

# BelaySAFE Backup Belay Operators Manual

## Secure Your Climb: The Ultimate Backup Belay System for Enhanced Safety

### BelaySAFE

disperses the climber's weight at the anchor point, thereby allowing a relatively lighter belayer to belay a heavier climber without the use of weight bags.



#### Easy to Install

Single installation point accommodates different types of anchor points in climbing gyms

Also compatible with the traditional anchor points of older gyms

#### Friction Adjustable

The adjustable pulley wheel has four positions for the user to fine-tune the desired level of friction

The higher the position of the adjustable pulley wheel, the greater the assisted-braking forces generated to aid the belayer

#### Sturdy & Durable Frame

4mm thick powder-coated steel plates help the device

### 1.3 Patent #s:

Patent Pending: Specific patent numbers will be included upon completion of the patent registration process to protect the innovative technology and design of the BelaySAFE device.

### 1.4 CE / UIAA Certs:

The BelaySAFE device is undergoing the certification process to meet the rigorous standards set by the CE and UIAA.

- **The CE certification:** The process is anticipated to conclude by May or June of this year which will reflect compliance with European safety, health, and environmental protection standards.
- **UIAA Certification:** This certification is In progress, and expected to be finalized soon. Upon completion, this will confirm that BelaySAFE meets the International Climbing and Mountaineering Federation's standards for safety equipment.

### 1.5 Language Notice:

This manual is now available in English. Additional language translations will be produced to ensure access and understanding for a global audience. For additional information on alternative language options, please visit our website or contact Customer Support at [support@belaysafe.com](mailto:support@belaysafe.com).

**1.6 Document Version:** 2.0 | **Date:** [Insert Date Here] | BelaySAFE Backup Belay Operators Manual

*This document may be updated and revised to include the latest safety standards, operating instructions, and certification information. Users are encouraged to consult the BelaySAFE website at [www.belaysafe.com](http://www.belaysafe.com) or contact customer support to obtain the latest version of this manual.*

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## 3.0 Operational Guidelines and Safety Standards

### 3.1 Additional Icons

Icons not available in the text format but are intended to visually represent and highlight key safety and operational guidelines throughout this manual.

- **Safety First:** An icon indicating the importance of prioritizing safety by following all guidelines and instructions.
- **Read Before Use:** An icon prompting users to thoroughly read and understand the manual before operating BelaySAFE.
- **Authorized Personnel Only:** An icon denoting that only trained and authorized personnel are allowed to handle, install, and operate BelaySAFE.
- **Calibration Required:** An icon reminding users that BelaySAFE must be calibrated before its first use.

### 3.2 Warnings

#### 3.2.1 Top-Rope Belay Assist Device Functionality

The BelaySAFE Top-Rope Belay Assist Device enhances belayer and climber confidence by simply rubbing the climber's rope during the climber's descent. This mechanism gives the belayers more control over the loop, ensuring a fast and controlled descent. Proper application of the BelaySAFE Top-Rope Belay Assist Device increases climber safety and significantly reduces errors associated with human belaying.

#### 3.2.2 Secondary Safety Component

The BelaySAFE Top-Rope Belay Assist Device is designed to function as a supplementary element within a primary belay system, reinforcing overall safety.

#### 3.2.3 Compatibility with Primary Belay System

Ensure that all components of your primary belay system are compatible with the BelaySAFE device to guarantee optimal safety and functionality.

#### 3.2.4 Mandatory Training and Authorization

Before operating the BelaySAFE device, it is important that you read, understand, and comply with all safety regulations and operating instructions outlined in this manual. Installation, measurement, maintenance, maintenance and operation of BelaySAFE are tasks entirely reserved for trained and authorized personnel. Operators are primarily responsible for ensuring the safety of the climber when operating the machine. All personnel should be familiar with these instructions prior to operating the BelaySAFE. For any information, contact [support@belaysafe.com](mailto:support@belaysafe.com).

#### 3.2.5 Calibration Requirement and DANGER Notice

Calibration is mandatory prior to the initial use of the BelaySAFE device. Neglecting to follow the safety rules and operating instructions described in this manual may result in serious personal injury or death.

### 3.3 User Limitations

#### 3.3.1 Single Climber Usage

BelaySAFE is engineered for individual use, accommodating climbers within the weight range of 16 to 140kg exclusively.

