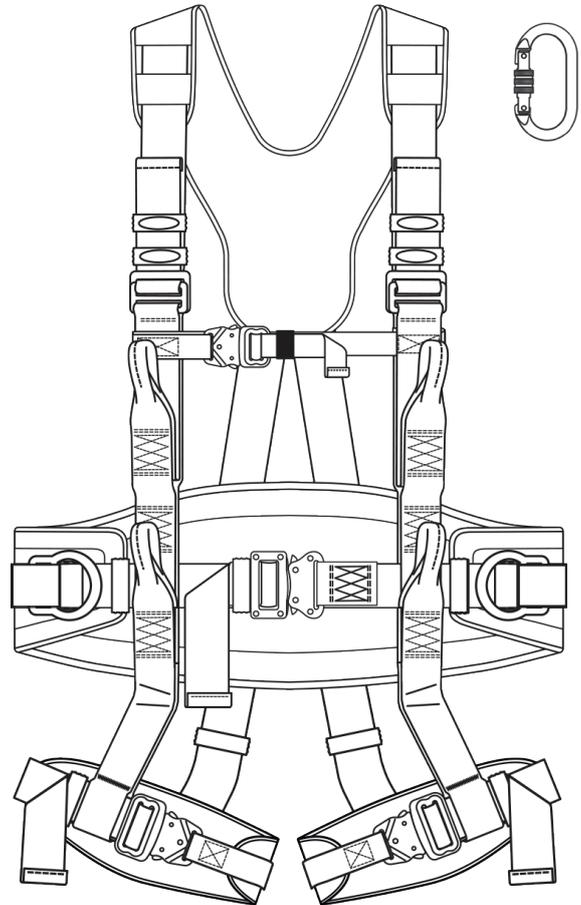


# Elite

## Construction Harness Instruction Manual



## HEP4678



The HEP4678 Elite Construction Harness is a basic item of PPE for protection against falls from a height that complies with AS/NZS 1891.1:2007 Harnesses & ancillary equipment, EN 361 (as a safety harness), EN 358 (as belts for work positioning and restraint) and EN 813 (as a sit harness) - the maximum load of the sit harness is 140kg.

### Certified to:

AS/NZS 1891.1:2007, EN 361:2002, EN 358:1999, EN 813:2008

### Admissible time of use:

Safety harness can be used for 10 years.

Users should be competent in the use of equipment before beginning any tasks requiring its use.

 PBIHS  0082



**Australian  
Standard**  
AS/NZS 1891.1:2007  
SMK40940 SAI Global



# Elite | Construction Harness HEP4678

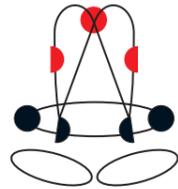


Provides all the comfort and benefits of the Plus range harnesses and is ideal for general rope access, work positioning and fall arrest applications. Ideal for the professional worker that demands comfort and premium safety with leg straps for ultimate comfort when in suspension. An elite harness with a comfortable legstrap which dons like a jacket.

For greater versatility there are an abundance of hard and soft attachment points spaced across the chest and waist, with tool loops located on the waist belt to attach additional hardware and equipment.



Ref.	Model	Size	Weight	Rated to	Dimensions	Material	Applications	Standards
			g	kg				
Construction harness Fall arrest + suspension harness	HEP4678	M-XL XXL	1900g 1980g	140kg	Refer to size chart	Polyester Webbing Steel Hardware		AS/NZS 1891.1:2007 EN 361:2002 EN 813:2008 EN 358:1999



