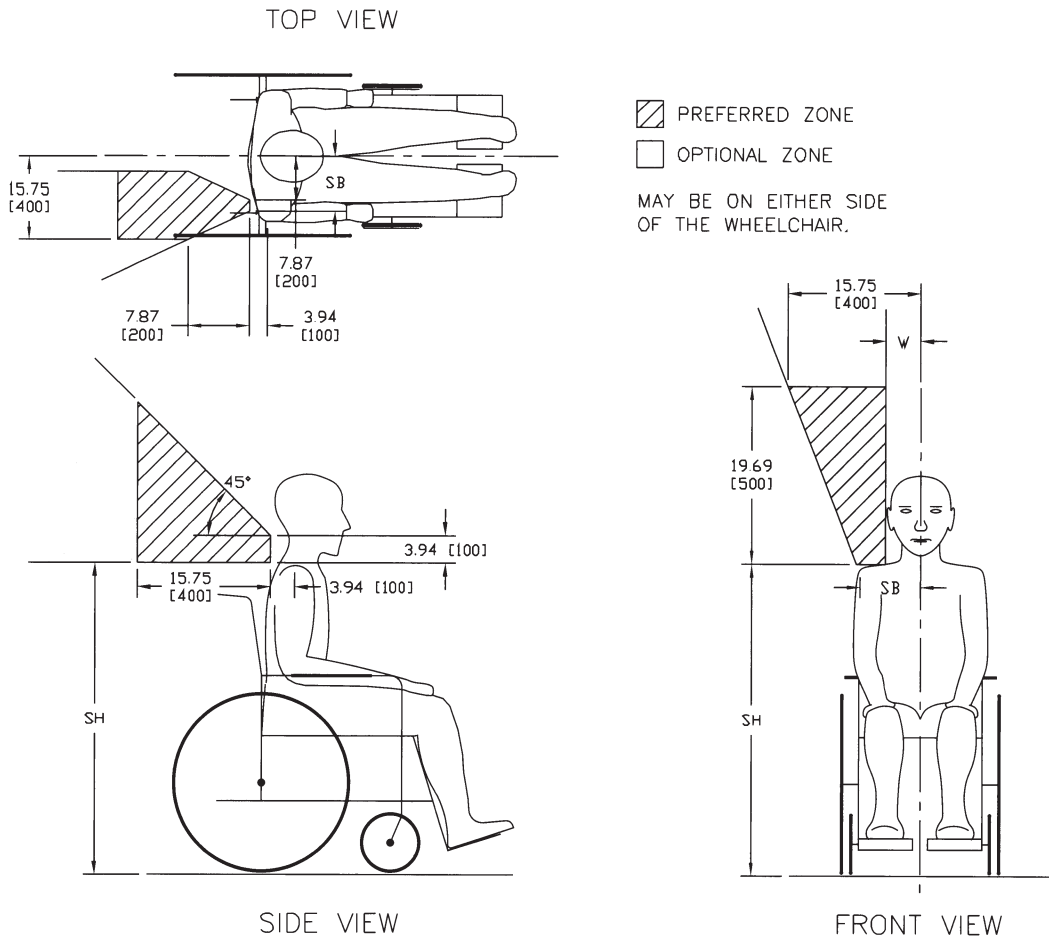


# WHEELCHAIR RESTRAINTS



Occupant Size	Shoulder Height – SH in/mm	Half Shoulder Breadth – SB in/mm	Half Neck Breadth – W in/mm	Seat Height in/mm
6-YEAR-OLD	30.51/775	5.12/130	1.97/50	14.96/380
SMALL FEMALE & 14-YEAR-OLD	39.37/1000	6.89/175	2.95/75	17.72/450
MIDSIZE MALE	43.31/1100	7.87/200	2.95/75	19.69/500
LARGE MALE	47.24/1200	8.27/210	2.95/75	21.65/550

