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CAN4–S115-M in comparison to UL 1479

Performance standards have been created by authorities having jurisdiction (AHJ's), local and national building codes, to ensure that materials used to seal fire rated openings will withstand exposure to the severe conditions of a fire. Underwriters Laboratories of Canada has issued Standard CAN4-S115, "Standard Method of Fire Tests of Firestop Systems". The United States uses Underwriters Laboratories Standard UL 1479, "Fire Tests of Through-Penetration Firestops", as one of its recognized standards. Building codes address this issue as follows: National Building Code of Canada - Section 3.1.9 Building Services in Fire Separations and Fire Rated Assemblies, Subsection 3.1.9.1 Fire Stopping of Service Penetrations. The subsections specify the requirement for the use of "tested" fire stop materials for sealing building services, which penetrate a fire separation or an assembly required to have a fire resistance rating.

A major difference between UL 1479 and CAN4-S115-M is that the hose stream test is mandatory in UL 1479 for all applications in order to obtain a listed system, while it is an optional requirement in CAN4-S115-M. Plastic pipes however, require an additional 50 pascal furnace pressure when testing under CAN4-S115.

The hose stream test provides an indication of the integrity of a firestop or assembly during the course of its exposure to fire. It exposes the system or material to impact, erosion and cooling tests in order to determine its overall reliability to perform as intended. Likewise, the 50 pascal requirement for plastic pipes also simulates the intense pressure situation in a fire scenario.

The distinction between test standards and the requirement for hose stream test is important. A specification that referenced UL 1479 would require that listed firestop systems used on that project must pass the hose stream test, which would not be the case if only CAN4-S115-M were referenced. Also, it is generally accepted that the hose stream test is a “worst case” scenario and more difficult to pass than the requirement for no hose stream in CAN4-S115.

UL 1479 and CAN4-S114-M are identical tests otherwise, with both being done in Canada and the US, through UL Testing and are thus compatible for the Canadian Firestop Market as well as being recognized by UL as one in the same.