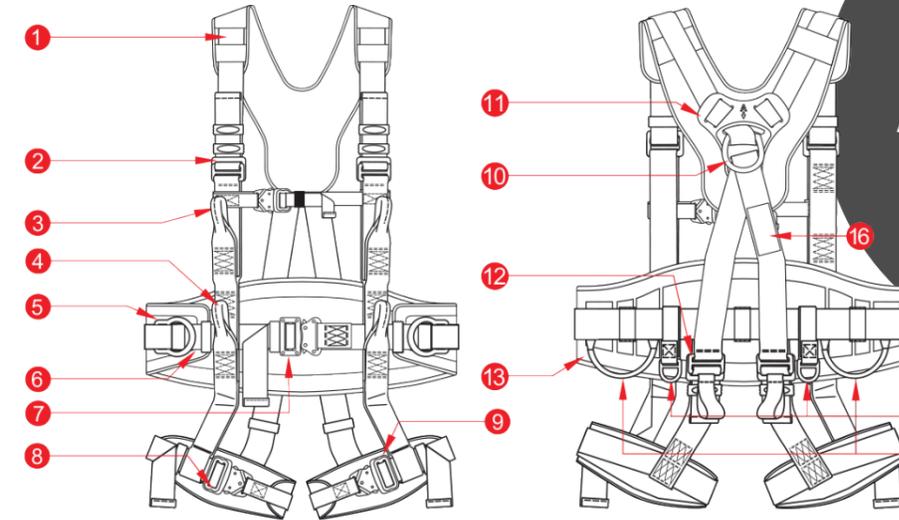
### Features

- > Versatile design allows use for a multitude of working applications.
- > Polyester webbing construction for durability and strength.
- > Side work positioning attachment points.
- > Quick connecting buckles on waist, chest and leg straps.
- > Front and rear fall arrest attachment points. Limited free fall arrest attachment point.
- > Shoulder and waist panels keep the harness in shape for easy fitting.
- > Gear loops to keep hardware and tools readily available.
- > Extra wide moisture wicking 3D mesh padded shoulder, waist and leg straps for added comfort when hanging or working for long periods of time.
- > Leg straps with adjustable risers to ensure best fit.
- > Supplied with forged steel hardware.
- > Can be used with the Suspend suspension seat (supplied separately).

Personal protective equipment should be used only by people trained in operating it. Personal protective equipment is considered personal equipment and should be used by a single person only.

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## Before using this safety equipment, please read the manually carefully



An ill fitting harness in a poor state of repair can cause serious injury or death. A rescue plan must be in place to deal with any emergencies that could arise during the work. Being suspended in PPE (e.g. arresting a fall), beware of suspension trauma symptoms.

**SIZES:** The harness is manufactured in three sizes:

- > S-M
- > M-XL
- > XXL

1. Shoulder belt.
2. Adjustment buckle of shoulder belt.
3. Front attachment loops for connection of equipment for protection against falls from a height.
4. Front attachment loops for use only as sit harness according to EN 813 (these loops must not be used for connecting equipment for protection against falls from a height).
5. Side positioning D-rings of a sit harness. For use with ropes for work positioning according to EN 358.
6. Sit harness for work positioning.
7. Fixing and adjusting buckle of waist belt.
8. Thigh belt.
9. Fixing and adjusting buckle of thigh belts.
10. Back D-ring for attachment of equipment for protection against falls from a height.
11. Crossing element.
12. Adjustment buckle of a back harness belt.
13. Padded BeltPillow of a sit harness for work positioning.
14. Plastic buckles for attachment of tool bags.
15. Loops for attachment of tools.
16. Labels of harness.
17. Carabiner to connect front webbing loops to create front fall arrest point.

- > Before use of equipment for protection against falls from a height comprising of the safety harness, check if all the elements are connected properly with each other, they cooperate without any disruptions and comply with the AS/NZS 1891.1:2007 Harnesses & ancillary equipment and the EN standards: EN 354, EN 355, EN 353-1, EN 353-2, EN 360, EN 362 (for linking and clamping components); AS/NZS 5532:2013 Single Anchor Test and EN 795 (for anchoring points for the equipment fixed structure points) EN 341 (for evacuation equipment) and EN 358 (for work positioning systems) and EN1497 (rescue harnesses).
- > Personal protective equipment must not be used by a person with a medical condition that could affect the safety of the equipment user in normal and emergency use.