## UPPER ANCHOR POINT OF SHOULDER RESTRAINT

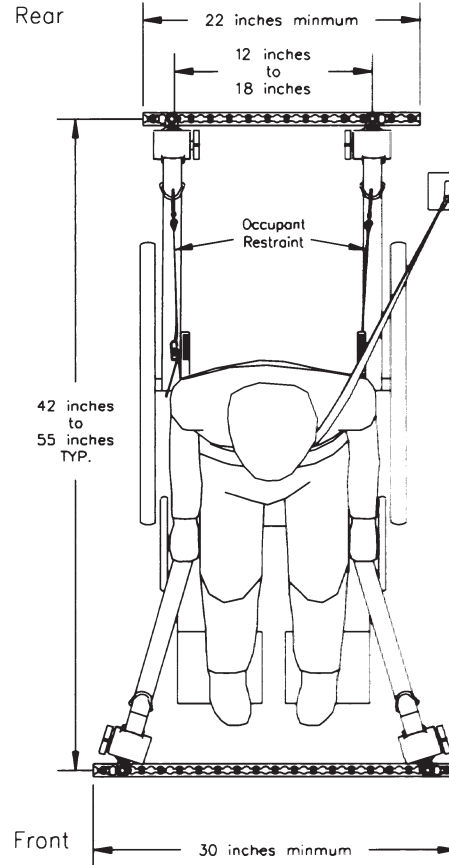
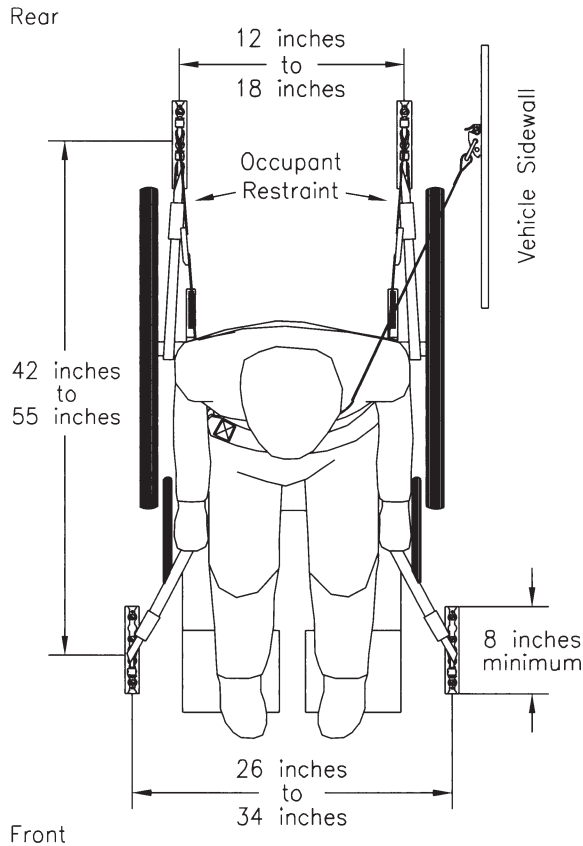
When L Track is used for upper anchor point, the track may be mounted either horizontally or vertically, with fastener spacing and requirements as shown for lengthwise L Track installation on page 28.

Upper anchor point of shoulder restraint may also be installed using Sidewall Mounting Kit FE200745.

Refer to applicable ADA, CSA, FMVSS, ISO, SAE, and vehicle manufacturers standards for additional information.

Above table and diagram are from SAE J2249, Appendix F. Refer to SAE J2249 for additional details.

# WHEELCHAIR RESTRAINTS



## L Track Lengthwise Orientation

### Recommended Installation:

For lengthwise installation, use a minimum of four fasteners or fasteners at 4" intervals, whichever provides the greater number of fasteners.

Use socket head cap screws per ASTM F835 or equivalent. Minimum size is 1/4" with 82° flathead.

The FE200762 and FE200765 mount with 3/8" grade 5 hexhead bolts on 8" centers. When properly mounted lengthwise in vehicle, these comply with 30mph/20g requirements.

Use appropriate back-up washers as needed to comply with local and/or Federal requirements.

## L Track Widthwise Orientation

### Recommended Installation:

For widthwise installation, use a minimum of four fasteners or fasteners at 2" intervals, whichever provides the greater number of fasteners.

Use socket head cap screws per ASTM F835 or equivalent. Minimum size is 1/4" with 82° flathead.

