “Close” button.



NOTE: You need to be online for the registration process.

Now the installation is completed and you can launch the CADvent Plug-in.

3.2.4 List of functions and User Interface

Graphical User Interface for CADvent Plug-In

The Graphical User Interface for CADvent Plug-In without MagiCAD

The CADvent Plug-In on computers without MagiCAD contains a Ribbon palette to access the commands.





List of functions:

Space	 Add Space	Create a 3D space object to add room information for uploading to lindQST, to calculate air devices or water products optimized for the specific room requirements
	 lindQST Upload	Upload the 3D spaces to lindQST
	 Wall Panels	Draw an InCapsa wall panel system. The cost effective system that makes it easier to mount and cover ventilation systems in buildings
	 Free Panels	Draw an InCapsa free hanging panel system.
Common	 Bill of Materials	Generates reports for all ventilation products.
	 About	In the About button you can find information about market settings, contact information and CADvent plugin version number.



3.2.5 Add Space

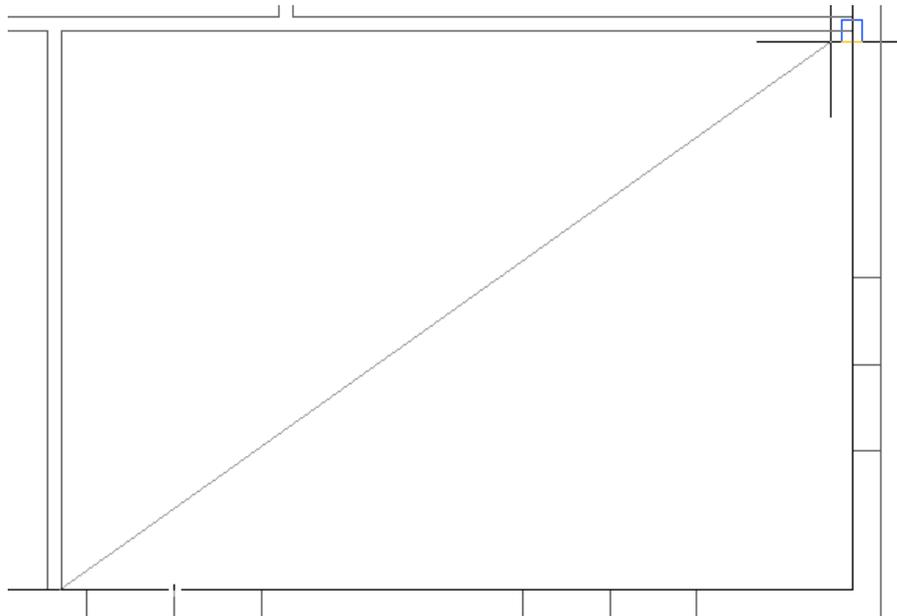


The 3D Space element gives the user the possibility to create 3D objects in the drawing to create zones. The zones can be created as simple rectangular boxes (default) or as Polylines (Type P in the command Line, or activate Polyline on the right click menu) to create zones which follow the architecture.

The Space object allows the user to divide the drawing into several rooms or zones which can be uploaded to lindQST, the Lindab Quick Selection Tool, for selecting and calculating water and air products.

Rectangular rooms:

- Activate the *Add Space* command.
- Click on one edge of the room
- Click on the opposite edge of the room

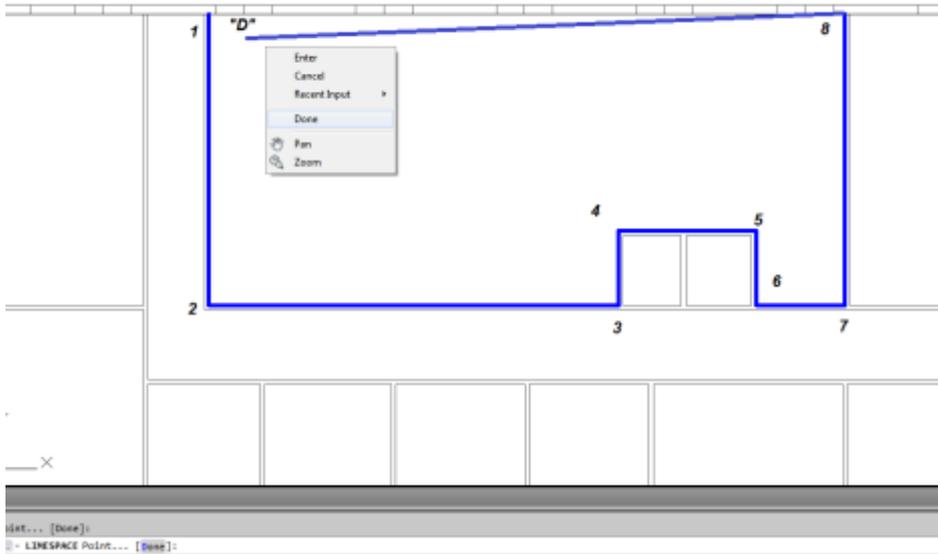


Define a rectangular space object

Non rectangular room:

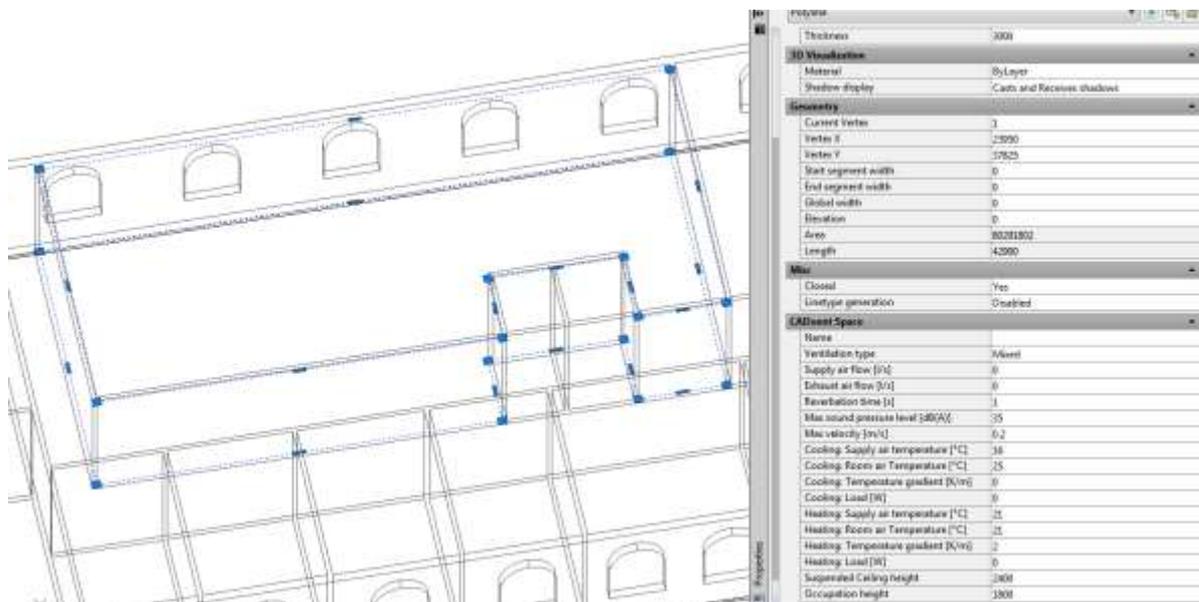
- Activate the *Add Space* command.
- Type P in the command line to activate the polyline command
- Click on one edge of the room
- Follow the walls of the room, by clicking on each edge

- Stop at the last edge and type D (done) to close the Polyline



Define a non-rectangular space object

When you have created a zone you can change the parameter in the AutoCAD Properties to define the requirements for the room.



CADvent Space in drawing with AutoCAD properties



Thickness:	Height of the space object
Name:	Name of the Room/ Zone (required)
Ventilation Type:	Mixed, Displacement or Chilled Beams
Supply and Exhaust airflow in l/s:	Total air volume for this room/space
Reverberation time in s:	Sound reverberation time
Max. sound pressure level in dB(A):	Max allowed sound level in the occupied zone
Max. velocity in m/s:	Allowed average air velocity in the occupied zone
Occupation distance:	Max. distance from displacement unit where the air velocity is allowed to prevail
Cool./Heat. Supply air temp. in °C:	Temperature of the supply air
Cool./Heat. Room air temp. in °C:	Temperature of the room air
Cool./Heat. Load in W:	The required power for the room
Suspended ceiling height:	Distance from floor to suspended ceiling
Occupation height:	Height of the occupancy zone

You can edit the zone afterwards by dragging on the AutoCAD Grip points in the corners or on the lines.



3.2.6 lindQST Upload



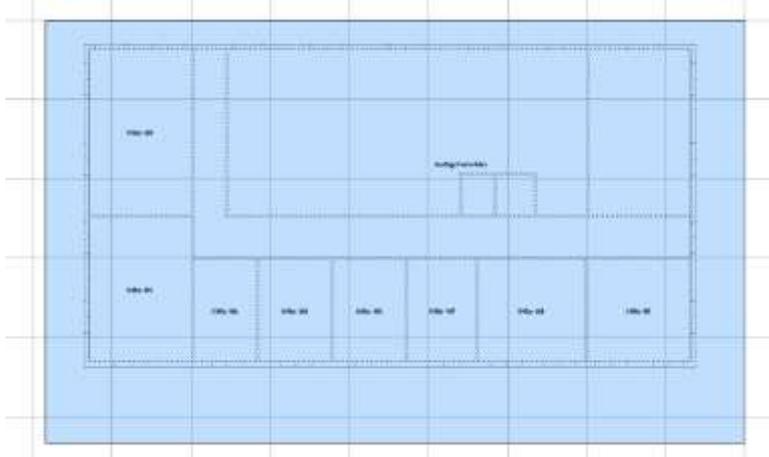
Note: The space must have a name to upload it to lindQST. You do this by right clicking on the space >> properties >> CADvent space >> Name

After creating rooms / zones with the Add Space command you can upload the spaces into lindQST.

Note: The upload is not limited to a single room. You can upload multiple rooms in one process.

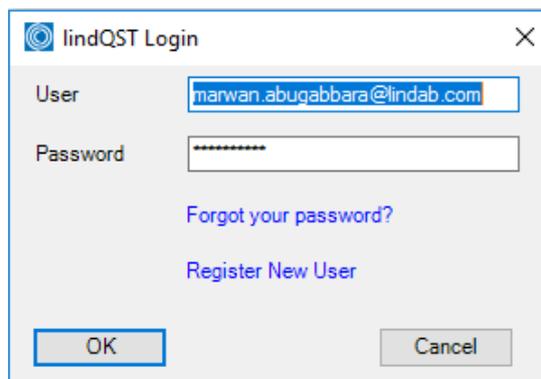
1. Activate the lindQST Upload command
2. Mark all spaces you like to update to your project in lindQST.

Note: You can all time add more spaces to your project in lindQST

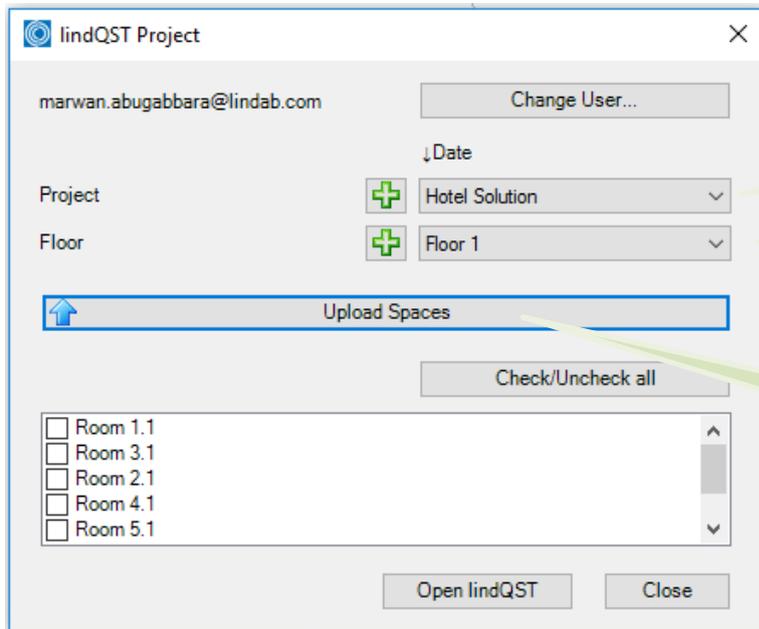


Mark multiple CADvent spaces for the upload to lindQST

3. Accept your selection with Enter
4. A browser window opens and ask you to log in.
5. Please enter your login data or register for the project area in lindQST



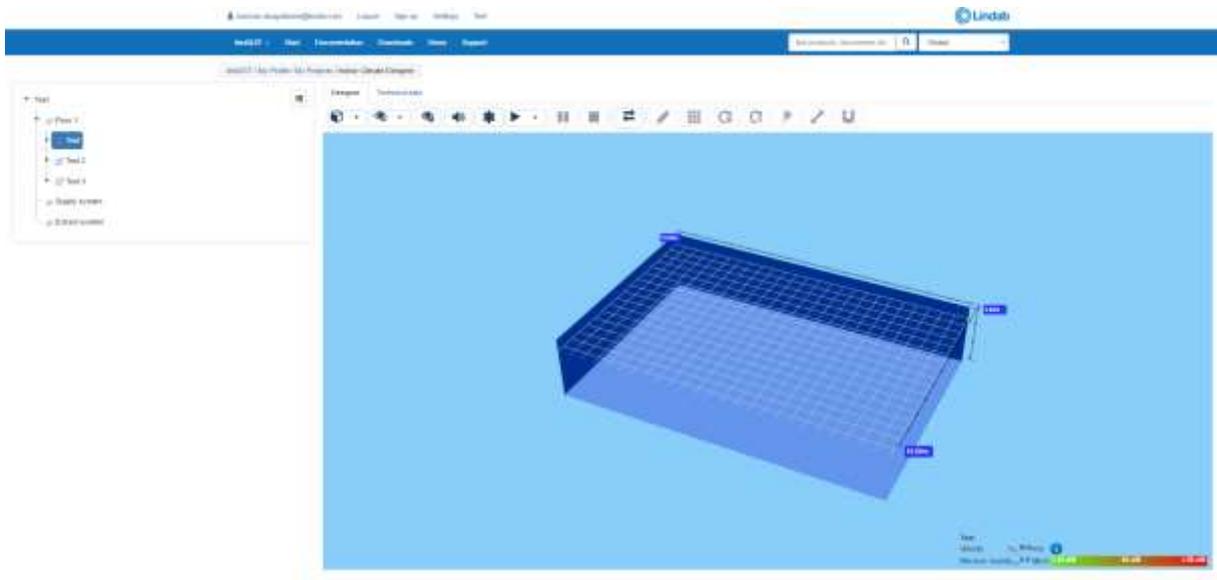
Login using your lindQST account



1 Choose the project where you want the space to be uploaded to

2 Select floor

3 Click on "Upload spaces"



★ Spaces successfully uploaded to lindQST



3.3 My Projects

After creating project/s as shown in section 3.1, all your projects will be found under “My Projects” dialog.

The image shows two screenshots of the Lindab software interface. The first screenshot displays the main dashboard with three panels: 'Find', 'Calculate', and 'Project'. The 'Project' panel contains a 'My Projects' section with a link to 'Create a new project or manage existing'. A green arrow points to this link with the text 'Click on My Projects'. The second screenshot shows the 'My Projects' page, which includes a table of created projects. A green arrow points to the table with the text 'Created projects'.

Project name	Created	Last Modified	Options
Hotel Solution	7/20/2016 2:07:00 PM	7/16/2017 1:17:40 AM	Indoor Climate Designer + Add - Edit - Share Clone Print - Delete
TestProject	12/1/2016 5:30:52 PM	12/12/2016 5:02:04 PM	Indoor Climate Designer + Add - Edit - Share Clone Print - Delete
Test	11/11/2015 12:41:01 PM	11/15/2016 4:24:55 PM	Indoor Climate Designer + Add - Edit - Share Clone Print - Delete



3.3.1 Edit project data

1 Click on edit

Project name	Created	Last Modified	Options
Hotel Solution	7/20/2016 2:07:00 PM	7/10/2017 7:17:40 AM	Indoor Climate Designer + Add - Edit - Share - Clone - Print - Delete
TestProject	12/12/2016 3:50:57 PM	12/12/2016 3:53:04 PM	Indoor Climate Designer + Add - Edit - Share - Clone - Print - Delete
Test	11/11/2016 12:41:01 PM	11/15/2016 4:24:38 PM	Indoor Climate Designer + Add - Edit - Share - Clone - Print - Delete

2 Enter project name and customer's details

3 Enter project description and customer's details

Project data ✕

<p>Project name <input style="width: 90%;" type="text" value="Hotel Solution"/></p> <p>Customer</p> <p>First Name <input type="text"/></p> <p>Last Name <input type="text"/></p> <p>E-Mail <input type="text"/></p> <p>Company <input type="text"/></p> <p>Country <input type="text" value="Not selected"/></p> <p>Profession <input type="text" value="Not selected"/></p> <p>Street <input type="text"/></p> <p>City <input type="text"/></p> <p>Zip code <input type="text"/></p> <p>Phone <input type="text"/></p>	<p>Description <div style="border: 1px solid #ccc; height: 40px; width: 100%;"></div></p> <p>Update from profile</p> <p>Designed by</p> <p>First Name <input type="text"/></p> <p>Last Name <input type="text"/></p> <p>E-Mail <input type="text"/></p> <p>Company <input type="text" value="Lindab A/S"/></p> <p>Country <input type="text" value="DENMARK"/></p> <p>Profession <input type="text" value="Not selected"/></p> <p>Street <input type="text" value="Lucernemarken 18"/></p> <p>City <input type="text" value="Farum"/></p> <p>Zip code <input type="text" value="3520"/></p> <p>Phone <input type="text"/></p>
---	---

★ Clicking on "Update from profile" will retrieve information from your profile as prescribed in section 2.3.2

4 Click OK



3.3.2 Sharing projects

1 Click on share

Project name	Created	Last Modified	Options
Hotel Solution	7/20/2016 2:07:00 PM	7/19/2017 7:17:40 AM	Hotel Climate Designer + Add - Edit - Share Clone Print - Delete
TestProject	12/1/2016 3:50:57 PM	12/12/2016 3:03:04 PM	Hotel Climate Designer + Add - Edit - Share Clone Print - Delete
Test	11/11/2016 12:41:01 PM	11/15/2016 4:24:58 PM	Hotel Climate Designer + Add - Edit - Share Clone Print - Delete

2 Choose recipient from existed contact list

3 Create a new contact

4 Message to receiver

5 Click on "Share"

Share Project

Share snapshot

Project sharing creates a snapshot (copy) of the project's current state and makes it available to the user you share it to. Any changes made to the original or copied project will not affect each other.

Share to user with e-mail: [dropdown menu]

or type a new e-mail: [input field]

Message to receiver: [text area]

Share



3.3.3 Clone a project

1
Click on Clone

The screenshot shows the Lindab iBIMST user interface. At the top, there is a navigation bar with 'Start', 'Documentation', 'Downloads', 'News', and 'Support'. Below this is a search bar and a 'Global' dropdown. The main content area displays a table of projects. The first row, 'Zens', has a 'Clone' button highlighted in a light blue box. A green callout bubble with the number '1' and the text 'Click on Clone' points to this button. The table columns are 'Project name', 'Created', 'Last Modified', and 'Options'. The 'Options' column contains icons for '+ Add', 'Edit', 'Share', 'Clone', 'Print', and 'Delete'.

Project name	Created	Last Modified	Options
Zens	4/10/2017 7:49:49 AM	5/23/2017 3:56:25 PM	Innover Climate Designer + Add - Edit Share Clone Print - Delete
TedProject	12/12/2016 2:50:52 PM	4/10/2017 7:49:37 AM	Innover Climate Designer + Add - Edit Share Clone Print - Delete
Westend034	4/6/2017 10:58:43 AM	4/7/2017 1:49:10 PM	Innover Climate Designer + Add - Edit Share Clone Print - Delete
Ted	11/11/2016 12:41:01 PM	4/6/2017 10:58:43 AM	Innover Climate Designer + Add - Edit Share Clone Print - Delete
Office building	3/13/2017 7:58:57 AM	4/6/2017 10:58:43 AM	Innover Climate Designer + Add - Edit Share Clone Print - Delete
Hotel Solution	7/20/2016 2:07:50 PM	3/13/2017 10:52:29 AM	Innover Climate Designer + Add - Edit Share Clone Print - Delete
Astron Steel Hall	3/6/2017 10:39:43 AM	3/7/2017 1:54:48 PM	Innover Climate Designer + Add - Edit Share Clone Print - Delete

2
Cloned project (same name of the original project + (Clone))

This screenshot shows the same Lindab iBIMST interface as the previous one, but with an additional project at the top of the list. The new project is 'Zens (Clone)', which has been created on 4/10/2017 at 7:49:49 AM and last modified on 7/19/2017 at 8:12:21 AM. A green callout bubble with the number '2' and the text 'Cloned project (same name of the original project + (Clone))' points to this new entry. The rest of the table and interface elements are identical to the previous screenshot.

Project name	Created	Last Modified	Options
Zens (Clone)	4/10/2017 7:49:49 AM	7/19/2017 8:12:21 AM	Innover Climate Designer + Add - Edit Share Clone Print - Delete
Zens	4/10/2017 7:49:49 AM	5/23/2017 3:56:25 PM	Innover Climate Designer + Add - Edit Share Clone Print - Delete
TedProject	12/12/2016 2:50:52 PM	4/10/2017 7:49:37 AM	Innover Climate Designer + Add - Edit Share Clone Print - Delete
Westend034	4/6/2017 10:58:43 AM	4/7/2017 1:49:10 PM	Innover Climate Designer + Add - Edit Share Clone Print - Delete
Ted	11/11/2016 12:41:01 PM	4/6/2017 10:58:43 AM	Innover Climate Designer + Add - Edit Share Clone Print - Delete
Office building	3/13/2017 7:58:57 AM	4/6/2017 10:58:43 AM	Innover Climate Designer + Add - Edit Share Clone Print - Delete
Hotel Solution	7/20/2016 2:07:50 PM	3/13/2017 10:52:29 AM	Innover Climate Designer + Add - Edit Share Clone Print - Delete
Astron Steel Hall	3/6/2017 10:39:43 AM	3/7/2017 1:54:48 PM	Innover Climate Designer + Add - Edit Share Clone Print - Delete



3.3.4 Print project

Here you have two options:

a) Generate room book (*xlsx format*)

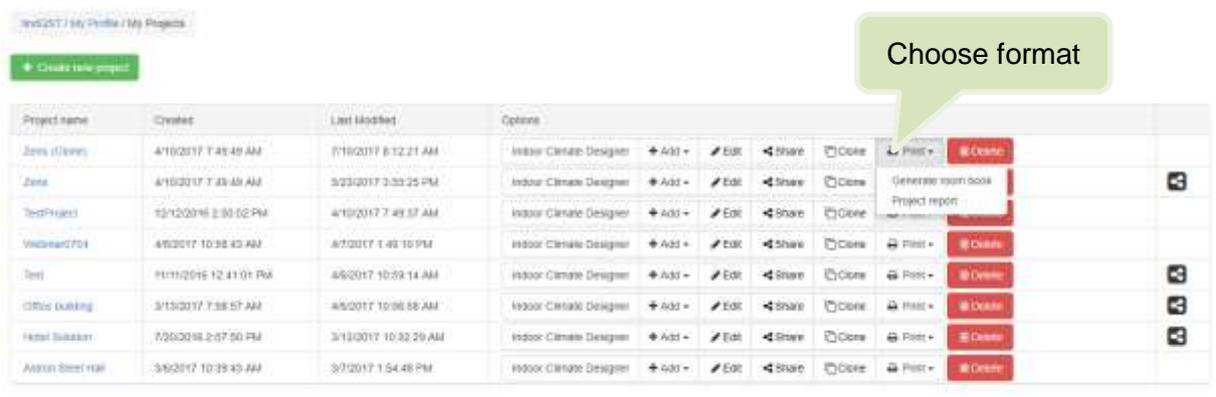
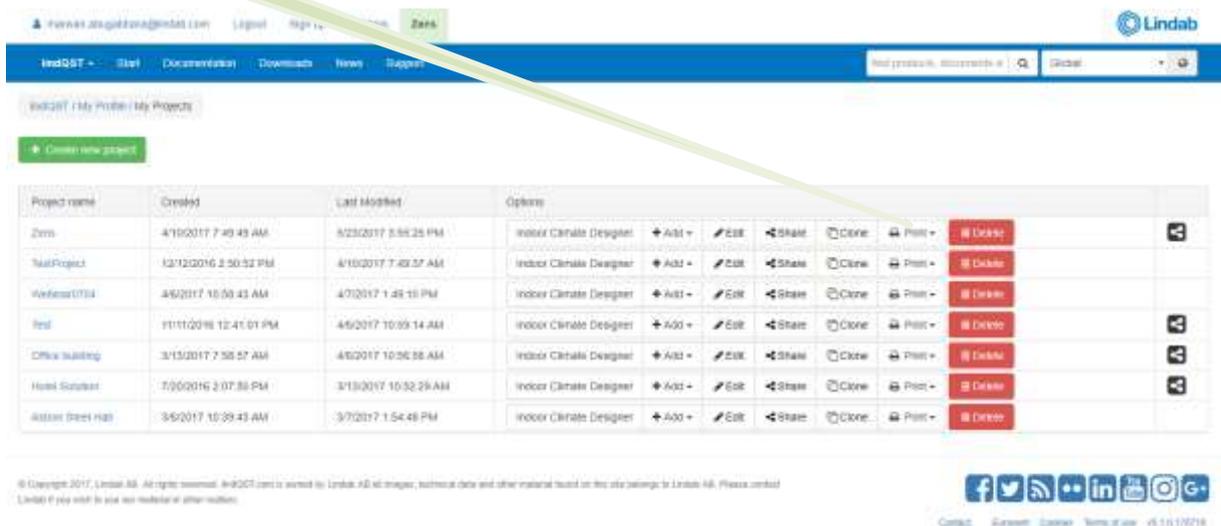
Shows all products included in the project according to their main category together with their technical data. Room data is also shown in a different sheet.

b) Project report (*pdf format*)

A detailed report with all information regarding: project information and description, summary of products according to their type, products image and description, products results and diagrams.

