AFTER 21 YEARS

The evolution of the industry's gate safety standard

By Rick Sedivy Director of Marketing & Regulatory Affairs, DoorKing

Editor's note: This article from Sedivy is timed for the upcoming Garage Door Safety month in May. It chronicles the notable changes to the UL 325 standard over the



years and highlights the important safety requirements that you need to know.

Many may be surprised to learn that the major changes to the UL 325 standard that we are all familiar with today were initiated in the early 1990s by an industry group led by DORCMA (Door Operator & Remote Control Manufacturer's Association), now the Gate Operator Division of DASMA.

After more than five years of meetings, the changes to UL 325 were approved and adopted by Underwriters Laboratories in the fall of 1998. With an effective date of March 2000, manufacturers had approximately 30 months to adapt their vehicular gate operator products; otherwise, they would lose their UL listing authorization.

The UL 325 changes also required dealers and installers to adapt new installation practices for vehicular gate operator and vehicular gate construction.

It's been 21 years since the revisions were implemented. How has the industry adapted to the UL 325 safety standard since then?

In the words of a wise and now retired colleague, "UL 325 is a living document." The standard has undergone many changes since March 2000, and it will continue to transform in the future.

In this short article we will cover the evolution of the entrapment protection requirements and the major changes that affected these requirements over the years.

2009: Two means of protection

The March 2000 document required gate operators to be supplied with or have

provisions for at least one independent primary and one independent secondary means of entrapment protection. Unfortunately, some installers in the field were inaccurately interpreting the requirement as optional.

In October 2009, UL issued a Certification Requirement Decision (CRD), which added new language clarifying that both primary and secondary means of entrapment protection were required.

It stated, "At installation, primary and secondary entrapment protection devices must be installed," which ended the argument over whether primary and secondary entrapment protection was optional.

2016: New language

Another milestone change took effect in January 2016, when the terms "primary" and "secondary" entrapment protection were removed. The previous language stated, "...operator shall have provisions for (see 59.3.3), or be supplied with, at least one independent primary and one independent secondary means..."

The new language said, "...operator shall have provisions for (see 61.3.5), or be supplied with, at least two independent entrapment protection means..." This was a good change because it clarified that both means of entrapment protection were equally important.

Most importantly, with the January 2016 effective date came the requirement that external entrapment protection devices had to be monitored. The monitoring requirement was initiated because inspections of automated vehicular gate installations (and some accidents) revealed that in many cases, external entrapment protection was not installed.

New content was developed and added to paragraph 31.1.7, specifying that the devices "... shall monitor for the presence

and correct operation of the device at least once during each open and close cycle."

The new language states that if the device is not present, a fault condition exists, or there is an open or short circuit in the wiring to the device, then the gate operator can only operate by means of a constant pressure device.

2018: Further clarification

In August 2018, the last major change to the entrapment protection guidelines became effective. While the previous language required two means of entrapment protection, there was confusion by installers in the field as to what this actually meant.

The most common interpretation was that if the gate operator had an inherent system, then installing a single external device would meet the "two means" required. The language added in 2018 clarified this misinterpretation, specifying that two independent means of entrapment protection are required for each direction of each entrapment zone.

Social media: Beware of noncompliant posts

There are several social media groups for access controls and gate operators. Some posts are fun, while others take a more serious tone. Some dealers that are rightfully proud of their work post beautiful gate designs and installations. Unfortunately, some posts may have the potential to cause harm to the individual and/or a company.

Posting images of a noncompliant gate installation project could put you and your company at risk if an incident were to happen. A background investigation would most likely include a search of relevant social media posts. Images of noncompliant gate systems could be construed as evidence of a history of willful negligence.

For example, in January, an image of a slide gate system installed in a small town in continued from page 46

Texas was posted to a social media site. It was a nice-looking gate, and the installer was proud of the installation. However, several people noticed and commented on the noncompliant issues evident in the posted image.

To make matters worse, the installer responded to these comments and said, "This is Texas, nobody cares about UL 325." If there was ever an incident involving this gate, not only could someone be injured, but a plaintiff's attorney could have a field day with the information available on social media.

Where are we now?

The wonderful news is that accident rates have decreased, and compliance is on the rise with many installation companies. However, accidents still happen, and they are usually due to noncompliant products or installations.

Our industry is safer today than it was 21 years ago, but there is always room for additional improvement, education, awareness, and compliance.

THERE HAVE BEEN SEVERAL DRAMATIC CHANGES TO GATE SAFETY POLICIES AND PROCEDURES SINCE DORCMA STARTED WORKING ON GATE SAFETY:

- After 21 years, as a result of DASMA advocacy, UL 325 and ASTM F2200 are now a part of the International Building Code (IBC), International Fire Code (IFC) and the International Residential Code (IRC).
- OSHA requires gate operators to be "acceptable," which means they must be accepted, or certified, or listed, or labeled, or otherwise determined to be safe by a nationally recognized testing laboratory (NRTL).
- UL 325 has been incorporated into the National Electric Code (NEC) and National Fire Protection Association (NFPA) 70.
- In August 2018, the Consumer Product Safety Commission launched "Operation Safe Gate," a public awareness campaign.
- The industry has vehicular gate operator installer and vehicular gate system design certifications available from two independent certifying organizations: Accrediation and Certification Institute (ACI) and IDEA.
- Some states require licensing and certification to install vehicular gate operators. More states will most likely also begin enforcing this in the future.
- DASMA has developed a wealth of resources to help manufacturers, installers, code officials, and end users understand relevant standards and code requirements that result in safe automatic gate systems. Most of these are available on the DASMA website, www.dasma.com.