- > It is forbidden to make any alterations or additions to the equipment without the manufacturer's prior written consent.
- > Any repair shall only be carried out by equipment manufacturer or his certified representative.
- > It is forbidden to use combinations of equipment in which the safe function of any one item is affected by, or interferes with the safe function of another.
- > Important; For all matters relating to selection, use and maintenance of fall arrest equipment, please consult AS/NZS1891 Part 4: Fall Arrest Systems & Devices- Selection, Use and Maintenance.
- > Warning; Personal energy absorbers (shock absorbers) that absorb energy by permanent deformation action should be discarded if that process has commenced.



**WARNING:** Harnesses and lanyards should be destroyed or returned to the manufacturer for inspection if any fall or accident has been sustained. If any part of an assembly is to be exposed to chemicals, e.g. hazardous atmospheres or cleaning materials the user must check with the manufacturer to determine whether the part is suitable for continued use.

# Harness markings



<b>a</b>	Device type	<b>g</b>	Serial number of the harness
<b>b</b>	Model symbol	<b>h</b>	Harness size
<b>c</b>	CE mark and number of the notified body controlling manufacturing of the equipment, number	<b>i</b>	Caution: read the manual
<b>d</b>	Number/year European standards	<b>j</b>	Identification of the harness manufacturer or distributor
<b>e</b>	Month and year of manufacture	<b>k</b>	Maximum weight for harness use
<b>f</b>	Month and year of expiry date	<b>l</b>	Australian Standard and SAI Global accreditation

**b** HEP4678 Elite Construction Harness  
**c** EN 361:2002 EN 813:2008 EN 358:1999  
**d** PBIHS CE0082 Max load: 140kg  
**e** Size: M-XL Dom: MM.YYYY  
**f** Expiry: MM.YYY Serial No: 00000000  
**g** **h** **i** **j** **k** **l**

**ZERO** www.zeroheightsafety.com

**Australian Standard** AS/NZS 1891.1:2007 SMK40940 SAI Global

> During periodic inspection it is necessary to check the legibility of the equipment marking.



**i** Only competent users should use this equipment. Manufacturer's instructions must be followed. The maximum allowable free fall is 2m.

**MADE IN EU**

**ZERO**

**PRE USE CHECK** - Before each use of personal protective equipment it is obligatory to carry out a pre-use check of the equipment, to ensure that it is in a serviceable condition and operates correctly. During pre-use check it is necessary to inspect all elements of the equipment in respect of any damages, excessive wear, corrosion, abrasion, cutting or incorrect acting, especially take into consideration:

Equipment elements	Inspect	
Full body harnesses and belts	Buckles, adjusting elements, attaching points, webbing's, seams, loops;	
Energy absorbers	Attaching loops, webbing, seams, casing, connectors;	
Textile lanyards or lifelines or guidelines	Rope, loops, thimbles, connectors, adjusting element, splices;	
Steel lanyards or lifelines or guidelines	Cable, wires, clips, ferrules, loops, thimbles, connectors, adjusting elements;	
Retractable fall arresters	Cable or webbing, retractor and brake proper acting, casing, energy absorber, connector;	
Guided type fall arresters	Body of the fall arrester, sliding function, locking gear acting, rivets and screws, connector, energy absorber;	
Connectors	Main body, rivets, gate, locking gear acting.	

# Putting on the harness



1. Lift the harness holding the back attachment buckle. Thigh belts should be unfastened.
2. Put shoulder belts on your shoulder.
3. Fasten the chest quick connect buckle.
4. Put the free ends of thigh belts over between your legs. Check if they are not twisted. Fasten the thigh belts' buckles.
5. Fasten the thigh belt buckle. Adjust the length of the thigh belt.
6. Connect chest webbing loops with carabiner supplied to create the front fall arrest attachment point. See 2 below.

