TROX® TECHNIK
The art of handling air

ENERGY-EFFICIENT AIR-WATER SYSTEMS

Unilever, Hamburg, Germany

Central and decentralised air-water systems have the following advantages:

- Efficient space utilisation
  Air-water systems require comparatively low air flow rates, this means that ducts with smaller cross sections are sufficient.
- Architectural design options
  Units for installation in floors, ceilings or walls/façades ensure that the best solution for each project can be found.
- Multi service units
  Active chilled beams can accommodate services such as lighting, loudspeakers, sprinklers, smoke detectors or PIR sensors.
- High flexibility with change of use
  Thanks to the modular configuration of air-water systems it is possible to change the usage of the building at a later stage without changes to the installation.
- Conservation of existing structures
  Both central and decentralised air-water systems are used for refurbishments and new builds since they can be adapted to the existing structure and to individual projects.

Ceiling and façade systems perfectly adapted to buildings.
Decentalised systems installed in or near the façade have a number of benefits with regard to design, flexibility and economy. The units allow for noise controlled air handling and provide the shortest possible path for supply air and extract air, i.e. from outside to inside and vice versa. Air-water systems from TROX are usually adapted to a project, to the structure and to the design conditions – in close cooperation with architects and specialist consultants. This is why they offer the greatest possible flexibility and maximum energy efficiency. Since air-water systems need only small air handling units, or none at all, and since pipes require only little space, such systems are often the only – yet ideal – solution for existing buildings that are to be equipped with ventilation and air conditioning components. On the next four pages we introduce various all-air systems and give recommendations for product selection.

EXAMPLES OF AIR-WATER SYSTEMS: ACTIVE CHILLED BEAMS, PASSIVE CHILLED BEAMS AND DECENTRALISED VENTILATION UNITS

CEILING

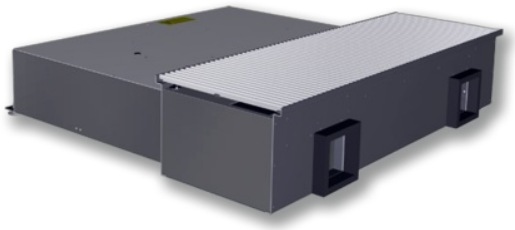
Active chilled beams
Integrated with the ceiling or freely suspended

WALL OR SILL

Under sill induction units

FLOOR

Under floor induction units



DECENTRALISED VENTILATION

- Under floor units
- Under sill units
- Vertical units
- Ceiling units

PASSIVE COOLING

Passive chilled beams