



2023 HELMET LABORATORY TESTING PERFORMANCE RESULTS

VICIS ZERO2-R MATRIX ID TRENCH¹

VICIS ZERO2-R TRENCH

VICIS ZERO2 MATRIX QB NEW, 1

VICIS ZERO2-R

VICIS ZERO2-R MATRIX ID1

Riddell SpeedFlex Precision Diamond (R41106)¹

Riddell SpeedFlex Precision (R41156)¹

Riddell Axiom (R61247)¹

Riddell SpeedFlex Diamond (R41175)

Xenith Shadow XR

Riddell SpeedFlex True (R61365)1

VICIS ZERO1 (2018)

Schutt F7 UR1 (208300)1

Schutt F7 2.0 (209000)

Schutt F7 UR2 (308300)1

Riddell SpeedFlex (R41195)

Schutt F7 VTD II (208801)

Schutt F7 UR1 2.0 (209300) NEW, 1

Xenith Shadow

Schutt Air XP Pro Q11 LTD (788600)

Riddell Foundation (R41179)

Riddell Speed Icon (R41197)

Xenith X2E+

Riddell Speed Classic Icon (R41198)

NEWLY PROHIBITED^{2,3}

Schutt Air XP Pro Q10 VTD

Schutt F7 VTD

Schutt Air XP Pro Q11

Schutt Vengeance Pro LTD Schutt Vengeance Z10 LTD

Shutt F5

Schutt F7

Offensive Lineman Top-Performer



Defensive Lineman Top-Performer

This year, for the first time, top-performing helmets were tested using methodologies specific to offensive linemen (OL) and defensive linemen (DL). Top-performing position-specific helmets are indicated by the corresponding helmet icons.

¹Actual performance and ranking may vary since these helmets are customized for each player's head shape.

²These helmets are not permitted for new players and players who did not wear them during the 2022 NFL season.

³These helmets will be prohibited for all players starting in 2024.

Note: Models worn by less than 1% of NFL players are grayed-out.

THE NFL, IN COLLABORATION WITH THE NFLPA, THROUGH THEIR RESPECTIVE APPOINTED BIOMECHANICAL EXPERTS, **ANNUALLY COORDINATE EXTENSIVE** LABORATORY RESEARCH TO EVALUATE WHICH HELMETS BEST REDUCE HEAD IMPACT SEVERITY. THE RESULTS OF THOSE TESTS, WHICH ARE SUPPORTED BY ON-FIELD PERFORMANCE, ARE SET FORTH ON THIS POSTER.

The helmet models are listed in order of their performance, with a shorter bar representing better performance. The rankings are based exclusively on the ability of the helmet to reduce head impact severity measures in laboratory testing. Performance variation related to helmet fit. retention, temperature-dependence, and long-term durability are not addressed in these rankings.

All helmets in green are recommended for use by NFL players. Based on a statistical grouping analysis, helmets in the Top-Performing group have been further distinguished into two green categories. The darker green group represents those that performed similarly to this year's top-ranked helmets, while the light green group performed similarly to the lowest ranked dark green helmet. Helmets with poorer laboratory performance were placed in the yellow or prohibited groups. Yellow and newly prohibited red helmets are not permitted for new players and players who did not wear them during the 2022 NFL season. Newly prohibited helmets will be prohibited for all players in 2024.

The laboratory test conditions were intended to represent potentially concussive head impacts in the NFL. The results of this study should not be extrapolated to collegiate, high school, or youth football.



Use this QR code to view the full list of prohibited helmets and an additional list of approved legacy helmets.