PERFORATED METAL SHEETING FOR SOUND ABSORPTION

Wall and Ceiling Perforated Metal Sheeting is used normally in building interiors as a fascia for acoustical absorbent products to reduce reverberant noise levels. For optimum performance the Wall and Ceiling Perforated Metal Sheeting is supplied in a variety of metals, thicknesses, profiles and open air percentages. Wall and Ceiling Perforated Metal Sheeting also provides structural integrity and mechanical protection requirements for broad industrial and commercial noise control treatments and applications.

DESCRIPTION

RPR Wall and Ceiling Perforated Metal Sheeting is available in aluminum, (stainless steel, and galvanized steel available upon request, minimums apply). The metal is perforated using 1/8” diameter holes on 21/64 inch staggered centers. This perforated pattern yields an approximate 13% opening of metal surface area, providing effective acoustical performance while retaining optimum structural strength. Other percentages of open areas in sheeting are available to provide effective high/low frequency absorption.

Aluminum thicknesses available are .024” and .032. All metals are available in smooth or stucco embossed finishes. Flat perforated metal can be supplied in rolls up to 100’ long or in cut-to-length sheets, as required.

Profiled perforated metal, as illustrated above, is cut-to-length and palletized. Degreased or pre-painted perforated metal sheeting is available. For pre-painted sheet, inquire as to types and film thicknesses. Profiles other than those illustrated above are also available. Inquire.

USES

RPR Wall and Ceiling Perforated Metal Sheeting is used as the expose to-the-noise facia of absorber type sound control treatment systems. These systems use mineral fiber, glass fiber or other absorbent type materials bagged in thin Mylar® or poly-film. The sheeting may be incorporated in permanent and/or demountable wall and ceiling noise absorber treatments. Movable and/or fixed absorber/barrier partitions are installed in power and process plants, pulp and paper mills, gas compressor stations, schools and other type noisy environments. Perforated metal sheeting satisfies a diversity of acoustical and mechanical needs.
INSTALLATION

RPR Wall and Ceiling Perforated Metal Sheeting may be installed directly onto or offset from, surfaces and structures utilizing extruded or press-brake formed trim and “T” ceiling components. Avoid the use of stick or welded pins and clips to secure or install the absorber. It is recommended that the absorbent products be “bagged” or wrapped in thin film sheeting, e.g. 0.5 mil Mylar® film or 1.0 mil polyethylene film. Film thickness heavier than recommended, herein, may negatively affect the acoustical absorbency effect and performance of the installation.

Note 1: RPR Products, Inc. suggests that a professional noise analysis of the affected area(s) be taken and provided to facilitate selection of the type and nature of the materials required to accommodate not only the acoustical design or requirements, but also the mechanical performance needs of the installation.

Note 2: NRC rating is influenced by various thicknesses and/or densities of the sound absorbing media as well as the thickness and percentage of open area of the Perforated Wall and Ceiling Sheeting. Sound absorption coefficient information is available. (NRC Values to 1.05.)