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REDUCE COST

FASTEST ROUTE TO TRAINING COMPLIANCE

ENSURE QUALITY

WHY ENSA?
The most comprehensive safety training company in wind power.

TRAIN LOCALLY

MOBILE TRAINING TOWER

THIRD PARTY CERTIFIED
ISO 9001
Wind power generation is a global industry, and safety is the number one priority for companies operating within this industry. The global Wind Organization (GWO) is a non-profit organization founded by leading turbine manufacturers and owner/operators, with the goal of creating a safer, more productive workplace.
GWO1005 COURSE DESCRIPTION

The GWO Basic Safety Training program (GWO-BST) was created as the safety standard for those working at height in the wind industry. It is globally recognized and ensures that any GWO-BST certificate holder has demonstrated competence and proficiency in the following areas:

- GWO1002 Work at Height
- GWO2002 Medic First Aid
- GWO101 Fire Awareness
- GWO102 Manual Handling
Best in class.

Enhance your safety culture.

GWO1002

WORK AT HEIGHT

Industry recognized Global Wind Organization Basic Safety Training is designed to provide personnel with the basic skills that will enable them to work safely at height in the wind energy industry and to meet emergency response training requirements.
**GWO1002 COURSE DESCRIPTION**

This two-day training course (one of four GWO BST modules) focuses on the access and egress conditions of a wind turbine environment. Following the Global Wind Organizations lesson plan for working at heights, participants receive the necessary knowledge and skills through theory and practical exercises to use PPE, perform work safely at height, and complete basic education and rescues at height.

**Objectives**

- **A** Demonstrate knowledge of hazards and risks associated with working at height, specific to the environment.
- **B** Demonstrate understanding of current national legislation regarding work at heights.
- **C** Demonstrate correct identification of PPE (including identification of all legislated labeling and markings).
- **D** Demonstrate knowledge and skills necessary to correctly inspect, maintain, store, and don the relevant PPE.
- **E** Demonstrate the first principles (correct use) of the relevant PPE, including identification of correct anchor points and correct ladder conduct.
- **F** Demonstrate the correct use on evacuation devices.
- **G** Know how to approach rescue situations in wind turbines and use rescue equipment efficiently.

**Prerequisites**

There are no prerequisites for this course.

Students are evaluated in accordance with GWO Training Provider main objectives for work at height. All training is conducted in accordance with ANSI Z490.1 Accepted Practices and Criteria for Health, Safety, and Environmental Training.

<table>
<thead>
<tr>
<th>PARTICULARS</th>
<th>Duration of Training</th>
<th>Student-to-Instructor Ratio</th>
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<td>Duration of Training</td>
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<td>Student-to-Instructor</td>
<td>2:1 Theory</td>
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<tr>
<td>Instruction Ratio</td>
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<tr>
<td>Training Compliance</td>
<td>OSHA 1926 &amp; 1910 Regulations</td>
<td></td>
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<tr>
<td></td>
<td>ANSI Z359 Standards</td>
<td></td>
</tr>
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<td></td>
</tr>
<tr>
<td>Refresher</td>
<td>6 hours</td>
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</tbody>
</table>
Industry recognized Global Wind Organization Basic Safety Training is designed to provide personnel with the knowledge skills and confidence to first aid.

Be the first responder.
GWO2002 COURSE DESCRIPTION

This two day training course follows the Global Wind Organization’s lesson plan for administering safe and effective first aid in a wind turbine environment that will ensure participants have an understanding of general health and safety responsibilities of employers and employees, incident, injury, and illness detection and mitigation, hazards and risks in the workplace, and emergency first aid procedures and safety instructions.

Objectives

A. Demonstrate understanding and importance of carrying out First Aid in a safe and sound manner, in accordance with legislative requirements.

B. Identify and explain normal function, signs and symptoms of serious or minor injuries and illness.

C. Demonstrate understanding and correct order of management in an emergency situation in a wind turbine environment.

D. Demonstrate lifesaving First Aid within primary assessment principles (ABC’s).

E. Demonstrate the correct use of an Automatic External Defibrillator (AED).

F. Demonstrate correct use of First Aid under secondary assessment principles.

G. Demonstrate correct use of First Aid equipment within First Aid scenarios.

Prerequisites

There are no prerequisites for this course.

### PARTICULARS

<table>
<thead>
<tr>
<th>PARTICULARS</th>
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<tbody>
<tr>
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<td>GWO/BST Current Version</td>
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<tr>
<td>Refresher</td>
<td>8 hours</td>
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</table>
Global Wind Organization Basic Safety Training participants will possess an awareness of hazards encountered when working within the wind industry and how to control and mitigate these hazards.

