

# New changes to UL 325

## Gate operator changes took effect in August 2018

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In August 2018, some changes took effect to UL 325, affecting gate operators sold in the United States and Canada.

The new changes require that a minimum of two independent means of entrapment protection must be provided in each direction of travel where the risk of entrapment exists. Many gate operators have inherent entrapment protection for both directions of travel, so that would qualify as one means of entrapment protection in each direction.

The second means will be an external device, such as a non-contact (Type B1) or a contact (Type B2) sensor, as required in each direction. The actual number of external devices required is dependent on the gate system layout and the number of entrapment areas that need to be protected.

### Installers are affected

*Installers need to identify all potential areas where the risk of entrapment exists and how best to protect those areas.* For example, some gates may require two (or more) external devices in each direction of travel to protect all potential areas of entrapment. The gate operators will not function without the minimum external monitored devices installed. The standard also mandates that all components used for monitoring purposes in the external devices must be factory-installed internally into the devices.

**For slide gate operators**, a minimum of two monitored external devices must be connected to the gate operator circuit board: one for the open cycle and one for the close cycle.

**For swing gate operators**, there is an exception regarding the minimum of two entrapment protection devices in each direction of travel. For example, if a swing gate system offers no potential for entrapment in the opening direction, then only the close direction will require a minimum of two means of entrapment protection. *Installers need to determine if any entrapment hazards exist in the opening direction, and, if so, those areas must be protected with external devices.*

**Vertical lift gates** require two means of entrapment protection in the down cycle, but will only require one means of entrapment protection in the up cycle.

**Barrier gate operators** that are installed so that the barrier arm does not come closer than 16 inches to a rigid object are not required to protect against entrapment.

The table below shows the minimum entrapment protection requirements for each type of gate operator as required by UL 325.

|                       | Opening | Closing |
|-----------------------|---------|---------|
| Horizontal Slide Gate | 2       | 2       |
| Horizontal Swing Gate | 2*      | 2*      |
| Vertical Pivot Gate   | 2       | 2       |
| Vertical Lift gate    | 1       | 2       |

*\*For a horizontal swing gate operator, at least two independent means of entrapment protection are required in each direction of travel. However, if there is no entrapment zone in one direction of travel, only one means of entrapment protection is required in that direction of travel. However, the other direction must have two independent means of entrapment protection.*

As you can see, these changes affect both installers and manufacturers. Complying with UL 325 is not optional; it is required by law. Failure to comply will not only increase the danger to your customers, it will leave your company open to the possibility of a lawsuit that could end your business. ■