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IS 302-2-3 (2007): Safety of household and similar electrical appliances, Part 2: Particular requirements, Section 3: Electric iron [ETD 32: Electrotechnical]



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भारतीय मानक
घरेलू और समान विद्युत साधित्रों की सुरक्षा

भाग 2 विवरणात्मक अपेक्षाएँ

खंड 3 विद्युतइस्तरी

(पहला पुनरीक्षण)

Indian Standard

SAFETY OF HOUSEHOLD AND SIMILAR
ELECTRICAL APPLIANCES

PART 2 PARTICULAR REQUIREMENTS

Section 3 Electric Iron

(*First Revision*)

ICS 13.120; 97.060

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BUREAU OF INDIAN STANDARDS
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NEW DELHI 110002

FOREWORD

This Indian Standard (Part 2/Sec 3) (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Electrical Appliances Sectional Committee had been approved by the Electrotechnical Division Council.

This standard was first published in 1992. This revision has been undertaken primarily to align the existing standard with latest International Standard and also to cover requirements of steam iron, which were earlier covered under a separate standard. Safety requirements of cordless iron and travel irons have also been covered in this standard.

This standard covers the safety requirements of electric iron. This standard does not cover the performance requirements, which is covered under a separate standard (*see* IS 366).

It has been assumed in the formulation of this standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the Indian accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. It also covers abnormal situations that can be expected in practice.

If the functions of an appliance are covered by different parts and sections of IS 302, the relevant part and section is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

NOTE — Throughout this publication, when "Part 2" is mentioned, it refers to the relevant part of IS 302 : 2007.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

Application of this standard, as far as is reasonable, may be considered to appliances not mentioned in Part 2, and to appliances designed on new principles.

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard, if when examined and tested, it is found to have other features, which impair the level of safety, covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.

This standard is to be read in conjunction with IS 302-1 : 2007 'Safety of household and similar electrical appliances: Part 1 General requirements (*sixth revision*)'. For the sake of convenience, the clauses of this standard correspond to those of IS 302-1, instead of reproducing full text of each clause, clauses of IS 302-1 : 2007 which are applicable (which means that relevant provisions of the clause apply) or not applicable and the sub-clauses or portion thereof which are not applicable are indicated as under:

- a) In case of a clause where it is applicable, the wording used is 'This clause of IS 302-1 : 2007 is applicable/not applicable'; and
- b) In case of sub-clause or part thereof 'Not applicable'.

Wherever a sub-clause of IS 302-1 : 2007 is to be replaced by a new text, it has been indicated as under:

Replacement — followed by the new text.

Any addition to the existing provision of a sub-clause of IS 302-1 : 2007 has been indicated as under:

'Addition — followed by the text of the additional matter'.

(Continued on third cover)

Indian Standard

SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES

PART 2 PARTICULAR REQUIREMENTS

Section 3 Electric Iron

(First Revision)

1 SCOPE

This clause of Part 1 is replaced by:

This standard deals with the safety of electric dry irons and steam irons, including those with separate water reservoir or boiler having a capacity not exceeding 5 litres, for household and similar purpose, their rated voltage being not more than 250 V.

Appliances not intended for normal household use, but which nevertheless may be a source of danger to the public, such as appliance intended to be used by laymen in shops, in light industry and on farms, are within the scope of this standard.

So far as is practicable, this standard deals with the common hazards presented by appliances, which are encountered by all persons in and around the home.

This standard does not in general take into account:

- a) Use of appliance by young children or infirm persons without supervision; and
- b) Playing with the appliance by young children.

NOTES

1 Attention is drawn to the fact that:

- a) for appliance intended to be used in vehicles or on board ships or aircraft, additional requirement may be necessary;
- b) the national authorities responsible for the protection of labour and similar authorities may specify additional requirements; and
- c) additional requirements for pressure vessels may be specified by the national authorities responsible for the safety of pressure vessels.

2 This standard does not apply to:

- a) ironers (No Indian Standard exist at present);
- b) appliance designed exclusively for industrial purpose; and
- c) appliance intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas).

2 REFERENCES

This clause of Part 1 is applicable.

3 TERMINOLOGY

This clause of Part 1 is applicable except as follows.

3.10 Replacement:

Normal Operation — Operation of the appliance under the following conditions:

‘The iron is placed on its stand and is operated with its thermostat at the highest setting.

