

**7450.0430 USER-FRIENDLY WHEELCHAIR SECUREMENT.**

Subpart 1. **Nominal movement.** A user-friendly securement device must limit movement of an occupied wheelchair when the vehicle is in normal operation. An occupied wheelchair loaded with a restrained weight of 250 pounds may not move more than two inches in any direction at any point of contact with the floor when the vehicle is being operated under the following conditions:

A. full-throttle acceleration on dry pavement from a standstill to a speed of 25 miles per hour with the vehicle at its curb weight plus one occupied wheelchair;

B. maximum braking from a speed of 22 miles per hour to a standstill on dry pavement with the vehicle at its curb weight plus one occupied wheelchair; and

C. driving both clockwise and counterclockwise with the outer, front wheel around one of the following:

(1) a 50-foot diameter circle at a minimum steady speed of 12 miles per hour;

(2) a 75-foot diameter circle at a minimum steady speed of 14 miles per hour;

or

(3) a 100-foot diameter circle at a minimum steady speed of 16 miles per hour.

Subp. 2. **Attachment.** A user-friendly securement device must attach to the wheelchair without damaging it during normal vehicle operations. "Damage" includes effects harmful to the strength, integrity, or serviceableness of the wheelchair but does not include minor dents, scratches, or other cosmetic blemishes not materially affecting serviceableness. A bent wheel or broken spoke for example is "damage."

Subp. 3. **Release.** A user-friendly securement device must be designed so as to prevent an unintended mechanical release.

Subp. 4. **User-friendly.** A user-friendly securement device must be designed so that it can be readily engaged and released by the user, or remotely by the vehicle driver, subject to the following conditions:

A. The manual operating control for the user must be located within the upper 33 inches of a 48-inch cube occupied by the secured wheelchair.

B. The force required by the user to engage and release may not exceed five pounds force and may not require tight grasping, pinching, or twisting of the wrist.

C. When a device is manually engaged, the reach, force, and dexterity required to manually release the device may not exceed that required to manually engage it.

D. The device may be automatically engaged by the wheelchair or remotely by the vehicle driver, but a manual release must be available that meets the specifications of

items A and B. A device that may be remotely engaged or released by the driver must have an indicator light to inform the driver that the device has engaged or released the wheelchair.

E. A user-friendly device does not need to be able to secure all types of wheelchairs. A user-friendly device must secure all types of wheelchairs for which it is approved by the commissioner.

**Statutory Authority:** *MS s 299A.01; 299A.12; 299A.18*

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