

Quotation for fabrication of NEN GreenHouse at SENSE IIT Delhi

Quotations are invited from vendors for the following at IIT Delhi (SENSE – Center for Sensors, instrumentation and Cyber-physical Systems Engineering)

CLIMATE CONTROLLED HYDROPONICS GREENHOUSE

Size: 16' L x 16' W

Side Height: 3.5 m

Centre Height: 4.5 m

Shape: Venlo

INFRASTRUCTURE: All galvanized steel is used and design as per IS875 standards. End wall and side wall framing Aluminium corner trims, aluminium ridge bar and Galvanized gutter trim Brackets & fasteners as required to assemble frame. All G.I. pipes are galvanized. This includes all the elements required for joining and water tighten components (such as fittings, clamps, screws and nuts plated against corrosion). (01 complete set),

CLADDING: Roof, front wall, end wall, & sidewalls of the Greenhouse - sets and double room for rigid covering with 6mm thick polycarbonate sheet, and accessories. (1 Complete Set),

ENTRANCE ROOM: Pre Entrance Room of Size: 4' x 4' x 2.43mtr. (L x W x H) made by galvanized pipes, sides and roof covered by 6mm thick polycarbonate sheet, with duly lockable arrangement. (1 No.), **Door size:** 1.9m x 0.91m Long & wide clear 6 mm polycarbonate glazing, top & bottom tracks, jambs, flashings & installation hardware. (2 Nos.), Air Curtain: Euronis-1200mm, provided at main entry with limit switch. (1 No.),

FAN & PAD COOLING SYSTEM: 100mm thick & G 'house Evaporative CELDEC cooling pad with All necessary framing material of Aluminium required top bottom and side frame distribution & returning piping., Slow Speed Axial Flow Fan: single speed belt driven exhaust fan (01 Complete Set.),

LIGHT: Photosynthetically Active Radiation Lamp, 36 watts are specific action spectra lamps for photosynthesis with electronic gear for research. They are DIN Germany, IEC international, & JIN Japan standard lamps PacRa™ lamps, are marketed in India by Saveer Biotech Limited only (1 Complete Set)

MICROPROCESSOR BASED AUTOMATION CONTROL PANEL includes Temperature, Humidity, and Heating Control system. (01 Complete Set.)

ELECTRIFICATION WORK: All wires will be of copper and desired load (Make-Havells/Finolex/Equivalent). Complete set with A grade work. (01 Complete Set.),

VERTICAL HYDROPONIC GROWING GULLEY: Hydroponic Growing Gulley-NFT Channels with capacity of 15 plants x 06 Nos. assembled on GI frame. (02 Complete Set), Total No. of plants: 180 Nos.

Special arrangement for hanging basket at the height of 3.5 m

FERTIGATION SYSTEM: Ferti - Bridge Control System for EC, pH: Supply & Installation of Ferti-Bridge Control System for maintaining EC and pH of nutrient solution. 01 complete set for hydroponic growing channels.

Work to be completed within 1 month of receiving the confirmed PO.

For any clarifications and site inspection, call 011-26591431:

Head SENSE (Attn: Prof.Subrat Kar)

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**01
Complete
set**