

EXFIL® Ballistic Helmet and Considerations Against the OpsCore® FAST Ballistic Helmet

Ballistic Protection and Weight:

The shell of the EXFIL® Ballistic is constructed with polyethylene and other fibers in a proprietary composite matrix. The shell's custom shape, shared across the EXFIL® line, increases strength while providing an optimal fit. The helmet geometry and materials also result in a lightweight package with greater ballistic protection than heavier helmets.

Ballistic Performance:

	EXFIL® Ballistic	FAST Maritime	FAST XP	FAST ST
17gr frag V50	2400 fps	2200 fps	2200 fps	2200 fps
9mm FMJ RN	1400 fps	1200 fps	1400 fps	1200 fps
BFD (9mm)	Less than 25.4mm	Less than 25.4mm	Less than 25.4mm	Not advertised

Weight:

	EXFIL® Ballistic	FAST Maritime	FAST XP	FAST ST
Shell (TW sz1/sz2, OpsCore M-L / L-XL)	1.75 / 1.85 lbs.	1.74 / 1.88 lbs.	1.85 / 1.99 lbs.	1.85 / 2.05 lbs.
Total (TW sz1/sz2, OpsCore M-L / L-XL)	2.6 / 2.75 lbs.	2.53 / 2.68 lbs.	2.7 / 2.9 lbs.	2.75 / 2.97 lbs.

^{*} Total helmet weight includes shell, rails, impact pads, retention system. Team Wendy total weight also includes Wilcox® W Shroud (0.085lbs.). OpsCore® advertised weights do not include shroud. All information from OpsCore® 2014 catalog.

Impact Protection:

Zorbium® Foam Liner

The EXFIL® Ballistic features a new liner design using the same patented Zorbium® foam that has been proven in the standard ACH ZAP 7-pad system. The liner is comprised of a 3-piece impact liner with removable center channel to better accommodate overhead communication headbands, and a series of adjustable comfort pads using an antimicrobial wicking fabric (helmet includes 16 individual comfort pads in 2 thicknesses).

This liner allows the EXFIL Ballistic, tested in a "worst case" configuration with thin comfort pads, to greatly exceed current ACH Blunt Impact requirements (per AR/PD 10-02, 16 Dec 2013). Maintaining all 10ft/sec impacts below 110G, with an average below 70G across all impacts, conditions, and helmet sizes. OpsCore FAST helmets are only advertised to meet ACH requirements requiring no impacts exceed 150G. The significance of maintaining impacts below 70G on average can be seen in recent research on the head acceleration levels that may lead to concussion, ranging from 81G to 145G in nine different studies conducted over the last 10 years. 1

Accessory Mounting:

The EXFIL® Ballistic provides mounting options for nearly every common headborne accessory. Therefore, virtually all existing accessories such as lights, oxygen masks, and communication systems setup for mounting to OpsCore® helmets will continue to be compatible with the EXFIL® Ballistic. In a few cases an additional adapter is required, often included from the original accessory manufacturer (e.g., Princeton Tec Charge Adapter). In addition, our Rail 2.0 system was designed to allow mounting via the upper and rear t-slots using common hardware. This provides the added benefit of custom mounting options in the field or when proprietary mounts (such as those for the OpsCore® ARC rail) fail or are not readily available.

Shroud:

The W-Shroud made by Wilcox® Industries specifically for the EXFIL® Ballistic utilizes a machined, anodized aluminum mount interface that is insert-molded in a polymer frame for a balance of strength, precision, and weight-savings compared to other cast or forged aluminum shrouds like the OpsCore® VAS and Skeleton Shrouds. This updated W shroud also allows fitment of a Wilcox® NVG retention lanyard. The W-Shroud conforms to the SOCOM SPEAR Program of record.

¹Benson et al., What are the most effective risk-reduction strategies in sport concussion?. Br J Sports Med, 2013; 47:321-326.









One-handed Fit Adjustment:

The EXFIL® Ballistic utilizes our CAM FIT™ retention system, implementing a Boa® closure that conforms to the shape of the head, unlike the rigid headband in the OpsCore® FAST. The CAM FIT™ system is also designed to give enhanced stability when wearing night vision by pulling the head forward, rather than simply encircling the head which can lead to instability by causing a gap at the front of the helmet.

Sizing Range:

The Zorbium® liner with 2 comfort pad thickness options, used in combination with the CAM FIT retention system, allows the EXFIL™ Ballistic to accommodate a wider sizing range than traditional ballistic helmets. Two sizes (designated simply Size 1 and Size 2) cover the same range as OpsCore S/M, M/L, and L/XL helmets, with the Size 2 EXFIL® Ballistic fitting an additional cm of head circumference larger than the OpsCore L/XL (63 vs 62 cm).







