

**STANDARD PERFORMANCE
SPECIFICATION FOR HELMET MOUNTED
POLO EYE PROTECTION**

NOCSAE DOC.055-03m05

Prepared By



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

Modified – June 2005

TABLE OF CONTENTS

Introduction	1
Scope	1
Referenced Documents	1
Sample Size	1
Eye Protector Preparation.....	1
Eye Protector Testing	1
Labels and Warnings	3
July, 2004 MODIFICATIONS/REVISIONS.....	7
June, 2005 MODIFICATIONS/REVISIONS	7

1. Scope

- 1.1. This standard specification establishes performance requirements for polo eye protection.
- 1.2. **All testing and requirements of this standard specification must be in accordance with NOCSAE DOC.001 and NOCSAE DOC.021, except where modified herein.**
- 1.3. *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
- 2.2. STANDARD PROJECTILE IMPACT TEST METHOD AND EQUIPMENT USED IN EVALUATING THE PERFORMANCE CHARACTERISTICS OF PROTECTIVE HEADGEAR/PROJECTILES, NOCSAE DOC.021.

3. Sample Size

- 3.1. See Section 11, NOCSAE DOC.001 and Section 3, NOCSAE DOC.021.
- 3.2. At least five (5) of each eye protector model must be tested.

4. Eye Protector Preparation

- 4.1. Eye protectors shall be tested complete, in the condition as offered for sale or use.
- 4.2. Eye protectors used for testing must be selected in a random manner.
- 4.3. Eye Protectors - During all testing the eye protectors must be attached to a helmet that meets the NOCSAE standard for polo headgear and be mounted in accordance with the manufacturers mounting instructions.

5. Eye Protector Testing

- 5.1. The polo ball(s) used for these tests must meet polo specifications and be approved for use by the U.S. Polo Association. A new ball must be used on each model submitted for testing.

- 5.2. See Section 5, NOCSAE DOC.021.
- 5.3. Each eye protector to be tested shall be mounted on a polo helmet certified as meeting the NOCSAE standard according to the manufacturer's instructions. Eye protectors shall be impacted one time at each of these positions:
 - 5.3.1. Directly in front with the headform and helmet in an upright (vertical) position. The barrel (line of ball travel) shall be perpendicular to the Coronal plane].
 - 5.3.2. With the headform and helmet in an upright (vertical) position and rotated away from the Midsagittal plane at a 45° angle from the direction of impact.
 - 5.3.3. Random location: The headform may be located in any manner that allows the impact point to be within the "no contact area" as defined in Figure 1 attached. The pointer or other targeting means can be set within, or to any edge of, the "no contact" area. The center of ball contact must be at the edge of, or within the "no contact" area.
- 5.4. The impacts shall be aimed at the center of the widest opening in the eye protector while in the chosen position.
- 5.5. No contact to the ocular area is permitted. (See Figure 1 attached).
- 5.6. The peak severity index of any impact shall not exceed 1200 SI
- 5.7. Verification of ball contact: For verification of ball or protector contacts with the Ocular area cover the entire ocular as shown in Figure 1 with pressure indicator paste. Contact of either ball or protector with any part of the ocular area will leave paste at the point of contact and proof of contact on the headform. Inspect thoroughly both the ball and the protector to determine if they contain residue of paste. Also inspect the headforms ocular area for evidence of contact.
- 5.8. A different eye protector is to be used for each test position at each temperature (five eye protectors are needed for the complete test series). Each eye protector will be used for different impacts (directed at the largest opening for each chosen position).
- 5.9. The headform shall be positioned with its impact site located 24in (610 mm) from the muzzle (or point at which the ball is released).
- 5.10. Each submitted sample shall be impacted with the ball in accordance with Table 1 and as depicted in Figure 2.

