

# BUILT FOR SAFETY



Landa Kärcher Group pressure washers are not only built tough, but are built for safety, too.

All of our pressure washers have been certified by ETL — a nationally recognized product testing laboratory — to the rigid UL-1776 safety standards. Nearly all are also Canadian certified — ETL-C approved — to CSA safety standards.

The UL-1776 standards were established in 1992 to address the unique safety concerns associated with pressure washers, both electric- and gasoline-powered.

Here are only a few of the features that have qualified our pressure washers for the additional confidence and liability protection you receive when you own a pressure washer that is certified to UL-1776 safety standards:

■ **Special Testing:** Because it has been certified to UL-1776, our equipment also complies to the Flooding and Water Spray test, the Drop-Impact test and the Test on Gripping Areas.

■ **Trigger Gun:** All pressure washers with pressure ratings above 100 PSI must come standard with a trigger gun for quick-release control by the operator.

■ **Wand Length:** All wands between the spray gun trigger mechanism to the end of the pressure nozzle must be at least 30" long on pressure washers of up to 3200 PSI, and 48" on pressure washers between 3200 and 5000 PSI. This is to help prevent operators from accidentally spraying themselves with a high-powered spray.

■ **Warning Labels:** Labels must be resistant to oil and gasoline. We go a step further and attach our UV-resistant lexan labels, which contain approved wording for operating instructions and warnings.



■ **Ground Fault Circuit Interrupters:**

For operator protection, a factory-installed GFCI must be, according to the NEC Code, "an integral part of the cord attachment plug or located within 12 inches of the attachment plug" on all machines 250 volts or less, single phase.

■ **Temperature Control Switch:**

Thermostat automatically shuts down the burner should water overheat.

■ **Unloader Valve:** Relieves pressure buildup in the pump when the pressure washer is running but not washing.

■ **Backflow Protection:** Prevents cleaning water and soap from backing up into the water supply.

■ **Motor Protection:** Motors must come with a thermal overload protection device.

■ **Safety Relief Components:** Contains one of the following: rupture disk, pressure relief valve, and/or unloader valve. Protects against excessive buildup of pressure.

■ **Electrical Cord:** UL-1776 specifies that power cords on portable models must be certified as "water resistant". They must also be at least 35 feet long to discourage use of extension cords that are unprotected by the required ground fault circuit interrupter (GFCI).

■ **Componentry Tested:** All electrical components must be individually evaluated. Machines are subjected to a dielectric voltage withstand test that identifies current leakage that can cause an electrical short.

*Why it's smart business to purchase only...*

# Safety-Certified Equipment

**Here are three key ways certification can protect you and your business**

When it comes to product safety, there are three types of protection you receive when you purchase equipment that has been certified by a Nationally Recognized Testing Laboratory (NRTL) — such as ETL — to the universally accepted UL-1776 safety standards for pressure washers:

■ **Legal Compliance:** It is the law in the workplace, according to OSHA regulation 1910.399 and 1910.303(a), all electrical and other types of equipment used in the workplace must be “listed” by an “approved” testing agency. Failure to comply can result in penalties assessed per infraction.

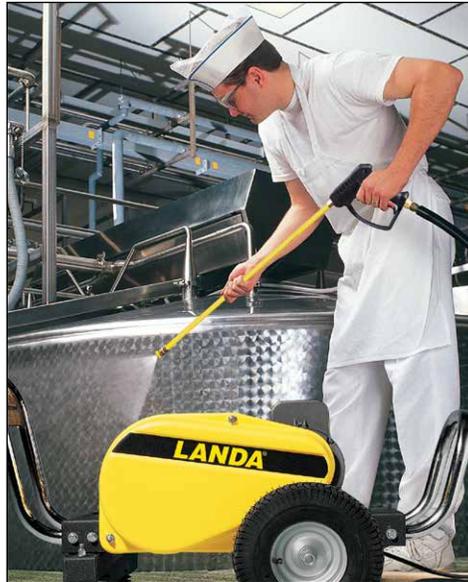
■ **Worker Protection:** It makes good business sense to make sure your workers are protected by providing them only the safest of equipment.

■ **Liability Protection:** In this day of costly litigation, one of your best legal protections against an accident on the job is purchasing only equipment that has been certified by an NRTL to rigorous safety standards.

The safety issue has become such an important factor that even the 1996 National Electrical Code (NEC) addresses the issue of pressure washers powered by electricity.

The NEC mandates that all portable pressure washers (except 3-phase and over 250V models) must have a “factory-installed ground-fault circuit-interrupter.... [one that] shall be an integral part of the attachment plug or shall be located in the supply cord within 12 in. (305 mm) of the attachment plug.”

Every electric-powered Landa Kärcher Group pressure washer meets this standard.



**Distributed by:**

**According to OSHA regulation 1910.399 and 1910.303(a), all electrical and other types of equipment used in the workplace must be “listed” by an “approved” testing agency. Failure to comply can result in penalties of up to \$7,000 per infraction.**

## CERTIFICATION Q&A

**Q. Who created the standards used in the pressure washer industry?**

**A.** The UL-1776 standard was created by Underwriters Laboratories (UL) at the request of the Cleaning Equipment Trade Association (CETA). Up to that point there was no specific standard for pressure washers in the United States. In Canada, the B140.1-M89 pressure washer standard was created by the Canadian Standards Association (CSA) for the Canadian marketplace. UL and CSA have created many of the recognized standards in North America.

**Q. Who is allowed to independently certify equipment to the various standards?**

**A.** Any one of the 14 (in the U.S.) Nationally Recognized Testing Laboratory (NRTL) can independently certify pressure washers to the appropriate standard. The major NRTL's recognized by the Occupational Safety & Health Agency (OSHA) and the Standards Council of Canada (SCC) are UL, Intertek Testing Services (ETL), or CSA.

**Q. Are there any new pressure washer standards coming in the near future?**

**A.** Yes. The new UL 60335-2-79 safety standard is already in effect, and manufacturers have until March 1, 2021 to make any design changes necessary to comply. UL 60335-2-79 was harmonized with the IEC 60335 part one and 60335-2-79 in order to have a single safety standard for pressure washers which is used around the world. This new standard allows more consistency with safety design and testing to ensure our products meet the stringent safety standards used by other nations.