



**PIP**

TRAVERSE<sup>TM</sup>  
SAFETY HELMETS  
FEATURING MIPS<sup>®</sup> TECHNOLOGY

[www.pipusa.com](http://www.pipusa.com)

**Mips**

A photograph of three construction workers standing on a construction site. The worker in the foreground is wearing a white hard hat with red accents, a high-visibility yellow safety vest over a grey t-shirt, and black gloves. He is holding a pair of pliers. Behind him, another worker wears a white hard hat and safety glasses. To the right, a third worker wears a black hard hat and is smiling. The background shows a building under construction with a crane.

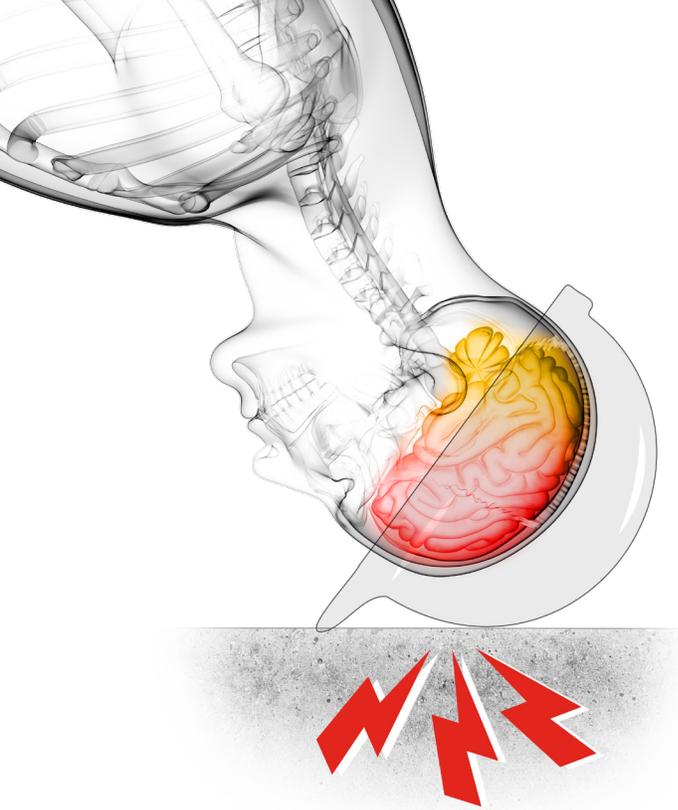
For nearly 100 years the basic purpose of hard hats has remained the same – to help protect the head against impacts from falling objects from above.

While this is still critically important for construction and maintenance workers, data is now telling us that:

**NEARLY 60%  
OF HEAD INJURIES**

ARE CAUSED BY FALL ACCIDENTS  
FROM HIGHER LEVELS  
OR FALLS ON THE SAME LEVEL

**IT'S TIME TO  
MOVE FORWARD**



# The Science of Head Injury

CONCUSSIONS AND TRAUMATIC BRAIN INJURIES ARE COMMONLY THE RESULT OF ROTATIONAL FORCE AND STRAIN TO THE BRAIN.

Injury statistics demonstrate that when someone trips on a level surface, they are more likely to fall at an angle instead of directly on top of the head. This is due to the forward energy of motion that may extend to the head when hitting the hard ground surface. Over the past few years, science has shown that our brains are very sensitive to rotational forces.

