Chapter 1 CONSTRUCTION

1.2.11. 'F' Rating

The time, stated in hours, that a Firestop system will prevent the passage of flame through an opening and not permit the projection of a water stream through a fire rated assembly. Firestop systems and devices shall have an F rating of at least 1 hour, but not less than the required fire resistance rating of the fire barrier penetrated, as determined by NFPA 251, ASTM E-814, UL 1479, UL 2079, FM 4990, BS EN1366-3 or other equivalent standards.

1.2.12. 'T' Rating

The period of time (in hours or 15 minute increments) a Firestop system has been shown capable of keeping the unexposed surface of the Firestop system and/or any penetrating items from exceeding a 325°F (181°C) above ambient temperature rise. This T rating also includes passage of F rating requirements for the same time period as determined by ASTM E 814, ASTM E-119, UL 1479, FM 4990, BS EN1366-3 or other equivalent standards.

1.2.13. 'L' Rating

The amount of air leakage through the fire rated assembly, determined by applying specified air pressure (0.30" water column) across the surface of the test assembly. The rating is expressed in cubic feet per minute (CFM) leakage per square foot of opening, as detailed in UL 1479, UL 2079, BS EN1366-3 or equivalent standards. An L rating is a measure of the ability of a fire-resistive assembly to prevent cold and warm smoke passage through fire stops, joint seals and other resistance rated assemblies, obtained at ambient or elevated temperatures.

1.2.14. 'W' Rating

W rating determines the capability of the firestop system to maintain watertightness of the penetration through a floor or wall construction at ambient air conditions under 3 ft. of water pressure head (1.3 psi) for a period of 72 hours.

1.2.15. Tested and Listed Assembly

Tested and listed assemblies are the systems that are successfully tested as assemblies to the test criteria mentioned in **section 7** by Civil Defence listed laboratories and certified by Civil Defence listed certification bodies. The supplier, manufacturer of such tested and certified assemblies shall be listed and approved by Civil Defence.

1.2.16. Engineering Judgments (EJ's)

An evaluation of the field conditions which do not conform to or deviate from an existing tested and listed assemblies. Engineering Judgment (EJ) shall be issued essentially by the original testing laboratory/Certification body that listed the system or registered Fire Consultant, Fire Protection Engineer, or an independent certification agency that provides certification services for such systems. EJ's are not to be used as a substitute for a classified system if it exists. EJ's, when considered, shall be approved by Civil Defence.

