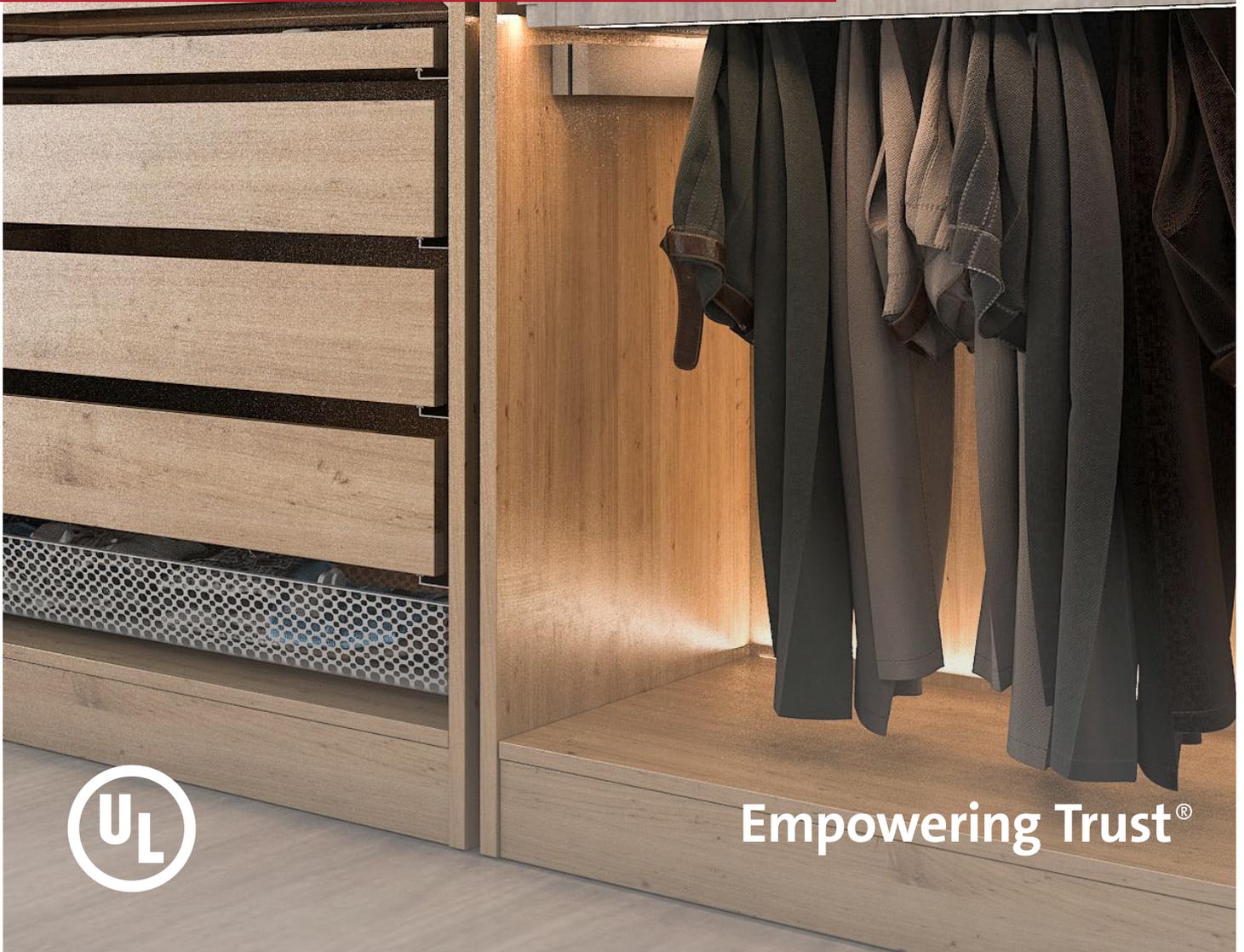


# UL 970 Retail Fixtures and Merchandise Displays Standard Reference Guide



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UL Standards have served as the industry benchmark for commercial displays since 1955. During this time, displays have undergone many innovations such as embedded computers, motion and LED lighting. In addition, displays are developed and manufactured for a shorter life cycle to keep retail shelves fresh and exciting.

Following proposals by stakeholders, Underwriters Laboratories, our nonprofit affiliate, and its Standards Technical Panels worked to help ensure that the Standards continue to evolve with this wave of innovation through publication of a new Standard that combines requirements from UL 65, the Standard for Wired Cabinets, and UL 962, the Standard for Household and Commercial Furnishings, into a single, streamlined Standard with requirements for displays, showcases, other types of retail fixtures, and requirements for temporary displays.

As a result, UL 970, the Standard for Retail Fixtures and Merchandise Displays, was published Feb. 20, 2020, and provides updated requirements for:

- Part 1: Commercial Displays and Retail Fixtures
- Part 2: Showcases
- Part 3: Temporary Displays

UL 970 was created to address requests from the market for one Standard that covers all types of retail case goods and for the requirements to be specific to the retail market. Other benefits to customers include:

- Having a single Standard for commercial displays will make it easier for companies to access information on certification and customers may have a single file for their certifications.
- Taking advantage of our flexible construction program, which enables alternate construction of displays to be UL Certified using predetermined guidelines. Companies have benefited from this program, as it enables a streamlined process with faster turnaround.
- More technology that is commonly used in displays, expanding test exemptions for showcases and allowing retrofit kits.
- Access to the limited production program for products that are only intended for limited production.

