Facility managers recognize the significant life and property protection fire smoke and combination fire smoke dampers can provide. Building owners and local authorities are realizing the International Fire Code (IFC) requirements, to be operationally tested and maintained on a regular basis, help ensure the dampers will function when needed.

TESTING AND MAINTENANCE CHALLENGES

With a dynamic fire damper or a combination fire/smoke damper, an operational test is conducted after the HVAC system is balanced (NFPA 105, 7.4). This verifies the damper functions properly under airflow and can be incorporated into acceptance testing. But ongoing fire damper testing can present challenges. First, fire dampers are often installed in areas that are not easily accessible above the ceiling in penetrations of fire-rated walls and floors. Second, the design of fire dampers can make them extremely difficult to test and reset. On the other hand, motorized fire dampers or combination fire/smoke dampers have accessibility issues, but testing can be performed through simply disconnecting the power.

In addition, testing needs to be performed by qualified personnel with knowledge and understanding of how dampers operate as well as the system in which the dampers are installed. This ensures proper operational testing and helps prevent injury to the person doing the testing and/or damage to the system (NFPA 80, 19.4.1).

The ADC105 removes the challenges of accessibility and difficulty testing.
AN INNOVATIVE, APPROVED SOLUTION

*Ruskin* Addressable Damper Controller ADC105 meets the NFPA 80 and 105 life safety remote damper testing requirements and addresses both the challenges of regular monitoring while also removing the challenges of accessibility.

The ADC105 is a 5x6 in. control box with 3-foot power and blade indication switch leads. Designed for easy installation within 3 feet of a motorized fire, smoke or combination fire/smoke damper, the ADC105 can be used with any local power supply to operate. The ADC105 can also be used with new construction or be retrofitted onto existing *Ruskin* dampers.

LOW-COST, CONTINUOUS MONITORING

The ADC105 allows for the periodic testing required by NFPA 80 and NFPA 105 and works directly with both new and preexisting Simplex ES addressable fire alarm panels. With the ADC105 connected to a Simplex fire alarm system, it allows continuous monitoring and alarm capability should something go wrong. Since the Simplex ES Fire alarm system is already part of a building’s automation, adding the ADC105 to any fire, smoke or combination fire/smoke damper makes this a low-cost, addressable controller and can save thousands in testing and maintenance costs. The Simplex ES system supports the supervision, reporting and control of the fire/smoke dampers. This data is available at the local panel and across the ES Network, including connected TSW workstations. The entire system is supervised, providing increased reliability versus legacy system solutions.

Visit our website at ruskin.com for more information.