VX9 · 9MM LUGER · 96 GR SOLID COPPER HP

Comparative evaluation vs. Federal HST 124 gr — accuracy, handling, and FBI-standard barrier gel testing

TEST DATE	LOCATION	CONDITIONS	PROTOCOL
Aug 10, 2024	Randall County, TX	65–90°F · 9:30a–1:00p	FBI-standard 10-ft gel
CARTRIDGE	**PROJECTILE**	**COMPARISON**	
9mm Luger	96 gr solid copper HP	Federal HST 124 gr	

PROJECTILE & TEST PLATFORM

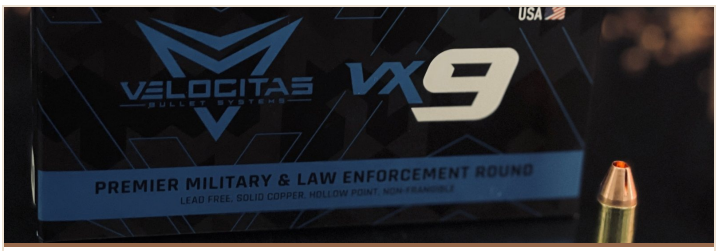


Figure 1 — VX9 96 gr, 9mm Luger — Military & Law Enforcement packaging, as tested.

PROJECTILE		TEST PLATFORM	
Weight	**96 gr**	Accuracy / speed	Glock 45
Material	Solid copper	Gel tests	Shadow Systems 920
Style	Hollow point, slit petals	Gel	FBI-standard ordnance gelatin
Sample size	5-shot groups; 1 rd/barrier	Barriers	Windshield, drywall, stud, denim

17.0″
BARE-GEL PENETRATION
(FBI WINDOW 12–18″)

.539″
BARE-GEL EXPANSION
(FROM .355″ CALIBER)

100%
WEIGHT RETENTION
THROUGH HEAVY DENIM

ACCURACY — 5-SHOT GROUPS, 25 YARDS

Table 1 — One 5-shot group per load, Glock 45, offhand. Single-group sample; shown as recorded.

LOAD	5-SHOT GROUP	HITS	NOTES
Velocitas VX9 96 gr	**10″ (best 4: 3″)**	**5 in 9-ring**	**One flyer opened the group**
Federal HST 124 gr	12″	1 bull · 1 ten · 1 nine · 2 eight	

HANDLING — TIMED STEEL RUN

Table 2 — Five shots on steel from the draw at 15 yards, Glock 45. One run per load.

LOAD	TIME, DRAW TO 5TH HIT	NOTES
Velocitas VX9 96 gr	**2.55 s**	**Includes a shooter error**
Federal HST 124 gr	2.93 s	

Velocity — from separate FBI-protocol testing, 11/7/2024. 30-round average **1,273 fps**, Glock 17 Gen 5 MOS, 4.49″ barrel, measured 15 ft downrange rather than at the muzzle. The source report publishes no velocity standard deviation.

Testing conducted by Velocitas Bullet Systems, 8/10/2024, using the FBI-standard 10-foot ordnance gelatin protocol. Single-round barrier events and single-run drills; results vary with firearm, barrel length, load, and conditions. © Velocitas Bullet Systems LLC. Provided for evaluation.

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TERMINAL PERFORMANCE — FBI-STANDARD GEL, 10 FT

Table 3 — One round per load per barrier, Shadow Systems 920. Recovered diameter measured at widest point.

BARRIER	LOAD	PENETRATION	RECOVERED DIA.	RETAINED WT.	Δ WT.	RETENTION
Bare gel	**VX9**	**17.0″**	**.539″**	**95.6 gr**	**−0.4 gr**	**99.6%**
	HST	14.0″	.585″	123.0 gr	−1.0 gr	99.2%
Heavy denim	**VX9**	**13.5″**	**.512″**	**96.0 gr**	**0.0 gr**	**100%**
	HST	17.0″	.411″	123.6 gr	−0.4 gr	99.7%
Windshield 18°, gel 18″ behind	**VX9**	**11.5″**	**.598″**	**95.4 gr**	**−0.6 gr**	**99.4%**
	HST	13.0″	.584″	113.2 gr	−10.8 gr	91.3%
Drywall	**VX9**	**19.0″**	**.343″**	**95.8 gr**	**−0.2 gr**	**99.8%**
	HST	18.5″	.602″	123.0 gr	−1.0 gr	99.2%†
Drywall + stud	**VX9**	**10.75″**	**.205″ (no expansion)**	**97.8 gr**	**+1.8 gr‡**	**—**
	HST	14.75″	.584″	124.4 gr	+0.4 gr‡	—

† Original field sheet recorded 81.0%; retention recomputed here from the recorded retained weight (123.0 gr of a 124 gr projectile). ‡ Weight gain = barrier material packed into the nose cavity; retention percentage not meaningful for these rows, so Δ wt. is shown instead. Collateral notes: windshield event produced glass collateral for both loads (HST toward the passenger side); drywall and drywall + stud events produced none for VX9, minimal for HST.

OBSERVATIONS

VX9: Weight retention held at 99.4–100% through bare gel, denim, and windshield glass — the windshield event cost 0.6 gr vs. 10.8 gr for the comparison load. Bare-gel penetration (17.0″) and denim (13.5″) sat inside the FBI 12–18″ window; post-windshield penetration measured 11.5″, just under it.

Where VX9 did not win: Through drywall + stud the projectile did not expand (.205″ recovered) and stopped at 10.75″, vs. 14.75″ for HST. Through single drywall it was recovered base-forward (turned 180° in the block) at .343″, though it still tracked to 19.0″ with 99.8% retention. Reported as recorded.

Comparison load (HST 124 gr): Expanded consistently (.411–.602″) across barriers; largest weight loss came through windshield glass (−10.8 gr, 91.3% retention).

PHOTOGRAPHIC RECORD



Figure 2 — Gel blocks staged, VX9 vs. HST comparison.



Figure 3 — VX9 windshield event; projectile visible at rest in gel.



Figure 4 — VX9 5-shot group, 25 yards, Glock 45.



Figure 5 — HST 124 gr 5-shot group, 25 yards, Glock 45.

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