Click on Print

★ The report header is taken from the profile logo prescribed in section 2.3.1



Choose format

★ The project will be saved under the Downloads folder on your hard drive

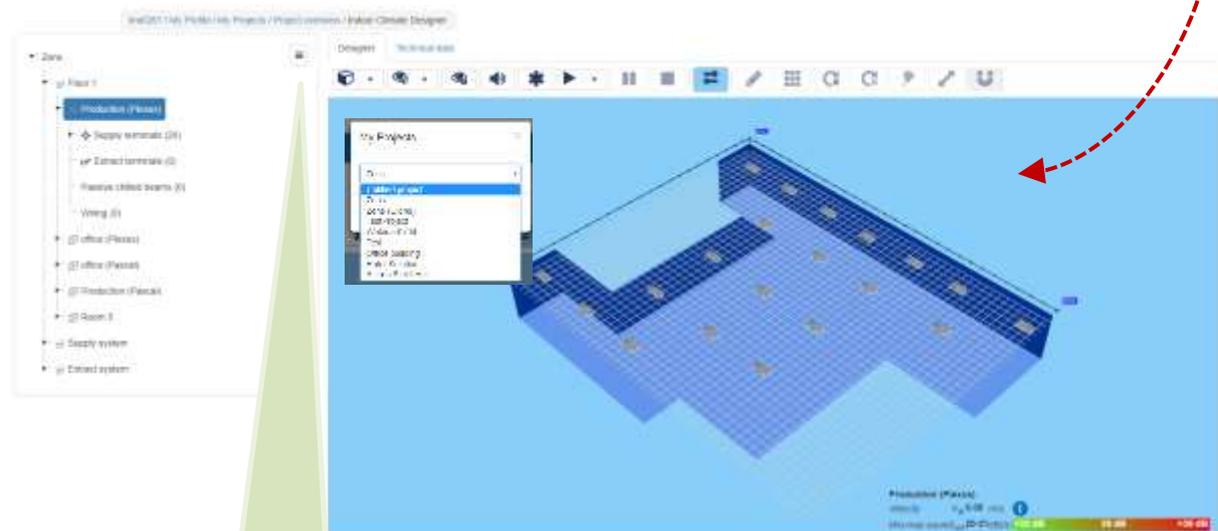
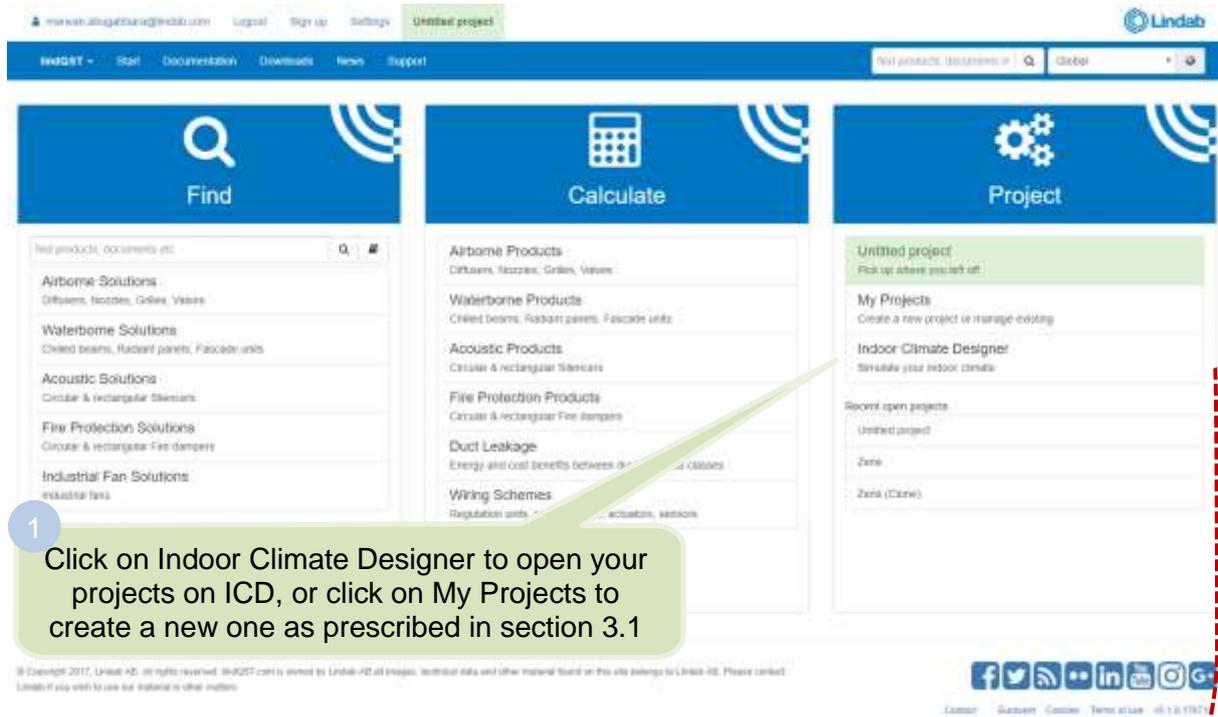




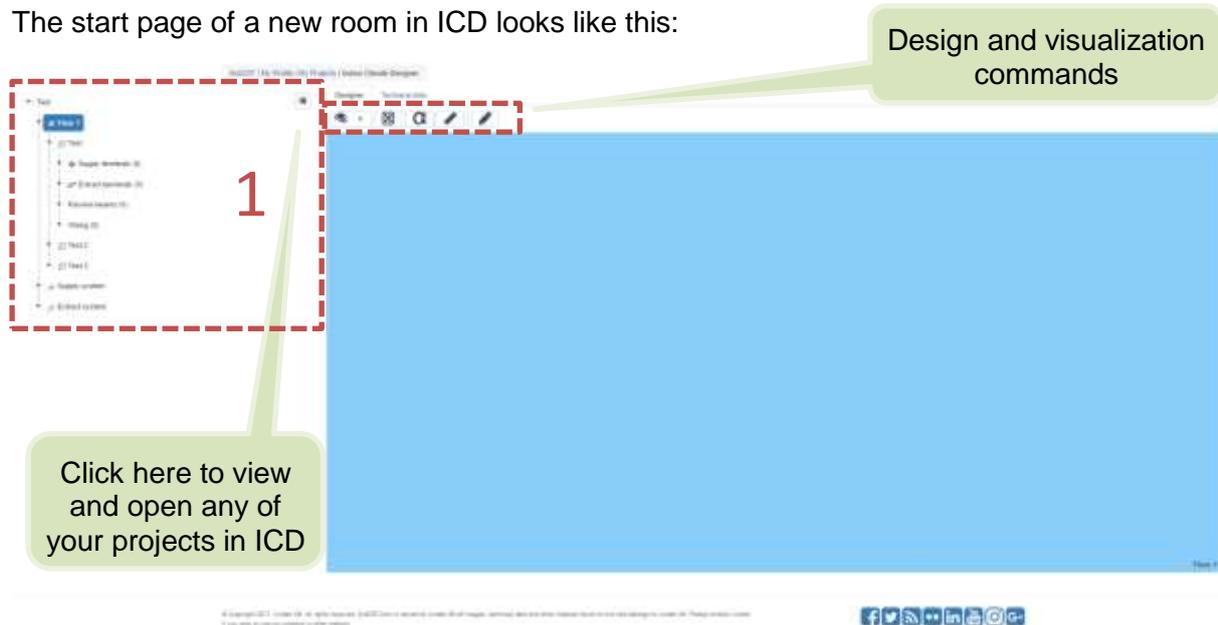
4 Indoor Climate Designer

Indoor Climate Designer (ICD) is an interactive 3D environment to visualize and simulate a room with the selected Lindab products.

You initiate ICD from the start page of lindQST as follows:

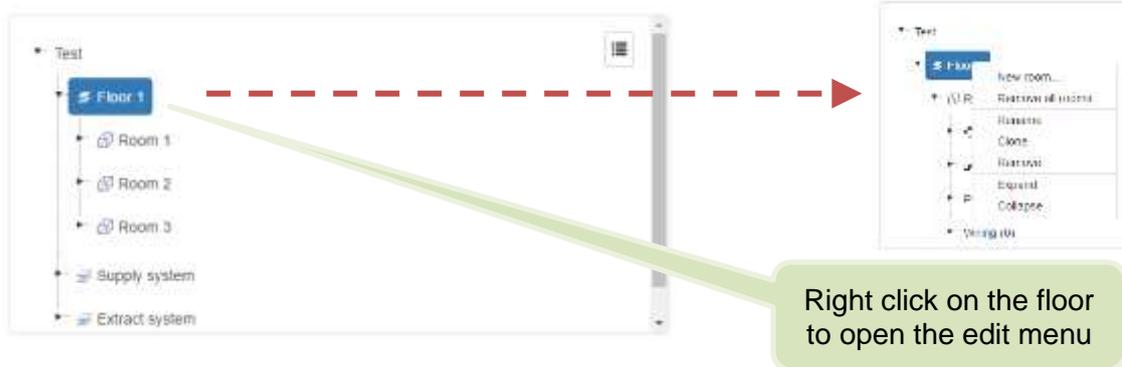


The start page of a new room in ICD looks like this:

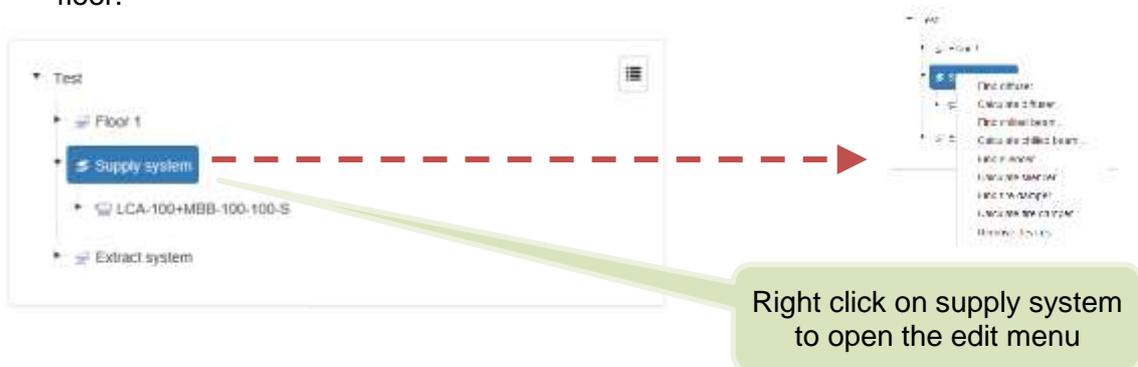


1: Each project comprises of three main levels:

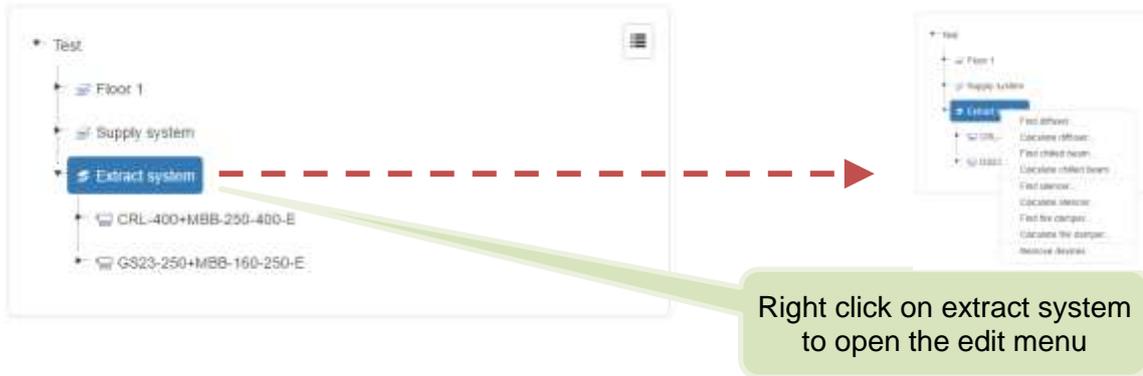
a) Floor: Contains all the rooms.



b) Supply system: Contains all the supply products for all rooms under the selected floor.



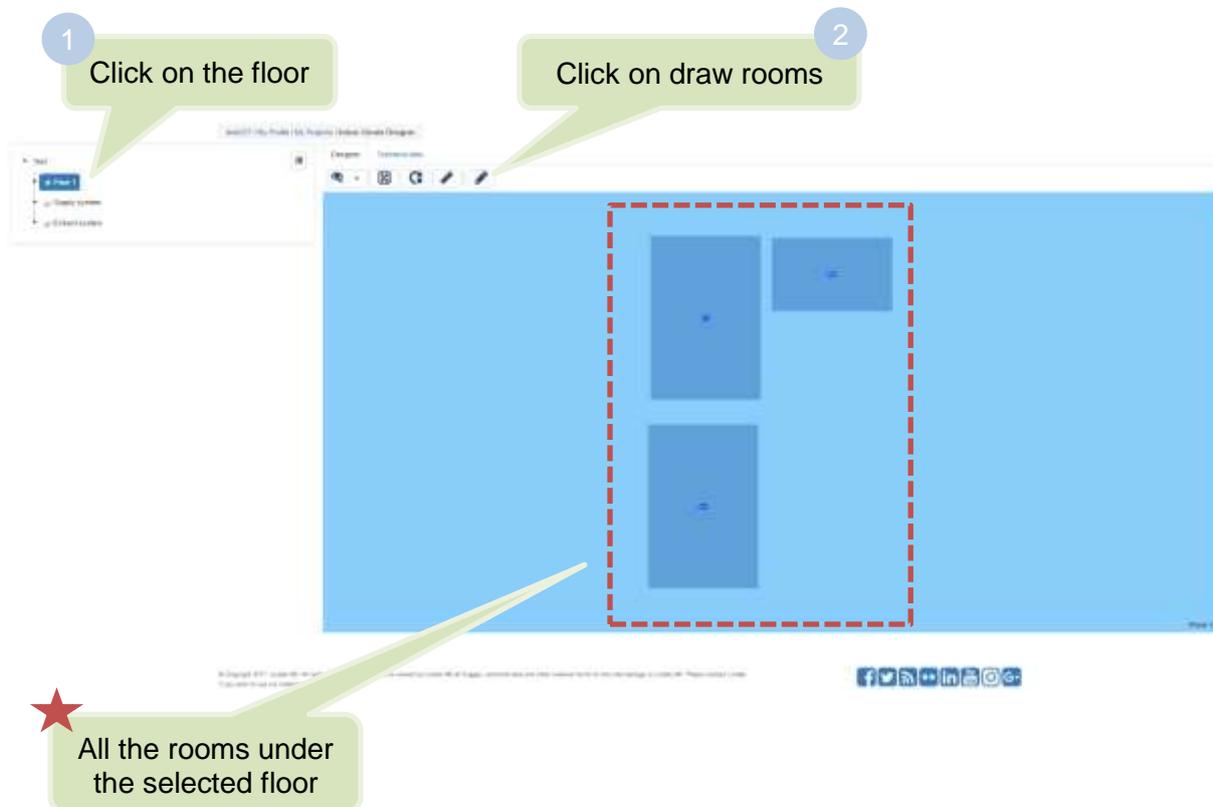
c) Extract system: Contains all the extract products for all rooms under the selected floor.

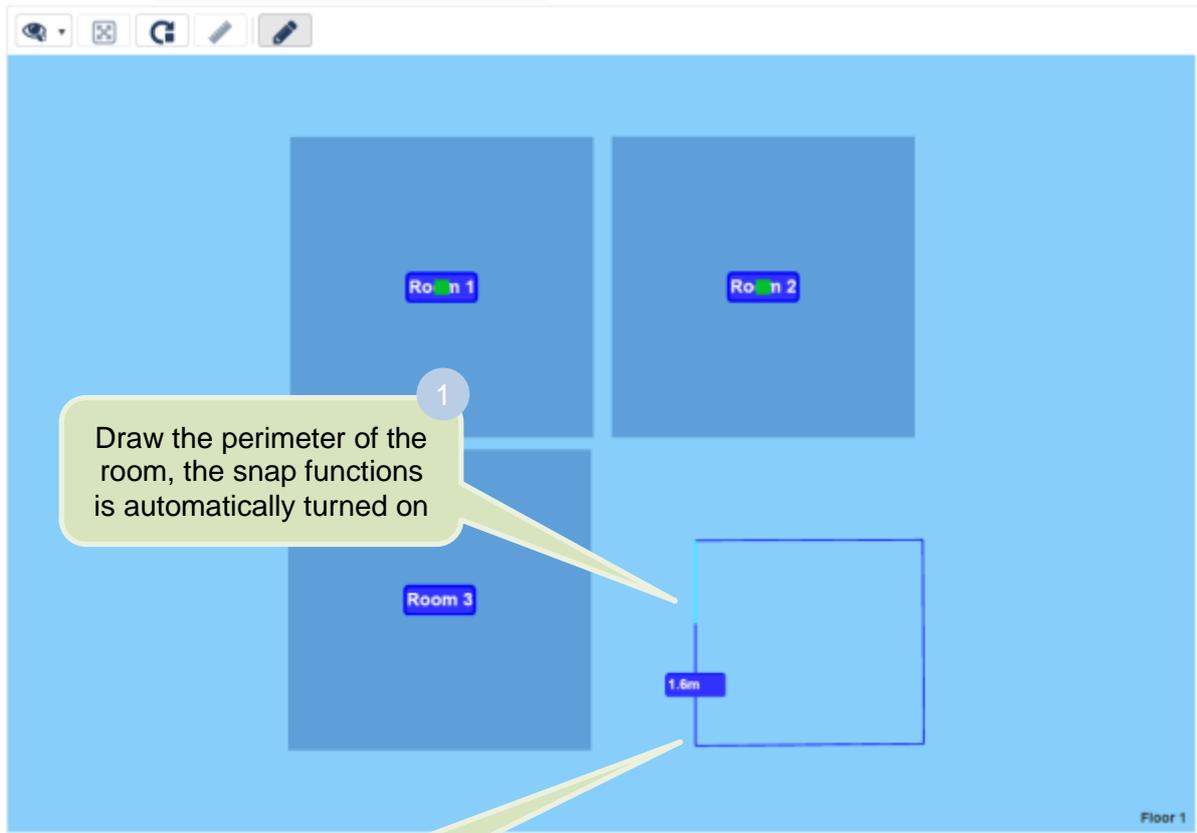


4.1 ICD floor view

By clicking on “Floor”, you can see the plan view off all the rooms included under a specific floor. You can also draw/add rooms by using ICD drawing commands, or you can import an image of a certain drawing to use it as a canvas to mark the geometry of the room. These two options are explained in details in the following subsections.

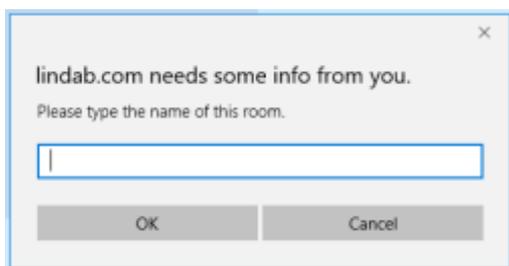
4.1.1 Draw rooms





1
Draw the perimeter of the room, the snap functions is automatically turned on

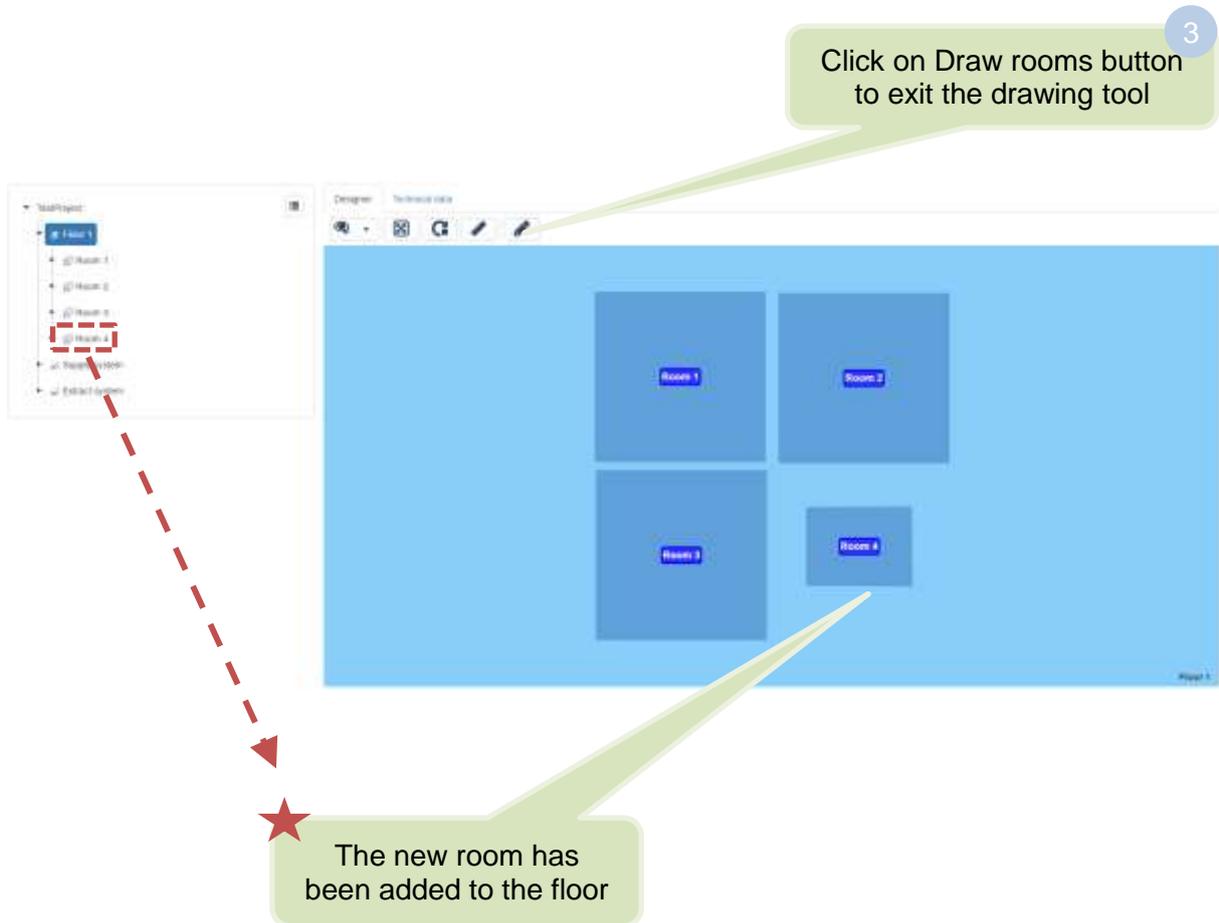
★ **Note:** Draw rooms based on internal measurements



2
When you close the perimeter of the room, give a name to the room and press OK

★ **Note:** You can change the background color by clicking on the eye icon



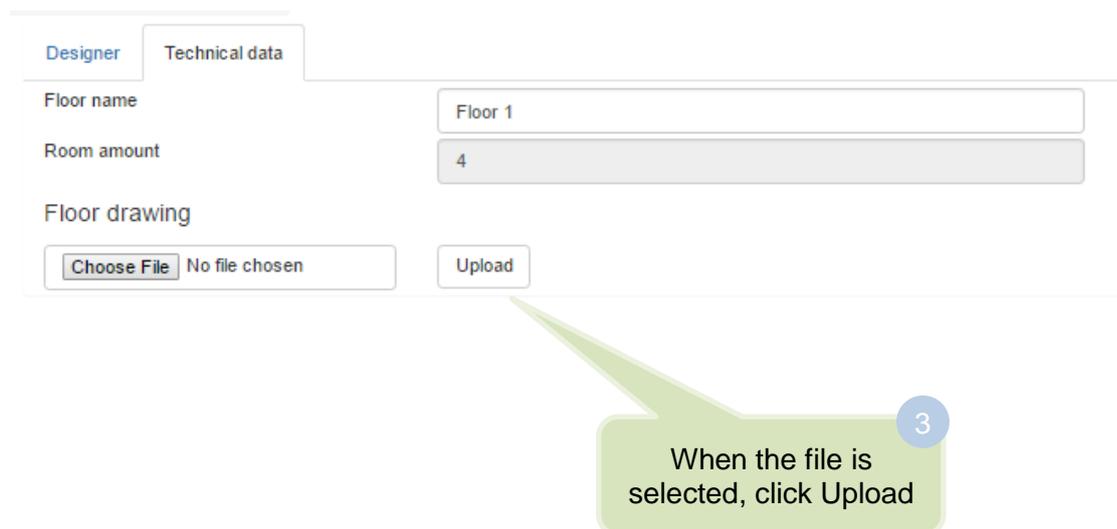


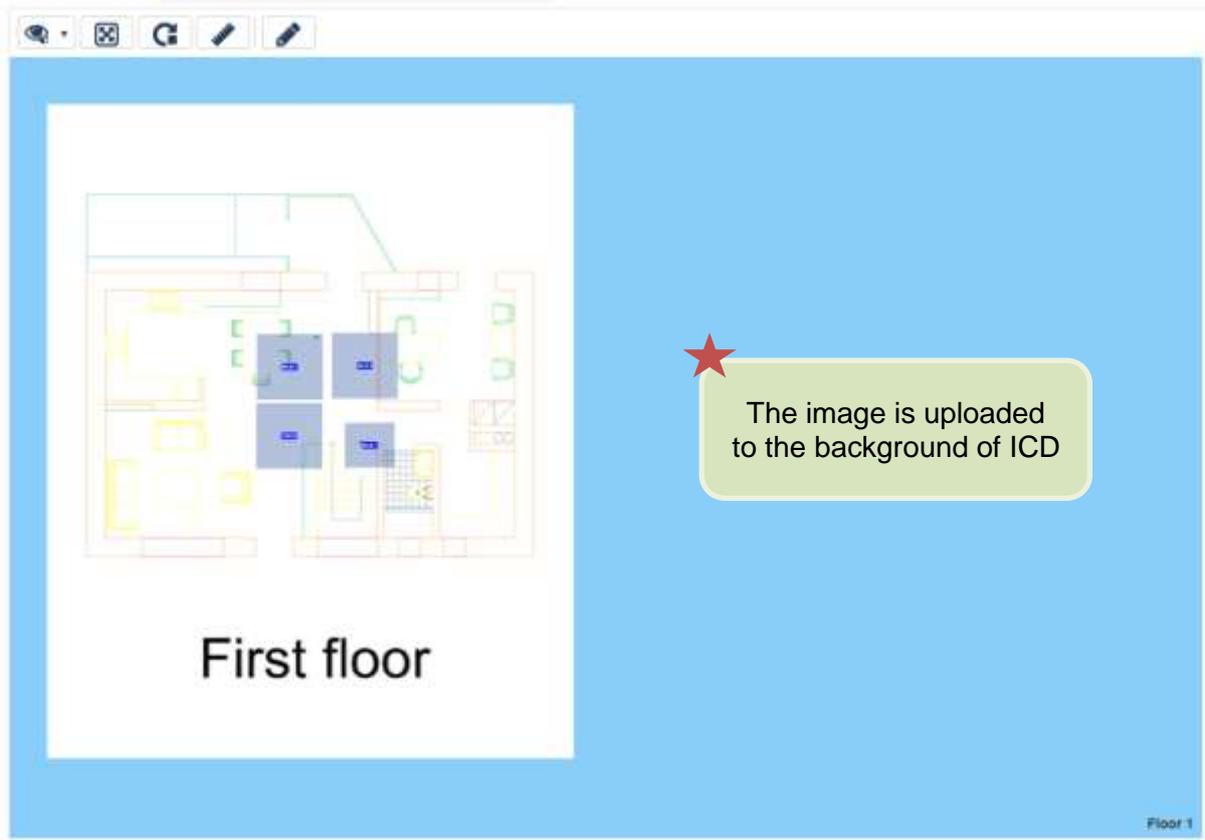
★ **Note:** A room height of 3 m is given by default. It can be adjusted according to the explanation in section 4.2



4.1.2 Upload floor drawing

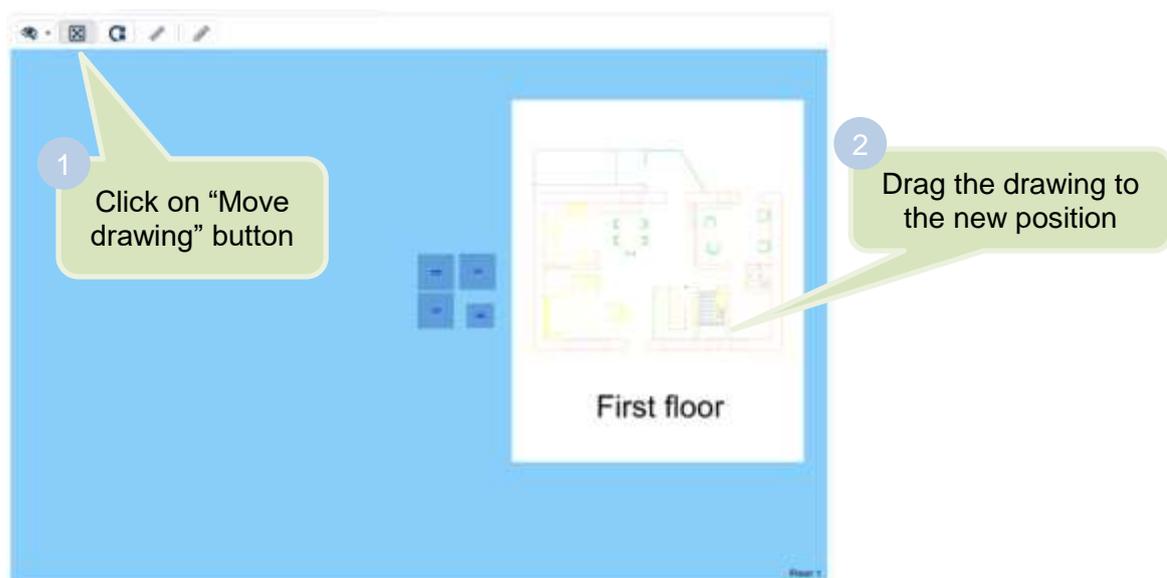
This feature can be used when a plan view is available in png or jpg file format.





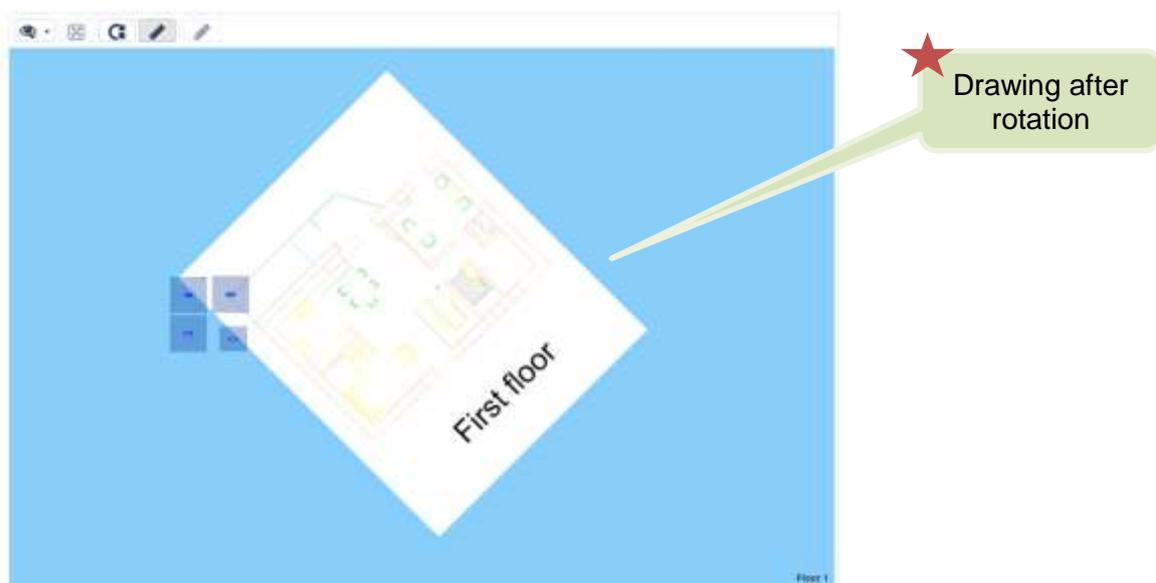
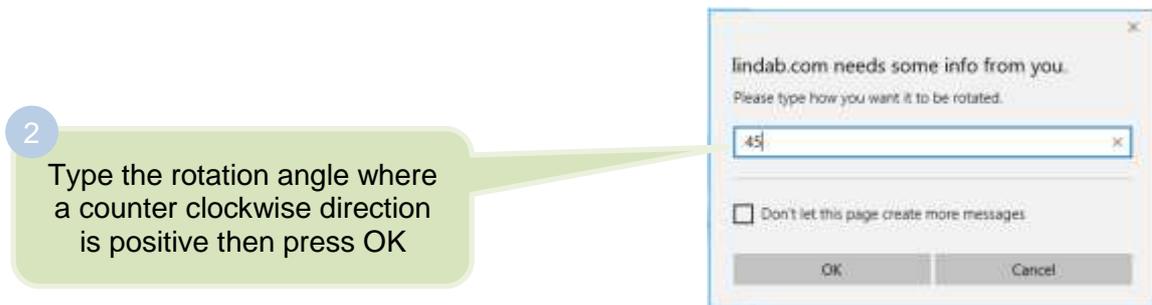
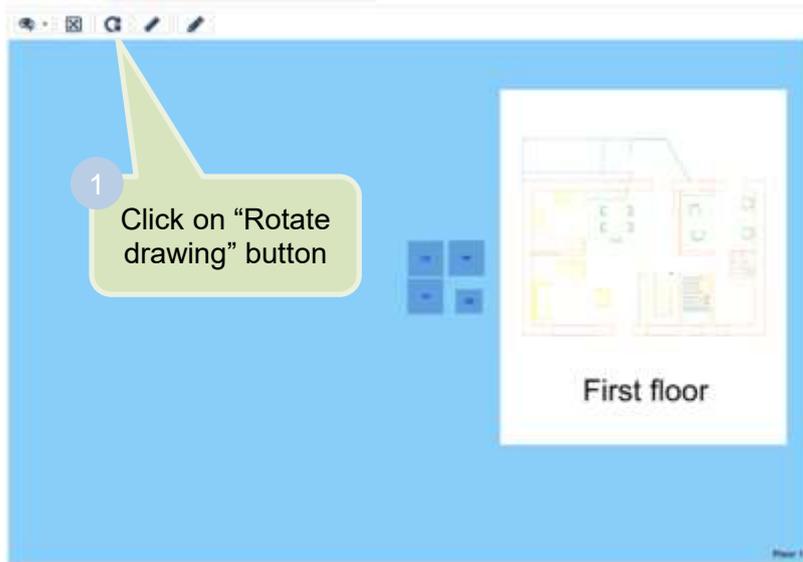
The “Floor drawing” feature has three options where you can adjust the drawing according to the desired layout:

- a) Move: Click on “Move drawing” to change its place on the 3D window.