### **3.3.2 Health Precautions**

Individuals with musculoskeletal or other physical conditions should seek medical advice before utilizing BelaySAFE. Consultation with a healthcare professional is recommended for those uncertain about their physical capability to engage safely in climbing activities with BelaySAFE.

## **3.4 Environmental Limitations**

### **3.4.1 Temperature and Corrosive Environments**

Exposing BelaySAFE to environments with temperatures exceeding 185°F or to corrosive conditions such as saltwater is not recommended. BelaySAFE is not intended for permanent outdoor deployment. When used outside, ensure that BelaySAFE is set up only prior to the activity and is subsequently stored or removed post-use.

### **3.4.2 Moisture Protection**

Protect the internal components of BelaySAFE from exposure to dirt, salt, and water. Avoid using the device and the rope if they are wet or suspected to be wet. Prior to use, thoroughly inspect and dry both the device and the rope to prevent unpredictable braking performance.

### **3.4.3 Electrical Safety**

Installation locations for BelaySAFE should be chosen to prevent any contact between the device or the rope and electrical sources. In that case, avoid installation near electrical sources to prevent hazards.

## **3.5 Lifespan Limitations**

### **3.5.1 Performance Variability Over Time**

The braking force exerted by BelaySAFE's descent control mechanism may increase as the rope experiences wear, diverging from its performance when new. This gradual shift in functionality is anticipated and should be considered normal.

### **3.5.2 Condition-Based Maintenance and Removal from Service**

Should a BelaySAFE unit exhibit signs of excessive wear, damage, corrosion, unusual noise, or an inability to provide adequate braking force, it must be immediately withdrawn from operation and marked as "unusable." Such units should be sent to an approved service center for evaluation and repair.

*Compliance with ANSI, CE, and OSHA standards is a foundational aspect of the design, operation, and maintenance guidelines detailed in this manual, ensuring that BelaySAFE remains a leader in climbing safety technology.*

## **4.0: Product Specifications**

This section outlines the detailed specifications of the BelaySAFE device, ensuring users and operators are fully informed of its physical attributes, load capacities, and compliance with testing and certification standards relevant to ANSI, CE, and OSHA guidelines.

### **4.1 Material Specifications**

The BelaySAFE device incorporates high-quality materials designed for durability, safety, and compliance with industry standards.

#### 4.1.1 Device Weight

- Weight: 1.5 kg (3.3 lbs.)
  - The lightweight design facilitates safety and ease of installation and handling while maintaining structural integrity.

#### 4.1.2 Housing Material

- Material: 4 mm anodized 6061 aluminum
  - This high-strength aluminum alloy provides excellent corrosion resistance and durability, extending the life of the device even on difficult mounting surfaces

#### 4.1.3 Pulley Material

- Material: One-way stainless steel
  - The pulleys are made from one-way stainless steel to provide a robust mechanism for friction management and rope guidance, ensuring reliable performance and safety. This material choice contributes to the overall longevity and performance of the device.

### 4.2 Load Specifications

BelaySAFE is designed to support climbers weighing between 16 and 140kg (35 to 308 lbs.), with safety being a top priority to accommodate a variety of users. This specification ensures that BelaySAFE can be used in a variety of environments climbing, from training to beginners to regular climbing for experienced enthusiasts.

### 4.3 Rope Specifications

The BelaySAFE device is compatible with a range of dynamic climbing ropes, accommodating varying diameters to suit different climbing scenarios.

- **Rope Diameter Compatibility:** 9.5-11 mm dynamic
  - This range ensures compatibility with most standard climbing ropes, allowing for flexibility in rope selection based on user preference and specific climbing conditions.

### 4.4 Testing and Certification

BelaySAFE equipment undergoes extensive testing to ensure it meets and exceeds the stringent standards established by ANSI, CE, and OSHA for climbing equipment safety.

**ANSI Compliance:** The device is tested for compliance with applicable ANSI standards, focusing on the specific safety requirements and performance standards of the lift equipment.

