Changes Coming to UL 325 for Gate Operators

By Rick Sedivy, DoorKing Director of Marketing and Regulatory Affairs, and Tom DeSilvia, LiftMaster Director of Engineering for Regulatory and Test Services

Starting on Jan. 12, 2016, new UL 325 changes take effect, bringing a series of new mandates for the gate operator industry. Here's a quick guide to the key modifications.

Entrapment-Protection Devices. Gate operators are required to have a minimum of two independent means of entrapment protection where the risk of entrapment or obstruction exists. A manufacturer can use two inherent-type systems, two external-type systems, or an inherent and an external system to meet the requirement. However, the same type of device cannot be used for both means of protection.

Monitoring Required. An external non-contact sensor or contact sensor may be used as a means of entrapment protection. However, the sensor must be monitored once every cycle for (1) the correct connection to the operator and (2) the correct operation of the sensor. If the device is not present, not functioning, or is shorted, then the gate operator can only be operated by constant pressure on the control device. Portable wireless controls will not function in this case.

Entrapment Risk Identification. As in the past, it's up to the installer to examine the installation and determine where a risk of entrapment or obstruction exists. Manufacturers are required to provide instructions for the placement of external devices, but they give only examples of suggested entrapment protection in their installation manuals. If the installer identifies a risk of entrapment or obstruction, at least two independent means of entrapment protection are required.

Terminology Change. The terms "primary" and "secondary" have been removed in the description of entrapment protection devices. This was done to emphasize that all entrapment protection devices are equally important.

The End of Type E. Type E (audible alarm) devices can no longer be used for entrapment protection. This change was made because the Type E device is really a warning device, not an entrapment-protection device. Also, all gate operator classes are now required to have an audio alarm that sounds when two successive obstructions are encountered via a contact-type system.

Access Control Location for Emergency Use. An exception has been added in the manufacturer's instructional requirements for the location of controls that operate the gate. The instructional requirements state that these controls must be at least 6' away from any moving part of the gate. In the new exception, "Emergency access controls only accessible by authorized personnel (e.g., fire, police, EMS) may be placed at any location in the line-of-sight of the gate."

Barrier-Arm Operator Exception. An exception has changed for barrier-arm gate operators requiring entrapment protection. The previous exception stated that a barrier-arm operator did not require entrapment protection if the arm did not move toward a rigid object closer than 2'. The distance has been reduced to 16" so it more closely aligns with the industry-defined entrapment protection provisions in ASTM F2200.

Gate Operator Class II and Class III Definitions. The definitions for installation classes for gate operators were modified. Class II now includes commercial locations accessible to the general public. Class III was refined to specify industrial locations not accessible to the general public. These changes, while seemingly minor, may affect which gate operator is suitable for a particular installation location.





Since 2000, gate operators have been required to have two independent entrapment protection devices for each area requiring entrapment protection. The changes listed here will affect manufacturers as well as installers.

For example, manufacturers need to ensure that a gate operator can detect (1) that each external entrapment protection device is connected and functioning properly, (2) that a Type E audible alarm is not one of the required means of entrapment protection, and (3) that their instructions have been properly updated.

The changes listed here will affect manufacturers as well as installers.

Installers need to understand the new requirements and ensure that the products are installed in accordance with the instructions and local codes. This may include installing external devices that are new or different from ones used in the past.

Since external entrapment protection devices must be monitored, installers need to ensure that the proper number and types of devices are installed. This will especially affect installers who have previously ignored the requirements to install two independent entrapment protection devices for each area requiring such protection.

If you have questions, contact your gate operator manufacturer.