



# THE LEADER IN SAFETY HELMET PERFORMANCE



## BOLT™ HEAD PROTECTION & ACCESSORIES

STAY **SAFE.**  
STAY **PRODUCTIVE.**





# THE LEADER IN SAFETY HELMET PERFORMANCE

VIRGINIA TECH<sup>TM</sup>  
HELMET RATING

5 ★★★★★

2026

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VIDEO



In September 2026, the Virginia Tech Helmet Lab, recognized globally for its gold-standard, science-based safety ratings, ranked the MILWAUKEE® BOLT™200 as the top-performing helmet on the market for preventing Traumatic Brain Injuries (TBIs). Compared to traditional hard hats, these helmets reduce concussion risk by 50% and skull fracture risk by nearly 75%.

The Virginia Tech Helmet Ratings, which are funded by construction industry organizations and free from manufacturer influence, evaluate helmets' ability to reduce both linear impacts and rotational head acceleration across scenarios that mirror typical construction accidents. Out of 34 helmets tested globally by Virginia Tech, 19 earned a 5-star rating. Milwaukee BOLT helmets occupy 7 of these 5-Star spots, and BOLT™200 ranks number one.

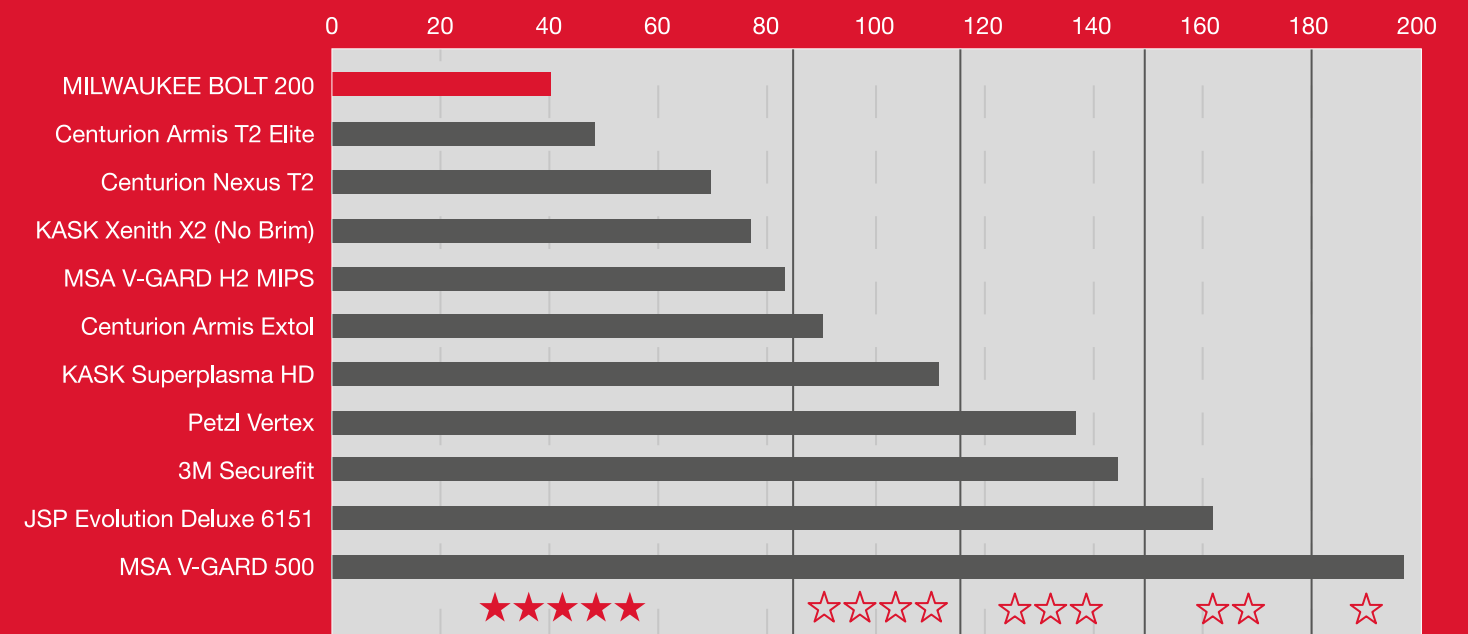
## MILWAUKEE® BOLT™ 200 EARNs TOP RATING IN INDEPENDENT CONSTRUCTION HELMET TESTING



MILWAUKEE® is highlighting new independent research from Virginia Polytechnic Institute and State University (Virginia Tech). There, the Helmet Lab evaluated construction helmets against fall-related impact scenarios based on real-world jobsite accidents. With more than 20 years of experience researching injury biomechanics across athletics, cycling, snow sports and construction, Virginia Tech's Helmet Lab is a recognised leader in helmet safety research. Their study moves beyond pass/fail certification standards, instead assessing individual helmets for the risk of head injury during jobsite accidents - not just from falling objects, but from oblique impacts, slips, trips, and falls.

