

**STANDARD PERFORMANCE
SPECIFICATION FOR
RECERTIFIED FOOTBALL HELMETS**

NOCSAE DOC (ND) 004-11m11

Prepared By



**NATIONAL OPERATING COMMITTEE
ON STANDARDS FOR ATHLETIC EQUIPMENT**

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Scope

- 1.1 This standard specification establishes performance requirements for the recertification of football helmets.
- 1.2 **All testing and requirements of this standard specification must be in accordance with NOCSAE DOC.001, except where modified herein.**
- 1.3 Firms may recertify only those helmets that have been previously certified to NOCSAE.
- 1.4 Helmets may only be recertified if the date of manufacture is legible. The date of manufacture must remain legible throughout the reconditioning process so that it is legible to the user when returned.
- 1.5 *This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2 Referenced Documents

- 2.1 STANDARD DROP TEST METHOD AND EQUIPMENT USED IN EVALUATING THE PERFORMANCE CHARACTERISTICS OF PROTECTIVE HEADGEAR, NOCSAE DOC.001

3 Helmet Preparation

- 3.1 See Section 10, NOCSAE DOC.001.
- 3.2 Face Guards - Helmets must be tested without face guards or face guard specific hardware. Any components of the headgear not associated with the faceguard (i.e. nose bumpers, front padding, etc.) must be securely attached to the helmet using appropriate means prior to impact testing.
- 3.3 Helmets must be tested before reconditioning as received from the field. The same helmets must be tested after all processing and in the condition in which they are to be returned to use (not all helmets are tested - not all helmets are tested both before and after). A statistical sample must be tested. This section should not be construed in any way as overriding Section 3.2 above.

4 Conditioning Environments

- 4.1 See Section 12.1 and 12.3, NOCSAE DOC.001

5 Impact Attenuation Tests

- 5.1 Impact locations are described in Section 19, NOCSAE DOC.001.

- 5.2 Impacts shall be conducted on the Test MEP pad (see Section 15.2.2, NOCSAE DOC.001).
- 5.3 Each submitted sample helmet shall be impacted in the front position and in one other location in accordance with Table 1 below and depicted in Figure 1.

TABLE 1

LOCATION - DROP velocities – ft/s (m/s)
 (All drop velocities must be within +3% -0%)

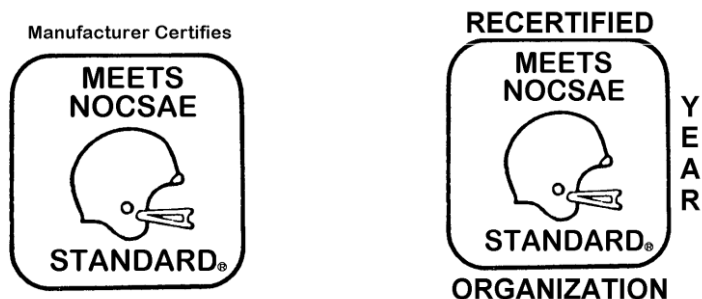
	(1) FRONT	(2) SIDE	(5) REAR	(6) TOP
Ambient	17.94 (5.46)	17.94 (5.46)	17.94 (5.46)	17.94 (5.46)
Temperature	17.94 (5.46)	17.94 (5.46)	17.94 (5.46)	17.94 (5.46)

6 Test Requirements for Recertification

- 6.1 Helmet configuration must be the same as originally certified.
- 6.2 All components must function as originally certified.
- 6.3 Helmet shells must be free from cracks (as defined in NOCSAE DOC.001, Section 3.7).
- 6.4 The peak severity index of any impact shall not exceed 1200 SI for any helmet manufactured on or after January 1, 1997.
 The peak severity index of any impact shall not exceed 1500 SI for any helmet manufactured prior to January 1, 1997.
- 6.5 Helmet repositioning during testing is anticipated. Any structural changes or other changes that take place during impact testing which result in un-restorable, loosening of the fit (see Section 20, NOCSAE DOC.001) shall be cause for failure.
- 6.6 A passing helmet is able to withstand all impacts at an acceptable SI and meets all other requirements when tested in accordance with this performance specification.
- 6.7 When helmets are re-certified and returned with face guards attached, the helmet re-certifier must verify that the faceguard was originally certified and has been either recertified or at a minimum inspected to determine that it is free of cracks (including welds) and if metallic (i.e., wire or metallic tubing) has a surface coating of resilient material, designed to reduce the risk of chipping, burrs, and the like that may result in increased risk of injury to the user or opponent. Helmet re-certifiers that mount certified/inspected faceguards with non-OEM hardware must demonstrate that the helmet/hardware faceguard combination meets the requirements of the NOCSAE faceguard standard.

