

COMMERCIAL ITEM DESCRIPTION

FACE SHIELD, NON-BALLISTIC

The General Services Administration has authorized the use of this Commercial Item Description for all Federal agencies.

1. SCOPE. This commercial item description covers the requirements for a non-ballistic face shield to be used by dismounted military personnel.

2. CLASSIFICATION. The non-ballistic face shield shall be of two types and one size for each type.

Type I – 0.150 inches thick

Type II – 0.250 inches thick

3. SALIENT CHARACTERISTICS.

3.1 General. The non-ballistic face shield, hereafter referred to as face shield, shall be the manufacturer's commercial product except for any changes necessary to comply with the government requirements.

3.2 Description.

3.2.1 Design. The face shield shall be designed to fit over the Personnel Armor System Ground Troops (PASGT) Helmet, MIL-H-44099 (see 7.1) and be worn over the M40A1 Mask, Chemical-Biological, Protective, Field, EA-M-1801 (see 7.1). It shall consist of a tilting transparent visor and helmet attachment assembly.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: Defense Personnel Support Center, Clothing and Textiles Directorate, Attn: DSCP-COET, 700 Robbins Ave, Philadelphia, PA 19111-5096.

AMSC N/A

FSC 8465

3.2.2 Visor. The visor shall be molded of 0.150 ± 0.015 inches for type I and 0.250 ± 0.015 inches for type II of polycarbonate or better material. The visor's height shall not be less than 7 1/2 inches or more than 8 inches high and not less than 15 inches interior surface (arc) length. The curvature of the visor shall be $4 \frac{3}{4} \pm \frac{1}{4}$ inch. The visor shall have an internal lip at the top center to provide a positive stop in the down position independent of that provided by the latch mechanism. This is to stop the top edge of the visor above the rim of the helmet to assure the function of the seal.

3.2.3 Visor Attachment Assembly. The visor attachment assembly shall be composed of two pieces. The attachment band that shall be molded of an internally pigmented thermoplastic of appropriate strength and toughness and the attachment webbing strap that hooks to the attachment band. The visor attachment band shall securely hook over the front rim of the helmet. The webbing strap shall be designed with sufficient adjustments to securely fix the band to all helmet shells.

3.2.4 Visor to Helmet Seal. The attachment band shall have a permanently attached thermoplastic rubber seal or better material. A properly secured attachment band will ensure that the attachment band does not rub against the exterior of the helmet as the visor is raised and lowered. The forward edge of the seal shall contact the visor in the down position. The seal shall cover an area not less than 60 degrees on each side of the visor when centered on the nose and shall prevent any liquid penetration between the helmet and visor when the visor is in the down position.

3.2.5 Latch Assembly. The latch and stop components shall be molded of an internally pigmented thermoplastic of appropriate strength and toughness equal to or better than the polycarbonate material. The latch shall secure the visor in both the up (stored) and down (use) positions. When in the up position the visor shall not impede the user's visibility and it shall be secured so that the user is able to run without having the visor dropping. The latch shall be transferable between right and left-hand positions without the use of tools. The user must be able to operate the latch and it shall be easy to operate the latch and raise or lower the visor with one single gloved hand. In the event that the visor is wrenched or impacted severely, the latch shall disengage in order to minimize neck injury.

3.2.6 System Weight. The weight of the face shield system shall not exceed the following:

Type I – 1.2 pounds

Type II – 1.5 pounds

3.2.7 System Interface Requirements. The face shield will be capable of being used with current weapons, clothing, and equipment normally, carried, worn, or used when the user is carrying the mission.

3.2.8 Instructions. An instruction sheet shall be provided, which, at minimum, includes instructions on how to assemble the face shield if assembly is required, maintenance, precautions, storing and cleaning procedures.

