

Hands-On

# Authorized Tower Climber and Rescue



## Course Description

This Hands-On course meets requirements set by OSHA and NATE for the Tower Industry.

The main objective of this Hands-On Authorized Climber and Rescue Training course is to prepare individuals with little or no experience to be able to safely climb and work on various types and sizes of towers. This course assures that the student will develop the knowledge base necessary to safely climb and work on towers, as well as the practical skill necessary to be able to safely perform his or her duty.

Employers are required to provide expedient rescue for employees that work at heights. Our tower climber and rescue courses empower tower climbers and professional rescuers with the tools and knowledge to rescue incapacitated personnel efficiently and safely. This Hands-On course begins with a review of modern fall protection and climbing techniques for towers, and then builds on these techniques with simple and effective rescue procedures.

Low student-to-instructor ratios and appropriate splits allow us to customize the curriculum to individual/corporate needs.

Designed in cooperation with the Regional OSHA office, this course is designed to meet and exceed all of the recommended training called for in the NATE (National Association of Tower Erectors) guidelines for Qualified Climbers. In order to successfully complete the course, the student must attain a score of 100 on the written final, and must demonstrate proper techniques in all competencies included in the practical skill sets.

Upon completion of this course students will receive a certificate of completion and will state 24 hours of Hands-On Training, CECs, and will also receive a Certified Tower Climber & Rescue ID Card, to provide to site supervisors, contractors, inspectors, and anyone that requires proof of certification.

The courses are taught by our BTS Industry Experts, and our courses have been recognized and approved by both OSHA and NATE. In addition, BTS is an approved training provider for Bechtel, General Dynamics, CalTrans, GSA, CN Railway, American Tower Corporation, Black and Veatch, Verizon, TDS Telecom, AT&T, Frontier, Lumen, Windstream, CenturyLink, Southern California Edison, FPL and our U.S. Military Branches many additional Government and City municipalities.



## Students Will Learn

- **Regulatory Safety Standards**
- **Equipment Safety Inspections**
- **Fall Protection Requirements**
- **Ropes, Knots and Lifelines**
- **Engineering Controls for Safety**
- **Work Practice Controls for Safety**
- **Climbing Techniques**
- **Introduction to Tower Rescues**
- **Competency Based Climbing Skills Assessments**
- **Review Fall Protection and Work Positioning Systems**
- **Implications of Harness-Induced Suspension Trauma**
- **Rescue Protocol and Decisions**
- **Anchoring Methods**
- **Back-Up Safety Systems**
- **Equipment Use and Inspection**
- **Transferring the Patient onto The Rescue System**
- **Ground and Tower-Controlled Systems**
- **Guidelines and Tag-Lines For Controlling Patient Descent**
- **Descending a Tower Using a Main Working and Safety Back-Up Line**
- **Raising the Patient onto Rescuers Descending System**
- **Descending with Patient**
- **And More...**

## Prerequisites

None.

## Course Outline

1. Describe situations where there would be a need for self and/or assisted rescues.
2. Define and describe Full Restraint Systems
3. Define and describe Fall Arrest Systems
4. Describe the use of all Hardware and Harnesss used by the AHJ
5. Tie and define the uses of the following knots and hitches
  - Figure Eight
  - Figure Eight on a Bight
  - Figure Eight Follow Through
  - Double Loop Figure Eight
  - Figure Eight Bend
  - Barrel Knot
  - Butterfly Knot
  - Double and Triple Fisherman

- Prusik (Two and Three Wrap)
- Tensionless Hitch
- Load Release Hitch
- Water Knot
- Square Knot

6. Tie and describe the uses of the following Hasty Harnesses

- Swiss Seat
- Modified Diaper
- Shoe Lace

7. Describe what creates forces on anchors and how they can be magnified or reduced

8. Define the purposes of Directionals

9. Describe how rope and/or webbing are employed in anchor systems

10. List suitable and unsuitable anchor points with the following areas:

- Buildings
- Vehicles
- Environmental

11. Describe circumstances where multiple anchors are needed

12. Describe the concept of load sharing/self equalizing anchors

13. Describe and demonstrate proper climbing techniques

14. Describe the AHJ and local policy for emergency rescue

15. Describe the AHJ and local Accident Reporting and Investigation process

16. Describe the AHJ and the local Incident Command Structure for handling and emergency

17. And more...

## **Delivery Method**

Instructor-Led with numerous Hands-On labs and exercises.

## **Equipment Requirements**

(This apply's to our hands-on courses only)

Below is the equipment you will be required to provide to complete this training

Head Protection with chin strap

Eye protection

Class 3 Harness with positioning D ring in front and fall arrest D ring on back at minimum

Fall Arrest Lanyards (Y version or 2 individual ones)

Work positioning lanyard

Safety cable grab

Hand Protection

Proper foot wear for climbing (steel toed boots)

The class will include the use a Fisk device during the practical phase of class. If your company uses any additional devices, please bring them with you and we will incorporate the device into your training to maximize your learning experience.

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

## Course Length

3 Days