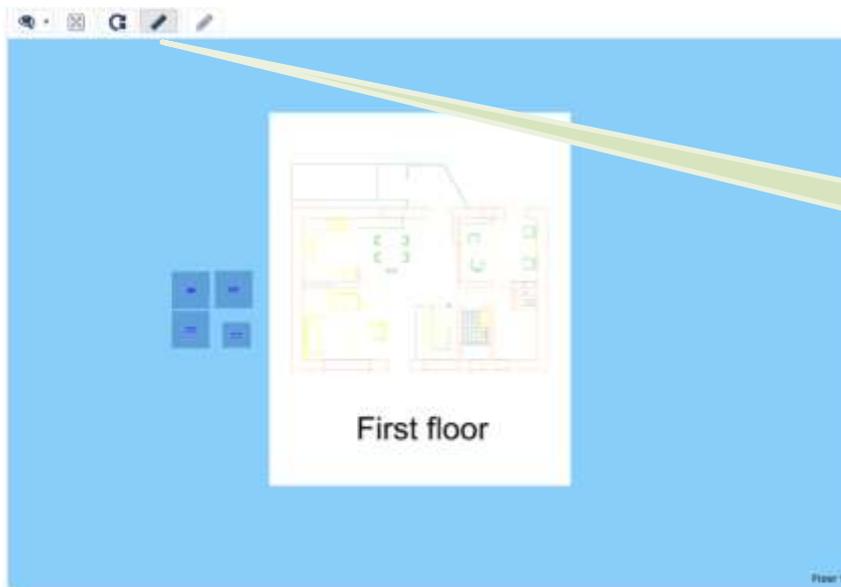


b) Rotate: To edit the orientation of the drawing.

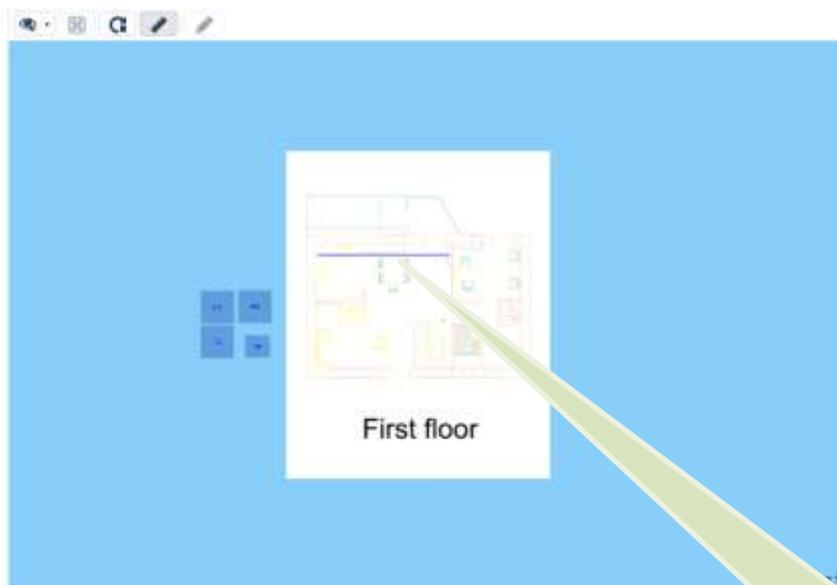




c) Scale: To resize the image based on a given dimension.



1
Click on "Scale drawing" button



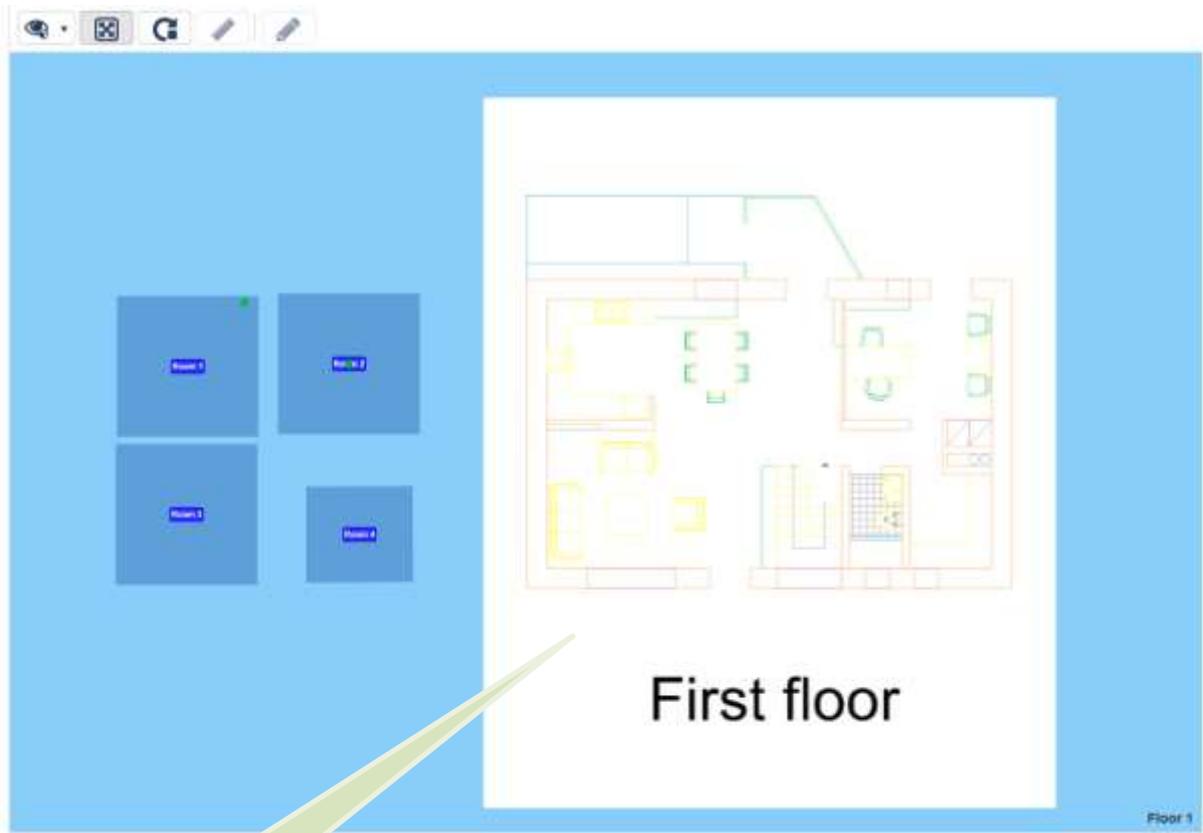
2
Mark between any two points where the distance between them is known



lindab.com needs some info from you.
Please type the distance between the points(mm)

OK Cancel

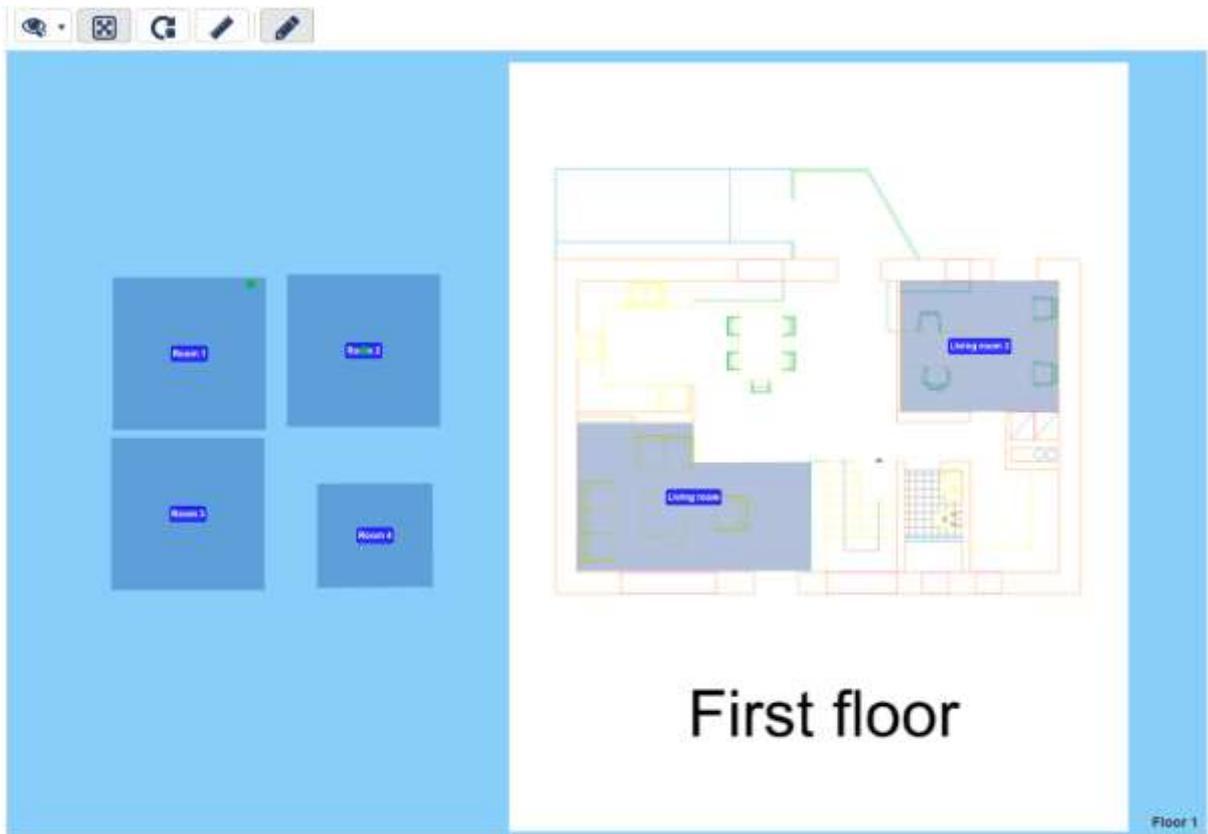
3 Enter the distance in mm then press OK



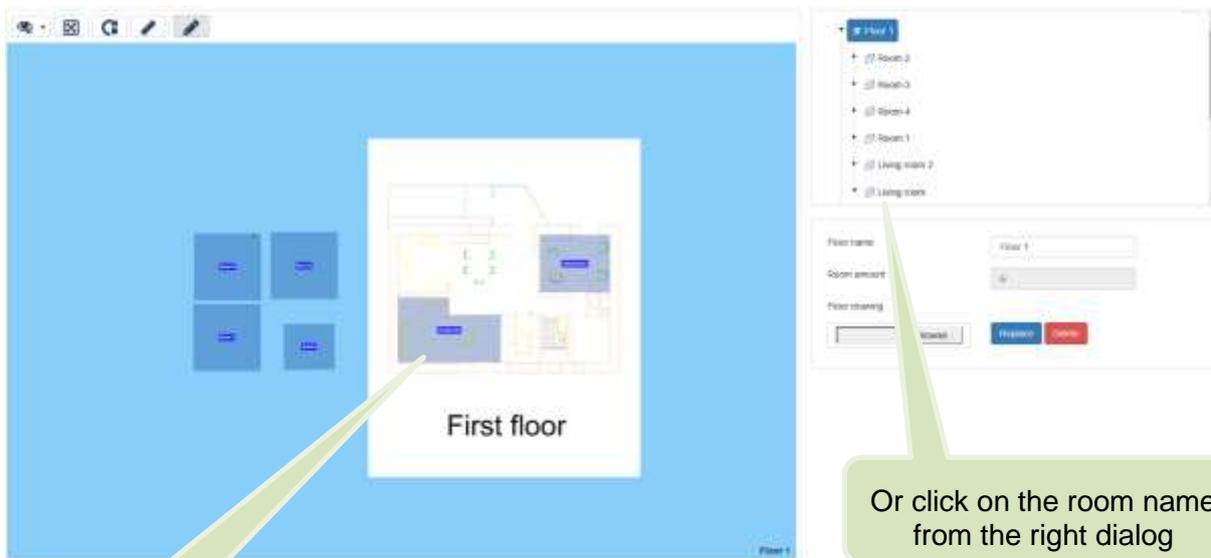
★ Drawing after being scaled



Rooms can be drawn on the uploaded drawing according to the steps shown in section 4.1.1

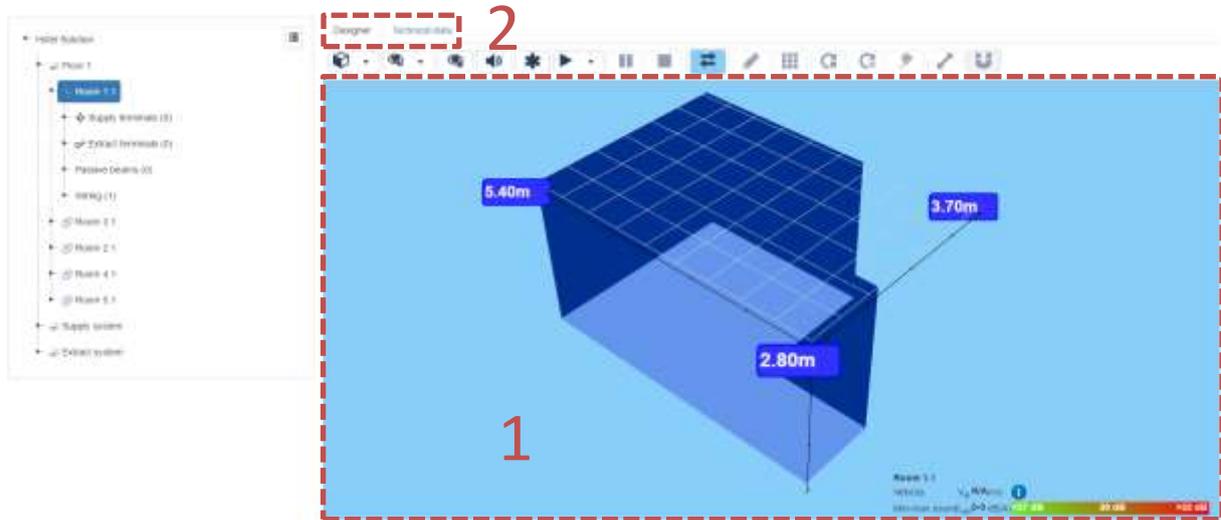


4.2 Room properties



Double click on the room

Or click on the room name from the right dialog



1: The 3D window which shows; room geometry, suspended ceiling, airflow simulation, and sound levels.

2: The technical data includes the following windows:

General:

General	Geometry	Dimension criterias	Occupied zone
Room name	Living room		
Ventilation type	Mixing		
Room type	None		
Reverberation time	1	s	
Allowed sound level	30	dB(A)	
Include thermal calculations	<input type="checkbox"/>		

General information about the room that will be used in the simulations and when generating a report

★ Reverberation time in seconds is used to in the calculation of the absorption area that affects the room attenuation

★ Allowed sound level refers to the sound level at the height of the occupied/comfort zone

★ Check the box of "Include thermal calculations" to view the thermal velocity on the result graph



Geometry:

Geometry	User defined	
Height	2.8	m
Suspended ceiling height	2.8	m
Suspended ceiling offset from wall, x	0	m
Suspended ceiling offset from wall, y	0	m
Width of suspended ceiling plates	0.6	m
Length of suspended ceiling plates	0.6	m

Height of the room and the suspended ceiling

Geometry of the suspended ceiling. Hover over the explanation mark to know how to enter data

Dimension criterias:

General	Geometry	Dimension criterias	Occupied zone
Supply air volume	q_s	20	÷
Extract air volume	q_e	0	÷ l/s
Function	Cooling and heating		
Room air temperature	t_r	22	21 °C
Temperature gradient in room	t_g	0	2 K
Primary air temperature	t_{p1}	16	21 °C
Supplied thermal power		0	0 W

Click on the division sign to distribute the total flow evenly between the devices in the room

Parameters related to the dimensioning of waterborne products



Occupied zone:

General	Geometry	Dimension criterias	Occupied zone
Height	1.8	m	
Height of barrier on wall	0	m	
Offset from wall	0.6	m	
Velocity	0.2	m/s	

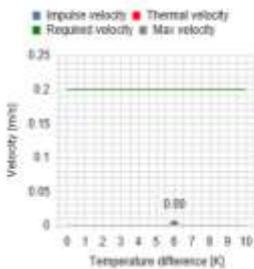
Enter dimensions of the occupied zone

Refers to the maximum air velocity when entering the occupied zone

Result dialog:

	Required	Result	
Area	A_o	20.5	m ²
Volume	V_o	40.1	m ³
Temperature difference	Δt_{ra}	6.0	K
Sound pressure level	L_{pA}	30	dB (A)
Total supply air volume	$Q_{s,r}$	0	l/s
Total exhaust air volume	$Q_{e,r}$	0	l/s
Velocity	$V_{e,r}$	0.2	m/s
Cooling			
Supplied thermal power	P	0	W
Supplied thermal power / area	$p(A_o)$	0	W/m ²
Heating			
Supplied thermal power	P	0	W
Supplied thermal power / area	$p(A_o)$	0	W/m ²

Room results based on the user's inputs



No products were added to the room and therefore there no results to show here. See section 4.3 to view results after adding products

4.3 Adding products

When choosing a product using airborne selector, airborne calculator, waterborne selector, or waterborne calculator as described in sections 5.1 to 6.2, this product can be added to any of your ICD projects by following these steps:

1 A product is selected according to the dimensioning criteria

2 Click on "Add to project"

Click Add

Choose the project where you want to add the product to

Select the system

Choose the floor

Choose the room

Enter number of devices in the room



Add to project

Please note that any room-related parameter used in the calculation will not be transferred to any existing room.

Projects: Test

System: Supply system

Floor: Floor 1

Room: Living room

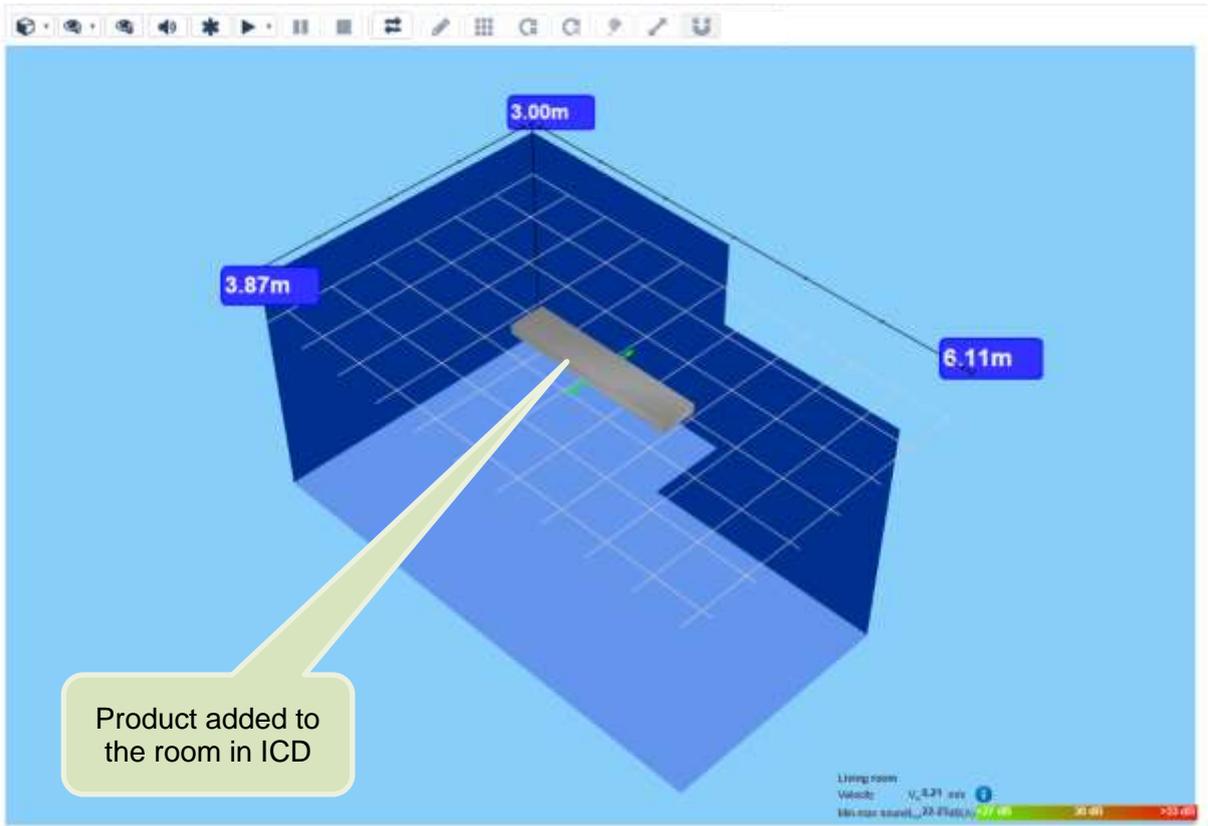
Number of devices: 1

Add

Product(s) successfully added to Living room.
Close this window to calculate new device or go to Indoor Climate Designer.

Indoor Climate Designer Close

When this green message appears, click on "Indoor Climate Designer" and open the room which the product has been added to





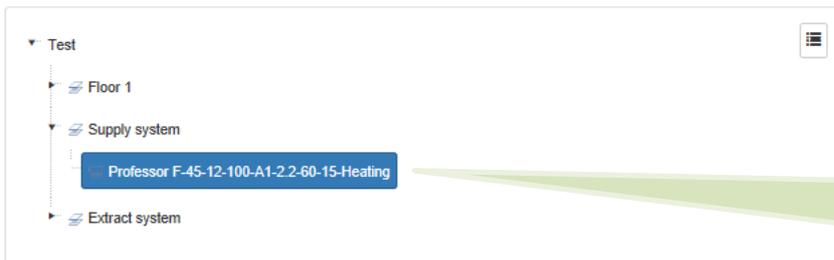
Results based on the inputs to room properties (see section 4.2)

Product results



Results of the selected product are shown on the right side of ICS page

4.3.1 Add existed products to different rooms



1 Open the supply or exhaust system under the project level and select the product

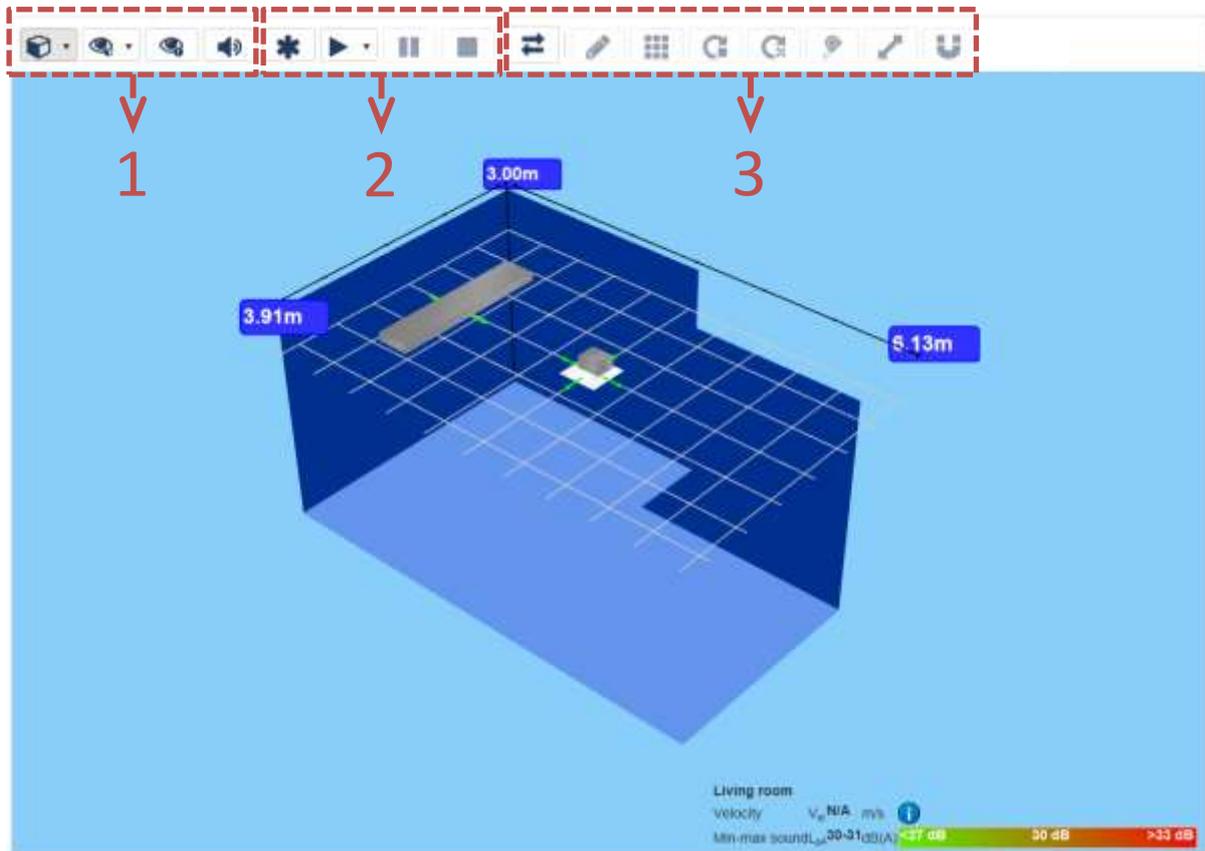


2 Drag to the selected product to the room where you want it to be placed



4.4 View/edit commands and simulate airflow

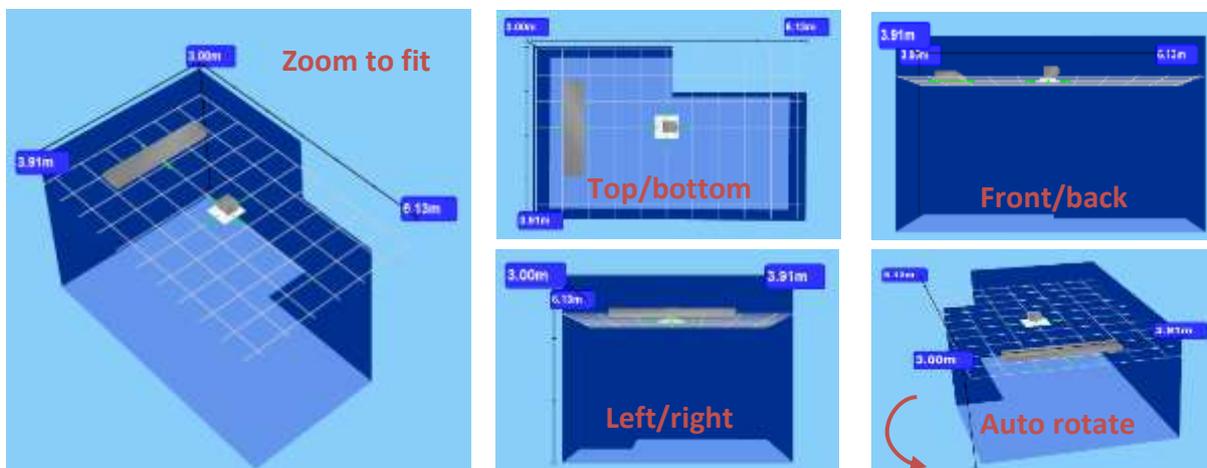
When a product is added to the room, new command buttons are activated on the 3D window which give multiple options to the user to edit the room geometry and the product configuration.



