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### 1. WARNING & USER INSTRUCTIONS



WORKING AT HEIGHT ACTIVITIES ARE POTENTIALLY DANGEROUS. FAILURE TO ABIDE BY THESE WARNINGS MAY RESULT IN SERIOUS INJURY OR DEATH.

There are countless ways that the Back  $Up^{\mathsf{TM}}$  could and can be used during day-to-day operations in rope access and rope rescue. Only use the recommended instructions as displayed in the images provided.

- Any improvisation of the use of the devise will not be covered in the guarantee of the product.
- The product may only be used with compatible suggested certified equipment.
- The user needs to conduct a proper risk assessment and planning prior to the use of the device.
- The physical appearance of the device will determine the life span and serviceability of the item.
- The stopping mechanism of the device can and will be affected by dirty, muddy, icy or old ropes.
- Extended use the device in an offshore environment will affect the life span of the product.
- Do not use the device in very hot or cold environments.

TIONS Ref to the temperature instructions.

- Do not expose the device to harmful chemical agents that may affect the safety or performance of the product.
   The product must be removed immediately if any doubt of the safe function of the device exist.
- Avoid using the device in electrical, thermal or chemical environments without having conducted a proper risk assessment.
- The equipment shall only be used by a person trained and competent.
- If the product is removed from use, it must not be used until a competent person confirms in writing that it is "FUNCTIONAL"
- Do not attempt to repair the product
- If the device is identified as unfit for use, the product should be destroyed
- No alteration or additions are allowed on the product without prior written consent from the manufacturer.
- All repairs will be done in accordance with the manufacturer's procedures.
- The equipment shall not be used outside its limitations, or for any purpose other than that for which it is intended
- We recommend that the equipment should be a personal issue item.
- Using the device with combinations of items or

equipment in which the safe function of any one item is affected by or interferes with the safe function of the Back Up™ will result in injury or death

 A rescue plan must be in place to deal with any emergency that could arise during the work

Before using this device, you must ensure the following:

- · Read and understand the user's guide and instructions.
- Failure to abide by these warnings may result in serious injury or death.
- The user of this system is responsible for his/ her own safety and actions

It is essential for safety that equipment is withdrawn from use immediately should:

- any doubt arise about its condition for safe use or;
- if it has been used to arrest a fall. And not used again until confirmed in writing by a competent person that it is acceptable to do so. The following medical conditions could effect the safety of the equipment in normal usage and in emergency:
- · High Blood Pressure
- Low Blood Pressure
- Epilepsy
- Hart Conditions
- Diabetes

BACK UPTM
USERGUIDE

Congratulations on acquiring your Height Safe 360™ Back up™. The Back up™ was designed and developed after years of experience performing advanced rope access operations in various circumstances.

The Back Up™ is to be used as a adjustment device for rope access purposes.

This device is accordance with Category III Personal Protective Equipment regulation 2016/425

#### 2. STANDARDS

EN 12841 Type B: 2006

### 3. FIELD OF APPLICATION

The back up is intended to reduce the risk of falling from a height while using a rope access system.

#### 4. COMPATIBILITY

This device has been designed to be used with:

the following connectors Oval Twist Lock/ Screw gate Carabineer (both the versions CE only or the version CE and ANSI are suitable): with Ø11mm, Ø13mm Altumax Enduro Access Rope.

The device can be connected anywhere along the length of the anchor line.

Release prevention mechanism. Note once the top and bottom plate has been closed it is not possible to remove the rope from the device unless the connector is being removed. Once the connection point is loaded it forces both top and bottom plates closed by means of the tapered groove.

**Placement.** The back up rope adjustment device has a unlock and locking clip that will prevent the device from sliding down the anchor line unintentionally.

A FULL BODY HARNESS IS THE ONLY ACCEPTABLE BODY HOLDING DEVICE THAT CAN BE USED IN A FALL ARREST SYSTEM.

#### 5. LIMITATIONS

The following limitations need to be taken into consideration before using a Back Up™

- Rope diameter (Rope size: 11mm-13mm). EN 1891 TYPE A
- Connector size that will be connected to the connection point of the Back  $\mbox{\rm Up}^{\rm m}.$
- Ensure that your harness has got a load bearing connection point where the Back Up™ can be connected to.
- The weight you are going to apply does not exceed the Safe Working Load (150kg) of the Back Up™. Please note that any overload may damage the anchor line.

#### WORKING LOAD

The weight applied does not exceed the the Safe Working Load: 150 kg

It is recommend that the Back Up<sup>™</sup> be connected to the front attachment point of the harness that will conform to EN 361. This can be a direct connection or by the rope lanyard that does not exceed 1m.

