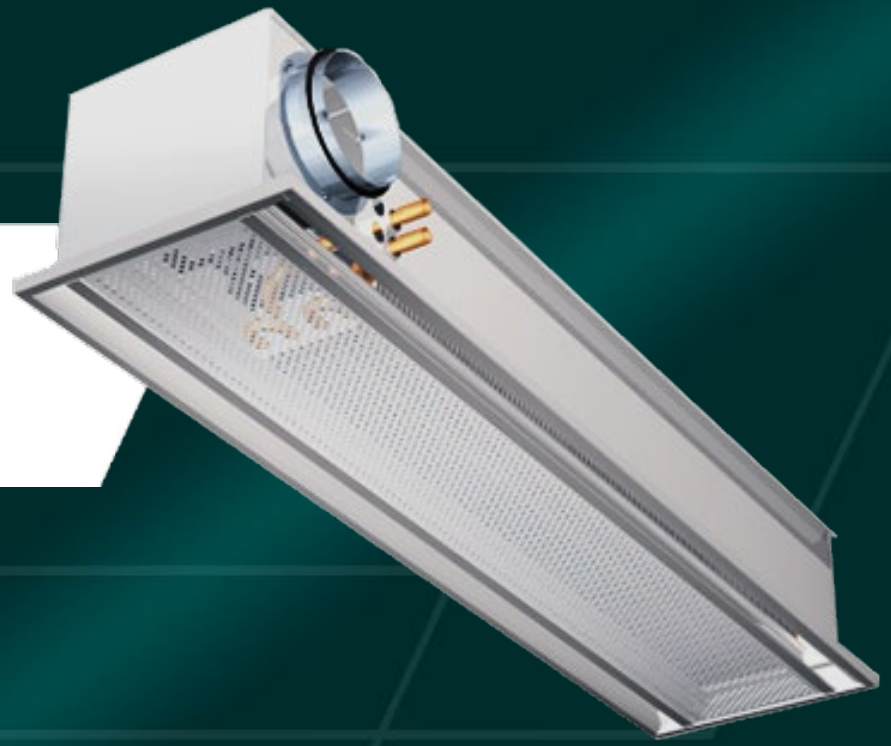
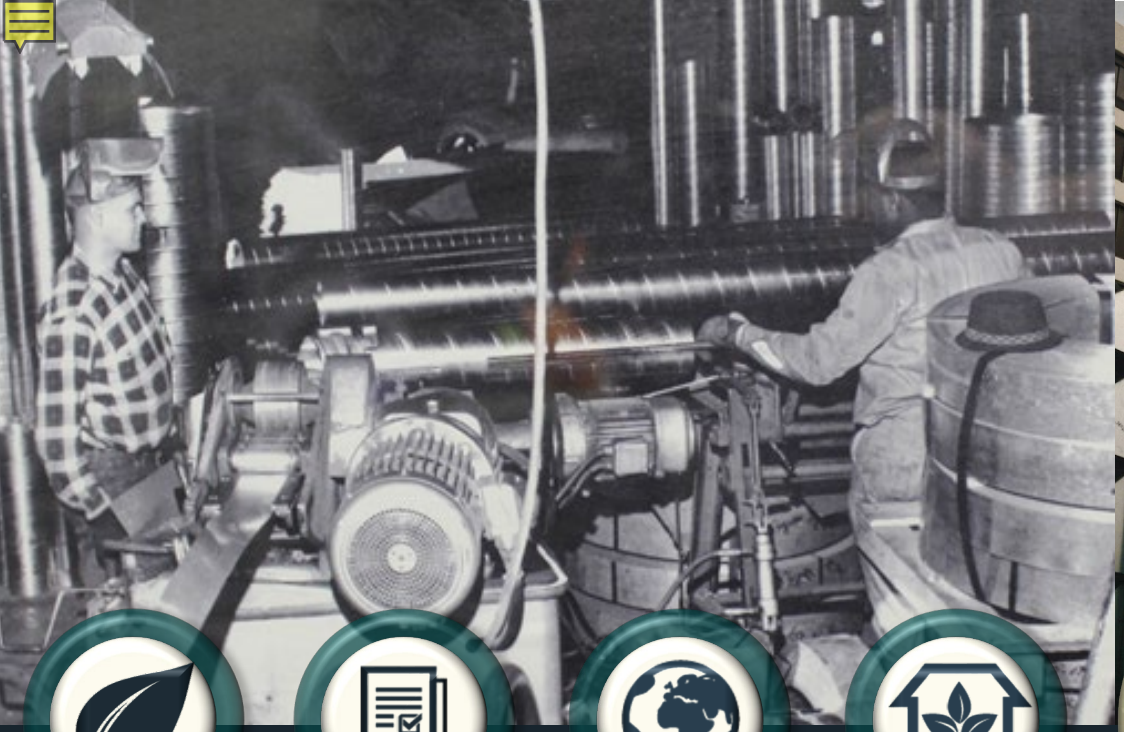
AURORA CHILLED BEAMS

