



McKEON plays a major role in preventing a total fire disaster.

LOCATION

Emily Carr University
of Art and Design
Vancouver, BC

PRODUCT

McKEON Auto-Set®
H200 Series
Horizontal Fire
Shutter



ON OCTOBER 5, 2019 an arsonist entered an office on the 4th floor of a newly constructed building on the Emily Carr University of Art and Design campus in Vancouver, BC. He ignited a significant amount of paper in an attempt to start a fire in an atrium a few feet away. The plan was foiled as the initial ignition in the office area set off the fire alarm system throughout the structure. Within seconds the building fire protection systems deployed –

Water from the activated sprinkler system pooled on the floor, however no water remained on the fire shutter.

Flames burned through the surrounding drywall, yet only charred the finish paint of McKEON horizontal fire shutter.

Debris from the arsonist's failed attempt to spread the fire throughout the structure via the atrium.



While the fire was quickly extinguished, one-third of the building's third and fourth floors suffered water damage. This photo shows the water pooling on the concrete floor surfaces, but an absence of water pooling on the McKEON H200. The horizontal shutter remained in place regardless of the water load and shielded the floors below from heat, smoke and falling burning debris.

both sprinklers and the closure of the McKEON H200s protecting the open vertical spaces.

When the perpetrator attempted to spread the fire by dropping the burning debris through the atrium opening closest to the fire's origin he was surprised to discover that the once-open atrium spaces were now closed at each floor level with 2,826mm (9.27 feet) wide x 16,410mm (53.8 feet) long steel shutters, each fire-rated for 2 hours UL10B and UL1784 for smoke. The fire merely charred the finish paint, and surrounding drywall and finishes. Had these opening protectives been installed as fire protective curtains the damage could have been far



When the arsonist attempted to spread the fire by dropping burning debris through the atrium opening closest to the fire's origin he discovered that the once-open atriums were now closed at each floor level with a fire-rated steel shutter (shown in red below).



more extensive from falling burning debris which can easily penetrate a light-weight fabric material. Fortunately the burning debris was unable to penetrate the robust steel slats of the shutter regardless of weight or combustibility.

Proof that passive redundancy works.

The damage caused by the Emily Carr University fire was not as bad as it might have been. The fire was blocked from reaching beyond the floor of origin. The arsonist's attempt to penetrate the deployable shutter and simultaneously ignite multiple floors failed. This fire event demonstrates perfect harmony between two major fire and life safety components – passive shutters and active sprinklers.

Other applications of the McKEON Auto-Set® H200 Series Horizontal Fire Shutter.

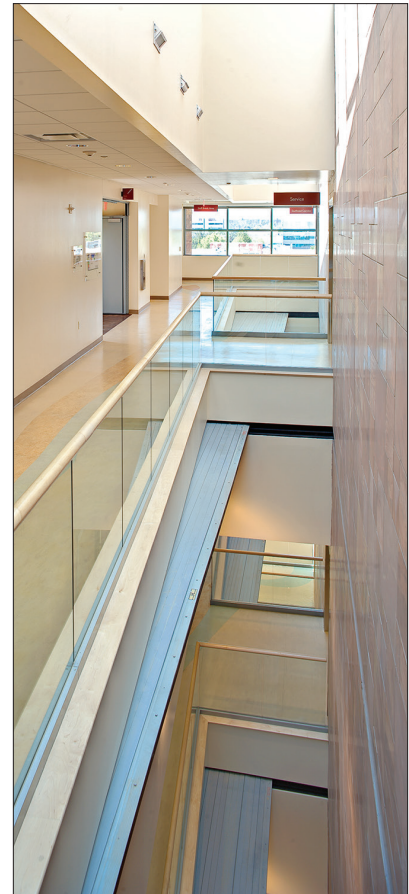
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