



Door & Access Systems
Manufacturers Association
International

HIGH PERFORMANCE DOOR DIVISION

DASMA TECHNICAL DATA SHEET

#451

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High Performance Door Terminology

An industry terminology standard can prove to be a helpful document:

- To facilitate communication between parties within the industry
- To improve the effectiveness of industry standards and other documents
- To reduce potential confusion and misunderstanding by recognizing and cross-referencing multiple terms that may have the same definition
- To educate interested parties outside an industry

The members of DASMA have compiled an extensive list of terms and definitions related to the high performance door industry to achieve these objectives.

The terminology information encompasses many common terms used in the high performance door industry. You will note that some terms are cross-referenced to a “primary” term. The “primary” term is the one that would be used most often in DASMA standards and technical publications.

Concerning the terms and definitions contained in this Technical Data Sheet, please note the following:

- This Technical Data Sheet is not to be construed as a standard-type document; therefore, the terms and definitions contained herein do not imply or suggest a given use to a particular manufacturer.
- This Technical Data Sheet includes a compilation of commonly used terms and may not be considered complete from an industry viewpoint.
- The terms and definitions are not universal. Variations within the industry may exist with regard to precise meaning.

Note: Technical Data Sheets are information tools only and should not be used as substitutes for instructions from individual manufacturers. Always consult with individual manufacturers for specific recommendations for their products and check the applicable local regulations.

This Technical Data Sheet was prepared by the members of DASMA's High Performance Door Division. DASMA is a trade association comprising manufacturers of high performance 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.

High Performance Door Terminology

1.0 SCOPE

The scope of this technical data sheet shall be to provide industry-accepted definitions for common high performance door terms. Multiple terms with the same definition are included if needed based on common usage of such terms. The primary term shall contain the definition.

2.0 TERMS AND DEFINITIONS

Activation Device: Any device used to initiate operation.

Astragal: A compressible or deformable seal provided on the leading edge of the door.

Authority Having Jurisdiction (AHJ): The organization, office, or individual responsible for approving equipment, an installation, or a procedure.

Backing Plates: See **Crush Plates**

Backup Electric Operation: See **Emergency Electric Operation**

Barrel Assembly: A cylindrical horizontal member at the head of the opening that supports the door curtain.

Bellmouth: Flared upper portion of guides to ease entry of curtain into the guides.

Bottom Bar: A reinforcing member at the lower edge of the door curtain assembly. It shall be provided with an astragal or sensing edge.

Bottom Beam: See **Bottom Bar**

Bottom Edge: A compressible or deformable seal provided on the leading edge of the door.

Between Jamb Mounted: Type of mounting where the guides are positioned between the mounting surfaces and not on the surface (interior or exterior) of the wall.

Brackets: Plates bolted to the wall or to extensions of the guide wall angles that serve to support the barrel and form end closures for the hood.

Brush Seals: Term used to refer generically to the use of brush filament material as a weather-seal.

Brush Weather-Stripping: Weather-stripping for use on all configurations of doors to close the gaps at jambs and header.

Chain Hoist: A mechanical device to assist in raising and lowering the door by use of hand chain.

Closed Position: A position of the door curtain with the underside of the bottom bar, including an astragal or sensing edge in contact with the sill along the entire width of the opening.

Control Panel: An enclosure that houses electrical controls.

Counterbalancing: A method by which the hanging weight of the door curtain is balanced by springs or weights.

Counterweights: See **Counterbalancing**

Crush Plates: Bearing plates provided where doors are mounted on wall units with hollow cells to

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accommodate through-wall bolts to prevent crushing of the hollow wall.

Curtain: Industrial fabric door panel or slats assembled together to close off the door opening.

Curtain Slats: Formed or extruded members that form the door curtain.

Cycle: An action on the door from the fully closed position, to the fully open position, and returned to the fully closed position or reverses to the fully open position.

Door Opening: The clear open width and height.

Door Panel: See **Curtain**

Drive Shaft: The shaft in the barrel that is securely attached to the barrel, through welding or pinning. When this shaft rotates the barrel should also rotate.

Drive System: See **Operator**.

Drum Tube: See **Barrel Assembly**

"E" Guides: Common expression for the shape that guides form when they are mounted to steel jamb supports or frames.

Electric Sensor Edge: See **Sensing Edge**

Emergency Electric Operation: Any door with a motor operator and an Uninterruptible Power Supply (UPS) capable of opening and/or closing the door while facility line power is off.

Emergency Release Device: Permits emergency manual operation of the door without electrical power to open.

Endlock: A component that is attached to curtain to prevent curtain from shifting laterally.

Exterior Hood: A protective covering for a barrel assembly.

Exterior Mounted: Condition where door is mounted on exterior surface exposed to weather and wind load.

Fabric Clear Area: Minimum distance between any obstructions required to prevent fabric wear.

Face of Wall Mounting: Door mounting where guides mount directly to wall, and side and header clearances are allowed.

Fascia: Metal closure for the back of door housing.

Guide Block: Component used to guide door travel in guide rail.

Guide Rail: See **Side Frame**.

Gussets: Support brackets.

Hand of Operation: The side on which the door operator is placed, as viewed from the barrel side of the door. It is either a RH or LH operation.

