

Minnesota Department of Public Safety State Fire Marshal Division

Rigid Partitions and Barriers for COVID-19 Protection

Introduction/Scope

Where fixed or portable rigid partitions or barriers are installed for COVID-19 protection based on CDC guidelines, there are specific fire code provisions that may apply depending on the amounts and types of materials used. This information sheet applies to fixed or portable partitions or barriers composed of rigid materials. Barriers installed on counters or desks are considered furnishings and need not comply with fire performance testing requirements. For non-rigid fabric or plastic film partitions, see our information sheet for [Non-Rigid Partitions for COVID-19 Separations](#).

Fire performance testing

Barriers or partitions used for COVID-19 protection that exceed **10 percent** of a room's wall area are considered interior finish materials, and must comply with minimum flame-spread classifications listed in Minnesota State Fire Code (MSFC) Table 803.3. Flame-spread classification (class A, B or C) depends on the type of occupancy, specific area and sprinkler protection. These classifications are based on ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*. You can view MSFC Table 803.3 [here](#) (scroll down to page 98).

Exception for existing buildings with sprinkler protection: In existing buildings protected by an automatic sprinkler system, barriers or partitions used for COVID-19 protection are not considered interior finish until they exceed **20 percent** of a room's wall area.

ASTM E84 classifications

- **Class A:** Flame spread index 0-25; smoke-developed index 0-450.
- **Class B:** Flame spread index 26-75; smoke-developed index 0-450.
- **Class C:** Flame spread index 76-200; smoke-developed index 0-450.

Example for calculating area limitations

Example: For a 30-foot-long by 30-foot-wide room with a 9-foot ceiling height, each wall has an area of 270 ft² (30 x 9). Thus, the total wall area of the room is 1,080 ft² (270 ft² x 4 walls).

- **Using the maximum 10 percent coverage threshold for new buildings or existing, non-sprinkler-protected buildings:** Up to 108 ft² of partitions or barriers (1,080 x 0.1) could be used without the need to meet fire performance testing requirements. This would equate to 18 linear feet of 6-foot-high partitions. Any amount beyond 108 ft² would qualify as interior finish and require documentation of fire performance testing.
- **Using the maximum 20 percent coverage threshold for existing, sprinkler-protected buildings:** Up to 216 ft² of partitions or barriers (1,080 ft² x 0.2) could be used without the need to meet fire performance testing requirements. This would equate to 36 linear feet of 6-foot-high partitions. Any amount beyond 216 ft² would qualify as interior finish and require documentation of fire performance testing.



Barriers and partitions composed of polypropylene (PP), high-density polyethylene (HDPE), or foam plastics

Due to the fire performance characteristics of certain plastic materials, partitions or barriers that qualify as interior finish and are composed of the following materials must comply with more stringent testing standards:

- **Polypropylene (PP) and high-density polyethylene (HDPE)**
 - NFPA 286, *Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth*.
- **Foam plastics**
 - NFPA 286, *Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth*.
 - UL 1715, *Fire Test of Interior Finish Material*.

Barriers or partitions that do not exceed the 10 percent (or 20 percent) threshold described above, and barriers installed on counters or desks, are considered furnishings and need not comply with fire performance testing requirements.

Location and arrangement

Barriers or partitions must be installed:

- At least 18 inches below the level of sprinkler deflectors in sprinkler-protected areas.
- No higher than within 15 percent of the ceiling height in areas protected with automatic heat or smoke detection.

Barriers or partitions must not obstruct a means of egress, including aisles, aisle accessways, exit access doorways or exits.

More information

Email the State Fire Marshal Division Fire Code Team at fire.code@state.mn.us. Visit sfm.dps.mn.gov for the latest updates to this information.