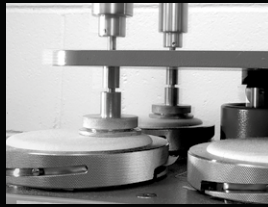


ABRASION TEST

ABRASION RESISTANCE (CYCLES)	PERFORMANCE LEVEL RATING
100	1
500	2
2000	3
8000	4

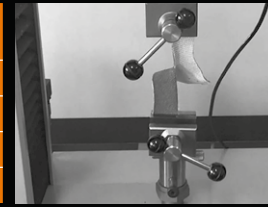


UPDATED: ABRASION PAPER

This test is carried out through the Martindale Abrasion Machine. A sample material is cut from the palm of the glove and fitted to a rubbing head of fixed size and weight. This is moved in an elliptical motion over a table covered with abrasion paper. The performance level of the glove is measured by the number of abrasion cycles required to 'hole' the material. Four samples are tested in this way, with the overall performance level decided by the lowest result.

TEAR TEST

TEAR RESISTANCE (NEWTONS)	PERFORMANCE LEVEL RATING
10	1
25	2
50	3
70	4



TEAR RESISTANCE

In this test, four samples from the palm of the glove are clamped in a standard tensile strength testing machine. The jaws move apart at a speed of 100mm per minute and from this the force required to tear the sample is measured. Performance levels range from 1 (resistance of peak force between 10N and 25N) to 4 (tear strength is at least 70N). For single materials, the level is decided by the lowest result of the four tests. For multiple, unbonded layers, each layer must be tested individually and the level is based on the lowest individual result of the most tear resistant material.

COUPE TEST

CUT INDEX	PERFORMANCE LEVEL RATING
1.2	1
2.5	2
5	3
10	4
20	5



COUPE TEST

Up until now, the 'Coupe Blade Cut Test' has been the standard test method for cut protection. A rotating circular blade moves horizontally to-and-fro across a fabric sample with a fixed force of 5 Newton's (N) applied from above. The test ends when the blade breaks through the sample material and the result is specified as an index value. This result is determined by the cycle count needed to cut through the sample and additionally by calculating the degree of wear and tear on the blade. This represents an exposure type cut risk in the workplace.

PUNCTURE TEST

PUNCTURE RESISTANCE (NEWTONS)	PERFORMANCE LEVEL RATING
20	1
60	2
100	3
150	4



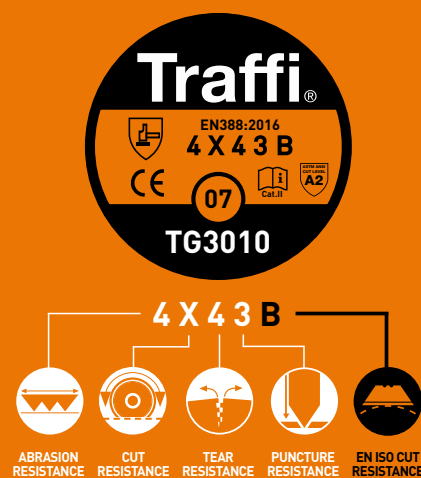
PUNCTURE RESISTANCE

This test consists of a compression test machine which pushes a rounded stylus 50mm (the size of a standard roofing nail) into the sample cut from the palm of the glove at a speed of 100mm per minute. From this, the maximum resistance force is recorded. Performance levels range from 1 (puncture resistance force of between 20N and 60N) to 4 (measured resistance of at least 150N). These levels are decided by the lowest of four test results.

EN ISO 13997 CUT TEST

For safety gloves created with materials designed to have a blunting effect on blades, additional cut protection tests must now be carried out and verified. Any sample fabric testing for cut resistance using the 'Coupe Blade Cut Test', which blunts the blade during the test, will be marked with an X and tested using the new EN ISO test. This is to ensure the degree of protection provided by the glove is as accurate as possible.