High comfort solutions—
Exceptional flexibility & performance



Corporate Overview

FläktGroup
SEMCO



Energy & Environmental Focus

Patented & Certified Products

U.S & Global Footprint

Engineered Air Quality & Data Center Solutions

Engineered Air Distribution & Sound Solutions

OEM, Key Account & Sales Rep Route To Market

Service & Support

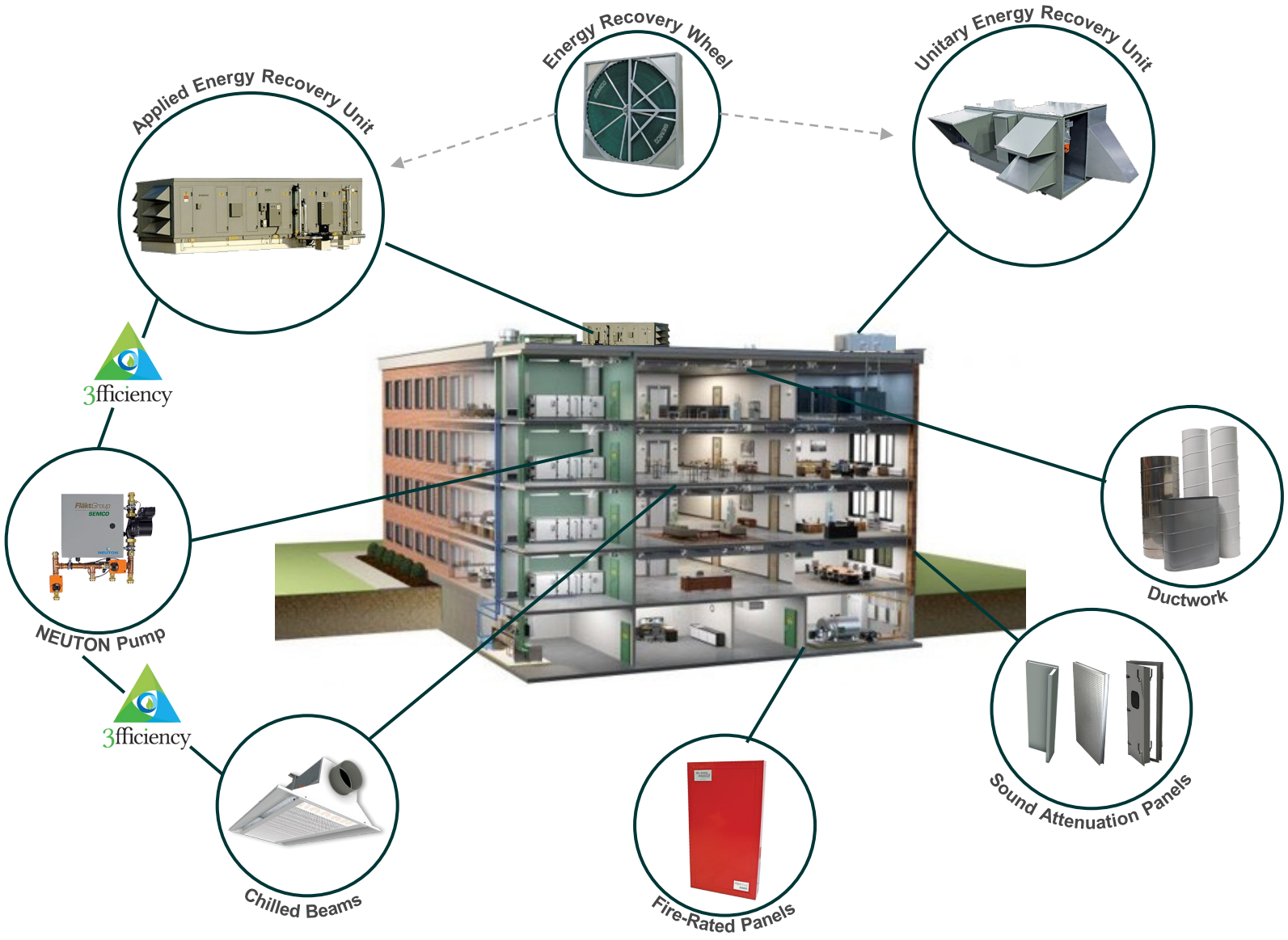
Award Winning & Industry Recognized

Who we are & what we do

FläktGroup
SEMCO

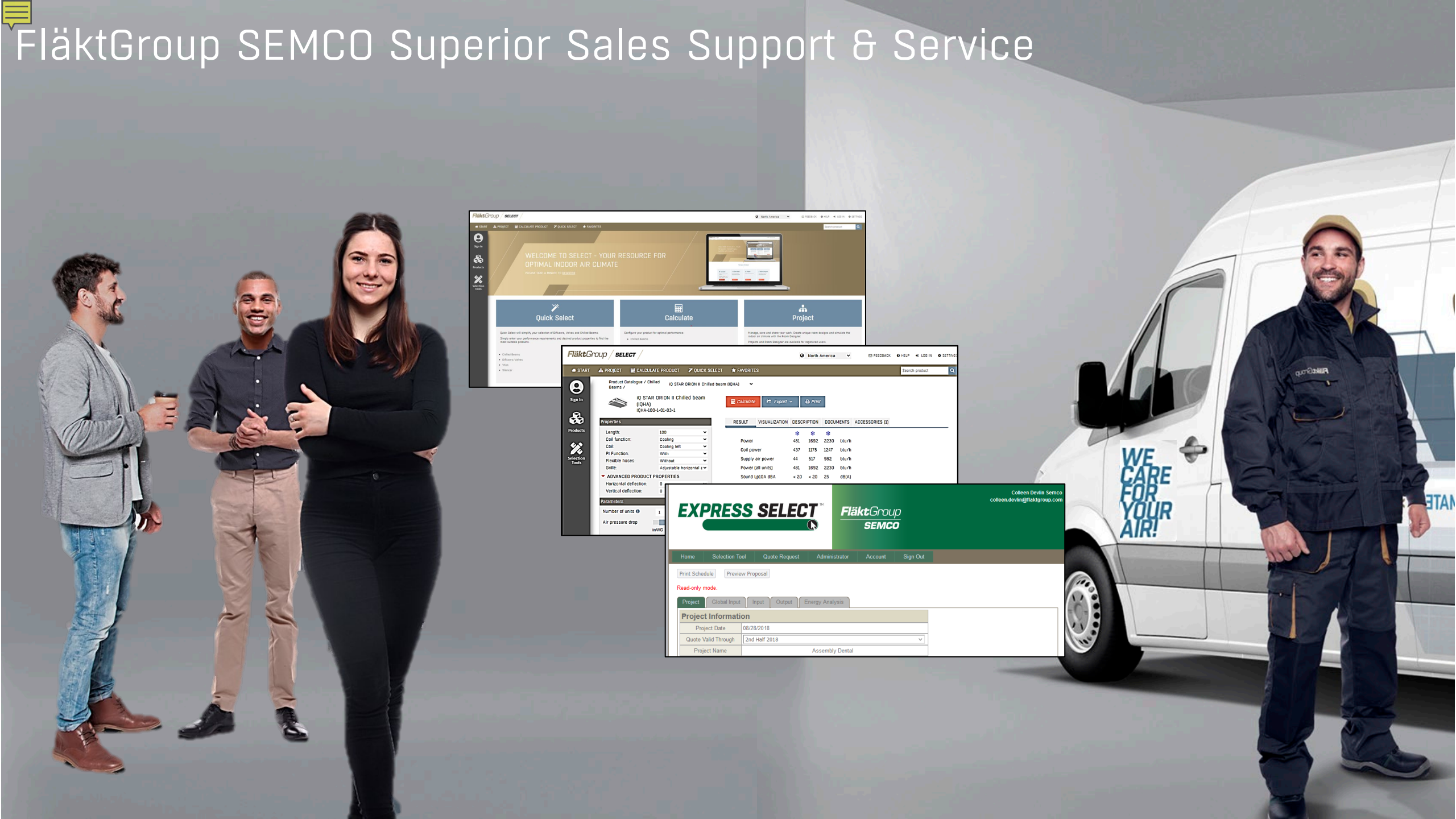
FläktGroup SEMCO Products For Commercial Applications

FläktGroup SEMCO — SPECIALIZED HEALTHY AIR SOLUTIONS



EXCELLENCE IN SOLUTIONS

FläktGroup SEMCO Superior Sales Support & Service



What are chilled beams?

Chilled beams combine radiant cooling with conventional overhead ventilation to:

- Reduce energy usage
- Improve comfort levels
- Reduce the architectural impact of ductwork and other mechanical systems

Designed for non-residential applications where there is a high temperature load and/or rooms that require individual comfort control.

