

TQS WITH INDOOR AIR QUALITY (IAQ) INLET FEATURES

Titus offers the Indoor Air Quality Inlet for the TQS. The demand for fresh air inlets on series fan powered terminals has been growing to address the growing IAQ concerns. Titus introduces the IAQ inlet option on the TQS premiere fan powered terminal.

Building owners are becoming more aware of the health concerns related to poor IAQ. Indoor air is a combination of outside air and indoor air distributed throughout a building. Indoor air pollution is caused by an accumulation of contaminants that primarily come from inside the building.

ASHRAE Standard 62, Ventilation for Acceptable Indoor Air Quality, specifies the minimum ventilation rates and indoor air quality that will be acceptable to human occupants. The standard is intended to minimize the potential for adverse health effects.

Standard 62 defines the outdoor air quality acceptable for ventilation, outdoor air treatment when necessary, ventilation rates for residential, commercial, institutional, vehicular, and industrial spaces, the criteria for reduction of outdoor air quantities when recirculated air is treated by contaminant-removal equipment, and the criteria for variable ventilation when the air volume in the space can be used as a reservoir to dilute contaminants.

In January 2000, the Environmental Protection Agency (EPA) released a report on the Energy Costs and IAQ Performance of Ventilation Systems and Controls. The study discusses the benefits (thermal and economic) of the various systems in the three climates, most of these issues will not be discussed in this catalog.

The study found that core zones consistently received less outdoor air than the perimeter zones. The core of a building is typically the zone with the largest occupancy levels and therefore would require more outdoor air than the perimeters.

Outside air control is typically handled by the central air handling unit. Due to varying conditions in individual zones, the outside air supplied by the air handler may not meet the minimum requirement for the zone. By supplying outside air directly to the zone using the TQS with IAQ inlet, the minimum ventilation requirement for the zone can be maintained.

