

**FROM THE FIREGROUND
TO THE WASH STATION:**

WHY THE F18H HALOFLEX™ HELMET CHANGES EVERYTHING



Today's firefighters are stretched thin. They work longer shifts, respond to [more calls](#), and face higher exposure to harmful contaminants. But while the job has evolved, many helmets have not. Outdated designs still make this essential gear uncomfortable to wear, hard to clean, and slow to repair.

Pacific Helmets set out to change that. With decades of experience in structural fire protection, they engineered the F18H Haloflex™, a helmet built for the realities of modern firefighting. Drawing on concussion prevention technology used in professional sports, the F18H delivers where it matters most: comfort, cleanability, and fast, no-hassle maintenance.

To see why the F18H makes a difference, it helps to look at where other traditional helmets fall short and how those gaps affect crews on every shift.



**F18H
HALOFLEX™
HELMET**

WHAT FIREFIGHTERS NEED FROM THEIR HELMETS

A fire helmet isn't just a piece of gear. It's one of the most relied-on tools a firefighter wears into every call. Yet, many helmets in use today weren't designed with current field realities in mind. Modern firefighting environments are faster, dirtier, and more demanding than ever. Unfortunately, many fire helmets struggle to keep up.

THESE CHALLENGES TYPICALLY FALL INTO FOUR MAJOR AREAS:

Comfort

A helmet that doesn't fit properly isn't just uncomfortable, it's unsafe. Many legacy helmets use basic ribbon suspension systems, often adapted from older military or industrial designs. These systems don't distribute weight evenly across the head, leading to concentrated pressure points. Over the course of a long shift, this can result in headaches, neck strain, and fatigue.

The fit problem goes beyond comfort. A poorly balanced helmet affects SCBA mask seals, reduces stability during rescues, and can shift dangerously during falls or impact events. For firefighters crawling through confined spaces or working overhead, helmet balance and comfort are mission-critical, not optional.



Decontamination

Decontamination isn't just a good habit; it's a key part of protecting firefighter health. But for many departments, fully decontaminating traditional helmets isn't realistic after every call. Older helmets have porous liners and non-removable parts that absorb sweat, smoke, and chemicals. Cleaning often requires partial disassembly, hand scrubbing, and air drying, adding up to lengthy processes that discourage consistent cleaning.

This creates a dangerous pattern: decontamination steps are skipped to save time. Helmets go back into service still contaminated, exposing firefighters to carcinogens, bloodborne pathogens, and chemical residues. Over months or years, this ongoing exposure poses serious health risks, risks that faster decon could help prevent.

Cleaning and Repair

Every call adds soot, chemicals, and biological contaminants to a firefighter's gear. Older helmet designs often make cleaning an afterthought. Removing liners or padding for proper decontamination requires hand tools and significant time. Many fire departments report that stripping down and reassembling legacy helmets can take 15 to 20 minutes per helmet.

This delay matters. When cleaning slows down, helmets stay dirty. Over time, trapped contaminants damage materials and expose firefighters to [long-term health risks](#). Crews already stretched thin by call volumes don't have time for labor-intensive gear maintenance.

Even basic repairs can pull helmets out of service for days. Replacing worn parts like liners or chin straps often requires trained staff or an external repair service. Each delay increases helmet downtime and costs departments both money and operational readiness.

Downtime

Downtime matters. Fire departments need their helmets in service, not sitting on a workbench. Yet fire helmets with ribbon suspension often spend more time out of rotation than in use. Whether waiting for professional repair, replacement parts, or even just drying after cleaning, legacy helmets aren't designed for quick turnaround. For smaller departments or volunteer crews, this problem is magnified. Limited equipment budgets and staffing mean every piece of gear needs to maximize uptime. When a helmet is offline, the entire department feels the impact.

