

# Summary of Manufacturers' stated maximum life for obsolescence of Recreational Climbing Equipment.

Maximum life for obsolescence is the latest possible date, subject to detailed conditions, that the Manufacturer states that the product should remain in service. A selection of the manufactures only make a recommendation for the life span of their products.

In order to reach this maximum life for obsolescence date the product must be fit to remain in service from a visual and tactile perspective, and therefore also be free from:

- any damage,
- deformation,
- adverse contamination,
- excessive wear,
- obvious signs of UV degradation e.g. bleaching or discolouration,

With all details / marking of identification (E.g. CE marking, batch reference, individual serialisation – where present etc.) being clear and readable.

It should be noted that many things can shorten the lifespan of a product, and the lifespan could be as short as first use, or even earlier if damaged (e.g. in transit) prior to first use.

Where products are permanently attached to other products (for example fabric and metal products such as quick draws or Via Ferrata lanyards), then please refer to the Manufacturer's instructions for the complete product. Likewise, some specialist equipment from the detailed manufacturers has a maximum life for obsolescence much shorter than the more general one detailed here, therefore please always check with the manufacturer's specific instruction state for the specific product.

All Manufacturers advise that all climbing equipment is regularly inspected and maintained by someone who has been trained and deemed competent to inspect equipment and to judge whether it can remain in service. In order to meet the Lifting Operations, Lifting Equipment Regulations (LOLER) this inspection should occur at very least every six months.

The Manufacturers also recommend that all climbing equipment reaching its maximum life for obsolescence should be removed from service and undergo a recorded controlled disposal, putting the equipment permanently out of use in an environmentally responsible manner.

The maximum life for obsolescence of each type of product listed below, was collected from the Manufacturers websites/workbooks and product instruction guidance booklets. Please note that these can be amended and changed by the Manufacturers at any time and that this list is for guidance purposes only. When a new item of equipment enters service it is worth checking the details within the attached product instruction guidance and working to that, as well as ensuring that the equipment is maintained and stored properly, as per the manufacturer's guidelines.



Harnesses

5 years use. Blue Ice

Climb X Metolius Stubai Trango

5 years from first use, 10 years from Black Diamond

manufacture, whichever comes first. Simond

Wild Country

7 years from first use, 10 years from Mammut

manufacture, whichever comes first.

10 years from manufacture. AustriAlpin

C.A.M.P. / Cassin

DMM Kong Ocun Petzl Salewa

10 years from first use, 12 years from Climbing Technology

manufacturer, whichever comes first.

10 years from first use, 15 years from Beal manufacture, whichever comes first. Edelweiss

Rock Empire Singing Rock

Slings

5 years use. Metolius

Fixe

5 years from first use, 10 years from Black Diamond

manufacture, whichever comes first. Simond Trango

Wild Country

5-10 years Grivel

7 years from first use, 10 years from Mammut manufacture, whichever comes first.

10 years from manufacture. AustriAlpin

Cousin Trestec

DMM

Lyon Equipment

Kong Ocun Petzl

10 years from first use, 12 years from C.A.M.P./ Cassin manufacturer, whichever comes first. Climbing Technology

Elderid

10 years from first use, 15 years fromBealmanufacture, whichever comes first.Edelweiss

Rope Empire Singing Rock



Ropes

5 years use. Blue Water Ropes (Dynamic)

Trango

5 years use, 7 years from manufacture,

whichever comes first.

Tendon

5 years from first use, 10 years from Black Diamond manufacture, whichever comes first. English Braids

Marlow Ropes Simond Sterling Rope

6 years from first use, 10 years from DMM

manufacture, whichever comes first.

7 years from first use, 10 years from Climbing Technology

manufacture, whichever comes first.

Ocun

Mammut

Rock Empire

10 years from manufacture. AustriAlpin

Blue Water Ropes (Low Stretch)

**Cousin Trestec** 

Petzl

10 years from first use, 12 years from C.A.M.P/Cassin

manufacturer, whichever comes first.

Singing Rock

10 years from first use, 15 years from Beal manufacture, whichever comes first. Edelweiss

Fixe-Roca

Helmets

3 years use. AustriAlpin

Stubai Trango

5 years use. DMM

6 years use. Mammut

5 years from first use, 10 years from Black Diamond

manufacture, whichever comes first.

10 years from manufacture. C.A.M.P. / Cassin

Kong Ocun Petzl

Singing Rock

10 years use. Grivel

10 years from first use, 12 years from Climbing Technology

manufacturer, whichever comes first.

10 years from first use, 15 years fromBealmanufacture, whichever comes first.Edelweiss

Rock Empire



## **Metal Climbing Equipment**

Highly recommended to replace every 3 years.

