

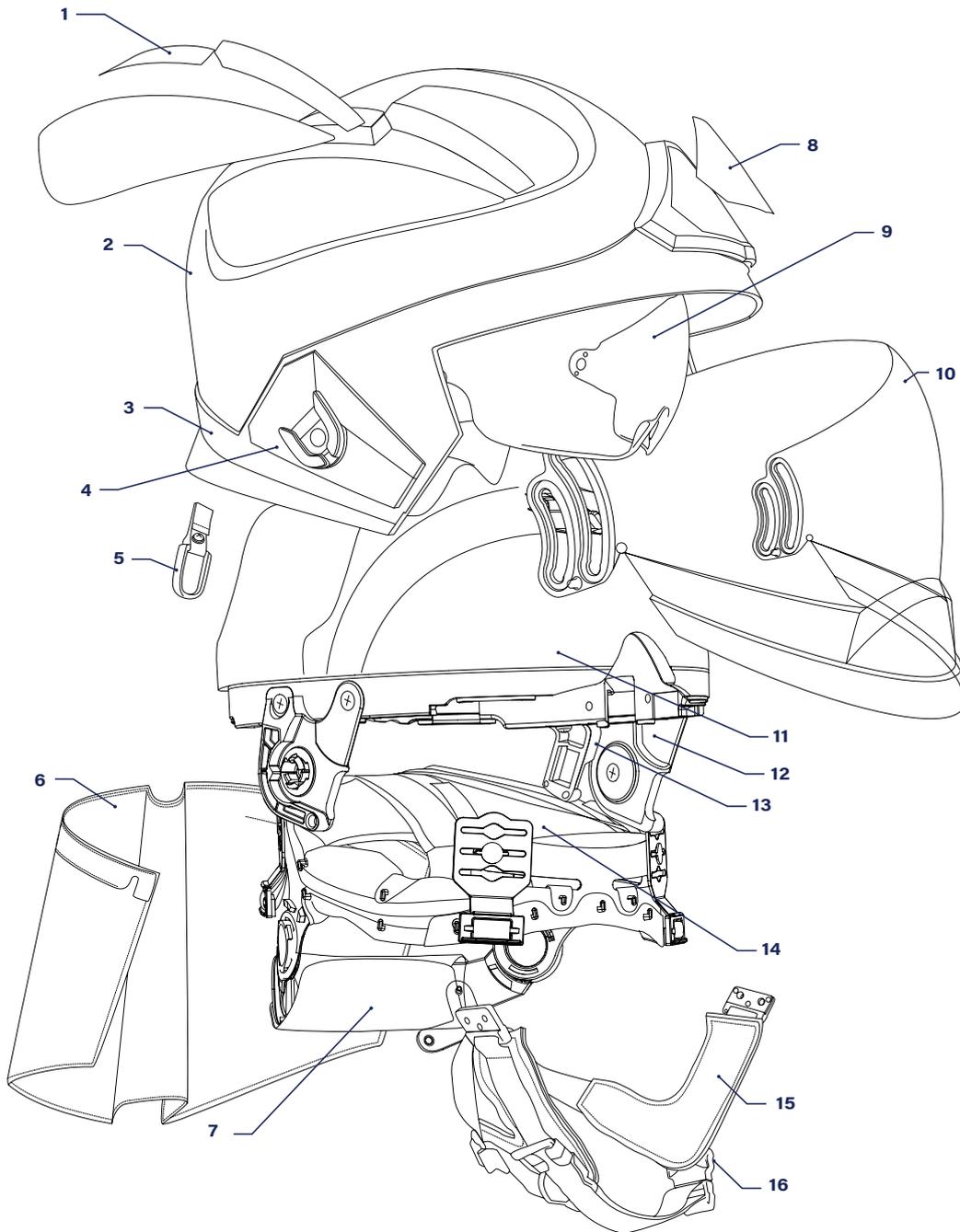


F15

STRUCTURAL
FIRE HELMET

TECHNICAL
INFORMATION





TECHNICAL DATA		FEATURES ¹	
Helmet Size:	One Size Fits All. Ratchet adjustable headband between 50-65cm. Downsize padding available for smaller head sizes.	1. Reflective Trim	12. Micro-Flex Hinge
Helmet weight:	AS/NZS and NFPA: 1640g ± 5% EN: 1760g ± 5% <i>with face shield, eye protector, and neck protector</i>	2. DuPont™ Kevlar® & Fibreglass Reinforced Composite Shell ²	13. Hands-Free Comms Bracket
Certification:	AS/NZS 4067:2012 EN443:2008 NFPA 1971:2013 NFPA 1951:2013 EN14458:2004 AS/NZS 1337:2010 ANSI Z87.1:2015	3. Advanced Polymer Chassis	14. 6-Point Ribbon Suspension System with Padded Air Mesh
		4. Adapter Plates	15. 4-Point Nomex® Chin Strap with Leather Cheek Padding.
		5. Rear Storage Hanger	16. Quick Release Buckle
		6. Flame Resistant Neck Protector	
		7. Pivot Headband	
		8. Front Plinth with Reflectors	
		9. Eye Protector	
		10. Dual Pivot Face Shield	
		11. Polyurethane Impact Liner	

F15



The Pacific F15 Structural Fire Helmet from Pacific Helmets (NZ) Ltd combines the heritage and proven safety of Pacific's unique DuPont™ Kevlar® shell technology with an advanced polymer chassis to revolutionize your firefighting experience.

For over 35 years Pacific Helmets (NZ) Ltd has been designing and manufacturing safety helmets based around three fundamental philosophies - safety, comfort, and quality. The design team incorporated these essential requirements into every aspect of the F15. The result is a helmet that not only offers the wearer extreme protection but is comfortable, easy to adjust, and will last for years.

Pacific are taking helmet safety to a level beyond that offered by any previous structural fire helmet. As well as providing increased head and face protection the F15 goes further to offer greatly improved protection from neck and spinal injuries.

The F15 incorporates Pacific's unique **Five Stage Impact Attenuation System** where all aspects of the system work in harmony to absorb more impact energy, minimising the transfer of that energy to the wearer. This is achieved by creating a system that allows the components greater flexibility to move

