

Fixing Device “Type” Classifications

UL 62275 United States
 CSA C22.2 No. 62275 Canada
 NMX-J-623-ANCE Mexico

CABLE TIES FOR ELECTRICAL INSTALLATIONS

Supplement for fixing devices

What are fixing devices? According to UL 62275; CSA C22.2 No. 62275 and NMX-J-623-ANCE, they are defined as components specifically designed to secure the cable tie to a mounting surface. These can be separately supplied devices or manufactured integrally with the cable tie. Fixing devices are available in a variety of constructions such as screw mount, adhesive mount and push mount (self-fastening) .

The principal measure of performance for a fixing device is its mechanical strength, as defined by specified tests. Testing for mechanical strength will vary based on the fixing device construction, and whether the fixing device is separately supplied or integral with the cable tie.

Like cable ties, fixing devices are identified by “**Type**” classifications and standard performance ratings declared by the manufacturer and confirmed by the tests in the standard. Integral products are marked with the Type classification of the cable tie as follows:

TYPE 1 Nonmetallic and Composite Separately Supplied and Integral Fixing Devices	Retains 100% of as-received declared mechanical strength and a minimum 50% of declared mechanical strength after specified test conditions.
TYPE 11 Nonmetallic and Composite Separately Supplied and Integral Fixing Devices	Type 1 with additional pre-qualification to long-term performance characteristics of nonmetallic molding materials in accordance with the UL Component Plastic Materials Certification Program (QMFZ2)
TYPE 2 Metallic, Nonmetallic and Composite Separately Supplied and Integral Fixing Devices	Retains 100% declared mechanical strength after specified test conditions.
TYPE 21 Nonmetallic and Composite Separately Supplied and Integral Fixing Devices	Type 2 with additional pre-qualification to long-term performance characteristics of nonmetallic molding materials in accordance with the UL Component Plastic Materials Certification Program (QMFZ2)
TYPE 2S and TYPE 21S Metallic (2S only), Nonmetallic and Composite Separately Supplied and Integral Fixing Devices	Type 2 or Type 21 with additional qualification for suitability to support flexible conduit and cables in building construction in accordance with the requirements in relevant national installation Codes.

Marking of fixing devices — Separately supplied fixing devices are marked with their mechanical strength, while integral devices are marked with both the mechanical strength of the fixing device and the loop tensile strength of the cable tie. If both are the same, a single value is marked. If they differ, both are marked.

Testing of fixing devices — Fixing devices are required to be tested the same as cable ties, both as-received and after specified conditioning, except that fixing devices are evaluated for their mechanical strength. The objective of mechanical testing is to determine if the fixing element such as a saddle or bridge is capable of retaining the cable tie after a specified tensile load.

For more information about Type classifications, ratings and industry standards, see NEMA *Cable Tie “Type” Classifications* guide.

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