

कार्यालय उत्तराखण्ड जैव प्रौद्योगिकी परिषद्
बायोटेक भवन, हल्दी-263146, उधम सिंह नगर (उत्तराखण्ड)
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अल्पकालिक निविदा सूचना

सर्वसाधारण को सूचित किया जाता है कि उत्तराखण्ड जैव प्रौद्योगिकी परिषद् के पटवाडांगर, नैनीताल में एक नेट हाऊस और एक कन्ट्रोल ग्रीन हाऊस फैसिलिटी (मिस्ट चैम्बर) के फैब्रिकेशन कार्य हेतु बंद निविदा आमंत्रित की जाती है। निविदा का विवरण विभागीय वेबसाईट www.ucb.ac.in में उपलब्ध है।

निदेशक
उत्तराखण्ड जैव प्रौद्योगिकी परिषद्

उत्तराखण्ड जैव प्रौद्योगिकी परिषद्

बायोटेक भवन, हल्दी-263146, ऊधमसिंह नगर, उत्तराखण्ड

निविदा प्रपत्र

निविदा संख्या : UBC - 02	निविदा शुल्क रू0 1000.00 + 18% GST
निविदा प्राप्त करने की तिथि व समय	दिनांक 17.07.2021 को पूर्वाह्न 10.00 बजे से
निविदा प्राप्त करने की अन्तिम तिथि व समय	दिनांक 29.07.2021 को अपराह्न 05.00 बजे तक
निविदा जमा करने की अन्तिम तिथि व समय	दिनांक 30.07.2021 को पूर्वाह्न 11.00 बजे तक
निविदा खोलने की तिथि व समय	दिनांक 30.07.2021 को सांय 4.00 बजे

एक नेट हाऊस और एक कन्ट्रोल ग्रीन हाऊस फॅसिलिटी (मिस्ट चैम्बर) फेब्रिकेशन कार्य

क्र. सं.	कार्य का विवरण	अनुमानित धनराशि	जमानत धनराशि	धरोहर धनराशि	निविदा प्रपत्र का मूल्य	कार्य पूर्ण करने की अवधि
1.	एक नेट हाऊस और एक कन्ट्रोल ग्रीन हाऊस फॅसिलिटी (मिस्ट चैम्बर) फेब्रिकेशन का कार्य पटवाडांगर, नैनीताल में (सम्पूर्ण विवरण निविदा प्रपत्र में संलग्न)	24,00,000/-	1,00,000/-	72,000/-	1000 + 18% GST	30 दिन अधिकतम

मैं मै0..... निविदा के नियम, शर्त तथा कार्य विवरण इत्यादि का गहन अध्ययन कर लिया है। इसलिए मैं
धरोहर धनराशि रू0 72,000.00, बैंक ड्राफ्ट/नगद रसीद/अन्य संख्या दिनांक
जमानत धनराशि रू0 1,00,000.00 बैंक ड्राफ्ट/नगद रसीद/अन्य संख्या दिनांक
निविदा मूल्य धनराशि रू0 1,180.00 बैंक ड्राफ्ट/नगद रसीद/अन्य संख्या दिनांक
को संलग्न किया जा रहा है।

फर्म का नाम
फर्म का पता
मोबाईल नं0
पैन नं0
बैंक खाता का विवरण
आधार कार्ड संख्या
परिषद् में पंजीकरण संख्या

