

A-A-1307  
May 16, 1984

# COMMERCIAL ITEM DESCRIPTION

## HAMMER, HAND, CARPENTERS', NAIL, CURVED CLAW

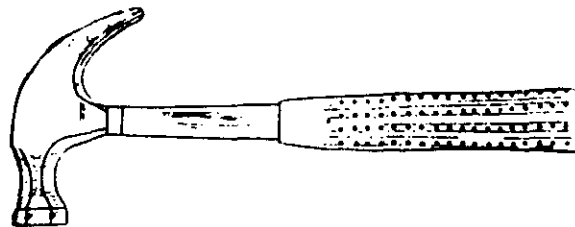
The General Services Administration has authorized the use of this commercial item description in preference to Type I, Class 1, Style B of Federal Specification GGG-H-86.

### Salient Characteristics:

Conform to ANSI B173.1 and requirements stated herein.

Finish. Polished striking face/protective coating of the entire head to deter rusting.

Handle: Fiberglass, Clear Lacquered Hickory or Steel (Tubular or Forged) as specified.



(Figure is illustrative and not restrictive)

## Hammer, Hand, Carpenters', Nail, Curved Claw

Nominal Head Weight	Handle Type	Handle Length Overall $\pm 1$	National Stock Number
Pounds		Inches	
7	Fiberglass	12	5120-00-892-6263
13	Fiberglass	13	5120-00-900-6110
16	Fiberglass	13	5120-00-892-5485
20	Fiberglass	13-1/2	5120-00-900-6109
16	Hickory	13	5120-01-112-8351
20	Hickory	13-1/2	5120-01-112-8352
16	Steel	13	5120-01-112-8350
20	Steel	13-1/2	5120-01-112-8349

Marking. Hammers shall be legibly marked with the manufacturer's name or trademark. The country of origin shall be marked on each hammer.

Workmanship. All hammers shall be free from imperfections which may affect their safety, appearance, serviceability, or durability.

The issue of ANSI B173.1 in effect on date of the solicitation shall apply.

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Test:

Handgrip Test. Hammers with handgrips shall be subject to test. Each sample shall be conditioned climatically to 30 degrees F, plus or minus 2 degrees F, and remain at this temperature for 1 hour or until thermal stabilization has occurred. The sample shall then be cycled to plus 120 degrees F, plus or minus 2 degrees F, and remain at this temperature for 1 hour or until thermal stabilization has occurred. The sample shall then be conditioned to plus 70 degrees F, plus or minus 10 degrees F (room ambient temperature).

The samples shall then be subjected to a pull test force applied to the grip parallel to the longitudinal axis of the handle with the hammerhead securely captured to restrict movement. In order to minimize normal forces to the handle, the handgrip shall be captured using a woven wire cable grip or suitable device.

The pull test force is to be as noted below, except, that for certain sizes where the handgrip pull test force is found to be greater than the pull-apart force (tensile force). In this instance the handgrips shall be subjected to the head pull-apart force (tensile force) and a maximum in lieu of the specified force.

Grips which loosen or separate from the handle shall be cause for rejection.

After application of the pull test, the hammers shall be held by the head, and the grip twisted at the normal handgrip position by hand in alternating directions with a torque as noted in the Table below. Five complete twisting cycles shall be performed, after which there shall be no grip looseness or separation from the handle.

<u>HAMMERHEAD WEIGHT</u>	<u>PULL TEST FORCE</u>	<u>TORQUE TEST</u>
Less than 16 oz.	500 lbs.	40 in-lbs.
16 oz. and over	700 lbs.	50 in-lbs.

Crack Detection Test. All samples shall be 100 percent inspected and shall be subjected to either a wet magnetic - particle inspection test as described in ASTM E-709-80 or an Ultrascop detection test described in ASTM E-114.75. All surfaces shall be examined. Any hammer exhibiting surface crack indications in any location, may have that indication removed by minor rework. The lot shall be rejected if upon Government acceptance testing any crack indications are found.

Fiberglass Handle Overstrike Test. Hammers with fiberglass handles shall withstand twenty three full swinging overstrike blows by an average built man (160 to 180 pounds), commensurate with the end use and weight of the hammer. The blows shall be against that portion of the handle directly behind the head and on a substantially supported steel object having a minimum 3/8 inch full radius.

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Fiberglass Bending Moment Test: Hammers with fiberglass handles shall be subjected the test below in lieu of the static force test found in ANSI B173.1. Samples of the assembled striking tool shall not break, chip, or crack when subjected to the applicable load and distance listed below. The distance shall be measured from the top of the tool head. The striking tool head shall be locked securely in the test fixture with the striking face down and with the handle extended in the horizontal plane. The load shall be applied gradually and in a vertical direction.

#### BENDING MOMENT TEST LOADS FOR FIBERGLASS HANDLED HAMMERS

<u>Head Weight (Ounces)</u>	<u>Distance (Inches)</u>	<u>Applied Load (Pounds Minimum)</u>
7	10	100
13	10	200
16	10	300
20	10	325

Regulatory requirements. The offeror/contractor is encouraged to use recovered materials in accordance with Public Law 94-580 to the maximum extent practicable.

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

ANSI Standards are available from American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018.

MILITARY INTEREST:

PREPARING ACTIVITY:

Custodian

GSA-FSS

Air Force - 99

Army - GL

Navy - SH