Office of Facilities Planning, New York State Education Department May 29, 2020 Plastic Sneeze Guards

Warning: Plexiglass glazing used to construct sneeze guards is flammable and does not meet NYSED Manual of Planning Standards-1998 requirements or the 2020 Building & Fire Codes of New York State.

In Response to COVID 19, School Districts and most Public Entities are anticipating reopening and are making plans to alter school facilities and accommodate measures known to help prevent the spread of the virus.

We have been informed that districts are beginning to install sneeze guards at locations where school operations and activities require staff and students to make face to face contact with each other. Locations may include, security/reception desks/counters/windows, main office reception counters, server lines, cashier stations, library checkout counters, teacher desks, and student work- stations, etc. NYSED acknowledges the protections achieved through the use of sneeze guards however they must be constructed using an approved flame-resistant material. Plexiglas is a well-known trade name for an inexpensive acrylic plastic glazing product. Typically, when a consumer needs plastic glazing, they will order the product using the term "Plexiglas" because of its identification with clear plastic glazing. Unfortunately the product procured is a flammable acrylic plastic which does not meet building code requirements.

The NYSED Manual of Planning Standards-1998 (MPS) sections S205-2 & S205-3 require plastic materials that are incorporated into construction to meet certain fire tests. They are as follows:

ASTM-E84 Surface Burning Characteristics of Building Materials: flame spread rating shall not exceed 0-25; smoke developed rating shall not exceed 450. Class-A flame spread rating (most restrictive rating).

ASTM D635, Flammability of Self-Supporting Plastics: burning test shall not exceed 2.5 inches per minute.

ASTM D-1929, Ignition Properties of Plastics: burning test shall not occur below 600 degrees F – MPS;

ASTM D-2843 Standard Method for Measuring Density of Smoke from Burning or Decomposition of Plastics: smoke density shall not exceed 75

The Building Code of NYS Section 803 has requirements for interior finishes. Exit enclosures shall be Class A. corridors shall be Class B and rooms and spaces shall be Class C. Plexiglass does not comply.

Note for installations where the sneeze guard is not fastened to a building element, the product would be considered a furnishing required to comply with MPS S205-13 b. Fire test criteria is required to be approved, "Items of obvious and questionable hazard avoided."

"Plexiglas" is a familiar, inexpensive, readily available plastic glazing material that is easily procured. However, acrylic plastic glazing products are flammable and do not meet Fire Code or NYSED regulations noted above.

An alternative clear plastic glazing product is available and is known as polycarbonate. It has a different chemical composition from acrylic plastic and is much less flammable. Districts are advised to investigate Polycarbonate products for test data. Another option is tempered safety glass.

School Districts must comply with the NYSED and Building Code requirements listed above when installing plastic glazing in school buildings. The products must be installed in accordance with code and a design professional should be consulted to ensure the product and installation is code compliant. In accordance with the Commissioner's Regulation Part 155, Section 155.2 plans and specifications for all construction projects which exceed \$10,000 or involve <u>health and safety</u> must be submitted to NYSED for a building permit. Installations under \$10,000 – provide NYSED a letter from a design professional certifying glazing material complies with MPS & Fire Code fire test requirements.