निविदा जारी करने वाले के हस्ताक्षर

निविदादाता के हस्ताक्षर

उत्तराखण्ड जैव प्रौद्योगिकी परिषद्
बायोटेक भवन, हल्दी

नियम एवं शर्तें

- निविदादाता को निविदा प्रपत्र एवं उसके साथ संलग्न नियम व शर्तों के प्रत्येक पृष्ठ पर हस्ताक्षर कर निविदा के साथ अनिवार्य रूप से जमा करना होगा। निविदा से सम्बन्धित सभी कार्य उत्तराखण्ड जैव प्रौद्योगिकी परिषद्, पटवाडांगर, नैनीताल में सम्पन्न किये जाएंगे।
- परिषद् के पंजीकृत आपूर्तिकर्ताओं से दिनांक 30.07.2021 को प्रातः 11.00 बजे तक परिषद् के टेण्डर बॉक्स/पंजीकृत डाक/स्पीड पोस्ट/कोरियर से आमंत्रित की जाती हैं। निविदा के साथ धरोहर राशि किसी राष्ट्रीयकृत बैंक अथवा डाकघर की एन.एस.सी./एफ.डी.आर., जो निदेशक, उत्तराखण्ड जैव प्रौद्योगिकी परिषद् के नाम ही संलग्न करना है। निविदा प्रपत्र दिनांक 29.07.2021 तक निर्धारित शुल्क जमा कर किसी भी कार्य दिवस में 10.00 बजे से 5.00 बजे तक कार्यालय से प्राप्त किये जा सकते हैं। यह निविदा दिनांक 30.07.2021 को सांय 4.00 बजे विभागीय निविदा समिति द्वारा खोली जायेगी। निविदा खुलते समय निविदादाता स्वयं अथवा उनके प्रतिनिधि उपस्थित रह सकते हैं। निविदा दू बिड से जमा करानी होगी (वित्तीय एवं तकनीकी)।
- निविदादाता को निविदा प्रपत्र के साथ धरोहर धनराशि ₹0 72,000.00 बैंक ड्राफ्ट/एफडीआर0 निदेशक, उत्तराखण्ड जैवप्रौद्योगिकी परिषद् के नाम से संलग्न करना अनिवार्य होगा। बिना धरोहर राशि के कोई भी निविदा स्वीकार नहीं की जायेगी।
- निविदादाता को निविदा में भाग लेने हेतु जमानत धनराशि ₹0 1,00,000.00 बैंक ड्राफ्ट जोकि निदेशक उत्तराखण्ड जैव प्रौद्योगिकी परिषद् के नाम देय होगा। निविदा समाप्ति के उपरान्त सफल निविदादाता को छोड़कर अन्य की जमानत धनराशि बैंक ड्राफ्ट वापस कर दिया जायेगा।
- सफल निविदादाता को निविदा स्वीकृत होने पर अपने व्यय पर ₹0 100.00 नॉनजुडिशियल स्टॉम्प पेपर पर परिषद् के साथ लिखित अनुबन्ध कराना होगा।
- निविदा का मूल्य ₹0 1000 + ₹0 180 = ₹0 1180 परिषद् के भारतीय स्टेट बैंक, हल्दी के खाता संख्या 30555213174, IFSC SBIN0001251 में जमा करके जमा रसीद परिषद् में जमा करानी होगी अथवा नगद धनराशि लेखा, उत्तराखण्ड जैव प्रौद्योगिकी परिषद् के पास जमा कर सकते हैं।
- नेट हाऊस और कन्ट्रोल ग्रीन हाऊस फॅसिलिटी (मिस्ट चैम्बर) की विस्तृत जानकारी संलग्न है, के क्रम में ही एक नेट हाऊस और एक कन्ट्रोल ग्रीन हाऊस फॅसिलिटी (मिस्ट चैम्बर) का फेब्रिकेशन कार्य होगा।
- नेट हाऊस और कन्ट्रोल ग्रीन हाऊस फॅसिलिटी (मिस्ट चैम्बर) से सम्बन्धित सभी प्रकार के टैक्स, टी.डी.एस. इत्यादि का भुगतान स्वीकृत निविदादाता को करना होगा जिसकी सूचना परिषद् को भी देनी होगी।
- सील बन्द निविदा के ऊपर "नेट हाऊस और कन्ट्रोल ग्रीन हाऊस फॅसिलिटी (मिस्ट चैम्बर) फेब्रिकेशन कार्य" लिखा जाना अनिवार्य है।
- उपरोक्त नियम एवं शर्तों को पूर्ण किये बिना निविदा प्राप्त होती है तो उसे निरस्त कर दिया जायेगा।
- किसी भी विवाद के लिए मा0 न्यायालय, रूद्रपुर में ही वाद दायर किया जायेगा।
- निविदा के सम्बन्ध में अन्तिम निर्णय निदेशक, उत्तराखण्ड जैव प्रौद्योगिकी परिषद् का होगा।

