



SURE-LOK 

Changes to Wheelchair Transportation Regulations

Thinking Beyond Safety



Q'Straint & Sure-Lok

- Q'Straint and Sure-Lok merged in November 2010
- More than 50 years of combined industry expertise and market knowledge
- Today: A global company serving customers in over 50 countries
- Sole Focus: Wheelchair securement is all we do!
- Commitment to Safety and ensuring products meet regulations

Current Regulations



1990

Americans with Disabilities Act

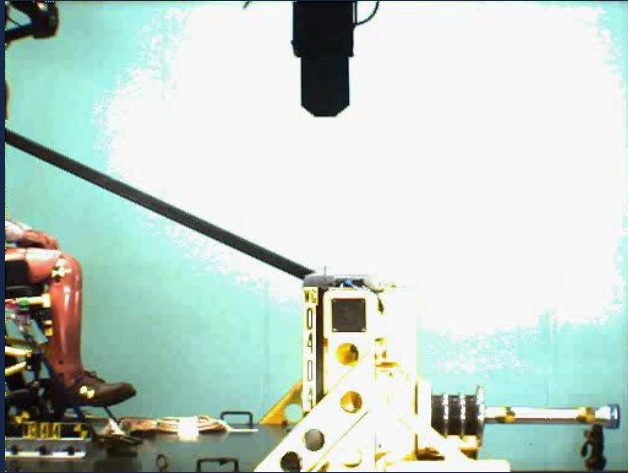
- Civil rights law
- Minimum legal requirements governing access not safety
- Provide accessible space and some form of securement



1996

Society of Automotive Engineers - J2249

- Governs the design, manufacture, testing and WC securement equipment
- Recommended “Best Practices”
- Became securement standard required by transportation agencies - DOT & DOE.
- Specs: National School Transportation Specification & Procedures



Wheelchair securement improves

But...

Wheelchairs themselves are
observed to be “weakest link”
in passenger safety

- WC manufactures not focused on improving transportability
- Disclaimer: “WC should never be used in a motor vehicle”
- Result: SAE merely making the best of what was common and available

Result: ANSI/RESNA WC-19



Work together to research, develop and publish standards for stronger, safer, transport ready wheelchairs

ANSI/RESNA WC-19



2000

WC-19

- Voluntary standard for WC manufactures
- Regulates the design and crash testing of WC's to be used in vehicles
- Main provision: 4 crash tested securement points



WC19 Implementation

2000

Slow Acceptance

- Manufactures: Reluctant to modify WC's because of added expense in design, engineering and testing
- Public: Cost & awareness

2011

Gaining Momentum

- Efforts by ANSI / RESNA
- Attention from lawsuits
- US Dep. Veterans Affairs now only funding WC-19 chairs
- Other agencies/insurance providers following suit
- Compels WC manufacturers to upgrade their devices

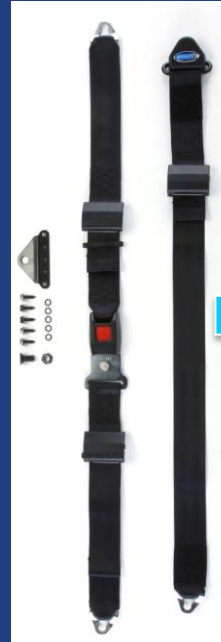


Result: Regulations Updated in 2012



Revised

- Manufactures now required to offer an integrated lap belt for all WC-19 chairs
- Lap belt must be:
 - Crash tested
 - Attached to chair
 - Adaptable with shoulder belt
- Goal: Facilitate the use of occupant restraints



WC18: Revised & Updated SAE J2249



WC18

Effective Dec 2015

- Similar testing requirements to SAE J2249
- Critical Difference: the WC19 Lap Belt
 - Tie-Downs must now secure wheelchairs with an integrated lap belt
 - Increase in loads on tie-downs by 60%
- Compliance will require new heavy duty retractors



Regulations Review

WC18

Larry Schneider, Professor,
University of Michigan, and
chair of SAE-J2249
standards committee

M|UMTRI UNIVERSITY OF MICHIGAN
TRANSPORTATION RESEARCH INSTITUTE
Advancing Safe and Sustainable Transportation.



What Does This Mean for Transportation Providers?



- **Increase in WC19 compliant wheelchairs**
Securement: Easier, Quicker, Safer & Reduced Liability



- **Post 2015:**
As WC-18 replaces SAE-J2249 as industry safety standard, WTOR will need to comply

WC18 / WC19 Compliant Retractor

QRT-360



START MOVIE CLIP

- 1st retractor to meet new WC-18 / WC-19 standards
- 4-point, fully automatic, self-tensioning
- Heavy Duty: Stronger than any previous retractor
- Available: 4th quarter 2014
- Sure-Lok compliant retractor coming soon



Resources

All videos shown in this presentation can be found on our Youtube Channel:
www.youtube.com/user/qstraint

For additional information on ANSI/RESNA, please visit:
www.resna.org

Q'Straint / Sure-Lok offers a sincere "Thank You" for having us here today.
For any future questions, do not hesitate to contact your local Q'Straint Sales Representative.

1-800-987-9987
qstraint.com