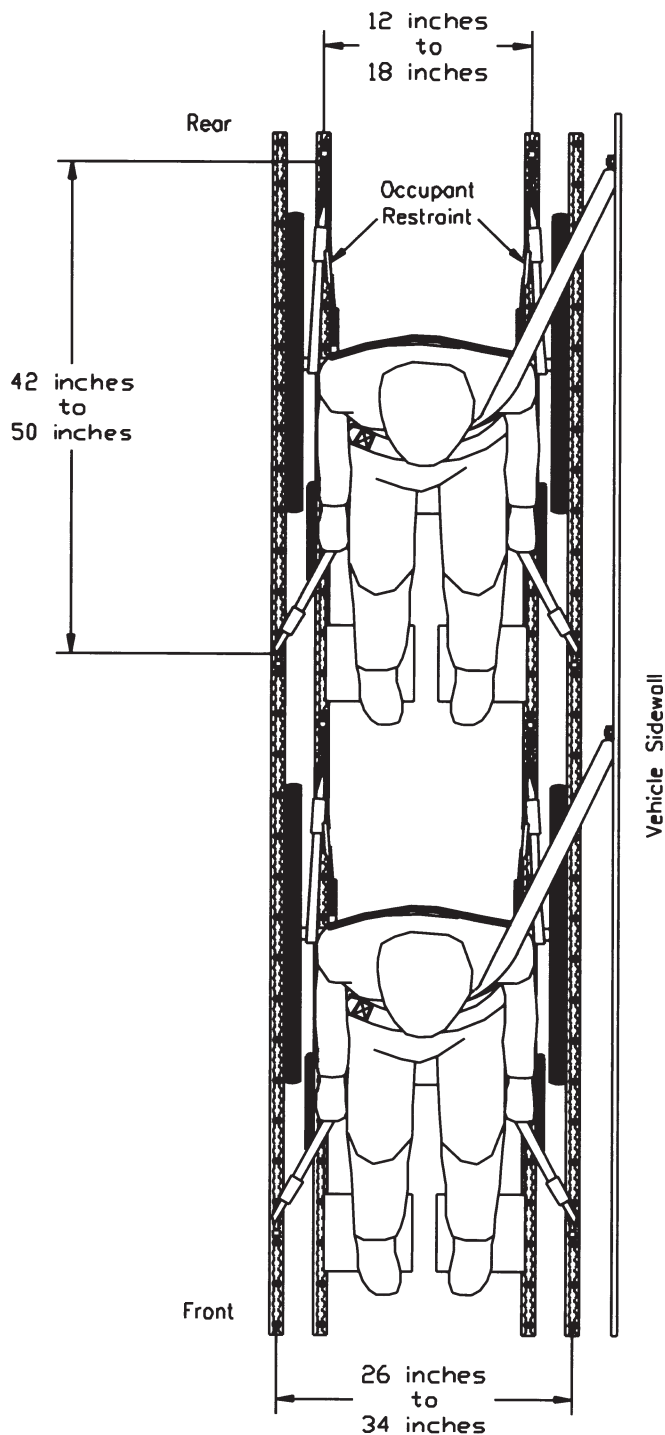
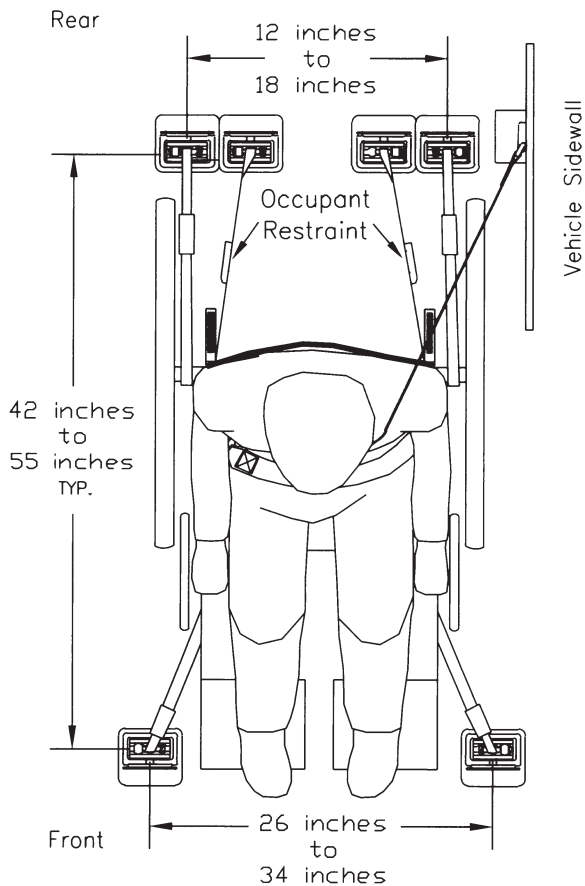
The FE200762 and FE200765 mounted widthwise are suitable for ADA rated installations only. Use grade 5 hexhead bolts on 8" centers.