7 Labels and Warnings

- 7.1 See Section 9.1 through 9.4 of NOCSAE DOC.001.
- 7.2 The labels identified in Section 9.1 shall be permanently and legibly labeled or marked in a manner such that the information can be easily read without removing any permanent component.
- 7.3 A permanent replica of one of the seals shown below must appear on the exterior of the headgear. If the original "Manufacturer" NOCSAE logo is not clearly legible, then the "Recertified" logo shall be applied.



If the "recertified" seal needs to be added, the "YEAR" data must be given and it shall reflect the year of the particular reconditioning season (e.g., 2001) that the helmet is being recertified. The "ORGANIZATION" information is optional; examples might be the name of the recertifier's organization or his company (e.g., NAERA or XYZ Reconditioning).

- 7.4 Each helmet shall have permanently affixed to the exterior of the shell a clearly legible statement which can be easily read without removal of any decal tape, other temporary material or permanent component, which contains language which effectively communicates to the purchaser and user the following information using the same or similar language:

WARNING:

NO HELMET CAN PREVENT ALL HEAD OR ANY NECK INJURIES A PLAYER MIGHT RECEIVE WHILE PARTICIPATING IN FOOTBALL.

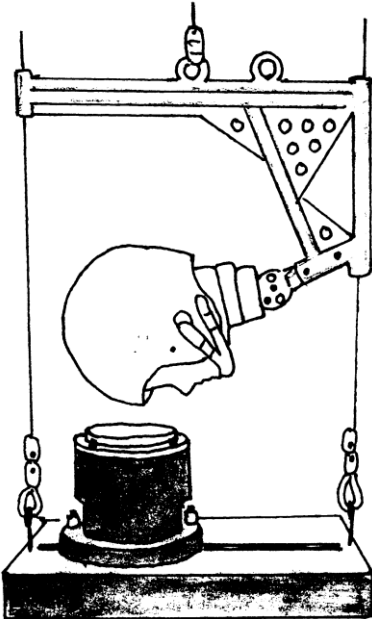
DO NOT USE THIS HELMET TO BUTT, RAM OR SPEAR AN OPPOSING PLAYER. THIS IS IN VIOLATION OF THE FOOTBALL RULES AND SUCH USE CAN RESULT IN SEVERE HEAD OR NECK INJURIES, PARALYSIS OR DEATH TO YOU AND POSSIBLE INJURY TO YOUR OPPONENT.

- 7.5 Recertified helmets must have a recertification seal that includes the name of the recertifying firm and the year of recertification. This seal may be placed on the interior or exterior of the shell in an area in which it can be easily read without removal of any permanent component and will also contain the following language:

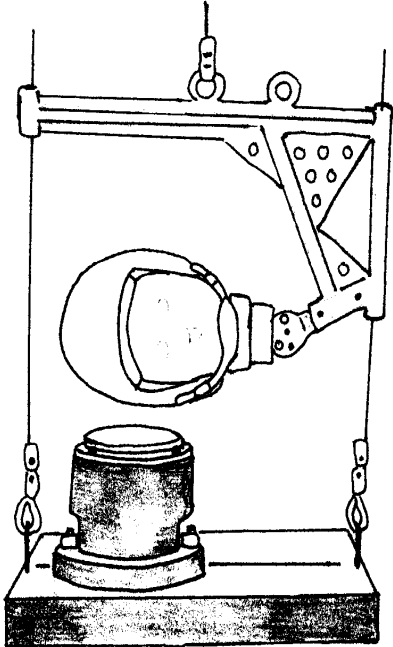
"This helmet has been recertified according to procedures established to meet the NOCSAE Standard."

This standard is subject to revision at any time by the responsible technical authority and must be reviewed every five years and if not revised either reapproved or withdrawn. Your comments are invited either for revision, modification or creation of additional standards and should be addressed to NOCSAE's Executive Director. Check the web at www.nocsa.org to obtain the latest version of a standard.

