

PRODUCT: TERMINAL UNITS
SUBJECT: LINER OPTIONS – COMPARING FIBER FREE TO STERI-LINER
ISSUED BY: GUS FARIS

Many jobs require liners that ensure that fibers do not become dislodged from the liner and enter the air stream of the unit. Most insulation is rated for high velocity airflow, but sometimes there is a greater need. Nailor offers two types of insulation for this option.



Steri-Liner is designed to reduce the risk of microbial growth within the terminal unit. A smooth non-porous facing over the fiberglass insulation provides a vapor barrier to moisture and reduces the risk of microorganisms becoming trapped. The foil facing also facilitates cleaning and prevents erosion. Fiber-Free insulation is a closed cell foam that basically has all the qualities of Steri-Liner mentioned above. There are some differences.

Steri-Liner can be permanently glued to the sheet metal surface. It is also held in place with metal Z strips at the edges, which also seal those edges to prevent migration of insulation into the airstream. (See the Dual Duct section of Nailor's VAV Terminal Unit catalog for a description of both.) While the Fiber-Free option does not need the protective edges, it is very difficult to attach to the sheet metal liners. It is typically glued and pinned to the walls of the terminal units. The closed cells that make up the foam are filled with air. Consequently, they expand and contract with temperature changes. Over fairly long periods this works the insulation free from the glue and expands the holes where the pins penetrate the insulation. Over time the insulation works loose from the unit sides, the insulation capability is degraded.

Both types of insulation have proven to be acceptable in our industry, although the Steri-Liner has a much larger installed base, covering many more years than the Fiber-Free. While Nailor provides both types of insulation, we believe the Steri-liner to be the superior choice between the two, providing better long term insulating qualities.

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