# OVERVIEW CHILLED BEAMS & ACCESSORIES

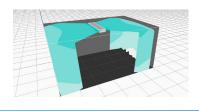
OVERVIEW OF AVAILABLE CHILLED BEAMS AND ACCESSORIES







SIMULATION TOOLS



**REFERENCES** 





## ► Chilled beams ► ►

#### **SVALBARD COMFORT**

Market's only pressure-independent VAV chilled beam ensuring optimal comfort, lowering installation costs, and saving energy!

Svalbard Comfort features a unique built-in VAV (Variable Air Volume) function, eliminating the need for external control dampers and ensuring complete pressure independence. VAV dampers at the inlet regulate the primary airflow to the desired quantity, and with a secondary actuator, adjust the nozzles to maintain a constant outlet velocity. This ensures high induction, providing increased cooling effectiveness at low air volume and controlling room comfort to avoid drafts.



## SVALBARD-I/F/H

Svalbard-I/F/H is used for cooling, heating, and ventilation of offices, shops, classrooms, etc. The system is designed to provide very good cooling efficiency, and a high degree of induction ensures a draft-free environment in the occupied zone. If necessary, the distribution pattern can be adjusted with the jet-split louvers.

**Svalbard-I** fits into standard ceilings with 600 mm modules. It can be obtained as a hygiene version where the coil can be tilted out for easy cleaning behind the coil.

**Svalbard-F** is designed for open installation against the ceiling or suspended freely.

**Svalbard-H** is designed for corner mounting, i.e., between the wall and ceiling.









## ► Chilled beams ► ►

#### **DID-E2 NORDIC EDITION**

DID-E2 NE is a chilled beam specially designed for suspended ceilings found in places like hospitals, hotel rooms, and similar environments. The beam is suitable for rooms with heights up to 4m.

The unit features an adjustable outlet for both primary and secondary grilles, simplifying installation.

The secondary grille has a perforated pattern, and the primary grille has adjustable horizontal louvers.

It can be supplied as a special edition with an electric battery.



#### **DID-614**

DID-614 is an active chilled beame with four-way air discharge. The unit can be supplied with a cooling coil or a combined heating and cooling coil.

The unit is available in sizes of 600x600 and 600x1200 mm and fits into the system ceiling.

If needed, the distribution pattern can be adjusted using the jet-split louvers.

We also have the ability to supply DID-614 in a special design for open ceilings or with a safety front for institutions.



DID-614, 600x1200





## ► Chilled beams accessories ►►



- X-Sensor
  - Temperature and/or occupancy sensor



- TRV 2-way valve.
  - Push-push connection provides simple and secure sealing to the copper pipe.
  - 15 mm. for Svalbard-I Comfort and Svalbard-I/F/H.
  - 12 mm. for DID-E2 NE and DID-614.



- Ballorex dynamic actuator
  - Modulating actuator 24 V (0-10 V control voltage).
  - On/Off actuator 230 V.
  - On/Off actuator 24 V.



- HLS 33 Room controller.
  - Designed for two or three-stage room control systems.
  - The controller has one stage for heating and two for cooling.



- Produal HLS 44 Room controller.
  - Room controller for heating and cooling.
  - Day and night mode
  - With CO2 sensor
  - Can be connected to VAV dampers and heating and cooling actuators.
  - Supports: Modbus RTU communication.



- DRS-K
  - Damper for adjustment with fixed air volume.
  - Perforated damper blade for generating lower noise levels.-
  - Dimension 125 mm.



## ► Simulation tools ► ►

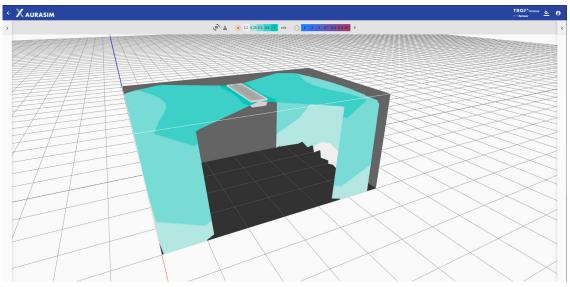
#### AURASIM is TROX Auranor's simulation and visualization tool.



AURASIM is a tool for calculating cooling capacity, pressure drop, sound levels, etc., and for visualizing airflow in the room. The chilled beams Svalbard-I, Svalbard-F, and Svalbard Comfort can be simulated in the program.

Velocity and temperatures inside and outside the occupied zone are visualized using color codes, and final velocity requirements can be adjusted in the settings.

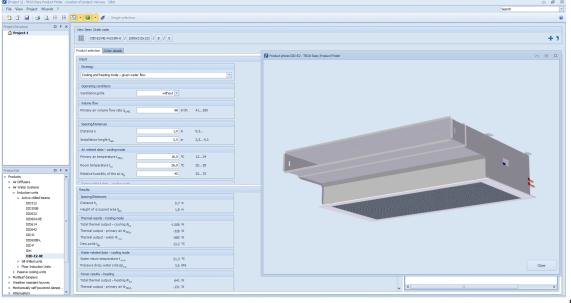
Learn more about AURASIM at www.trox.no/en or go directly to Aurasim.no.



Svalbard-F Comfort simulated in AURASIM

## **Easy Product Finder**

Easy Product Finder is used to calculate a wide selection of TROX products. Velocity in the occupied zone, pressure loss, and sound are typical values documented. Dimensional drawings and ordering codes can also be retrieved from the program. DID E2 Nordic Edition and DID 614 are calculated in these programs.



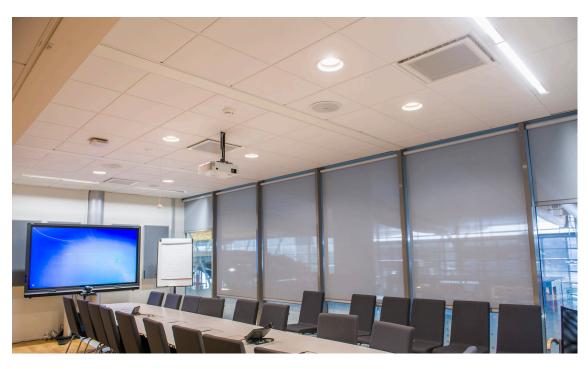


# ► References ► ►





**PIRELLI MILAN, ITALY**Svalbard-I and Svalbard-F



**OSLO AIRPORT GARDERMOEN, NORWAY** DID-614



# ► References ►►



**EQUINOR OSLO, NORWAY** 

Svalbard-I special edition (multi service chilled beam) with integrated lighting and sprinklers.



**MEDIA CITY BERGEN, NORWAY** Svalbard-F









# TRO

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