



**Informal Interpretation Report
Number 8513**



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Section 607.3.1

Question:

The Florida State Building Code and the Florida State Mechanical Code require dynamic ceiling radiation dampers. Is an HVAC air distribution system that incorporates a static ceiling radiation damper and a fire-stat "less than equivalent" to an HVAC air distribution system that incorporates a dynamic ceiling radiation damper and a fire-stat?

Answer

They are different.

2020 FMC, 607.3.1 deals with Damper testing. Ceiling radiation dampers shall comply with the requirements of UL 555C or shall be tested as part of a fire-resistance-rated floor/ceiling or roof/ceiling assembly in accordance with ASTM E119.

2020 FMC, 607.6.2.1 deals with Ceiling radiation dampers. Ceiling radiation dampers shall be installed in accordance with the details listed in the fire-resistance-rated assembly and the manufacturer's installation instructions and the listing.

UL 555C applies to ceiling dampers and ceiling air diffusers intended for use in HVAC systems where the airflow is operational at the time of a fire. Static ceiling radiation dampers are installed only in systems that are not designed to operate during a fire.

If the question asked is if a static ceiling radiation damper is "less than equivalent" to a dynamic one, the answer to that is "yes". If the system is designed so that air movement is not deactivated, then the dynamic ceiling radiation damper is required and the static one is not equivalent.

Commentary:

The designer needs to determine the actual intent of the radiant damper's use. Each type, static or dynamic, is tested for that specific air flow use.

Notice:

The Building Officials Association of Florida, in cooperation with the Florida Building Commission, the Florida Department of Business & Professional Regulation, ICC, and industry and professional experts offer this interpretation of the Florida Building Code in the interest of consistency in their application statewide. This interpretation is informal, non-binding and subject to acceptance and approval by the local building official.