

## COMFORTABLE AND EFFICIENT AIR DISTRIBUTION



Air must travel long distances in shopping malls. An efficient airflow is the result of duct geometry and route:

- Large cross sections to minimise airflow velocities
- As few bends and junctions as possible

Another critical factor in a system's energy efficiency is intelligent control. Electronically controlled VAV terminal units combined with the X-AIRCONTROL zone control system provide demand-based volume flow rate control to ensure the best possible indoor air quality and temperature while they help to save energy at the same time.

Fire dampers and smoke control dampers play an important role for the safety of ventilation and smoke extract systems.

Fire dampers close off ducts and prevent the spread of fire and smoke to adjacent fire compartments. TROX fire dampers meet the high requirements of EN 15650 and are CE certified. They are available for a wide range of different applications such as fire batts or flexible ceiling joints and generally fit state-of-the-art construction methods. Fire dampers are suitable for supply air and extract air systems in potentially explosive atmospheres.

Smoke control dampers provide the full functionality of a fire damper and can be used in mechanical smoke extract systems to remove hot fire gases and to let in additional supply air in one or more fire compartments. The CE marking according to the Construction Products Regulation means that the product can be universally used in all European countries and for different application situations. TROX smoke control dampers such as the EK-EU can be used for ventilation if the mechanical smoke extract system has been approved (general building inspectorate approval) for ventilation.

Duct smoke detectors prevent smoke from spreading through the ducts of ventilation and air conditioning systems because they control and release approved fire dampers and smoke protection dampers that are fitted with an electric or electric-pneumatic release mechanism (power off to close).



Air terminal units combined with the X-AIRCONTROL zone control system provide demand-based flow rate control to ensure the best possible room air quality with high energy efficiency.



TROX fire dampers with CE marking and a CPR-compliant declaration of performance and TROX RM-O-M multifunctional duct smoke detectors tested to EN 54-27:2015 with volume flow rate and contamination monitoring



TROX EK-EU smoke control dampers CE certified according to the CPR, fully open or

close even after being exposed to higher temperatures (approx. 800 °C) for 25 minutes.