कार्य का विवरण

क्र. सं.	कार्य का विवरण	अनुमानित धनराशि	धरोहर धनराशि	निविदा प्रपत्र का मूल्य	कार्य पूर्ण करने की अवधि
1.	एक नेट हाऊस और एक कन्ट्रोल ग्रीन हाऊस फॅसिलिटी (मिस्ट चैम्बर) फेब्रिकेशन का कार्य पटवाडांगर, नैनीताल में (सम्पूर्ण विवरण निविदा प्रपत्र में संलग्न)	24,00,000 /-	72,000 /-	1000 + 18% GST	30 दिन अधिकतम

Uttarakhand Biotechnology Council

Patwadangar, Uttarakhand

Green House Facility (Mist Chamber) & Net House Facility

Controlled Green House Facility (Mist Chamber) & Net House Facility with under mentioned technical and operational details as under.

Controlled Green House Facility

Green House Size (Total Area – 100.65 m²)

Size :- 16.5m x 6.1m (L x W)

Side Height: - 3m

Center Height: - 4.5m

With

Pre-entry / Buffer zone Size: 2.1m x 2.1m x 2.43m (L x W x H)

Model :- Dome Shape / Arc

Automatic Air modulation system will be made available at maximum height with thermal controls for easier Temperature Maintenance.

Super Structure:

All Structures, Rafters, Perlins, Trusses are hot dip galvanized and design to take a wind load up to 140 km/h. Hot dip galvanized Steel Structure: Galvanized tubular structure as per IS875 std.

a) All structural component will be of 50mm x 50mm, 50mm x 25mm B Class GI Sq. Pipe.

b) Nuts and other metallic parts: Includes all the elements required for joining and water tightens components (such as fittings, clamps, screws and nuts should be GI plated to avoid corrosion).

Buffer Zone

Double door Buffer Entry of size 2.1m x 2.1m x 2.43m (L x W x H) covered with 6mm thick Multiwall Metallic UV stabilised Polycarbonate sheet.

Double door size: 1.9m x 0.91m (Tall & wide), normally lockable made with clear 6mm polycarbonate glazing, top & bottom tracks, jambs, flashings & installation hardware- 2 Nos. (with door closer)

Air Curtain – Electronically balanced air curtain with double blower and automised ON/OFF operation w.r.t. door opening at the main entrance.

Glazing:- Plastic material unbreakable, Liquid and chemicals resistant. Properly installed and regularly maintained greenhouse glazing will be provided a suitable barrier for developed by product research materials.

*BL4-P standard.

Polycarbonate Sheet Specification-

Thickness:- 6mm multiwalled. Sound insulation dB :- 18

Make:- Bayer / Laxan Clear code : 112

Impact Performance :-40°C to +120°C

Both side UV stabilised Std lengths: 2.1 m x 11.8 m, Sheet Structure :- 6/2 RS

Approx. weight g/m² 1300 U.L Temperature Rating :100°C

K.value W/m²K 3, 5 Sound Insulation DIN52210:-18db

Multiwalled :- Impact resistant, Energy saving. Impact Resistant: - : 200 times of GLASS

Light Transmission :- 82 – 90% .Excellent Thermal Insulation : 3.5 down.

Safe Fire Performance: Self-extinguishing and difficult to ignite

Light Weight: Weight ranging from 1.3 Kgs/ Sqms for 6mm.

Thermal Conductivity : DIN52612W/2°C -0.21

*BL4-P walls and ceilings sealed with internal shell.

Polycarbonate Sheet Fixing with aluminum Profile :-Anodized ,strengthened ,sealed internal shell.

Specification :- Anodized ,strengthened ,sealed internal shell.