Headerbox: A mechanical box at the head of the door, containing a drive system.

Headplates: See **Brackets**.

Header Seal: Weather-stripping mounted to opening header to seal the opening between header and curtain.

Headroom: Amount of clear unobstructed space above the door lintel or header.

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High Performance Door: A power-operated rolling, folding or sliding non-residential door, generally characterized by either 100 or more cycles per day or 20 or more inches per second opening speed, and typically made-to-order and/or designed for higher durability, and/or designed to break away due to equipment impact.

High Speed Door: A type of high performance door with a minimum opening rate of 32 inches per second, a minimum closing rate of 24 inches per second, and a means to automatically reclose the door.

Hood: A housing that mounts horizontally, serving as an enclosure for the door header.

Inertia Brake: A unit that is attached to the door shaft and headplate or wall, which will stop the door from free falling should there be a failure in the motor operator brake, roller chain drive or torsion spring assembly. When the shaft is moving at a certain RPM the unit will lock up the shaft, preventing it from moving until door can be repaired.

Intermediate Beam: Beam contained in door curtain to increase wind load resistance.

Jamb: The vertical member that frames the side of an opening in the wall.

Jamb Angle: See Wall Angle

Jamb Load: Force exerted on jamb by guide assembly when curtain is subjected to wind load.

Leading Edge: The front edge of the door relative to its closing movement.

Lintel: A horizontal member spanning and carrying the load above an opening.

Manual Override: Means of operating a door by manual operation in case of power loss.

Manual Release Device: Device that allows manual operation of the door without electric power to open.

Motor Cover: Cover to protect the motor from exterior weather, debris, or to meet OSHA safety requirements.

Motor Shroud: See Motor Cover

Mullion, Swing-Up: A combined guide assembly joining two adjacent doors where center guide is hinged and motorized to lift up and out of the way, to expose a full opening width when both doors are open.

Mullion, Removable: A combined guide assembly joining two adjacent doors, grilles or shutters where center guide is removable to expose a full opening width.

Operator: A powered mechanism that opens and closes a door.

Panel: Assembly that closes off the door opening.

Perforated Slats: A curtain with holes or slots in slats to allow air infiltration.

Photoelectric Sensor: A sensor that consists of a light-emitting device and a light-receiving device. If the beam of light is blocked by an obstruction, the sensor signals the operator to stop and/or reverse.

Photoelectric Eye: See Photoelectric Sensor

Pipe Shaft: See Barrel Assembly

Reversing Edge: See Sensing Edge

Roll Cover: See Hood

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TECHNICAL DATA SHEET**#451****Roll Tube:** See Barrel Assembly**Safety Arrestor:** A device to support door if lifting member fails.**Self Support Header:** Head support member supported by jambs.**Sensing Edge:** A device added to the leading edge of a power operated door, which stops or reverses the door curtain or panel upon contact with an obstruction when closing under power.**Sensing Edge, Pneumatic:** An air hose installed inside the astragal and connected to a diaphragm switch, to signal the operator to stop or stop-and-reverse the door.**Sensing Edge, Electric:** An electrical astragal enclosed with two parallel foils. When bottom of closing door touches an obstruction, the foils close an electric circuit to signal the operator to stop or stop-and-reverse the door.**Sensing Edge, Optical Type:** Astragal enclosing a tube with a lightemitting transmitter at one end and a detector at the other end. When IR source is obstructed, the operator will stop or stop-and-reverse the door.**Side Frame:** Vertical assembly, fastened to the jamb, in which the curtain travels and which retains the edges of the door curtain and closes the space between the curtain edges and the jamb.**Side Jamb:** See Wall Angle**Sideroom:** Required unobstructed space on either side of the opening.**Shroud:** Cover or hood at side frame and header.**Slats:** See Curtain Slats**Slide Bolt:** Locking device on bottom bar or edge of door, which slides into guide and is equipped for padlocking. Mounted either inside, outside or on both sides of the door.**Sloped Bottom Bar:** Tapered leading edge to match sloped sill of opening, and will hang into opening on low side unless door height is increased and door curtain is raised to have sloped bottom edge clear opening when door is open.**Spring Cycle Life:** Spring counterbalance is designed for a fixed number of cycles.**Spring Counterbalance:** See Counterbalancing**Stop Edge:** See Sensing Edge**Stops:** Bars mounted at top of guides to prevent bottom bar from traveling out of the guides when the curtain is fully raised.**Thru-Wall Operation:** A door driven by means of a hand chain, crank or motor operator located on the opposite side of the wall.**Torsion Spring:** A spring in a counterbalance assembly, used to counterbalance the curtain.**Vision Panel:** Cutout in a door, glazed with clear plastic or glass.**Wall Angle:** An angle of the guide assembly, which attaches to the face of wall and supports the load of the door assembly.**Wind Bar:** Channel, bar, tube or other material used to stiffen the door panel under wind load.**Wind-lock:** A component attached to prevent the curtain from leaving the guides under wind load or a component used to prevent a door from lifting upward under wind load.**"Z" Guides:** Common expression for the shape that guides form when they are mounted to masonry jambs.

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