4.4.1 View commands

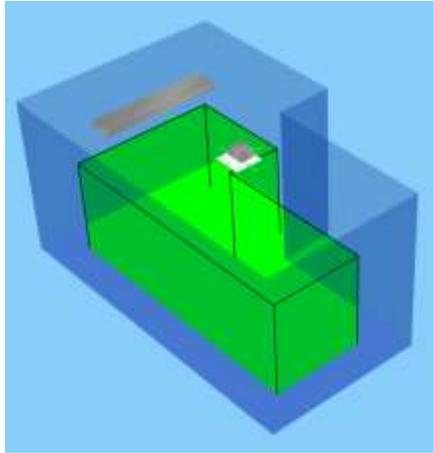


Quick view: Changes the perspective view of the room.





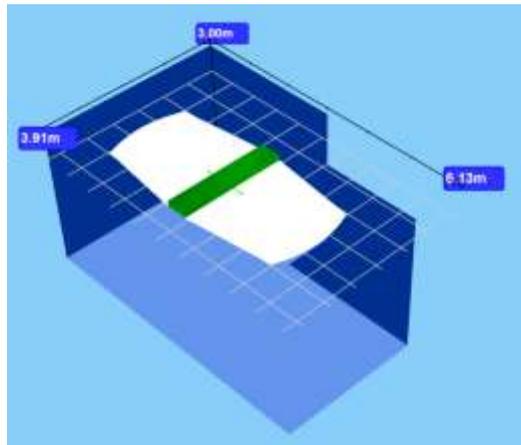
Show/hide: Show or hide elements on the 3D room.



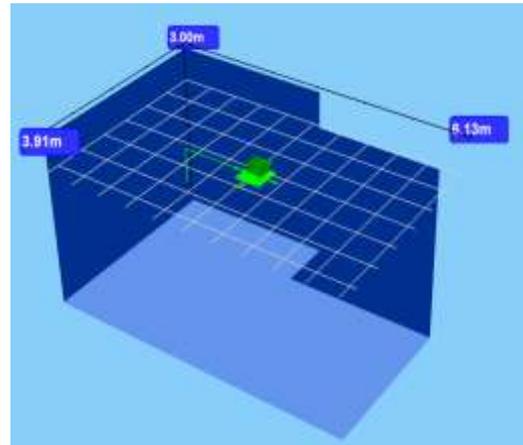
- Walls
 - Floor
 - Suspended Ceiling
 - Comfort zone
 - Rulers
 - Device boxes
 - Flow arrows
-
- Transparent walls
- Background color ▾



Critical view: Shows the critical airflow of a product based on throw length and face velocity.



Critical view of an air chilled beam



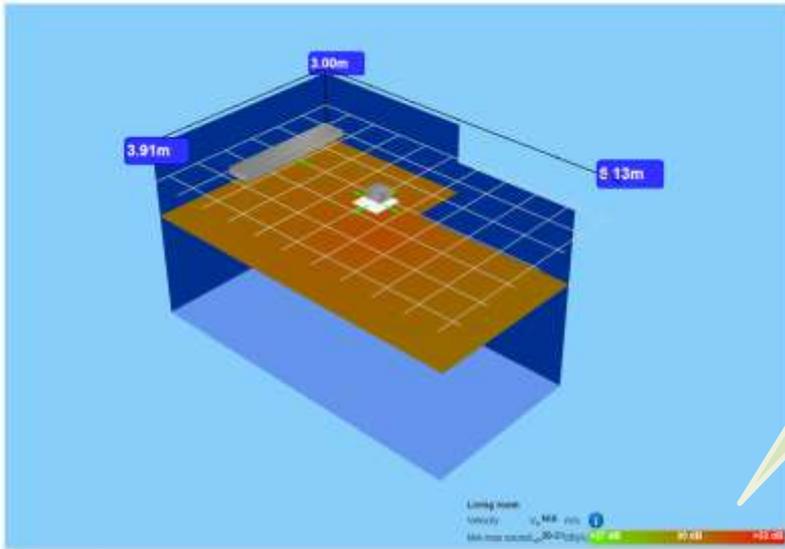
Critical view of an air diffuser



Note: When both airborne and waterborne products are placed in one room, critical view cannot be simultaneously activated for both systems. Only available for a room with the same medium carrier (air or water)



Soundview: Generates a colored Soundview mesh at the top of the comfort zone.

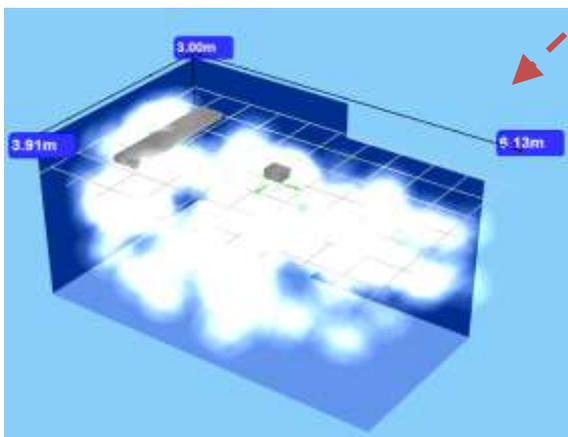
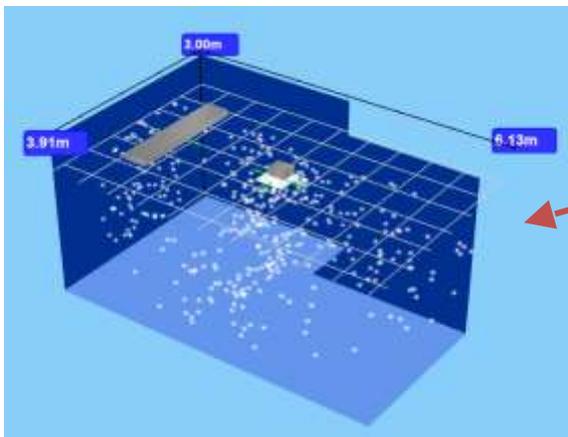


Note: The colors of the Soundview mesh are interpreted according to the sound legend at the bottom right corner

4.4.2 Simulate airflow commands



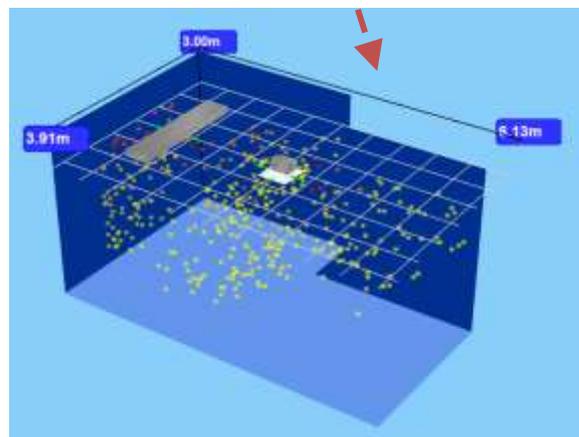
Start airflow simulation.



▶ | || | ■

Particles
Smoke
Color

Simulate selected
Simulate Critical





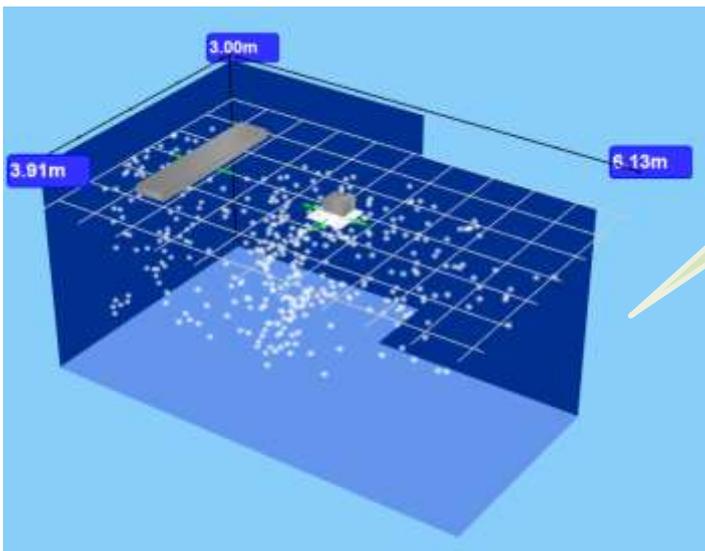
★ **Note:** Simulate selected option is used to simulate the airflow for a single product

★ **Note:** Simulate critical option is only available for a room with one system. Check critical view in section 4.4.1

 Pause airflow simulation.

 Stop airflow simulation.

 Frozen particles.



Frozen particle view

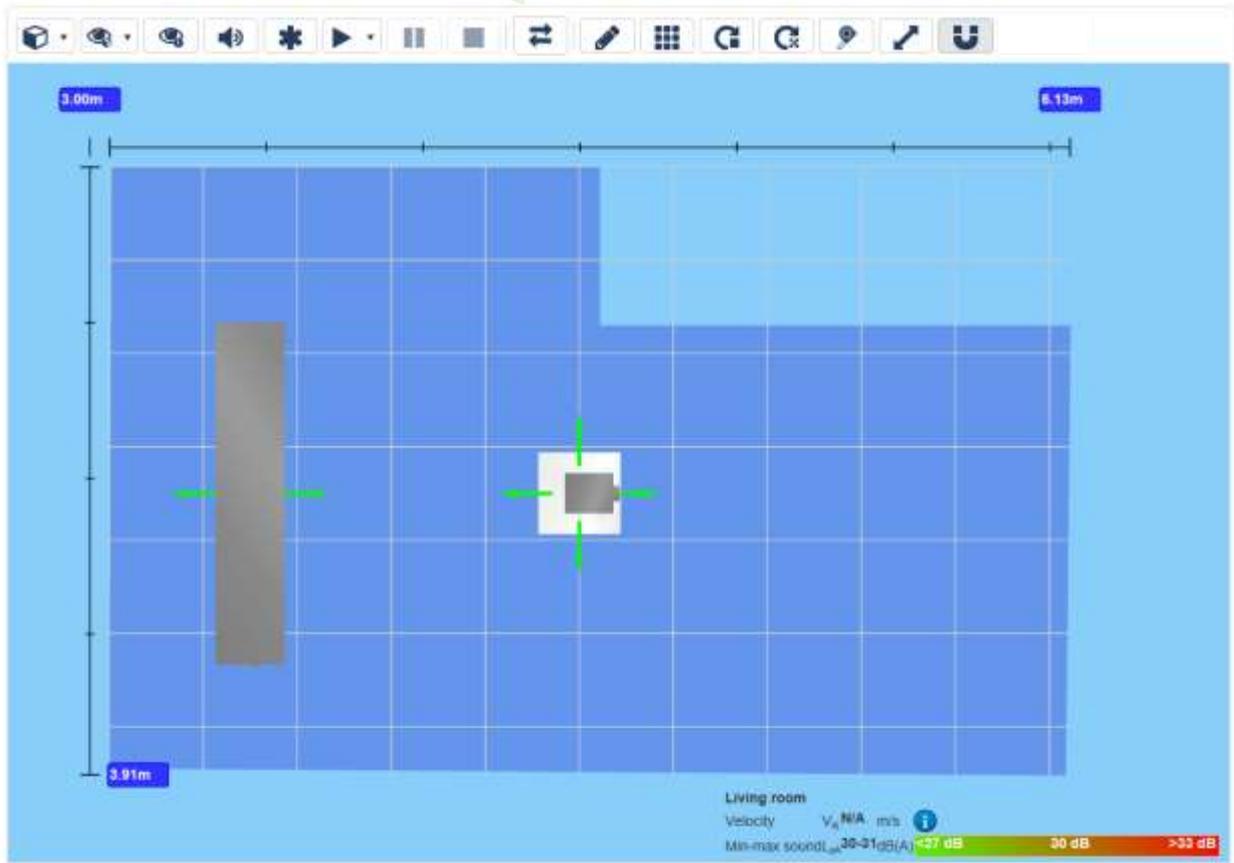
4.4 Edit tools

Click on "Switch to edit mode" to activate the edit commands





When “Switch to edit mode” button is pressed, the room is turned into a plan view accordingly



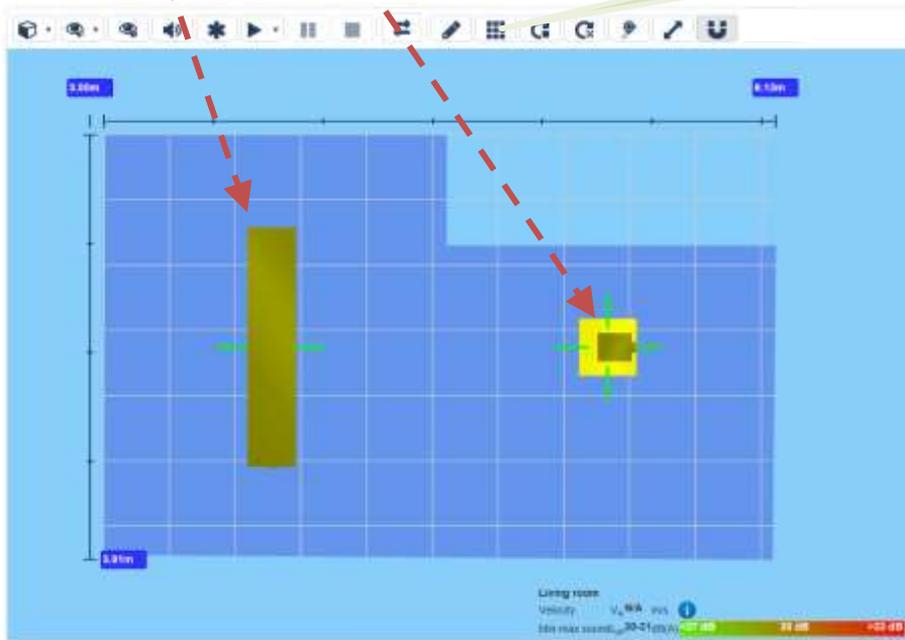
Draw rooms: Redraw the room according to a new geometry without influencing the products that have been added to the room.



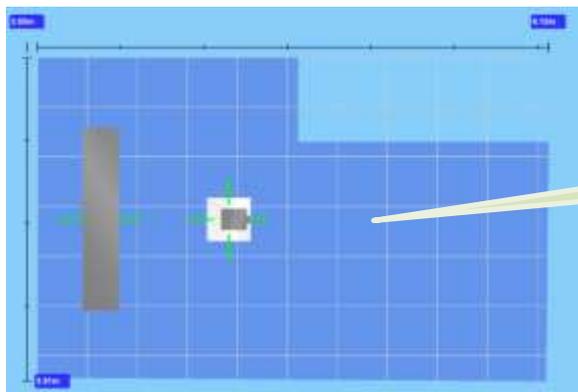
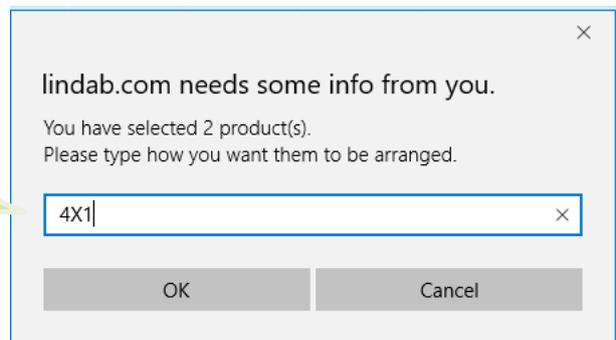
Arrange selected devices: Arranges multiple products according to a given grid.

1 Select devices. Press control for multiple selection

2 Click on "Arrange selected devices"



3 Enter the grid arrangement. The first number on the left represents the number of columns. The second number refers to the number of rows. Press OK



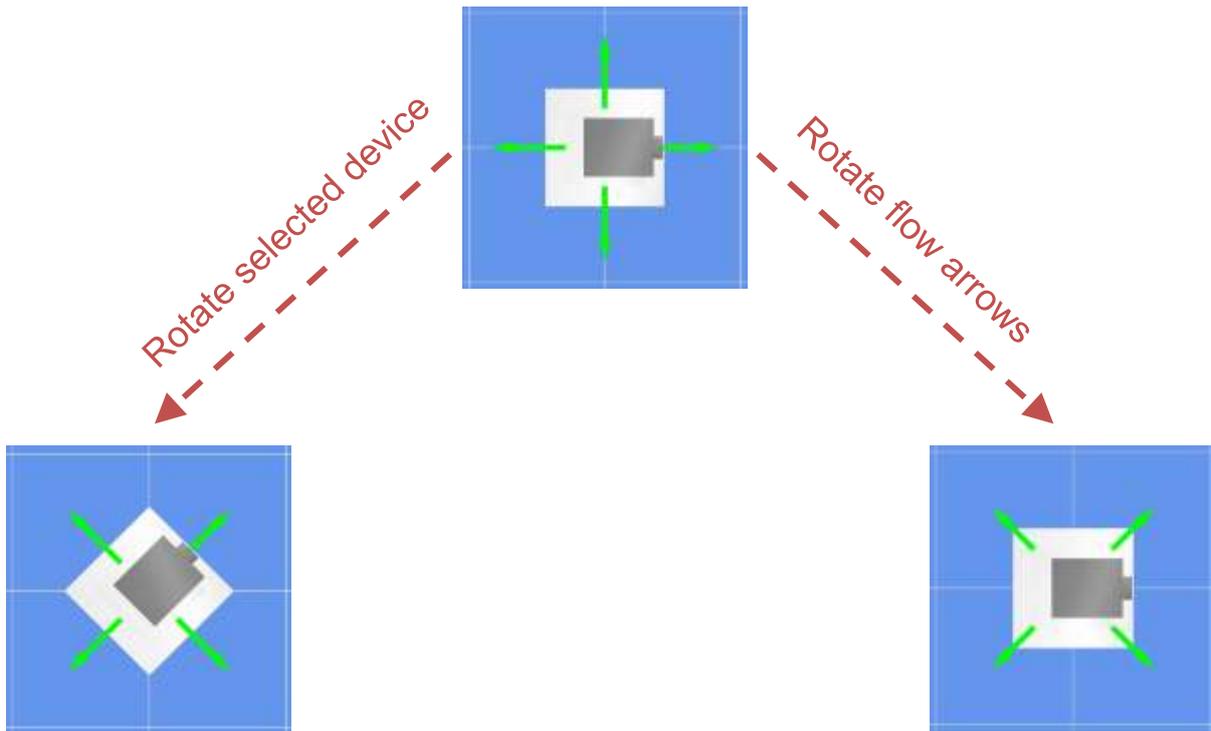
Products after arrangement



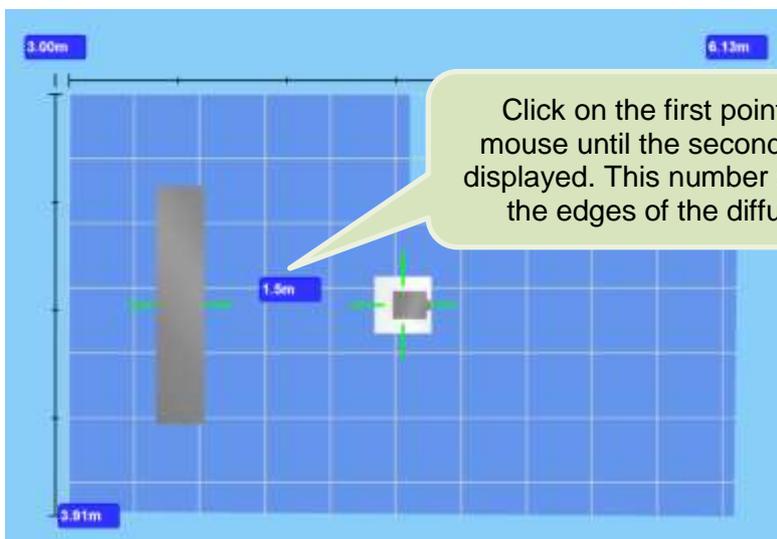
Rotate selected device.



Rotate flow arrows of selected devices: Rotates only the flow arrow while keeping the same position of the product.

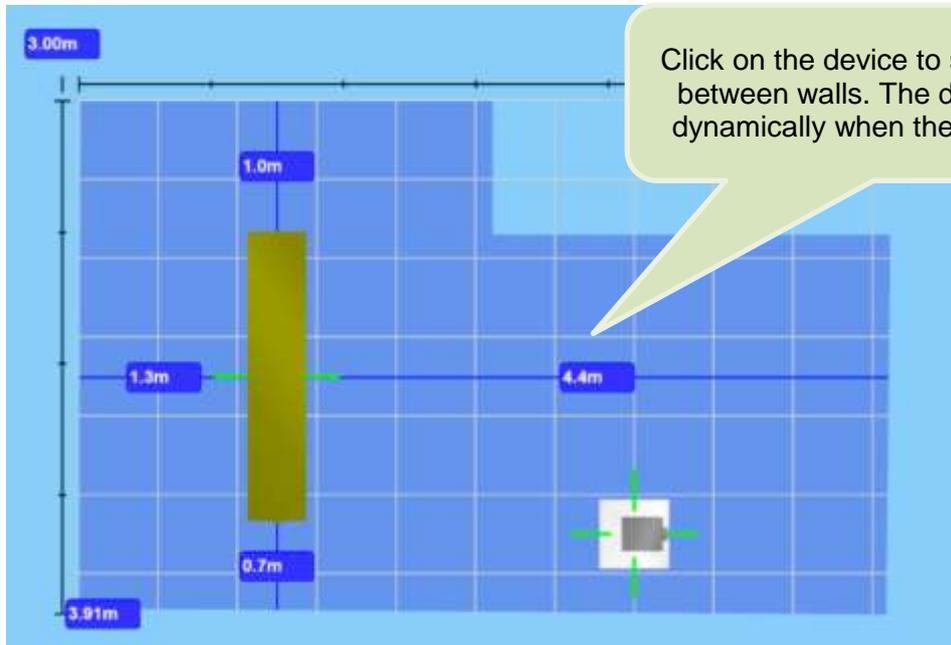


Measure distance.





Measure distance to walls.



Device snap: Deactivate this command when you want to move the device freely.



4.5 Keyboard shortcuts in ICD

You can see the list of shortcuts by hovering over the draw room command as shown below:

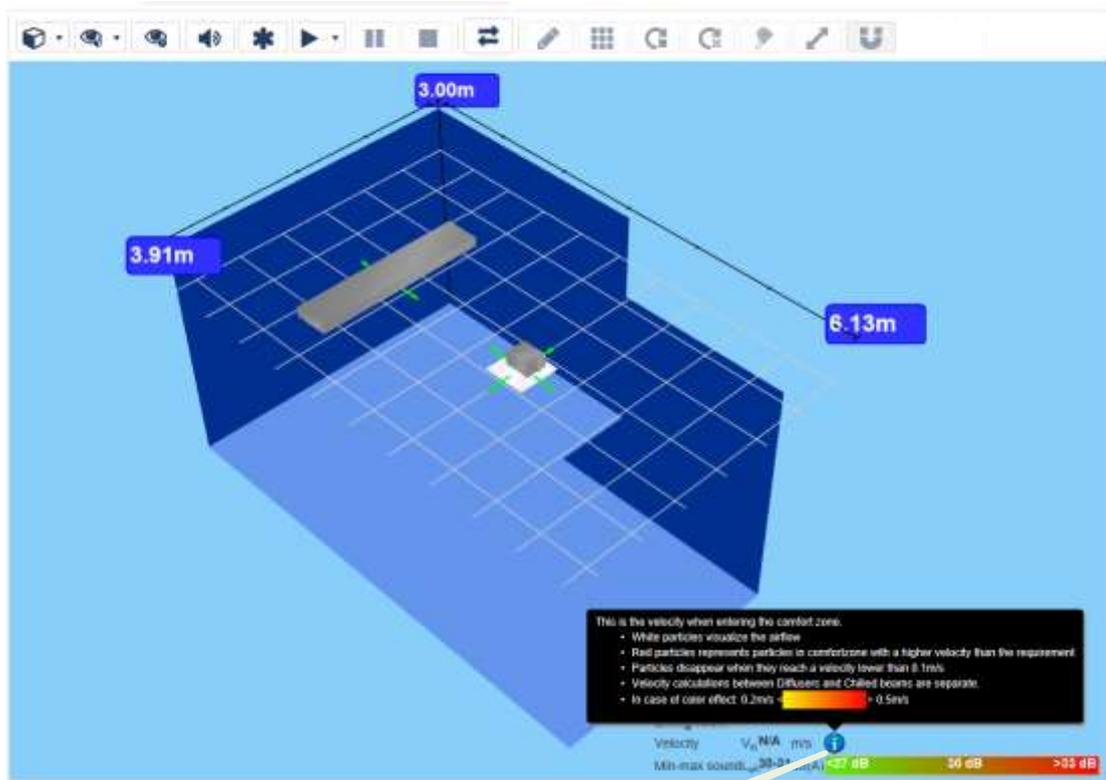


1. Left mouse key: Add wall point.
 2. U key: Undo last wall point.
 3. C key: Close the room.
 4. L key: Type exact length of a wall.
 5. Ctrl key: 45 degrees wall.
 6. Left shift: Stop snap to first point.
 7. Delete key: Remove selected object.
- } In 2D mode
- } In 3D mode



4.6 General notes

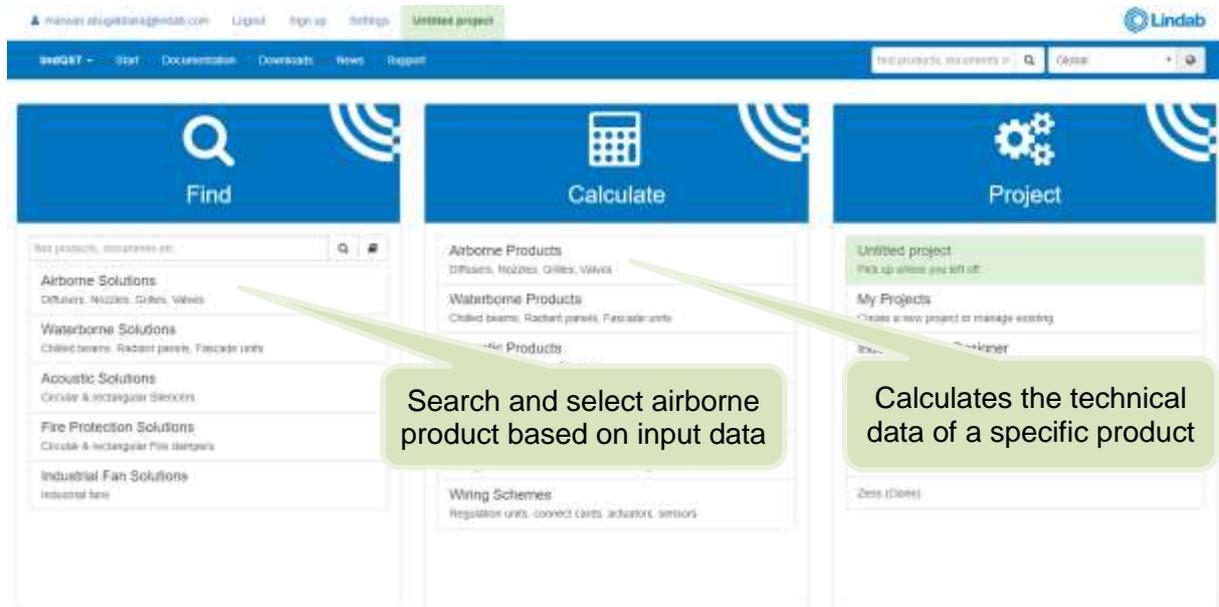
- To exit from any command on the 3D window, click once again on its icon and the command will be deactivated.
- Further explanation on the interpretation of the airflow simulation can be found by hovering the cursor over the explanation mark on the bottom of the 3D window. See figure below.