Fight fire with fire.
GWO101 COURSE DESCRIPTION

The aim of this four hour training course is to give participants the basic knowledge and skills to prevent fires, conduct initial and appropriate judgment when evaluating a fire, manage evacuation of personnel to ensure all are safely evacuated and accounted for and, if it is to be judged safe, to efficiently extinguish an initial fire using basic hand held firefighting equipment.

Objectives

A. Demonstrate knowledge in the development and spread of fire.
B. Demonstrate knowledge of the causes of fires in wind turbines and the danger they relate.
C. Identify any sign of a fire in a wind turbine environment.
D. Demonstrate knowledge of the contingency plans in a wind turbine environment, including smoke detection and emergency escape procedures.
E. Demonstrate correct actions on discovering and extinguishing a fire, including correct operation of firefighting equipment.

Prerequisites

Students are evaluated in accordance with GWO Training Provider main objectives for work at height. All training in conducted in accordance with ANSI Z490.1 Accepted Practices and Criteria for Health, Safety and Environmental Training.

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<thead>
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<td></td>
<td>NFPA 10 Standards</td>
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<td></td>
<td>GWO BST Current Version</td>
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</table>
Global Wind Organization Basic Safety Training within Manual Handling focuses on the practical skills required for safe manual handling for operation within a restricted area of movement found within a wind turbine environment.

Better ergonomics.

Reduce loss time injuries.
The aims of this four hour training course is to give participants awareness through theoretical and practical training to encourage positive manual handling behavior and perform manual handling activities in a safe manner in the wind turbine industry ad environment.

Objectives

A. Demonstrate understanding of the importance of carrying out work duties in a safe and sound manner in accordance with the legislative requirements.

B. Identify aspects of job tasks that could increase a worker’s risk of developing muscular/skeletal injuries.

C. Demonstrate understanding of the safe practice of Manual Handling, including the correct handling of equipment.

D. Identify signs and symptoms of injuries related to poor Manual Handling techniques and have knowledge of reporting methods.


F. Demonstrate Manual Handling risk reduction techniques.

Prerequisites

There are no prerequisites for this course.

Students are evaluated in accordance with GWO Training Provider main objectives for work at height. All training in conducted in accordance with ANSI Z490.1 Accepted Practices and Criteria for Health, Safety and Environmental Training.
Wind turbines pose a very specialized work environment where wind technicians are subjected daily to unique and challenging tasks within vertical or confined space arenas. All wind technicians must understand the hazards and control or eliminate potential risks that under a normal industry setting would never exist.

The hazards and risks wind technicians face range from working in very small teams at isolated locations through carrying out complex and involved manual handling tasks 300 ft. in elevation inside a permit required confined space, and as such prevention and preparation are key elements within this very specialized work environment.

Enhance your safety culture.
BUNDLED 3
COURSE DESCRIPTION

ENSA’s Bundled 3 is an established and trusted training program specific to the development of safe access methods and rescue response procedures should an incident occur. The training is specific to wind turbine operations and comprises of three main instructional safety trainings; vertical access and rescue, trauma at height, and confined space entry and rescue.

Wind Technicians holding valid first aid/CPR/AED certification placed into this five day event where they practice to proficiency safe methods of access and specialized rescue response procedures within primary operating locations on the wind turbine.

Rescue scenarios are realistic representations of wind industry incidents and require the application of all skill sets developed and trained upon. Simply holding certification in first aid or work at height rescue is NOT the principle behind the Bundled 3 training program, methods of safe access and rescue response encompass all work and rescue safety training aspects required when working at height within hazardous locations.

Bundled 3 combines the mechanics of vertical rescue, the know-how confidence and skills necessary to conduct a permit required confined space entry and rescue and the ability to safely address medical emergencies, under a skills training evolution curriculum.

PARTICULARS

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<th>Duration of Training</th>
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<tr>
<td>OSHA 1910.151</td>
<td>ANSI Z359 Standard</td>
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<tr>
<td>ANSI Z117 Standards</td>
<td>Refresher 4 days</td>
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</table>

Note: MEDIC First Aid programs are accepted as equivalent to the AHA and ARC by many state regulatory authorities, the Department of Homeland Security United States Coast Guard, and others. MEDIC First Aid is consistent with OSHA’s best practices for first aid training programs.
1. WE1002 Work at Height - Safe Access and Rescue

During the course students are taught the dangers of working at height on a wind turbine and provided with the essential underpinning knowledge required to work and rescue safely within this environment. Training covers use of personal protective equipment for safe access and rescue at height and the command of equipment utilized within a rescue response environment.

Training also demonstrates appropriate decision making when addressing fall/rescue hazards through the adoption of preventative safety culture.

