

# Explanation of UL Code Numbering System

## The Importance of Listed Systems Designs

Think of a listed systems design as a universal standard, which allows for the sale of firestopping products for exact applications as outlined in the systems designs. If a product does not have a third party listed systems design **to cover a specific application**, the product cannot be used for that application, no matter how many listings it has for other uses.

The listing also provides a trail of liability to the listing agency and the manufacturer. If you have installed or passed an application without a listing you have just accepted all liability associated with an improper installation.

## UL Numbering System for Service Penetrations

The format of the UL Listing Numbers for Firestop Systems Designs appearing in the UL Directory is Alpha - Alpha - Numeric, such as C-AJ-1000. The first "Alpha" grouping uses the following characters to identify the type of penetrated fire separation:

"C" for both floor and wall penetrations

"F" for floor penetrations only

"W" for wall penetrations only

The second "Alpha" grouping uses the following characters to identify the type of construction:

"A" For concrete floors less than or equal to 5 inches thick (minimum)

"B" For concrete floors greater than 5 inches thick (minimum)

"C" For framed floors

"D" For deck construction

"E-I" Reserved for future use

"J" For concrete or masonry walls less than or equal to 8 inches thick (minimum)

"K" For concrete or masonry walls greater than 8 inches thick (minimum)

"L" For framed walls

"M" For bulkheads

"N-Z" Reserved for future use

The numeric grouping will use the following sequences of numbers for the penetrating items shown:

0000-0999	None
1000-1999	Metal pipe, conduit, or tubing
2000-2999	Non-metallic pipe, conduit, or tubing
3000-3999	Cables
4000-4999	Cables in a cable tray
5000-5999	Insulated pipes
6000-6999	Miscellaneous electrical penetrants
6000-7000	Miscellaneous mechanical penetrants

8000-8999	Mixed penetrants containing any of the above
9000-9999	Reserved for future use

### Penetrating Items

Conduit, as a penetrating item, is intended for use with electrical conductors, in accordance with the National Electrical Code. Electrical conductors may not be used without conduit unless permitted by the National Electrical Code and when the conductors are specifically described in the firestop system.

Pipe, as a penetrating item, is intended for the transport of gases and liquids. The maximum diameter, minimum wall thickness, and the specific material for conduits and pipes are specified in each firestop system. All non-metallic pipes are to be of the solid wall type unless otherwise specified in the system. All electrical conductors are to be copper, unless otherwise specified in the system. The maximum conductor size is also specified in the system.

For additional specifications of penetrating items, refer to the following documents:

<u>Penetrating Item</u>	<u>Document</u>
Cellular Core Acrylonitrile Butadiene Styrene (ABS Pipe)	ASTM F 628
Cellular Core Polyvinyl Chloride (PCV) Pipe	ASTM F 891
Chlorinated Polyvinyl Chloride (CPVC) Pipe	ASTM F 442
Copper Tubing	ASTM B 88
Copper Pipe	ASTM B 42
Crosslinked Polyethylene (PE) Tubing	ASTM D 2737
Electrical Metallic Tubing (EMT)	UL 797
Electrical Non-Metallic Tubing (ENT)	UL 1653
Flexible Metal Conduit	UL 1
Intermediate Metal Conduit (IMC)	UL 1242
Liquid Tight Flexible Non-Metallic Conduit	UL 1660
Polybutylene (PB) Pipe	ASTM D 3000
Rigid Metal Conduit	UL 6
Rigid Non-Metallic PVC Conduit	UL 651
Solid Core Acrylonitrile Butadiene Styrene (ABS Pipe)	ASTM D 1527 and D2661
Solid Core Polyvinyl Chloride (PCV) Pipe	ASTM D 1785 and D2665

### UL Numbering System for Fire Rated Joint Systems

The format of the UL Listing Numbers is Alpha/Alpha - Alpha - Numeric, such as FF-S-1000. The first "Alpha/Alpha" grouping uses the following characters to identify the type of joint:

- "CG" for wall to wall joints (corner guards)
- "FF" for floor to floor joints
- "FW" for floor to wall joints
- "HW" for head to wall joints
- "WW" for wall to wall joints

The second "Alpha" grouping identifies the movement capabilities of the joint system:

- "D" Dynamic - allows movement
- "S" Static - no movement allowed

The numeric grouping will use the following sequences of numbers to identify nominal joint width:

- 0000-0999 Less than or equal to 2 inches
- 1000-1999 Greater than 2 inches and less than or equal to 6 inches
- 2000-2999 Greater than 6 inches and less than or equal to 12 inches
- 3000-3999 Greater than 12 inches and less than or equal to 24 inches
- 4000-4999 Greater than 24 inches