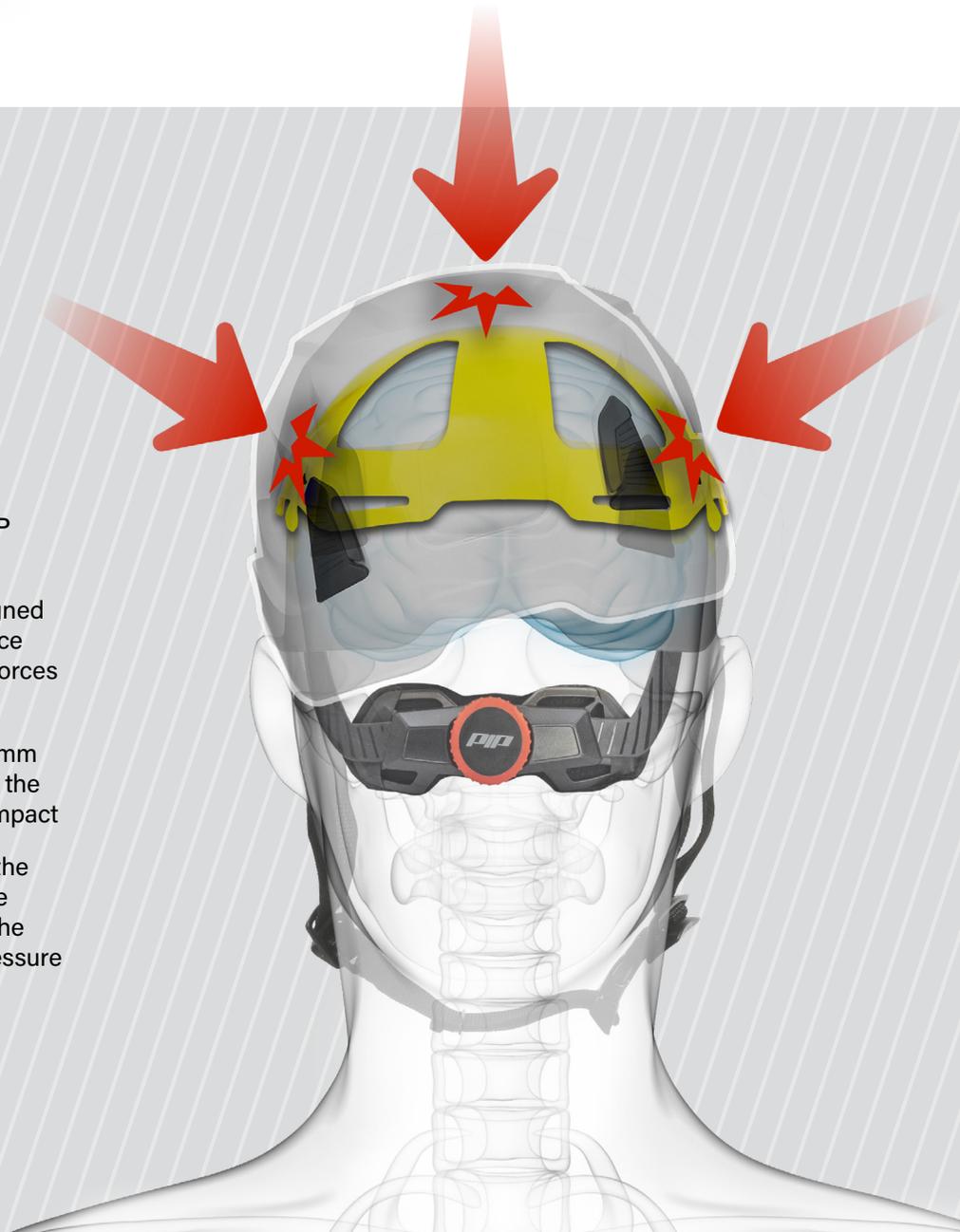
**IN THIS SCENARIO, CONVENTIONAL HARD HATS WITHOUT A CHIN STRAP WOULD LIKELY FLY OFF. A CHIN STRAP HELPS, BUT IS IT ENOUGH?**

Mips

## Introducing Mips® Technology

A LOW FRICTION LAYER DESIGNED TO HELP REDUCE THE SEVERITY OF HEAD INJURIES

- > At impact the Mips® Safety System is designed to help reduce the amount of rotational force transferred to the head by redirecting the forces that are generated by the impact
- > The Mips® Safety System allows for a 10-15 mm relative movement between the helmet and the head during the critical first 5-10ms of the impact
- > It is not uncommon that the point load on the head/helmet at impact is at 2,200 lbs. – the Mips® Safety System is designed to allow the helmet to move even under this kind of pressure



