

# Personal Fall Arrest Protection

For Existing Ladder Systems

**CST**

**AQUASTORE®**

**TecTank™**

**HARVESTORE®**

CST offers a cable safety system for retrofitting any existing ladder to meet the new OSHA regulations.

The cable safety system includes:

- Top bracket assembly with shock absorber
- Bottom lifeline tensioner
- Galvanized steel cable lifeline
- Cable guides (as needed)
- Cable sleeve

Benefits of the cable safety system:

- The continuous ladder climbing system provides uninterrupted fall protection.
- The cable sleeve provides a “dual shock-absorbing system” to further reduce fall forces, protecting the system and ladder from damage. Once a fall occurs, the deployed shock absorber indicates the unit must be taken out of service.

**CST can also recommend and install safety swing gates at step-off platforms and ladder step throughs.**

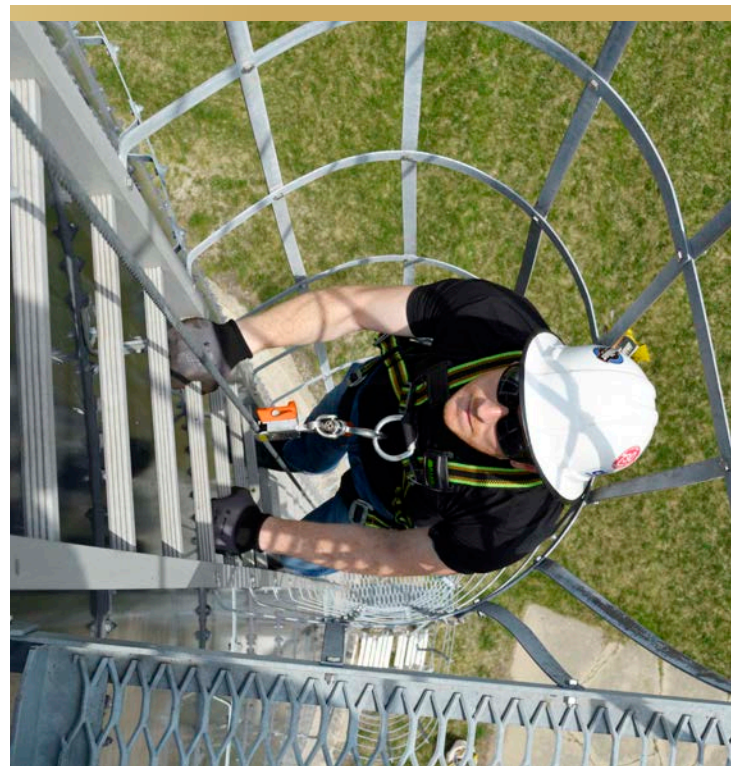


» TECHNICAL DATA SHEET

## FAQ's Regarding OSHA Final Ruling on 29 CFR 1910, Subpart D - Walking - Working Surfaces:

OSHA is phasing out the use of ladder cages as fall protection over a period of nearly 20 years among other significant changes made in 2017 to 29 CFR 1920, Subpart D, Walking-Working Surfaces.

1. Fixed ladders that extend more than 24-foot above a lower level and installed prior to 11/19/2018 must be equipped with a ladder safety system (i.e. personal fall arrest system and/or a cage).
2. Each fixed ladder installed on and after 11/19/2018 must be equipped with a ladder safety system (a cage is no longer considered as a ladder safety system).
3. When a fixed ladder or cage, or any portion thereof, is replaced, a personal fall arrest system is installed in at least the section where the replacement is located.
4. On and after 11/18/2036, all fixed ladders that extend more than 24-foot are to be equipped with a personal fall arrest system.
5. A cage can be used in combination with a personal fall arrest system provided the cage does not interfere with the operation of the system.
6. Openings that serve as points of access for ladders must have a self-closing gate that slides or swings away from the opening or the opening is offset to prevent an employee from walking or falling through the opening.



For more information about upgrading your ladders to the new OSHA regulations for 2018, call the experts at 844-44-TANKS or visit us online at [cstindustries.com](http://cstindustries.com).

It is the owner's responsibility to review and become familiar with OSHA Subpart D and any other applicable industry standards. Most design standards will specify a minimum load requirement that each ladder and platform should be designed to meet or exceed. CST cannot guarantee that your ladder and platform meet the minimum structural requirements of all applicable standards, and recommend a 3rd party structural review if unsure of the ladder and platforms capacity.

