Rolling Door Winding Bars

ANSI/DASMA 203 and ANSI/DASMA 204 contain language requiring that rolling door tension wheels and locking mechanisms be designed with sufficient strength to withstand the maximum torque from torsion springs. When winding devices are used, consideration must be made for installer safety. The significance of this safety consideration is that springs, when in their set position for counterbalancing a door, are under extreme tension, especially when the curtain is in the fully closed (down) position.

Three important factors must be considered:

1. Tensioning systems are designed such that the force required for proper spring tensioning can be practically and safely controlled. On some doors, that force may still be significant. Trained door systems technicians should consider human effort, site conditions and working clearances in the process of adjusting spring tension. If a technician has any concern about this force limit for a particular door installation, or for a particular door product, the door manufacturer should be contacted.

2. When adjusting spring tension, use a steel bar of sufficient size to properly fit the pockets (openings) in the tension adjusting wheel (charge wheel) and of adequate length to safely control (limit) the force required to adjust spring tension. The use of reinforcing bar (“re-bar”) or any other tool is not recommended unless otherwise instructed by the door manufacturer.

3. The recommended initial tension for the torsion spring counterbalance should be provided by the door manufacturer. When the tension wheel or charge wheel is located on the outside of the headplate bracket, the initial spring tension must be applied while the door is open. Doors with an inside tension/charge wheel require the door to be closed when the tension is applied.

If additional assistance is required to determine what type, size or length of winding bar should be used, the door manufacturer should be contacted. The industry also strongly advises that only a trained door systems technician should install, adjust or repair a rolling door counterbalance system, including the use of any tool (including a winding bar) in conjunction with any component under tension.