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
<table>
<thead>
<tr>
<th><strong>Current Regulations</strong></th>
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<tr>
<td><strong>1990</strong></td>
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<tr>
<td><strong>Americans with Disabilities Act</strong></td>
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<tr>
<td>• Civil rights law</td>
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<tr>
<td>• Minimum legal requirements governing access not safety</td>
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<tr>
<td>• Provide accessible space and some form of securement</td>
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<td><strong>1996</strong></td>
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<td><strong>Society of Automotive Engineers - J2249</strong></td>
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<td>• Governs the design, manufacture, testing and WC securement equipment</td>
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<td>• Recommended “Best Practices”</td>
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<td>• Became securement standard required by transportation agencies - DOT &amp; DOE.</td>
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<td>• Specs: National School Transportation Specification &amp; Procedures</td>
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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 as a seat in a motor vehicle”
• Result: SAE merely making the best of what was common and available
Work together to research, develop and publish standards for stronger, safer, transport ready wheelchairs
ANSI/RESNA WC-19

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

2000

Securement Regulations Update
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
Regulations Updated in 2012

- 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

Revised

Securement Regulations Update
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

START MOVIE CLIP

Securement Regulations Update
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 Retractors

- QRT-360
  - 1st retractors to meet new WC-18 / WC-19 standards
  - 4-point, fully automatic, self-tensioning

- TITAN800
  - Heavy Duty: Stronger than any previous retractors
  - Available Now

START MOVIE CLIP
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.

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