Size :- 2" inch

Weight :- 1.25 Kg / 12 feet

Length :- 12 feet

Screw :- SS non Magnetic / High quality GI

Thermal safety :- Silicon

Shading System

External Shading System: - (70 : 30 %) agro shading net green colour (agro shade net) with Automatic motorised rolling arrangement, connecting pipe etc. The shading system can be rolled up and down as per the need.

Internal Shading – Thermal Aluminium silver screen with manual rolling arrangement will also be provided for easier temperature maintenance.

Civil Work - IS- 2645 Civil work Standard . * BL3-P Internal walls, ceilings, and floors resistant to liquids and chemicals.

CC foundation (1:3:6), Plastering :- 1: 6

Digging :- 2' x 1'6"

BAES :- PCC 2" thick WIDE :- 18"

FIRST BASE LINE :- 13"

SECOND BASE LINE :- 9"

Frame Base Block :- 2' x 9" x 9".

Curtain wall :- 30cm (height).

Flooring – Chemical resistant Hard cemented Flooring made up of 2" thick crushed bricks with 20mm graded stone (4:3:1) ratio of rods:sand:cement. Further flushed with Anti slippery flooring tiles.

Curtain wall 30cm above and 30cm below the actual ground level as kick-board 9" wide.

Plinth Protection: 30cm wide all around the Green House.

Grow Light system:- PAR using Special Photosynthetically Active Radiation Lamp :- Intensity with fluorescent light and Photosynthetically Active Radiation lamps (PACRa) W 1.7 to 2.6/60 are specific action spectra lamps for photosynthesis for research and commercial production .

PAR illumination 100 $\mu\text{moles} / \text{m}^2 / \text{s}$ additive only and as per DIN and IEC standard using High Flex PAR LED Lighting system (100 W) Lamp in IP65 Enclosure with PAR T8 LED Lamps with higher efficacies and higher PHOTOSYNTHETIC PHOTON FLUX along with SMART DIGITAL SELECTABLE CONTROLLING OF COLOR SPECTRUM.

- **Wavelengths:** 450nm, 660nm, 735nm & 5700K White /
- **Wavebands:** UV-A (380nm), Blue (400, 420 & 450nm), Green (520nm),
- Red (630, 660nm), Far Red (735nm), & White (5700K)
- Operated using higher ANDROID /IOS operating devices.
- Pure Warm white / Cool white can also be selectable.

(Covering the complete Containment Area of 100.65 Sq.m.)

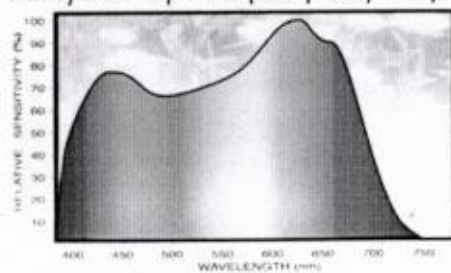
PAR Watts for Plants

Since plants use energy between 400 and 700 nanometers and light in this region is called Photosynthetically Active Radiation or PAR, we could measure the total amount of energy emitted per second in this region and call it PAR watts. This is an objective measure in contrast to lumens which is a subjective measure since it is based on the response of the subjects (humans). PAR watts directly indicates how much light energy is available for plants to use in photosynthesis.

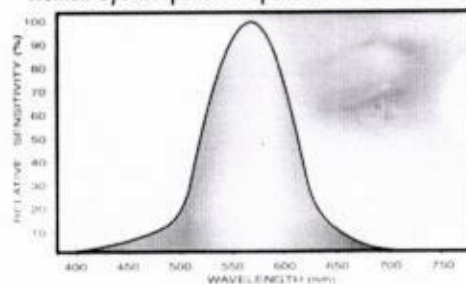
These three measures of photosynthetically active radiation, PAR watts per square meter, PPF PAR and YPF PAR are all legitimate, although different, ways of measuring the light output of lamps for plant growth. They do not involve the human eye response curve which is irrelevant for plants. Since plant response does "spill out" beyond the 400 nanometer and 700 nanometer boundaries, some researchers refer to the 350 – 750 nanometer region as the PAR region. Using this expanded region will lead to mildly inflated PAR ratings compared to the more conservative approach in this discussion. However, the difference is small.

