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Snell Foundation Inc.

SA2025 Cover – Draft 09152023

September 23, 2023

Included with this cover is the first draft for SA2025, the next revision of the Snell Special Applications Standard for Protective Headgear for Use in Competitive Automotive Sports. There are some key changes in SA2025 which should be noted.

Requirements for impact velocities and acceleration limits have been selected to assure compatibility with FIA 8859-202# (draft). That is; compared to the corresponding values in FIA 8859, impact velocities and peak acceleration for SA2025 are either the same or more severe.

The table shows the SA2025 and SA2020 demands for standard impact testing. The grey cells indicate the changes.

Impact Velocity Table							
Head Form		Α	С	E	J	М	0
SA2025 Peak G		275	275	275	275	275	275
SA2025 Certification	1 st	8.70 m/s	8.30 m/s				
	2 nd	6.60 m/s	6.60 m/s	6.60 m/s	6.30 m/s	6.00 m/s	6.00 m/s
	3 rd	6.00 m/s					
SA2020 Peak G		300	300	300	300	280	280
SA2020 Certification	1 st	8.50 m/s	8.15 m/s				
	2 nd	6.80 m/s	6.80 m/s	6.80 m/s	6.45 m/s	6.00 m/s	6.00 m/s
	3 rd	6.00 m/s					

SA2025 incorporates several modifications and test requirements:

- Cold-Cycle conditioning will be performed at the discretionary -30°C.
- Key mechanical components must remain operational after exposer to flammability testing.
 - Face shield locking hardware must remain operable.

Additional considerations and proposed changes for SA2025 not included in this draft.

- Visual clarity requirements for face shields.
 - ISO 12312 1:2013, Article 5.3.2.3 "Detection of signal lights"
 - EN ISO 12312 1:2013, Article 5.3.2.2 "Spectral transmittance"
- Shell projections and surface friction test.
 - Snell standards previously left projections and frangibility requirements as a judgment call issue by the technical staff at Snell laboratory, "CONSTRUCTION – A. GENERAL."



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The laboratory uses the "Method B" (EC reg. 22) equipment and guidelines to aid in assessing these general requirements. SA2025 may introduce a formal adoptions of a Projections and Surface Frictions" test method as a more standardized evaluation of shell projections.

The Snell Foundation is considering updates to face shield penetration test, possibly increasing
pellet velocities and/or standardizing the projectile type to a steel ball.

Proposed Transition Schedule

- Certification testing to SA2025 will begin once a final version of the standard is completed. *
- April 1, 2025 The Snell office will begin to ship stocks of SA2025 certification labels to certified
 manufacturers who request them. However, SA2025 labeled helmets may not be made
 available for sale until the Standard takes effect.
- October 1, 2025 Snell SA2025 will take effect, the first SA2025 labeled helmets may be advertised, displayed and sold as of this date. There should be no SA2025 labeled headgear or claims for such until this date.
- June 30, 2025 Shipments of SA2020 certification labels will cease. Production of SA2020 labeled helmets may continue through March of 2026.
- March 31, 2026, production and shipping of SA2020 labeled units must cease.

The Snell Foundation relies on input from helmet user groups, sanctioning bodies, safety organization, helmet makers and distributors to help draft and publish meaningful helmet requirements. Questions, comments and suggestions are welcome.

Stephen D. Johnson Executive Director Snell Foundation, Inc. Edward B. Becker
Director – Standards Development
Snell Foundation Inc.
Board of Directors – Secretary

*SA2025 release dates may be adjusted to compensate for proposed issue dates of FIA 8859-202#, and coordinate combined SA2025/FIA 8859 testing scenarios.