



DASMA
Door & Access Systems
Manufacturers Association
International

COMMERCIAL & RESIDENTIAL GARAGE DOOR DIVISION

TECHNICAL DATA SHEET

#158

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GLAZING IN GARAGE DOORS

Introduction

Federal glazing laws, as contained in the document CPSC 16 CFR 1201, have been enacted and enforced in the United States. The laws aim to protect individuals in various defined hazardous locations from injuries due to human impact with glazing, or due to pieces of glazing falling onto pedestrians. Building codes have adopted provisions of these laws and have developed them into useful code enforcement provisions. Various types of doors are cited in the codes as being considered specific hazardous locations and requiring safety glazing material.

Garage doors are not mentioned by name as one of these locations; however, it is important to define instances in which garage doors are not considered a hazardous location, as well as those instances in which garage doors may be considered as such, within the context of building codes. This Technical Data Sheet will identify some potential situations and clarify the application of glazing requirements to garage doors.

Hazardous Locations

Using Section 2406.2 of the International Building Code as a reference, the following three hazardous locations have been identified for consideration relative to garage doors:

1. **Glazing in ingress and egress doors.** Under normal circumstances, garage doors are not a “required exit” from a building. In other words, buildings are not usually designed to incorporate a garage door as a necessary means for pedestrians to exit, particularly in an emergency situation; therefore, unless otherwise specifically designed as such, garage doors are not considered either an ingress door or an egress door.
2. **Glazing in fixed and sliding panels of sliding door assemblies.** “Sliding door assemblies”, within the context of the code, is intended to apply to patio type doors that are usually defined as a means of ingress/egress. Garage doors are not to be interpreted as “sliding door assemblies.”
3. **Glazing in a fixed or operable panel.** In order for the requirements related to glazing in a fixed or operable panel to apply to a garage door, and, therefore, for safety glazing material to be required, all of the following conditions would have to be met:
 - a. Exposed area of an individual pane greater than 9 square feet.
 - b. Exposed bottom edge less than 18 inches above the floor.
 - c. Exposed top edge greater than 36 inches above the floor.
 - d. One or more walking surfaces within 36 inches horizontally of the plane of the glazing.

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This Technical Data Sheet was prepared by the members of DASMA's Commercial & Residential Garage Door Division Technical Committee. DASMA is a trade association comprising manufacturers of rolling doors, fire doors, grilles, counter shutters, sheet doors, and related products; upward-acting residential and commercial garage doors; operating devices for garage doors and gates, sensing devices, and electronic remote controls for garage doors and gate operators; as well as companies that manufacture or supply either raw materials or significant components used in the manufacture and installation of the Active Members' products.

A walking surface is likely to be located near a garage door to satisfy d) above; however, in order to satisfy all of the remaining criteria, at least one pane of glass 72 inches in width or greater would need to be located in a second section above the floor, where the first section is less than 18 inches high and the top of the second section is more than 36 inches above the floor. *Typical garage door designs dictate that any glazing in a garage door will not comply with all four of the “fixed” glazing criteria set forth. See Figure 1.*