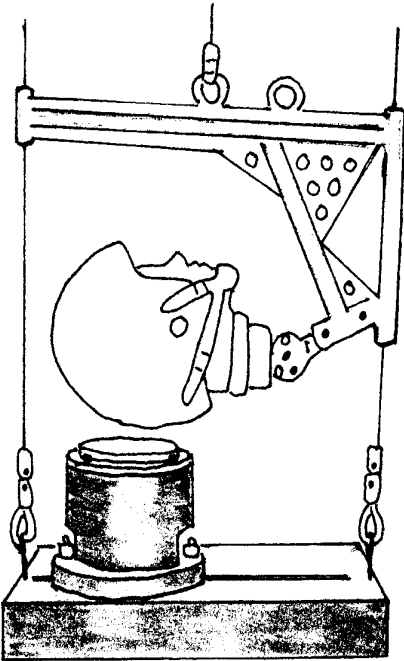
This standard is copyrighted by NOCSAE 11020 King St. Suite 215, Overland Park, Kansas 66210 USA. Copies may be obtained from the NOCSAE web site at www.nocsa.org



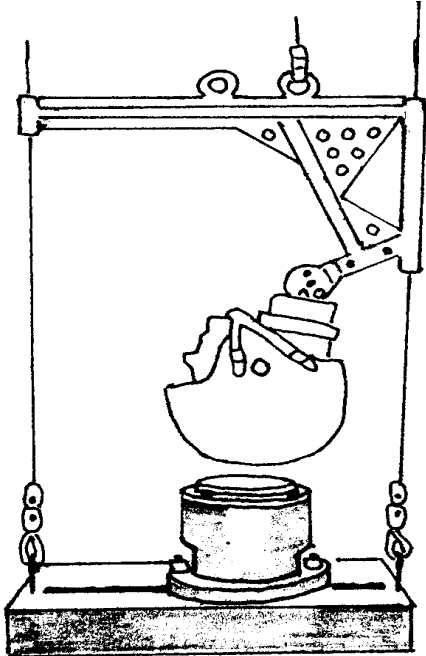
Front Impacts



Side Impacts



Rear Impacts



Top Impacts

Figure 1

MAY, 1998 MODIFICATIONS/REVISIONS

- Added depictions of impact locations and referenced them in 5.3.

MARCH, 2001 MODIFICATIONS/REVISIONS

- Eliminated issuance year reference on all NOCSAE documents that are referred to in this standard.
- Modified Section 7.1 to eliminate the requirement for including a fitting booklet with each recertified helmet and making sure there is a date of manufacture.
- Modified Section 7.1 to permit a Reconditioner to place the labels identified in NOCSAE.DOC 001, Section 9.1, to be placed inside a helmet.
- Added a new Section 7.2 to show a special NOCSAE logo that may be placed upon a recertified helmet.
- Modified Sections 7.3 and 7.4 for clarity.

JANUARY 2002, MODIFICATIONS/REVISIONS

- Updated header to NOCSAE DOC 004-96.

APRIL 2003, MODIFICATIONS/REVISIONS

- Modified naming convention and added NOCSAE logo to cover page.

JANUARY 2004, MODIFICATIONS/REVISIONS

- Modified pagination and section numbers to correct typographical errors, added sunset clause.

DECEMBER 2004 MODIFICATIONS/REVISIONS

- Modified section 3.3 to clarify helmets tested.

DECEMBER 2005 MODIFICATIONS/REVISIONS

- Added section 6.4 defining faceguard requirements.

JUNE 2006 MODIFICATIONS/REVISIONS

- Changed section 6.3 reference to NOCSAE 001 section 3.5 to 3.6

DECEMBER 2008 MODIFICATIONS/REVISIONS

- Clarified section 3.3 concerning the condition of helmets tested

MAY, 2009 MODIFICATIONS/REVISIONS

- Modified section 5 for clarity.
- Modified section 6.4 faceguard inspection.

JANUARY 2011, MODIFICATIONS/REVISIONS

- Clarified the requirement for the date of manufacture of the helmet.
- Corrected reference typos in document

FEBRUARY 2011, MODIFICATIONS/REVISIONS

- **REVISION-** Change drop heights to drop velocities. Clarified attachment of component requirement. Moved test requirements to section 6.