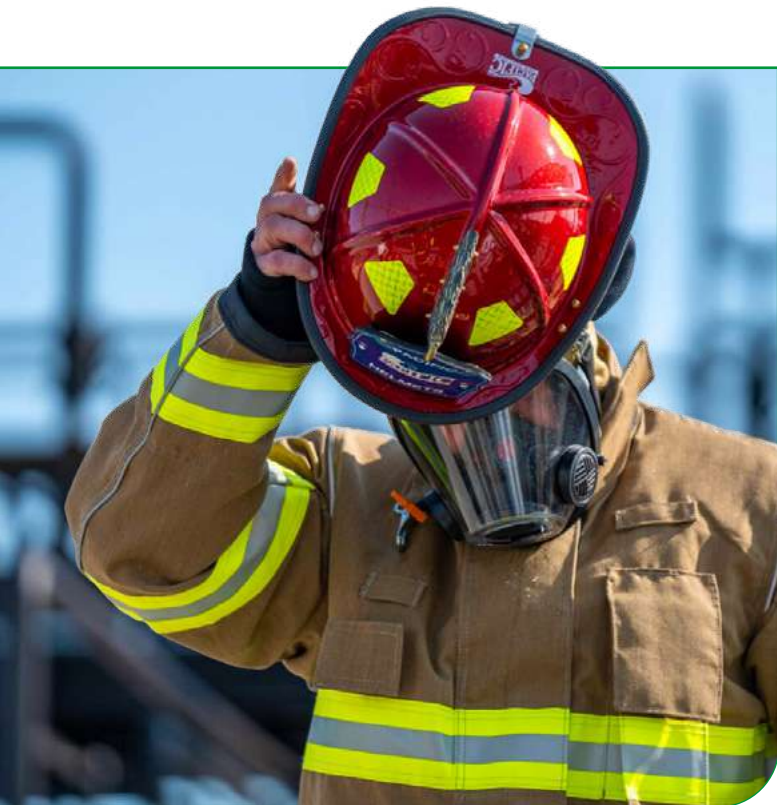
Pacific Helmets recognized that solving these four challenges wasn't just about improving a product. It was about protecting firefighter health, reducing downtime, and supporting safer operations. The F18H Haloflex™ Helmet was engineered with this purpose in mind: to give firefighters a helmet that works as hard as they do, both on the fireground and in the wash station.

F18H HALOFLEX™ HELMET



OVERVIEW OF THE F18H HELMET SYSTEM

The F18H blends traditional firefighting helmet design with advanced materials and engineering. While it respects the iconic look firefighters value, every part of this helmet is built to meet the demands of modern structural firefighting. The result is a helmet that feels familiar yet performs far beyond older models.



KEY FEATURES INCLUDE:

A fiberglass composite shell that honors the classic North American fire helmet silhouette.

For many North American firefighters, the traditional fire helmet isn't just a look; it's part of their legacy. In departments where crews span generations, that familiar profile represents pride, identity, and connection to the fire service.

The F18H respects that heritage with a recognizable shape firefighters trust, while updating the materials and performance to meet today's demands. Underneath the classic lines is a modern, high-performance composite shell built for real fireground conditions.

The shell is made from a fiberglass-reinforced composite, selected for its balance of strength and weight. This material resists cracks, punctures, and warping under high-heat conditions. Whether exposed to flashover temperatures or falling debris, the shell provides the protection firefighters rely on during structure fires.

Fully modular construction allows for quick part swaps when needed.

Unlike many traditional helmets that rely on fixed, stitched, or glued components, the F18H uses a fully modular design. Every key component, including the liner system, impact mesh, comfort pads, and chinstrap, can be removed and replaced without specialist tools.

This modularity means maintenance is faster and more efficient. If comfort pads wear out or the One Touch Eye Protector (OTEP™) needs replacing, firefighters can swap those components without taking the helmet out of service. That means departments no longer need to send helmets out for professional servicing for routine wear and tear.

Lightweight but tough, the shell resists heat and impact without sacrificing comfort.

Weight is a critical factor on the fireground. Every ounce counts when wearing turnout gear, SCBA, and carrying tools. The F18H's shell construction reduces helmet weight without compromising structural integrity. This means less strain on the firefighter's neck and shoulders during long-duration calls.

The fiberglass composite, coupled with the thermal liner, also provides excellent heat resistance. The shell maintains its shape and protective properties even after repeated exposure to high temperatures. This is essential for maintaining impact protection in prolonged interior attack scenarios or vehicle fires.

Certified to NFPA 1971:2018 and ANSI Z87.1:2020 for structural firefighting and eye protection.

Compliance with major safety standards matters. The F18H is fully certified to NFPA 1970:2025, the current North American standard for structural firefighting protective gear. It also meets ANSI Z87.1:2020 standards for eye protection, thanks to its integrated OTEP™ (One Touch Eye Protector) visor system.

These certifications give departments confidence that the F18H meets or exceeds industry benchmarks for thermal resistance, impact protection, and face/eye safety. Departments seeking grant funding or regulatory compliance can count on the F18H to meet documentation requirements.

Offered in gloss or satin finishes with customizable trim and color options.

