

2021 HELMET LABORATORY TESTING PERFORMANCE RESULTS

VICIS ZERO2-R MATRIX $^{
m NEW}$ VICIS ZERO2-R TRENCH $^{
m NEW}$ **VICIS ZERO2-R**^{NEW} Riddell SpeedFlex Precision Diamond (R41106)¹ Riddell SpeedFlex Precision (R41156)¹ Riddell SpeedFlex Diamond (R41175) ANCE **Xenith Shadow XR VICIS ZERO1 (2018)** BETTER LABORATORY PERFORM **Schutt F7N (208100)** Schutt F7 UR1 (208300)¹ Schutt F7 UR2 (308300)1 Riddell SpeedFlex (R41195) **Schutt F7 VTD II (208801) Xenith Shadow** Schutt Air XP Pro Q11 LTD (788600) Riddell Speed (R41190) **Riddell Revolution Speed Classic (R41167) Riddell Foundation (R41179)** Riddell Speed Icon (R41197) Riddell Speed Classic Icon (R41198)

Schutt F7 VTD (208800)
Schutt Vengeance Pro LTD (20440)

Schutt Air XP Pro Q11 (788700)

Schutt F7 (208000)

Laboratory Testing program.

Schutt Vengeance Z10 LTD (204200)

Schutt Air XP Pro Q10 VTD (788910)

Schutt Vengeance Pro (204301)²

Schutt Air XP Pro Q10 (788900)²

Schutt Vengeance Z10 (204101)²

¹Results shown are for a helmet with interior padding customized for the testing headform. Actual performance and ranking may vary since these helmets are customized for each player's head shape.

²These helmets join a list of 13 previously prohibited helmets according to the NFL and NFLPA's joint Helmet

Note: Models worn by less than 1% of NFL players in the 2020 season are grayed out.



NOT RECOMMENDED

NEWLY PROHIBITED

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

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 GENERALLY 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 dark green group represents those that performed similarly to the top-ranked helmets from the 2021 testing, while the light green group performed better or similar to the lowest ranked dark green helmet from the 2020 poster. Helmets with poorer laboratory performance were placed in the yellow (not recommended) or red (prohibited) groups. Players may wear helmets that are: (1) certified based on the standards established by **NOCSAE** (National Operating Committee for Athletic Equipment); (2) less than 10 years old; and (3) not prohibited pursuant to the NFL and NFLPA's joint Helmet Laboratory Testing program.

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

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