under impact without separating. Impact force is directed out along the shell and away from the wearer.

The Five Stage Impact Attenuation System:

- 1. SHELL:** Unique composite material that is reinforced by Kevlar® and fiberglass. Lightweight but with high tensile strength the shell also remains flexible and is designed to flex under high impact. This acts in the same way as crumple zones in cars, decelerating the helmet. The Kevlar® thread embedded in the shell provides penetration resistance and protection in multi impact situations.
- 2. CHASSIS:** Advanced polymer molded chassis provides a secure platform for the F15 but allows all the components to flex and move thus dissipating the impact energy away from the impact point.
- 3. LINER:** Full cranium closed cell polyurethane foam cells crush and absorb impact energy efficiently.
- 4. RIBBON CRADLE:** 6 point ribbon cradle elongates to absorb impact energy.
- 5. MICRO-FLEX HINGE:** Unique elasticated co-mould hinge with micro-flex design works in sync with the foam liner to dissipate impact energy like a car shock absorber. Because it is flexible it allows the shell to move while retaining the system in place.

01. A BALANCED APPROACH

A vital part of expanding the safety and comfort of the F15 is a commitment to increased human ergonomic compatibility. The wearer should virtually become unaware they are wearing the helmet much in the same way you do when wearing a baseball cap for a long time.

The F15 has minimal impact on movement, sight, hearing and the ability to quickly carry out essential tasks firefighters are called on to perform.

The F15 has been designed to distribute the weight of the helmet on the head to achieve an **optimum center of gravity**. This means the F15 is not only more stable but actually feels lighter to wear due to being so well balanced.

The result is a helmet that reduces neck and spine fatigue and the risk of whiplash injury.

