

Control Fire and Smoke with Air Handling Equipment

Buildings with “fixed glass windows” must control their environment by means of recirculating heat, ventilation, and air conditioning systems. Air recirculating shafts should be of noncombustible construction with at least a two hour fire resistant rating.

Designed “fire-safe” features to reduce and/or eliminate the transfer of heat and smoke throughout the building are available:

(1) Automatic operating fire dampers

In the event of fire the flow of air through all air handling ductwork must be stopped. This can be accomplished by installing automatic closing metal fire dampers in the return air ducts of all systems. The automatic closing of these dampers should be actuated by products of combustion sensing devices built into the duct.

The location of dampers should be specifically designed into the system. However, as a guide, dampers should be installed where ducts penetrate or pass through:

- Fire walls and/or partition walls subdividing large floor areas.
- Recirculating air return and/or exhaust shafts.
- Fire resistive floors.
- Large public assembly areas such as conference rooms, ballrooms, and restaurants.

NOTE: Fire dampers should be properly maintained and tested periodically.

(2) Automatic fire/smoke detection system

- Products of combustion sensing devices should be installed throughout the recirculating air handling system and arranged to:
 - Shut off the supply fans to prevent the distribution of heat and smoke.
 - Close predetermined fire dampers.
 - Open dampers to safely discharge heat and smoke to the outside.
 - Activate local and central station fire alarms.

(3) Manual controls

Manual controls should be provided to actuate all controls and systems.

Buildings with “fixed glass windows” must control their environment by means of recirculating heat, ventilation, and air conditioning systems.

The loss prevention information and advice presented in this brochure are intended only to advise our insureds and their managers of a variety of methods and strategies based on generally accepted safe practices, for controlling potentially loss producing situations commonly occurring in business premises and/or operations. They are not intended to warrant that all potential hazards or conditions have been evaluated or can be controlled. They are not intended as an offer to write insurance coverage for such conditions or exposures, or to simply that Great American Insurance Company will write such coverage. The liability of Great American Insurance Company is limited to the specific terms, limits and conditions of the insurance policies issued.

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