If the iron does not have a thermostat, the surface temperature at the mid-point of the centreline of the soleplate is maintained at $250^{\circ}\text{C} \pm 10^{\circ}\text{C}$ by switching the supply on and off or at the highest temperature if it is lower.

Steam irons with a separate water reservoir or boiler are operated with the water reservoir or boiler filled with water.

Pressurized steam iron incorporating the boiler are operated with or without water whichever is more unfavourable.

Other steam irons are operated empty.’

3.101 Steam Iron

Iron having means to produce and supply steam to the textile material while ironing.

NOTE — Steam irons may incorporate a means for blowing steam on clothes.

3.102 Vented Steam Iron

Steam iron in which steam is produced when the water contacts the soleplate, the water reservoir being at atmospheric pressure.

NOTE — The water reservoir may be incorporated in the iron or is connected by a hose to the iron.

3.103 Pressurized Steam Iron

Steam iron in which steam is produced in a boiler at a pressure exceeding 50 kPa.

3.104 Instantaneous Steam Iron

Steam iron in which small quantities of water are pumped from the water reservoir and in which steam is produced when the water contacts the walls of the

boiler, the water reservoir and the boiler being at atmospheric pressure.

NOTE — The water and the boiler are connected to the iron by a hose to the iron.

3.105 Cordless Iron

Iron which is connected to the supply only when placed on its stand.

NOTE — Cordless irons may be directly connected to the supply mains during by a detachable part to which the supply cord is fixed.

3.106 Soleplate

Heated part of the iron, which is pressed against the textile material ironing.

3.107 Stand

Heel of the iron or a separate part provided with the iron, on which the iron is placed when at rest.

NOTE — The separate water reservoir or boiler may serve as the stand.

4 GENERAL REQUIREMENT

This clause of Part 1 is applicable.

5 GENERAL CONDITIONS FOR THE TESTS

This clause of Part 1 is applicable except as follows:

5.2 Addition

NOTES

101 If a protective device becomes open circuit during the tests of 21.101, the test is continued on a separate appliance.

102 The additional test of 25.14 is carried out on a separate appliance.

5.3 Addition

For irons with a thermostat, the test of 21.101 is made before that of 11. The test of 22.102 is made at the end of the test of 11.

Additional sub-clauses:

5.101 Irons are tested as heating appliances even if they incorporate a motor.

5.102 If a cordless iron can also be directly connected to the supply mains during ironing, the relevant tests are applicable for both modes of operation.

6 CLASSIFICATION AND RATING

This clause of Part 1 is applicable.

7 MARKING AND INSTRUCTIONS

This clause of Part 1 is applicable except as follows:

7.1 Modification

Appliances shall be marked with their rated

power input.

Addition

Separate stands shall be marked with:

- Name, trade-mark or identification mark of the manufacturer or responsible vendor; and
- Model or type reference of the stand.

Stands of cordless irons shall be marked with their

- rated voltage or rated voltage range; and
- rated power input.

7.12 Additions

The instruction for use shall contain the substance of the following:

- Iron must not be left unattended while it is connected to the supply;
- Plug must be removed from the socket-outlet before the water reservoir is filled with water (for steam irons and irons incorporating means for spraying water);
- Filling aperture must not be opened during use. Instructions for the safe refilling of the water reservoir shall be given (for pressurized steam irons);
- Iron must only be used with the stand provided (for cordless irons); and
- Iron is not intended for regular use (for travel irons).

7.15 Addition

For steam irons with a separate water reservoir or boiler, the total rated power input shall be marked on the part containing the supply terminals or supply cord.

Additional sub-clauses:

7.101 The electric iron may also be marked with the Standard Mark.

7.101.1 The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

8 PROTECTION AGAINST ACCESS TO LIVE PARTS

This clause of Part 1 is applicable except as follows:

8.1.2 Addition

NOTE — Connecting devices in stands of cordless irons are not regarded as socket-outlets.

9 STARTING OF MOTOR-OPERATED APPLIANCES

This clause of Part 1 is not applicable.

10 POWER INPUT AND CURRENT

This clause of Part 1 is applicable.

11 TEMPERATURE RISE

This clause of Part 1 is applicable except as follows:

11.2 Replacement

Irons are placed on their stands on the floor of a test corner and away from the walls. However, the separate water reservoir or boiler or steam irons is placed as near to the walls as possible. Dull black painted plywood approximately 20 mm thick is used for the test corner.