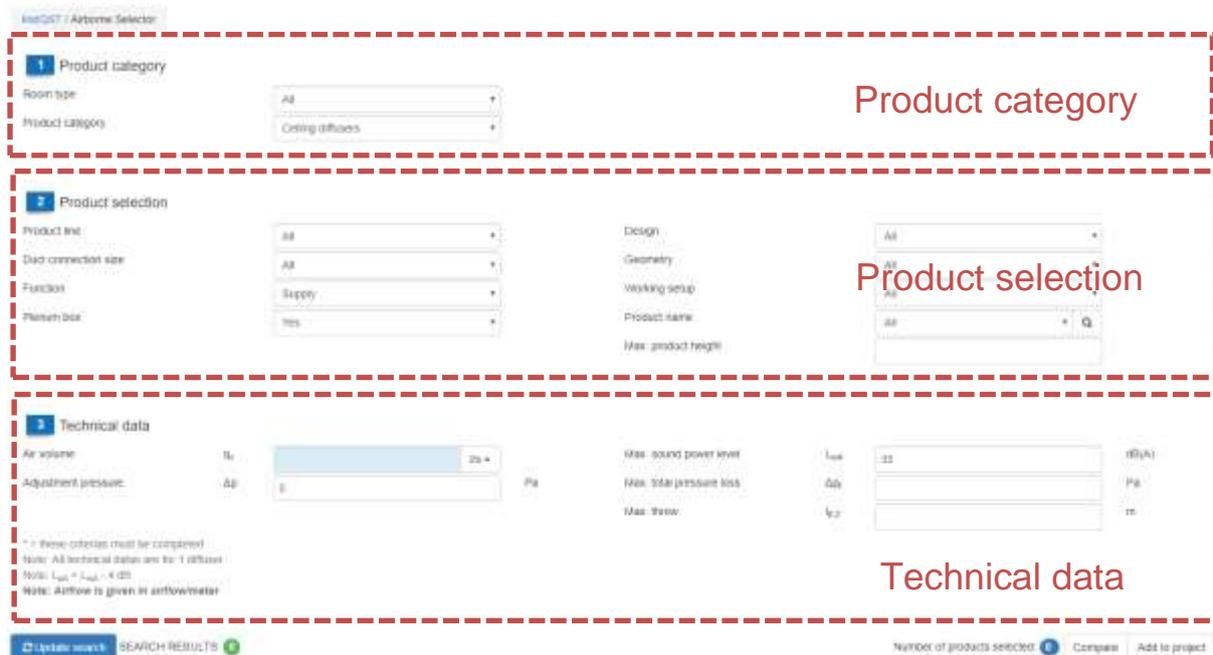
Hover the cursor over here



5 Airborne

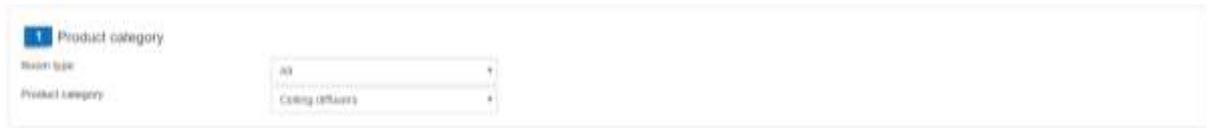


5.1 Airborne Solutions





5.1.1 Product category



Here, you begin by selecting the room type. By doing so, the search engine will narrow down the search results by excluding the non-suitable products. The option “All” will give a wider range of products regardless the room type.

Then, select the category of the airborne product from the wide variety of options available in the dropdown list.

5.1.2 Product selection



Duct connection size: Refers to the size of the duct connected either to the device or to the connection box.

Note: This configuration refers only to the square swirl diffuser (RS14) with R connection box

Duct connection size

RS14 with R box

Plenum box: MBB box with linear cone damper.



Choose/enter work setup, Duct connection, Max. product height, and Product name to narrow down the search results, or select “All” for a wider range of products.

5.1.3 Technical data

Mandatory field

3 Technical data

Air volume	V _a	<input type="text"/>	m ³ /s	Max. sound power level	L _w	<input type="text"/>	dB(A)
Adjustment pressure	ΔP	<input type="text"/>	Pa	Max. total pressure loss	ΔP _t	<input type="text"/>	Pa
		<input type="text"/>		Max. throw	I _{0,2}	<input type="text"/>	m

* = Basic values must be compared.
 Note: All technical data are for 1 (1) meter.
 Note: L_w = L_p + 4 dB.
 Note: Airflow is given in airflowmeter.

Note: You can fill in the white fields to narrow down the search results, or leave them empty for a wider range of products

Adjustment pressure: Static pressure in Pascal.

Max. total pressure loss: The sum of static and dynamic pressure (including a possible plenum box) connected to a straight air duct with a length of 1 m and the same dimension as the diffuser at air density = 1,2 kg/m³.

Max. sound power (L_w): The sound effect of the source device is measured in Watt and noted as sound effect level in decibels. The sound pressure (L_p) which is perceived by the ear equals to the sound power minus 4: L_p = L_w – 4

Max throw (I_{0,2}): Is the distance, in meters, between the center of the unit and the point in the air jet where the air velocity equals to 0,2 m/s.



5.1.4 Search for products

When you are finished with the previous three steps, click on “Update search” to show the results based on your selection criteria.

The screenshot shows the 'Product Selector' interface with three main sections:

- 1 Product category:** Includes dropdowns for 'Room type' (set to 'All') and 'Product category' (set to 'Ceiling diffusers').
- 2 Product selection:** Includes dropdowns for 'Product line' (All), 'Duct connector size' (All), 'Function' (Supply), 'Finish box' (Yes), 'Design' (All), 'Geometry' (All), 'Working setup' (All), 'Product name' (All), and 'Max. product height'.
- 3 Technical data:** Includes input fields for 'Air volume' (25), 'Adjustment pressure' (0), 'Max. sound power level' (35), 'Max. total pressure loss' (0.5), and 'Max. flow' (1.2). Units are specified as m³/s, Pa, dB(A), Pa, and m³/s.

At the bottom, there is a search bar with 'SEARCH RESULTS' and a green checkmark, and buttons for 'Compare' and 'Add to project'.

Click on “Update search”

The search engine will provide you with a list of results that matches your inputs. See next figure.



Update search SEARCH RESULTS 11

Number of products selected: 11 Compare Add to project

	Order code	Working setup	L_{p2} [m]	L_{w} [dB(A)]	A_{s} [m ²]
<input type="checkbox"/>	CRL-315+MBB-200-315-S	4-way	1.3	<20	3
<input type="checkbox"/>	CRL-315+MBB-200-315-S	4-way	1.3	<20	3
<input type="checkbox"/>	CRL-315+MBB-315-315-S	4-way	1.3	<20	1
<input type="checkbox"/>	CRL-315+MBB-200-315	4-way	1.3	<20	6
<input type="checkbox"/>	CRL-315+MBB-200-315	4-way	1.3	<20	3
<input type="checkbox"/>	CRL-315+MBB-315-315	4-way	1.3	<20	1
<input type="checkbox"/>	CRL-400+MBB-200-400-S	4-way	1.1	<20	2
<input type="checkbox"/>	CRL-400+MBB-315-400-S	4-way	1.1	<20	1
<input type="checkbox"/>	CRL-400+MBB-200-400	4-way	1.1	<20	2
<input type="checkbox"/>	CRL-400+MBB-315-400	4-way	1.1	<20	1

Click here to expand the product properties and have a quick access to different options without leaving the search results page

Update search SEARCH RESULTS 11

Number of products selected: 11 Compare Add to project

	Order code	Working setup	L_{p2} [m]	L_{w} [dB(A)]	A_{s} [m ²]
<input checked="" type="checkbox"/>	CRL-315+MBB-200-315-S	4-way	1.3	<20	3

CRL-315+MBB-200-315-S

Total pressure loss	Δp_t	3	Pa
Sound power level	L_{w}	<20	dB(A)
Throat	S_{p2}	1.3	m
Product height		290	mm

Generate PDF Generate DXF

Images Verification data Product description Related documents

<input checked="" type="checkbox"/>	CRL-315+MBB-200-315-S	4-way	1.3	<20	3
<input checked="" type="checkbox"/>	CRL-315+MBB-315-315-S	4-way	1.3	<20	1
<input checked="" type="checkbox"/>	CRL-315+MBB-200-315	4-way	1.3	<20	6



5.1.5 Compare products

On the search result page, you can compare up to three products and view their characteristics on one page by following these steps:

1 Select the products by checking their corresponding box

2 Click "Compare"

	Order code	Working setup	L_{eq} [m]	L_{eq} [dB(A)]	a_{p1} [Pa]
<input checked="" type="checkbox"/>	CRU-315-MEB-250-315-S	4-way	5.2	<20	5
<input type="checkbox"/>	DRU-315-MEB-250-315-S	4-way	5.2	<20	3
<input checked="" type="checkbox"/>	CRU-315-MEB-315-315-S	4-way	5.2	<20	7
<input type="checkbox"/>	CRU-315-MBC-250-315	4-way	5.2	<20	6
<input type="checkbox"/>	CRU-315-MBC-250-315	4-way	5.2	<20	2
<input type="checkbox"/>	CRU-315-MBC-315-315	4-way	5.2	<20	7
<input checked="" type="checkbox"/>	CRU-400-MEB-250-400-S	4-way	5.1	<20	7
<input type="checkbox"/>	CRU-400-MEB-215-400-S	4-way	5.1	<20	5
<input type="checkbox"/>	CRU-400-MBC-250-400	4-way	5.1	<20	2
<input type="checkbox"/>	CRU-400-MBC-315-400	4-way	5.1	<20	7



Click here to return to the results page and exit the comparison

Number of products selected: 3 Compare Add to project

Product	Total pressure loss ΔP_t	Sound power level L_{wA}	Throw $L_{d,2}$	Product height
CRL-315+MBB-250-315-S	41 Pa	30 dB(A)	4.3 m	340 mm
CRL-315+MBB-315-315-S	22 Pa	27 dB(A)	4.3 m	400 mm
CRL-400+MBB-250-400-S	50 Pa	29 dB(A)	5.8 m	370 mm

Images | **Ventilation data** | Product description

Relative documents

Hz	63	125	250	500	1K	2K	4K	8K
K_{dB}	13	6	-1	-2	-6	-12	-17	-23
ΔL	11	7	0	15	17	17	15	10

Select

Click on select to view the full properties of the selected product

★ **Note:** Navigate through the different tabs for other properties



5.1.6 Add to project

1 Select product/s

2 Click on "Add to project"

Update search SEARCH RESULTS 0

Number of products selected: 3 Complete Add to project

	Order code	Working setup	Load [Pa]	Load [BSA]	Abs [Pa]
	CRL-250+MBC-250-250	4-way	5.3	34	40
<input checked="" type="checkbox"/>	CRL-315+MBC-315-315-S	4-way	4.5	33	41
<input checked="" type="checkbox"/>	CRL-315+MBC-315-315-R	4-way	4.5	37	39
<input checked="" type="checkbox"/>	CRL-315+MBC-315-315	4-way	4.5	26	32
	CRL-315+MBC-315-315	4-way	4.5	23	32
<input checked="" type="checkbox"/>	CRL-400+MBC-315-400-S	4-way	3.8	26	32
<input checked="" type="checkbox"/>	CRL-400+MBC-315-400-E	4-way	3.8	33	38
	CRL-400+MBC-315-400	4-way	3.8	20	24
	CRL-400+MBC-315-400	4-way	3.8	21	18



Add to project

Please note that any room-related parameter used in the calculation will not be transferred to any existing room.

Project: Office building

Floor: Floor 1 Indoor Climate Designer

Room: Meeting Room Indoor Climate Designer

Number of products: 1

Select project, floor, and room then click on Add

You can create a new project by clicking here

5.1.7 Product properties

When you have searched for a product and you want to view its data, click on the product on the search results screen. This window will open:

The screenshot shows a software interface for product selection. On the left, there is a 'General information' section with various input fields: Product category (All), Product name (CRL-), Duct connection size (100), Function (Supply), Plenum box (Yes), Working setup (4 way), Article name (CRL-100+MBB-100-100-S), Air volume (20), Room attenuation (1), Adjustment pressure (0), and Description. A 'Calculate' button is at the bottom of this section. On the right, the 'Order code' section shows 'CRL-100+MBB-100-100-S' with buttons for 'Generate PDF', 'Generate COF', 'Visualize', and 'Add to project'. Below this, there are tabs for 'Product information' and 'Results', and a 'Visualize' button. A 3D image of the product is shown on the right side.

1) Main tab which includes two options:

Product information

Includes four sub options:

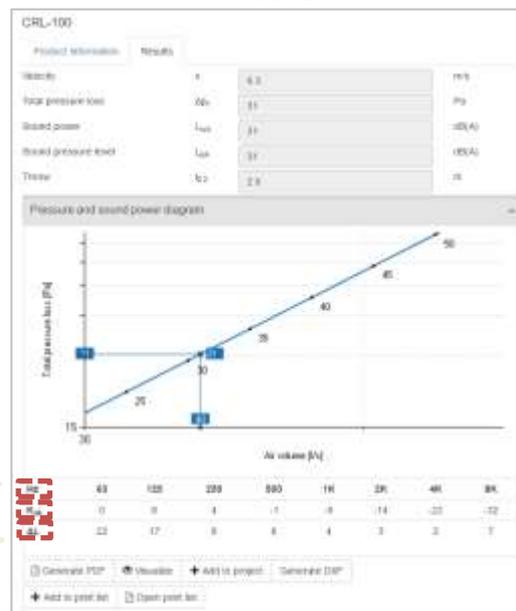
- Images.
- Ventilation data
- Product description.
- Related documens.

Note: These options will be explained in the next point.

Results

Three callout boxes with green backgrounds and white text point to specific data points in the technical data table below:

- Centre frequency in Hertz
- Octave correction value for sound power level
- Room attenuation



Product's technical data

Product information sub options:

→ **Images:** Shows images of the selected product.



→ **Product description:** Description of the functionality and features of the product in a text wise.

Images Product description Related documents

CRL is a circular diffuser with an unperforated adjustable face plate and can be used for both supply and extract air. The diffuser can be switched between horizontal and vertical supply air, and is therefore suitable for the horizontal supply of cooled air or vertical supply of heated air. The CRL can be equipped with accessories of various types in order to achieve optimal function.

Installing a CRL diffuser in a plenum box type MB can help to achieve a stable airflow to the diffuser as well as realise the potential for individual adjustment.

Damper type B is a unique linear cone damper which allows to use the full operational area (0-100%) and allows to balance with a high pressure drop over the box with low sound generation. Furthermore the construction of the damper gives an accurate and reliable measurement.

Damper type C and E are with rotating blade dampers for respectively supply and extract. Typically used in applications that don't require a high balancing pressure in the plenum box.

- Suitable for both supply and extract air
- Suitable for horizontal or vertical supply air patterns
- Plenum box with several damper options.

→ **Related documents:**

Images Product description Related documents

[Download all documents](#)

[Building product declaration](#)

[Catalogue page](#)

[Ceiling adaption](#)

[MIS](#)

[Mounting](#)

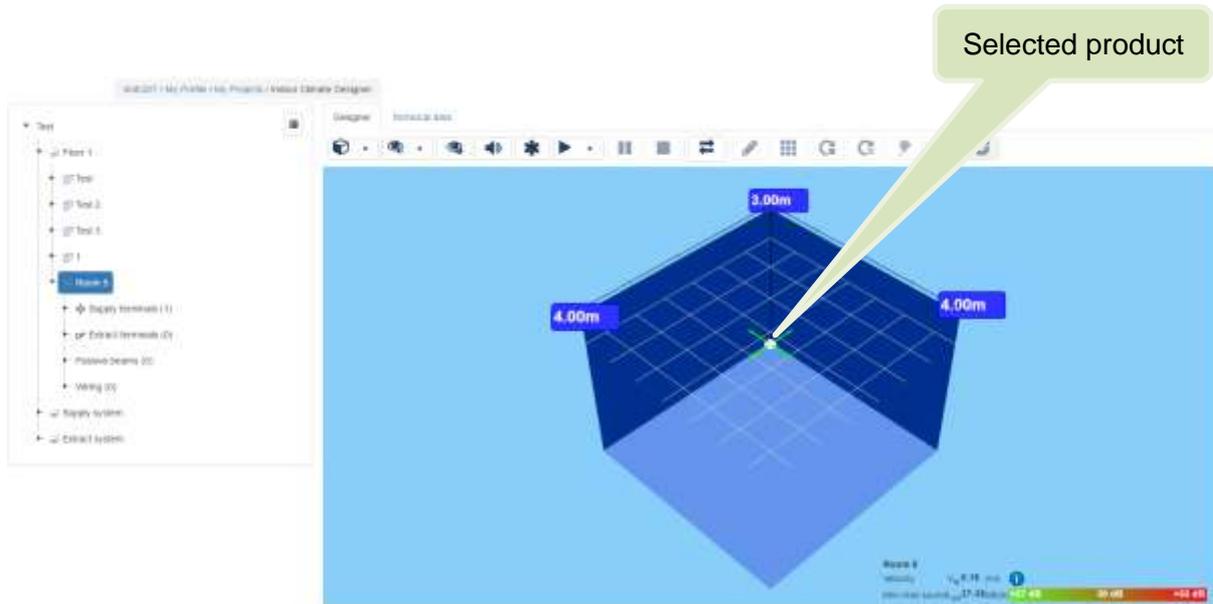
[Theory](#)



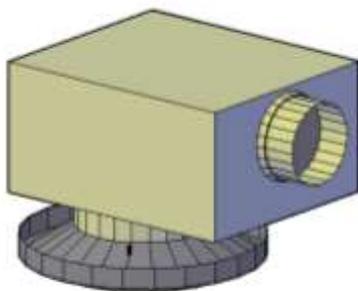
2) Other features:

 **Generate PDF** Generates a pdf file with all the information of the selected product.

 **Visualize** Quick visualization and airflow simulation of the selected product in Indoor Climate Designer. See section 4 for explanation on how to use ICD



 **Generate DXF** Exports a 3D object of the product that can be opened in CAD drawings.



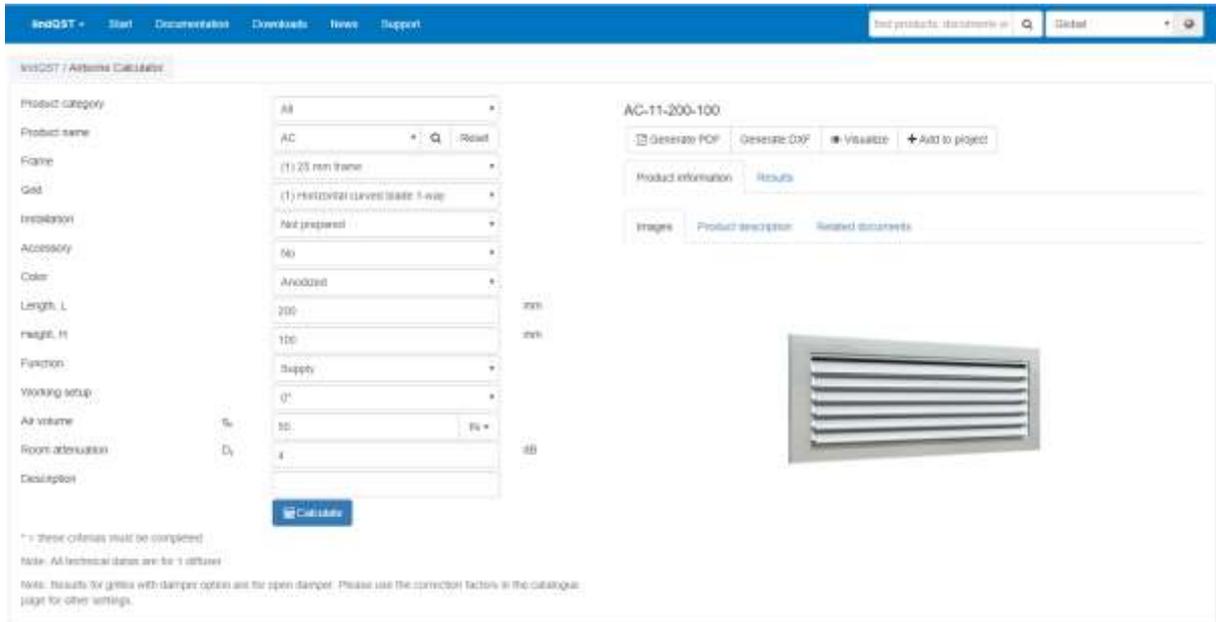
CRL-160+MBB-100-160-S
3D object in AutoCAD

 **Add to project** As explained in section 4.3



5.2 Airborne products/calculator

Airborne calculator is used when a specific product is intended to be calculated and analyzed for given inputs. Depending on the product name, fields of inputs will be changed accordingly.

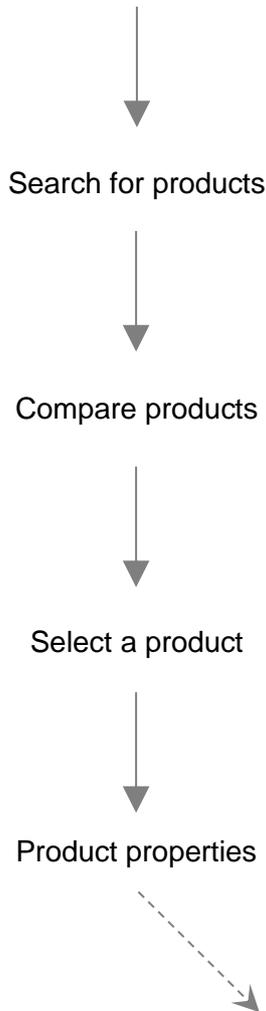


★ Navigate through the page in the same way as described in section 5.1.7 Product properties

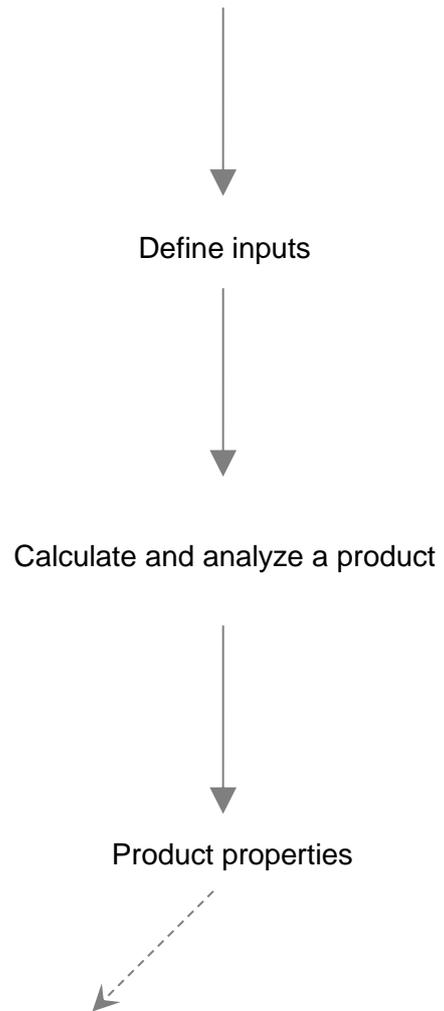


5.3 Summary of airborne

Airborne solutions



Airborne calculator



- Results
- Ventilation data
- Add to Indoor Climate Designer
- Generate pdf
- Generate DXF
- Download documents



6 Waterborne

The screenshot shows the Lindab software interface with three main sections: Find, Calculate, and Project. The 'Find' section lists various solution categories like Airborne, Waterborne, Acoustic, Fire Protection, and Industrial Fan. The 'Calculate' section lists product types such as Airborne Products, Waterborne Products, Acoustic Products, and Fire Protection Products. The 'Project' section shows options for creating a new project or managing existing ones. Two callouts are present: one pointing to the 'Waterborne Solutions' category in the 'Find' section with the text 'Search and select waterborne product based on input data', and another pointing to the 'Calculate' section with the text 'Calculates the technical data of a specific product'.

6.1 Waterborne Solutions

The 'WATERBORNE Selector' tool is divided into three main sections:

- 1 Product category:** Includes dropdowns for Room type, Placement, Product category, Function, and Product name.
- 2 Product selection:** Contains radio buttons for calculation methods (e.g., Calculate water flow from given delta T) and input fields for various parameters like Room air temperature, Temperature gradient in room, Primary air temperature, Water inlet temperature, Temperature difference water circuit, Max. allowed pressure drop loss in water circuit, and Required capacity.
- 3 Technical requirements:** Includes input fields for Primary airflow rate, Static nozzle pressure loss, Max. sound power level, Max. deflection in mm, Max. number of products, and Max. length.

Callouts on the right side of the image identify these sections: 'Product category', 'Dimensioning criteria', and 'Technical data'.



6.1.1 Product category

Here you choose some constraints that will limit the search results by excluding the non-suitable products. The option “All” will give a wider range of products regardless any constraints.

Varying the function of the product will affect the required inputs in the next step “Dimensioning criteria”

The screenshot shows a web interface for selecting product categories. It includes several dropdown menus: 'Room type' (set to 'All'), 'Placement' (set to 'All'), 'Product category' (set to 'Active chilled beams'), 'Function' (set to 'Cooling'), and 'Product name' (set to 'All').

There are four categories for the waterborne products:

Product category

The dropdown menu is open, showing the following options: 'Active beams' (highlighted in blue), 'Radiant panels', 'Facade units', and 'Passive beams'.



6.1.2 Dimensioning criteria

Choose the desired input method for dimensioning the product:
1) Temperature difference of product's water circuit.
2) Water flow in the product's water circuit.
3) Use the nominal water flow of which the product is operated by.

2 Product selection

- Δt_w - Calculate water flow from given delta T
- q_w - Calculate delta T from given water flow
- q_w (nom) - Calculate delta T from nominal water flow

❄ Cooling

Room air temperature	t_r	<input type="text" value="25"/>	°C
Temperature gradient in room	t_g	<input type="text" value="0"/>	K
Primary air temperature	t_{ai}	<input type="text" value="18"/>	°C
Water inlet temperature	t_{wi}	<input type="text" value="14"/>	°C
Temperature difference water circuit	Δt_w	<input type="text" value="3"/>	K
Max. allowed pressure drop loss in water circuit _{cooling}	Δp_w	<input type="text" value="12"/>	kPa
Required capacity _{cooling} *	P	<input type="text"/>	W



The same inputs are applicable for heating

Remember:

- Temperature gradient in room: Temperature gradient caused by density differences between warm and cold air in the room.
- Temperature difference water circuit: Difference in temperature between inlet and outlet of the water loop into the product.



6.1.3 Technical data

You enter the primary air volume by either two ways:
1) As a total air volume in the room.
4) Percentage of the maximum airflow allowed in the product.

[Update search](#) SEARCH RESULTS: 0

Once you have filled the data, click on "Update search"



6.1.4 Search for products

SEARCH RESULTS 15

 Number of products selected: 1

ID	Order code	q [m]	q _{net} [m]	L [m]	Quantity	V _{net} (MVA)	q _{net} [W]	A _{net} (RFV)	F _h [N]	F _h (90) [N]
▶	Architect Profile 12-125-A1-1.2-80-30	30	80	1.2	2	24	0.0279	0.8	603	1206
▶	Architect Line 12-125-A1-1.2-80-30	30	80	1.2	2	24	0.0279	0.8	603	1206
▶	Architect Corner 12-125-A1-1.2-80-30	30	80	1.2	2	24	0.0279	0.8	603	1206
▶	Plating B-12-2x100-A1L-3.4-80-60	60	80	3.6	1	34	0.0945	10	1994	1994
▶	Profile F-30-15-2x100-A1-3.5-80-60	60	60	3	1	34	0.0848	9.5	1573	1573
▶	Profile F-45-12-2x100-A1-3-0-80-60	60	60	3	1	34	0.06	8	1511	1511
▶	Profile Plus F-60-12-2x100-A1-3-5-80-60	60	60	3.6	1	31	0.1023	14.2	1918	1918
▶	Profile Plus F-60-15-2x100-A1-3-5-80-60	60	60	3.6	1	31	0.1111	15.1	1903	1903
▶	Mansard L-1200-12-125-A5-80-30	30	60	1.2	2	28	0.0688	16.6	1117	2235
▶	Peksa 840-12-125-A5-90-60	30	60	600	2	32	0.0381	2.9	732	1464
▶	Premat 160-12-125-A1-1.2-80-30	30	60	1.2	2	22	0.0381	1.5	732	1464
▶	Premat 160-12-125-A1-1.2-80-30	30	60	1.2	2	22	0.0648	7.3	940	1884
▶	Premat 160-15-125-A1-1.2-80-30	30	60	1.2	2	22	0.0540	1.1	340	1884
▶	Podium 17-10-100-A1-4-8-30	30	80	4.8	2		0.0314	11.8	647	1294
▶	Podium 18-10-100-A1-3-0-30	30	80	3	2		0.0445	17.8	630	1273
▶	Podium 18-12-100-A1-2-4-30	30	60	2.4	2		0.0225	2.4	663	1326



The search results window looks exactly the same as in the airborne selector (see sections 5.1.4 to 5.1.7)



6.1.5 Product results

The product results window for waterborne products looks the same as in the airborne product results except for a few changes related to the design data. These change are explained in this section.

See next page!