Use appropriate back-up washers as needed to comply with local and/or Federal requirements.

**NOTE:** The recommended installation, except as noted, when properly done, will comply with 49 CFR Part 571.222 (FMVSS 222) for School Bus Passenger Seating and Crash Protection and 30mph/20g requirements. These recommendations are not all inclusive and may not cover every system installation. Each Wheelchair Tie-Down and Occupant Restraint System shall be carefully reviewed and tested by the installer to provide maximum protection for the end user. Refer to applicable ADA, CSA, FMVSS, ISO, SAE and vehicle manufacturers standards for additional information.

**NOTE:** The use of stainless steel fasteners to secure L Track is not recommended due to galvanic corrosion potential, which is set up by the use of dissimilar metals.

# WHEELCHAIR RESTRAINTS



## L Track Floor Plates

### Recommended Installation:

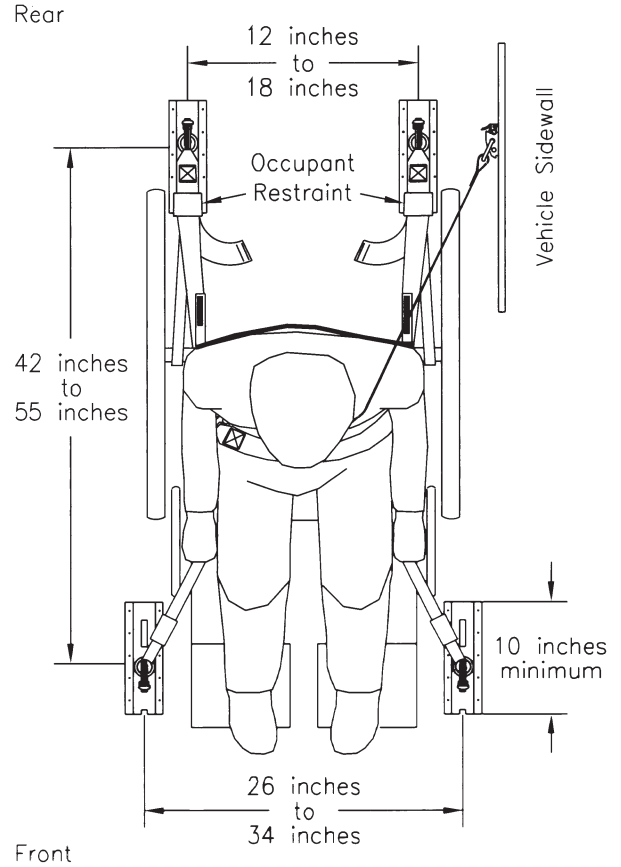
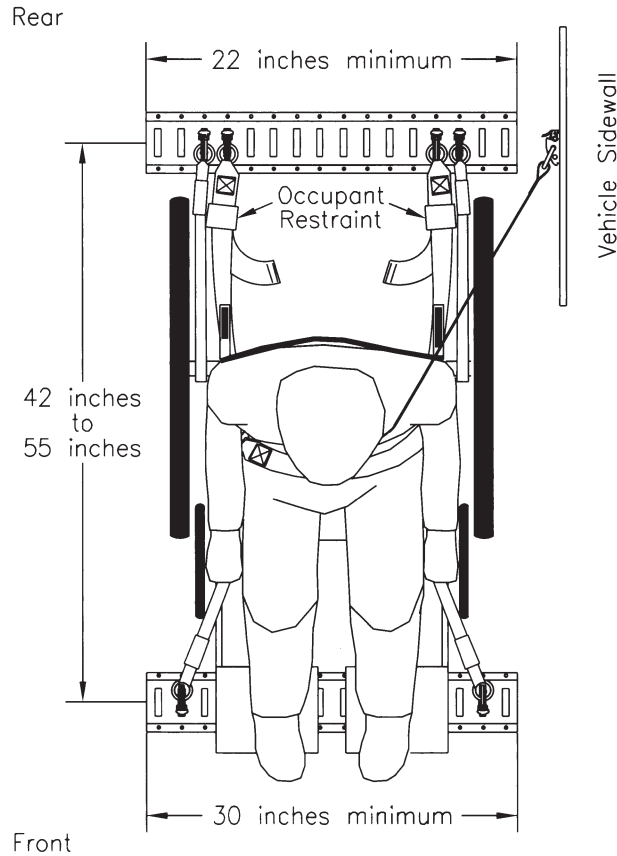
Sure-Lok Series L Floor Plate Kits all come with installation hardware included. Each kit also comes with complete installation instructions.

