

Structural/Proximity and Heavy Duty Technical Rescue Recovery/Utility Shells

FYR-Glass Shell Technology Products

The shells on the Ben 2 Plus, Lite Force Plus, Proximity Plus and Heavy Duty Technical Rescue Recovery/Utility are all made from our special formula FYR-Glass composite material. This super tough shell material has been proven for years in field use to resist cracking, chipping and peeling (even on helmet ridges) better than conventional fiberglass composites, painting or coating methods, and even Kevlar® reinforced shells.

The key to this durability success is using 100-ton presses to apply over

1,000 psi of pressure while heating the mold to very high temperatures. This process compresses the layers of fibers and exclusive resins to the point where they fuse into an extremely strong, yet shock dissipating, composite. While the molds are an incredible expense, our investment in your safety and the products' superior durability make it more than worthwhile.



A shell so strong, the top heaviness and weight of an impact cap is no longer needed!

Lightweight Technical Rescue Recovery/Utility and Wildland Shells

Thermo-FYR Injection Molded Shell Technology

The shells on the Lightweight Technical Rescue Recovery/Utility and Wildland helmets are all made from our specially engineered Thermo-FYR, high temperature thermo-plastic. This specially engineered thermoplastic material provides the ideal characteristics needed for Technical Rescue Recovery/Utility Incidents and Wildland fire fighting.



EMS Shells

Poly-Med Injection Molded Shell Technology

The shells on the EMS helmets (which meet ANSI Z891-2003, Type 1, Class E) are all made from our specially engineered Poly-Med injection moldable, high density plastic. This specially engineered thermoplastic material provides the ideal characteristics needed by today's deeply involved EMS personnel.



Shown with *highly recommended* options

FYR-Glass vs Conventional Compression Molded Fiberglass

Property	ASTM Test No. ¹	Morning Pride FYR-Glass ²	Conventional Compression Molded Fiberglass ³	FYR-Glass Advantage
Impact Test, Izod	D-256	35	12 foot-lbs/inch	2.91 to 1 foot-lbs/inch
Flexural Strength Before Breaking	D-790	78,000 psi	18,000 psi	4.33 to 1
Deflection 1 Temperature Under Load	D-648	572° F 300° C	396° F 202° C	1.49 to
Tensile Strength	D-638	52,000 psi	8,000 psi	6.50 to 1

¹All ASTM test methods run on .250 inch samples as required.

²Morning Pride exclusive material not available to competitive manufacturers.

³Material data provided by a manufacturer of conventional compression molded fiberglass.

New Edition of NFPA 1971 Now in Effect...

The 2007 edition of NFPA 1971 became effective in August of 2006. Included in this new edition are a number of changes that will have a significant impact on Structural fire fighting helmets. For quick reference, listed below are changes made to the Standard and the impact on the Morning Pride Helmet line.

General changes to the 2007 Edition Standard of NFPA 1971...

- The NFPA standard is now formatted with separate chapters on terminology and certification. Labeling requirements now appear in Chapter 5, Design Criteria in Chapter 6, Performance Criteria in Chapter 7, and Test Methods in Chapter 8. References are now located at the front of the document in Chapter 2.
- One significant technical change is the merger of NFPA 1976 covering Proximity Fire Fighting Protective Ensembles with NFPA 1971 for Structural Fire Fighting Protective Ensembles. The merger takes advantage of the fact that many of the requirements between the two types of ensembles are identical. The requirements in the Standard are now organized with one section which applies to both types of helmets, another section on requirements specific to Structural fire fighting helmets and a last section on requirements specific to Proximity fire fighting helmets.
- A CBRN (Chemical/Biological/Radiological/Nuclear) option has been added to the Standard for both

Structural and Proximity fire fighting ensembles. The CBRN option is for demonstrating protection against chemical, biological, radiological and nuclear particulate agents that could be released during a terrorism incident. The option includes a series of design, performance and labeling criteria in addition to base requirements of the 1971, 2007 edition Standard. In order to be compliant to this option, the manufacturer must specify a full ensemble including garment, hood, gloves, footwear and SCBA, excluding the helmet which is not integral to the CBRN protective ensemble. Only a full ensemble can be certified, and the certification of individual components is not permitted under the CBRN option.

Helmet Changes

- Helmets must still be supplied with faceshields or goggles, but goggles are no longer required to be attached to the helmet. We will continue to ship goggles attached to the helmet, and the customer can disengage them in the field if desired.

- Flame resistance testing of the helmets will now include the application of the flame inside the brim at the goggle attachment points. This testing will provide an evaluation of helmet components not previously evaluated. While we will require no design adjustments, we feel it is likely that some brands may require adjustments.
- The ear covers provided with helmets must now meet a thermal protective performance (TPP) requirement of 20 or more. Previously, there was no insulation requirement for this part of the helmet. This insulation is consistent with the minimum TPP requirement for hoods and wristlets, and will result in more robust ear covers on some brands.

For a complete discussion on how the 2007 edition of NFPA 1971 – Structural and then Proximity firefighter clothing and equipment – will impact ALL elements of our product lines, please see the Honeywell First Responder Products Reference Guide.

