



Quantum Chemical

SafeCoat[®]
Fire Retardant Coatings
Fire Protection Simplified!

CASE STUDY – Flame Spread Abatement in False Ceilings and Service Areas

Cost savings are available during upgrades in False Ceilings and Mechanical Service Rights-of-Ways (service spaces and service rooms, etc.). These areas are often found during retrofits to schools, nursing homes and other similar occupancies.

During major upgrades to a composite high school, which included the relocation of several walls, the local building inspector observed that much of the existing rated ceiling tile would have to be removed. In addition, changes in classroom size and relocation of the mechanical services resulted in approximately 3500 sq. ft. of wood roof deck exposed in the concealed space formed by the installation of the new T-bar ceiling. The potential for a fire to spread within this space led the inspector to insist that the exposed surfaces be upgraded to a Class A finish (a Flame Spread Rating of less than 25). Since most of the mechanical work had been completed, installation of gypsum over the flammable roof deck was not possible.

SECTION 3.6.4.3 1)a) of the Building Code requires that Service Spaces and Service Rooms have a flame spread rating of not more than 25 and smoke developed classification of not more than 50, or the issue must be addressed in another manner.

SECTION 3.1.11.6 of the Building Code requires that Service Spaces and Service Rooms conform to the flame spread ratings in Table 3.1.13.7 (which states that Flame Spread Ratings must be limited to a maximum of 25) or the issue must be addressed in another manner.

The architect and contractor had to provide a Flame Spread Rating of 25 or less, or incur the costs involved with installing a set of sprinklers or installing drywall between the pipes and ducts in this space. The project also had a tight turn around, time-wise, since several trades would be delayed if the building inspector was not satisfied that the problem had been resolved. The architect called Quantum Chemical for a quotation on the cost and the time required to install the **SafeCoat**[®] **Latex** in all exposed areas prior to the installation of the false ceiling.

The **SafeCoat**[®] met the requirement for a Flame Spread Rating of less than 25 in a single coat. Therefore the cost to apply **SafeCoat**[®] by airless sprayer was far less expensive than cutting and installing gypsum inserts between the existing duct work and piping, or installing a set of sprinklers in the space.

It took less than one week from the day the problem was identified, to the day the job was completed (including scheduling and approvals).