The objective of this new EN ISO 13997 cut test is to determine the resistance of the safety glove by applying the sample fabric with great force in a single movement, a better representation to the pressure type cut risk experienced in the workplace. To this end, a sharp-edged blade is dragged over the sample fabric once. This allows the accurate calculation of the minimum force required to cut the sample material at a stroke length of 20mm. The result is displayed in Newton's. There are 6 cut levels identified in the new EN ISO cut method.



Traffi®

THE HAND PROTECTION SPECIALISTS



UK Head Office:
Innovation House,
Unit 18 Caker Stream Road,
Mill Lane Industrial Estate, Alton,
Hampshire, GU34 2QA. UK
T: +44 (0)1344 207090 E: info@traffiglove.com



EU Office:
Traffi Safe Europe Srl,
Via Colle Fiorito 2,
Genzano di Roma, 00045 (RM), Italy
T: +44 (0)1344 207090
E: export@traffiglove.com



NA Office:
TraffiSafe LLC
31435 Stephenson Hwy,
Madison Heights, MI 48071, USA
T: +1 248-509-2345
E: nasales@traffiglove.com



www.traffiglove.com
TG/UK_EN388/12/23



EN 388:2016+A1:2018

AN UNDERSTANDING

Traffi®

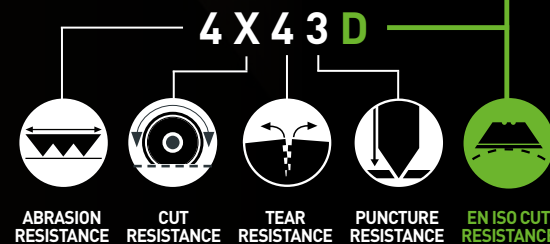
THE HAND PROTECTION SPECIALISTS

YOUR CARBON NEUTRAL
HAND PROTECTION
PARTNER

EN 388:2016+A1:2018

WORKING WITH THE TRAFFISYSTEM

RED CUT LEVEL LOWER CUT PROTECTION		AMBER CUT LEVEL MEDIUM CUT PROTECTION		GREEN CUT LEVEL HIGHER CUT PROTECTION	
A	B	C	D	E	F
2 Newtons 204gms	5 Newtons 505gms	10 Newtons 1020gms	15 Newtons 1530gms	22 Newtons 2243gms	30 Newtons 3059gms



EN 388:2016+A1:2018 EXPLAINED

A new version of EN 388, the standard used to regulate cut protection in safety gloves, was published in November 2016.

Our hands are amazingly versatile, allowing us to carry out everyday tasks and precision movements with minimal effort. However, this also means they are exposed to a multitude of hazards in the workplace.

Cuts and lacerations are the most common type of hand injury, meaning it is absolutely critical to wear the correct safety glove for the task at hand. To help users determine a glove's cut resistance, the EN 388 standard uses index values to rate the performance level of a glove in protecting the user against numerous mechanical risks including:

- Abrasion
- Blade cut
- Tear
- Puncture
- Impact

High performance fibres and materials (such as fibreglass or steel) are used to achieve greater levels of cut protection in safety gloves. Due to this, testing procedures and classifications are regularly improved and adapted to ensure the degree of cut level protection is truly representative.



Our RED cut level resistant gloves provide protection for a wide range of low cut risk tasks, such as general product handling, warehouse and assembly line work and some low risk construction jobs. The RED colour serves as a warning, reminding the wearer to consider whether further protection is required when switching to a different task. Such gloves are also a good choice for supplying to site visitors who are required to wear them to comply with safety regulations.

Our AMBER gloves offer a medium level of cut protection, which makes them the ideal choice for second fix construction trades, mechanical and electrical trades, steel fixing and handling materials with sharp edges. The AMBER gloves are finished with a variety of coatings to give you plenty of choice within the range.

Our GREEN gloves provide the higher levels of cut protection, so should be used when carrying out greater cut risk tasks such as applying cladding, swarf and metal work and handling glass or sheet metal with sharp edges. They also provide the higher protection necessary when dealing with unknown risks, for example, in the waste and recycling industries.

We can only recommend which cut level we believe will be suitable for your tasks based on feedback and testing. Ultimately, it comes down to your company's risk assessment and user trials to ensure the correct glove is chosen.