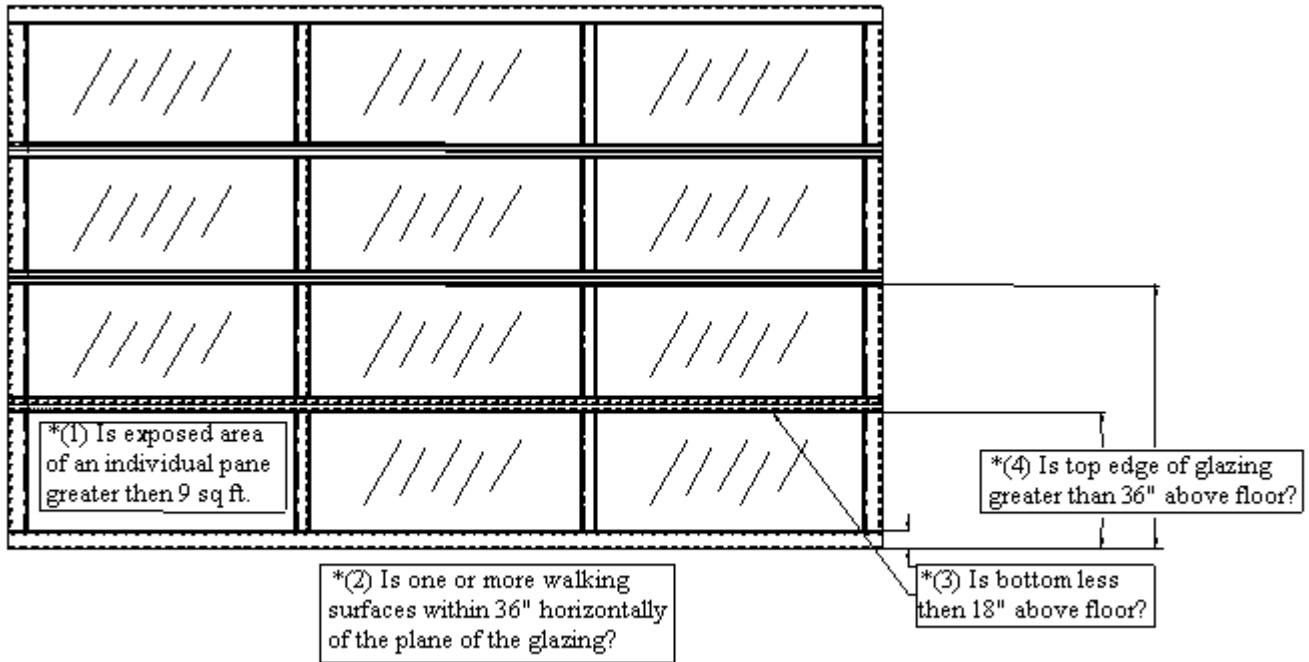
Garage Doors vs. “Sloped Glazing”

Although glazing in a garage door may sometimes be confused as “sloped glazing” when the garage is in the fully open position, it is important to note that glazing in garage doors *is not considered “sloped glazing.”* Sloped glazing requirements apply to glazing with a significant area and weight, where the potential exists for causing injuries due to fall or breakage because of the height of the location. In garage doors, glazing is typically small and lightweight; therefore, even if there is a potential for impact and breakage, the glazing is not a potential hazard that could cause a significant injury.

A building code evaluation services staff evaluation letter is attached to further illustrate the comparison of garage door glazing and sloped glazing. While the staff evaluations are informative and helpful, as always, the local building official is responsible for final interpretation.

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* If answers to all Questions, (1) through (4), are “Yes”, then safety glazing materials are required. If any answer is “No”, then safety glazing materials are not required.

SECTIONAL GARAGE DOOR - ELEVATION VIEW

No Scale

Figure 1

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September 15, 2003

Mr. Joseph R. Hetzel, P.E.
Technical Director
Door & Access Systems Manufacturers Association
1300 Sumner Avenue
Cleveland, OH 44115-2851

Re: 2003 International Building Code®
Section 2405

Dear Mr. Hetzel:

In response to your questions, in your February 1 FAX letter, regarding the application of Section 2405 to "vision lights" in garage doors in the fully open position, we offer the following opinions of the meaning and intent of the code on this subject:

It is my understanding that your letter and documentation pose the following two questions:

Q1. Can Section 2405 be interpreted to apply to garage doors containing "vision lights", when garage doors are in the fully open position?

A. No.

Q2. What is your rationale behind your answer to #1?

A. Section 2405 addresses glazing installed at a slope more than 15 degrees from the vertical plane. The normal installation of a garage door is vertical. The code does not address garage door glazing in the fully opened position.

We are pleased to provide you with the opinions stated herein. It should be noted, however, that the final interpretation is the responsibility of the local building official.

Sincerely,

Larry D. Franks, PE, CBO
Senior Staff Engineer
Codes & Standards Development

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