Vented steam irons with a separate water reservoir, pressurized steam irons and instantaneous steam irons are tested both with the water reservoir empty and filled but without steam emission.

Irons, other than cordless irons, are also tested with the soleplate in the horizontal position placed on three pointed metallic supports, which have a height of at least 100 mm. Vented steam irons with a separate water reservoir, pressurized steam irons and instantaneous steam irons are operated with the water reservoir or boiler filled.

For appliance provided with an automatic cord reel, one-third of the total length of the cord is unreel. The temperature rise of the cord sheath is determined as near as possible to the hub of the reel and also between the two outermost layers of the cord on the reel. However, if the cord reel is incorporated in a part, which is moved during ironing, the cord is completely unreel.

For cord storage devices, other than automatic cord reels, which are intended to partially accommodate the supply cord while the appliance is in operation, 50 cm of the cord is unwound. However, for cord storage devices on parts, which are moved during ironing, the cord is completely unwound. The temperature rise of the stored part of the cord is determined at the most unfavourable place.

11.4 Addition

If the temperature rises limits are exceeded in appliances incorporating motors, transformers or electronic circuits and the power input is lower than the rated power input, the test is repeated with the appliance supplied at 1.06 times rated voltage.

11.7 Replacement

Irons are operated until steady conditions are established.

When vented steam irons with a separate water reservoir, pressurized steam irons and instantaneous steam irons are tested with the iron placed on the pointed supports, steam is emitted in cycles, each cycle having a period of 10 s with steam emission and a period of 10 s with the steam emission interrupted.

11.8 Modification

Instead of the temperature rise limit of 50 K for rubber or polyvinyl chloride insulation of internal wiring, including supply cords without T-marking, 60 K applies.

Addition:

During the test with the iron placed on the pointed supports, only the temperature rises of the insulation of internal wiring and flexible cords are measured. However the temperature rise limits apply to the water reservoir and the hose of pressurized steam irons and instantaneous steam irons. The temperature rise of the accessible surface of the hose shall comply with the temperature rise limits for handles, which in normal use are held for short periods only. However, if a non-metallic hose is covered by textile material, the temperature rise of the surface of the textile material shall not exceed 80 K.

The temperature rise limits of motors, transformers, components of electronic circuits and parts directly influenced by them may be exceeded when the appliance is operated at 1.15 times rated power input.

12 VOID

13 LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE

This clause of Part 1 is applicable.

14 TRANSIENT OVERVOLTAGE

This clause of Part 1 is applicable.

15 MOISTURE RESISTANCE

This clause of Part 1 is applicable except as follows.

15.2 Modification

The test for steam irons, other than those with a separate water reservoir or boiler, is carried out as follows:

The iron is placed in the filing position according to the instructions and filled with water containing approximately 1 percent NaCl. A further quantity of 0.1 l is steadily poured into the filling opening over a period of 1 min. The iron is then placed on its stand and subjected to the electric strength test of 16.3. The iron is left on its stand for 10 min after which the electric strength test is repeated.

The iron while still filled is operated at rated power

input for 1 min under normal operation. It shall then withstand the electric strength test of 16.3.

Cordless irons are also filled with the saline solution while resting on their stands, if the iron can easily be filled in this position.

16 LEAKAGE CURRENT AND ELECTRIC STRENGTH

This clause of Part 1 is applicable.

17 OVERLOAD PROTECTION OF TRANSFORMERS AND ASSOCIATED CIRCUITS

This clause of Part 1 is not applicable.

18 ENDURANCE

This clause of Part 1 is not applicable.

19 ABNORMAL OPERATION

This clause of Part 1 is applicable except as follows:

19.1 Modification:

The test of 19.2 and 19.3 are not carried out.

Addition:

Cordless irons are also subjected to the tests of 19.101.

19.4 Modification:

The test is only carried out at rated power input.

Addition:

Steam irons are tested with or without water, whichever is more unfavourable.

The test is only carried out with the iron resting on its stand.

Any control that limits the pressure during the test of 11 is rendered inoperative.

19.7 Addition:

The test is carried out for 5 min unless the motor is kept switched on by hand.

19.101 Cordless irons are operated under normal operation at rated power input until the thermostat operates for the first time. The iron is then placed on its stand in the position that most adversely affects the material of the stand.