3.3 Materials:

3.3.1 Protective Treatment. Materials that are subject to corrosion in oxygen, salt air, ultraviolet or any other atmospheric conditions likely to occur during service usage shall be protected against such elements to minimize the corrosion/degradation effect of the item. Any protective coating that will crack, chip, or scale with age or extremes of atmospheric conditions shall not be used.

3.3.2 Visor Material. The visor material shall be polycarbonate or better material with notched Izod impact strength values between 11.3-17.0 ft-lb/in when tested in accordance with ASTM D256, Plastics, Determining the Izod Pendulum Impact Resistance of (see 7.2).

3.3.3 Resistance to Temporary or Permanent Optical Degradation. Maximize the resistance to scratching, abrasion, and fogging so as to minimize interference with vision. Initial haze shall conform to ANSI Z87.1, Protection, Eye & Face, Practice for Occupational and Educational (see 7.2). No more than six percent (6%) haze shall be added to the baseline as a result of abrasion testing.

3.3.4 Adhesion. If a coating has been applied to the lens, the coating shall not be removed, dislodged, or affected in any way. Removal or loosening of the coating shall be cause for rejection.

3.3.6 Ballistic Resistance. When tested in accordance with MIL-STD-662F, V50 Ballistic Test for Armor (see 7.1), there shall be no penetration, spall, or cracks when tested with a caliber .22 (17 grains fragment simulating projectile) at a velocity of 550 to 560 ft/sec.

3.4 Human Factors.

3.4.1 Sizing/Fit. The face shield shall be designed to accommodate (i.e., fit, adjust, and/or successful use) U.S. Army target audience soldiers with 5th percentile female through 95th percentile male while wearing the PASGT Helmet.

3.4.2 Donning/Doffing. The face shield shall be easily and quickly donned and doffed on the helmet without the use of any tools.

4. REGULATORY REQUIREMENTS. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

5. QUALITY ASSURANCE PROVISIONS.

5.1 Product conformance. The products provided shall meet the salient characteristics of this commercial item description, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and to be the same product offered for sale in the commercial market. The government reserves the right to require proof of such conformance.

5.1.2 Visual examination. Each item shall be examined for the defects listed below.

Defects. Any component not in accordance with specified requirements, a cracked or broken shield; bubbles or other inclusions within the visor, visor/helmet leakage, rough or sharp edges, torn webbing, a visor with haze or cloudiness; any serious material defects, distorted parts or other evidence of poor workmanship; any component part omitted; any items not packaged in accordance with the contract or purchase order.

5.2 Acceptance Criteria. Acceptance criteria shall be as specified in the contract or purchase order.

6. PACKAGING.

6.1 Preservation, packing, and marking. The preservation, packing, and marking shall be as specified in the contract or order.

7. NOTES.

7.1 Source of Government documents. Copies of military and Federal documents are available from:

For (PASGT) Helmet, MIL-H-44099 and FED STD 662
Standardization Documents Order Desk
Bldg. 4D
700 Robbins Avenue
Philadelphia, PA 19111-5094

For M40A1 Mask, Chemical-Biological, Protective, Field, EA-M-1801
U.S. Army Edgewood Research, Development and Engineering Center
Attn: SCBRD-ENE-S
Aberdeen Proving Ground, MD 21010-5423

7.2 Source of non-Government documents

For ASTM D256
ASTM Test Methods

(Applications for copies should be addressed to American Society For Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

For ANSI Z 87.1
American National Standards Institute (ANSI) Test Methods

(Applications for copies should be addressed to American National Standards Institute
11 West 42nd Street, New York, New York 10036

7.3 Products known but not limited to meet this CID

Tactical & Survival Specialties Inc.
1832 South Main Street
Harrisonburg VA 22801
Product name:
Type I - DK5H150
Type II - DK5H250

MILITARY INTERESTS:

Custodians
Army – GL

CIVIL AGENCY COORDINATING ACTIVITY:

GSA-FSS

PREPARING ACTIVITY:

DLA-CT

Project Number
8465-0290