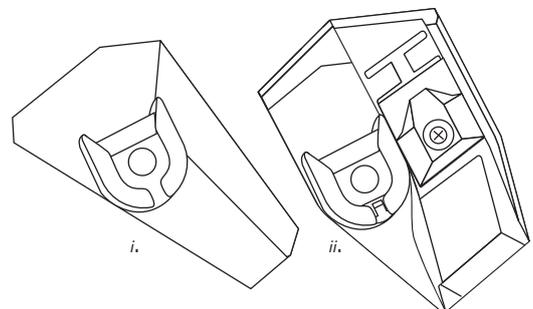
02. SHELL

- a. Unique composite material that is reinforced by **Kevlar® and fiberglass**, allowing the shell to be lightweight but with high tensile strength.
- b. The base material of the shell is inherently fire retardant and does not depend on other material, such as the paint on the shell, for flame protection.
 - i. *Shell materials are subjected to an 1000°C flame for 15 seconds and successfully self-extinguish in under 5 seconds after the removal of the flame source.*
- c. The shell has been designed in combination with the chassis to optimise the helmet center of gravity (COG) which is vertically aligned with the head's center of gravity. Optimised COG means the wearer is protected from stress and strain to the neck muscles making the helmet comfortable to wear over extended periods of time. This also minimizes health and safety incidents to the neck areas.
- d. Durable, chemical and UV resistant, easy to clean, the shell is available in a wide range of high gloss or matt colours. Photoluminescent (glow in the dark) or High Visibility Fluorescent paint colours are also available.
 - i. *Customised paint colours are also available to match your branding.*



03. CHASSIS

- a. Special **advanced polymer molded chassis** provides a secure platform for the F15 while being flexible enough to ensure the Five Stage Impact Energy Attenuation System has the ability to absorb a maximum amount of force. It distributes the weight evenly across the F15 to achieve a low center of gravity, which in turn creates a very stable helmet.
- b. The Chassis is **ultrasonic welded** to the shell for an inseparable bond.
- c. **Adapter plates** on the side of the chassis can be easily switched to enable different attachments. Current options for adapter plates are below:
 - i. *Easi On-Off Base (standard)*
 - ii. *Combination SCBA and Easi On-Off Base*
- d. The Chassis also incorporates an attachment system at the front. This is used to attach the **Front Plinth** (standard), which can be easily removed and replaced.
- e. A **Front Torch** attachment is currently in development, estimated launch in Q4 2017, and retrofittable to all F15s.



04. IMPACT LINER

- a. **Full cranium closed cell polyurethane** foam impact liner provides all round impact protection. Unique ridges in the top of the liner allow for extra compression to further reduce the force transferred to the head and neck.
- b. Closed cell polyurethane foam offers superb thermal insulation. Independent laboratory tests routinely indicate a rise of less than 5°C after a radiant heat exposure of 14kW/m² for 8 minutes, which equates to approximately 800~1000°C.

05. MICRO-FLEX HINGE

- a. Unique **elasticated co-mould hinge** with micro-flex design works in sync with the foam liner to dissipate impact energy. Not only does this flexible design act as a shock absorber itself, it allows the rest of the Five Stage Impact Energy Attenuation System the ability to all move in unison vastly reduces the force transferred to the wearer. Allowing the helmet the flexibility to react to force protects the wearers spine.



06. SUSPENSION

- a. The **6-point ribbon cradle suspension system** creates a 30mm clearance between the top of the wearer's head and the impact liner. This elastically cushions the head and at the same time allows for unobstructed air flow inside the helmet, keeping the head well ventilated.
- b. The ribbons are **easily removed** for decontamination, maintenance, and replacement.

07. COMFORT

- a. **Padded Air Mesh** in the F15's liner provides comfortable wear over prolonged use. This 3D mesh provides **optimal internal air circulation** throughout the liner. The Padded Air Mesh wicks moisture away from your skin.
- b. The padding system can easily be removed for cleaning or decontamination without tools and with a gloved hand. It is attached by either hooks or velcro.
- c. The front and rear padding is available in your choice of **Leather** (pictured), **Nomex**®, or **Merino**.



08. QUICK-FIND ADJUSTMENT

- a. Firefighters are required to operate equipment in adverse surroundings and at any time. For this reason, all adjustable components required to quickly secure the helmet are red to stand out against a dark background making them easier to find in bad lighting or under extreme fatigue.

09. HEADBAND

- a. Pacific's latest headband design eliminates pressure points by using **global contraction** to contour evenly around the head. It can be adjusted to fit head sizes ranging from **50 to 65cm**. Ratchet adjustment enables the headband to be resized to fit a wide range of head sizes. Micro-adjustment is at 5mm increments and can be adjusted with ease by a single heavily gloved hand. The ratchet is red to stand out against a dark background making it easier to find in bad lighting or under extreme fatigue.
- b. Downsize kit available to improve the fit on smaller head sizes.
- c. A **pivoting rear nape** allows the angle to be adjusted at a range of 100° to perfectly suit the wearer's nape. This makes for a comfortable and secure fit for all head shapes.
- d. There are three height adjustment levels to ensure stability and comfort for all head sizes.
- e. The front of the headband is specially shaped to avoid interference with BA masks.