# PIP® TRAVERSE™ SAFETY HELMET MEETS BOTH:



**ANSI Z89.1**

Industrial Head Protection

AND



**EN 12492**

Mountaineering Equipment Standard

## TYPE II

3rd Party Certified

### Force Transmission

must be less than an average of 831 lb/ft

### 4 Off Center Penetration Tests

Front, Back and Sides

### Impact Energy Attenuation

Maximum attenuation shall not exceed 150g

#### PENETRATION

2.2 lbs. at 23 ft/s

#### IMPACT ABSORPTION

8 lbs. at 18 ft/s

#### PENETRATION

6 lbs. at 3.28 ft

#### SHOCK ABSORPTION

11 lbs. at 1.64 ft

### Shock Absorbing Capacity

(Clauses 4.2.1.2; 4.2.1.3; 4.2.1.4)  
Must be less than 2,248 lb/ft

### Retention System Strength

(Clause 4.2.3)

### Effectiveness of the Retention System

(Clause 4.2.4)



**Mips**

MULTI-DIRECTIONAL  
IMPACT PROTECTION



# PIP<sup>®</sup> TRAVERSE<sup>™</sup> SAFETY HELMET - MIPS<sup>®</sup>

ALSO AVAILABLE IN  
A VENTED OPTION

**280-HP1491RVM**  
Vented Shell



|                          |                              |
|--------------------------|------------------------------|
| <b>ANSI</b><br>Z89.1     | <b>EN</b><br>12492*          |
| IMPACT TYPE<br><b>II</b> | ELECTRICAL CLASS<br><b>C</b> |



## 280-HP1491RM

Non-Vented Shell

- Super lightweight ABS shell for wearer comfort
- Low frictional layer designed to reduce rotational motion transferred to the head from angled impacts
- EPS foam impact liner helps absorb the forces of front, side, or rear impacts
- 4-point quick-release chin strap for a proper fit
- Sure-lock wheel ratchet for an effortless fit
- Inner padding for added comfort
- Traverse<sup>™</sup> specific accessory slots and universal accessory slots on side of safety helmet

|                          |                              |
|--------------------------|------------------------------|
| <b>ANSI</b><br>Z89.1     | <b>EN</b><br>12492*          |
| IMPACT TYPE<br><b>II</b> | ELECTRICAL CLASS<br><b>E</b> |

### COLORS AVAILABLE



| STYLE NUMBER     | SIZE ADJUSTMENT         | SHELL      | COLOR         | SHELL MATERIAL | ANSI Z89.1 | EN 12492 | ELECTRICAL CLASS |
|------------------|-------------------------|------------|---------------|----------------|------------|----------|------------------|
| 280-HP1491RM-01  | Sure-Lock Wheel Ratchet | Non-Vented | White         | ABS            | Type II    | Yes      | Class E          |
| 280-HP1491RM-02  | Sure-Lock Wheel Ratchet | Non-Vented | Yellow        | ABS            | Type II    | Yes      | Class E          |
| 280-HP1491RM-03  | Sure-Lock Wheel Ratchet | Non-Vented | Orange        | ABS            | Type II    | Yes      | Class E          |
| 280-HP1491RM-04  | Sure-Lock Wheel Ratchet | Non-Vented | Dark Green    | ABS            | Type II    | Yes      | Class E          |
| 280-HP1491RM-08  | Sure-Lock Wheel Ratchet | Non-Vented | Navy Blue     | ABS            | Type II    | Yes      | Class E          |
| 280-HP1491RM-09  | Sure-Lock Wheel Ratchet | Non-Vented | Gray          | ABS            | Type II    | Yes      | Class E          |
| 280-HP1491RM-11  | Sure-Lock Wheel Ratchet | Non-Vented | Black         | ABS            | Type II    | Yes      | Class E          |
| 280-HP1491RM-15  | Sure-Lock Wheel Ratchet | Non-Vented | Red           | ABS            | Type II    | Yes      | Class E          |
| 280-HP1491RM-44  | Sure-Lock Wheel Ratchet | Non-Vented | Hi-Vis Yellow | ABS            | Type II    | Yes      | Class E          |
| 280-HP1491RVM-01 | Sure-Lock Wheel Ratchet | Vented     | White         | ABS            | Type II    | Yes      | Class C          |
| 280-HP1491RVM-02 | Sure-Lock Wheel Ratchet | Vented     | Yellow        | ABS            | Type II    | Yes      | Class C          |
| 280-HP1491RVM-03 | Sure-Lock Wheel Ratchet | Vented     | Orange        | ABS            | Type II    | Yes      | Class C          |
| 280-HP1491RVM-04 | Sure-Lock Wheel Ratchet | Vented     | Dark Green    | ABS            | Type II    | Yes      | Class C          |
| 280-HP1491RVM-08 | Sure-Lock Wheel Ratchet | Vented     | Navy Blue     | ABS            | Type II    | Yes      | Class C          |
| 280-HP1491RVM-09 | Sure-Lock Wheel Ratchet | Vented     | Gray          | ABS            | Type II    | Yes      | Class C          |
| 280-HP1491RVM-11 | Sure-Lock Wheel Ratchet | Vented     | Black         | ABS            | Type II    | Yes      | Class C          |
| 280-HP1491RVM-15 | Sure-Lock Wheel Ratchet | Vented     | Red           | ABS            | Type II    | Yes      | Class C          |
| 280-HP1491RVM-44 | Sure-Lock Wheel Ratchet | Vented     | Hi-Vis Yellow | ABS            | Type II    | Yes      | Class C          |

