Trained Door Systems Technician – Checking a Garage Door for Damage

Introduction

This technical data sheet is intended as a guideline for a trained door systems technician to check for garage door damage. Examples that may prompt such checking include but are not limited to damage caused by a high wind event, seismic activity, or flooding.

Notes

1. **WARNING**: Building occupants should be reminded not to attempt to remove, adjust or repair doors, springs, or any other door system components, or anything to which they are fastened. Doors are large, heavy objects that move with the help of springs under extreme tension, and can cause serious injury or death. Only trained door systems technicians should remove, repair or adjust doors.

2. If unsure of the condition of the framing surrounding the door to which the door is attached, a building contractor or design professional should be contacted to assess the framing and attachment to the structure.

3. If any problem is observed during visual inspection or operational inspection, a judgment should be made as to whether the door should be repaired or should be replaced. Particular attention should be given to the condition of sections, stiles, struts, hinges, rollers and fasteners. The building owner should then be presented with any and all viable options.

Visual Inspection

1. **Begin Inside the Garage**: The door should remain closed during this portion of the inspection. A flashlight and a step stool or ladder should be kept handy.
2. **Condition of Door System:** Check the door system for signs of stress or fatigue. If damage is a result of a high wind event, make an assessment as to whether the door system will withstand another high wind event in the environment in which the door is installed. If you determine it will not withstand an additional event, notify the property owner of your assessment and recommendations. In general, if stress or fatigue has compromised the door’s performance, you should advise the property owner to forward your assessment and recommendations to the property owner’s insurance company. The assessment should state that sufficient damage has occurred requiring replacement of the garage door system. A registered design professional may need to be contacted as well.

3. **Door Alignment:** Check for misalignment of door to track and track system to framing. Check alignment of door components, or evidence of damage to components including broken or cracked glass.

4. **Opening Frame:** Visually inspect jambs and header for proper attachment to the structure including any loose or improperly attached connections.

5. **Door Track System:** Visually inspect for any looseness of fasteners, or deformation including twisting, the track opening up, or bending. Check for misalignment of the track system components.

6. **Rollers:** Make sure all the rollers are in the track system without tension. Inspect the ball bearing rollers for looseness or missing bearings. You should be able to rotate and slide the roller stems in the roller brackets, indicating neither the shafts nor the roller carriers are bent.

7. **Roller Brackets and Hinges:** Make sure all the roller brackets and hinges are properly attached without any loose or missing fasteners.

8. **Spring System:** Look for loose or slack cables or any apparent loosening of any other component of the spring system or mounting attachments.

9. **Door Sections:** Visually inspect the door sections (from both inside and outside the garage) for any cracks, dents, or buckling that would decrease the performance of the door. For wood doors, pay particular attention to any splitting, cracking, bowing, or splintering of the wood, especially around or through end hardware fasteners, as this can be an indication of structural damage.
Operational Inspection

1. **Disconnect Operator:** If the garage door is equipped with a motorized operator, make sure the operator is disconnected from the door by pulling the disconnect handle.

2. **Unlock Door:** Make sure the door is mechanically unlocked.

3. **Begin Lifting Door:** Slowly and carefully lift the door a few inches. If the door is difficult to move, stop and lower the door to the fully closed position. Make adjustments per the manufacturer’s instructions, and replace components as necessary.

4. **Continue Lifting Door:** If the door moves freely, without difficulty, continue to slowly lift the door while watching that the rollers move smoothly and remain in the track.

5. **Stop When Door is Half Open:** When the door is half open, check to see if the door will remain in that position. If the door will not, lower the door to the closed position and make the necessary adjustments following the manufacturer’s instructions. If the door will remain in the half open position, do an additional visual inspection of the rollers, roller brackets, hinges, and the track system.

6. **Continue Lifting Door Until Fully Open:** Slowly and carefully move the door to the fully open position. If the door is capable of being fully opened without any abnormal movement and stays in the open position, it should be capable of being manually opened and closed, or connected back to the motorized operator. If there was a loss of power, wait until the power is restored before connection the operator.

7. **Re-connect Operator:** Once the door is connected back to the motorized operator, door locks should be disable or removed. Test the reversing feature per the operator manufacturer’s instructions.