

Facilities Planning

Newsletter 87 – May 2007

Manual of Planning Standards Update:

Our Architects and Engineers in Facilities Planning are addressing the updating of the Manual of Planning Standards (MPS). A great deal of work had been provided by Liz Freund and we are working toward a completed document. Our schedule is to complete our material and then compare our document with changes within the final document of the NEW Uniform Fire Prevention and Building Code which is expected to be available this summer. Our timetable would have us presenting a new MPS later this fall. We will let you know at that time how we will incorporate it into new construction projects.

Previously we have provided several articles in past Newsletters that asked for conformance of design work with Newsletter articles. These articles are incorporated in the new MPS. Below is another of these articles. By providing these articles we hope we are eliminating surprises to the design community when we present our completed document.

Fire Separations at Science Labs, Vocational Technology Shops, and Art Rooms:

At a recent internal Architect/Engineer meeting the requirements for fire separations at science labs and shops was discussed with the following consensus.

Science labs and prep rooms shall be enclosed with a one hour fire barrier, with $\frac{3}{4}$ hour doors and fire dampers per code. Prep rooms shall also be separated from science labs with a one hour fire barrier, including $\frac{3}{4}$ hour doors and fire dampers. Science lab storage rooms over 100 sq. ft. shall also be enclosed with one hour fire barriers.

Vocational Technology Shops shall be enclosed with two hour fire barriers with the required opening protectives and fire dampers. Shops shall be separated from other shops with the same two hour fire barrier. Classrooms inside shop areas are not required to be separated from the shop, but still require two means of egress into separate smoke zones and should have windows between the shop and the classroom. Open mezzanine storage areas are allowed and must have at least a 60 degree ships ladder for access and if over 500 sq. ft. must have a second means of egress such as a vertical ladder.

High School and Middle School art rooms shall be considered laboratories as defined in the "Uniform Fire Prevention and Building Code". High School and Middle School art rooms shall be enclosed with one hour fire barriers, including $\frac{3}{4}$ hour doors and fire dampers. Outdoor ventilation air shall be provided based upon 20 cfm. per occupant.

Electric Kilns are not required to be in a separate enclosure. However, kilns located in elementary school classrooms should not be operated while the classroom is occupied. Gas-fired kilns require a one hour fire barrier, with $\frac{3}{4}$ hour doors and venting in accordance with manufacturer's instructions and code requirements. School personnel must be diligent in maintaining the manufacturers required separation distance for the kiln from combustible materials. A recent school fire was

caused by a kiln which ignited combustible paper and cardboard stored only 10 inches away. An appropriate separation distance must be maintained between the kiln and any combustible materials for fire safety.

Fire Extinguisher Maintenance:

Fire Extinguishers are a very important component of school fire safety. The SED Manual for Fire and Building Safety Inspections In Public and Nonpublic Schools requires an annual inspection and correction of any inspection items that are not compliant. Appendix C of this Manual, the Fire Safety Inspection Code Reference Checklist, item 16-B-2, requires portable fire extinguishers to be located in a conspicuous location, be readily accessible, not obstructed or obscured, and maintained in accordance with Fire Code Section 906.2 and NFPA 10, Chapter 7.

NFPA 10, Chapter 7, for Inspection, Maintenance, and Recharging of Portable Fire Extinguishers requires maintenance, servicing, and recharging be performed by trained and certified persons. Most service personnel are certified. The certification of service personnel is required after August 17, 2008. The maintenance procedures include a thorough examination of the basic elements of a fire extinguisher following the procedures detailed in the manufacturer's service manual.

Fire extinguishers are subjected to maintenance at intervals of not more than 1 year. Each fire extinguisher shall have a tag or label attached that indicates the month and year recharging was performed, identifies the person performing the service, and identifies the name of the agency performing the work. A verification of service (maintenance or recharging) collar shall also be attached to the extinguisher.

A School District representative is required to inspect fire extinguishers at 30-day intervals. This inspection includes a check of at least the following items:

1. The extinguisher is located in its designated place,
2. There are no obstructions to access or visibility,
3. The pressure gauge reading or indicator is in the operable range or position,
4. It is full,
5. The condition of the hose, nozzle and operating parts are not damaged.

Please approach the care and inspection of fire extinguishers responsibly and diligently.

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<https://www.p12.nysed.gov/facplan/NewsLetters.htm>.

If you would like to have this Newsletter sent directly to you by e-mail, please send your e-mail address to Joe Levy at jlevy@mail.nysed.gov.

Please continue to send in your comments and requests. If you have a subject you would like addressed, feedback on the material you read, input or general comments we are happy to hear from you.