Rolling Door Performance Evaluation
By a Facility Manager or a Building Superintendent

Important Information

1. **WARNING:** The counterbalance assembly and its related parts are under EXTREME spring tension at all times. Only a trained door systems technician with a thorough knowledge of the mechanism, using proper tools, should make repairs and adjustments. Severe personal injury or death may result from improperly attempting adjustments or repairs.

2. In addition to the periodic performance evaluation of a rolling door, an event such as high wind, seismic, or flooding should require an immediate evaluation of all door systems in the facility regardless of when the last periodic inspection was performed.

3. Consult the manufacturer’s installation instructions for specific product directions.

INTRODUCTION

The objective of this Technical Data Sheet is to provide a recommended procedure for the evaluation of a rolling door by a facility manager or building superintendent. It is important to remember that rolling doors are designed and manufactured to provide many years of trouble free performance under normal use.

SCOPE

Rolling door type products covered include service doors, fire doors, counter doors, and rolling grilles. This Technical Data Sheet is a guideline for normal operation of such products, and does not address automatic closure or detectors.

INSPECTION

Please refer to Figure 1 for a picture of a door and the names of the parts of the door to be inspected.
Inspect the following items:

- **Hood.** Check for damage to the hood that may cause binding between the hood and the door curtain.
- **Guide Assembly.** Check guides for damage. The legs of the guides must form a groove to contain the ends of the door curtain as it travels up and down. The guide legs must be equally spaced from top to bottom so the curtain and bottom bar have free movement through the guides. Ensure that each guide assembly is securely fastened to the jamb and the wall above the jamb. In addition, ensure that fasteners are located in all slots/holes, and that fasteners are properly tightened.
- **Curtain & Bottom Bar.** The bottom bar and curtain should not be bent or damaged or bind in the guides or rub the wall above the opening. The curtain endlocks or windlocks should not be loose or missing, or rub against the headplate brackets. If a sensing edge is on the door, check for secure fastening of this device.
- **Product Safety Labels.** Product safety labels should be periodically inspected and cleaned by the product user. Replacement labels should be ordered from the door manufacturer.

**PERFORMANCE EVALUATION**

Check the balance of the door in the manual mode of operation. Use two hands to control hand chain while operating the door. In the closed position, the door may rise up off the floor. When the door approaches the open position, it should advance toward the curtain stops. When the door is closing, it should close freely through the middle of the opening. If the door does not perform as described above, a trained door systems technician should be contacted to make proper adjustments.

**ELECTRIC OPERATION**

- Check the sensing edge performance, if supplied. When the door closes on an obstruction in the opening the sensing edge should cause the door to stop or stop-and-reverse to the open position. Follow the manufacturer’s recommendations for testing sensing edge performance.
- Per the requirements of UL 325, the operator must be wired so that the close button must be pressed constantly as the door is closing if the door does not have a properly functioning sensing edge, photoelectric eyes, or other properly functioning sensing devices.
- The operator should not sway as the door opens or closes. Bracket mounted operators may be sway braced if necessary.
- Evaluate the open and close limit settings. The operator should stop as the bottom bar touches the floor or sill. The operator should stop as the bottom bar approaches the curtain stops at the top of the guides.

**SERVICE**

- If the door will not open or close, adjustment/repair must be made by a trained door systems technician using proper tools and instructions.
• A door utilizing chain and sprocket operation should be regularly evaluated by a trained door systems technician.
• A trained door systems technician should perform periodic inspection and maintenance at least annually or per the door manufacturer's recommendations.
• Rolling steel type fire doors must be inspected and drop tested annually in accordance with the door manufacturer's instructions; this testing is required by the National Fire Protection Association standard NFPA 80. This requirement applies to all fire doors – even those that are not used and remain in the closed position. All horizontal or vertical sliding and rolling fire doors shall be inspected and tested annually to check for operation and full closure. Resetting of the release mechanism shall be done in accordance with the manufacturer’s instructions. A written record shall be maintained and shall be made available to the authority having jurisdiction. When conducting the annual test for operation and full closure, rolling steel fire doors shall be drop tested twice. The first test shall be to check for operation and full closure. A second test shall be done to verify that the automatic closing device has been properly reset. Refer to DASMA Technical Data Sheet TDS-271.
Figure 1

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 Rolling 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.