- **ANSI:** Ensures BelaySAFE's reliability and safety performance under various climbing conditions, in accordance with the American National Standards Institute's specifications for climbing safety equipment.
- **CE Certification:** Pending completion, the CE certification process ensures that BelaySAFE equipment meets EU safety, health and environmental protection requirements. This certification is proof of the quality and safety standards of the product.
- **UIAA:** Undergoing certification by the International Climbing and Climbing Association, which upon completion will certify that BelaySAFE meets the highest international safety standards for climbing equipment.
- **OSHA:** BelaySAFE's design and operating instructions comply with Occupational Safety and Health Administration regulations, ensuring that users in the United States climb at safe times.

*\*Note: The completion of CE and UIAA certifications will be updated in the manual upon finalization, ensuring the device's compliance with international safety standards is accurately reflected.\**

## 5.0: Product Diagram & Nomenclature

The BelaySAFE device combines advanced technology and safety features designed for the climbing industry. This section provides a comprehensive breakdown of the various parts of the machine, giving users a detailed understanding of its structure and function.

### 5.1 Product Diagram

A detailed diagram of the BelaySAFE device is provided here (not visually presented in text form), highlighting all the key features. This diagram serves as a visual guide for users to better understand the layout and operation of the device.

### 5.2 Nomenclature

1. **Device Housing:** Made from 4mm thick Anodized 6061 Aluminum, weighs 1.5 kg (3.3 lbs.) for robust strength while maintaining a lightweight profile. The housing ensures that the internal systems of the machine are protected from environmental and mechanical stresses.

2. **Anchorage Point:** A designated loop or fixture for attaching the device to a secure point on a climbing wall or structure.

3. **Pulley System:** The pulley material consists of high-quality one-way stainless steel, designed to facilitate smooth rope movement while preventing backflow, ensuring a secure and controlled descent for climbers.

4. **Braking Mechanism:** The core feature that differentiates BelaySAFE, providing adjustable friction for varying climber weights and rope conditions, enabling a customized and safe climbing experience.

5. **Rope Guide Channels:** Specifically engineered pathways within the device to guide the climbing rope securely through the pulleys, ensuring optimal alignment and friction application.

6. **Adjustment Knob:** A user-operable component allowing for the adjustment of friction levels to accommodate different rope diameters and climber weights, enhancing the device's versatility.

7. **Attachment Points:** Strategically placed for secure anchoring of the device to the climbing structure, these points are designed to support the load efficiently and safely.

8. **Locking Mechanism:** Ensures that the device remains securely closed during operation, protecting internal components and maintaining safety integrity.

9. **Load Indicator:** A feature designed to provide visual evidence that the machine is under load, ensuring active use during climbing activities

10. **Serial Number and Certification Labels:** Located on the equipment housing, these labels provide important information about the equipment's operating details, certification compliance, and unique identification for tracking and inspection purposes.

**11. Material Specification Tag:** A label indicating the type of material used in the machine housing, such as anodized 6061 aluminum for the housing and stainless steel for the pulleys.

**Secondary Anchor:** Secondary anchors act as additional anchor points in climbing systems, providing backup to the primary anchor for improved safety. Its function is important in preventing failure of the entire system in case of failure of the main anchor. In using a device such as BelaySAFE, a secondary anchor not only provides redundancy but also ensures that the system meets safety standards by distributing the load and reducing the risk in the event of an anchor failure or deterioration.

## 6.0 Unit Installation

The successful installation of the BelaySAFE Backup Belay Device is crucial for its optimal performance and the safety of its users. This section outlines the step-by-step process to securely install the BelaySAFE unit, excluding the rope installation, which is covered separately. Adherence to these instructions is paramount to ensure compliance with ANSI, CE, and OSHA standards.

### 6.1. Preliminary Considerations

Before performing the installation, it is important to consider the following.

1. **Location:** Identify a location directly parallel to the desired climbing route to minimize backtracking and ensure a vertical rope path.
2. **Environment:** BelaySAFE is designed primarily for indoor use. If used outdoors, make sure it is not exposed to water, direct sunlight, or extreme heat, which can compromise the integrity and functionality of the device.
3. **Structural Integrity:** The anchor point must be part of a climbing structure certified to carry loads in excess of the maximum expected strength. See EN 12572 standards for artificial climbing structures for guidance.

### 6.2 Installation Steps

#### 1. Selecting the Anchor Point:

- The anchor point should be securely fixed to the climbing wall or structure, capable of supporting at least 20kN (approximately 4500 lbs.) in the direction of the expected load to comply with safety standards.
- Ensure the anchor point allows for the device to have slight movement in all directions, facilitating proper rope alignment.
- The secondary anchor should be chosen with care, ensuring it is as reliable as the primary anchor point. It should be capable of supporting the anticipated loads and forces generated during climbing activities. The anchor point could be another solid attachment point on the climbing structure, such as a bolt hanger or a structural feature capable of withstanding significant forces.

