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भारतीय मानक मसौदा

मुर्गीपालन के लिए जाल घोंसले – विशिष्टि

(आई एस 7516 का पहला पुनरीक्षण)

*Draft Indian Standard*

**TRAP NESTS FOR POULTRY — SPECIFICATION**

*(First Revision of IS 7516)*

ICS 65.020.30

Agriculture And Food Processing Equipments  
Sectional Committee, FAD 32

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**FOREWORD**

Trap nests are used to record the individual performance of laying birds for estimating their productivity or genetic potentialities. The mechanism of trap nests is such that when a bird enters into it for laying eggs, it is trapped inside until it is released by egg collector.

The trap nests are available in various shapes, sizes, and designs and are made up of galvanized steel sheets or wooden planks. The materials of construction also vary considerably. Considering these variations, the Standard was published in 1974 stipulating essential requirements and performance of the trap nests for facilitating bulk transactions.

In this revision, the dimensional requirements of the compartments have been clarified, reference standards wherever applicable have been updated, and this standard has been brought out in latest style of Indian Standards.

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: 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

## 1 SCOPE

This standard prescribes the requirements for materials, construction and dimensions of trap nests and trap doors for poultry.

## 2 REFERENCES

The following standards contain provisions which through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

<i>IS No.</i>	<i>Title</i>
IS 277: 2018	Galvanized Steel Strips and sheets (Plain and Corrugated) — Specification ( <i>seventh revision</i> )
IS 280: 2006	Mild steel wire for general engineering purposes ( <i>fourth revision</i> )
IS 399: 1963	Classification of commercial timbers and their zonal distribution ( <i>first revision</i> )
IS 808: 2021	Hot rolled steel beam, column, channel and angle sections — Dimensions and properties ( <i>fourth revision</i> )

## 3 TERMINOLOGY

For the purpose of this standard, the following definition shall apply:

**3.1 Trap Nest** — The nest with mechanism for trapping individual laying bird for recording its egg production.

## 4 MATERIALS

The materials used for the construction of various parts of trap nests shall be as given in col 3 of Table 1. The material should, as far as possible, conform to relevant Indian Standards as indicated in col 5 of Table 1.

**Table 1 Material for Trap Nest**  
(*Clause 4*)

<b>Sl. No.</b>	<b>Part</b>	<b>Material</b>	<b>Size, <i>Min</i> (mm)</b>	<b>Relevant Indian Standard</b>
(1)	(2)	(3)	(4)	(5)
i.	Body	Galvanized steel sheets or Seasoned light wood	0.63  12.5	IS 277  IS 399
ii.	Trap door	Galvanized steel sheets	0.63	IS 277

		or		
iii.	Perch supports and Legs	Mild steel wire	5.0	IS 280
		Mild steel (angle section)	30×20×4	IS 808
iv.	Perching step	Seasoned hard wood	20	IS 399

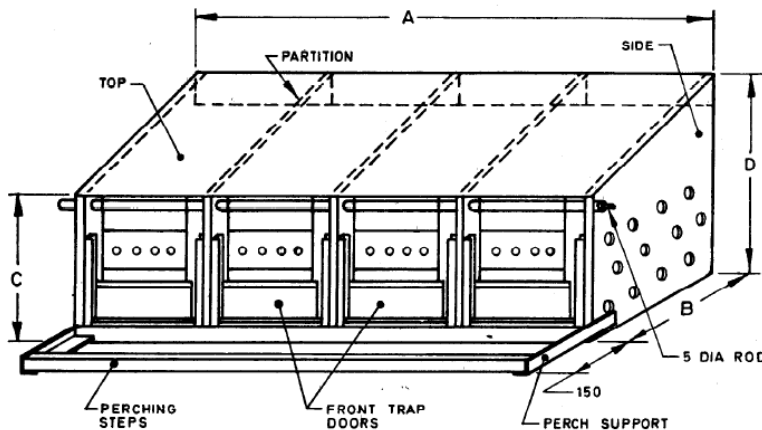
NOTE — The mild steel wire shall be galvanized.