The graphs below show the human eye response curve and the plant response curve.
Note the vast difference in the contours.

Photosynthetic Response Réponse photosynthétique



Human-Eye Response Réponse de l'oeil humain



COOLING SYSTEM ECS Technology

ECS CONSTRUCTION MATERIAL:-, Eco friendly.

18 GA GI/ ALUMINIUM : Tray Gutter, Side & Top gutter etc

Cooling Media : 100 mm thick Cellulose Pad at velocity of 1 to 3 m /s to give efficiency from 60 to 95 %.

Filtration : Screen filter ISI 25 to 55 viscous filter for 30 μ efficiency.

Miscellaneous : Fasteners , Galvanized, Rivet- Aluminium.

PVC pipe : 20mm/25mm/32mm with L & T .

Water Tank : PVC Tank 1000 liters

Monoblock pumpset : 1 HP Crompton Greaves / Servo make

Technical Specifications Cellulose Pad:

Evaporative cellulose pads are made from a specially formulated cellulose paper impregnated with special compounds to prevent rot, early moss formation and ensure a long service life.

Paper ambient condition :- 25°C - 45 °C

CeL Pad Cross angle :- a = 45 ° b = 45 °

Nominal Efficiency :- 88%

Estimated cooling load : 101,520 BTUs/ Hrs.

Water Flow : 7.56LPM

Bleed : 10%

Make :- HuTek / Equivalent make (HOW EQUIVALENCY TO BE JUDGED)

Self cleaning feature, High saturation efficiency

Temperature :- 8 to 12°C Below. ambient.@ 45% RH.

Cooling Pad Size : 6m x 1.5m x 100mm (W x H x thickness)

(Specifications: - Height: 1200mm, 1500 mm, 1800 mm, 2000 mm- Width: 300 mm, 600 mm

- Thickness: 50mm, 100 mm, 150 mm, 200 mm, 300mm) FRAMING (Backside of Cooling

Pad area will further be covered with UV stabilized 40 mesh duly fixed with Grippers)

Slow Speed Axial Flow Fans 48" (2 Nos) (Fan Make Should Not Be Chinese)

Propeller Size : 750 mm, Number of Blade: 6 Nos, Blade : S.S 430, Shutter : Galvanized steel

Speed of Propeller: 439 r/min, Speed of motor: 1400R/min, **Capacity/CFM : 26000m³/hr.** (Motor Make: Crompton/ Kirloskar)

Pressure : 56 pa, Noise : <=70, Voltage : 220V/380V/1/3-Phase/50Hz.

Heavy galvanized steel box framing riveted together for durability.

Cross Shaped steel framework has a streamlined design with the fan hub at the centre. With the fan blades on one side and the pully on the other side, this design allows improved load balancing which increase bearing and fan life.

Centre hub made from die cast aluminium with integrated steel shaft. Shaft is supported by two rigid radial ball bearings with watertight protective screen.

Shutters comes with automatic shutter opener. This opener system allows the shutters to fully open as soon as the fan starts to run. Air delivery normally lost due to dirty shutters or to hold shutters open is thus eliminated.

Heating System :- Heavy duty Paralytic Technique/ Great. Which is ideal for heating in biotech work and greenhouse.

Inbuilt auto thermal cut off device, Biotech grade 2.5 KW. It has ISI standard make heating element and ISI standard 900

rpm speed fan they prevent SO₂ injury to plants as caused by other make of heater due to improper combustion of fuel

gases as a common phenomenon seen in green house . Input 200-240 VAC, 50 HZ, single phase, Ambient 5°C to 50°C , RH upto 90%. No. of Heater : 4 Nos.