\*EN12492: SHOCK ABSORBING CAPACITY (CLAUSES 4.2.1.2; 4.2.1.3; 4.2.1.4), RETENTION SYSTEM STRENGTH (CLAUSE 4.2.3), EFFECTIVENESS OF THE RETENTION SYSTEM (CLAUSE 4.2.4)

# CUSTOM ACCESSORY OPTIONS

FOR PIP® TRAVERSE™ SAFETY HELMET

All Accessories Sold Separately



**251-HP1491P**  
Eye Shield Protector  
Smoke

- Protects the eye shield from scratches
- Has a mounting slot on protector to allow headlamp to be worn



**280-HP1491FSUN**  
360 Degree  
Fabric Sunshade



**251-HP1491C**  
Clear



**251-HP1491G**  
Smoke Gray

- Eye Shield**
- Provides eye protection against hazards
  - Scratch resistant and anti-fog



**251-HP1491PFS**  
Polycarbonate  
Faceshield Set



**280-HP1491KIT**  
Reflective Decal Kit  
Silver

- Reflective sticker kit for increased visibility at night
- Only available in silver



**280-HP1491VC**  
Vent Covers

- Made from TPR
- Close vents on top of helmet to protect against rain

### 280-HP1491NS

#### Neck Sunshade

- Provides sun and rain protection for the neck
- Made from hi-vis ripstop material with reflective striping



*Head lamp not included  
and is not sold by PIP®*



### 280-HP1491SUN

#### Sun Brim Extension

- Brim clips onto the front of the helmet for additional protection from the sun or rain
- Easy on/off clips

### 280-HP1491BAGB

#### Basic Storage Bag



- Drawstring bag
- Soft bag to protect against damage during storage and transport

### 280-HP1491BAGD

#### Deluxe Storage Bag



- Zippered storage bag to easily hang and store product to protect from damage during storage and transport
- Identification label on front of bag



### 280-HP1491TAG

#### Name Tag Holder

- Easy to install plastic name tag holder to allow for quick identification of the worker
- Weather resistant

## REPLACEMENT PARTS



### 251-HP1491PF

*Polycarbonate*

### 251-HP1491MF

*Metal Mesh*

#### Replacement Faceshields



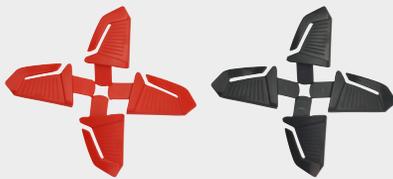
### 251-HP1491B

#### Replacement Faceshield Bracket



### 280-HP1491CS

#### Replacement 4-Point Chinstrap



### 280-HP1491LCR

*Red*

### 280-HP1491LCG

*Dark Gray*

#### Replacement Lamp Clips

- Pack of 4
- Universal strap holder for head lamp



### 251-HP1491PC

#### Replacement Eye Shield Protector Connector

- Replacement clips to connect the eye shield to the helmet
- Pack of 2



### 280-HP1491PAD

#### Replacement Pad Kit

- 3-piece replacement padding set
- Crown, front and rear padding



**PROTECTIVE INDUSTRIAL PRODUCTS, INC.**

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