#### HARNESSES

The device can all so be connected to the front center waist attachment point of the harness that conforms to EN 813. The length of the rope Lanyard (from connection point on the harness to the connector to the Back Up<sup>™</sup>) that the Back Up<sup>™</sup> is connected to may not exceed 1 meter.

#### ANCHOR TYPES

It is recommended to use only 11 mm to 13 mm Altumax Enduro Access rope that confirms to EN 1891 Type A

#### CONNECTERS

All Oval Twist lock Carabineer will conform to EN 362- Overall dimensions 57mm (w) x 108mm (l) x 9.5mm(t)

This European Standard applies to rope adjustment devices intended for use in rope access systems. It specifies the requirements, test methods, marking and information supplied by the manufacturer. Rope adjustment devices conforming to this European Standard may be designed for the use of one person, or in case of rescue, for two persons simultaneously.

#### EN 12841: TYPE B

The rope adjustment devices as specified are not suitable for use in a fall arrest system.

The length of the rope Lanyard (from connection point on the harness to the connector to the Back Up™) that the Back Up™ is connected to may not exceed 1 meter. It is recommenced that the rope lanyard used conforms to EN 892:2012 with a min diameter of 10.5mm.

### 6. INSPECTION OF THE BACK UP™

The Back Up™ must be inspected for serviceability of all the individual components before every use. The physical appearance of the product will determine its serviceability.

THIS INSPECTION WILL ACT AS A PRE-USE CHECK OF THE EQUIPMENT, TO ENSURE THAT IT IS IN A SERVICEABLE CONDITION AND OPERATES CORRECTLY BEFORE USAGE.

- Verify that all hardware components are free from cracks, deformities, rust, burs, and signs of overloading, wear and tear (indentations).
- 2. Verify that the moving bar is serviceable and locks in place.
- 3. Verify that the Top plate slides open and close to the intended locked position.
- 4. Inspect the hook up points for any signs of wear and deformities.
- 5. Verify that the anti-drop cord and the pull cord is tied properly and still intact.

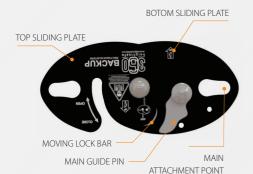
down movement and locking capability on the rope.

6. Test the device on a rope prior to use for easy up and





### 7. COMPONENTS OF THE BACK UP™



STANDING BAR

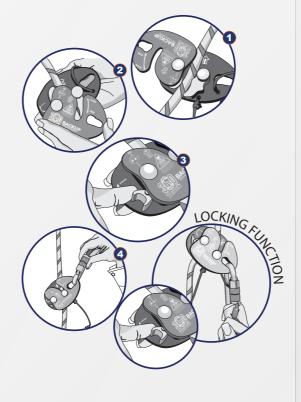
UNLOCK AND



### 8. OPERATING SYSTEM

- Once the rope is inserted. Close the device. Ensure the centre spring loaded pin locks into place.
- Pull up the free rope thought he device and test the locking and releasing mechanism. If the rope is threaded incorrectly the device will not work. There is an additional safe lock. The safe lock will only work if the rope runs from the wrong direction with enough friction.
- If the device is used for fall arrest purposes: The Back Up™
  is an industrial type mobile rope access rope adjustment
  device that will slide up and down the rope and will only
  lock onto the rope if pulled down on the load bearing
  connection point.
- 4. If the device is used for rope access purposes it can be locked in place, by making use of the locking clip. By locking it only half way you will still be able to slide the Back Up™ up and down while ascending and descending.

IF THE DEVICE DOES NOT MOVE UP OR DOWN THE LOCK IS ON. OPEN THE LOCK OR UNLOCK.



#### 9. WORKING PRINCIPLE



### 10. LOCKING FUNCTION

#### Working load of 66 lbs (30 kg) to 330 lbs (150 kg).

It is recommended that a double rope access system is used at all times, in case of a dynamic overload that can damage the rope. If the Back Up™ rope is overloaded, the user must be equipped with another backup system or rope.

Any slack in the anchor line between the user and the anchors should be avoided.

When a adjustable anchor line is loaded by the full weight of the user it becomes a working line in addition to the working line the user should use a safety line for optimum safety of the user HEIGHT OF THE HARNESS ATTACHMENT POINT SO
THAT A POTENTIAL FALL WILL ALWAYS BE LESS THAN
0,5M.