Trango
5 - 10 years

Grivel

10 years from manufacture. Mammut

Metolius Stubai

10 years from date of first use. Wild Country

Fixe

Theoretically indefinite, but advised Climbing Technology

replacement after 10 years. Simond

No Known maximum life for obsolescence, AustriAlpin

and only the condition of the product is applicable. Beal

Black Diamond C.A.M.P / Cassin

DMM Edelwiss Elderid Kong Ocun

Omega Pacific

Petzl Rock Empire Singing Rock Sterling Rope

## Statutory Regulations and Equipment Inspections

All Equipment used for recreational climbing in a professional context (climbing walls, outdoor centres, schools etc.) must meet the following regulations:

- Provision and Use of Work Equipment 1998 (PUWER)
- Personal Protective Equipment at Work 1992 (PPE)
- Lifting Operations and Lifting Equipment 1998 (LOLER)
- Working at Height 2005 (2007) Amendment (WaHR)

WaHR has some general principles and LOLER has specific guidance about selection, use and inspection of equipment used for working at height. This includes (but is not limited to) all climbing wall fixtures and fittings such as lower-offs and running belays; all climbing equipment used by employees in the course of their work. While PUWER has the specific requirement for an acceptance/insertion check before equipment is used for the first time. This is important for identifying manufacturing defects or damage that has occurred during transportation.

In all cases, equipment must:

- Have adequate strength. In particular, anchors must be able to withstand forces imposed on them;
- Meet standards relevant for intended use (i.e. PPE should be CE marked); and



- Be uniquely identifiable.
- Suitable for the purpose for which it is intended to be used
- Regularly inspected
- Properly maintained pursuant to a dedicated maintenance schedule

## Who can carry out an Examination/Inspection?

During each session, there is a legal requirement on each instructor to complete a preuse check. The operator must ensure that the instructor has also been provided with such information, instruction and training as necessary so that they are competent to carry out the work safely and that the equipment is to be used and is being used within the scope of the manufacturer's instructions.

Employees must be aware of and understand:

- The risks that the equipment will avoid or limit;
- How to correctly and safely use the equipment;
- How to conduct a simple visual/tactile pre-use check to ensure that equipment is safe to use.
- The procedure in which to follow if damaged, faulty or non-specified equipment is identified

In addition to the pre-use check by an instructor. A competent person must inspect equipment upon entry into service and then on a regular basis thereafter. These inspections are detailed examinations and must be completed by a competent person.

This must be done in accordance with a schedule drawn up by the competent person, taking into account the recommendations of the manufacturer/supplier. Unless specified otherwise in an inspection schedule drawn up by a competent person, inspections should take place at a minimum of every six months. Certain factors such as volume of use and positioning of wall fittings may lead to a higher rate of wear and require more frequent inspections. As an example, a busy centre or climbing wall may inspect karabiners and belay devices on a monthly basis and ropes and harnesses weekly.

All formal inspections must be recorded, while an instructors pre-use check does not. An additional interim inspection may be required following any incident or exceptional circumstance (when the equipment has been put through an experience that is not routine) that could affect the safety of the equipment.

Each formal inspection must be recorded in an Inspection Report, which must be kept for at least three years, though it is advisable to keep records for the whole life span of the individual piece of equipment. Individual inspection records should be kept at least until the next inspection. Equipment transferred between businesses must have clear indication of when it was last inspected.

In the case of a reported incident or a suspected incident, inspection records should be retained for at least three years in the case of an incident involving an adult, or in the case of a minor having been involved, till three years after that person's 21st birthday!



## Who is deemed a 'Competent person'?

HSE guidance states that a competent person is one who has the appropriate practical and theoretical knowledge and experience to enable them to detect defects or weaknesses and assess their importance in relation to the safety and continued use of the equipment. This may be assessed using one of the four routes to competency and is left for the operator to be able to evidence in an appropriate way.

Although the competent person may often be employed by another organisation, this is not necessary, provided the employee is granted sufficient authority by the operator to ensure that in-house examinations are made without fear or favour. However, this should not be the same person who undertakes routine inspection of the equipment - as they would then be responsible for assessing their own inspection work.

The purpose of any inspection is to detect defects or deterioration that may give rise to hazards and to take appropriate corrective action. Any inspection check schedules for equipment should be done in accordance with the manufacturer's recommendations.

#### **About the Author**

Paul Smith has been an active climber for over 20 years and currently runs Rock and Water Adventures. He specialies in providing Technical Advice to range of climbing walls, centres, schools and small businesses, alongside the delivery of the Mountain Training Single Pitch, Climbing Wall and Climbing Wall Leading awards, and the Coaching scheme. He has written a number of climbing related books – 'Climbing Games' and 'Top Tips for Climbing Coaches', as well as co-authoring Mountain Training's recent 'Remote Supervision Guidance Notes', and is a frequent equipment reviewer for Trek & Mountain magazine.

Acknowledgements – Thanks must go to the following for their technical suggestions and feedback – Dr. Gordon McKenzie, Joby Maw Davies, Alan Halewood, Jez Brown, Mark Davies and JP Edgington.