Dimensioning criteria

Same features as in airborne products



Professor F-45-12-100-A1-2.4-00-20

Generate PDF Generate CWI Visualize Add to project

Product information Results

Product description Related documents

Product information Results

Results	1	▼
Total results	2	▼
Additional results	3	▼

Symbols, definitions, and units:

Symbol	Definition	Unit
t_r	Room temperature	°C
t_{wi}	Water inlet temperature	°C
t_{wo}	Water outlet temperature	°C
t_{ai}	Primary air temperature	°C
t_g	Temperature gradient in room	K
Δt_{rw}	Temperature difference between room air temp. and mean water temp.	K
Δt_{ri}	Temperature difference between room air temp. and primary air temp.	K

1) Results:

Professor F-45-12-100-A1-2.4-60-20-Heating



Results are based on the design inputs shown in section 6.1.5

		Cooling	Heating	
Temp. difference between room air temp. and mean water temp.	Δt_{rw}	9.500	27.000	K
Nominal water capacity	P_{nom}	611	1283	W
Water flow rate	q_w	0.0509	0.0304	l/s
Corrected water capacity	P_w	642	1278	W
Capacity air	P_a	168	-48	W
Total Capacity	P	810	1230	W
Pressure loss in water circuit	Δp_w	3.1	0.6	kPa
Sound power level	L_{wA}	28		dB(A)
Sound pressure level	L_{pA}	28		dB(A)
Water capacity / active meter		306	609	W/m
Mixed air temperature	t_{am}	19.1	32.0	°C
Total results				
Additional results				

- Δt_{rw} (cooling) = $t_r + t_g - (t_{wi} + t_{wo}) / 2 = 25 + 0 - (14 + 17) / 2 = 9,5$ K
- Δt_{rw} (heating) = $(t_{wi} + t_{wo}) / 2 - t_r - t_g = (55 + 45) / 2 - 21 - 2 = 27$ K
- Δt_{ri} (cooling) = $t_r - t_{ai} + t_g = 25 - 18 + 0 = 7$ K
- Δt_{ri} (heating) = $t_r - t_{ai} - t_g = 21 - 21 - 2 = -2$ K
- P_a (cooling) = $q_a \times 1,2 \times \Delta t_{ri} = 20 \times 1,2 \times (7) = 168$ W
- P_a (heating) = $q_a \times 1,2 \times \Delta t_{ri} = 20 \times 1,2 \times (-2) = -48$ W
- Total capacity (P) = $P_w + P_a$
- Sound power level = Sound pressure level + 4 dB = 24 + 0 = 24 dB
- Sound pressure level: dependent on product configuration. In this example = 24 dB
- Nominal water capacity, corrected water capacity, water flow rate, and pipe pressure loss can be calculated from the product's catalogue. For Professor catalogue, click here:





2) Total results:



Shows the final results after iterations and corrections

Results				
Total results				
Primary airflow rate	q_a	20		l/s
Water flow rate	q_w	0.0509	0.0304	l/s
Total Capacity	P	810	1230	W
Additional results				

Air + water



3) Additional results:

Results				▼
Total results				▼
Additional results				▲
Penetration length, horizontal (min)	X_{ip}	1.7		m
Penetration length, horizontal (max)	X_{ip}	1.7		m
Added pressure loss in connection	Δp_a	7		Pa
Total air pressure loss in duct	Δp_t	67		Pa
Air volume / active meter	q_a/L_{act}	9.5		l/s/m
Induction ratio	q_{ai}/q_a	4.7		
Induction air volume	q_{ai}	94		l/s
Mixed air volume	q_{am}	114		l/s

- Penetration length: refers to the horizontal length on the ceiling plane before the cooled air starts to fall down from ceiling. It depends on the jet cone settings of the product.
- Added pressure in connection: dependent on product configuration.
In this example = 7 Pa
- Total air pressure loss in duct = static nozzle pressure loss + added pressure in connection = 60 + 7 = 67 Pa
- Induction ratio = Induction air volume / primary air flow = 94 / 20 = 4,7
- Induction air volume and mixed air volume are dependent on product configuration.



6.2 Waterborne products/calculator

Waterborne calculator is used when a specific product is intended to be calculated and analyzed for given inputs. Depending on the product name, fields of inputs will be changed accordingly.

Product: Plexus IS120-12-125-A5-15-00

Function: Cooling 2-pipe system

Type: I

Water connection: 12 mm

Air connection: 1x125 mm

Connection type: AS

Product length: 1200

Distribution profile: Rama

Static nozzle pressure loss: 9 Pa

Primary airflow rate: 15 m³/s

Room attenuation: 3 dB

Number of products: 1

Description:

Capacity need: \dot{V}_v W

Room air temperature: t_r 20 °C

Temperature gradient in room: Δt_r 0 K

Primary air temperature: t_a 16 °C

Water inlet temperature: t_w 14 °C

Temperature difference water circuit: Δt_w 3.0 K

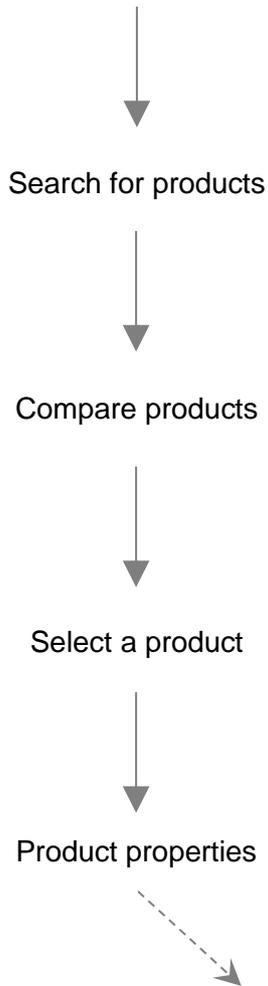
Buttons: Calculate, Costing

★ Navigate through the page in the same way as described in section 6.1.5 Product results

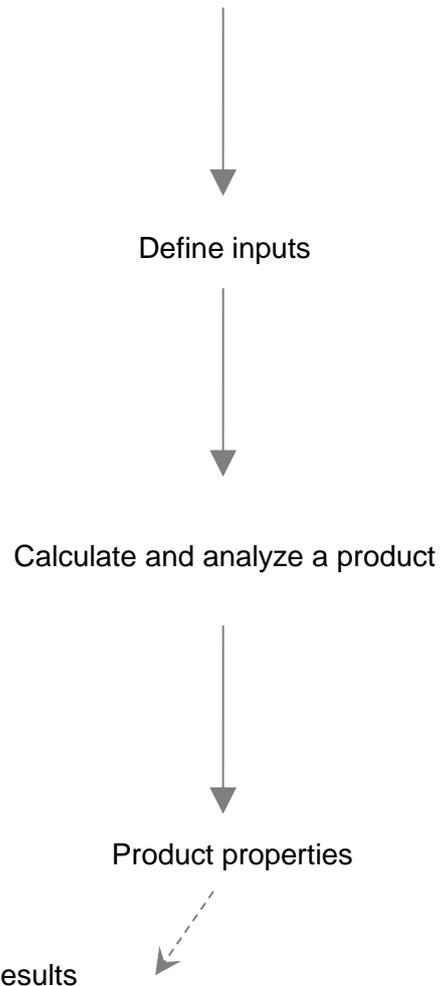


6.3 Summary of waterborne

Waterborne solutions



Waterborne calculator



- ✓ Results
 - Total results
 - Additional results

- ✓ Ventilation data
- ✓ Add to Indoor Climate Designer
- ✓ Generate pdf
- ✓ Generate DXF
- ✓ Download documents



7 Fire protection

The screenshot shows the Lindab software interface with three main sections: Find, Calculate, and Project. The Find section lists various solutions including Airborne, Waterborne, Acoustic, Fire Protection, and Industrial Fan. The Calculate section lists products like Airborne, Waterborne, Acoustic, Fire Protection, and Duct Leakage. The Project section shows an 'Untitled project' and 'My Projects'.

Search and select fire damper based on input data

Calculates the technical data of a specific damper

7.1 Fire protection solutions

The 'Fire damper Selector' tool is divided into three main sections:

- Construction selection:** Includes dropdowns for Construction type, Installation type, Sealing, Min. thickness, Min. density, and Fire resistance class.
- Product selection:** Includes dropdowns for Connection, Duct connection size, and Product name.
- Technical requirements:** Includes input fields for Airflow, Max. sound power level, Max. total pressure loss, Max. velocity, and a table for technical data (L_{WA}, Δp_T, v, dB(A), Pa, m/s).

Additional text at the bottom: "These criteria must be completed. Note: All technical data are for 1-diffuser. Note: L_{WA} = L_{WA} - 4 dB. Note: Airflow is given in air/watermeter." Buttons for 'Update search', 'SEARCH RESULTS', 'Number of products selected', 'Compare', and 'Add to project' are also visible.



7.1.1 Construction selection

Enter data by choosing from the options available in the dropdown list of each field. The search engine will narrow down the search results by excluding the non-suitable products. The option “All” will give a wider range of products regardless the room type.

7.1.2 Product selection

Select whether the connection is circular or rectangular to narrow down the search results. Choose the product name and / or duct connection size to also narrow down the search results. The option “All” will give a wider range of products regardless the room type.



7.1.3 Technical data

Mandatory input!

3 Technical requirements

ArtNo: [input field] [dropdown]

Max. sound power level: [input field] dB(A)

Max. total pressure loss: [input field] Pa

Max. velocity: [input field] m/s

* - Base criteria must be completed
Note: All technical data are for 1 diffuser
Note: L_{WA} = L_{WA} - 0 dB
Note: Airflow is given in cfm/cmmeter

[Update search] SEARCH RESULTS ✓

Number of products selected: 1 [Compare] [Add to project]

Once you have filled the data,
click on "Update search"



7.1.4 Search products

System search SEARCH RESULTS 17

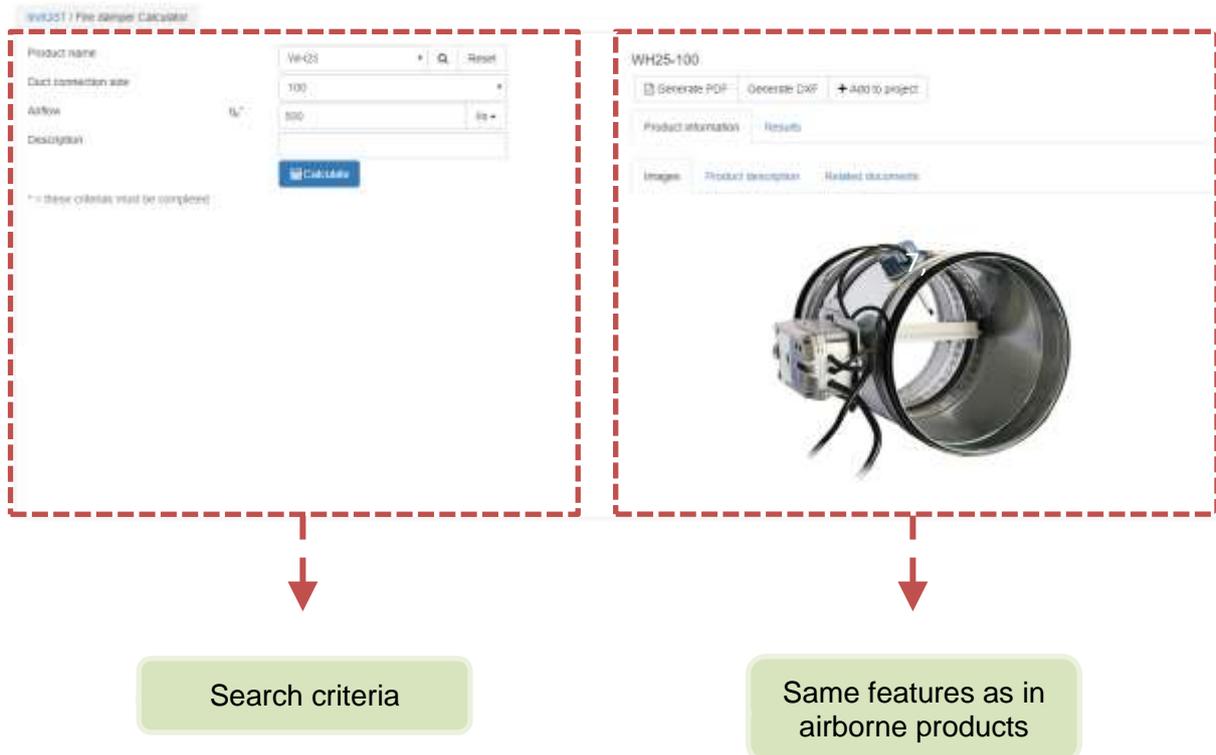
Number of products selected 1 Compare Add to project

	Order code	SA (PN)	L _{eq} (250Hz)	v (Hz)
•	WH05-100	3882	97	63.7
•	WH05-120	1206	84	48.7
•	WH05-140	806	77	32.9
•	WH05-150	464	75	28.2
•	WH05-160	301	68	24.9
•	WH05-180	179	62	19.6
•	WH05-200	105	52	15.9
•	WH05-224	57	48	12.7
•	WH05-250	32	42	10.2
•	WH05-280	18	35	8.1
•	WH05-300	12	31	7.1
•	WH05-311	10	28	6.4

★ The search results window looks exactly the same as in the airborne selector (see sections 5.1.4 to 5.1.7)

7.1.5 Product result

The product results window for fire damper products looks the same as in the airborne product results except for a few changes related to the design data. These changes are explained in this section.



Search criteria

Same features as in airborne products



7.2 Fire damper products/calculator

Fire damper calculator is used when a specific product is intended to be calculated and analyzed for given inputs. Depending on the product name, fields of inputs will be changed accordingly.

The screenshot shows the 'Fire Damper Calculator' interface. On the left, there are input fields for 'Product name' (WH-25), 'Duct connection size' (100), and 'Airflow' (500). A red dashed box highlights these three input fields, with a callout bubble labeled 'Input data' pointing to it. Below the input fields is a blue 'Calculate' button, with a callout bubble labeled 'Click Calculate' pointing to it. On the right side of the interface, there are buttons for 'Generate PDF', 'Generate DXF', and 'Add to project'. Below these are tabs for 'Product information' and 'Results'. At the bottom right, there is a large image of a fire damper product.

★ Navigate through the page in the same way as described in section 7.1.5 Product results



8 Acoustic

The screenshot shows the Lindab software interface with three main sections: Find, Calculate, and Project. The Find section lists various solutions like Airborne, Waterborne, Acoustic, Fire Protection, and Industrial Fan. The Calculate section lists products like Airborne, Waterborne, Acoustic, Fire Protection, Duct Leakage, and Wiring Schemes. The Project section shows an 'Untitled project' and 'My Projects'.

Search and select silencer based on input data

Calculates the technical data of a specific silencer

8.1 Acoustic Solutions

The 'Silencer Selector' tool is divided into three main sections:

- Silencer placement:** Includes dropdowns for 'Sound before and after silencer', 'System', 'Placement', and 'Fan'. A diagram shows a duct layout with 'Surrounding quiet', 'Outlet', 'Rooms', 'Supply', and 'Extract'.
- Silencer performance:** A table showing noise levels (dB) for different frequencies (63, 125, 250, 500, 1k, 2k, 4k, 8k, 08(A)) for 'LW before', 'Inherent loss', 'Self-generated noise', and 'LW after'.
- Technical requirements:** Includes dropdowns for 'Duct type', 'Silencer type', 'Product name', and 'Duct connector size'. It also has input fields for 'Air volume', 'Max. total pressure loss', 'Max. water barrier', and 'Sound tolerance'.

At the bottom, there is an 'Update search' button, 'SEARCH RESULTS' (1), 'Number of products selected' (6), 'Compare', and 'Add to project'.



8.1.1 Silencer placement

The screenshot shows the 'Silencer placement' dialog box. Callout 1 points to the search criteria dropdown menu. Callout 2 points to the 'System' dropdown menu. Callout 3 points to the 'Placement' dropdown menu. To the right of the dialog is a schematic diagram of a duct system with 'Surrounding', 'Inlet', 'Outlet', 'Supply', and 'Extract' sections.

Fan:

Here you can define fan's sound data that will be used in the the next section, sound data. The fan will be saved automatically under the name that you've given. Fill in the sound data for the different octave bands.

Fan data

Name: Sample fan + New

Fan: Sample fan * Delete

Supply air volume: 500 l/s

Extract air volume: 500 l/s

	63	125	250	500	1K	2K	4K	8K	dB(A)
→ (1) Inlet	90	-	-	-	-	-	-	-	64
→ (2) Supply	70	-	-	-	-	-	-	-	44
→ (3) Outlet	50	-	-	-	-	-	-	-	24
→ (4) Extract	65	-	-	-	-	-	-	-	39
	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

OK Cancel



8.1.2 Silencer performance

Enter the sound data of the corresponding fields. The fields are activated based on your selection in the previous step.

★ Taken from the fan sound data in the last step

8.1.3 Technical data

Enter technical data to limit the search results

★ Blue fields are mandatory



8.1.4 Search products

Update search SEARCH RESULTS 0

Number of products selected: 0 Compare Add to project

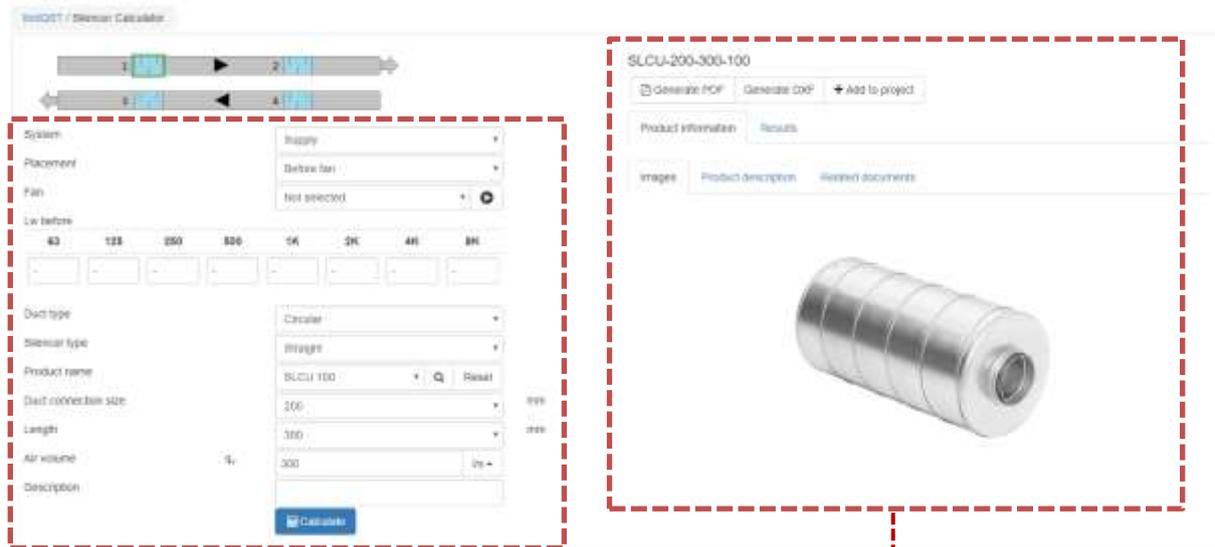
		Order code	L (mm)	Δa (%)	L _{tot} (mm)	V (m³)
▶		LAC5-63-300-0	300	0	67	0,2
▶		LAC5-63-600-0	600	0	67	0,2
▶		SLCJ-63-300-50	300	0	67	0,2
▶		SLCJ-63-600-50	600	0	67	0,2
▶		SLU-63-300-50	300	0	67	0,2
▶		SLU-63-600-50	600	0	67	0,2



The search results window looks exactly the same as in the airborne selector (see sections 5.1.4 to 5.1.7)



8.1.5 Product result



Silencer configuration and technical data

Product information and results

★ Results are presented in the same way as in all other products



Results:

Shows the pressure loss, face velocity, and sound data of the selected product

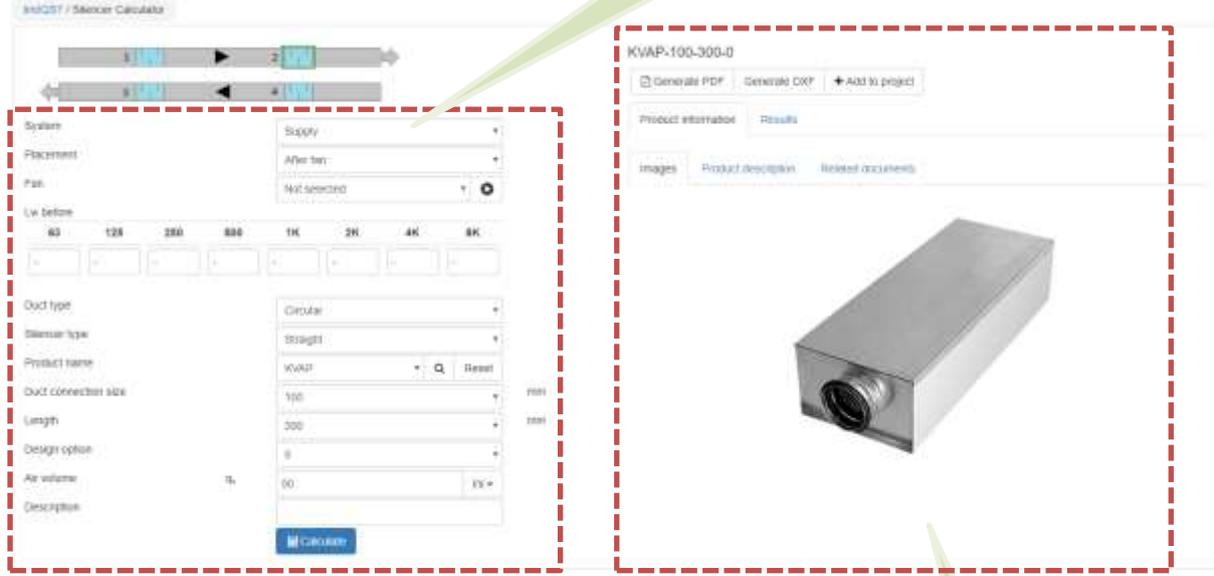
SLCU-315-900-100

Product information		Results									
Total pressure loss		0								Pa	
Face velocity		0.6								m/s	
		63	125	250	500	1K	2K	4K	8K	dB(A)	NR
Lw before		-	-	-	-	-	-	-	-	0	0
Insertion loss		2	6	12	14	19	15	7	8		
Self-generated noise ⓘ		0	0	0	0	0	0	0	0	0	0
Lw after		-	-	-	-	-	-	-	-	0	0
		dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	NR

8.2 Acoustic products/ calculator

Silencer calculator is used when a specific product is intended to be calculated and analyzed for given inputs. Depending on the product configuration, fields of inputs will be changed accordingly.

Input data

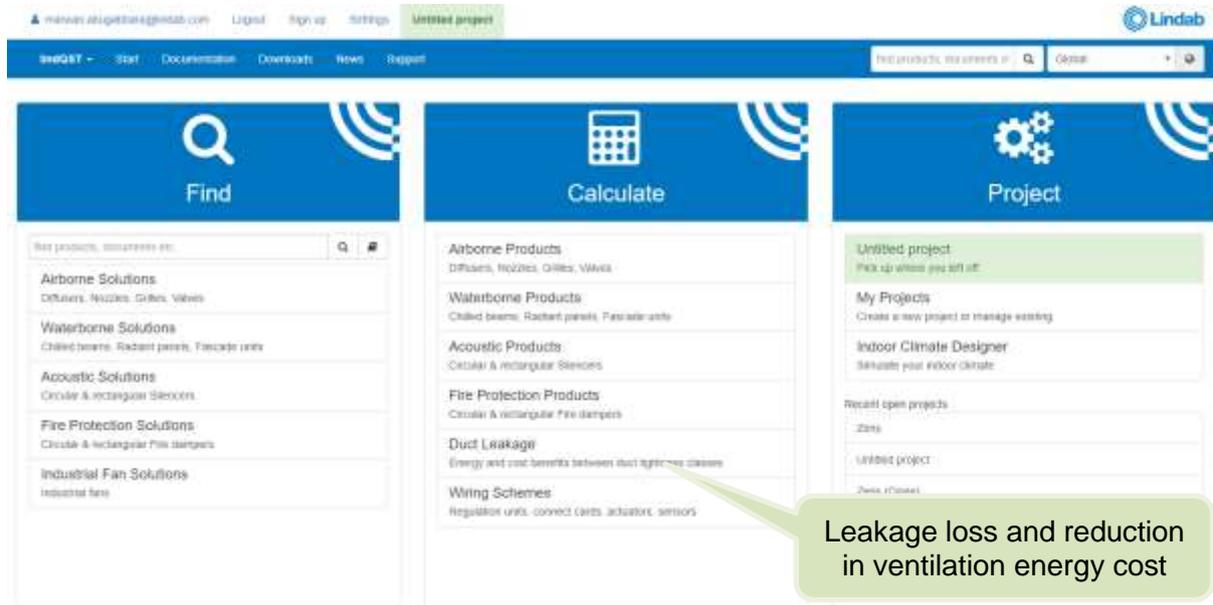


Results

★ Navigate through the page in the same way as described in section 8.1.5 Product results



9 Air duct systems



9.1 Inputs

There are two methods in order to define the inputs of duct leakage calculator. The user has the option to choose any of which according to what results they are interested in, or the available data. The two methods are explained as:

1) Basic input:

Basic input

Floor area m²

Building function

Improved tightness duct system

1 Enter the floor area of the building in square meters

2 Choose the building function from the dropdown list

3 Choose the airtightness class of the duct system that will be improved to



2) Detailed input:

★ Default values are be loaded automatically based on the selected building function in the basic inputs. You can change values to your preferred inputs at anytime

Detailed input

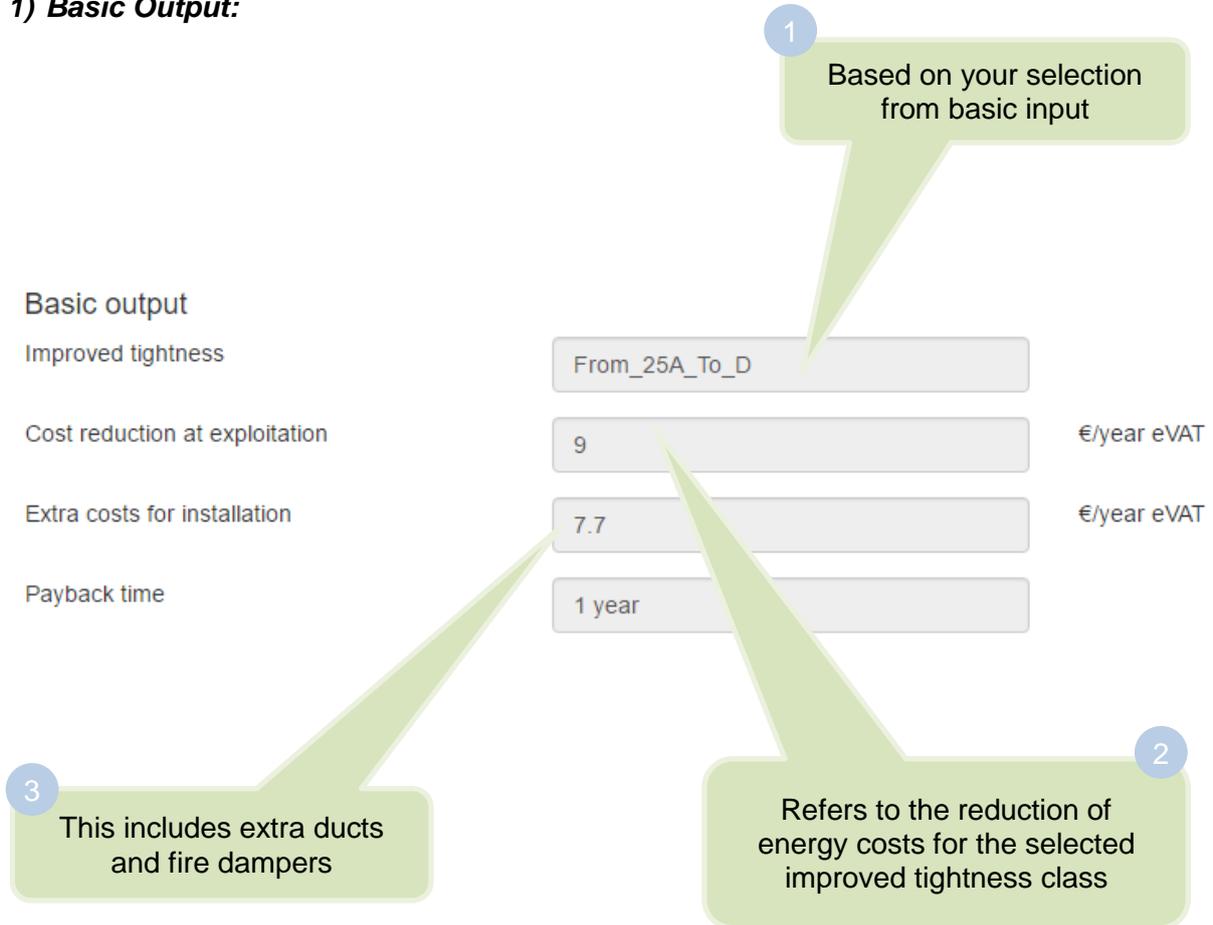
Ventilation airflow	<input type="text" value="63"/>	m ³ /h
Surface of ducts (supply & exhaust)	<input type="text" value="3.465"/>	m ²
Part circular ducts (supply & exhaust)	<input type="text" value="25"/>	%
Number of circular fire dampers (supply & exhaust)	<input type="text" value="0.0504"/>	
Number of rectangular fire dampers (supply & exhaust)	<input type="text" value="0.1008"/>	
Average diameter of circular ducts	<input type="text" value="200"/>	mm
Average dimension (Width or height) of rectangular fire dampers	<input type="text" value="500"/>	mm
Heat recovery	<input type="text" value="Cross_flow"/>	
Cooling	<input type="text" value="Cooling_present"/>	
Humidification	<input type="text" value="Humidifier_available"/>	
Moisture recovery	<input type="text" value="Not_available"/>	
Power humidification	<input type="text" value="Electricity"/>	
Power control fans	<input type="text" value="No_Power_Control"/>	
Total power of installed fans	<input type="text" value="0.05425"/>	kW
Unit price electricity	<input type="text" value="130"/>	€/MWh eVAT
Unit price fuel	<input type="text" value="45"/>	€/MWh eVAT
Average static pressure drop in duct	<input type="text" value="200"/>	Pa
Yearly price increase energy	<input type="text" value="5"/>	%

★ Only used for the calculation of extra costs for installation



9.2 Results

1) Basic Output:





2) Detailed Output:

Detailed output

Energy consumption fans (supply & exhaust)	114	kWh electricity
Power demand cooling and dehumidification (supply)	41	kWh electricity
Power demand humidification (supply)	79	kWh electricity
Total electricity consumption ventilation	234	kWh electricity
Fuel demand humidification (supply)	0	kWh fuel
Fuel demand heating ventilation (supply)	231	kWh fuel
Total fuel consumption ventilation	231	kWh fuel
Total energy cost ventilation without leakage losses	41	€/year eVAT

Electrical energy demand is divided into three categories:

