DASMA TECHNICAL DATA SHEET

Door & Access Systems Manufacturers Association International

#183

1300 Sumner Avenue Cleveland, Ohio 44115-2851

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

E-mail: dasma@dasma.com

Garage Door Component Substitution

Introduction

There are two common instances when a garage door assembly may be subjected to a substitution of one or more components. One is during the process leading up to initial installation of the door, where a component may come from a source other than the door manufacturer.. The other is a post-installation situation requiring a damaged or underperforming component to be replaced in order to restore a door to its intended strength and operation. This Technical Data Sheet gives recommendations to individuals and parties involved with deciding on components to be substituted into a garage door assembly.

General Considerations

The strength and operation of a garage door is a function of the components used in its construction. Garage door manufacturers design and/or specify every component of a garage door assembly for strength and functionality required for anticipated installed conditions. (Note: In addition to wind load, consideration for other conditions such as corrosion resistance should be made.) While the garage door industry recognizes availability of alternate parts for repair and maintenance, careful consideration should be taken to avoid compromising the strength of the door, whether or not the door is wind load rated. Replacing parts on tested, certified, or wind load rated products to standards such as ANSI/DASMA 102 and 108 with parts that are not identical may weaken the overall assembly and expose the party making an unauthorized substitution to liability.

Visual Considerations

Discretion and caution should be exercised any time a substitution is considered, particularly with respect to visual comparison of components. A part that looks similar may not offer the same strength or functionality as the original, adversely affecting both performance and safety aspects of the door. Differences may exist in material thicknesses too small to be visually identified, or in the material composition/strength that cannot be seen.

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 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.

The critical nature of some components or details of assembly may not be apparent to someone not intimately with the performance requirements and design of a particular door. Loads applied to doors due to wind, windborne debris impact, thermal radiation/convection/conductivity, fire, flooding, storm surge or seismic activity are different than loads experienced during normal operation. Details such as extra fasteners, unique fastener locations, extended roller lengths, higher strength roller bearings, and greater track thickness are a few examples of subtle structural features that can be critical for door performance.

Certified Garage Doors

Certified garage door assemblies are regulated by an agency independent to the garage door manufacturer. Certification typically involves establishing certain door performance characteristics, most commonly those involving wind design. In most cases component substitutions must be in accordance with written guidelines established in the applicable program governing the garage door certification, as administered by the independent agency. The certifying agency may invalidate the door certification if a component is substituted contrary to program guidelines.

Conclusion

The original garage door manufacturer should be contacted if there are any questions or concerns about substituting any garage door component, since any component can affect the overall performance of a door.

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 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.