OBJECTIVES

A. Students are able to demonstrate knowledge of professional safety behavior and safety awareness.
B. Students are able to demonstrate awareness and understanding in the adherence to statutory requirements and company policies pertaining to work at height.
C. Students are able to demonstrate knowledge of fall risks within the work environment and how to implement control measures against such risks.
D. Students through practical demonstration are able to conduct correct pre-climb protocols.
E. Students are able to demonstrate the first principles of fall protection equipment, including care and maintenance.
F. Students are able to demonstrate the first principles of fall rescue equipment.
G. Students are able to demonstrate how to approach rescue situations in wind turbines.
H. Students through practical demonstration are able to effect a successful self-evacuation, ladder rescue, lowering and raising a remote casualty and rescue of another in descent.

2. TH1001 Trauma at Height

This course is designed around specific medic-related requirements and exposures particular to wind turbines and other work at height structures where working in confinement is a requirement. It affirms through practical assessment and problem solving exercises the capability of participants to safely assess an emergency situation, communicate the need for additional resources, provide needed care for life threatening conditions, and effectively manage victim movement to the ground when necessary.

OBJECTIVES

A. Site self-sufficiency when responding to trauma at height.
B. Increase ability for fast, effective emergency response.
C. Various forms of first aid in an emergency situation.
D. Implement a rescue procedure effectively within ICS protocol.

TRAUMA SUBJECT MATTER FOCI

- Bleeding and control of shock
- Crushing/amputation injury
- Heat exhaustion/heat stroke
- Medical emergency - heart attack
- Chemical overexposure
- Hypothermia/heat stroke
- Suspension trauma
- Head, neck and spinal injury
- Strained knee/ankle - slip, trip fall
- Electric shock with burns
- Back injury – overexertion
- Fall from height – multiple impact injuries

3. CSER2002 Confined Space Entry & Rescue

This training course caters specifically to the confined space entry and rescue requirements for operating in both permit required and restricted space. When available the training will cover the written site specific confined space entry program, turbine specific hazard assessments, entry permits and safe work procedures.

OBJECTIVES

A. Students are able to demonstrate knowledge in defining a confined space, types of confined space permits, and the roles and responsibilities to enter a confined space
B. Students are able to demonstrate knowledge in confined space procedures and documentation.
C. Students are able to demonstrate knowledge in identifying the operation and care of confined space entry and rescue equipment, practical entry skills, and the performance of practice rescues.
Designed around the specific requirements of the wind industry, this ENSA training course delivers the foundational training for technicians who work at height within construction or general industry on wind turbines.
WE1002 COURSE DESCRIPTION

During the course students are taught the hazards and risks of working at height on a wind turbine and provided with the essential underpinning knowledge required to work safely within this environment. Training covers use of personal protective equipment for working safely at height and fall rescue equipment for personal escape or casualty rescue scenarios.

Training also demonstrates appropriate decision making when addressing fall hazards through the adoption of preventative safety culture.

This course covers rescue Types 1, 2, 3 and 4 as defined by the Work at Height Safety Association (WAHSA).

1. Lowering a remote casualty
2. Raising a remote casualty
3. Self-evacuation by descent
4. Rescuing another in descent

Objectives

A. Establish the importance of a culture of prevention.
B. Establish awareness and adherence to statutory requirements, industry standards, and company policies.
C. Identify fall risks of the work environment and conduct pre-climb protocol.
D. Demonstrate the first principles of fall protection equipment, including care and maintenance.
E. Demonstrate the first principles of fall rescue equipment.
F. Effect a successful self-evacuation, ladder rescue, lowering & raising a remote casualty and rescue of another in descent.

Prerequisites

There are no prerequisites for this course.

PARTICULARS

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<td>Training Compliance</td>
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<tr>
<td>Refresher</td>
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</tbody>
</table>
This course delivers foundational training for technicians who work at height within the wind energy industry and who need to gain a command of the issues surrounding access to wind turbines using personal fall protection and fall rescue equipment. During the course, students are taught the hazards and risks related to work-at-height on wind turbines. They are provided with the knowledge to recognize and control job site hazards and to implement safe access and basic rescue techniques.
WE1002-MET
COURSE DESCRIPTION

This two-day training course focuses on the necessary foundational knowledge within work at height fall protection and rescue equipment and the need to fully understand and identify the potential risks and hazards associated with conducting work on meteorological (MET) towers on wind farms. Delegates will be instructed on personal fall protection equipment, fall arrest systems, and the means of emergency escape and rescue essentials to MET tower safe access.

Objectives

WE1002-MET is an advanced tower climber training focusing on hazard assessment and risk mitigation strategies specific to safe access and rescue planning. All students are expected to participate in practical work at height and rescue at height scenarios.

A. Establish the importance of a culture of prevention.
B. Establish awareness and adherence to statutory requirements, industry standards, and company policies.
C. Identify fall risks and hazards unique to the work environment on a MET tower.
D. Demonstrate the first principles of fall protection and rescue equipment.
E. Demonstrate a successful evacuation, rescue in descent outside the MET tower, rescue in descent inside the tower, and suspend pick-off rescue.