TABLE 1

LOCATION - MILES PER HOUR (m/sec)¹
(All speeds must be $\pm 3\%$)

	FRONT (90°)	AT A 45° ANGLE	RANDOM
Ambient Temperature	90 (40.2)	90 (40.2)	90 (40.2)
Low Temperature	90 (40.2)	90 (40.2)	N/A

6. Labels and Warnings

- 6.1. See Section 9, NOCSAE DOC.021 with the exception of sections 9.1.3, 9.2, 9.6 and 9.7.
- 6.2. The phrase, Manufacturer Certifies, "Meets NOCSAE Standard" Shall be permanently affixed to the eye protector. The actual manufacturers name can be used i.e., xyz manufacturing certifies "Meets NOCSAE Standard".
- 6.3. Packaging and/or instructional literature for face protectors shall be permanently and legibly labeled in a manner such that the following information can be easily read:
- 6.3.1. A list of helmets certified as meeting the NOCSAE standard for Polo helmets, on which the face protector has been tested and certified as meeting this Standard Performance Specification.
- 6.3.2.

WARNING

DO NOT USE THIS FACEGUARD IF IT IS CRACKED OR DEFORMED; OR IF ANY PART IS DETERIORATED. SEVERE HEAD OR NECK INJURY, INCLUDING PARALYSIS OR DEATH MAY OCCUR TO YOU DESPITE USING THIS FACEGUARD. NO FACEGUARD HELMET COMBINATION CAN PREVENT ALL HEAD INJURIES OR ANY NECK INJURIES, OR FACIAL INJURIES A PLAYER MIGHT RECEIVE WHILE PARTICIPATING IN POLO

THIS FACEGUARD DOES NOT COMPLY WITH NOCSAE REQUIREMENTS UNLESS IT IS ATTACHED TO A HELMET SPECIFICALLY LISTED BY THE MANUFACTURER AND WHICH BEARS THE NOCSAE POLO LOGO.

¹ The impact test is designed to approximate the impact of a direct perpendicular blow from a polo ball traveling at 90 MPH (40.2 m/s). These measurements have been confirmed by actual measurements taken in January 2001 whereby 100 used polo balls were hit from an offside forehand shot between the goal posts from 60 yards. The average speed of the horse was 12 MPH. The speed of the ball was at times in excess 90 MPH.

6.4. A permanent, exact replica of this seal must appear legibly on the packaging.



NOTE: You must have an executed, valid license agreement with NOCSAE to use any of the NOCSAE logos at any time. You must have an executed, valid license agreement with NOCSAE to use any of the NOCSAE logos at any time. NOCSAE, the NOCSAE seals/logos, and the National Operating Committee on Standards for Athletic Equipment are registered marks and the exclusive property of the Committee. Use of the marks in any manner is prohibited without prior written permission of the NOCSAE Board of Directors. In place of manufacturer certifies the manufacturer may use it's own name i.e., xyz company certifies "MEETS 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 re-approved 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.nocsae.org to obtain the latest version of a standard.

