



Designation: D8390 – 21

Standard Classification for Domestic Cannabis/Hemp Plant Indoor Growing Appliances¹

This standard is issued under the fixed designation D8390; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This standard classifies the types of domestic cannabis/hemp plant indoor growing appliances.

1.2 This classification shall be applicable to growing of cannabis/hemp plants using indoor growing appliances.

1.3 This classification differentiates between the various types of cannabis/hemp plant indoor growing appliances.

1.4 The examples for each type of cannabis/hemp plant indoor growing appliance are not intended to be all-inclusive. Examples shown or described in this classification are included only as an aid in the understanding and comprehension of each type under the classification.

1.5 The values stated in SI units are to be regarded as standard. The values given in parentheses after SI units are provided for information only and are not considered standard.

1.6 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.7 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

D8374 Personal Cannabis/Hemp Plant Growing Appliances

2.2 *UL Standards:*³

UL 8800 ANSI/CAN/UL Standard for Horticultural Lighting Equipment and Systems

¹ This classification is under the jurisdiction of ASTM Committee D37 on Cannabis and is the direct responsibility of Subcommittee D37.08 on Cannabis Devices and Appliances.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from Underwriters Laboratories (UL), UL Headquarters, 333 Pfingsten Road, Northbrook, IL, 60062, <http://www.ul.com>.

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *automated, n*—a growing system that is automated and pre-configured but can be user modified or user input programmed. User imputable information can include atmospheric monitoring, grow system and lighting system control, with varying feature levels of automation control for lighting, watering, and nutrient dispense systems that require the interaction by the experienced cannabis grower.

3.1.2 *curing appliance, n*—an appliance used to dehydrate, preserve dry cannabis and develop cannabinoid profiles.

3.1.3 *drying appliance, n*—an appliance used to remove moisture.

3.1.4 *grow tent, n*—a specialized tent enclosure designed for growing cannabis plants, consisting of frame, fabric, and reflective lining.

3.1.4.1 *Discussion*—A grow tent may be portable, stationary or be intended to be permanently fixed in place.

3.1.4.2 *Discussion*—A grow tent is used for growing cannabis, but can also be used for growing herbs and vegetables such as tomatoes all indoors.

3.1.5 *grow box, n*—a specialized box enclosure that is explicitly designed for growing cannabis plants, consisting of a rigid structure made with light reflecting material (such as polished metal) or coated material to reflect light.

3.1.5.1 *Discussion*—A grow box may be stationary or be intended to be permanently fixed in place.

3.1.5.2 *Discussion*—A grow box can also be used for growing herbs and vegetables such as tomatoes all indoors.

3.1.6 *horticultural system, n*—a prefabricated chamber, cabinet, or open frame structure of which identified for the purpose outfitted with electrical infrastructure for the active optimization of plant growth. These systems may incorporate pre-installed materials and equipment which, after installation, may be concealed and may not be accessible for inspection at the final installation site. They may additionally include lighting, shutters, controls, control panels, plumbing components (such as pump motors, solenoid valves, water reservoirs), and cooling and heating components, as part of the plant growth management control horticultural system. A horticultural system may include hydroponic, aeroponic, aquaponic, and other forms of irrigation methods. Passive growing