Prerequisites

WE1002 or equivalent.

PARTICULARS

<table>
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<tr>
<th>Duration of Training</th>
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<tbody>
<tr>
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<td>Refresher</td>
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</tr>
<tr>
<td>Certification</td>
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OSHA 1926 Subpart M
OSHA 1910.157 Regulations
ANSI Z359 Standards
This course is an enhancement of the pre requisite standard American or Canadian Red Cross certification (or other acceptable curriculums) and will prepare students to apply information from previous first aid and CPR/AED training to emergency situations that involve victim care at heights. This is particularly important when responding Emergency Medical Services may be delayed by long travel distances, challenging terrain, and limited by lack of training to provide advanced medical care in elevated work spaces.
Prerequisites

SUGGESTED

- CPR/AED training
- Basic first aid

Required for personnel who are expected to respond to incidences of serious traumatic injuries and medical emergencies at height that could possibly occur in wind turbines.

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<tbody>
<tr>
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<td>American and Canadian Red Cross standard first aid and emergency care or multimedia standard first aid courses and will satisfy the training requirements of 40 CFR 1910.151 and ANSI Z490.1-2009</td>
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<td>ANSI Z359 Standards</td>
<td></td>
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<tr>
<td>Refresher</td>
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</table>

Note: Students must be medically and physically fit with a desire to work at heights. The training environment may require the use of specialized access methods such as those employed within suspension and rope access practices. These practices may be utilized as effective safety tools within the delivery of this program. They are not to be considered trained upon within this program.

Objectives

A. Site self-sufficiency when responding to trauma at height.
B. Increased ability for fast effective response.
C. Rendering various forms of first aid in an emergency situation.
D. Implement a rescue procedure effectively within ICS protocol.

TRAUMA SUBJECT MATTER FOCI

- Bleeding and control of shock
- Crushing/amputation injury
- Heat exhaustion/heat stroke
- Medical emergency - heart attack
- Chemical overexposure
- Hypothermia/frostbite
- Suspension trauma
- Head, neck and spinal injury
- Strained knee/ankle - slip, trip fall
- Electric shock with burns
- Back injury – overexertion
- Fall from height – multiple impact injuries

“T’m a big fan and so is the Tower Climbing Grease Monkeys. I’ve always felt welcomed and have learned skills that are relatable to my industry. I know that the ENSA team cares about my safety and the safety all of the men and woman who work at heights. I consider the ENSA team apart of the family.”

- Neal Gyngard, Tower Climbing Grease Monkeys
The challenge of confined spaces within wind turbines is widely recognized by regulatory agencies, manufacturers and trade associations alike. The simple utility of scale alone presents hazards and challenges when working inside these structures.
CSER2002 COURSE DESCRIPTION

Compliance under OSHA or OHSA (Canada) involve permit requirements to managerially assist in the necessary controls for exposure to hazards through isolation, elimination or control procedures. This training course caters specifically to the confined space entry and rescue requirements for operating in both permit required and restricted space. When available the training will cover the written site-specific confined space entry program, turbine specific hazard assessments, entry permits and safe work procedures.

The exercises presented in this course are a combination of classroom discussion and demonstration scenarios, major equipment application scenarios done in controlled surroundings, and advanced skill application scenarios performed at height in identified confined or restricted spaces of wind turbines. Each scenario evaluates site safety and personal safety considerations, with a detailed assessment of persons operating within confined space entry teams or performing the skills needed as a member of a confined space rescue team. Rescue scenarios from blade entry, hub & nose cone entry, basement entry and in some cases a nacelle restriction will be practiced to proficiency.

Objectives

A. Define a confined space, types of confined space permits, and the roles and responsibilities to enter a confined space.
B. Navigate confined space procedures and documentation.
C. Identify fall risks of the work environment and conduct pre-climb protocol.
D. Demonstrate knowledge in identifying the operation and care of confined space entry and rescue, practical entry skills, and the performance of practice rescues.

Prerequisites

WE1001 Safe Access & Rescue (or equivalent) is required as a prerequisite to confined space training.

PARTICULARS

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<tr>
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<tbody>
<tr>
<td>Duration of Training</td>
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<td>Student-to-Instructor Ratio</td>
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<tr>
<td>Training Compliance</td>
<td>OSHA 1926 Subpart M</td>
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<td>ANSI Z359 Standards</td>
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</table>
Climbing and safely accessing a MW-class wind turbine is a demanding activity requiring education and training in safety from all involved. Accessing a work environment situated 300ft. in elevation where often the only access is a vertical ladder climb, necessitates basic understanding of safety requirements and professional conduct demanded by such an environment.