10. CHINSTRAP

- a. Your F15 is fitted with a **4-point chinstrap** made of fire retardant Nomex® webbing that has a minimum tensile strength of 900N.
- b. **Dual rear "rip cord" nape straps** allow for a single pull rapid adjustment to achieve maximum security, easily adjusted with a gloved hand.
- c. The chinstrap has been designed to avoid interference with the SCBA mask face seal.
- d. The **Quick Release Buckle** and dual nape strap ladder locks are red to stand out against a dark background making them easier to find in bad lighting or under extreme fatigue.
- e. Available both with and without **Leather Padding** to provide extra comfort to your cheeks and ears.
- f. Chinstrap can be easily removed if required for cleaning, decontamination, and maintenance.



11. DUAL PIVOT FACE SHIELD

Certified to EN14458:2004, NFPA1971:2013, ANSI Z87.1:2015, EN166:2001, AS/NZS 1337:2010

- a. The dual pivot face shield provides **full face coverage** (including the chin). When deployed, the face shield arcs away from the face to create additional internal space compared to a standard single pivot internal face shield.
- b. The face shield can be **completely deployed over a BA mask** to provide you with an extra layer of safety. This is the only internal face shield currently on the market able to do this.
 - i. *Diagram of the clearance for SCBA mask from side:*



- c. Made of fire retardant polycarbonate which is highly shock impact resistant under all environmental conditions. Designed to be optically neutral ensuring no visual distortion.
 - i. *Resistant to high speed particle shock impact at 120m/s.*
- d. Face shield locks into the stowed position and fully deployed position to offer stability.
- e. **Hard coated** exterior giving it resistance to scratches and scuffs that distort light and vision.
- f. **Anti-fog** coated interior.
- g. Available in clear, gold, or smoke tint.



12. EYE PROTECTOR

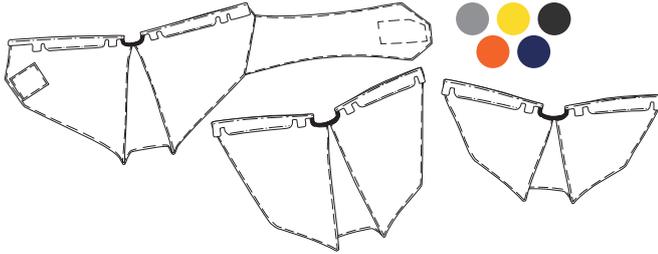
Certified to EN14458:2004, NFPA1971:2013, ANSI Z87.1:2015, EN166:2001, AS/NZS 1337:2010

- a. **Wrap around design** provides maximum protection to the wearer's eyes, especially from lateral impacts.
- b. Made of fire retardant polycarbonate, it is highly shock impact resistant under various environmental conditions. External surface is scratch resistant. The lenses are optically neutral and achieve Optic Level 1 in full compliance to EN166:2001 requirements.
 - i. *Resistant to high speed particle shock impact at 120m/s.*
- c. There are two deployment options, either **manual with pull tabs**, or automatic **One Touch Eye Protector (OTEP)**™ with easy push activated eye protection.
- d. Available in clear, gold, or smoke tint.



13. NECK PROTECTOR

- a. Your F15 is supplied standard with a **260gsm double layer Nomex® neck protector**. This provides **superior flame & thermal protection**, and includes **anti-static** and **water repellent** properties.
- b. A **gusseted design** provides natural outward curvature ensuring compatibility with all turnout jacket collars. Customised lengths and shapes are available including full wrap design with a selection of material and color. This includes aluminized fabric with Nomex® backing for close proximity intense firefighting.
- c. The neck protector is simple to detach with gloved hands for easy decontamination and maintenance.
- d. Options available:



14. STORAGE

- a. A D-ring **Rear Storage Hanger** is fitted as standard, so that your F15 can be hung from a wall hook for drying and convenient storage.
 - i. *The D-ring has been tested to withstand 28kgf/275N of force without signs of damage.*
- b. Available in metal or nylon.



15. HELMET VISIBILITY

- a. A range of reflective trim designs and colours are available in addition to any minimum required for relevant certification.
- b. Examples of required decals are below. Shape can be modified to meet your design requirements.
 - i. *3M8887 Lime Reflective Trim for NFPA certified helmets.*
 - ii. *3M680 White Reflective Trim for AS/NZS certified helmets.*



- c. Your F15 is available with a **directional reflective system**. This uses different colours front and rear to assist in determining the facing direction of firefighting personnel from distance or in difficult visibility.