#### 2. Attaching BelaySAFE:

- Use an approved anchorage connector (e.g., a carabiner or shackle) that meets EN 362 or equivalent standards, capable of supporting the required load.
- Connect BelaySAFE's anchorage point to the anchor using the connector, ensuring a secure and direct link without additional extenders or unnecessary equipment that could introduce slack or reduce system integrity.

#### 3. Connecting to Secondary Anchor

- To connect the BelaySAFE device to the secondary anchor, use equipment that meets or exceeds the strength of the primary anchorage system. This might include high-strength carabiners, slings, or ropes specifically designed for climbing. The equipment used should comply with relevant safety standards (e.g., UIAA, EN).
- Configuration: The secondary anchor is typically installed in a way that it does not bear the primary load but is ready to take over instantly should the primary anchor fail. This could involve setting up the anchor in parallel or in series with the primary, ensuring that the force distribution does not compromise the BelaySAFE device's functionality or safety.

#### **4. Orientation and Positioning:**

- The device should be oriented so that its pulley system aligns vertically with the climbing route. Incorrect orientation may lead to improper rope path and device functionality.
- Position BelaySAFE so that its movable parts (e.g., calibration dial, safety lock mechanism) are easily accessible for adjustments and inspections.

#### **5. Checking for Interferences:**

- After installation, manually simulate the rope path through BelaySAFE to ensure there are no points of interference with the climbing wall, holds, or other equipment that could obstruct the rope's free movement or damage the device.

#### **6. Environmental Protections:**

- If the installation is in a location with potential for moisture exposure (e.g., near swimming pools or in humid climates), additional protective measures should be considered, such as a protective cover or regular inspections for corrosion and functionality.

#### **7. Final Inspection:**

- Perform a detailed inspection of the installation, ensuring that the BelaySAFE is securely attached and oriented properly. Make sure there is no undue pressure on the device, its anchorage, or the connectors.
- Ensure that all moving parts are in good working order and that the machine shows no wear or damage that could affect its operation.

### **6.3 Post-Installation**

#### **1. Documentation:**

- Document installation information, including date, location, and any specific dimensions or specific changes made. This record is important for future maintenance, inspection and ensuring compliance.

#### **2. Operator Training:**

- Ensure that all operators are trained in the proper use, inspection, and maintenance of BelaySAFE post-installation, reinforcing the importance of adhering to the operational manual and safety standards.

#### **3. Regular Inspections:**

- Schedule regular inspections of BelaySAFE and its anchorage point as part of the facility's routine safety checks. Inspections should assess the structural integrity, wear signs, and functionality of the device and anchorage system.

### **6.4 Compliance Reminder**

- ANSI, CE, and OSHA Standards: The installation procedures outlined are designed to ensure compliance with the most stringent safety standards. Regularly review



these standards for any updates or changes that may affect the installation and use of BelaySAFE.

- **Manufacturer's Guidelines:** Always refer to the latest version of the BelaySAFE operational manual for updated installation guidelines and safety information.

The installation of BelaySAFE is a critical process that impacts the safety and functionality of the device. By following these detailed instructions and adhering to recognized safety standards, operators can ensure a safe climbing experience for all users.

## 7.0 Rope Installation & Calibration

Ensuring that the BelaySAFE device is properly set up with the correct rope and calibrated for first use is essential for the safety and efficiency of the system. This section provides clear instructions for operators and users on rope installation, differentiation between the belayer's and climber's ends of the rope, and initial calibration procedures.

### 7.1 Accepted Product Use

BelaySAFE is designed for indoor, temporary and outdoor climbing activities in a top rope climbing configuration. The height of the equipment installation can range from 5 to 20 meters, providing a variety of climbing walls and ensuring versatility in alpine training and recreational situations. It is important to ensure the safety of climbers and prolong equipment life by following operating instructions and using the BelaySAFE equipment as intended.

