



Skyliner® Technical Bulletin 017: **Return Air Plenums**

It does not occur very often, but there are instances where the design of a metal building incorporates an exposed liner system, such as Skyliner, as a component of a return air plenum within the HVAC system ducting. This bulletin was written to assist with common questions regarding that scenario.

Energy Considerations

ASHRAE 90.1-2016, section 6.4.4 HVAC System Construction and Insulation will address requirements. Specifically regarding plenums, refer to section 6.4.4.1.2 Duct and Plenum Insulation. This section will assist with energy requirements depending on Climate Zone and Duct/Plenum Location. We would also recommend that you consult the HVAC contractor and any applicable energy codes within the jurisdiction of the project.

Fire Hazard Considerations

In general, the IMC, UMC and NFPA 90A will require insulating materials that are exposed in plenums to comply with a flame-spread index of not more than 25 and a smoke-developed index of not more than 50, per ASTM E84 / UL723. Products that meet this criteria can be identified as having a FHC 25/50.

FHC (Fire Hazard Classification) 25/50 means that the product has been tested in accordance with ASTM E84 / UL723 and produced a flame-spread rating of not more than 25 and a smoke-developed rating of not more than 50.

Bay's Skyliner Insulation System meets this requirement. The Skyliner material and insulation are both FHC 25/50.

**Questions? Contact your Bay District Manager,
call 844.999.7153 or visit www.SkylinerSystems.com.**

(Photo of Actual fabric)