- Fan consumption.
- Demand for cooling and dehumidification.
- Demand for humidification.

$$\ast \text{ Total electricity consumption ventilation} = a + b + c$$

Fuel energy demand is divided into two categories:

- Fuel demand for humidification.
- Fuel demand for heating ventilation.

$$\ast \text{ Total fuel consumption ventilation} = a + b$$



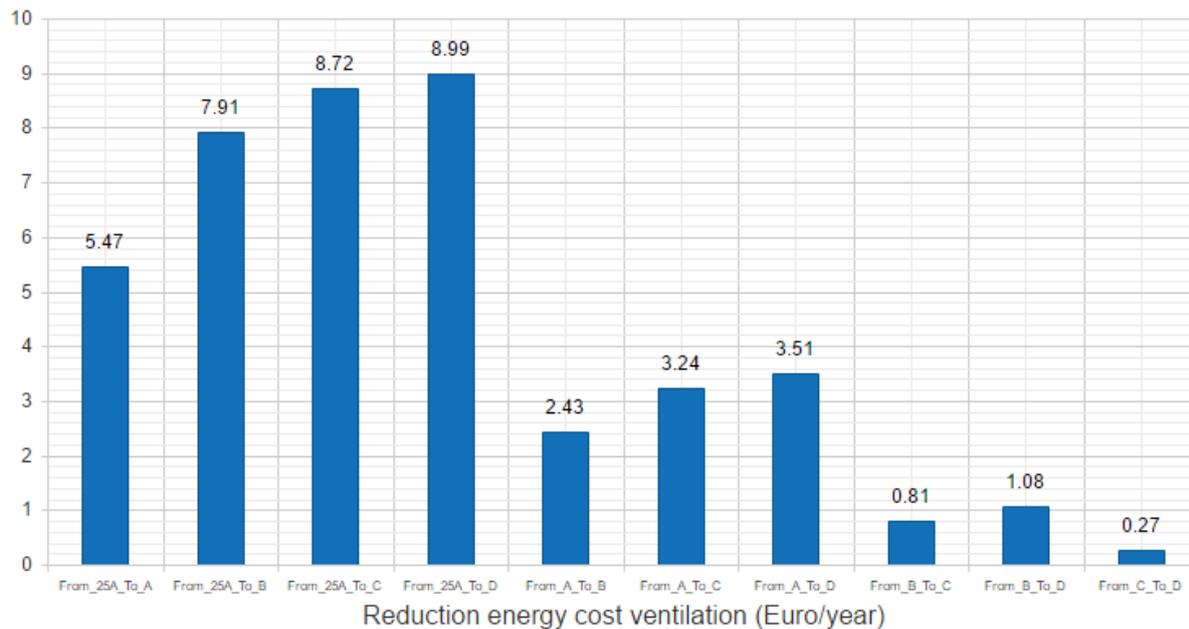
3) Reduction Energy Costs:

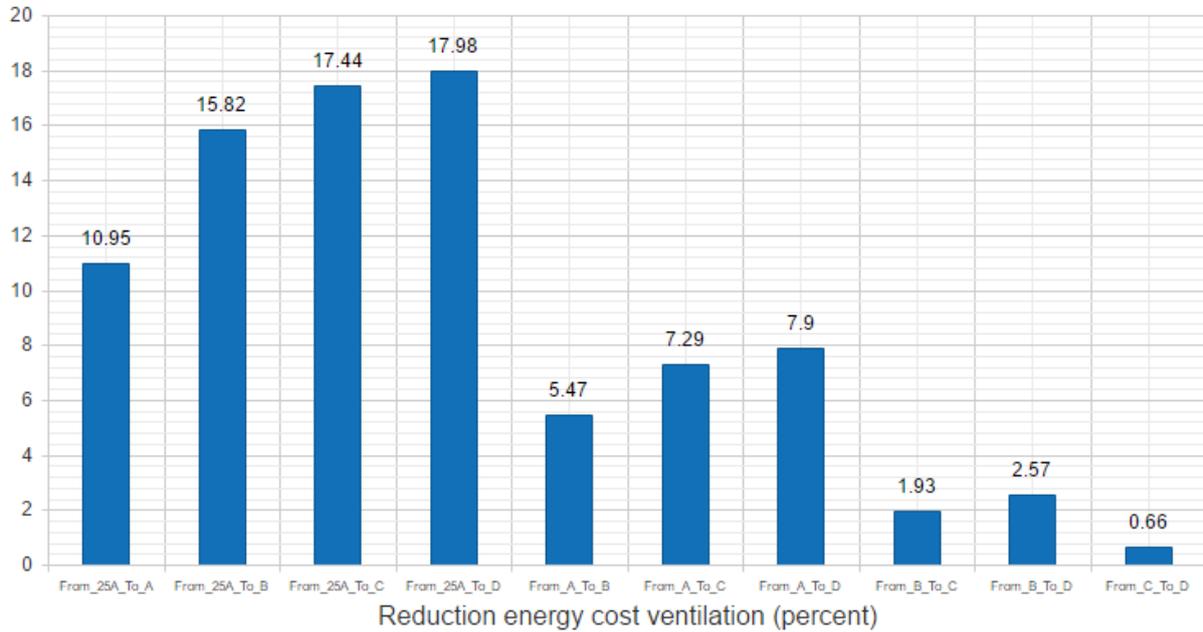
Shows the energy cost reduction for each improved tightness class in Euros per year and as a percentage

Reduction Energy Costs

Improved tightness	€/year eVAT	Percent
From_25A_To_A	5.47	10.95
From_25A_To_B	7.91	15.82
From_25A_To_C	8.72	17.44
From_25A_To_D	8.99	17.98
From_A_To_B	2.43	5.47
From_A_To_C	3.24	7.29
From_A_To_D	3.51	7.9
From_B_To_C	0.81	1.93
From_B_To_D	1.08	2.57
From_C_To_D	0.27	0.66

★ The results are also shown on column charts for both cost and percentage





4) Leakage loss calculations:

Leakage loss calculations

Class	Ducts m ³ /h	Fire Dampers m ³ /h	Air Flow m ³ /h	Consumption €/year eVAT	Percent
Class 2.5A	13	1	77	50	122
Class A	5	0	69	44	109
Class B	2	0	65	42	103
Class C	1	0	64	41	101
Class D	0	0	63	41	100
Without leakage loss	0	0	63	41	100

↓

Leakage losses through ducts

↓

Leakage losses through fire dampers

↓

Airflow after losses and leakage in m³/h

↓

Energy consumption in €/year eVAT

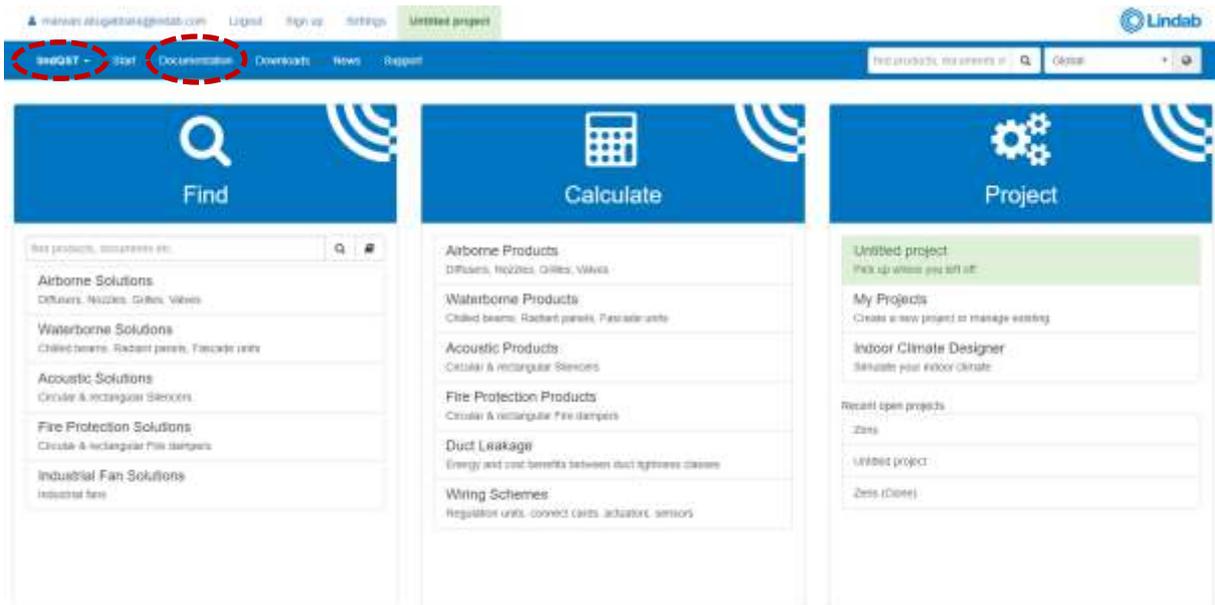
↓

Percentage of ventilation airflow relative to reference

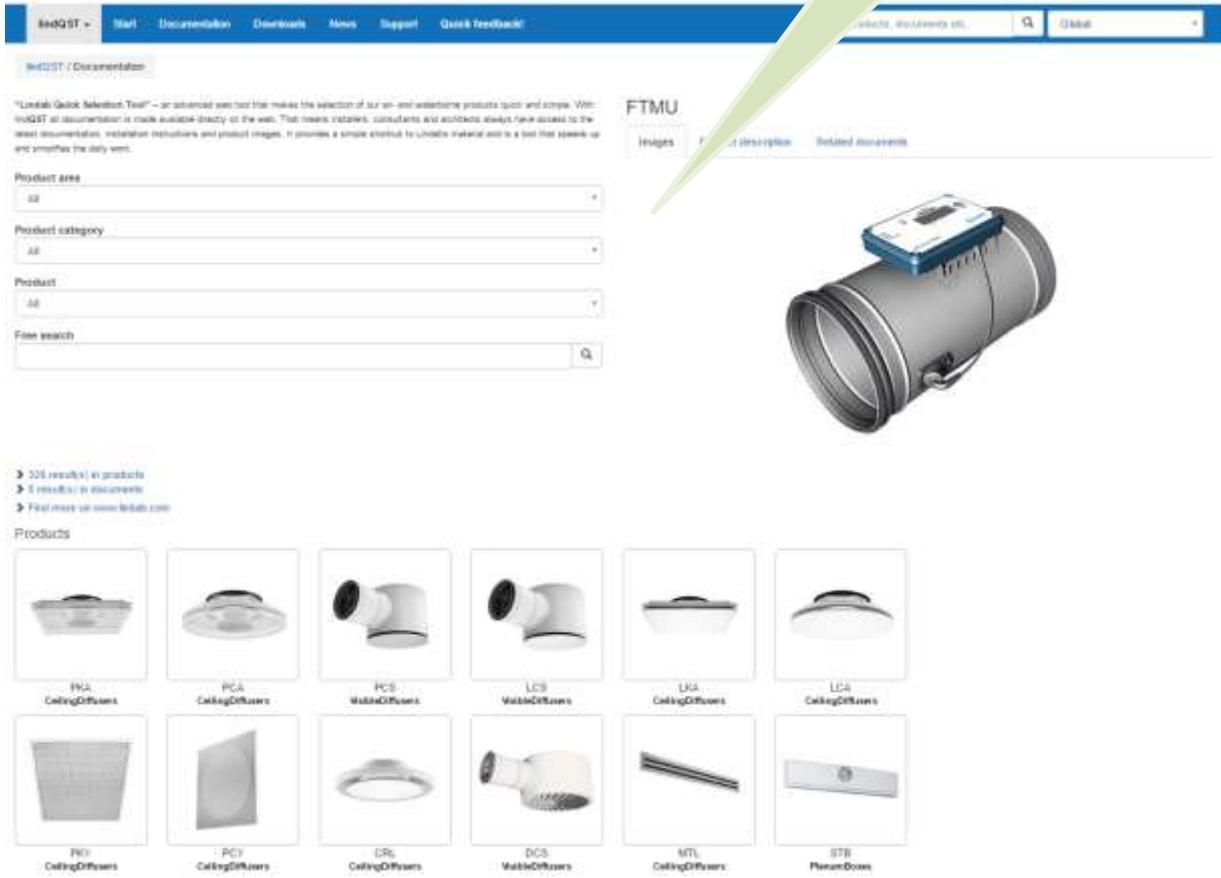


10 Documentation finder

To have access to all of the documents related to a product, click on documentation on either the top main menu of the start page, or on the drop down list of lindQST.



Window of documentation finder



You can search for product’s documents by either:

- Products area: Finds documentation related to all products under the selected area.
- Product category: Finds documentation of all products that are used for the selected category.
- Product: Shows a list of all Lindab’s products. The list depends on the selection of product area and category.
- Free search: Perform the same way as in the search field on the top right corner of the page where you can write in keywords of your search criteria.



Example: A lindQST user is interested in finding documentations of Plafond air chilled beam.

Answer – search method A: Plafon air chilled beam belongs to the Waterborne product area.

lindQST / Documentation

"Lindab Quick Selection Tool" – an advanced tool that makes the selection of our air- and waterborne products quick and simple. With lindQST all documentation is made available directly on the web. That means installers, consultants and architects always have access to the latest documentation, evaluation structures and product images. It provides a simple shortcut to Lindab's material and is a tool that speeds up and simplifies the daily work.

Product area: Waterborne

Product category: All

Product: All

Free search: [input field]

FTMU

Images | Product description | Related documents

1 Choose waterborne product area



2 Click on Plafond under the products results

24 result(s) in products
0 result(s) in documents
Find more on www.lindab.com

Products

 Plexus SupplyAirBeams	 Professor SupplyAirBeams	 Cabinett PassivBeams	 Polaris S SupplyAirBeams	 Plafond SupplyAirBeams	 Podium SupplyAirBeams
 Solo SupplyAirBeams	 Capella PassivBeams	 Cort PassivBeams	 Fasadrum FacadeUnits	 Altium C RadiantPanels	 Loggia RadiantPanels
 Altium H RadiantPanels	 ACTUATORS Regulation	 Architect SupplyAirBeams	 Water CO2 Sensors Regulation	 Temperature sensor Regulation	 Presence Sensor Regulation
 Plexus SupplyAirBeams	 Premium SupplyAirBeams	 Solus SupplyAirBeams	 Altium Plans RadiantPanels	 Professor Plus SupplyAirBeams	 Muro SupplyAirBeams

3
Product is shown on the main dialog

Product 7 Documentation

"Lindab Guide Selection Tool" – an advanced web tool that makes the selection of our air- and waterborne products... With INQUIRY all documentation is made available directly on the web. This means installers, consultants and architects always have the latest documentation, installation instructions and product images. It provides a simple alternative to Lindab's material and is a fast and simple way to simplify the daily work.

Product area: AB
Product category: AP
Product: Platond
Free search: [input field]

126 results in products
2 results in documents
Find more on www.lindab.com

Products

Platond

Images | Product description | Related documents

Image Product description Related documents

Platond

Images | Product description | Related documents

Platond

Images | Product description | Related documents

Platond's function is based on the induction principle. Induction air with a certain dynamic pressure is released through specially formed nozzles into a sloped air cone. This air creates a low static pressure. The low pressure causes warm air from the room to be sucked towards the ventilator as passing through the ceiling. The volume of the room is not 100% as high as that of the ventilator air. The air is cooled as it passes through the battery, which consists of aluminum ribs with copper tubes that will cool incoming water. The heat of the room is absorbed through the aluminum ribs, and then transferred through the copper pipe to the water circuit and on to a central cooling unit.

- The ceiling installation is corner
- Fine stagger distribution pattern
- Excellent acoustics

Platond

Images | Product description | Related documents

Download all documents

Language: en

Product type

Material

Accessories

Dimensions

Download all documents

Download the file

Download

Version

Building product classification

Technical data sheet

Download all documents



Answer – search method B: Plafon air chilled beam belongs to the Active beams product category.

1 Choose active beams product category

2 Click on Plafond under the products results

The screenshot shows the Lindab Quick Selection Tool interface. At the top, there is a header with the Lindab logo and the text "lindab | we simplify construction". Below the header, there is a search bar and a "FTMU" button. The main content area is divided into two columns. The left column contains search filters: "Product area" (set to "All"), "Product category" (set to "Active beams"), "Product" (set to "All"), and a "Free search" field. The right column contains a list of product images. The first image is a large cylindrical air chilled beam, which is highlighted by a green callout box with the number "1" and the text "Choose active beams product category". Below the product images, there is a section titled "Products" with a grid of 12 product thumbnails. The second thumbnail in the first row, labeled "Plafond Supply Air Beams", is highlighted by a green callout box with the number "2" and the text "Click on Plafond under the products results".

Answer – search method C: Write the product's name on the free search field.

1

Type plafond on the free search field then click Enter

The screenshot shows the Lindab search interface. At the top, there is a search bar with the text 'plafond' entered. Below the search bar, there are several filter options: 'Product area', 'Product category', and 'Product', all set to 'All'. A 'Free search' field is also present. To the right of the search bar, there is a product image of a cylindrical metal component with a blue connector. Below the search bar, there is a section for 'Products' showing a small image of the product and the text 'Plafond support'. Below this, there is a section for 'Documents' with a table listing various documents related to the product.

2

Product result

3

Documents results

Category	Document
Catalogue page	plafond.pdf
Connector cover	plafond-b_connector.pdf
Connector cover mounting	plafond-b_connector_mounting.pdf
Maintenance	plafond_maintenance.pdf
Mounting	plafond_mounting.pdf

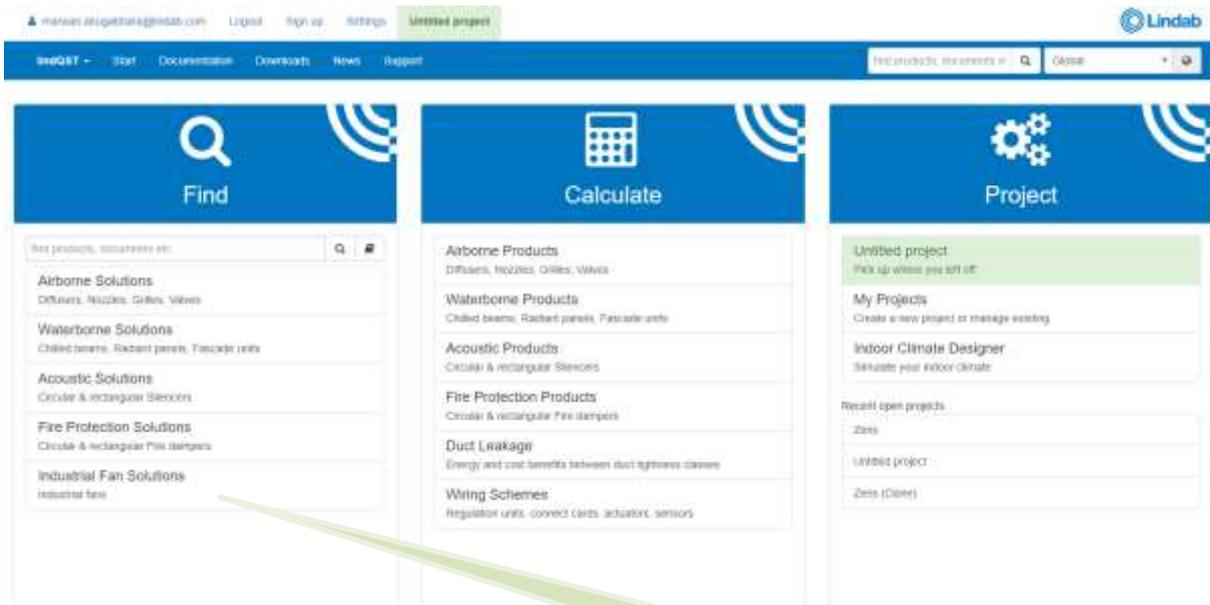


11 Air movement - Lindab Fan Selection Tool

Here you can select, compare, and size fans by using the Lindab Fan Selection Tool.



11.1 Industrial fan solutions





Selection by series: Choose fan family and series to limit search results.



Advanced selection: Detailed data required to select a fan. This is by default the home page of Lindab Fan Selection Tool.



Comparative: Compare between multiple fans.



Settings: Change units used in the selection tool. When you click on this command, the following window will open:



Select units according to your preference then click on "Save changes"

Preferences



<p>Flow rate</p> <p>Default unit of volume used in the selection form and graphics.</p> <p>m³/h</p>	<p>Static pressure</p> <p>Default unit of pressure used in the selection form and graphics.</p> <p>Pa</p>	<p>Temperature</p> <p>Default unit of temperature to be displayed.</p> <p>°C</p>
<p>Length/Height</p> <p>Measure unit for distance and height to a noise source over the sea level.</p> <p>m</p>	<p>Security coefficient</p> <p>Value expressed in% to calculate belt drive fans power, applying this security factor.</p> <p>15</p>	<p>Frequency</p> <p>Motor working frequency</p> <p><input checked="" type="radio"/> 50 Hz <input type="radio"/> 60 Hz</p>

Cancel Save changes



Change language.



2) Airflow and pressure

Airflow/pressure values

Flow (m³/h)

Pressure (Pa)

Number of fans - 20000 m³/h

Units of inputs can be changed under settings

Enter airflow and pressure (mandatory)

3) Environmental data

Environment data

Air temperature (°C)

Height above sea level (m) - 1.2 Kg/m³

Air max temperature (°C)

Air temperature and height above sea level are used to calculate the exact air density



4) Type of fan

Type of fan

- All
- ROOF FANS
- INLINE FANS
- CERTIFIED F400 FANS INSIDE THE HAZARDOURS AREA
- CERTIFIED F400 FANS OUTSIDE THE HAZARDOURS AREA
- AXIAL FANS
- LOW CONSUMPTION
- LOW PRESSURE CENTRIFUGAL FANS
- MEDIUM PRESSURE CENTRIFUGAL FANS
- HIGH PRESSURE FANS
- CERTIFIED F300 FANS INSIDE THE HAZARDOURS AREA
- ATEX FANS

5) Fan series

Fan serie

- All
- HP P/R
- HP 45/5-60/7
- HP 47-70
- HPTVA
- HPTVC
- HPTVG
- HPTVM
- HPTVP
- HPTZA
- HPVA
- HPVC
- HPVG
- HPVM
- HPVP

6) Fan filters

Fan filters

- Single-phase motor
- Three-phase motor
- 2 pole standard motor
- 4 pole standard motor
- 6 pole standard motor
- 8 pole standard motor
- Direct driven motor
- Belt driven motor
- Straight blade centrifugal
- Backward centrifugal
- Forward centrifugal
- 1 speed motor
- 2 speed motor
- 3 speed motor



Select fan type, series, and/or filters to narrow down the search results. The option "All" or leaving the boxes unchecked, will give a wide variety of fans.

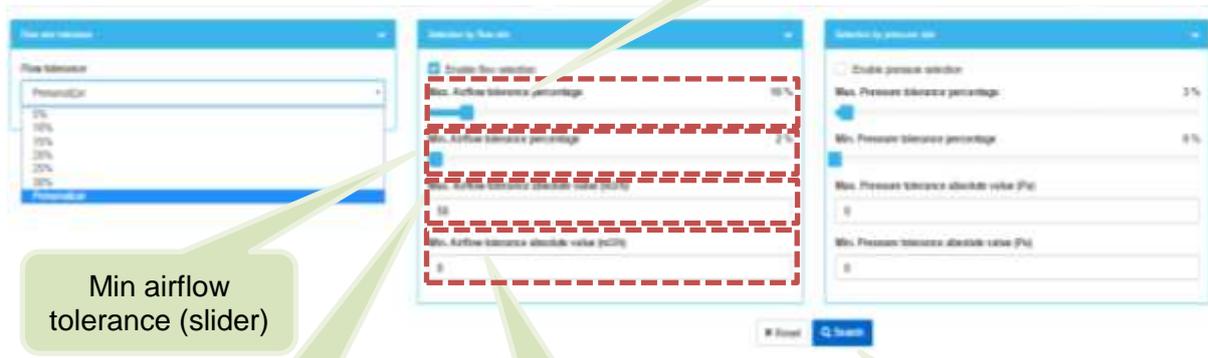


7) Tolerance



Enter the acceptable tolerance for the fan airflow. The option "Personalizer" will activate the dialog boxes in step number 8

8) Personalizer



Max airflow tolerance (slider)

Min airflow tolerance (slider)

Max airflow tolerance (absolute value)

Min airflow tolerance (absolute value)

Click on search

★ You enter the values of max and min tolerance for flow rate or pressure rate by either adjusting the slider, or entering absolute tolerance values in the corresponding boxes



11.2 Search results

Based on your inputs, the search engine will provide you with a list of all the suitable fans:

Code	Name	Flow (m³/s)	Pressure (Pa)	RPM	Power (kW)	Efficiency	Efficiency type	
24177046	BDF FRC T10 T4 7.8kW	2028.70	154.07	-	1.0	-	-	
241770962v	BDF FRC T10 T4 8.1 3.1 3kW	2028.89	154.07	1400	7.6 1.3	-	-	
202851068	BD BDF 2027 7.8kW	2028.2	155.50	700	1.5	18.43 %	Total	
202851144	BD BDF 2027 5.9kW	2000.22	163.02	328	3.0	31.1 %	Total	
242807928	BDF FRC 2000 4kW	2019.19	192.09	600	4	19.27 %	Total	
242807929	BDF FRC 2000 4kW	2019.19	192.09	600	4	19.27 %	Total	
242807930	BDF FRC 2000 4kW	2019.19	192.09	600	4	19.27 %	Total	
20280790	BDF 2027	2027.85	164.14	600	1.9	49.77 %	Static	



Add the fan to be compared against another one. You access the compare command as described in section 10.1

View fan. Shows technical data, description, and all specification and documentation of the fan



11.2.1 Compare fans

Code	Name	Flow (m³/h)	Pressure (Pa)	RPM	Power (kW)	Efficiency	Efficiency type
241770150	BCF FRC 730 T4 7.8kW	20283.70	154.07	-	7.5	-	-
241770162v	BCF FRC 730 T4TS 7.8V 2000	20284.99	154.07	1400	7.8	13	-
242851159v	BCI BCK3500 7.8kW	20282.2	155.58	706	7.6	28.49 %	TotM
242851162v	BCI BCK3500 7.8kW	20000.22	163.03	704	7.8	31.1 %	TotM
242850193v	BCS FRC 2000 4kW	20139.19	192.08	608	4	19.37 %	TotM
242850192v	BCS FRC 2000 T4TS 4kW	20139.10	192.08	608	2016-01-04 06:00:00	19.37 %	TotM
242850190	BCP 3500	20071.93	194.14	608	7.8	45.77 %	TotM

Click on "Add to compare" next to the fans you want to compare

★ Number of selected fans is shown on the comparative command



Click on comparative



Selected fans are shown on popup window where you can remove any of them from the comparative command

Comparative



You have selected the following models to compare:

	BDP 20/20	
	BD BOX 20/20 7,5kW	
	BDL FIRE 20/20 T4/T8 4/1kW	

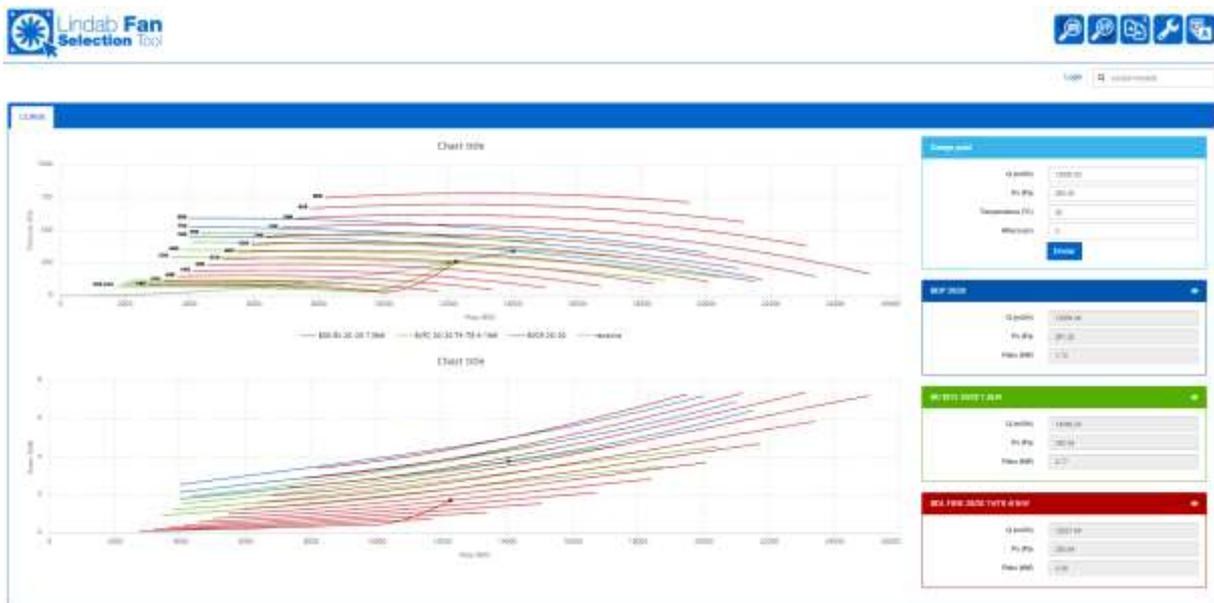
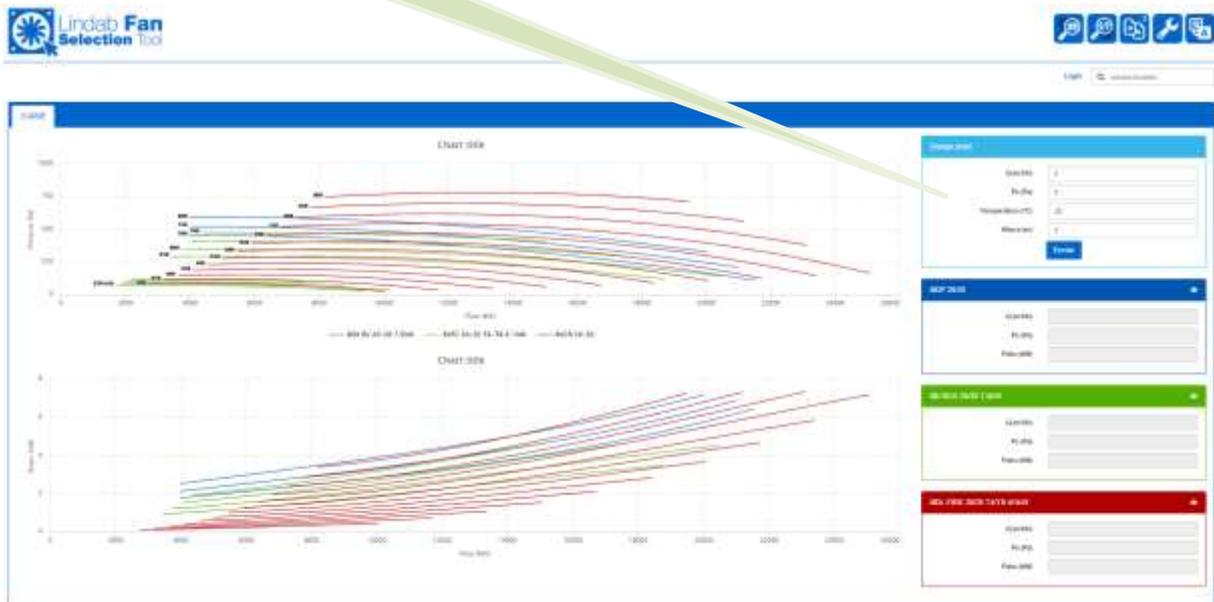
Cancel