**NOTICE** always link the chest loops with a carabiner to create the rated fall-arrest connection. \*See below.

## \*CONNECTING THE LINKING AND BUCKLE COMPONENTS

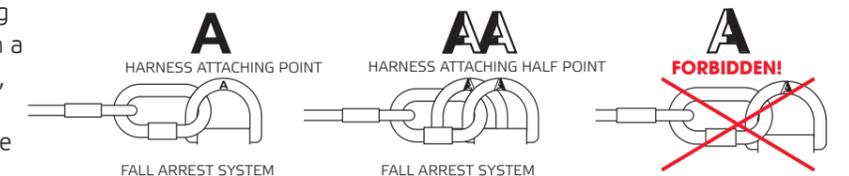
The front loops of the harness should always be attached with a carabiner to create the front fall-arrest attachment point. Always check the carabiner is secure on the front loops and locked against accidental opening. It is prohibited to use the harness with unfastened front loops or buckle. Any supporting buckle must not be removed from the harness or replaced with another buckle.

The back attachment fall arrester point is marked with a letter **A**, placed on the crossing element, with an arrow pointing to the fall arrester point.

The front attachment fall arrester loops are marked with a label with the letter **A**, the carabiner **must** join both loops marked with this letter in order to be fall arrest compliant.

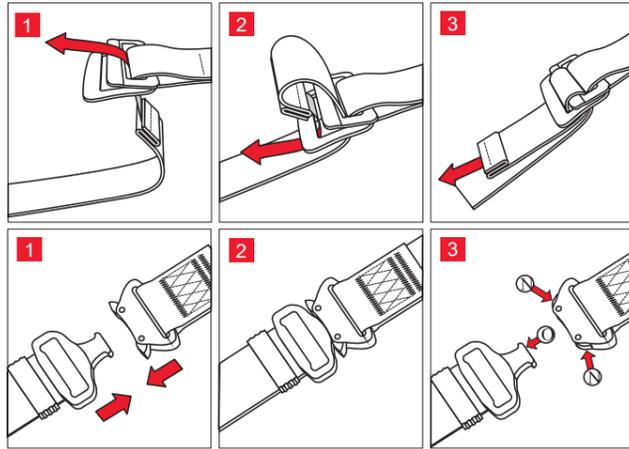
The front fall-arrest loops must be connected together only as the front catch element of the safety harness, marked with the large letter 'A'. The connecting fall arrest component (such as lanyard) can only be attached; directly to the back attachment buckle (1), or to the front attachment point which has been created by joining the two loops with a carabiner to make the rated fall-arrest attachment point (2). The linking component (such as lanyard, rope, or fall arrester devices) must not be attached directly to the harness loop nor the buckle, instead connecting elements should be attached to the completed front Fall Arrest point.

**NB:** In a full body harness use only attaching points marked with a big letter "A" to attach a fall system. If the 'A' is half black, half white, it must be attached to another attachment marked with the same marking in order to be fall arrest compliant.



When making a connection to a point on a harness which cannot be seen by the wearer of the harness, either the connection should be made and inspected for security before putting the harness on, or; the connection should be made or checked for security by a second person (eg; a buddy check).

## Fastening the straps



### Harness is put on correctly if:

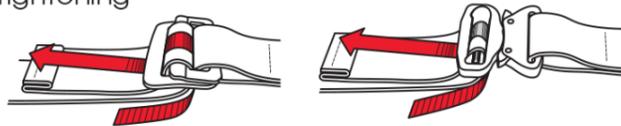
- > It is possible to place a hand between the individual belts of the harness and the clothing.
- > Back attachment buckle is located on your shoulder blades.
- > The front linking buckle is located at the height of middle of your ribcage.
- > The free ends of belts are secured in loops and fit tight to harness.

**ATTENTION:** Before use the belt the first time the user should carry out a suspension test in a safe place to ensure that the sit harness is the correct size, has sufficient adjustment and is of an acceptable comfort level for the intended use.