16. BRANDING

- a. The **removable front plinth** can accommodate 3D or standard vinyl print brigade badges.
- b. Rank markings, badges, wording, and customized decals are available which can be tailored to your brigade's requirements.
- c. Decals can be **clear coated** to provide extra longevity.
 - i. *Note: Clear coat only available on branding on the shell itself, not compatible with front plinth.*





KEVLAR



17. LIGHTING

- a. The F15 offers a range of lighting solutions to meet your needs. This includes torches which clip low and tight on the shell to maintain optimal center of gravity and reduce snag risk.
- b. A front plinth Underwater Kinetics eLED torch is currently in development (pictured left) and will be available in Q4 2017.
- c. **Underwater Kinetics 3AA eLED**

- i. *Compact torch. Available with front switch or rear switch.*

TECHNICAL DATA

Size & Weight:	13.5 x 4.1 x 3.6cm, 150 grams
Batteries:	3 x AA Alkaline
Light Description:	110 Lumens, 92 metres, Burn Time 8 hours
Depth Rating:	3.05 metres
Enclosure Protection:	IP67
Certifications:	<ul style="list-style-type: none"> • AMERICAN standard UL STD 783, UL STD 913; CERTIFIED TO CSA STD C22.2 NO. 157). ETL (US, Canada) Approved CL I,II, III DIV 1 GROUP A-G, T4 Exia • ATEX standards Zone 2, Zone 1 SEV 09 ATEX 0154 II 2G Ex e ib IIC T6, II 2D Ex ibD 21 T61°C

- d. **Adaro Adalit L5 and L5R**

- i. *Features automatic light brightness adjustment, a photoluminescent bezel, and two power modes*

TECHNICAL DATA

Size & Weight:	15 x 3.8 x 4.4cm. 145 (L5) / 125 (L5R) grams
Batteries:	4 x AA Alkaline or Rechargeable
Light Description:	135 Lumens
Burn Time:	4 hours on High, 30 hours on Low
Enclosure Protection:	IP67
Certifications:	ATEX ZONE 0 II 1 GD Ex ia IIC T4 Ga, Ex ia IIIIC T 85 °C Da



18. COMMUNICATIONS

- a. Your F15 liner is fitted with a bracket for mounting the Titan noise cancelling boom microphone and speaker communication system which is compatible with a variety of radios.
- b. **Titan Firecom HUC5**

- i. *This comprehensive communication device can be directly connected to a speaker microphone or a PTT using the Nexus connector. It comes in a stereo, single, and listen only version for your helmet and critical communication needs.*



- ii. **TECHNICAL DATA**

LOUDSPEAKER SPECIFICATIONS

Normal size:	40mm, 1.5 inch.
Resonant frequency:	530 Hz ± 150 Hz at 1 V
Impedance:	8 Ohm ± 15% at 1 KHz 1 V
Sound pressure level:	90 dB/w ± 3 dB 0.5 w 50 cm ave at 0.8K, 1K, 1.2K, 1.5K Hz
Response:	Fo Hz ~ 6 KHz max 10 dB
Input power:	Nominal 0.5 W - Handling capacity 1.0 W

CABLE

Cable length:	55cm
Type:	Straight or coiled flame retardant ULV.0
Connector:	Nexus TP120 connector

MICROPHONE

Generating element:	Electret condenser
Polar response:	Noisecanceling at 1KHz - Waterproof
Sensitivity:	-33 to -25dB ref 1 Vms (1KHz and 1PA at 1/4)



19. CARE & MAINTENANCE

- No special tools are needed for fitting replacement parts.
- Common domestic cleaning detergent is recommended for washing the helmet and components.
- No special training is needed to disassemble and re-assemble the helmet components.
- Minimalist approach in design which makes the care and maintenance of this helmet intuitive.
- See section 21 for detailed cleaning instructions.

20. IMPACT PROTECTION

Test Results

- Pacific Helmets strives to not only meet the requirements of all major international standards, but exceed them. Below are examples of the results the F15 can achieve when impact tested.

b. EN443:2008

- Average test results for the F15 when certified to EN443:2008.

SHOCK ABSORPTION	FORCE TRANSMITTED	
	F15	MAX
Hot Temperature	5.9kN	15.0kN
Cold Temperature	6.9kN	15.0kN
Wet Temperature	6.7kN	15.0kN

- The test results above show the force transmitted to the headform when testing the F15 versus the limit allowable by the standard. The shock absorption offered by the Pacific F15 is almost 3 times superior to the level allowed by the standard.