### **What is the scope of UL 970?**

UL 970 requirements cover nonrefrigerated or heated commercial displays and other case goods used in retail establishment, including bakeries and restaurants. The term display(s) will be used to refer to all types of products covered by this Standard. The products are used in accordance with the National Electrical Code<sup>®</sup>, ANSI/NFPA 70<sup>®</sup>. These requirements cover products rated 600 V AC or less, including those powered by primary or secondary batteries.

They are intended for dry, damp or wet locations. These displays include both electrified and non-electrified products and may include, but are not limited to: shelving units (gondolas), merchandise kiosks, point of sale (POS), motorized displays, hanging displays, wall systems, showcases, display cases, cash wraps, check-out stands (motorized and non-motorized), temporary displays, and product platforms.

### **How will this Standard impact your existing UL files and new products?**

Current files under IYMX will be updated to UL 970 due to the migration of the Standards. For those customers currently UL Certified under wired cabinets (ZNXR), the files are being updated to include new clarification text and the components currently described in the file will remain and the descriptions will reference UL 970. This is being performed by UL as part of our customer file updates at no charge.





### What are the key differences to the UL 970 Standard from UL 962 and UL 65?

**UL 970, part 1** requirements are equivalent with UL 962, the Standard for Household and Commercial Furnishings, which is used to evaluate commercial displays, with notable updates including:

- Clarification of requirements to ensure consistency between the parts
- Requirements for lasers
- Abnormal loading requirements have been lowered for some usages and additional exceptions for loading tests

**UL 970, part 2** requirements are equivalent with UL 65, the Standard for Wired Cabinets, which is commonly used to evaluate showcases, with revised requirements to be consistent between the parts. Notable changes include:

- The definition of showcases was added to better define products that are considered test-exempt
- Information on luminaires appropriate for use in showcases
- Identifying LED drivers that don't require testing

**UL 970, part 3** requirements allows UL certifications for temporary displays. This section mainly references a subset of part 1 and includes less restrictive requirements due to the construction and temporary use of the units.

References to commercial displays have been proposed for removal from UL 962. UL 65 has been withdrawn.

### Quick look: Overview of Standards

UL 962	UL 65	UL 970
Published 1996	Published 1955, withdrawn	Published May 2020
Covers bookcases, curio cabinets, desks, tables, chairs, power distribution, beds, other household and commercial furnishings.	Covered wired cabinets, however, this Standard has been withdrawn.	Covers commercial displays.
Mechanical requirements within UL 962 are unique to this Standard based upon the product type.		The mechanical tests in UL 970 are unique to this Standard based upon the product type and usage.
Applies to residential and some commercial furnishings.		Applies to retail fixtures, commercial displays, showcases and temporary displays.

## Points to consider

In order to align requirements between showcase (wired cabinets) and other commercial displays, new requirements have been added for showcases. A few key clauses have been highlighted below to help you better prepare for the transition to the new Standard and to highlight areas that may cause challenges to the safety evaluation process.

CATEGORY	DETAILS
User guide/installation instructions/Markings	This area of a safety evaluation is the most common noncompliance. The Standard explicitly outlines what an organization must do to comply with these requirements for user guides and instructions. Showcases will now require instructions.
Required plastic ratings for electrical enclosures	UL 970 requires that any polymeric part be rated minimum HB (horizontal burning) flammability rating for all plastic parts and higher ratings for plastic enclosures. As plastics are being selected in the design phase of product development, the flammability rating of the plastic should be carefully considered along with the other properties needed for enclosures.
Flammability requirements	Any combustible component in excess of 10 square feet will be subject to a flammability test. The intent of this test is to ensure the furniture will not exacerbate or accelerate a structure fire. This test measures the flame spread index and smoke developed index related to the combustible material. This test is performed on the combination of materials (core, adhesives, laminates, etc.), so note that any changes in the product construction will prompt re-testing.
Locked rotor testing and safety challenges	For motorized products, the locked rotor test is intended to simulate the conditions of a user trying to actuate the product while something is preventing the product from moving. In many cases, manufacturers of the component may rely on software or electronics as a means to protect the product. If software or electronics are used in this manner, UL 970 requires that the software or electronics be evaluated for reliability as a functional safety circuit.
Components	UL Recognized Components cannot be fully evaluated unless they are in the end use product. While some components may have been evaluated to a specific Standard, it is unlikely that they have been evaluated as a part of a display. Recognized Components are tested as a part of the end product.
Personal injury points	Motorized furnishings may have personal injury areas. UL 970 allows these if the product complies with other requirements.
Accessories	To help ensure that the complete display unit meets the Standard requirements, all accessories must be evaluated with the display. Even accessories that may not affect the testing should be included for testing to help ensure it does not negatively impact the safety of the product.

**Contact UL today to discuss how UL 970 may impact your products and organization. We will schedule time to review and create a tailored plan with you.**



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