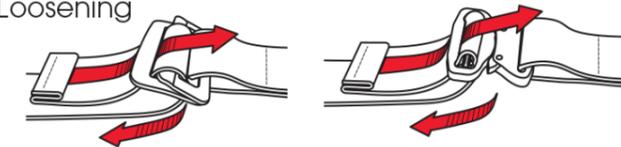
Size	Adjustment	Comfort

## Adjusting the straps

### Tightening

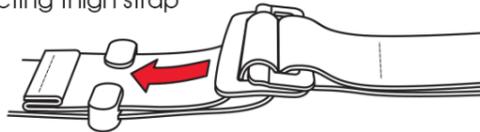


### Loosening

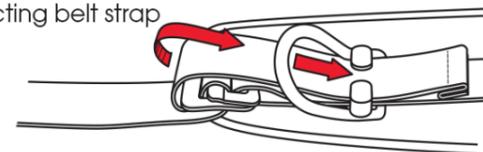


## Protecting the straps - Always protect free end of the strap with the loop.

protecting thigh strap



protecting belt strap



## Lifespan

The harness can be used for 10 years, counting from the date of manufacture. After this period the harness must be withdrawn from use and destroyed. The harness must be withdrawn from use immediately and destroyed when it have been used to arrest a fall. Withdrawal from use must be carried out only by a competent person responsible in a company for a safety equipment.

## Cleaning and storing

Personal protection equipment should be stored loosely packed, in a well-ventilated place, away from other tools to prevent cross-damage. PPE must be protected from direct light, UV degradation, damp environment, sharp edges, extreme temperatures and corrosive or aggressive substances.

Personal protection equipment should be cleaned periodically using specialist cleaner, or a mild detergent and water, wash with a soft non-abrasive brush or sponge and allow to air dry after removing excess water with a dry cloth.