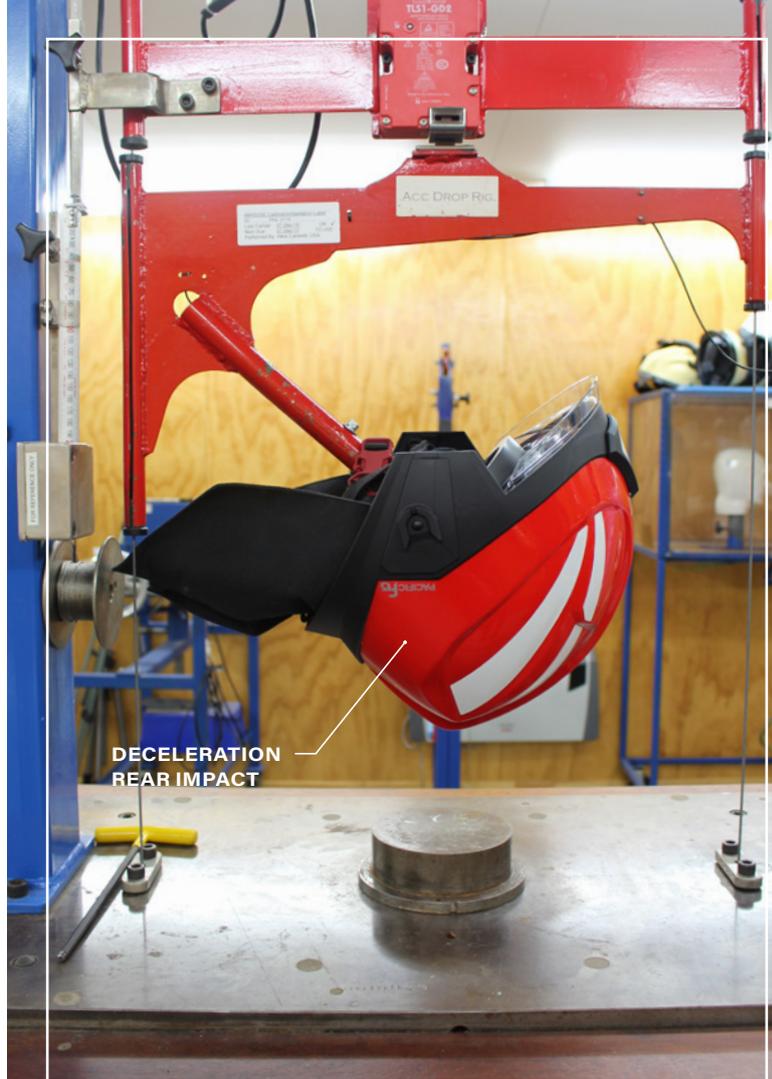
c. AS/NZS 4067:2012

- Average test results for the F15 when certified to AS/NZS 4067:2012.

DECELERATION	IMPACT ENERGY ATTENUATION	
	F15	MAX
Front/Side/Rear Low Temp.	170g	300g
Top Low Temperature	118g	150g
Front/Side/Rear Wet	159g	300g
Top Wet	129g	150g

SHOCK ABSORPTION	FORCE TRANSMITTED	
	F15	MAX
High Temperature	9.0kN	15.0kN
Low Temperature	6.4kN	15.0kN

- In the AS/NZS 4067:2012 Standard there are two versions of impact tests. While the Force Transmitted test is the same as EN443, in AS/NZS there is also a deceleration test which measures the force the wearers head receives in falls. This test also measures impacts lower down the sides and rear of the helmet shell in a way that is not testing in EN443.





21. CLEANING INSTRUCTIONS

A. IMPORTANCE OF CLEAN AND WELL MAINTAINED HELMETS

It is important that you keep your protective helmet clean, free of contamination, and properly maintained at all times. Protective helmets that are dirty or contaminated pose significant hazards. Many contaminants can be absorbed by the skin, and some are carcinogenic. In addition, many contaminants are flammable. Do not wear your protective helmet unless it is properly cleaned and thoroughly dried. Refer to the relevant Standard for the selection, care, and maintenance of the helmet for additional guidance. However the instructions provided by Pacific Helmets (NZ) Ltd take precedence over any requirements specified in the relevant Standard.

