



Office of Facilities Planning Newsletter Update #5 – July 2000

If you would like to have this Update 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. Our purpose is to provide information which will help all Consultants and Facilities Planning provide a quick concise review of all projects. This will help the schools get their construction projects out to bid in a timely manner.

Code Review Checklist:

Please provide the "NYSED" pages of the Code Review Checklist with your submissions to Facilities Planning. We began requiring this after the gathering here in Albany on March 28th. We are receiving documents that do **NOT** have the pages labeled with "NYSED" included. Please fill out the review on the computer, print and send the "NYSED" pages in with your new submissions. If you have not noticed, this checklist has been altered/updated in response to your feedback. Thank You.

Forms:

You can now take advantage of the SED Forms that we have provided with the Code Review Checklist. This version of the forms is in MS Excel. This allows you to fill the form out on the computer using the Excel format. The forms are listed in the "Worksheet Names" in the table of contents of the Code Review Checklist. Please let the administrative people in your office know these forms are available. We hope they will make your work easier and quicker. We know hand printing or using a typewriter is not as convenient.

Plastics - Acrylic:

The last day of school at a North Country district ended with a fire that caused damage estimated at between \$600,000 and \$1 million. The fire was reported to have been started by two students who lit a cardboard box outside and next to the plastic wall of an attached greenhouse. This and other reports lead us to suspect that the greenhouse addition may have been glazed with acrylic plastic. In addition, there appears to have been a large number of empty plastic pots stacked together on the interior against the wall that may have contributed to the spread of the fire.

The Manual of Planning Standards Section S205 contains extensive information on the use of plastic materials in greenhouse type enclosures. There are specific ASTM flammability tests which these plastics must pass. It is our understanding that acrylic plastics do not pass these tests. Architects and Engineers must be very diligent with their specifications and shop drawing approvals to ensure that the safety of building occupants is not compromised. School districts must be aware of the importance of having such additions designed by professionals and approved by the Commissioner of Education.

Acrylic is the recommended material specified by some greenhouse manufacturers. That doesn't automatically make it OK to use in school construction. As an addition or part of a school the greenhouse has to comply with the Construction Type of the school, Code Sections 773 for plastic materials and 770.3(a)(1) for glazing in windows and The Manual of Planning Standards Section S205. In summary, do not specify acrylic for greenhouses and do not accept acrylic as an equivalent or substitute **unless** you can prove it meets all these requirements.

Translucent Roof Panels and Skylights:

There has been much controversy regarding the classification of translucent roof panels. It is our opinion that translucent roof panels made of glass fiber reinforced thermoset resin face sheets, bonded to an aluminum grid, with fiberglass insulation is not a plastic roof panel as described in the New York State Uniform Fire Prevention and Building Code Section 770.4(c). The above described roof panels are allowed to be used without area limitations provided the interior face sheets have a UL Class A flame spread rating and the exterior face sheets comply with the requirements for a Class A roof covering. This is as opposed to thermoplastic, which deforms when heated and is not acceptable.

In addition, if you are specifying plastic skylights it is our understanding that acrylic plastics do not pass the ASTM flammability tests as previously stated. Plastic skylights should comply with Code Sections 773 for plastic materials and 770.4(c) for roofs and the Manual of Planning Standards Section S205.

We hope this helps in your selection of skylights.

Comment:

We have been asked whether drawings should specify UL Design numbers. Fire ratings **MUST** be specified to show compliance with Table III-704, Section 771 or any other pertinent requirements of the Building Code. To speed reviews you must show your detailing to achieve required design performance. We would prefer that you include a design number (UL, GA, WH or whatever). It is a practical solution that will curb change orders and protect your client, the school districts.

We are happy to hear from you. If you have a subject you would like addressed, feedback on the material you read, input or general comments, please send them to Joe Levy at jlevy@mail.nysed.gov.

We plan to address subject matter as discussed at our March 29, 2000 Workshop, common errors holding up reviews, solutions to repeat problems and any subject which will help the schools and consultants quickly and efficiently receive their project approvals.