Rolling Doors and High Wind Events

Rolling doors are typically in the largest openings associated with building structures. There are several items that should be kept in mind regarding a rolling door’s wind load performance in high wind events accounted for in building codes. (NOTE: NOAA’s National Weather Service defines High Wind as follows: “Sustained wind speeds of 40 mph or greater lasting for 1 hour or longer, or winds of 58 mph or greater for any duration.”)

1. A rolling door is subject to either being blown into the building or pulled out of the opening. Therefore, backing a vehicle, or placing any other object, against a rolling door is not recommended. Further, this may damage the vehicle or other items used. The appropriate protection is provided with a rolling door that is wind resistant to local requirements.

2. A rolling door should be closed prior to a high wind event. The door should be wind resistant to local requirements, and the door rating is only valid for a fully closed door. Keeping a rolling door open during a high wind event leaves the interior walls, ceilings and roof structure vulnerable to structural damage and possible collapse of the structure.

3. DASMA does not recommend the operation of rolling doors during high wind events. The increased operational force needed to manually open or close the door, especially if windlocks are present in the door installation, may result in property damage and/or personnel injury.

4. Adding any non-manufacturer specified reinforcement to a rolling door can create a dangerous situation that may result in property damage and/or personal injury. Owners should avoid adding reinforcement to a rolling door themselves. A rolling door is not operational with any type of permanently attached exterior reinforcement. Even if such reinforcement were to be attached only when the door is in the fully closed position, altering the door to accommodate the attachments may compromise the door's operational capabilities.

5. There are some coastal areas that are subject to storm surges where it is more important that the door “break away” from the structure rather than resist wind load. Contact your local building department if the structure in question may be included in this requirement.

If you question your rolling door's ability to resist high winds, contact a design professional to evaluate both the door and the surrounding frame of the opening. Keep in mind that the attachment of both the door guides and the door jamb to the structure are just as critical as the strength of the door itself.