

STANDARD INFORMATION

Standard: ANSI/CAN/UL 325

Standard ID: Door, Drapery, Gate, Louver, and Window Operators and Systems [ANSI/CAN/UL 325:2017 Ed.7+R:21Feb2023]

Previous Standard ID:

Door, Drapery, Gate, Louver, and Window Operators and Systems [ANSI/CAN/UL 325:2017 Ed.7+R:28Feb2020]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **March 21, 2025**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

Overview of Changes:

- Bifold Gates
- CGI Changes
- Revision of the Important Safety Instructions to add "Severe" Injury to WARNING
- Revision of the Important Safety Instructions to Change Reference from "Emergency" Release to "Manual" Release

Specific details of new/ revised requirements are found in table below.

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined-out below.</i>
	Info	PROTECTION AGAINST RISK OF INJURY TO PERSONS
26	Info	General
		In the evaluation of entrapment protection circuits used in gate operators:
26.11		a) The entrapment protection devices shall be operational, b) An alarm shall be present and functional for an operator with a Type A entrapment protection device, c) Monitor for the presence and correct operation of an external entrapment protection device, d) A Class I or II operator for a horizontal slide gate or vertical lift gate shall not result in gate movement that exceeds that specified in 32.1.24, and <u>e) A Class I or II operator for a horizontal bifold gate, shall not result in gate leading edge movement that exceeds that specified in 32.1.24 for the last 16 inches of panel travel in the closing direction.</u>
32	Info	Class I, II, III, and IV Vehicular Gate Operators and Systems
32.1	Info	General entrapment protection provisions
		<i>New clause added;</i>
32.1.24A		A Class I or Class II horizontal bifold-gate operator (or system) shall not result in a gate speed greater than 0.3 m/s (1 ft/s) during the last 406 mm (16 in) of panel travel while closing with the operator exerting a pull force of 333.6 N (75 lbf) when connected to a supply circuit of maximum rated voltage and rated frequency. The speed is measured in the closing direction at the vertical leading edge of the inner bifold panel (item 5 of Figure 4.3) over any 305 mm (1 ft) increment of horizontal travel where the gate speed is fastest.
32.2	Info	Entrapment protection (Types A, iB2, and C)
		<i>New section added;</i>
		Vehicular bifold gate operators
32.2.5		With reference to 32.2.1.1, a 41.3-mm by 88.9-mm (1-5/8-in by 3-1/2-in) solid rectangular object not less than 152-mm (6-in) long is to be fixed in an immobile position as follows for each entrapment zone: See standard for details.



CLAUSE	VERDICT	COMMENT
37	Info	Photoelectric Sensors
37.2	Info	Normal operation test (all other gates)
		<i>New clause added;</i>
		For a photoelectric sensor intended for use on a bifold gate operator or system, the obstruction shall be placed in accordance with a through d below, as applicable, for the entrapment zones intended to be protected by the sensor(s):
37.2.3		<p>a) When installed as described in 35.1.1 – 35.1.4, a photoelectric sensor shall sense an obstruction as described in 37.2.2 that is placed on a level surface in the path of the leading edge of the gate in the closing direction (see Figure 4.3, edge 6). The sensor is to be tested with the obstruction at a total of five different locations over the width of the gate opening. The locations shall include distances 25.4 mm (1 in) from each end, 305 mm (1 ft) from each end, and the midpoint. The 305 mm (1 ft) side of the obstruction is to be centered across the gate opening perpendicular to a straight line across the opening.</p> <p>b) In at least one location along the path travelled by the opening side of the Outer column panel, outside horizontal bottom edge. See Figure 4.3, edge 4. The 305 mm (1 ft) side of the obstruction is to be positioned on a surface perpendicular to gate edge 4, located in the midpoint of Figure 4.1 panel 2 between the post Figure 4.1 item 1 and the hinge edge Figure 4.2 item 9.</p> <p>c) In at least one location along the path of the opening gate, 2 ft into the “V” area formed by the gate panels (see Figure 4.3, edges 2, 3) measured from the closed gate line. The obstruction is to be oriented so the 305 mm (1 ft) side of the obstruction is parallel to the closed gate line, but 2 ft into the “V” area. The obstruction shall be placed in that location after the gate has been intentionally stopped with a control mid-travel, and then the gate shall be restarted via control in the opening direction.</p> <p>d) If a photo eye is intended to protect any other entrapment zone(s), the obstruction shall be placed in at least one location for each entrapment zone it is intended to protect.</p>
39	Info	Edge Sensors
39.1	Info	Normal operation test
39.1.1	Info	Edge sensor
39.1.1.1		<p>An edge sensor, when installed on a representative door or gate, shall actuate upon the application of a 66.7 N (15 lbf) or less force in the direction of the application when tested at room temperature 25°C ±2°C (77°F ±3.6°F). Additionally, when intended for use when exposed to outdoor temperature, shall actuate at 177.9 N (40 lbf) or less force when tested at -35°C ±2°C (-31°F ±3.6°F).</p> <p>a) For an edge sensor intended to be used on a sectional door, slide gate, <u>or bifold gate</u>, the force is to be applied by the longitudinal edge of a 1-7/8 in (47.6 mm)</p>



