

4.7 Indicative Technical Specifications of Insect Net House (INH)- Cable Purlin

| S.N | Item | Indicative Specifications |
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| 1. | Structure | Tubular Structures with cable purlins Net House |
| 2. | Size | According to requirement |
| 3. | Shape | As per design |
| 4. | Withstand to wind velocity | Structure may be design to withstand wind velocity upto 104 Km/hr. 120 km/hour per hrs. in high wind velocity zone. |
| 5. | Main Column | Exterior corner 76 OD, 2.65 mm thick, height of pole 4m Exterior side/peripheral column 76 OD, 2.65 mm thick, height of pole 4m Interior column 60 OD, 2mm thick, height of pole 5 m i.e. (4 mtr. above ground level+1 mtr. below ground level) |
| 6. | Balcony | 2.50 mtr. Supported with 6mm thick anchor cable |
| 7. | Trellis System | i) Base wire 8 mm with anchor foundation or GI Pipe 60 mm OD, 2 mm thick, two nos. first and last row of the structure. ii) Trellising wire 3 mm steel or 2 mm gear wire, spaced apart at 75 cm in entire crop area in the structure. iii) Supporting wire 4 mm steel or 3 mm gear wire, connecting to each column from east to west of structure. |
| 8. | Clamps | Clamps-triple wire connector, 6mm thick wire cable clamp |
| 9. | Nut Bolts | Tighten bolt 3/8", 120 mm; Tighten bolt 3/8", 90 mm; Tighten bolt 3/8", 100 mm, Eye bolt 3/8", 120mm |
| 10. | Spacing | 5 x 8 mtr., spacing 4 x 5 mtr. at both outer sides |
| 11. | Centre Height | 4.0 mtr. in case of flat structure. |
| 12. | Accessories | Cable hold small plate, cable hold large plate, 3" pipe plastic cup, 2" pipe plastic cup, 14mm iron pins, screen red rolls, screen pipe housing, net needles, net oval connectors, net hook connectors, simes. |
| 13. | Insect Proof Net & Shade Net | 40 mesh insect net shade net on roof, 40 mesh anti-insect net at sides |
| 14. | Entrance & anti room | Entrance – G.I. frame with poly carbonate sheet 2m x 2m size hinged type with locking arrangement. (Anti room of size 2m x 4m x 2m with double door and covering of insect net/shade net, with provision of entry and exist for tractor), 50 mm PCC flooring over 75 mm thick sub base. |
| 15. | Foundation (Civil material as per HSR) | Outer anchor: 1.8 mtr length anchor with 1 mtr depth PCC of CM ratio (1:2:4) of 45 cm diameter. Outer pole: 50 cm length, 25 mm dia. Bent iron pin/rod in 0.5 mtr depth PCC of CM ratio (1:2:4) of 45 cm diameter. Intermediate pole: in a pit of 45 cm dia, the pole is inserted 1 mtr. Deep, rested on plates for foundation and is placed in 25 cm thick PCC of CM ratio 1:2:4 |
| 16. | Iron accessories for foundation | Anchor, bent iron pin/rod, inner column base angles/foundation plates for intermediate poles |
| 17. | Drip irrigation and Fogging system | Drip irrigation system under greenhouse need to be selected on the basis of crop spacing design on spacing 30 cm dripper to dripper (two rows per bed) 30 cm x 40cm along with fogging facilities. The spacing considered for calculation. The suggested bill of materials are Sand Filter 10 m ³ /hr, Hydro cyclone filter 25m ³ /hr, Screen Filter/Disc Filter 10 m ³ /hr, Control Valve 63mm, Control Valve 50mm, By-pass Assembly 1.5", Air Release Valve, 1", Non Return Valve 1.5", Throttle Valve 1.5", Flush Valve 50mm, Venturi 1.5" Assembly with manifold, PVC pipe 63 mm/4 kg cm ² , PVC pipe 50 mm/4 kg cm ² , PVC pipe 63 mm/6 kg cm ² , PVC pipe 50mm/6kg/cm ² , PE plane lateral 16 mm, emitting pipe lateral 16mm - @ 0.30 m to 0.40m spacing, hanging type micro sprinkler nozzle (four-way take off assembly) for very fine water particles (foggers) to be fixed in PE pipe of diameter 16mm and fittings & accessories @ 5%. Note: The above list of material is indicative list for 500 sqm structure area. The material may increase/decrease based on the size of structure. |
| 18. | Shade Net | Shade Net minimum 35 to 65% IS 16008:2016 |