1300 Sumner Avenue Cleveland, Ohio 44115-2851

Phone: 216-241-7333 • Fax: 216-241-0105

E-mail: dasma@dasma.com

Common Rolling Steel Door Installation Problems

The following situations have been identified as common occurrences in the course of installing a rolling steel door. It is always good practice to double check the materials supplied for the job as well as to check thoroughly all existing job conditions affecting the installation of the door. Observance of the following suggestions, along with following the door manufacturer's instructions, will go a long way toward a good door installation.

NOTE: Rolling steel doors are intended to be installed and serviced only by trained door systems technicians, in order to maintain the integrity and function of the door as designed by the manufacturer and also for the safety of those installing and servicing such doors. Any unsatisfactory wall conditions should be addressed between the owner or general contractor and the installation contractor prior to beginning installation. Commencing installation signifies installer approval of the wall conditions.

- 1. **Door is too large/small for the wall opening.** Verify that the door is designed for the opening before installation starts.
- 2. Wall angle installation is incorrect. The angles must be plumb and the tops of the wall angles must be level. The distance between the guide wall angles must be set at the distance prescribed by the manufacturer. The barrel and the curtain must be centered between the brackets and the guides. The curtain must not rub against the back of the guides, the wall angles or the bracket plates. The curtain can bind between the two guide angles when the guide gap is not set properly. Always fasten wall angles to the proper wall/jamb location per the manufacturer's instructions, including use of specified fasteners.
- 3. The door is not level. The barrel assembly must be installed level. This is true regardless of the levelness of the lintel and/or floor. One guide may need to be installed with its lower end above the floor to compensate for differences in floor level. If this offset results in a gap under the bottom bar, contact the door manufacturer for options. The door support bracket should be checked for level while being fastened.

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.

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4. **The jambs are not plumb.** The vertical door opening surfaces should be checked for plumb. A block wall may be "waffled" (wavy and/or uneven), a concrete wall may have been poured out of plumb, or a steel channel may be skewed, slanted or offset.

For fire doors, if any gaps are observed between the wall angle and the jamb, a bead of firestopping caulk or sealant that is listed as a Fill, Void or Cavity material (or other material acceptable to the authority having jurisdiction) can be applied to the gap/open areas. This remedy is suited for minor imperfections that would be considered typical for masonry walls especially. If the gap/open area would result in a bead of sealant greater than ½ inch in width, the gap should be corrected. Fastening a fire door guide tight against a wall is critical to the door's intended function. Walls that would otherwise require using spacers of some kind should be repaired and made plumb prior to applying the fire door. Regardless of the problems with the opening, guides must be installed plumb.

- 5. The jambs are not high enough. At times, fire doors are mounted to steel jambs that frame an opening and do not project above it to the top of the door itself. When this condition is determined, steel spacers should be provided to assure a smooth consistent mounting surface for the door guides.
- 6. **The opening is not square.** All corners must be 90 degrees. This can be accomplished by using the 3/4/5 or 6/8/10 triangle rule and by verifying that the diagonal dimensions are equal. Check the opening for square, and check for jamb alignment. Check if steel channels are skewed, slanted or offset. Regardless of opening, the door must be installed square and the guides must be in the same plane alignment.
- 7. **The door is not balanced.** First, make sure your expectation of balance is realistic. Rolling doors typically are balanced near the top and near the bottom of the opening, but have some imbalance in between. Second, review the installation to ensure that the manufacturer's instructions have been observed in the following ways:
 - a. Pre-tension was applied with the door in the proper position (up or down, depending on the type
 - b. Proper amount of pre-tension was applied.
 - c. Pre-tension was applied in the proper rotational direction.
 - d. Barrel was handed properly when installed, to avoid balance problems from a barrel mounted backwards.

Next, adjust the pre-tension higher or lower as needed, following all manufacturers instructions and safety precautions. If the door still does not balance as it should, call the manufacturer for assistance.

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