CMC 609.0 Automatic Shutoffs

Please define “Air-moving Systems” and “enclosed spaces”, as we are finding multiple definitions, depending on the jurisdiction. In addition, the following are examples that may clarify the intent:

1. Two 1,500 CFM rooftop package units serve a single large room. Is automatic shutoff required for each package unit?

Yes. CMC, Section 609 requires automatic shutoff upon smoke detection for “air moving systems” supplying air in excess of 2000 CFM to enclosed spaces within buildings. Where multiple fan units (including packaged HVAC units) supply a combined CFM in excess of 2000 CFM to an enclosed room or area, then all of the fan units would be required to have automatic shutoff upon smoke detection.

2. Two 1,500 CFM rooftop package units serve different areas of a small building and area separated by wall. Is automatic shutoff required for each package unit?
Automatic shutoff upon smoke detection would not be required for these 1,500 CFM HVAC fan units where the rooms or areas are completely separated by full height walls with doors, and where the HVAC fan units do not utilize common ducting or plenum.

3. Two 1,500 CFM rooftop units serve different areas of a small building. However, assume that one space is common to the two (a corridor for example). Is automatic shutoff required for each package unit?

Yes. Where a room or area (including corridors) is served by multiple HVAC fan units supplying a combined CFM in excess of 2000 CFM, then all of the HVAC fan units would be required to have automatic shutoff upon smoke detection.