## 5 DIMENSIONS

**5.1** The dimensions of a typical four-compartment trap nest, when read in conjunction with Fig. 1, should be as given below. Depending upon the need of the purchaser, the number of compartments may vary and the length of the nest may change according to the number of compartments in proportion to the dimensions given in table 2. However, for any number of compartments, the width, front height and back height should remain same.

**Table 2 A Typical Four-Compartment Trap Nest**  
(Clause 5.1)

Sl. No.	Particulars	Light Breed (mm)	Heavy Breed (mm)
(1)	(2)	(3)	(4)
i.	Length, <i>Min</i> (A)	1 200	1 500
ii.	Breadth, <i>Min</i> (B)	350	375
iii.	Front height, <i>Min</i> (C)	350	375
iv.	Back height, <i>Min</i> (D)	500	500



All dimensions in millimetres.

**FIG. 1 A TYPICAL FOUR COMPARTMENT TRAP NEST**

## 6 COMPARTMENTS AND PARTITIONS

### 6.1 Compartments

The number of compartments shall depend on the size of breeding pen and number of pullets for which it is required to be used. One compartment should be used for trapping 3 to 4 pullets.

### 6.2 Partitions

In case of a four-compartment trap nest there shall be three partitions at equal distance. Each partition and the two side walls shall have at least 12 die punched holes for ventilation each of minimum 10 mm diameter.

## 7 TRAP DOORS

**7.1** Each compartment shall have trap door fitted in front and made of either 0.63 mm galvanized steel sheet (*see* Fig. 2), or of 5 mm galvanized steel wire (*see* Fig. 3). In case of galvanized sheet doors, trap door should consist of two parts. The upper part shall have at least four die punched holes for ventilation each of minimum 20 mm diameter and a rod of 5 mm diameter fitted on both sides forming a semi-circular ring of 15 mm diameter on top and a similar ring on bottom for hanging the lower part of the trap door.

**7.1.1** The lower part at its top shall be fitted with a rod of 5 mm diameter. The bottom end should also have a rod of 5 mm diameter so that the two ends of this lower rod projecting about 20 mm on each side should smoothly play up and down in two 15 × 15 mm galvanized steel sheet channels, fitted on both sides in front of each compartment.