THE DEVICE MUST BE KEPT FOLIAL TO OR ABOVE THE

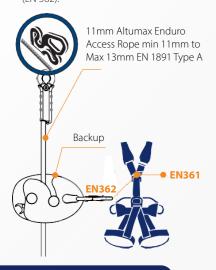
Anchor Point above user Anchor P
(EN 795) (



Anchor Point above user (EN 795)

### 11. COMPATIBILITY FALL ARREST

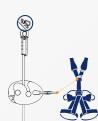
To attach this device directly to the harness ,it is strongly advised to use an Oval Twist Lock/ Screw gate Carabineer (FN 362)



Not Applicable

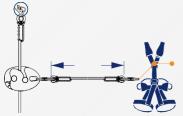
### 15. HARNESS CONNECTION

12. COMPATIBILITY WPL



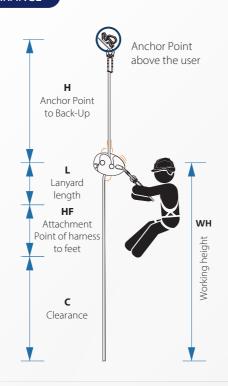
# Once the rope has been inserted

and the functionality test has been performed, connect the Back  $\mathsf{Up}^{\scriptscriptstyle\mathsf{TM}}$  to the front fall arrest attachment point (FN 361) of the harness by using a karabiner. Ensure that the Back Up™ is properly closed and that the connector is properly locked.



the Back Up™ is properly closed and that the connector is properly

### 13. CLEARANCE



Necessary minimum clearance below the user

#### $C = (H \times 8\%) + S + 1 (in m)$

 $H \times 8\% = (S)$  Rope stretch = Slippage = max 1,2 m Minimum working height

#### WH = L + HF + C

In case of a shock absorbing lanyard take in account the possible full deployment!

Maximum arrest distance  $H_2 = 1.5$  m for 11mm rope and 13 mm rope = 0.10 m

The device has the inclination to move freely on a vertical anchor line and will only lock into place in the event where a vertical force is applied.

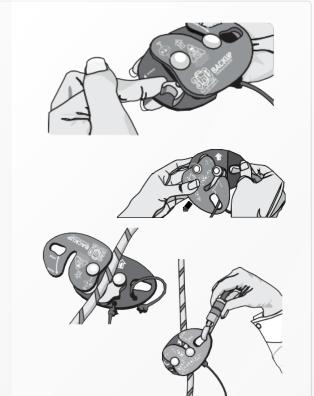
Meaning any downward force on the connector side will result in the device locking on the rope. If the device is tilted 15 deg towards the connector side the device will lock on the rope.



## 14. INSTALLING THE ROPE

#### TO INSTALL THE ROPE INSIDE THE BACK UP™ ENSURE THE FOLLOWING

- Remove the connector from the hook up point to be able to open the device
- Ensure that the lock plate is in the open position. If the lock plate is not in the open position you will not be able to fit the rope into the device.
- Open the device by sliding the top plate in the opposite direction as the locked position.
- Insert the rope between the two locking bars.
- Check the up-sign picture on the outside and inside of the device, to ensure the correct direction of the rope.
- · If the locking bars are closed, slide the lock to the open position.
- · Close the top plate and replace the connector.
- Check that the rope has been inserted the correct way around.
- · Fit the connector to the connection point.
- Perform a function test by sliding the device up and down the rope, pull down on the connector to see if it locks in place.

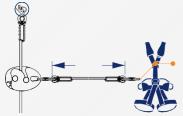




### **During Fall Arrest Operations**

#### **During Rope Access Operations**

Once the rope has been inserted and the functionality test has been performed. Connect the Back Up™ to the rope access EN361 harness by using the front top connection point (EN 361) by using a kern mantle dynamic rope cow tail conforming to EN 892:2012 no less than 10.5mm thick, no longer than 1 meter.



**Ensure that** 

### 16. MOVING DEVICE UP & DOWN THE ROPE



#### **During Fall Arrest Operations**

- During fall arrest operations / work, ensure that the lock is in the unlock position and connect the device to the front chest fall arrest point of the harness. Ensure that the connector and the Back  $Up^{m}$  is closed and locked.
- · Climb up and down without touching the device. The Back  $\mathsf{Up}^\mathsf{TM}$  will run smoothly up and down, if the rope is in a vertical position. If the device locks while you climb up or down or it does not want to slide up or down the lock could be activated and or the rope has been fitted upside down.







### **During Rope Access Operations (do this)**

- During rope access operations it is recommend to always keep the Back  $\mathsf{Up}^\mathsf{m}$  higher that your hips.
- For moving the Back Up<sup>™</sup> upwards, drag it by using the connector attached to the back up

### 17. RECORDS

- It is recommended that and inspection record is kept.
- · It is recommended that a documented inspection is done one a daily basis before every use.

