

Facilities Planning

Newsletter 81 – November 2006

Get to Know us Better:

Jeannine Murphy has come to us from the Office of State Aid where she worked in the Building Aid Unit. Jeannine joined the State in 1978 working in the Office of Professional Licensing. Over the past 27 years she has worked in various offices in the Department before joining Facilities as Secretary I. So be nice to her.....or she won't let you speak to Carl.

Jeannine received her Associate in Applied Science from Hudson Valley Community College in Banking, Insurance and Real Estate. She has two lovely daughters, Erin and Lisa. We can't forget the other member of the family, Lucy... with a larger than life attitude. The 4 year old black/tan dachshund is so cute and adorable... if you ignore her she will let you know that she has to be the center of attention.

When Jeannine isn't working at Facilities Planning you can find her working part time at Albany Advanced Imaging, bringing her smile to the patients that are having an MRI. She enjoys bowling, skydiving, crafts and decorating.

Rescue Windows:

SED has many publications in which we stress the design, maintenance, and compliance for a second means of egress. This important safety requirement was instituted as a result of the 1954 Cleveland Hill School Fire in which several students and teachers were killed as a result of windows being nailed shut. Our publications include:

- The Commissioner's Regulations 155.7(a)(5) and (a)(6) address the requirements for a second means of egress and rescue windows. They are retroactive requirements that apply to all existing public school buildings (other than the "Big Five" city school districts).
- The "Manual for Fire and Building Safety Inspections In Public and Nonpublic Schools" cites the lack of a compliant second means of egress as a violation of 2C-3 in existing buildings. This violation is rated as "severe" and would not allow SED to issue an Annual Certificate of Occupancy. Rescue windows are also addressed.
- The Evaluation of Existing Building Form, FP-EEB 5/2005, items 15 and 16 also address the requirements for a second means of egress and the compliance of rescue windows. This is on the form because of the two previous requirements.
- The SED Manual of Planning Standards (MPS) Sections 104-5b and 104-7 provide the design requirements for new construction. The MPS applies to all public school buildings, with the exception of those schools in New York City.

All of these can be found on the Facilities Planning web site, just place the name in the search box.
<https://www.p12.nysed.gov/facplan/home.html>.

Any space of student occupancy over 500 sq. ft. is required to have a second means of egress into a second smoke zone. There are several ways to accomplish this, such as a second door into a corridor which is separated from the main door by a smoke partition dividing the corridor, or a door

to the exterior, or the most common way of accomplishing this safety feature which is to provide a "rescue window".

Rescue windows are required to have a clear opening of six square feet, with a minimum dimension of 24 inches in width or height. The windows can not be obstructed by operating arms such as provided on some awning or casement style windows. Screens, if provided for rescue windows must be hinged, sliding or easily pushed out, with one hand without the use of a key or pulling pins, etc. Rescue windows are identified by signs on the window which must be visible from the inside and outside. The identification sign must also be on any window shade, blind, or curtain blocking the rescue window from sight.

There are two situations where inadequate rescue windows often come to our attention. The first is when an inappropriate space such as a basement space is commandeered to be used as a classroom. The rescue window sill heights are usually too high and the operating handle is out of reach. The second is when windows are replaced with new units and the detailed sizes are not carefully described in the construction documents. This is followed with shop drawings in which the type of window is changed or the window mullions are larger. This results in undersized rescue windows being installed with a reduced clear opening and reduced minimum width or height.

Please design and inspect rescue windows with extreme care. Check shop drawings very carefully to be sure the contractor is providing the full 24-inch dimension in either height or width and the 6-square feet for the clear opening. And as requested on the Code Compliance Checklist (for construction drawings), provide dimensions of the "Rescue Window Clear Opening Size" on an elevation of the rescue window within the construction drawings.

Classroom Windows and Visual Environment:

Do Sections 304-3, 304-4, and Table 304-4 in the SED Manual of Planning Standards (MPS) contain all we need to know about window design requirements? There are still plenty of questions from school officials and designers that are proposed to Facilities Planning.

To provide "Day Lighting", vision strips are required for all classroom environments. The High Performance School Building Strategy Guide published by the Sustainable Buildings Industry Council indicates that students in classrooms with increased day lighting have improved student performance. And, as much natural day lighting as cost effectively possible should be designed into classrooms in a manner that avoids excessive heat loss and glare.

Vision strips are windows that are at least 50% of the lineal length of an outside wall of the room. Table 303-1 provides a list of room uses found in school buildings. The table provides a column where vision strips are required when an "X" is indicated within that column. Another column provides the window stool (interior sill) height. Please note that all academic uses are listed. Special Education rooms do require windows even though they are not specifically listed. They are designed as elementary or secondary classrooms that are smaller in size due to their ratio of students to teachers.

To avoid glare, glazed areas should be placed and arranged to minimize brightness differences. Reduce the direct view of the sky or sunlight and prevent reflection from bright exterior surfaces. See Table S304-3 for the Recommended Limits of Brightness Ratios. Know also that coatings which reduce light transmissibility for increased energy savings could also affect the brightness, visibility aspects, and student performance

Please remember, the MPS requires a minimum distance of 30 feet between exterior walls having classroom windows and adjacent parallel walls. Greater distances are recommended.

When providing security, do not reduce the number of windows. Not only are windows required by the MPS, window reduction is not considered a method for providing security. For more information on security see this link: [The Appropriate and Effective Use of Security Technologies in U.S. Schools](#)


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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.