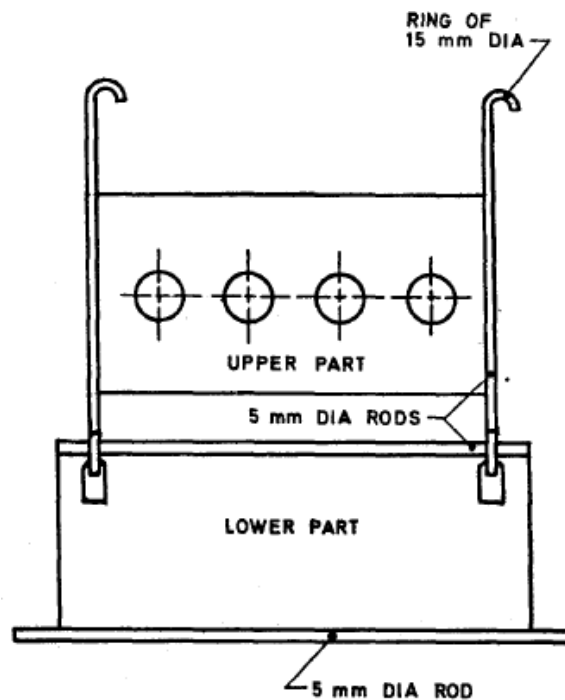


FIG. 2 A TYPICAL GALVANIZED STEEL SHEET TRAP DOOR

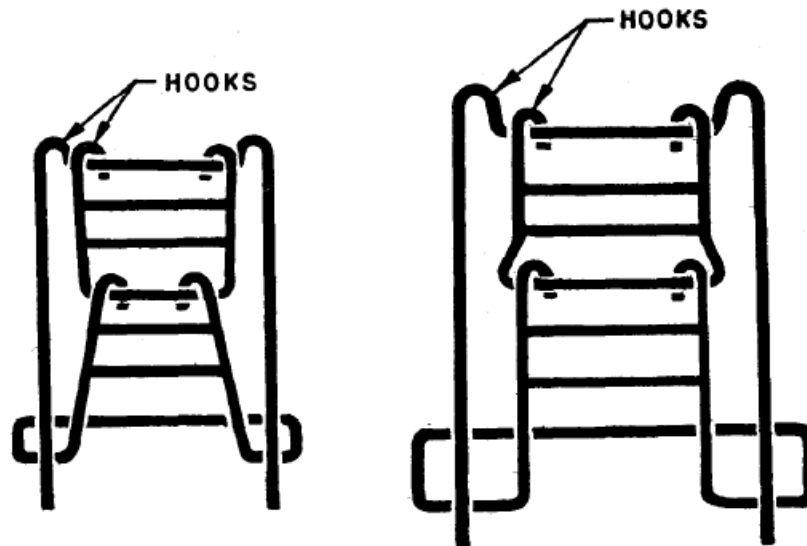


FIG. 3 A TYPICAL GALVANIZED STEEL WIRE TRAP DOOR

NOTE — Doors should be so adjusted that when folded up they should have clear sufficient space for a bird just to get in and they should close soon after the bird enters the nest. The doors should not be opened either by the bird from inside or by another bird from outside.

## 8 BACK SIDE

The back of the trap nests should be wire netted with whole size of 12.5 mm diameter up to 150 mm from the top. A folding type lid for the removal of birds for recording data should be fitted below the wire netting to cover the open gap. The lid should be hinged at the bottom and properly secured with the wire netting at the top.

NOTE — In case trap nests are fitted on a side of a wall, back fittings are not needed.

## 9 FRONT AND BACK SUPPORTS

**9.1** To prevent falling of litter from compartments of the trap nest, a 75-mm high galvanized steel sheet support or a wooden support, upper edge of which is properly bevelled to prevent injury to birds, shall be fitted at the bottom in front all along the length of trap nest. A similar 100-mm high support shall be fitted on back side to prevent falling of litter.

## 10 PERCHING STEP

**10.1** One wooden strip 60 mm wide, 20 mm thick and equal to the length of the nest shall be fitted in front of the compartment to enable the birds to step over it for entering the compartment. Angle iron section shall be fitted on both sides to support the perching step. The projecting part of the angle on which wooden step

is bolted should be 150 mm long and have two additional holes for adjusting the position of wooden step. Other suitable materials may also be used.

## **11 FITTINGS**

**11.1** The trap nest may be placed on two angle iron bars fixed to the wall at about 450 to 600 mm height. Alternatively, the trap nest may be provided with legs of approximately 250 mm height made of angle iron section.

## **12 MARKING AND PACKING**

### **12.1 Marking**

Each trap nest shall be marked legibly and indelibly with the following particulars:

- a) Manufacturer's name or trade-mark,
- b) Manufacturer's model or type reference,
- c) Number of compartments,
- d) Year of manufacture, and
- e) Any other information.

#### **12.1.1 *BIS Certification Marking***

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed there under, and the products may be marked with the Standard Mark.

### **12.2 Packing**

The trap 'nests shall be packed as agreed to between the purchaser and the supplier.

## **13 TESTS**

### **13.1 Stability Test**

The trap nests should be stable and should not be overturned under normal operating conditions.

### **13.2 Trap Door Test**

When a bird is already trapped, the door should not be opened by light pressing by the birds from outside.