Keep everyone safe.
WE0001 COURSE DESCRIPTION

This one day training course focuses on the necessary underpinning knowledge within work at height fall protection and fall rescue equipment and the need to fully understand and identify the potential hazards associated with the task. Delegates will be instructed upon personal fall protection equipment, fall arrest systems and the means of emergency escape essential under Wind Turbine safe access.

Objectives

A. Establish the importance within the culture of prevention.
B. Establish awareness and adherence to statutory requirements and company policy.
C. Identify fall risks within the work environment and conduct pre-climb protocol.
D. Understand and demonstrate the first principles of personal fall protection equipment including care and maintenance.
E. Understand and demonstrate the first principles of use of fall protection systems (ladder safe climb, identified anchors, work position and suspension mitigation).
F. Demonstrate safe access requirements while adhering to supervisory requirements.
G. Demonstrating awareness in emergency escape under supervision.

Prerequisites

There are no prerequisites for this course.

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<tr>
<th>PARTICULARS</th>
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<tbody>
<tr>
<td>Duration of Training</td>
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<td>Training Compliance</td>
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<td>Refresher</td>
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This course is intended to train and educate authorized persons in necessary safe access and rescue protocol for the execution of work at height for temporary suspended platform work on wind turbines.
SUS2001 COURSE DESCRIPTION

Working on temporary suspended platforms that utilize long line rigging requirements (rigging systems greater than 60 meters) poses interesting challenges for the wind industry that can prove inherently dangerous due to the rigors of the task and possible changes within adverse conditions. To prepare for this challenging work environment, training of authorized users to affect all safe access, rigging and rescue activities in the safest possible manner is paramount.

Upon successful completion of this one-day training the candidate will hold the skills and knowledge necessary to confidently identify and control hazards specific to work at height from temporary suspended access platforms, identify rigging/anchor strengths and weaknesses pertinent to single hoist platform, fall protection and fall rescue systems utilized on wind turbines.

Objectives

A Demonstration of practical skill evolutions specific to suspended platform safe rigging (single hoist platform systems).

B Demonstrate leadership within pre-lift safety protocol and hazard mitigation procedures (pre-climb/pre-lift).

C Demonstrate up tower anchorage rigging (platform and fall arrest system).

D Demonstrate competency in site management of a written fall protection plan.

E Demonstrate proficiency within all vertical rescue skill evolutions including: assisted evacuation, rescue from the suspended platform, rescue releasable anchor and rescue pick off (rescue from suspension w/ rescuer in descent).

B Rescue team development and requirements - up tower & suspended platform.

C Demonstrate Rescue Post incident protocol (debrief / investigation).

Prerequisites

WE1002 or equivalent.

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<th>PARTICULARS</th>
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<tr>
<td>Duration of Training</td>
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<td>Certification</td>
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**AUTHORIZED INSTRUCTOR PROGRAM**

**Work at Height Initial 5-day**

The AIP certificate Issuance Program is ENSA North America’s managed training delivery program designed to assist corporate industry in the implementation of an in-house training curriculum fulfilling industry best practice.

Instructor Candidates are trained to deliver scenario-based instruction to their end users under a combination of classroom discussion and demonstration scenarios, major equipment application scenarios (foundation skill evolutions) done in controlled surroundings, and advanced skill application scenarios performed at height from multiple levels of work at height structure.

The AIP training outline consists of receiving the end user training (day one and two) that is to be delivered by the instructor. Day three and four the instructor received training in class requirements and administration, classroom presentation delivery, practical scenario instructor requirements, and student safety procedures and protocol. Day five is assessment of classroom presentation and practical scenario instruction (including backup safety systems).

The result is the successful development of a company’s work at height, rescue at height instructor who is competent to instruct a specific course utilizing a specific rescue device.

**Prerequisites**

The initial 5-day AIP is an ASTM E2659 compliant certificate program offered to persons with the following minimum requirements:

- A current and recognized 16 hour Safety Training for Work and Rescue at Height certificate.
- Two-year field experience involving work at height.
- Written proof of employer sponsorship.

Alternate AIP Courses available:

- 40-hour TC1002 Authorized Climber and Rescuer.

Additional AIP Courses available upon completion of Initial Work at Height:

- 40-hour TH1001 Trauma at Height.
- 40-hour CSER2002 Confined Space Entry and Rescue (nonIDLH).

**CORPORATE INSTRUCTOR PROGRAM**

**Work at Height Initial 10-day**

To complete a credential as an ENSA training instructor that is meaningful to the workplace and is specific to the industrial work at height environment, it is essential the candidate achieve a strong competent foundation within the necessary skills to confidently train, educate, and ensure the safety of others whose careers depend on them to access heights in a professional manner and if required carry out a successful rescue when working at height.