Chilled beams often are used in lieu of a fan coil unit.

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FläktGroup SEMCO SPECIALIZED HEALTHY AIR SOLUTIONS

Indoor Comfort Components

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OPTIMIZED COMFORT WITH CHILLED BEAMS

FULLY MIXED AIR

Low-temperature gradient

LOW NOISE

No fan in Chilled Beams

FRESH AIR

Right humidity & temperature

EVEN AIR DISSEMINATION

No pockets of concentrated air

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Chilled Beams – The Benefits

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ENVIRONMENTALLY FRIENDLY

- **Improves the indoor environment with a low velocity (draught-free) solution**
- **Low noise level to surrounding area**

ECONOMICAL & ENERGY EFFICIENT

- Lower airflow means that you can use a smaller AHU
- Low temperature gradient — more uniform room temperature

EXPERTISE DRIVEN

- No fans, no filters & no drain for condensation means that less maintenance is required over time

Indoor Air Quality

- Increased ventilation to each space (all applications)
- Better air distribution (circulation) within the space
- Lower noise levels than most HVAC systems ~30 db(A)
- Low velocity – no perceived draft

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SEMCO Chilled Beam Solutions

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JUNO IQHC
Highest cooling with lowest air & water pressure drop active beam

LYRA II IQCC
Low noise level with high flexibility & high cooling capacity

NOVA II IQFI
Exposed active chilled beam suitable for many ductwork system types

AURORA IQSA
Narrow 1-foot-wide active beam for ceiling mount

ORION II IQHA
Very low noise level – perfect for hotel & hospital rooms

NEUTON
Active condensation control for chilled beams

EXCELLENCE IN SOLUTIONS

AURORA IQSA
ACTIVE RECESSED CHILLED BEAM

The Aurora chilled beam is the right choice for modern buildings requiring high flexibility. Designed to perfectly fit into 12” ceiling grids, the Aurora beam provides comfort, low energy consumption, and quietly distributes air.

Three main functions:

1. **Ventilation**
2. **Cooling**
3. **Heating**

The Aurora chilled beam will supply the right indoor climate for applications like offices, schools,

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AURORA IQSA
ACTIVE RECESSED CHILLED BEAM

- Optimum energy consumption
- High flexibility & ease of installation
- Available with less than 31 dB of sound level which provides exceptionally quiet operation
- Compact with high cooling capacity
- Less maintenance thanks to no moving parts

- 1’ X 4’, 6’, 8’ & 10’ ceiling configurations
- Air flow range: 20 – 111 CFMs

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Aurora – Low Life Cycle Cost

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EXCELLENCE IN SOLUTIONS

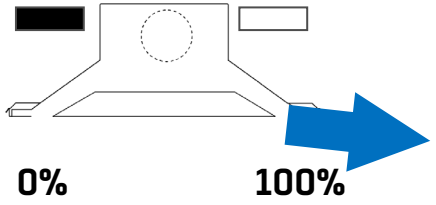
HIGH EFFICIENCY
LARGE SAVINGS

LOW LIFE CYCLE COST

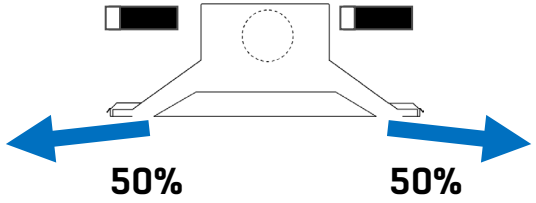
- Smaller AHU size for the system
- Low maintenance
- Free cooling capability
- Reduced energy consumption by

Aurora – Comfort Control

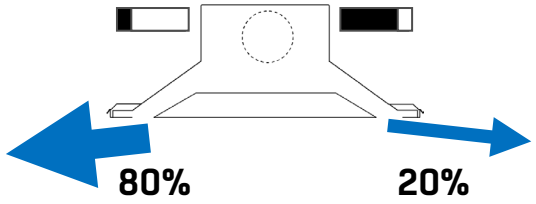
- Adjustable induction on site
- Different air distribution available:
  - One way distribution



