

THE INSIDE STORY

1. Fabric covering Foam is usually enveloped in a sponge clean fabric. However, before you clean your body protector, make sure that you check the manufacturer's instructions.

2. Inner material Most body protectors are constructed from two layers of heat-sensitive PVC Nitrile foam. This is softened by body heat when the garment is worn. Some foams are perforated to provide increased flexibility, reduce weight and improve air flow. Body protector foam should never be exposed to excessive heat, such as when drying garments on a radiator.

3. Weight The lighter the foam, the harder it usually is when not in use and the heavier the foam, the softer it is. Most modern foams mould to the body, so the difference in weight is hardly noticeable when worn.

4. Fastenings These can include zips, sliding buckles, clips or Velcro strips and will depend on whether the body protector is a tabard (over the head) or front-opening garment.

5. Lining This is usually made of a breathable mesh.



AIR VESTS

Air vests and jackets are made with air bags, which inflate when a mechanism is activated as the rider is thrown from the horse. When this happens, a trigger – just like a rip-cord – is pulled taut to set off and inflate the garment. There are a variety of different types on the market, with varying body coverage and inward or outwardly inflating air bags.

Although there is currently no European standard specifically for these types of equestrian garments, some companies choose to have them tested to one of the following criteria, neither of which is compulsory:

- SATRA M38 specification for equestrian air vests.
- EN 1621-4 standard, designed for motorcycle air vests.

BETA is working on a European safety committee group to provide an equestrian standard for air vests, which should be published in 2024.

Air vests and jackets should always be fitted by a trained supplier to ensure correct attachment of the cord. Because the body protector offers constant protection, we recommend that it should always be worn under an air vest, which only offers protection on inflation. In addition, air vests work well for flat falls but offer limited protection against direct kicks or sharp objects, when falling or on the ground when handling horses.

Hybrid versions of these garments are available, combining a body protector, which should always be approved to BETA Level 3, with an integral air vest.

It is important that airvests are regularly serviced, at least once a year



Photograph: Bob Hook

CHECK IT OVER

You should never cut or alter a body protector – leave things to the manufacturer. Any changes introduced by you could result in the garment no longer meeting the standard. Even if it still carries the label, changes could lead to the wearer being excluded from competition in disciplines where the standard is compulsory.

Always check your body protector for dents immediately after an incident such as a fall or kick because the foam should expand back into shape after 30 minutes. Any dents that remain are an indication that the damaged area no longer offers the same absorption properties as before. Some manufacturers, however, are able to supply replacement panels.

BACK PROTECTORS

There are currently designs on the market that offer back only protection. At present these garments are not made to an equestrian standard, because one does not exist, some may be tested to the EN motorcycle standard.

Due to the garments not passing an equestrian standard most disciplines do not specify their use. Even though the garments cover the front of the body to hold the garment in place, they do not offer any protective covering on this part of the body.

THE FOLLOWING COMPANIES ARE BETA BODY PROTECTOR LICENSEES AND MANUFACTURERS AND HAVE CONTRIBUTED TO THIS LEAFLET FOR YOUR BENEFIT.



Note: Not all licensees have to be BETA trade members and they can make garments for different brands that are also not BETA trade members.

Help us make our sport safer! BETA is collecting information to better understand what happens to our hats and body protectors during an accident. It is key to design better and safer equipment, as well as feed into the safety standards that determine how these garments perform. If you have had an accident scan the QR code with your phone camera and fill in our form. Also, share it with your horsey friends.



Free copies of all BETA's leaflet guides can be ordered from the BETA office. Email info@beta-uk.org, or order from BETA's online shop at www.beta-uk.org.

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BETA GUIDE TO BODY PROTECTION

Find out more about the correct fit, safety standards and quality marks



Photograph: Airowear



Photograph: Champion

Photograph: FOMO

BUILT TO PROTECT

Body protectors are designed to offer the best possible protection to a rider. They do this by absorbing high levels of energy created when falling off or being kicked or stood on by a horse. The British Equestrian Trade Association (BETA) body protector standard sets the benchmark for safety and is recommended by all leading riding organisations and disciplines that demand body protectors should be worn.



There is a wide range of styles on the market from a number of different manufacturers and brands. Zip-fronted garments are a popular option. Tabard body protectors, which are put on over the head and adjusted at the shoulders and waist, are also available but becoming a little less common.

Developing technology has seen a number of new styles emerging, such as moulded garments. It is crucial when seeking a body protector that you shop around and try on a variety of styles before deciding what suits you the best.

QUALITY ASSURANCE STANDARD

The BETA Standard has been in place for over 25 years, starting in 1992 and being regularly reviewed and amended in 1995, 2000, 2009 and 2018.

In order to feature a BETA label, body protectors must meet the EN13158 performance standard, and be certified to the CE or UKCA administration mark.

All manufacturers are called to re-test approved garments annually to ensure consistency in the quality of manufacture and shock-absorbing foam used. BETA acts as a quality assurance standard.

EN 13158: This provides the technical specification for body protectors and sets the level of shock absorption required, highlights the area of the body that must be covered and ensures minimal gaps between foam panels and that all closures are safe. EN 13158 is a one-off test at the beginning of a body protector's life, provided that no changes are made to materials or patterns.

CE and UKCA administration mark: These are neither a quality mark nor a standard, but a mandatory declaration by a manufacturer to show compliance with essential requirements of personal protective equipment legislation. Under this legislation all safety equipment must bear either the CE or UKCA mark to show that it meets the basic health and safety requirements, often evidenced by certification to a recognised standard or specification.



THREE LEVELS OF PROTECTION

Body protector labels highlight three levels of protection suitable for different activities and riders. These safety garments are made from materials designed to absorb and spread impact to reduce any injury sustained. The difference between each of the levels is due to the thickness of foam used in manufacture.

