



Standard Specification for Leather Protectors for Rubber Insulating Gloves and Mittens¹

This standard is issued under the fixed designation F 696; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This specification covers leather protector gloves and leather protector mittens to be worn over electrical workers' rubber gloves and rubber mittens. It is intended that the gloves specified herein shall fit snugly and without undue wrinkles over rubber insulating gloves and rubber insulating mittens specified in Specification D 120.

1.2 The purpose of the leather protectors is to provide mechanical protection only for the rubber insulating gloves and rubber insulating mittens. The leather protectors shall not be used for electrical protection.

2. Referenced Documents

2.1 ASTM Standards:

D 120 Specification for Rubber Insulating Gloves²

F 496 Specification for In-Service Care of Insulating Gloves and Sleeves²

2.2 Federal Specifications:³

KK-L-170C Leather, Kidskin or Goatskin, Chrome Tanned

KK-L-2004 Leather, Cattlehide, Deerskin and Horsehide, Chrome Tanned

751a Stitches; Seams; and Stitchings

3. Materials

3.1 The leather for the body of the glove shall be grain cowhide, buffed grain cowhide, grain deerskin, grain pigskin, grain horsehide, or goatskin. Leather shall be free of cuts, open grub holes, or brand marks although well-healed grub scars are permitted. For protectors for Class 0 and Class 00 gloves, grain sheepskin or capeskin are also acceptable.

3.1.1 The thickness of the leather in the hand portion shall not be less than 1.00 mm (0.039 in.) nor greater than 1.60 mm (0.063 in.). For protectors for Class 0 gloves, the leather must be provided in a minimum thickness of 0.58 mm (0.023 in.), with the maximum thickness being 1.2 mm (0.04 in.). For

protectors for Class 00 gloves, the leather must be provided in a minimum thickness of 0.40 mm (0.016 in.) with a maximum thickness being 1.20 mm (0.047 in.).

3.2 The cuff shall be made of either leather or polymeric material or combination of both.

3.2.1 When leather is used for the cuff, it shall be of sufficient stiffness to be self-supporting.

3.2.2 When polymeric material is used for cuffs, it shall be made of 0.51 mm (0.020 in.) minimum thickness, 1.78 mm (0.070 in.) maximum thickness, and shall be supported with fabric or equivalent to provide sufficient stiffness to be self-supporting and to prevent excessive elasticity. Cuffs may be made of one or two layers of cuff material.

3.2.3 Cuffs may also be molded in one piece of elastomeric compounds, and shall be of sufficient thickness to be self-supporting.

3.3 An adjustable drawstrap shall be made of either grain or split leather, webbing, or "shirred elastic." It shall be a minimum of 13 mm (0.50 in.), maximum 19 mm (0.75 in.) wide. Adjustability of drawstrap shall be obtained through the use of metal or synthetic buckles, nylon rings, or Velcro fasteners, except for shirred elastic, which provides its own adjustability.

3.4 Bonded nylon, polyester, or cotton thread shall be used throughout the protector glove. When bonded nylon or polyester thread is used, it shall be a minimum of size 69 and maximum of size 99, with the exception that when a looper thread is used, its minimum size may be size 46. When cotton thread is used, it should be size 16, 4-ply minimum.

3.5 The top edge of leather or polymeric cuffs shall be hemmed or finished with binding.

4. Manufacture

4.1 The leather protectors covered by this specification shall be manufactured in either clute, gunn, montpelier, or one-finger mitten patterns.

4.1.1 The clute pattern shall consist of a one-piece palm including the fronts of all four fingers and thumb. The one-piece palm may include the back of the index finger. When the palm includes the back of the index finger, there shall be three fourchettes to form the backs and sides of the other three fingers. When the palm does not include the back of the index finger, there shall be four fourchettes to form the backs and

¹ This specification is under the jurisdiction of ASTM Committee F-18 on Electrical Protective Equipment for Workers and is the direct responsibility of Subcommittee F18.15 on Worker Personal Equipment.

Current edition approved March 10, 1997. Published May 1997. Originally published as F 696 – 80. Last previous edition F 696 – 91.

² *Annual Book of ASTM Standards*, Vol 10.03.

³ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.