CLAUSE	VERDICT	COMMENT
		diameter cylinder placed across the sensor so that the axis is perpendicular to the plane of the door or gate. See Figure 39.1 and Figure 39.2. b) For an edge sensor intended to be used on a one piece door, swinging door, or swinging <u>or bifold gate</u> , the force is to be applied so that the axis is at an angle 30 degrees from the direction perpendicular to the plane of the door or gate. See Figure 39.3 and Figure 39.4. c) For an edge sensor that wraps around the leading edge of a swinging one-piece door or a swinging <u>or bifold gate</u> , providing activation in both directions of travel, the force is to be applied so that the axis is at an angle 30 degrees from the direction perpendicular to both the closing direction and the opening direction. See Figure 39.5.
39.1.3	Info	Vehicular gate operators
39.1.3.1		Vehicular gate operators intended to be used with a Type B2 device, with reference to 32.1.17(a), shall be tested per 32.2.2, i32.2.3, i32.2.4, or 32.2.5 as applicable. Also see Figure 39.9 for a vertical pivot, vertical lift gate, or barrier arm; Figure 39.10 for a horizontal slide gate; or Figure 39.11 for a swing gate. <u>For a horizontal bifold gate operator system, the system shall be tested as per Figure 39.10 in the last 406 mm (16 in) of travel in the closing direction and Figure 39.11 elsewhere.</u>
	Info	INSTRUCTION MANUAL
60	Info	Details
60.8	Info	Vehicular gate operators (or systems)
		Instructions regarding intended installation of the gate operator shall be supplied as part of the installation instructions or as a separate document. The following instructions or the equivalent shall be supplied where applicable: b) The operator is intended for installation only on gates used for vehicles. Pedestrians must be supplied with a separate access opening. <u>The pedestrian access opening shall be designed to promote pedestrian usage. Locate the gate such that persons will not come in contact with the vehicular gate during the entire path of travel of the vehicular gate.</u>
60.8.4		j) For a gate operator utilizing iType B2, contact entrapment protection in accordance with 32.1.1: <u>8) One or more contact sensors shall be located where the risk of entrapment or obstruction exists on a bifold gate, such as:</u> <u>i) At the inner and outer leading edge,</u> <u>ii) Between the outer column panel and the inner bifold panel of an opening bifold gate,</u> <u>iii) Between the outer/column panel and any obstruction within 406mm (16 in) of the gate panel when it is in the fully open position,</u> <u>iv) At hinge points depending on the construction of the gate,</u>



CLAUSE	VERDICT	COMMENT
		<p>v) <u>On the bottom edge(s),if the bottom edge(s) of a bifold gate is/are greater than 152 mm (4 in) but less than 406 mm (16 in) above the ground at any point in its arc of travel.</u></p>
		<p>Instruction regarding intended operation of the gate operator shall be provided as part of the user instructions or as a separate document. The following instructions or the equivalent shall be provided:</p>
		<p>IMPORTANT SAFETY INSTRUCTIONS</p>
60.8.5		<p>WARNING – To reduce the risk of <u>severe</u> injury or death:</p> <p>4. Test the gate operator monthly. The gate MUST reverse on contact with a rigid object or stop when an object activates the non-contact sensors. After adjusting the force or the limit of travel, retest the gate operator. Failure to adjust and retest the gate operator properly can increase the risk of <u>severe</u> injury or death.</p> <p>5. Use the <u>emergency manual</u> release only when the gate is not moving.</p>