The ENSA Initial 10-day Corporate Instructor Program (CIP) is a comprehensive training solution that shapes the development of a work at height training instructor operating within a company whose modus operandi extends beyond in-house training.

The complex nature of vertical rescue with its copious offering of descent devices, rigging solutions and specialized work environments demands trainer competence to meet the unique solutions a client may be faced with under work environment, employee experience, and budgetary actualities.

<table>
<thead>
<tr>
<th>PARTICULARS</th>
<th>80 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of Training</td>
<td>80 hours</td>
</tr>
<tr>
<td>Student-to-Instructor Ratio</td>
<td>4:1</td>
</tr>
<tr>
<td>Training Compliance</td>
<td>ANSI Z359 Standards</td>
</tr>
<tr>
<td>Certification</td>
<td>Annual (refresher)</td>
</tr>
</tbody>
</table>

**Prerequisites**

The initial 10-day CIP is an ASTM E2659 compliant certificate program offered to persons with the following minimum requirements:

- A current and recognized 16 hour Safety Training for Work and Rescue at Height certificate specific to the ANSI Z359.4 descent devices or equivalent.
- Two-year field experience involving work at height.
- Has at least 100 hours of teaching experience in general.

Alternate CIP Courses available upon completion of Initial WE1002:

- 40-hour TH1001 Trauma at Height.
- 40-hour CSER2002 Confined Space Entry and Rescue (nonIDLH).
- 40-hour TC1002 Authorized Climber and Rescuer.
- 40-hour TC2003 Competent Climber and Rescuer (both TC1002 and TC2003 are available under Initial 80-hour training).
**APE ESCAPE EVAC ONLY KIT**

The APE escAPE Assisted Rescue and Personal Escape System is designed for rescue and evacuation purposes for persons who work at heights within or on structures where an additional means of rescue or emergency egress involves the use of a Control Descent Device.

The APE escAPE Descending Device is intended to be used in conjunction with an appropriate harness, and reliable anchorage to enable a person to descend from one position to another, either on their own or assisted by another.

The Assisted Rescue components within the system additionally allow the solution of rapid rescue response if rescue incident occurs. This assisted rescue and personal escape system is third party tested and verified to ISO22159 International Standard for Personal equipment for protection against fall – Descending Devices. And third party tested and verified to ANSI Z359.4 Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components.

**KIT COMPONENTS**

**KIT BAG**
Ballistic Nylon Reinforced

**ROPE PROTECTOR**
Spectra / Ballistic Nylon

**APE ESCAPE DESCENDER**
ANSI Z359.4, ISO 22159 (current version)

**7.5MM SUPERTECHFIRE®12 STRAND HOLLOW BRAID ROPE**
Cl 1202 (current version)

**ENSA PINNED CARABINER (2)**
ANSI Z359.12, CSA Z259.12 (current version)

**BLUEWATER DYNEEMA SLING 2FT.**
6,000 lbs. (26.6 kn.) m.b.s.

**PRIMARY FEATURES**

- Micro Descent System with 540° Friction Sheave
- Stainless Brake & Pinch Axles & Slack Prevention Strut for heightened performance
- Hands free locking and panic grab brake system with ergonomically correct control handle/safety
- ENSA APEscAPE™ SupertechFire® Double Braided Hollow Technora® for high heat resistance & tensile strength (long line descent systems)

Note: This product must only be used by persons who are trained and competent in its use as part of an evacuation and assisted rescue kit.
APE ESCAPE RESCUE KIT

The APE escAPE Assisted Rescue and Personal Escape System is designed for rescue and evacuation purposes for persons who work at heights within or on structures where an additional means of rescue or emergency egress involves the use of a Control Descent Device.

The APE escAPE Descending Device is intended to be used in conjunction with an appropriate harness, and reliable anchorage to enable a person to descend from one position to another, either on their own or assisted by another.

The Assisted Rescue components within the system additionally allow the solution of rapid rescue response if rescue incident occurs. This assisted rescue and personal escape system is third party tested and verified to ISO22159 International Standard for Personal equipment for protection against fall – Descending Devices. And third party tested and verified to ANSI Z359.4 Safety Requirements for Assisted Rescue and Self-Rescue Systems, Subsystems and Components.

KIT COMPONENTS

KIT BAG
Ballistic Nylon Reinforced

ROPE PROTECTOR
Spectra / Ballistic Nylon

APE ESCAPE DESCENDER
ANSI Z359.4, ISO 22159 (current version)

7.5MM SUPERTECHFIRE®12 STRAND HOLLOW BRAID ROPE
CI 1202 (current version)

ENSA PINNED CARABINER (4)
ANSI Z359.12, CSA Z259.12 (current version)

KONG DUCK ROPE CLAMP
EN567 (current version)

PETZL OXAN CARABINER
ANSI Z359.12, CSA Z259.12 (current version)

BLUEWATER DYNEMA SLING 2FT.
6,000 lbs. (26.6 kn.) m.b.s.