B. CLEANING PRECAUTIONS

In cleaning your protective helmet:

- Use only mild detergents with a pH range of not less than 6.0 pH and not greater than 10.5 pH as indicated on the product Safety Data Sheet (SDS) or original product container.
- Substances recommended for cleaning, maintenance or disinfection shall have no adverse effect on the helmet and shall not be known to have any adverse effect upon the wearer when applied in accordance with the manufacturer's instructions.
- Never use solvents or chlorine bleach or cleaning agents that contain chlorine bleach. These substances rapidly break down some helmet materials.
- Do not machine wash or dry whole helmets. The neck protectors and headband/ ratchet padding may be machine washed and dried as instructed below.
- Separately clean helmet neck protectors.
- Do not use wash water or drying temperatures above 40°C.
- Wear protective gloves and eye/face splash protection when cleaning soiled items.
- Do not wash protective helmet or other protective clothing alongside personal items.
- Do not dry clean your protective helmet or helmet components.

C. ROUTINE CLEANING

Clean your protective helmet after each use or whenever your helmet has become soiled. You may clean your helmet with or without the neck protector, headband/ratchet padding, and chinstrap. Use the following procedures for routine cleaning by hand of your protective helmet in a utility sink:

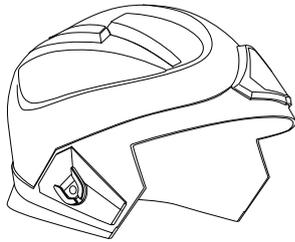
- Choose a utility sink, tub, or bucket that is specifically used for cleaning protective gear; do not use a kitchen sink or other sink that is employed for personal products.
- Ensure that you are wearing nitrile or latex gloves so as not to come in contact with contaminants from the helmet or contaminated water.
- Remove the neck protectors and chinstraps and wash separately using the instructions provided below.

- Brush off any loose debris.
- Fill the utility sink with warm water no hotter than 40°C.
- Use a mild detergent in an amount according to the detergent supplier's instructions.
- The entire helmet can be submerged in cleaning water.
- Scrub the exterior of the helmet gently using a soft bristle brush.
- Scrub the interior liner of the helmet gently using a soft bristle brush.
- Only use a soft cloth or sponge to clean the eye protector/face shield.
- Drain the sink and thoroughly rinse the exterior of the helmet. Conduct a second rinse if necessary.
- Inspect the helmet and, where necessary, rewash any portions of the protective helmet that do not appear clean or submit it for advanced cleaning.
- Dry the helmet by air drying it in a well ventilated area but not in direct sunlight. Do not force dry the helmet with a hair dryer, or place it over a heating duct or radiator. Forced drying may cause damage to the helmet suspension.
- Only when all components are dry, reinstall the neck protector and headband/ratchet padding.
- Rinse the utility sink following routine cleaning procedures.

D. DECONTAMINATION

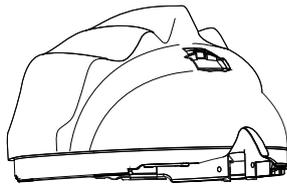
Proper decontamination of your protective helmet will depend on the type and extent of contamination. If your protective helmet has become contaminated with blood or body fluids, immediately isolate the helmet and inform your supervisor, department, or organization. Before reusing your helmet it must be subjected to specialised cleaning procedures that have been proven to remove contaminated fluids.

If your protective helmet has become contaminated with chemicals or other hazardous substances, immediately isolate your helmet and remove it from service, taking care not to cross-contaminate other clothing items. Immediately inform your supervisor, department, or organisation. Do not wear a helmet that was contaminated until verification has been provided that it is safe to do so.



E. SHELL

- The entire helmet can be submerged in cleaning water.
- Brush off any loose debris.
- Fill the utility sink or bucket with warm water no hotter than 40°C.
- Use a mild detergent in an amount according to the detergent supplier's instructions.
- Scrub the exterior and exposed interior surface of the helmet gently using a soft bristle brush.
- Dry the helmet by air drying it in a well ventilated area but not in direct sunlight. Do not force dry the helmet in a domestic dryer, with a hair dryer, or by place it over a heating duct or radiator. Forced drying may cause damage to the helmet suspension.