Compare

Click on compare



Enter data to mark the design points on the curves

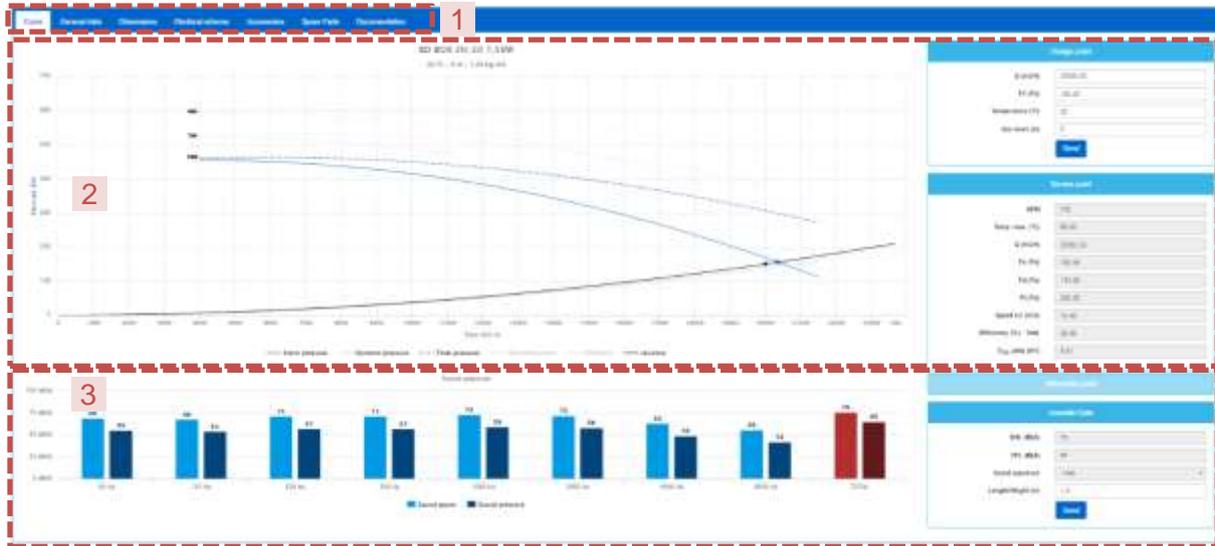


★ Each fan performance is shown in both table and diagrams



11.2.2 View fan

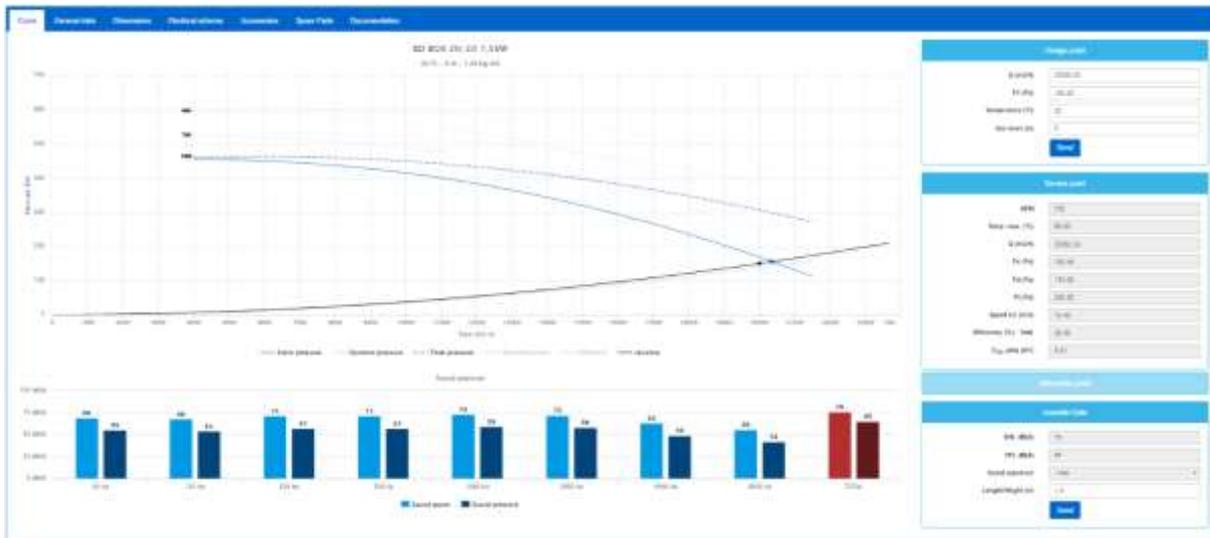
When you click on view fan (see section 10.2), you can access all the data of that fan. The window looks like this:



1) Main tabs

a. Curve

Shows the fan curve, sound spectrum, and fan service point.





b. General data

Text description of the fan, applications, technical data, and performance.

BD BOX 20/20 7,5kW

Fan

Value	Unit	Value	Unit
100		22000 Pa	
		22000 Pa	

Motor

Value	Unit	Value	Unit	Value	Unit	Value	Unit
7.5 kW		1000		0.1 A		0.47 A	
						1000	

ERP

Property	Value	Unit
Max. efficiency	91.04	
EF (annual)	0.10	
Annual power	0.10	kWh
Max. width	425.00	mm
Min. width (P)	100.00	mm
Quantity	0.01	
EF	0.10	

★ ERP: Energy Related Product

c. Dimensions

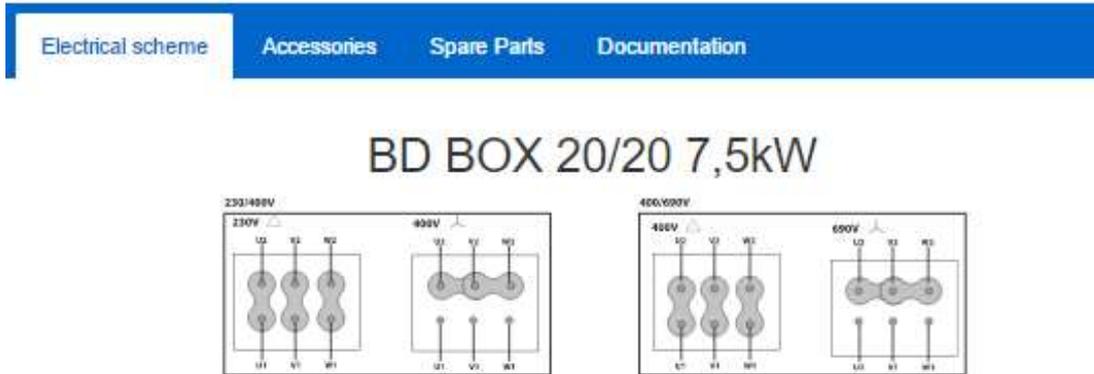
Shows the geometry of the selected fan together with different perspectives.

BD BOX 20/20 7,5kW

A	B	C	Depth	Depth	F	G	H	I	K	L	M	N	O	P	Q
1183,5	1117	152,5	600	607	85	425	1240	1200	100	1351,8	1411,8	161,8	1814	1814	1814



d. Electrical scheme



e. Accessories

Show extra components that are recommended to install together with the selected fan.

Accessories			
Model VES OUT 20	Model TEL SOL FIRE	Model ISOSW 16 TV	Model F3CD T 11kW
Information VES Flange to fit outlet including beam protection guard.	Information TEL SOL FIRE Weather protective roof made of galvanized steel for DO BOX PLUS, DO BOX PLUS, SOL FIRE and DO BOX.	Information ISOSW Safety start-stop switch. Useful for stopping the fan before any maintenance job. Suited for direct control of motor in AC 3 operation category. According to the IEC 947-3 standard. IP-55 protection.	Information F3CD Designed for controlling fan motors speed in HVAC applications. Ultra compact installation, simple cabling, easy parameterization and wide standard functions. Integrated control unit (panel with digital read, PID card). Optical E2/E3 Filter. Certifications: CE/UL/CSA/EN/DOBY/CCC. Protection Marking: IP20. F3CD S: Entrance 230V I, exit 230V III F3CD T: Entrance 400V III, exit 400V III

f. Spare parts

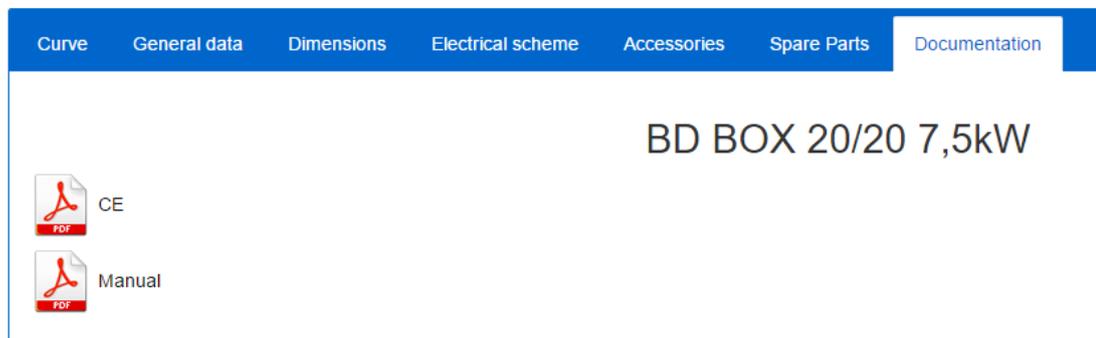
Shows a scheme and specification of all the parts included in the fan.



Ref	Quantity	Name	Qty	Price	Angle
WEL7	1	WEL02007	40	700	---
WEL127	1	WEL120 2 (1610)	41	700	---
WEL127	1	WEL120 2 (1617)	41	700	---
WEL127	1	WEL120 2 (1617)	41	700	---
WEL127	1	WEL120 2 (1617)	41	700	---

g. Documentation

Download manuals and other documents related to the selected fan

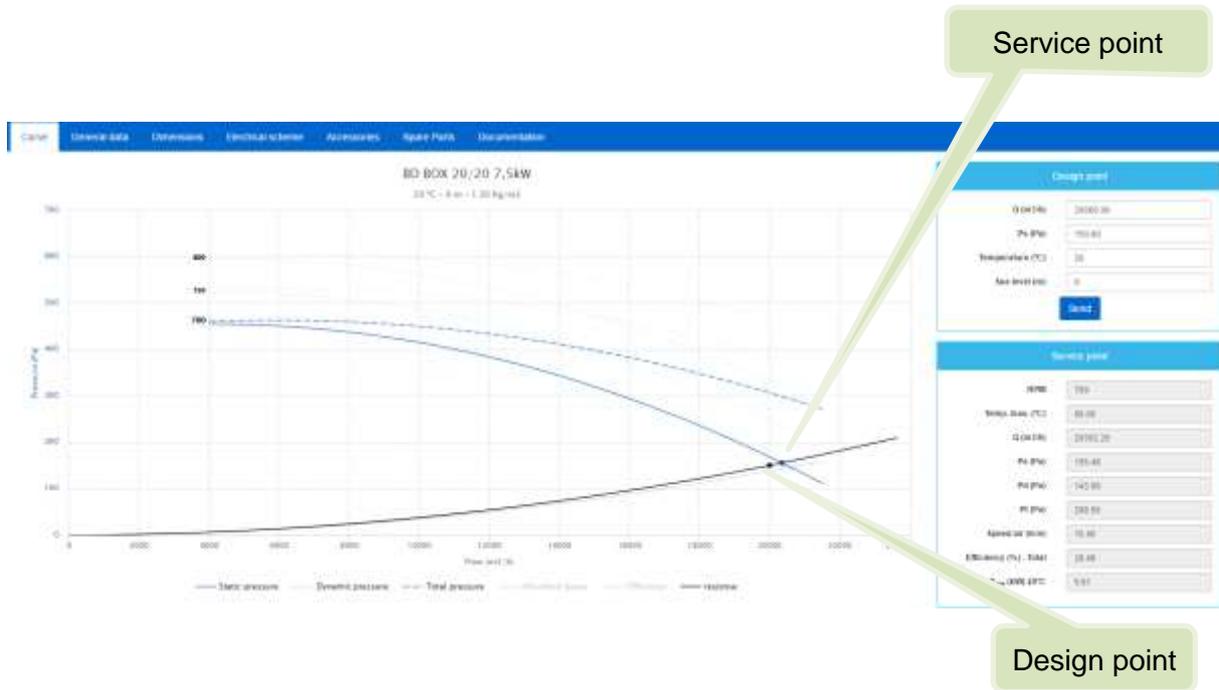


BD BOX 20/20 7,5kW

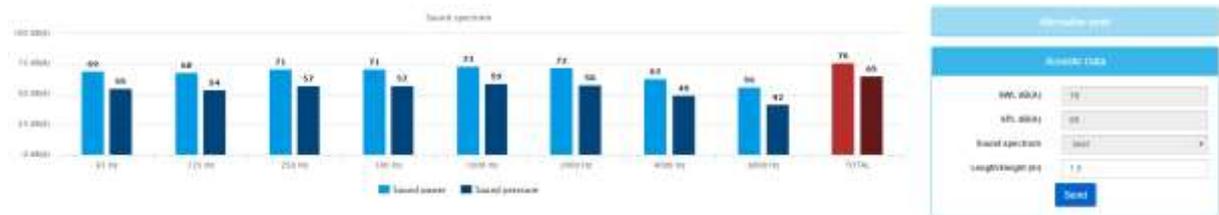
- CE
- Manual



2) Fan curve



3) Sound spectrum

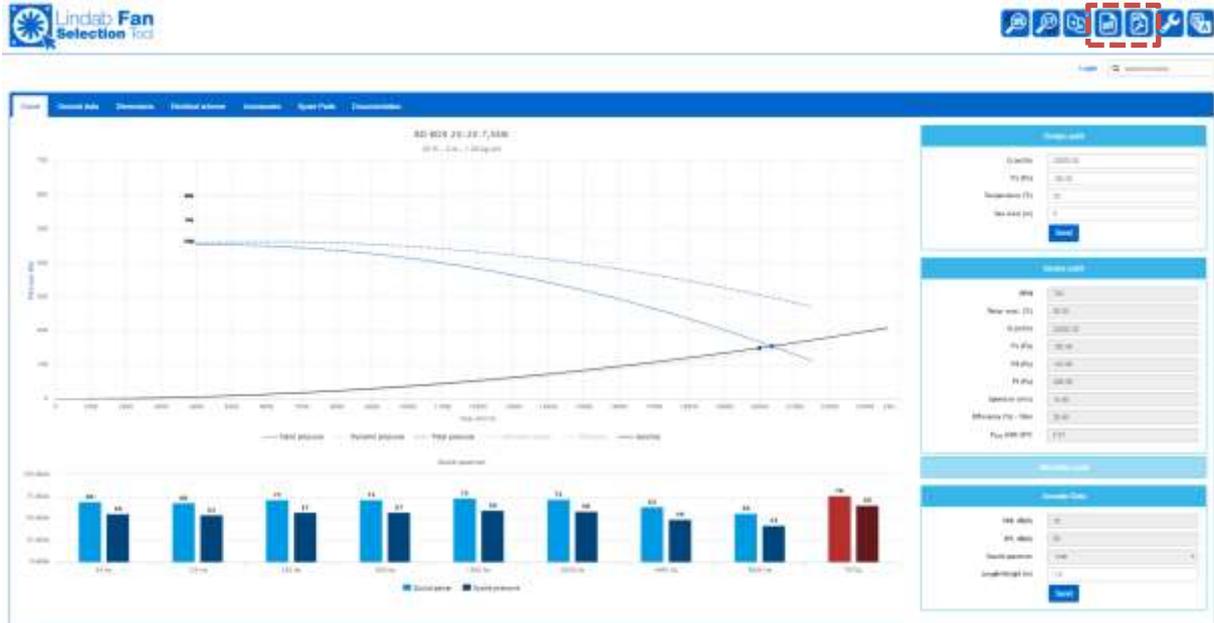


★ Sound pressure = sound power – attenuation



11.2.3 Export fan results

When you click on view fan, these two commands will be added to the settings:



pdf configuration: When you click on this button, you can select what data you want them to be included in the pdf report from the boxex shown on the right list.

PDF Configuration ×

- General data
- Performance curve
- Technical data
- Acoustic data
- Dimensions
- Wiring diagram
- Accessories
- Spare parts
- Cost price
- Logo

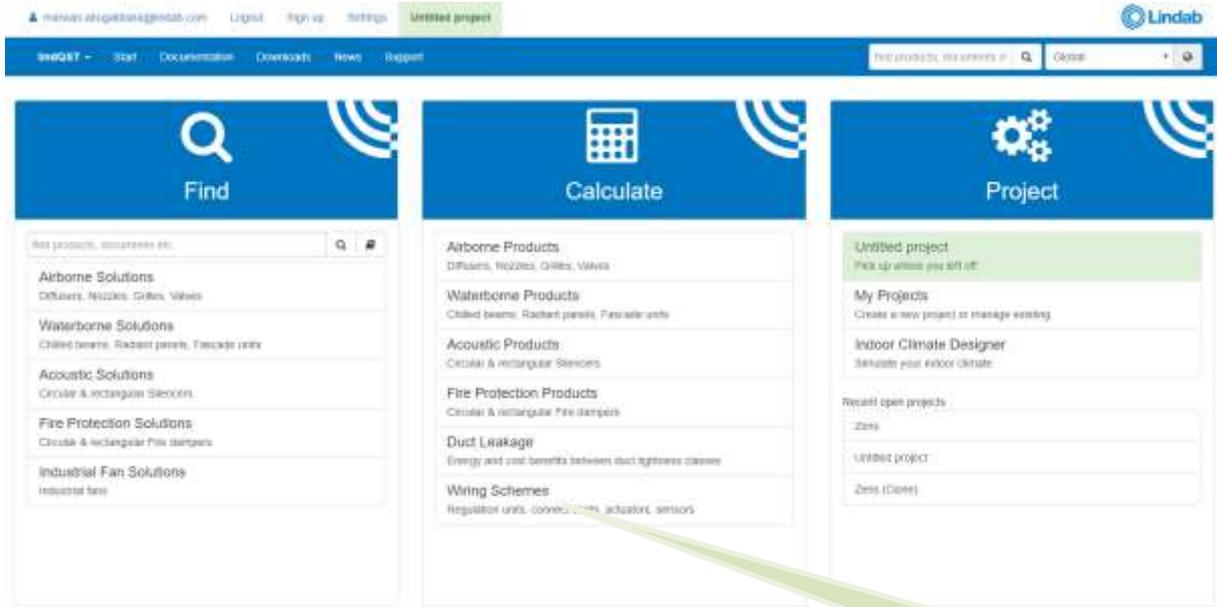


pdf: Click here to generate a pdf report.



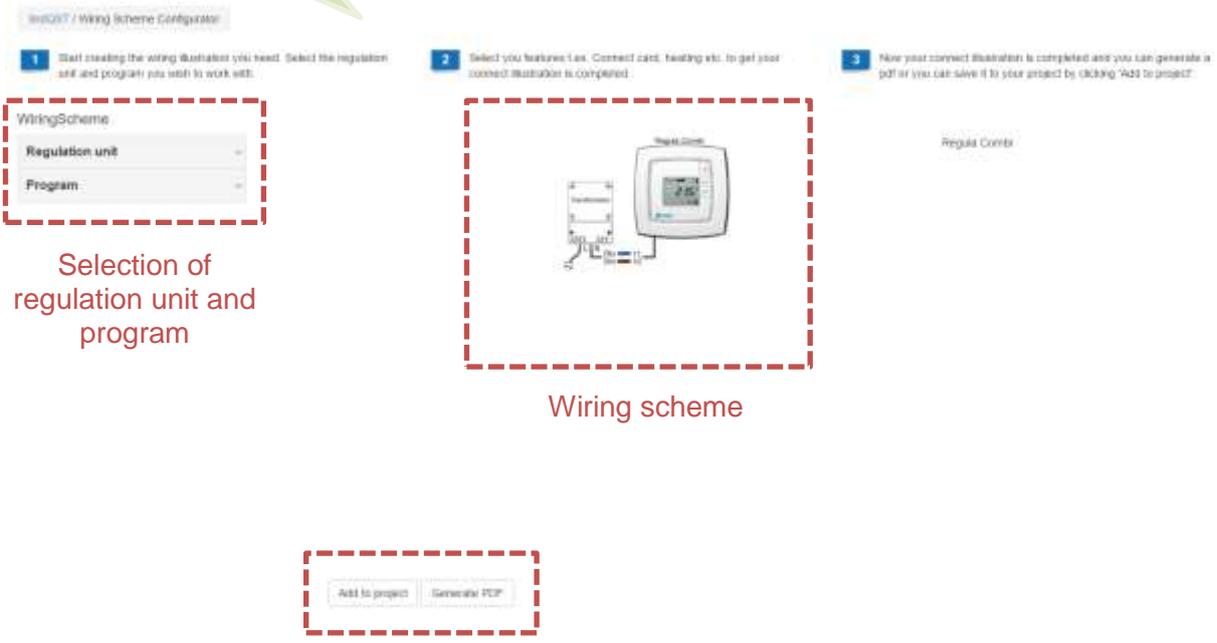
12 Wiring scheme configurator

Here you can visualize, generate pdf, or add illustration to Indoor Climate Designer project.



Wiring Scheme Configurator window

Click on "Wiring schemes" on lindQST start page



Selection of regulation unit and program

Wiring scheme

Add to project and generate pdf commands





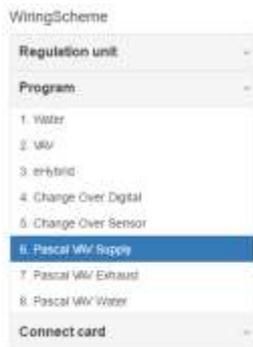
Example: A wiring scheme of Regula Combi Pascal VAV supply system with volume flow regulator for both heating and cooling needs to be illustrated. The system also includes CO₂, presence-light, and temperature sensors.

Answer:

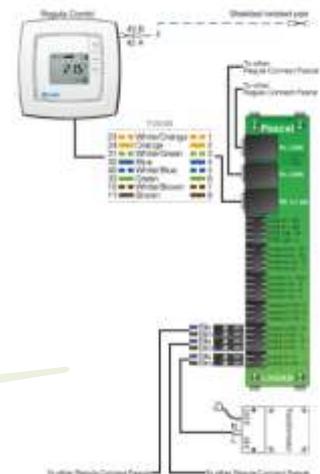
1 Select type of regulation unit



2 Select the program function



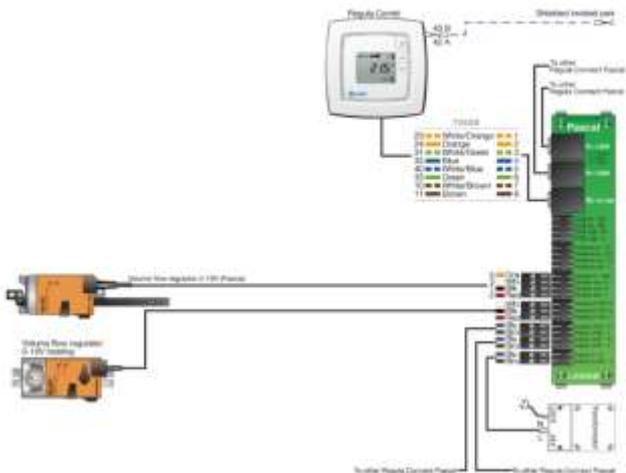
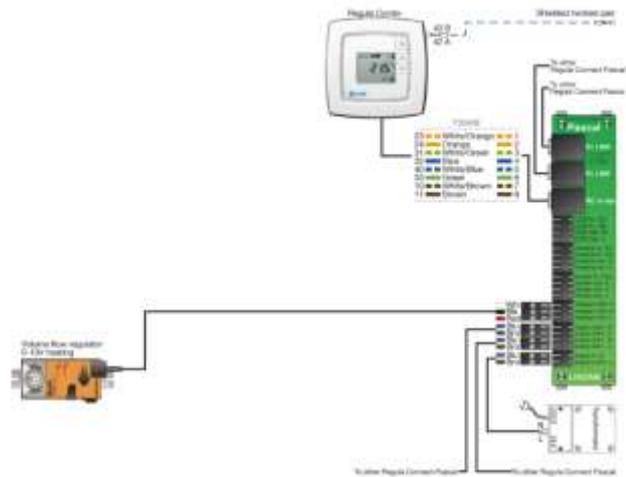
3 Choose if the system has a connect card or not



★ The scheme is updated according to your selection



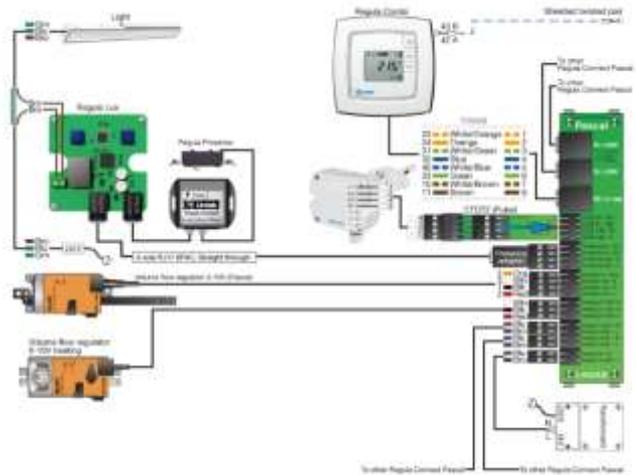
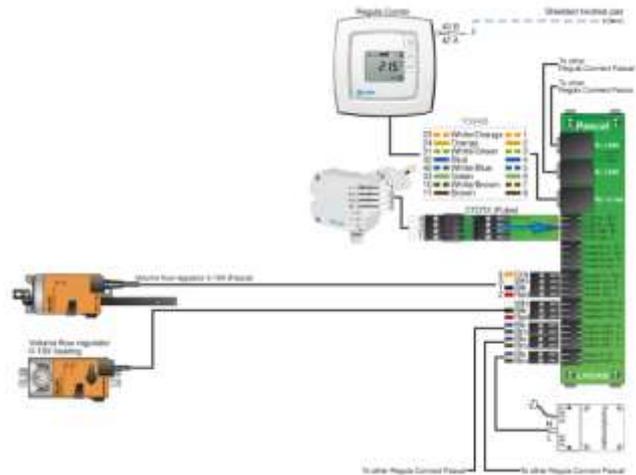
4 Choose heating and cooling features





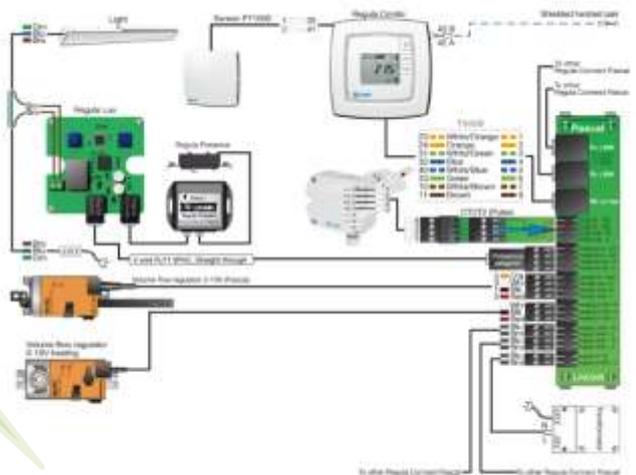
5

Select type of CO₂, presence, and light sensors



6

Add the wiring to scheme to project or generate pdf



Add to project Generate PDF

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