BLUEWATER RHINO ANCHOR NYLON SLING
11,000 lbs. (48.9 kn.) m.b.s.

ENSA CARABINERS (2)
ANSI Z359.12, CSA Z259.12 (current version)

FIXE PULLEY
EN 12278, 5,000 lbs. (22.2 kn.)

ENSA SILVERBACK 6:1 MECHANICAL ADVANTAGE
EN 13157 (1.5 kn.) m.b.s. 1348 lbs. (6 kn.)

ENSA 42" RETRACTABLE TOOL TETHER
MaxW.L 2 lbs. (0.9 kg.)

According to: ANSI/ASSE Z359.4-2013, ISO 22159:2007
In conformity to: ANSI/ASSE Z359.7-2011, ANSI/ASSE Z359.7-2011

PRIMARY FEATURES

• Micro Descent System with 540° Friction Sheave
• Stainless Brake &Pinch Axles & Slack Prevention Strut for heightened performance
• Hands free locking and panic grab brake system with ergonomically correct control handle/safety
• ENSA APEscape™ SuperTechFire® Double Braided Hollow Technora® for high heat resistance & tensile strength (long line descent systems)

Note: This product must only be used by persons who are trained and competent in its use as part of an evacuation and assisted rescue kit.
**GORILLA GRIP**

The Gorilla Grip 3-meter adjustable lanyard is designed to be used as a part of a work positioning system for work at height. Work positioning systems are designed to support the user when working at height and when needed in a hands-free environment. The adjustable lanyard is used to connect the users full body harness to an anchorage, to hold the user in a supported work positioning stance or to prevent a person from reaching a fall arrest zone.

The Gorilla Grip Adjustable Lanyard is NOT intended for fall arrest unless fitted with a Personal Energy Absorber meeting the requirements of ANSI Z359.13 (current version) or CSA Z259.11 (current version), and must be used with a fall arrest system when carrying out work at height.

**SPECS (KERNMANTLE)**

- **ROPE DIAMETER**
  11 mm x 3 m Polyester/Nylon
- **SLEEVE**
  Abrasion Resistant Nylon
- **PANIC BRAKE**
  None
- **RATED LOAD**
  220 kg (440 lbs.)
- **CAM MATERIAL**
  Stainless steel
- **SIDE PLATES**
  Anodized aluminium
- **WEIGHT (ADJUSTER)**
  306 gm (10 oz.)
- **MIN. BREAKING STRENGTH**
  16 kn (3597 lbs.)
- **CARABINER**
  ANSI Z359.12, CAN/CSA Z259.12
- **WEIGHT**
  803 gr (1.77 lbs.)

**SPECS (ARMORTECH™)**

- **ROPE DIAMETER**
  11.5 mm x 2 m
- **PANIC BRAKE**
  None
- **RATED LOAD**
  220 kg (440 lbs.)
- **CAM MATERIAL**
  Stainless steel
- **SIDE PLATES**
  Anodized aluminium
- **WEIGHT (ADJUSTER)**
  306 gm (10 oz.)
- **MIN. BREAKING STRENGTH**
  16 kn (3597 lbs.)
- **CARABINER**
  ANSI Z359.12, CAN/CSA Z259.12
- **WEIGHT**
  803 gr (1.77 lbs.)

**PRIMARY FEATURES**

- Gorilla Grip ANSI Z359.3 2017 & Z359.7 v2017 verification (current version) as well as 358 & EN12841
- Life-safety Rope NFPA 1983 (current version)
- Squeeze style friction release regulator with heightened control lever for use in descent mode
- Monkey Paw termination knot for carabiner stability control
- Positioning at its best (white color)

Gorilla Grip is not to be used for fall arrest.
ENSAAPE
ALUMINUM
CARABINER

D-shaped/oblong carabiner with spring-hinged side that is used as a connector to hold a freely running rope.

MONKEY
KNUCKLE

The monkey knuckle is rated to hold 6000lb and each gate rated 3600lbs, front back and side per ANSI.

SPECS

PLATING
Parts are plated in accordance with CSA and ANSI Standards for fall protection hardware.

INSPECTION
Hardware parts undergo a rigorous inspection process including: Proof testing to ANSI, CSA and CE standards. 100% inspection for functionality, plating and appearance.

MARKINGS
All parts have the following markings: Part Number, Minimum tensile strength (5M, 4M), Heat Code (material and processing traceability), Manufacturer mark - CSA Logo (where applicable)/CE Standard (where applicable). For ANSI Z359.12 hardware, Gate marked with 3600 lbs. or 3.6m.