Although no body protector can prevent serious injury in certain circumstances, it can definitely improve your chances of staying safe and reducing the severity of injuries.

BETA-standard body protectors and shoulder protectors feature one of the following labels:

Level 1: This shows that the body protector provides a lower level of impact protection considered suitable only for licensed jockeys while racing.

Level 2: Body protectors with this label provide a lower than normal level of protection considered appropriate for use in low-risk situations. These do not include riding on roads or other hard surfaces, riding over jumps, riding young or excitable horses or if you are an inexperienced rider. Those working in the racing sector can wear Level 2 garments provided that the trainer has completed a risk assessment beforehand. This level is now a requirement for racing in Ireland and the UK.

Level 3: This shows that the body protector offers a level of protection considered appropriate for normal horse riding and competitions, and for those working with horses. Garments to this level should prevent minor bruising resulting in stiffness and pain, as well as some rib fractures, and reduce soft tissue injury and bruising.

Please note that a Level 3 body protector should always be worn under an air vest, whatever the activity.



SHOULDER PROTECTORS

These are designed to protect the end of the collarbone, which often suffers injury when falling on the shoulder. The BETA standard is designed to help guard against injury sustained in a fall on to the point of the shoulder, which is stronger than the rib cage and a different shape.

For this reason, shoulder protectors undergo separate testing even though they are an integral part of a body protector. Research into eventing falls has revealed that a BETA Level 3 shoulder protector can reduce the risk of breaking a collarbone by up to 80 per cent.



FITTING TIPS

For a body protector to do its job, it must be properly fitted. A visit to a retailer who has been trained by BETA to fit safety garments is highly recommended. The following tips can help you to find a suitable body protector:

Measurements Waist, chest and waist-to-waist (from the waist at the front, over the shoulder and then down to the waist at the back) measurements are taken.

Size chart This can be found in the user instructions attached to new BETA-standard body protectors and it helps to find the correct size.



Scan the QR code to watch a short video on checking the fit of your body protector

Size ranges If your measurements put you at the top or bottom of a size range, try to find the two closest sizes before establishing which is most comfortable.

Try it on Always try a body protector on over light clothing or garments that will usually be worn underneath. Heavier clothing such as rain wear is best worn over the top.

Fastenings To ensure a snug fit, adjust the body protector's fastenings at the shoulders and waist.

If you can't find a body protector that's a comfortable fit, some manufacturers offer a made-to-measure service.

A CORRECT FIT

Some body protectors can seem a bit stiff when you first try them on but, after five minutes, body heat will warm the foam up and allow it to mould to your shape.

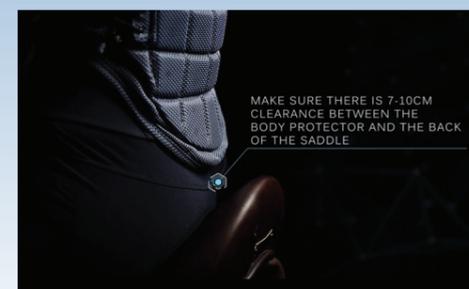
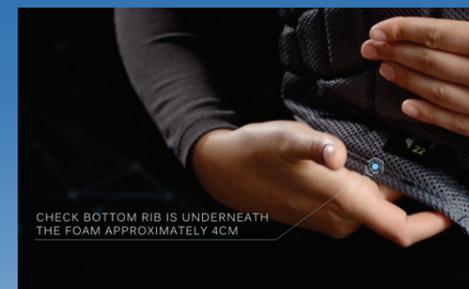
Secure A secure and reasonably tight fit helps to avoid movement and ensure that the body protector remains in place in the event of an accident.

Coverage The body protector should reach the top of the sternum (breastbone) at the front and fit up to the prominent bone at the base of the neck at the back. Additionally:

- The front should not be less than 25mm below the ribcage.
- The body protector must fit all the way round the torso.
- Together, the body and shoulder protectors should cover the collarbone.
- The rear bottom edge of the body protector should not touch the saddle when mounted. There should be a minimum gap of at least 7cm. It is possible to obtain short fittings or a shortening service from some manufacturers.

Comfort check Try out all simulated riding positions to ensure that the body protector is comfortable.

Coloured Velcro All BETA 2009 and 2018 body protectors feature coloured Velcro fastenings. If these are exposed once the garment has been fitted, it shows that the garment does not fit correctly and a larger size should be tried.



Credit: Champion



LIFESPAN

BETA recommends that body protectors should be replaced every three to five years, depending on use, as impact absorption properties of the foam might start to decline during this time. Level 5 (red), Level 7 (blue), Class 1 (green), Class 2 (orange) and Class 3 (purple) labels are now obsolete as are all garments bearing the 2000 Level 1, 2 and 3 labels. Garments bearing any of these labels are no longer effective and should be replaced.



Riding disciplines and organisations now require either BETA 2009 or BETA 2018 Level 3 when body protectors are worn on either a voluntary or compulsory basis. In terms of rider safety the two versions offer the same level of protection. The majority of organisations will not permit the use of 2009 garments from 1st January 2024. Please check with your disciplines rules.



BUYING A BODY PROTECTOR

Body protectors are available from many BETA retailers who have been trained by us to offer an expert fitting service – just look for their safety course attendance certificate displayed in-store. They will be able to help and guide you when making your purchase. A full list of BETA retail members can be found on the BETA website, www.beta-uk.org.

Full instructions, including how to wash and care for your body protector, are supplied by the manufacturer.

A full list of body protector brands and manufacturers approved to current standards can be obtained from the BETA office (see contacts on the back page of this booklet).

