

approved authorities or calculations sealed by a registered professional engineer verifying the structural adequacy of the members formed from such material.

- b. Where the aluminum and steel are in direct contact, protection against electrolytic action shall be provided. The area of contact shall be thoroughly covered with paint or other non-metallic coatings. Where the contact areas are likely to be wet frequently or for prolonged periods of time, special protection may be desirable.

Section 12—PLASTIC PANELS IN METAL BUILDINGS

Because more factual information is needed, it is recognized that it is difficult to set forth specifications recommending the extent to which plastic panels should be used in either roofs or sidewalls of buildings. The Society of the Plastics Industry, Inc., in conjunction with various code authorities, is working toward recognized standards.

It is recognized that plastic panels in the sidewall of metal buildings serve as a decorative feature as well as for lighting. The use of plastic panels to provide light is becoming more common, especially in flat glazing of metal sash.

The great extent of their present day use and U. S. Navy tests have indicated that plastic panels in roofs of metal buildings serve as an economical source of light. In the Navy's study (Technical Note N-184, U. S. Naval Civil Engineering Research and Evaluation Laboratory, Port Hueneme, California, dated March 23, 1954, entitled "Skylighting Patterns for Daylight Illumination of the Bureau Standard Rigid Frame Steel Building, 40 feet by 100 feet and Bureau Standard Arch Rib Steel Building, 40 feet by 100 feet - P. J. Rush"), the results indicated that, if in roofs of rigid frame buildings 17 per cent of the projected floor area consisted of glass-fiber reinforced polyester laminate sheets with a theoretical light transmission factor of 62 per cent, the illumination at working surface level would be sufficient for this height and width building. (Varies approximately inversely as ration of the height squared.)

It has also been found that the temperature at the working level may become uncomfortable if too large an area of the roof