# » Get a FREE QUOTE on Upgrading Your Fixed Ladder Systems

1. Measure the height from the top rung to the lowest rung of the straight run of ladder and enter into **Box A**. A ladder run is any continuous section of ladder.
2. Measure the approximate rung diameter (if round) or the rung width/height, whichever is greater (if not square) and enter into **Box B**. The rung clamps can accommodate rung diameters ranging from 3/4-inch to 1-1/4-inches.
3. Enter in **Box C** whether the top of the ladder terminates at a step-off (SO) platform to the side of the ladder or a step-through (ST) to a platform.
  - A.) CST provides an anchorage connector for secondary tie off with each top bracket assembly.
  - B.) CST provides a 7-foot top bracket assembly at a step-through (ST) for easier transition, and the standard 3-foot assembly at step-off platform.
4. Enter into **Box D** whether a safety-swing gate is required at the platform and the opening width in **Box E**.
5. Indicate the quantity of cable sleeves in **Box F**; choose a minimum of one and select additional sleeves for each additional climber that may be ascending the ladder during the same period. CST recommends only one climber per continuous ladder section.
6. Indicate the quantity of harnesses in **Box G**, a harness for each sleeve indicated in **Box E** is recommended.
  - A.) It is recommended the harness offered by CST and proven to be compatible for use with ladder safety systems be used with the cable safety system.
  - B.) Only harnesses that meet ANSI Z359.11 and include a front D-ring can be used with ladder safety systems. The harness offered by CST includes both front and back D-rings. Only use Personal SRL's (pSRL) or lanyards that have a maximum arrest force of 1,350 lbs and meet OSHA 1910.66/12926.502 and ANSI Z359.11 (pSRL) and ANSI Z359.13 with this ladder safety system.

7. Repeat steps 1 through 6 for each straight run of ladder.

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Job Name: \_\_\_\_\_

Request Installation by CST: \_\_\_\_\_

Today's Date: \_\_\_\_\_

Date Required: \_\_\_\_\_

Run 1		
	Box	Description
A		Continuous Ladder Section Length
B		Rung Diameter (if round) or Width / Height (If rectangular, whichever is greatest)
C		Top Ladder Termination Type (SO or ST)
D		Unguarded Ladder Opening requiring a Swing Gate (Y/N) (See Figure 2)
E		If Box D is marked Yes, then enter the opening width
F		Quantity of Cable Sleeves required (minimum of 1) (See Figure 2 and 3)
G		Quantity of Universal Harnesses requires (1 per sleeve is recommended)

Run 2		
	Box	Description
A		Continuous Ladder Section Length
B		Rung Diameter (if round) or Width / Height (If rectangular, whichever is greatest)
C		Top Ladder Termination Type (SO or ST)
D		Unguarded Ladder Opening requiring a Swing Gate (Y/N) (See Figure 2)
E		If Box D is marked Yes, then enter the opening width

Run 3		
	Box	Description
A		Continuous Ladder Section Length
B		Rung Diameter (if round) or Width / Height (If rectangular, whichever is greatest)
C		Top Ladder Termination Type (SO or ST)
D		Unguarded Ladder Opening requiring a Swing Gate (Y/N) (See Figure 2)
E		If Box D is marked Yes, then enter the opening width

Run 4		
	Box	Description
A		Continuous Ladder Section Length
B		Rung Diameter (if round) or Width / Height (If rectangular, whichever is greatest)
C		Top Ladder Termination Type (SO or ST)
D		Unguarded Ladder Opening requiring a Swing Gate (Y/N) (See Figure 2)
E		If Box D is marked Yes, then enter the opening width

Run 5		
	Box	Description
A		Continuous Ladder Section Length
B		Rung Diameter (if round) or Width / Height (If rectangular, whichever is greatest)
C		Top Ladder Termination Type (SO or ST)
D		Unguarded Ladder Opening requiring a Swing Gate (Y/N) (See Figure 2)
E		If Box D is marked Yes, then enter the opening width

» Reference the Below Figures to Complete the FREE QUOTE Form



» Multiple Ladder Runs Shown on Glass-Fused-To-Steel Tank



» Multiple Ladder Runs Shown on Epoxy Coated Tank



» Safety Gate

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**CST**