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3M™ TA590 Vented Safety Helmet

Technical Data Sheet

Description

The Australian made 3M™ TA590 (vented) Polycarbonate safety helmet (Type 2) with comfortable 6 point terylene head harness is the central building block providing users with a face, head and hearing certified protection system if needed. It is designed to protect wearers from numerous hazards and compliments a number of 3M™ accessories.

The unique crown cooling vents ensures cooler and more comfortable protection in humid conditions.

The helmet consists of a shell and a suspension system called a harness. The shell provides the impact protection by deflecting, whilst the harness absorbs the shock and load. The transmission of force is dissipated through the shell, harness by stretching and dissipating it down through the body to the ground. The six point harness provides the cushioning by stretching and spreading the load evenly over the protected area.

The 25mm wide webbing maximises the surface area contact with the wearer's head and enhances stability/ security of the helmet.

The area between the shell and harness is the shock absorption zone and should not be treated as a storage location when worn.

Features

- Australian made
- Type 2 Polycarbonate shell suitable for higher temperature applications
- Top venting ensures cooler and more comfortable protection
- Lightweight 341g
- Comfortable 6 point terylene head harness
- Fit all head sizes 50 – 66cm
- Rain gutter helps prevent water dropping on wearer
- Terry towel sweatband absorber (replaceable)
- 25mm moulded slots accept all safety helmet accessories (cap attach earmuffs and visors).
- PPE combinations have been tested as an "approved" combination under AS/NZS 1801:1997, AS/NZS 1337:1992, AS/NZS 1270:2002.
- Helmets can be personalised with names, logos or reflective tapes

Applications

Suitable for general use in industry for protection of the upper part of the wearers head.

The TA590 (vented) safety helmet has been designed to meet the requirements of AS/NZS 1801 for shock absorption, resistance to penetration, lateral stiffness, ignition by flame and electrial insulation (electrical hazards up to 650V) when tested in the Hot (50°C), Cold (-5°C) and Wet conditions.

Type 2 Polycarbonate safety helmets are suitable for higher temperature work applications such as welding and smelting

Standards

The TA590 is certified to AS/NZS 1801:1997 Type 2 Polycarbonate for high temperature workplaces.

The range of Safety Helmets are compatible with brand hearing, eye and face protection. Various brand PPE combinations are certified (including manufacturer's certified accessories) to Australian/New Zealand Standards.

Specifications

3M™ TA590 Vented Safety Helmet	
Shell Material	Injection moulded (Polycarbonate)
Vented or Unvented	Vented
Harness Cradle	25mm Nylon webbing 6 point
Weight	291 g (weights differ with colours)
Harness Segments	Injection moulded HDPE (High Density Polyethylene)
Adjustment Range	50 - 66 cm
Harness Headband	Injection moulded LDPE (Low Density Polyethylene)
Harness Sweatband	Foam backed Terry Towelling (alternative: Lambswool)
Shell Colours	White, Yellow, Fluoro Yellow

Types of Safety Helmets

The scope of AS/NZS 1801:1997 standard specifies requirement for occupational protective helmets to protect wearers heads from falling objects in building and construction, quarrying, shipbuilding, forestry, and other occupations with similar hazards. These requirements include the construction and materials of the helmet shell and head harness, mechanical strength of the shell and finish of the helmet.

In compliance with the standards objectives to specify protective helmets that are worn in a variety of occupations. brand safety helmets are classified into three types:

Type	Safety Helmet
Type 1	General industrial safety helmets
Type 2	Helmets intended for high temperature workplaces
Type 3	Helmets intended for bushfire fighting

Markings & Working Life of Safety Helmets

All information pertaining to selection, care and use is available in AS/NZS 1800:1998. Based upon industrial field tests Australian and New Zealand standards recommends, in general terms, an industrial safety helmet should be replaced every three years from date of issue, and the harness should be replaced every 2 years. Harsh conditions and/or rough usage dictate that a helmet may be replaced sooner.

Markings on safety helmets are a requirement for certification. It assists users in identifying their intended use. The shell is moulded with very important information stamped on the peak and you should familarise yourself with the significance of this labelling.

Australian/New Zealand Standards AS/NZS 1801:1997 is an excellent reference document and provides assistance.

Replace your hard hat at regular intervals - hard hats don't last forever, even with proper care, wear and tear is inevitable, as a result AS/NZS 1800:1998 3.4 states that the average service life for a safety helmet is three years from time of issue or earlier if the helmet has changed in colour, exhibits any signs of wear or damage due to impact or deterioration.