### 7.2 Installing Rope

#### Identifying Rope Ends:

It is important to clearly see the end of the belayer and climber's rope. This can be done by marking the string with a different colored stripe at each end or with wires at the end of a particular color. The end of the belayer should always be connected to the BelaySAFE device, while the end of the climber is connected to the climber.

#### Rope Installation Steps:

1. **Prepare the Rope:** Make sure the rope is free of knots and tangles. Select the end of the belayer and climb based on the preset symbols.
2. **Thread the Rope:** Follow the rope path indicator on the BelaySAFE device and thread the device through the end of the rope according to the illustrated instructions. Make sure that the rope passes smoothly through the pulley system without obstruction or misdirection.
3. **Secure the Rope:** When threading is complete, pull the rope through the machine to a sufficient length so that it reaches the climber and belayer without tension.

### 7.3 First-use Calibration

**Notice to Calibrate:** Before the first use of the BelaySAFE device, it is mandatory to perform a calibration procedure. This ensures that the device provides the appropriate level of friction for the climber's descent based on the rope type and environmental conditions.

#### Calibration Process:

- 1) With the rope installed, attach a weight equivalent to the lightest climber expected to use the system to the climber's end of the rope.
- 2) Elevate the weight approximately 2 meters off the ground.
- 3) Gradually release the belayer's end of the rope. If the weight descends too quickly or not at all, adjust the calibration dial on the BelaySAFE device to modify the friction until achieving a controlled descent.

## 7.4 Recommended Ropes

Dynamic loops of 9.5 to 11 mm in diameter are recommended to ensure proper and safe operation of the BelaySAFE device. These lines provide the best balance between flexibility and stability, which is essential for the BelaySAFE system to work properly.

## 7.5 Indicated Product Misuse/Usage Limitations

**Misuse of the BelaySAFE device includes, but is not limited to:**

- Using ropes outside the recommended diameter range can lead to inadequate friction and potentially unsafe descent speeds.
- Failing to clearly mark or differentiate between the belayer's and climber's ends of the rope, leading to improper installation and use.
- Overloading the device beyond the specified weight limit of 16 to 140kg, risking device failure or compromised safety.
- Ignoring the specified installation height range (5-20 meters), which could affect the device's performance and safety.

**Usage Limitations:**

- BelaySAFE should not be used in environments where it can be exposed to corrosive substances, extreme temperatures, or direct sunlight for prolonged periods.
- The device is not designed for solo climbing or lead climbing scenarios.

Following these guidelines ensures that the BelaySAFE device works as intended, providing a safe and reliable climbing experience. Users are responsible for ensuring that all users are aware of these options and comply with established restrictions on use and usage

## 8.0: Use & Care – PASSIVE MODE

### 8.1 Daily Functional Check

Before each use, a daily functional check is essential to ensure the BelaySAFE device is in optimal working condition:

- **Visual Inspection:** Check for any visible damage, wear, or corrosion on the device, especially focusing on the pulleys, safety lock mechanism, and anchorage points.
- **Operational Test:** Ensure the device operates smoothly in passive mode. The rope should run freely in the direction of belay activity but engage the braking mechanism when a force is applied in the opposite direction.
- **Friction Adjustment:** Verify that the calibration settings are appropriate for the day's conditions and the rope type being used. Adjust if necessary.

### 8.2 Care, Maintenance, & Storage

**Care and Maintenance:**

- **Cleaning:** Clean the machine regularly to remove any dirt, grime or debris that may accumulate on the moving parts or cable path. Wipe the exterior with a soft, dry cloth.
- **Lubrication:** Lubricate leaks sparingly with dry lubricant for maximum efficiency, avoiding any grease or oil that may attract dirt.
- **Inspection:** Perform a thorough monthly inspection to check for signs of excessive wear, debris, or corrosion. Replace any parts as recommended by the manufacturer.

**Storage:**

- **Environment:** Store the BelaySAFE device in a dry, cool place away from direct sunlight and extreme temperatures to prevent material degradation.

- **Positioning:** Hang or place the device in a manner that prevents stress on any one part, especially the pulleys and anchorage points.

### 8.3 Troubleshooting

#### Common issues and solutions:

- **Rope Slippage:** If the rope slips through the device in passive mode, check the calibration settings and adjust the friction. Also, inspect the rope for wear or incorrect diameter.
- **Device Not Locking:** Ensure the device is correctly installed and the rope is threaded according to the manufacturer's guidelines. Check for damage or obstruction in the rope path.
- **Unusual Noise:** Any unusual noise during operation may indicate the need for cleaning or lubrication. Check the parts of the machine for looseness or signs of wear.