20 STABILITY AND MECHANICAL HAZARDS

This clause of Part 1 is applicable except as follows:

20.1 Replacement:

Irons shall have adequate stability.

Compliance is checked by the following test:

Irons incorporating a stand are placed on their stand on a plane inclined at an angle of 10° to the horizontal, the cord resting on the inclined plane in the most unfavourable position. Irons provided with a separate stand are placed on the stand on a plane inclined at an angle of 15° to the horizontal.

Appliance intended to be filled with liquid by the user in normal use are tested empty or filled with the most unfavourable quantity of water up to the capacity indicated in the instruction for use.

NOTES

101 The stand may be tapped to overcome static friction between the iron and the stand.

102 The appliance is not connected to the supply.

If the iron overturns or slips off the stand in one or more position, it is tested as specified in 11 in all positions.

The temperature rise shall not exceed the values specified in Table 9.

21 MECHANICAL STRENGTH

This clause of Part 1 is applicable except as follows:

Addition:

Compliance is also checked by the test of 21.101.

21.101 The iron is operated under normal operation at rated power input and, except for cordless irons, the soleplate temperature is maintained under these conditions throughout the test.

The iron is then suspended by its handle with the soleplate in the horizontal position. It is dropped from a height of 40 mm onto a rigidly supported steel plate having a thickness of at least 15 mm and a mass of at least 15 kg. The test is carried out 1 000 times at a rate not exceeding 20 drops/min.

The test is conducted so that the iron rests on the steel plate for approximately 15 percent of the time.

NOTE — The iron is suspended so that the impact energy is only influenced by its mass.

After the test, the iron shall not be damaged to such an extent that compliance with this standard, in particular with 8.1, 15.2 and 29, is impaired. In case of doubt, supplementary insulation and reinforced insulation is subjected to the electric strength test of 16.3.

22 CONSTRUCTION

This clause of Part 1 is applicable except as follows:

22.7 Replacement:

Pressurized steam irons and instantaneous steam irons

shall incorporate adequate safeguards against the risk of excessive pressure.

If jets of steam or hot water are emitted through protective devices, the electrical insulation shall not be affected or the user exposed to a hazard.

Compliance is checked by inspection and by the following test.

For pressurized steam irons, the maximum pressure occurring during the test of 11 with the boiler filled but without steam emission, is measured. All pressure regulating devices that operated during the test are rendered inoperative and the pressure measured again. The pressure shall not increase by more than 200 kPa. Any pressure limiting protective device is then rendered inoperative and the pressure in the boiler is raised hydraulically to five times the pressure measured originally or twice the pressure measured with the pressure-regulating device rendered inoperative, whichever is higher. There shall be no leakage from the water reservoir.

Pressurized steam irons, in which the device regulating the steam supply is within the boiler, are operated as specified in 11 but with all pressure regulating devices operating during the test of 11 rendered inoperative. All vents in the soleplate are sealed and the device regulating the steam supply is opened. There shall be no leakage from the hose except at an intentionally weak place within the enclosure of the boiler. If this occurs, the test is repeated on another appliance that shall also leak in the same way.

All vents in the soleplate of instantaneous steam irons are sealed and the pressure in the water reservoir is raised hydraulically until the pressure limiting protective device operates. The pressure shall not exceed 50 kPa. The outlet through the protective device is then sealed and the pressure is raised to 100 kPa and maintained at this value for 1 min. There shall be no leakage from the container.

22.101 Irons shall be provided with a stand.

Compliance is checked by inspection.

22.102 Steam iron shall be constructed so that there is no spillage of water or sudden jets of steam or hot water likely to expose the user to a hazard when the iron is used in accordance with the instructions.

When removing the filling cap of boilers, the pressure shall be relieved in a controlled manner before the cap is removed completely, to avoid the emission of jets of steam or hot water in a manner likely to expose the user to a hazard.

Compliance is checked by inspection during the test of 11 and by removing the filling cap at the end of the test.

22.103 The water reservoir of stem irons with a separate boiler shall incorporate at least one non-self resetting thermal cut-out that is only accessible by means of a tool.

Compliance is checked by inspection.

22.104 Pressure limiting protective devices which operate during the tests of 19.4 and 22.7 shall have an inlet aperture at least 5 mm in diameter or 20 mm² in area and a width of at least 3 mm. The area of the aperture at the outlet shall not be less than that of the aperture at the inlet.