If the sticker has not been used or removed, replace the helmet three years from the manufacture date stamp under the brim or peak of the helmet. In the centre of the stamp is the year with a directional arrow pointing to the month of the year in which the helmet was made.

Customisation & Integrity

3M's corporate branding and reflective tape options are available across the range of Australian made brand safety helmets to create and maintain company image and visibility on site.

3M's Australian made brand safety helmets are manufactured under an independently audited scheme to ISO9001. The Safety Helmets are licensed and manufactured to AS/NZS 1801:1997.

3M's logo printing and application of reflective tape to brand safety helmets does not affect the integrity of the Safety Helmet.

Maintenance/Cleaning

The safety helmet should be kept in good condition and cleaned regularly using warm water and/or a mild detergent only. A brush can be used to remove stubborn marks from the shell. Prior to washing, the harness should be removed from the shell to facilitate cleaning. The use of solvents, very hot water or harsh abrasives is not recommended.

Worn or damaged headgear parts should be replaced immediately and damaged shells (splits, cracks, dents or excessive abrasion, discolouration or weathering of the shell surface) should be discarded.

Accessories must be OEM components and never use a makeshift chinstrap. A chinstrap whilst a simple component is designed to meet specific breaking loads. This is to prevent serious accidents from occurring.

Storage

Storage is part of ongoing care and maintenance but is so often overlooked. Care should be taken to ensure your safety helmet, when not in use, is stored appropriately and not exposed to possible damage.

Refrain from leaving it sitting near the rear window of a car as it is exposed to intensified heat, sunlight and becomes a flying projectile in the event of a car accident or sudden braking.

Disposal

Most components of this assemble can be recycled. Recycle symbols are present on both the shell and harness assemblies. If recycling facilities are not available the product should be disposed of as solid waste. If the product is to be disposed of, it should be dissembled and disposed of as solid waste. Please see local authority regulations for disposal advice and locations.

Ordering Information

3M Code	Model #	Description
AT010706607	TA590:WH	3M™ TA590 Safety Helmet Polycarb (Type 2) Vented - White
AT010706706	TA590:YE	3M™ TA590 Safety Helmet Polycarb (Type 2) Vented - Yellow
AT010669771	TA590:FLYE	3M™ TA590 Safety Helmet Polycarb (Type 2) Vented - Fluoro Yellow
AT010676768	TA590:FLLM	3M™ TA590 Safety Helmet Polycarb (Type 2) Vented - Fluoro Lime

Attachments & Accessories

3M Code	Model #	Description
AT010700691	TA094	Replacement Sweatband Terry Towelling
AT010701343	TA095	Replacement Sweatband Lambswool
AT010707381	VH500	Nylon Visor Holder for TA500 Helmet Visor
AT010707399	VH500P	Nylon Peaked Visor Holder for TA500
AT010659731	VV765	Aluminium Visor Holder For TA500 Series Helmets
AT010700006	2010892	Visor Post L Profile T25 GRP
AT010655499	KF010	Visor Holder HC600 HC71
AT010655481	KF003	Visor Holder To Suit HC600 71
AT010659509	TA179	Balaclava for use under Helmet
AT010659491	TA177:NA	Wide Brim Neck Flap Earmuff Compatible
AT010659426	TA173:BK	Canvas Brim and Neck Flap - Black
AT010659434	TA173:GN	Canvas Brim and Neck Flap - Green
AT010659459	TA173:OR	Canvas Brim and Neck Flap - Orange
AT010659467	TA173:RD	Canvas Brim and Neck Flap - Red
AT010659475	TA173:WH	Canvas Brim and Neck Flap - White
AT010659483	TA173:YE	Canvas Brim and Neck Flap - Yellow
AT010659442	TA173:NA	Canvas Brim and Neck Flap - Navy
AT010659418	TA170	Cotton Neck Flap White
AT010703992	TA175	Chinstrap for TA500 & TA400 Series Helmets
AT010704065	TA180	Reflective Tape Kit for Helmets
AT010706714	TA597	Replacement 6 Point Harness for TA500 Series
AT010706730	TA598	Ratchet Headgear for TA500 Series Helmet
AT010700196	HXSC71	Insert Slot Cover for TA500 Series Helmets

Important Notice

To the extent permitted by law, 3M shall not be liable for any loss or damage including any loss of business, loss of profits, or for any indirect, special, incidental or consequential loss or damage arising from reliance upon any information herein provided by 3M. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.

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