



Regulatory Compliance

ANSI/ ISEA 105 Cut Standards Update

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THE STANDARDS ARE CHANGING. HERE'S WHAT YOU NEED TO KNOW.



CUT

EN 388



abcdef

New cut resistance standards from American National Standards Institute (ANSI) and International Safety Equipment Association (ISEA) became effective in March 2016. These new standards include changes to the ratings scale and the standardization on a testing methodology.

What has changed. What it means.

NEW TEST The 2016 ANSI/ISEA cut resistance standards are based on a specific testing methodology, ASTM F2992-15, which can be performed on only one type of machine, the

TDM-100. With this testing methodology, samples are cut along a straight path by a straight-edged blade under force. The European ISO 13997 test procedure will also use only the, TDM-100 for the

EN388 standard. Defining the testing procedure this way will:

- Ensure uniform test results
- Make it easier to compare scores for different

materials and products

- Reinforce the compatibility between the two

international standards

NEW SCALE Going forward, cut resistance in occupational gloves will be measured on a scale of A1-thru-A9 (ANSI/ISEA 2016), instead of the 1-thru-5 (ISEA 105-2011) scale in use since 2011. In North America, performance results will still be measured in grams of force. The recently adopted European EN 388 standard for mechanical gloves will continue to use newtons.

The revised, compatible approaches will:

- Reduce the gaps between protection levels
- Add new levels for establishing better performance
- Ensure clearer valuations of protection levels

The chart below contrasts the old performance scale with the newly revised ANSI levels and their counterparts.

CURRENT: ISEA 105-2011		NEW: ANSI/ISEA 2016		EUROPE: EN388-2016	
ASTM F1790-2014 (CPPT)*		ASTM F2992-15 (TDM)		ISO 13997 (TDM)	
CPPT or TDM		TDM ONLY		TDM ONLY	
LEVEL	GRAMS	LEVEL	GRAMS	LEVEL	NEWTONS*
1	≥ 200	A1	≥ 200	A	2
2	≥ 500	A2	≥ 500	B	5
3	≥ 1000	A3	≥ 1000	C	10
4	≥ 1500	A4	≥ 1500	D	15
		A5	≥ 2200	E	22
		A6	≥ 3000	F	30
		A7	≥ 4000		
		A8	≥ 5000		
5	≥ 3500	A9	≥ 6000		

* Note: 1 Newton is equal to 102 grams of force.
This means the new ANSI cut level in North America will correlate to the EN388 cut level in Canada and Europe.

CHANGE IN ANSI/ISEA CLASSIFICATION LEVELS FOR CUT RESISTANCE

NEW ICONS Going forward, Ansell products and marketing collateral will communicate 2016 ANSI cut levels in new graphic icons, as shown on the glove example below..



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