Humidification System: This is very important feature of the Green house for growing of plants. It creates fine mist inside the chamber and increases the RH. Manufactured of high quality plastic material, resistant to chemicals

Humidity Range :- Up to 90 %

Fogger discharge range:-7.0 LPH,

Operating Pressure:-4.0 bar,

Density of one fogger:-4.0 m,

Mister /Fogger Make :- NANDAN (Israel) / Netafim (Israel). Head Control Unit- The same head control to be used for humidity & irrigation. Microfogging / Micromisting :- Installation with leakage prevention device (LPD) fogger does not

drip during the function. Working pressure :- 4 bar at this pressure, the average droplet size :- 50 to 100 µm. Density :- One

fogger to 0.3 m – 0.4 m² for propagation. Patten :- four way nozzle ,hanging type. Pipe Imported :- 16 mm LLDPE (10 kg/cm²) colour BLACK . Motor:- 1HP monoblock pump (Crompton/servo) :- 1 No. Filter (Screen) :- (ISI mark). Pressure

meter:- 10 bar one. Return gutter, control valve assembly Tank :- 500 litres. PVC pipe :- 32 mm/ 25mm

Microprocessor Control Panel for Automation (CE certified)

Microprocessor Photosynthesis control Panel :- (User friendly) for TEMPERATURE, HUMIDITY and LIGHT

duly fixed in Processing Area with L&T / Havells make miniature circuit breakers and rigid standard of safety

a) Technical features of Temperature Control System –

- Temp. Range: 0.1 to 59.9°C.

-Accuracy: ±1°C.

-Hysteresis: 0.4°C with sensor probe Pt-100 Sensor cord 15 meters.

-Set point lock within the setting panel to protect setting changes. Level lock to ensure that the parameter can be read but cannot be changed.

-Sensor failure indication.

-Selection of unit °C, °F .

-Display resolution 0.1°. Automatic hysteresis control.

-Input: 200-240VAC, phase-single.

-Ambient: 5°C to 45°C, RH up to 85% normally.

b) Technical Features of Humidity Control System:

- RH in the range of $\pm 4\%$.
- Range: 30% to 90%.
- Real RH: $\pm 2\%$, ± 1 digit (at 45%).
- Set point lock within the setting panel to protect setting changes. Level lock to ensure that the parameter can be read but cannot be changed
- Input: 220VAC, phase- single.
- Ambient: 5° to 45°C, RH up to 95%. With **Plitz Timer/ cyclic Timer for Humidity/Irrigation:**
0-999 Min/sec On, 0-999 Min/sec OFF
Automatic cycling. Accuracy quartz

C) Technical feature of Programmable Photoperiodic Timer

- Clock Accuracy $\pm 2.5\text{sec/day@}20^\circ\text{C}$
- 1 Channel
- Week Program
- 16 memory locations adjustable to the minutes.
- Auto summer and winter time changing.
- 1500 Hrs. Running reserve.
- Input: 200-240 VAC, phase – single.
- Ambient: 5°C to 45°C, RH up to 85% normally.

With Remote Alarm facility for temperature

- User can connect Data SIM for sending sms.
- Easy to put contact numbers by using keys and LCD display.
- User can get sms on High / Low Temperature ranges.
- Hooter output for local Audio Alarm.
- GSM modem for sms facility
- Battery back up for 4hrs. in case of power failure.

And Programmable Temperature and Humidity Data Logger for recording Temperature Range : 0.0°C to 60.0°C.
Humidity Range : 0.0%RH to 100.0% RH. Accuracy : $\pm 2.0\%$ Rh and $\pm 0.3^\circ\text{C}$ and Inbuilt real time clock calendar with lithium battery (Back up min 10Years).

Electrical wiring

- All connections will be made from the provided location of department site electric line (Near the site)
- All electrical wires will be of **FR grade multistrand** copper wire of desired load (Make- Polycab/ Finolex)
- Each Area of Green House have its own electric line/ circuits with individual circuit breakers/ MCB's and conducting of ISI make complete in all respect. However electricity and earthing arrangement at site will be users responsibility without any cost effect for construction and operational use.