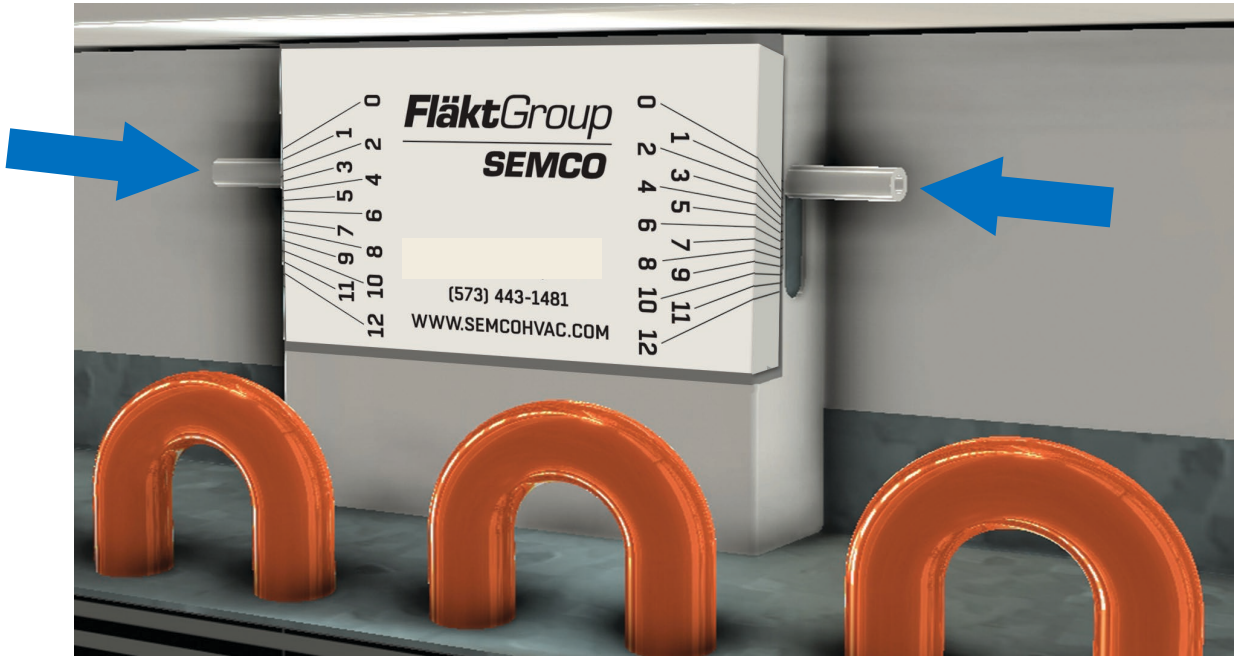
  - Two way distribution



  - Asymmetric air diffusion



- Chilled beam capacity can be increased or decreased by slot adjustment
- No tools required



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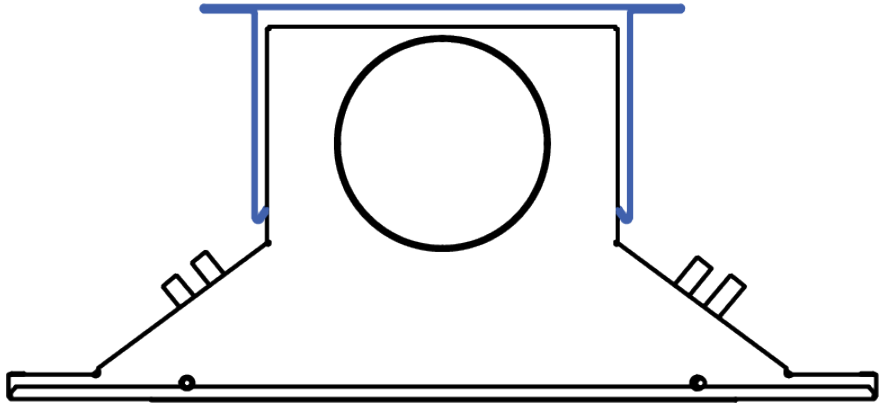
Fastening brackets for easy installation (free hanging or false ceiling)

1. Use threaded rods to attach brackets to Unistrut.
2. Clip beam into place.

Easy + fast installation = Low Installation Costs



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Aurora – Benefits By Audience

PROPERTY OWNER

- High indoor air climate comfort – silent and draught free diffusion
- Flexibility in building layout – adjustable capacity and air diffusion
- Low life cycle cost – reduced energy consumption and maintenance costs

CONSULTANT

- Energy saving functions such as free cooling and occupancy detection
- Ease of layout design – compact unit with high cooling capacity
- High indoor air climate comfort – silent unit and low air velocity in the room

CONTRACTOR

- Quick and easy installation – smart fastening brackets system
- Simple commissioning – no tools required
- Low maintenance – no moving parts & no condensation tray

Thank you for your attention!

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SPECIALIZED HEALTHY AIR SOLUTIONS