

A Precaution for Rib Lath on Ceilings or Soffits

Rib lath is manufactured from coils of sheet steel, slit and expanded into a herring bone pattern. Following the slitting and expansion process, continuous sheet metal ribs are formed in the surface of the lath. The ribs are spaced approximately three inches apart and run parallel to the long dimension of the lath. See the illustrations below for examples of rib lath.

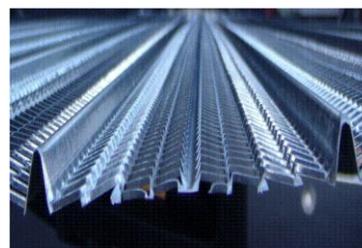
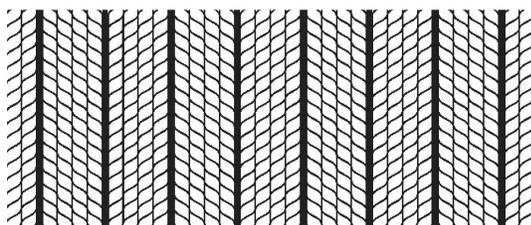
The ribs reinforce the lath and make it stronger and more rigid than traditional non-ribbed material, characteristics that permit rib lath to be used in applications with wide framing support spacings. For example, Table 3 of ASTM C1063ⁱ, limits the maximum framing support spacing for an installation of non-ribbed, expanded metal lath on the underside of a horizontal surface, such as a ceiling or soffit, to 16 in. on center. In contrast, flat rib expanded metal lath can be used in the same application with supports spaced up to 19 in. on center, and 3/8 in. high rib lath can span 24 in. on center.

Excessive cracking has occurred in ceilings and soffits where flat or high rib lath was installed to framing that was spaced at intervals that would have allowed the use of non-ribbed expanded metal lath. In most instances, the cracks originated at and telegraphed along a sheet metal rib, typically at a location where the thickness of the applied plaster is reduced due to the presence of a rib.

Therefore, caution is urged regarding the specification or installation of rib lath in horizontal applications where its use may not be necessary. Requirements contained in specifications and codes should be fully analyzed to determine the most appropriate materials to be incorporated into a specific construction system.

In addition, water-resistive barriers should be omitted on a ceiling or soffit, regardless of the type of lath installed. Some lath has strips of paper, that do not serve as a water-resistive barrier, installed behind the lath to minimize overspray when the scratch (first) coat of plaster is gun- or machine-applied. The strips will not hold back water in the ceiling; however, they can make it more difficult to wire-tie the lath to horizontal framing members.

Examples of Rib Lath



ⁱ ASTM International C1063-19 *Standard Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster*, West Conshohocken, PA; ASTM International, 2019, www.astm.org