STANDARDS
Our hardware meets or exceeds: ANSI Z-359.1, CSA Z259.12, E = EN362, ANSI Z359.12 where noted.

COLOR
Black with Black Twist Lock, or Black with Silver Twist Lock

Use limitations: While the G270 fabric is designed to reduce melting in the presence of high heat/fire, it is not a flame resistant fabric and should not be used in situations justifying flame or arc flash rated protective clothing. 

Note: You are not protected if you are not connected.
ENSARWERK PANT

A very technical performance WerkPant ideally suited for protection, comfort and mobility in applications.

SPECS

COMPOSITION
69% cotton, 28% CORDURA Nylon, 3% Spandex

WEIGHT
270 GSM (grams / sq. meter) | 7.8 oz / sq. yrd

CONSTRUCTION
70D + 40D • 70D + 40D/150D

WEAVE
Rip = Stop with two-way weft stretch

TREATMENTS
Durable water resistant

PERFORMANCE TESTS
Abrasion resistance ASTM D4966: >20,000 cycles

SEAM STRENGTH
Warp 66.7-lbs, weft 64.9-lbs

TENSILE STRENGTH
Warp 168-lbs, weft 87.9-lbs

TEARING STRENGTH
Warp 6.8-lbs, weft 3.5-lbs

COLOR FASTNESS
4-5 (out of 5)

Use limitations: While the G270 fabric is designed to reduce melting in the presence of high heat/fire, it is not a flame resistant fabric and should not be used in situations justifying flame or arc flash rated protection clothing.

PRIMARY FEATURES

• Gusseted inseam, articulated knees and extended cuff
• Stretch direction for each panel is to promote a wide range of motion and structural integrity
• COATS engineered seams with Core-Spun Poly thread creates easy-flexing seams that offer limited elongation, resistance to abrasion and exceedingly high ultimate strengths
• Knee pad pockets, half dozen thigh pockets, removable/modular ‘trick’ pockets add protection and versatility
• 3M micro-prismatic reflective details are positioned to increase at-height worker visibility
• Pocket and hem protection overlays and bar-tacked belt loops further improve durability
• Garment for industrial athletes
CUSTOM TRAINING STRUCTURES

A customizable modular tower solution to suit your specific training needs.

SPECS

PLATING
Parts are plated in accordance with CSA and ANSI Standards for fall protection hardware.

INSPECTION
Hardware parts undergo a rigorous inspection process including: Proof testing to ANSI, CSA and CE standards. 100% inspection for functionality, plating and appearance.

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For ANSI Z359.12 hardware, Gate marked with 3600 lbs. or 3.6m

STANDARDS
Our hardware meets or exceeds: ANSI Z-359.1, CSA Z259.12, E - EN362, ANSI Z359.12 where noted.

COLOR
Black with Black Twist Lock, or Black with Silver Twist Lock

REACHING NEW HEIGHTS WITH ENSA.
EMPEROR TAMARIN MULTI-PURPOSE HARNESS

Designed for use as a Type I full body harness.

SPECS

SIZING
S, M, L, XL

WEIGHT
6 lb. 11 oz.

GEAR LOOPS
Carbon fiber

STANDARDS

MAX. CAPACITY
3110 lbs.

PRIMARY FEATURES

• Wide 6.25 inch anatomical waist pad for increased comfort and added back support
• Modular work/tool pouch system allows the user to customize each harness to their own arrangement
• Adjustable for variations in clothing by use of camlock buckles
• Attachment points at waist, hips, chest, back, and back
• Extra large, side positioning rings allow the user to easily make connections to safety belt
• Contoured shoulder pads included
• Contains a stab-lock buckle system

“MORE COMFORTABLE THAN YOUR DULUTH® UNDERWEAR.”
DISCLAIMERS

All ENSA North America practical training exercises are implemented under a “Skills Based Evolution Process” where the student experiences a layering approach, where a basic foundation is established and through reaffirmation and confirmation additional practical skills are applied to effectively demonstrate and apply through hands on experiences the complexities of work and rescue at height achieving success through confidence by all who participate.

Reaffirmation through testing is applied with the addition of correction to 100%. This unique philosophy in learning ensures all incorrectly answered test questions are tabled under whole group discussion to ensure maximum retention and understanding by all students.

All training programs are structured upon a pass or fail determination criteria and are in accordance with ANSI Z490.1 – 2009 Criteria for accepted practices in safety, health, and environmental training and harmonized to Z10 American National Standard — Occupational Health and Safety Management Systems.

Note: Students must be medically and physically fit with a desire to work at heights. The training environment may require the use of specialized access methods such as those employed within suspension and rope access practices. These practices may be utilized as effective safety tools within the delivery of this program. They are not to be considered trained upon within this program.