### 8.4 Addition of Calibration Log Sheet

Incorporating a calibration log sheet can significantly enhance the maintenance and safety record-keeping for the BelaySAFE device:

- **Purpose:** The log sheet serves as a record of each calibration performed, including date, conditions, rope type, and any adjustments made. This documentation helps track the device's performance over time and identify any patterns that may require attention.
- **Implementation:** The log sheet should be kept in a secure place accessible to operators responsible for the device's maintenance. Ensure that entries are made consistently after each calibration.

## 9.0: Formal Inspection

The formal inspection process for BelaySAFE equipment is a critical component of ensuring its safe and efficient operation. Adherence to this procedure is paramount for compliance with ANSI, CE, and OSHA standards, ensuring that BelaySAFE remains a reliable fall protection system in climbing facilities. This section outlines the steps required for conducting annual formal inspections, derived from the manufacturer's guidelines as provided in the accompanying PowerPoint documentation.

### 9.1 Annual Inspection Overview

The annual formal inspection of BelaySAFE equipment involves a comprehensive review of its physical condition, functionality, and safety features. This inspection should be conducted by trained and authorized personnel who are familiar with BelaySAFE's operational and maintenance requirements.

### 9.2 Preparation for Inspection

- **Documentation Review:** Start by reviewing all maintenance records, previous inspections, and the manufacturer's instructions to identify any issues or concerns that may require special attention
- **Inspection Tools:** Gather necessary tools such as vernier calipers for measuring wear, torque wrenches for testing bolt tightness, and other tools specified in the manufacturer's guide

### 9.3 Inspection Procedure

### 1. Visual Inspection:

- Inspect the device cover for wear, tear, or other damage. Any damage should be documented on a record provided by the manufacturer.
- Check the rope for wear, bunching, or furring. Replace the rope if any signs of significant wear are detected.

### 2. Mechanical Functionality:

- Verify the mounting point for wear. If wear is apparent, ensure it does not exceed 10% of the base metal. This is crucial for maintaining the integrity of the anchor point.
- Test the main pulley to ensure it spins freely clockwise but does not spin anti-clockwise.
- Ensure the secondary pulley spins freely anti-clockwise but not clockwise.
- The third adjustable pulley should spin freely in both directions. This is essential for proper friction adjustment and rope management.

### 3. Lubrication and Wear:

- Remove the third pulley to inspect and grease the roller bearings and shaft/sleeve using regular automotive grease. This step ensures smooth operation and extends the life of the moving parts.
- Measure the wear on the rope guides using Vernier calipers. The minimum acceptable size is indicated in the manufacturer's documentation. If wear exceeds recommended limits, the rope guide must be retired and returned to the factory.

### 4. Safety and Compliance:

- Ensure all safety labels and markings are legible and comply with ANSI, CE, and OSHA standards. Missing or illegible characters should be replaced.
- Ensure that all modifications or repairs made to BelaySAFE equipment comply with the manufacturer's specifications and relevant safety standards.

## 9.4 Recording and Reporting

Record all observations, measurements, and actions taken during the inspection in the log sheet provided. This record is necessary to monitor the condition of the product over time and to ensure that safety standards are met.

- **Non-compliance Issues:** Clearly mark any compliance issues identified during the inspection. Plan and document corrections necessary to address these issues.
- **Certification:** Upon completion of the inspection and any necessary repairs or adjustments, certify that the BelaySAFE equipment is safe to use. This certificate must be in writing, signed by the inspector and kept with the records of the machine.

## 9.5 Post-Inspection

- **Communication:** Present survey results to all relevant stakeholders, including plant managers and operators. Ensure that any necessary repairs or changes are understood and implemented immediately.
- **Training:** Review the operation manual and training materials with staff, particularly any changes or updates that result from the inspection findings.

## 9.6 Compliance with ANSI, CE, and OSHA Standards

The standard inspection protocol for BelaySAFE equipment is designed to ensure compliance with ANSI, CE, and OSHA standards with a focus on:

- **Operational Safety:** Ensure that all parts of the BelaySAFE equipment maintain their structural integrity and are not corroded or excessively damaged.
- **Operational Safety:** To ensure proper and safe operation of the product, according to the manufacturer's specifications and safety standards.