**When storing equipment keep away from chemicals.**

**DO NOT** use chemicals to clean heavily soiled gear. Chemicals may destroy webbing, equipment and function.

**DO NOT** put equipment in the clothes dryer. Excessive heat may melt the webbing and alter the strength.

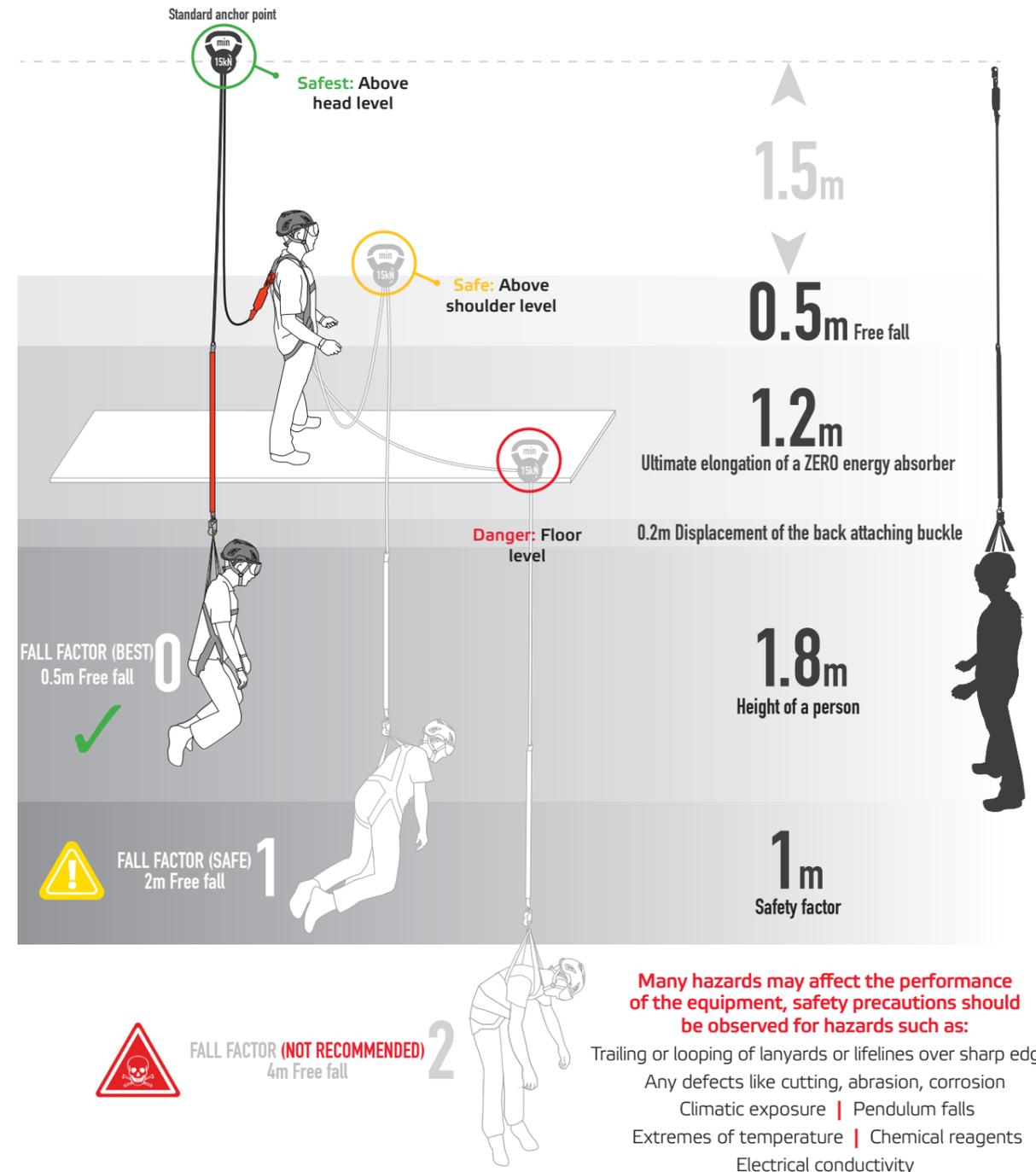
## Fall factor & fall distance

When setting up a fall arrest system, fall factors and fall distances are critical factors to be considered. The principle behind fall factors is the basic physics of gravity and energy.

### Energy is mass multiplied by velocity

The lower the anchor in relation to the human body, the greater the fall distance will be. By minimising the height of the fall, the speed will be reduced (velocity) at the

point when the arrest event starts. Check there is sufficient distance between the work surface and any surface/obstacle below to enable the system, including the action of any shock absorber, to deploy fully, without the worker hitting the below surface or obstacle. The anchor device/point should be placed above the position of the use. Minimal static strength of the anchor device/point is 15 kn. It is recommended to use certified and marked structural anchor point complied with EN795 or AS/NZS 5532.



**IMPORTANT:** Personal protective equipment must be withdrawn from use immediately when any doubt arise about its condition for safe use and not used again until confirmed in writing by equipment manufacturer or his representative after carried out the detailed inspection.

# Identity Card

It is the responsibility of the user organisation to provide the identity card and to fill in the details required. The identity card should be filled in before the first use by a competent person, responsible for protective equipment.

Any information about the equipment including periodic inspections, repairs, reasons for equipment being withdrawn from use, should be noted into the identity card. The identity card should be stored with the equipment

during the entire period of equipment utilization.

Equipment should be inspected at least once every six months in accordance with the manufacturers recommendations and withdrawn from use if not deemed by a competent person to be suitable for continued use. For any questions surrounding Maintenance matters please refer to AS/NZS 1891.4 of Australian/ New Zealand Standards Document.

## EXAMPLE ID CARD

Download full version from [zeroheightsafety.com](http://zeroheightsafety.com)

MODEL AND TYPE OF EQUIPMENT		REF. NUMBER	
DATE OF MANUF.		SERIAL NUMBER	
USER NAME			
DATE OF PURCHASE		DATE OF PURCHASE INTO OPERATION	

### PERIODIC EXAMINATION AND REPAIR HISTORY

No.	Date	Reason for entry periodic examination or repair	Defects noted, repairs carried out and other relevant informations	Name and signature of competent person	Periodic examination next due date
1					
2					
3					
4					
5					
6					
7					
8					

**Do not use the equipment without the identity card.  
All records in the identity card can be filled in only by a competent person.**

Notified bodies, at which certification was performed and which supervises the production of the equipment:



SAI Global Certification Services Pty Ltd  
(ACN 108 716 669) ("SAI Global")  
680 George Street,  
Sydney, NSW 2001.

CETE APAVE SUDEUROPE  
BP 193, 13322 Marseille, FRANCE  
No.0082



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