Compliance is checked by measurement.

22.105 The connection contacts of cordless iron shall be constructed so that any electrical or mechanical failure occurring in normal use will not give rise to a hazard.

Compliance is checked by the following test:

The two live pins of the iron are connected together and an external resistive load is connected in series with the supply. The external load is such that the current is 1.1 times the rated current when the iron is supplied at rated voltage.

The iron is placed on its stand and withdrawn 50 000 times, at a rate of 10 times/min. The test is continued for a further 50 000 times without current following.

After the test the iron shall be fit for further use and compliance with 8.1, 16.3, 27.5 and 29 shall not be impaired.

22.106 Cordless irons, which may be directly connected to the supply mains during ironing, shall be constructed so that the force necessary to withdraw the connector from the iron is at least 30 N.

Compliance is checked by measurement.

NOTE — Any locking device is engaged before carrying out the test.

22.107 Any device incorporated in an iron in order to comply with 19.4 shall be a non-self-resetting type, which is accessible only by means of a tool.

For steam irons with a separate boiler, the water reservoir shall incorporate at least one non-self-resetting thermal cut-out accessible only by means of a tool.

Compliance is checked by inspection.

23 INTERNAL WIRING

This clause of Part 1 is applicable.

24 COMPONENTS

This clause of Part 1 is applicable except as follows:

24.1.3 Addition:

Switches that control steam or water emission are subjected to 50 000 cycles of operation.

24.4 Addition:

NOTE 101 — This requirement is not applicable to the connection between the iron and the stand of cordless irons.

24.101 Any component incorporated in an iron for compliance with 19.4 shall not be self-resetting and only accessories by means of a tool.

Compliance is checked by inspection.

25 SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS

This clause of Part 1 is applicable except as follows:

25.5 Addition:

Type Z attachment is allowed for travel irons and cordless irons.

NOTE 101 — Type Z attachment is not allowed for cordless irons that may also be directly connected to the supply mains during ironing.

25.7 Addition:

Braided cords may be used.

Polyvinyl chloride sheathed cords are only allowed for the connection to the supply mains of stands of cordless irons and for the separate water reservoir or boiler of steam irons.

NOTE 101 — Polyvinyl chloride cords are not allowed for cordless irons that may also be directly connected to the supply mains during ironing.

25.14 Modification:

Instead of the load specified for the cord, the cord is loaded with a mass of 2 kg.

Instead of the number of flexing specified, the number of flexing is 20 000.

NOTE 101 — The test is not carried out on cordless irons unless the iron can also be directly connected to the supply mains during ironing.

Addition:

For steam irons with a separate water reservoir or boiler, the test is made on the steam hose and the interconnection cord together. If they are contained in one sheath or otherwise attached to each other, the assembly is not turned through an angle of 90°.

The test shall not result in:

- Loosening of the hose;
- Damage to the hose to such an extent that compliance with this standard is impaired; and
- Leakage from the hose.

Appliances are also subjected to the following test while mounted on an apparatus similar to that of Fig. 8. The test is carried out on a separate appliance.

The supply cord is suspended vertically from the appliance and loaded so that a force of 10 N is applied. The oscillating member is moved through an angle of 180° and back to the initial position. The number of flexings is 2 000, the rate of flexing being six per minute.

NOTES

102 The appliance is mounted so that the direction of flexing corresponds to that most likely to occur when the supply cord is wound around it for storage.

103 The test is not carried out if it is unlikely that the cord will be wrapped around the appliance, for example, cordless irons and irons with a separate water reservoir.

26 TERMINALS FOR EXTERNAL CONDUCTORS

This clause of Part 1 is applicable.

27 PROVISION FOR EARTHING

This clause of Part 1 is applicable.

28 SCREWS AND CONNECTIONS

This clause of Part 1 is applicable.

29 CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION

This clause of Part 1 is applicable.

30 RESISTANCE TO HEAT, FIRE AND TRACKING

This clause of Part 1 is applicable except as follows:

30.1 Addition:

For irons with thermostats, the temperature rises occurring during 19 are not taken into consideration.

30.2.3 Not applicable.

31 RESISTANCE TO RUSTING

This clause of Part 1 is applicable.

32 RADIATION, TOXICITY AND SIMILAR HAZARDS

This clause of Part 1 is applicable.