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

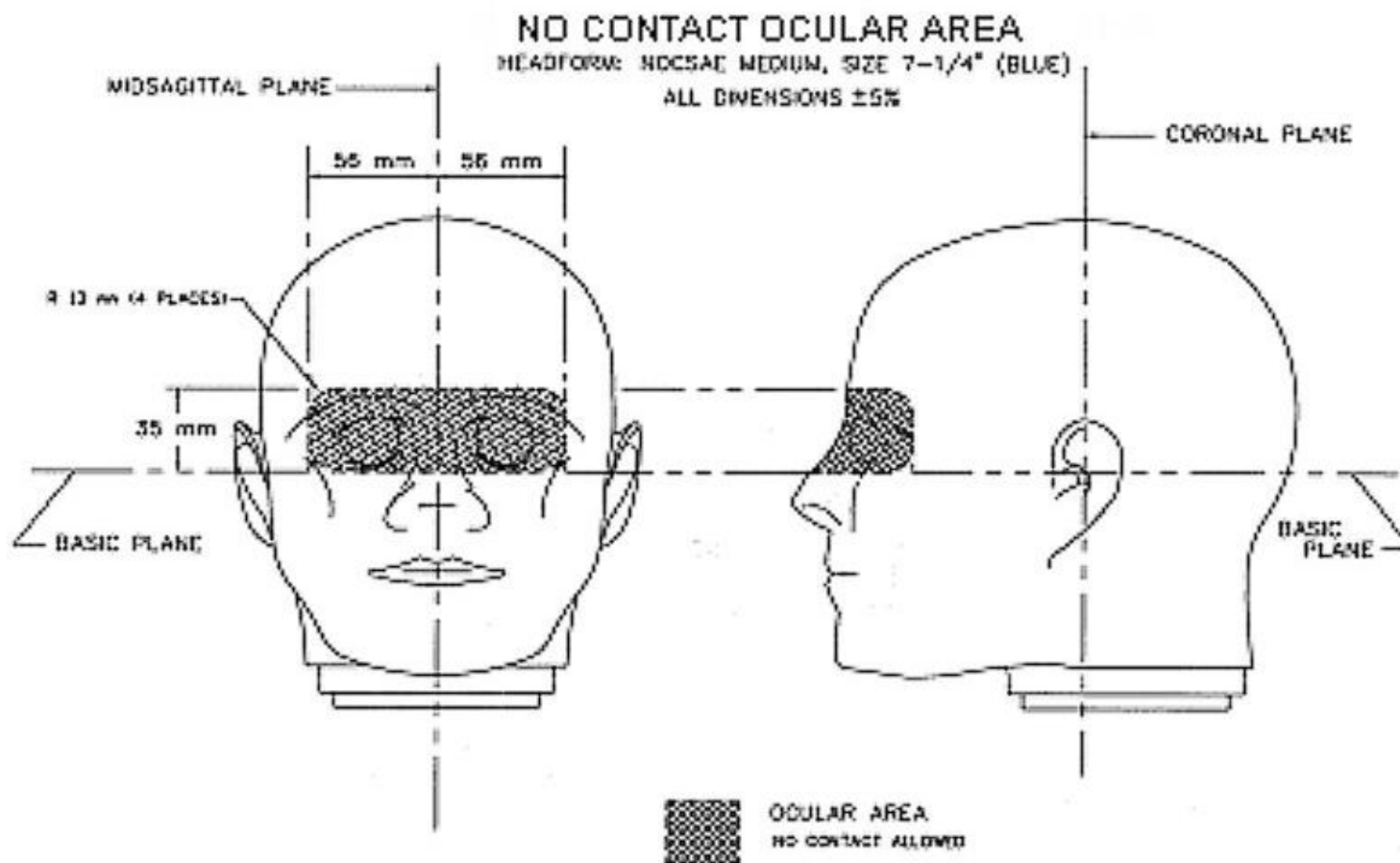
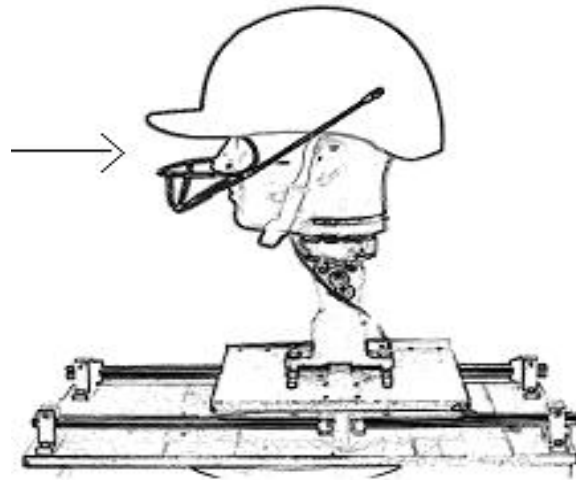
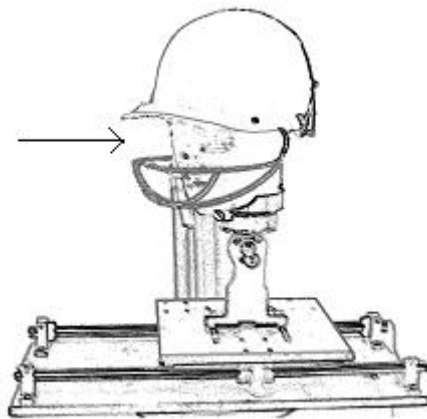


Figure 1



Front



At a 45

Figure 2

July, 2004 MODIFICATIONS/REVISIONS

- Added sunset clause

June, 2005 MODIFICATIONS/REVISIONS

- Modified labeling requirements
- Modified Figure 1 title correction
- Modified NOCSAE contact information
- Modified Note in section 6.7