For integrated lap belt, only two floor plates are needed at the rear.

## Multiple Positions

See recommended installation for lengthwise L Track on Page 28.

# WHEELCHAIR RESTRAINTS



## Heavy-Duty Series A Horizontal Track Widthwise Orientation

### Recommended Installation for all A Track:

A minimum of four fasteners or fasteners at 4" intervals on each side of the track, whichever provides the greater number of fasteners.

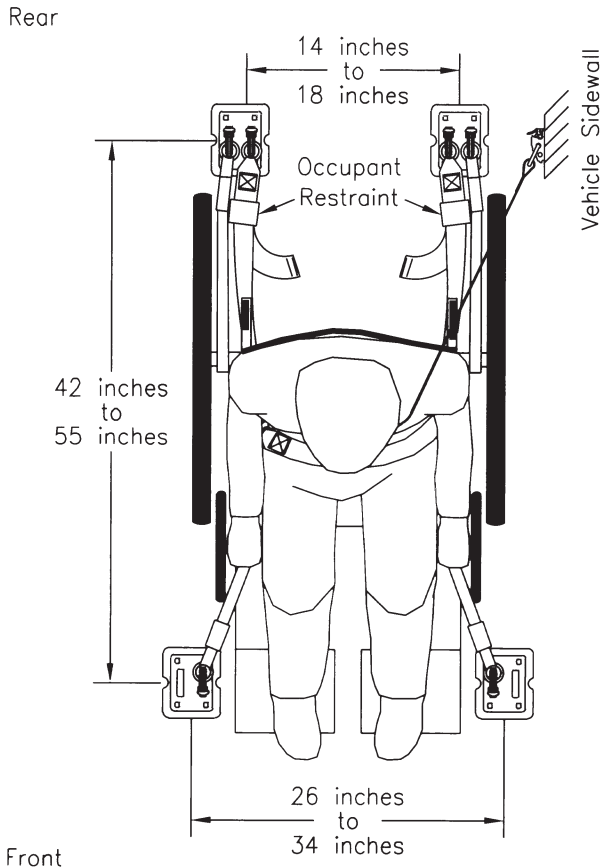
Use grade 5 or equivalent fasteners of 1/4" minimum size.

Use appropriate back up washers as needed to comply with local and/or Federal requirements.

## Heavy-Duty Series A Vertical Track Lengthwise Orientation

**NOTE:** The recommended installation, when properly done, will comply with 49 CFR Part 571.222 (FMVSS 222) for School Bus Passenger Seating and Crash Protection and 30mph/20g requirements. These recommendations are not all inclusive and may not cover every system installation. Each Wheelchair Tie-Down and Occupant Restraint System shall be carefully reviewed and tested by the installer to provide maximum protection for the end user. Refer to applicable ADA, CSA, FMVSS, ISO, SAE and vehicle manufacturers standards for additional information.