101 TESTS

101.1 Type Tests

The tests specified in Table 101 shall constitute the type tests and shall be carried out on a sample selected preferably at random from regular production lot (see 5.3). Before commencement of the tests, the irons shall be visually examined and inspected of components, parts and their assembly, constructions,

mechanical hazards, marking provision of suitable terminals for supply connections, earthing and the effectiveness screws and connection. The external surface finish shall be even and free from finishing defects.

101.1.1 *Criteria of Acceptance*

Sample shall successfully pass all the type tests

for proving conformity with the requirements of the standard. If the sample fails in any of the type tests, the testing authority at its discretion, may call for fresh samples not exceeding twice the original number and subject them again to all tests or to the test(s) in which failure(s) had occurred. No failure should be permitted in the repeat tests(s).

Table 101 Schedule of Type Tests

(Clause 101.1)

SI No.	Tests	Ref to Clause
(1)	(2)	(3)
i)	Protection against access to live parts	8
ii)	Power input and current	10
iii)	Heating	11
iv)	Leakage current and electric strength	13
v)	Transient over voltage	14
vi)	Moisture resistance	15
vii)	Leakage current and electric strength	16
viii)	Abnormal operation	19
ix)	Stability and mechanical hazards	20
x)	Mechanical strength	21
xi)	Construction	22
xii)	Internal wiring	23
xiii)	Components	24
xiv)	Supply connection and external flexible cord	25
xv)	Terminals for external conductors	26
xvi)	Provision for earthing	27
xvii)	Screw and connections	28
xviii)	Clearances, creepage distances and solid insulation	29
xix)	Resistance to heat and fire	30
xx)	Resistance to rusting	31
xxi)	Radiation, toxicity and similar hazards	32

101.2 Acceptance Test

The following shall constitute the acceptance tests:

<i>Sl No.</i>	<i>Tests</i>	<i>Ref to Clause</i>
(1)	(2)	(3)
i)	Protection against access to live parts	8
ii)	Power input and current	10
iii)	Heating	11
iv)	Leakage current and electric strength and operating temperature	13
v)	Moisture resistance	15
vi)	Leakage current and electric strength	16
vii)	Provision for earthing	27

NOTE — For the purpose of acceptance tests, the humidity treatment shall be done for 24 h while conducting the test for moisture resistance (see 15).

101.2.1 A recommended sampling procedure for acceptance tests is given in Annex J of IS 302-1 : 2007.

101.3 Routine Test — The following shall constitute the routine tests:

<i>Sl No.</i>	<i>Tests</i>	<i>Ref to Clause</i>
(1)	(2)	(3)
i)	Protection against access to live parts	8
ii)	High voltage	13.3.2 of IS 302-1 : 2007
iii)	Provision for earthing	27

ANNEXURES

The Annexures of Part 1 is applicable.

(Continued from second cover)

Clauses/Tables which are additional to those of IS 302-1 : 2007 are numbered starting from 101 and additional sub-clauses are numbered with the main clause number followed by 101, 102, etc, for example, 7.101.

Should however, any deviation exist between IS 302-1 : 2007 and this standard, the provision of the latter shall apply.

This standard is based on IEC Pub 60335-2-3 (2002) 'Household and similar electrical appliances — Safety Part 2-3 : Particular requirements for electric irons' issued by the International Electrotechnical Commission except for the following modification:

- a) The leakage current value is more stringent as compared to values specified to IEC Publication; and
- b) Ambient test conditions are based on National conditions.

After the publication of this standard, IS 302-2-205 (1994) 'Safety of household and similar electrical appliances, Part 2 Particular requirements, Section 205 Steam irons' will be withdrawn.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*).' The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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AMENDMENT NO. 1 MARCH 2013
TO
IS 302-2-3 : 2007 SAFETY OF HOUSEHOLD AND SIMILAR
ELECTRICAL APPLIANCES

PART 1 PARTICULAR REQUIREMENTS
SECTION 3 ELECTRIC IRON

(First Revision)

(Second cover page, para 11) — Substitute ‘IS 302-1 : 2008’ for ‘IS 302-1 : 2007’ and also wherever it appears in the standard.

(Page 2, clause 3.106, line 2) — Insert ‘while’ between ‘material ironing’.

(Page 6, clause 25.14, para 4, line 3) — Substitute ‘Fig. 9’ for ‘Fig. 8’.