Miscellaneous items

- Miscellaneous Stainless washbasin in each Area with tap, aluminum ladder with Plumbing Polymer pipe.

Flexible expendable polymer hose pipes with 7 different water discharge streams in each area

Hose Technical Details

- **Material: Latex +High Strength Fabric/Yarn.**
- Expandable and flexible: Expands up to 3 times its original length.
- Light Weight: Garden Hose is the portable, compact hose that expands to full size hose, but weighs less than a pound.
- Easy to handle: Hangs and stores anywhere.
- Multipurpose (Colour Green / Blue)
- Hose shrinks back to its original size when not in use. Kink and tangle proof.
- Advantage: Light weight, never kink, super strong, expandable, multipurpose.
- **Expandable Garden Hose: 2.5m in original length, working Length 7.5m**
- The Control Panels with proper terminations will duly be place in Buffer Room with all safety cut-off devices and L&T make On/Off device.

Plant Work Station / Benches – 16 Nos.

- Each Bench Size: 9'x3'x2' (LxWxH)
- Stand/Legs: Made of galvanized steel
- Steel expended metal bench top approximate 3/4"- 1" diamond shape & G.I Supporting frame.
- G.I. rust resisting benching duly fixed with castors for easier movability.
- Benches are engineered for standard 1200 kg. per bench weight limit.

Complete cost of Climate Controlled Green House Facility on turnkey basis

Net House

MODEL :- Dome shape

Size :- **20m x 15m x 3m : 2.43m** (L x W x H at Centre : on sides) { **Multispan** }

STRUCTURE STEEL FRAME :- Infrastructure & Super structure

DESCRIPTION :- -Anti-corrosive, Humidity resistant GI pipe.

WIND LOAD STRENGTH :- 120 km/HR

GALVANIZED COAT :- ISI standard

Trusses :- 38mm x 38mm, 32 mm x 32 mm & 25mm x 25mm

Vertical Supports :- 38mm x 38mm

Purline :- 25 mm x 25 mm.

Runners :- 25 mm x 25 mm.

Support :- 32mmx 32mm & 25 mm x 25

Doors :- GI sq. pipe fitted with Nylon Mesh

Door Size :- 6'3" x 3' with basic locking arrangements.

Cladding

Roof Screen and all Four sides covered with UV Stabilised Agro Shed Net 75% (Green/Black) duly fixed in Galvanized profile specially designed for better grip and easy replacement.

Civil work- IS- 2645 Civil work Standard.

CC foundation (1:3:6) 2' below the ground level, Frame base block height 2' x 1' x 1'

Flooring: Natural.

Plumbing:-Water connection with elbow operated tap, distributed through corrosion free pre coated GI pipe of appropriate diameter (3/4" or 1/2") will be provided.

1/2 "& 3/4" GI Pipe :- ISI make B -class

L-bow & T :- ISI Make

Fogging/sprinkling: To increase the humidity up-to 80% ± 5% by providing 4 way fogging Nozzles hanging type with fine discharge (28-30 lh) at 4bar pressure.

Drip Irrigation System: Water Discharge: Inline dripper 2 LH each nozzles spacing L/L- 0.6m N/N- 0.4m, **Pump:** 1.5HP, **Filter** : Disc online, **Water storage** : PVC Tank 1000(Make-sintex) lit placed on 4-5' ht platform/ stand,

Fertigation : By ventury, **Mixing Tank** 300 lit, **Timer:** Digital 0-999 min/sec for automatic ON/OFF of drip/ foggers pump.

Electric Fitting: Pump/ time should be connected with nearest power supply point (up-to 50 mtr)

Complete cost of Net House on turnkey basis-

IGST : @ 5% Extra against DSIR certificate or 18%.

Packing Forwarding : nil.

Warrantee : **One year** against all manufacturing defects.

Delivery : Within 8-10 weeks after receiving the purchase order

Payment : 80% on physical delivery of Stores and balance after completion.

Validity : Upto 90 days