- **Maintenance and Repair:** Implement a robust monitoring and maintenance program to identify and resolve security problems that could pose a risk to users.

## 10.0: Manufacturer's and Assembler's Details

In the context of distributing and ensuring the safety and compliance of BelaySAFE devices in the North American market, a collaborative effort between Climb Asia, the original manufacturer, and Aerial Adventure Technologies, the regional assembler, is paramount. This section delineates the responsibilities, compliance requirements, and operational manual adjustments necessary to meet ANSI, CE, and OSHA standards within North America and potentially other markets.

### 10.1 Manufacturer Details

**Climb Asia Pte Ltd** is the inventor and manufacturer of the BelaySAFE device. Their dedication to innovation and safety has resulted in a friction-adjustable fall reduction system that meets the highest standards of quality and compliance.

- Address: The Frontier, 52 Ubi Ave 3 #05-31, Singapore 408867
- Contact: [support@belaysafe.com](mailto:support@belaysafe.com)
- Website: [belaysafe.com](https://belaysafe.com), [climb-asia.com](https://climb-asia.com)

Climb Asia is responsible for manufacturing BelaySAFE devices for markets outside North America and for assembling the pulley assemblies that are shipped to Aerial Adventure Technologies for final assembly.

### 10.2 Assembler Details

**Aerial Adventure Technologies** will serve as the assembler and distributor of BelaySAFE devices in the North American market. This partnership ensures that devices are assembled according to the strict guidelines set by Climb Asia while also adhering to local compliance and safety standards.

#### Responsibilities:

- Assemble BelaySAFE devices from pulley assemblies provided by Climb Asia.
- Update device labels to include Aerial Adventure Technologies' information as the assembler.
- Ensure compliance with ANSI, CE, and OSHA standards specific to the North American market.
- Distribute BelaySAFE devices within North America and potentially other markets in the future.

### 10.3 Compliance and Labeling

To meet regulatory requirements and ensure user safety, Aerial Adventure Technologies will update BelaySAFE device labels to include both the manufacturer's and assembler's details. This dual labeling approach ensures traceability and accountability throughout the product's lifecycle.

#### Labeling Requirements:

- Include both Climb Asia and Aerial Adventure Technologies' contact information.
- Clearly state the device's compliance with ANSI, CE, and OSHA standards.
- Indicate the device's country of assembly to inform users and regulators.

### 10.4 Operations Manual Considerations

Given the dual roles of Climb Asia and Aerial Adventure Technologies in the production and distribution of BelaySAFE devices, there are specific considerations for the Operations Manual:

- **Inclusion of Assembler Information:** It is essential to include Aerial Adventure Technologies' information in the Operations Manual to provide end-users with comprehensive support and contact details.
- **Market-Specific Manuals:** There is a need for an Operations Manual tailored to the North American market to address local regulatory requirements, climatic conditions, and usage patterns. This manual should complement the global version provided by Climb Asia, with specific sections updated or added to ensure compliance and relevance to North American users.
- **Collaborative Updates:** Both Climb Asia and Aerial Adventure Technologies should collaborate on updating the Operations Manual. This ensures consistency, accuracy, and compliance with all relevant standards and regulations.

### 10.5 Future Market Expansion

As Aerial Adventure Technologies considers expanding the distribution of BelaySAFE devices beyond North America, a strategy for developing region-specific Operations Manuals must be in place. These manuals should address the unique regulatory, environmental, and operational challenges of each new market.

### 10.6 Conclusion

The partnership between Climb Asia and Aerial Adventure Technologies signifies a commitment to safety, compliance, and quality in the climbing equipment industry. By updating the Operations Manual and device labels to reflect both entities' roles, BelaySAFE devices distributed in North America and potentially other markets will meet the highest standards of safety and regulatory compliance. Continuous collaboration and communication between Climb Asia and Aerial Adventure Technologies will ensure that these standards are upheld and that users have access to the most current and relevant information.

Note to Readers:

Thank you for exploring this sample of our work.

We are honoured to have been trusted with editing this piece, ensuring that the manual aligns with specific regulatory standards.

Should you be interested in learning more about our Editing services, please don't hesitate to reach out.

Thank you,  
The Write Direction Team