EQUIDMENT DECORE

• It is recommended that a documented inspection is verified on a 3 monthly basis by a 3 party.

		EQ	UIPMENT RECO	RD		
PRODUCT: BAC	KUP					
Model & Type Ide HG1/003	entification:	Trade Name: BACKUP			ID Nr: 2022/00-00/0000	
Manufacturer: HEIGHT SAFE 360	)	Address: Midrand, Gauteng			Tel nr: +27(0)11 314 2733	
Year of manufact 2022	ure:	Purchase date:			Date first use:	
		Othe	r relevant inform	ation		
P	ERIODIC E	XAM	INATION AND	REPA	IR HISTOR	Υ
Date	Reason for entry		Defects noted, repairs carried out and other	Name and signature of competence		Periodic examination next due date

#### 18. TRACEABILITY AND MARKINGS

#### Each item comes with its own unique individual number:

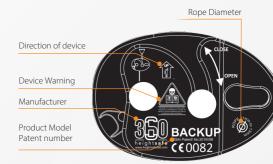


Up arrow: Indicates the up direction of the device in the direction facing the anchor point



Thickness of rope: Indicates the thickness of rope that can be used.





Lavnard WP 

### 19. BACK UP™ USER WARNINGS



Do not allow any slack on the rope between the fall arrest device and anchor point.



Do not grab hold of the rope above the device.



This is a hands-free device. Do not grab hold onto the body of the device in the event of a fall or injury. This will result in the device **NOT LOCKING** 



Please note that any overload that exceeds a 150 kg safe working load may damage the

#### 21. PACKING, STORING & TRANSPORTATION

Always store the Back Up™ in a cool dry well-ventilated area away from harmful chemicals and or materials.

The device should be removed immediately is there is any doubt regarding the safety function of the device

- Do not step on or drive over the Back  $\mathsf{Up}^\mathsf{TM}$
- Do not place heavier equipment on the Back  $\mathsf{Up}^{\scriptscriptstyle\mathsf{TM}}\!.$ Do not expose the Back Up<sup>™</sup> to excessive heat conditions.
- Keep the product in its original packaging to protect it from damage during transport, general weather

conditions like direct sunlight (UV radiation).

· When the product has been opened and is in use. Transport in protective carry bag. Do not place heavier items on top of the carry bag.

#### When traveling by road, sea or air, extreme temperatures can degrade the products like:

- Direct sunlight above 80 degrees Celsius.
- In the trunk of a car that has been exposed to car battery acid and or gas cans. Keep the product away from harmful chemical agents, corrosives, solvents (like acids) and corrosive environments (high fluoride and or salt), high moisture, very hot temperatures, very low temperatures, sharp edges and continuous vibrations. Store the product

in a well ventilated area away from direct sunlight and harmful materials and chemicals

If there is any doubt about the safety of the product, remove from service.

### 22. GUARANTEE

This Back Up ™ is guaranteed for a period of three years against any defects caused during the manufacturing process. This includes all hardware and software materials of

## The following occurrences are not included in this

- · Normal wear and tear caused by day to day use
- Rust and or oxidation
- · Alterations and modifications made to the product.
- · Wrong storage, transportation and handling methods
- No or poor maintenance
- Damage due to excessive use or accidents
- Dropping the item from a height.
- · Overstepping the safe working load of the item. Using the product beyond the intended design scope
- · Using the wrong size connectors

### 23. DISCLAIMER

Year of Manufacture

Batch Number

Unite in Batch

- Item Code

Height Safe 360™ will not accept any responsibility, accountability or liability for the actions and consequences direct, indirect or accidental or any other type of injury that may result from the use of the Back Up.

### NOTIFICATION BODY

APAVE 0087, Module B and C2

Agence MARSEILLE - Apave8 Rue Jean-Jacques Vernazza Z.A.C Saumaty-Séon, 13016 Marseille, France

IF THE PRODUCT IS RE-SOLD OUTSIDE THE ORIGINAL COUNTRY OF DESTINATION THE RESELLER SHALL PROVIDE INSTRUCTIONS FOR USE, FOR MAINTENANCE, FOR PERIODIC EXAMINATION AND FOR REPAIR IN THE LANGUAGE OF THE COUNTRY IN WHICH THE PRODUCT IS TO BE

> Approval Date:13/10/2021 Document Number: HS360-UG-001 | RI Owner: Johan Du Toit Title: Back Up User Guide





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EU declaration of conformity can be accessed on our website

www.heightsafe360.com