The MILWAUKEE® BOLT™ 200 earned a 5-star Virginia Tech Construction Helmet Rating and, in the current September 2026 published ratings, ranks #1 of 38 helmets tested with a STAR score of 40.74. The STAR score quantifies risk of two injuries - concussion and skull fracture - across 100 impacts. The lower the score, the lower the risk.

### PREDICTED INJURIES IN 100 IMPACTS



MEETING A STANDARD IS THE STARTING  
POINT. PERFORMANCE IS THE DIFFERENCE.

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# SAFETY HELMETS

MORE PROTECTION FOR MORE HAZARDS



## VT STAR TEST METHOD

### TYPE 1 HEAD PROTECTION (HARD HATS)

PROTECT AGAINST FALLING OBJECTS



### TYPE 2 HEAD PROTECTION (HELMETS)

PROTECT AGAINST FALLING OBJECTS  
AND OBLIQUE IMPACTS, SLIPS, TRIPS,  
AND FALLS



**57% OF FATAL AND 54% OF  
NON-FATAL CONSTRUCTION BRAIN  
INJURIES INVOLVE A FALL**

#### The jobsite hazard is not only what falls on the worker

Traditional head protection has long been associated with falling-object hazards. But construction workers are also regularly exposed to slips, trips and falls, where the head may strike the ground or another surface from a range of directions. The Virginia Tech research was developed specifically to investigate these severe, but survivable, fall-related impacts and the complex head motion they can generate.

#### Type 1 vs Type 2: Protection from more directions

Type 1 helmets are designed primarily around top impacts, while Type 2 helmets add lateral impact requirements. That distinction is particularly relevant to slips, trips and falls, where impact may occur at the front, rear or side of the helmet rather than only at the crown.

#### Real accident data. Controlled laboratory testing.

Virginia Tech developed its fall-specific methodology using previous research, OSHA accident reports and oblique impact testing. The current rating protocol recreates severe but survivable construction fall scenarios using three impact locations and two impact speeds. Linear and rotational head accelerations are measured during each impact and correlated with concussion and skull fracture risk. These calculations output a STAR score - the Summation of Tests for the Analysis of Risk - which is the predicted number of total injuries in 100 accidents.

- 12 laboratory impacts are performed per helmet, using a new sample for each test.
- Three impact locations are tested at two speeds, with two trials for each condition.
- Impact conditions are weighted according to how frequently that type of fall is expected to occur on construction sites.
- Measured acceleration data is used to calculate predicted concussion and skull fracture risk.
- The combined result produces the Construction STAR score; lower scores indicate better performance.

#### Why the STAR rating matters

Virginia Tech awards more stars to helmets associated with lower concussion and skull fracture risk in the tested fall scenarios and recommends 4- and 5-star helmets for workers exposed to fall hazards. The research also demonstrates that not all Type 2 helmets perform equally, making comparative testing important when users are choosing head protection.

In the peer-reviewed development study, the MILWAUKEE® BOLT™ 200 recorded the lowest STAR score among the representative subset of helmets tested. Across that study, Type 2 helmets reduced concussion risk by 32.7% and skull fracture risk by 57.5% on average compared with the Type 1 models tested. The researchers also observed substantial performance variation between Type 2 models.

Ranking and scores above reflect Virginia Tech's September 2026 Construction Helmet Ratings at the time this release was prepared. Virginia Tech states that new and previously untested helmets will continue to be added, so rankings may change over time.



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# THE BOLT™ SYSTEM



**Built for more than the standard**

The BOLT™ platform is more than a helmet. It is part of a wider head-protection system integrating heat mitigation, lighting solutions, and protection for eye, face, and hearing. BOLT™ helps professionals adapt their PPE to the demands of the task while being protected by the top-ranked safety helmet on the market.

## BOLT™ 200

### BEST IN CLASS PROTECTION

Protects Side Impact

LEXAN Shell

5 Point Adjustment,  
Comfortable Fit

Removable and  
Machine Washable

Removable and Machine  
Washable Sweat Band

Comfortable  
Padded Suspension

Comfortable Fabric  
Extended Wear

Also available in various  
colours in Vented & Non Vented



Absorbs Top  
Impact Energy

Adjustable Swinging  
Ratchet  
Better comfort



EN397 / EN12492  
Color-coded Chinstraps

Optimized Venting  
for Better Airflow

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ACCESSORIES  
MULTI ACCESSORIES COMPATIBILITY



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