While safety and function come first, appearance still matters in the fire service. Crews often take pride in their gear. The F18H accommodates this with options for gloss or satin finishes, available in a range of standard colors,

including black, red, and white, as well as custom color schemes for departmental branding, subject to minimum order quantities and possible surcharges.

This is not just a helmet. It's a complete system built for the needs of today's fire service.

From its advanced materials to its modular design and customizable appearance, the F18H is more than protective headgear. It's a fully integrated system designed to solve the real problems firefighters face: protection, comfort, easy cleaning, and fast, practical maintenance.

The difference is clear. Better fit. Superior protection. Faster maintenance. Less downtime. But what does this mean for daily operations?

INSIDE THE F18H: THE HALOFLEX™ SYSTEM IN ACTION

At the heart of the F18H is the Haloflex™ liner system, a step forward in firefighter head protection. This isn't just an upgrade, it's a full rethink of what a helmet liner should do, both during impact events and in everyday use.

The Haloflex™ system draws from the advanced lattice structures used in modern concussion-protection technology found in professional football helmets. Firefighters, like athletes, face sudden, high-impact forces from falling debris, structural collapse, and rapid movement during rescues.

Unlike traditional ribbon suspensions, which are designed to snap or deform under pressure, Haloflex™ features a 3D elastomer mesh that compresses on impact, disperses energy through a structured lattice, then rebounds to form. It protects against repeated impacts without losing performance over time.

The same structure that improves impact protection also improves comfort. The mesh contours to the wearer's head for a snug, stable fit that stays balanced during movement. Crews have described the F18H as "the most comfortable helmet I've worn in years." The weight savings, around 10% lighter than traditional helmets, add up during long shifts, reducing neck strain during overhaul, salvage, or high-mobility operations.

Real-World Fit and Function

Traditional liners create pressure points and offer limited adjustability. The Haloflex™ system changes that. Its four adjustment points offer 16 unique settings for pitch and attitude, helping each firefighter dial in their preferred fit. Once set, the system stays locked in place for consistent performance, even during SCBA use or confined-space rescues. Most firefighters adjust it once and never need to touch it again.

Because the liner is contoured and balanced around the center of gravity, the helmet stays secure throughout all types of movement. It doesn't shift, twist, or interfere with other equipment, allowing crews to focus on the task, not their gear.

Clean Gear That's Easy to Manage

Firefighters face long-term health risks from exposure to particulates, carcinogens, and other contaminants. Yet many traditional helmet liners absorb these substances and are difficult to clean without damaging materials. The Haloflex™ system solves this with non-absorbent impact mesh and machine-washable comfort pads. These components are compatible with NFPA 1851-compliant care and maintenance processes, including advanced cleaning cycles up to 105°F (40.5°C).

The comfort padding is made from closed-cell EVA foam with a soft polyester doeskin finish. It dries quickly, resists buildup, and doesn't harbor mold or bacteria. Departments report faster, more consistent decontamination practices since switching to Haloflex™, giving crews more confidence that their gear is safe between calls.

Faster Maintenance, Less Downtime

When helmets are hard to clean or repair, they sit idle, costing departments time and readiness. The Haloflex™ system was built to solve that. Comfort pads and the full liner assembly, including the impact mesh, PU liner, and cap, can be taken out in under two minutes using everyday tools like a coin or flat utensil. While machine screws and brass dome nuts still secure the liner to the shell, no specialized tools or outside services are needed for routine maintenance.

Haloflex™ uses intuitive snap-fit connectors, locking tabs, and a secure bayonet system. Each part is color-coded or keyed to its location, removing the need for complicated reassembly or guesswork. Even new personnel can service the helmet confidently after a quick demo.

One fire captain summed it up clearly:

"We put the F18H through real calls, structure fires, traffic collisions, rescues. After a month, my team refuses to go back to the old helmets. Cleaning used to be a 20-minute chore. Now, it's a quick rinse and we're done."

The F18H Haloflex™ isn't just about specifications on paper. It's about how firefighters feel after a full shift, and how fast departments can get their gear back in service. These are the benefits that matter most on the fireground.



GEAR THAT WORKS AS HARD AS THEY DO

The F18H Haloflex™ isn't just a helmet upgrade; it's a smarter approach to firefighter protection. By solving long-standing challenges like poor fit, slow decontamination, and unnecessary downtime it gives departments a tool built for today's fireground.

With every shift, every call, and every wash cycle, the F18H proves its worth: more comfortable, lighter, cleaner, and easier to manage. For departments ready to move beyond traditional gear limitations, it offers a simple choice: equip crews with helmets that work as hard as they do.



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