

# UL 2043 – IT’S NOT JUST FOR ELECTRICAL PRODUCTS ANYMORE!

**The requirements in the 2015 International Mechanical Code (IMC) broaden the application of the UL 2043 Standard for Fire Test for Heat and Visible Smoke Release for Discrete Products Installed in Air-Handling Spaces.**

**Compliance with UL 2043 was already a requirement for discrete electrical products in plenums, and the 2015 IMC requires discrete plumbing and mechanical products to comply with UL 2043 as well.**



## ***Here are six important things you need to know about UL 2043:***

1. A discrete product is defined as “having a clear independent shape or form” and as being “noncontinuous.” Products such as audio-video equipment, pipe hangers, lamp ballasts and control dampers would be considered discrete products. A product such as continuous piping or conduit would not.
2. If a product has already been certified to UL 723, it doesn’t have to be further certified to UL 2043. UL 2043 requirements are based on the technical rationale of the UL 723 standard but apply to products that cannot be tested to UL 723 requirements due to their small size, inability to manufacturer the materials to UL 723 specified samples or other factors.
3. Electrical, plumbing or mechanical equipment with non-combustible or metallic enclosures are not required to meet UL 2043 requirements. Note that enclosures with large cut-outs or other significant discontinuities in the non-combustible material may need to be tested if the void is large enough to allow propagation of flame. AHJs should be consulted to determine applicability.
4. UL 2043 requirements address the concern for contribution to the smoke density or flame propagation by the equipment during a fire. Products complying with UL 2043 have demonstrated the following characteristics:
  - a. A peak rate of heat release of 100 kW or less
  - b. A peak normalized optical density of 0.50 or less
  - c. An average normalized optical density of 0.15 or less.
5. Products which are certified in accordance with UL 2043 can be found on the Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database). The guide information for the Discrete Products Installed in Air-Handling Spaces (BHZF) includes helpful information regarding these products. Note that these products may have also been investigated in accordance with established electrical, mechanical or other requirements as well as UL 2043. Additional categories these products may have been evaluated to are shown in the sidebar.

6. Products that comply with UL 2043 have the certification mark of UL on the product or on the smallest unit container in which the product is packaged. The certification mark includes the UL symbol, the word "Classified," a control number and the following additional information:
- AS TO HEAT RELEASE RATE AND SMOKE OPTICAL DENSITY ONLY Control No.
  - The product name or other appropriate product description as shown in the individual Classifications.

**Discrete products under these categories may be investigated per UL 2043, as noted in individual listings.**

- Audio/Video Equipment (AZSQ),(AZOE)
- Commercial Audio and Radio (AZJX)
- Communication Technology (AZOJ)
- Communications-circuit Accessories (DUXR)
- Control and Communication Equipment (PGWM)
- Control Dampers (EIMZ)
- Electric Actuators (XABE or XABE2)
- Fluorescent Lamp Ballasts (FKVS)
- Pipe Hangers (VFXT)
- Information Technology Equipment (AZOT), (NWGQ)
- Outlet Boxes and Fittings Classified for Fire Resistance (CEYY or QBWY)
- Positioning Devices (ZODZ)
- Power Supplies (QQFU), (QQIJ)
- Smoke-control-system Equipment (UUKL)
- Speakers (UEAY)
- Speakers and Amplifiers for Fire-alarm Systems (UUMW)
- Suspended-ceiling-grid Low-voltage Lighting (IFFC),(IFFC2), (IFFA) , (IFFA2)
- Telephone Equipment (WYQQ)
- Through-penetrating Products (XHLY)

**2** For more information visit [www.ul.com/code](http://www.ul.com/code) authorities