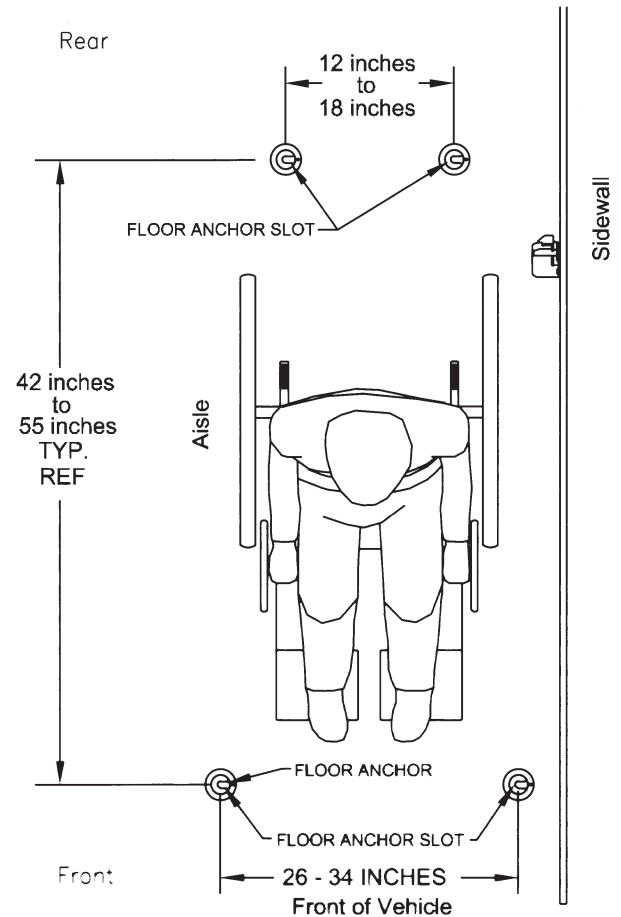
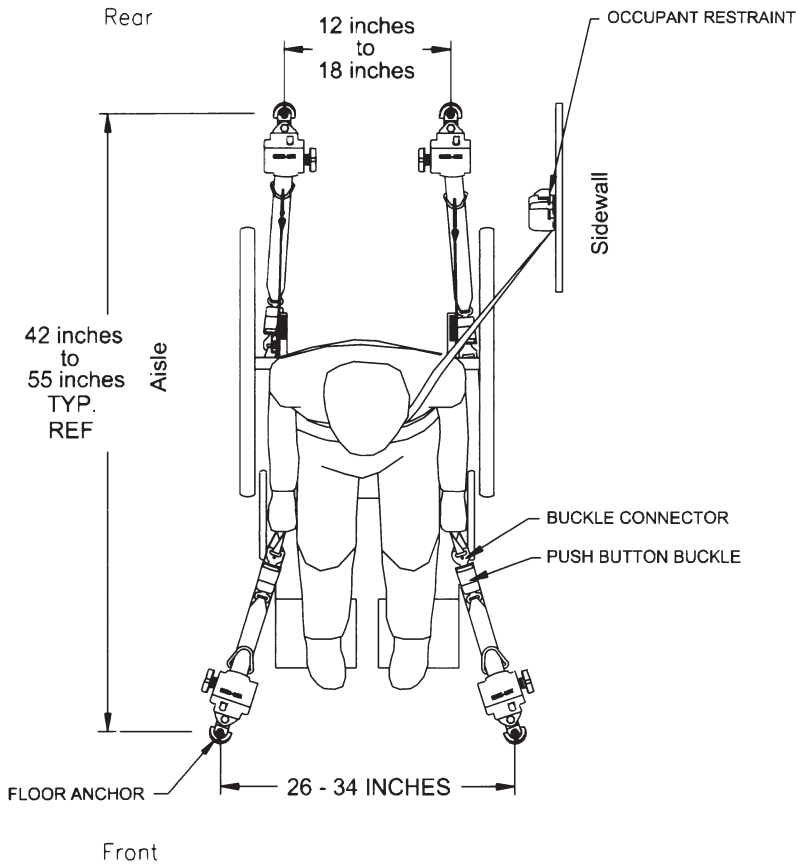
# WHEELCHAIR RESTRAINTS



## Heavy-Duty Series A Floor Plate Kit FE200742

**Recommended Installation:**  
Sure-Lok Series A Floor Plate Kits come with installation hardware included. Each kit also comes with complete installation instructions.

# WHEELCHAIR RESTRAINTS



## Solo Floor Anchor Fitting – FE200922

### Recommended Installation:

Sure-Lok Solo Floor Anchor Fitting comes with the Anchor Backing Plate, Lock Washer and Nut. Each kit comes with complete installation instructions.

All Solo Floor Anchor installations require the use of a special installation tool, part number FE200937, sold separately. The tool prevents the floor anchor from rotating during installation. Refer to pages 5 and 23.

## Solo Floor Anchor Slot Position

### Recommended Installation:

It is essential that the direction of the slot on each Solo Floor Anchor is positioned facing the vehicle sidewall, as shown above.

**NOTE:** The recommended installation, when properly done, will comply with 49 CFR Part 571.222 (FMVSS 222) for School Bus Passenger Seating and Crash Protection and 30mph/20g requirements. These recommendations are not all inclusive and may not cover every system installation. Each Wheelchair Tie-Down and Occupant Restraint System shall be carefully reviewed and tested by the installer to provide maximum protection for the end user. Refer to applicable ADA, CSA, FMVSS, ISO, SAE and vehicle manufacturers standards for additional information.