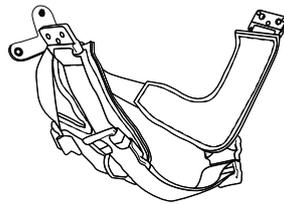
F. INTERNAL LINER

- There is no need to remove the liner for cleaning, the entire helmet can be submerged in cleaning water.
- Brush off any loose debris.
- Fill the utility sink or bucket with warm water no hotter than 40°C.
- Use a mild detergent in an amount according to the detergent supplier's instructions.
- Scrub the interior surface of the liner gently using a soft bristle brush.
- Dry the helmet by air drying it in a well ventilated area but not in direct sunlight. Do not force dry the helmet in a domestic dryer, with a hair dryer, or by place it over a heating duct or radiator.



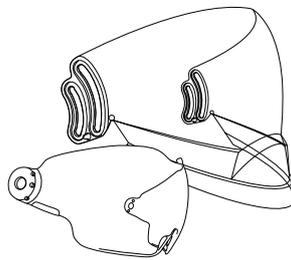
G. HEADBAND

- When necessary, unclip headband and remove from liner.
- Brush off any loose debris.
- Scrub the headband gently using a soft bristle brush or wipe down with a soft cloth.
- Dry by air drying in a well ventilated area but not in direct sunlight. Do not force dry with a domestic dryer, hair dryer, or place over a heating duct or radiator. Forced drying may cause damage to the headband.



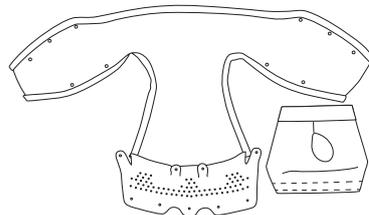
H. CHIN STRAP

- The chin strap can be cleaned while still attached to the helmet.
- Brush off any loose debris.
- Scrub the chin strap gently using a soft bristle brush.
- Ensure that the chin strap is thoroughly rinsed to remove all cleaning products before returning to use.
- Dry the chin strap by air drying in a well ventilated area but not in direct sunlight. Do not force dry with a hair dryer, or place over a heating duct or radiator. Forced drying may cause damage to the chin strap.



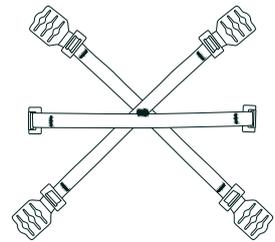
I. FACE SHIELD & EYE PROTECTOR

- Only use a soft cloth or sponge to clean the eye protector/face shield.
- Use mild cleaning agents such as window cleaner or mild detergent and water, and a soft sponge or cloth.
- Do not use abrasives, solvents, paint removers, or acetone.
- Do not use paint or lacquer thinner, or any chlorinated organic solvents.
- This also applies to gold plated face shields and tinted eye protectors.



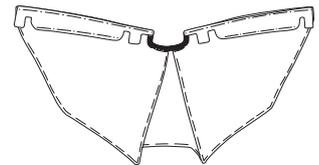
J. COMFORT PADDING & AIR MESH

- Machine wash and dry on low settings or hand wash in sink or bucket.
- Dry the comfort pads by air drying in a well ventilated area but not in direct sunlight.
- Do not force dry with a domestic dryer, hair dryer, or place over a heating duct or radiator. Forced drying may cause damage to the seat pads.



K. RIBBON CRADLE

- The ribbon cradle can be scrubbed with a soft brush and washed while still in the helmet.
- For a more thorough clean remove the ribbons from the liner by firmly pulling the black plastic tabs up and out.
- Machine wash and dry on low settings or hand wash in a sink or bucket.
- Refer to product instructions for laundering.
- Dry the ribbon cradle by air drying in a well ventilated area but not in direct sunlight. Do not force dry with a hair dryer, or place over a heating duct or radiator. Forced drying may cause damage to the helmet suspension.
- Ensure ribbon cradle is not twisted when fitting into the liner after cleaning.
- Ensure ribbon cradle tabs are fully inserted into the liner after cleaning.



L. NECK PROTECTORS

- Machine wash and dry on low settings or hand wash in sink or bucket.
- Dry the neck protector by air drying it in a well ventilated area but not in direct sunlight. Do not force dry the neck protect with a hair dryer, or place it over a heating duct or radiator.



WWW.PACIFICHELMETS.COM
SALES@PACIFICHELMETS.COM

PROTECTING PEOPLE WITH
THE WORLD'S BEST SAFETY GEAR.
WITHOUT COMPROMISE.

EDITION 3.0

A PACIFIC SAFETY INTERNATIONAL LTD COMPANY