

	<p>भारतीय प्रौद्योगिकी संस्थान पालक्काड Indian Institute of Technology Palakkad अहलिआ एकीकृत कैम्पस, कोज़िहपारा Ahalia Integrated Campus, Kozhipara पालक्काड- 678557 Palakkad – 678 557</p>	<p>दूरभाषसंख्या /Phone no: 04923 – 226300/590/586</p> <p>ईमेल / Email : purchase@iitpkd.ac.in</p>
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Tender No: IITPKD/ADMN/054/2017

Date : 13.11.2017

TENDER FOR INVITING QUOTATIONS

DUE DATE FOR SUBMISSION OF TENDER 28.11.2017 AT 15.00 HRS

Dear Sirs,

On Behalf of Indian Institute of Technology Palakkad quotations are invited from “**Original Equipment Manufacturer for “Supply, installation, testing and commissioning (SITC) of 8.5 TR duct able split ACs to Room No. 002 at IIT Palakkad”** confirming to the specification in the Annexure.

1. Quotations are invited in duplicate for the various items shown below/overleaf/ enclosed list.
2. The Quotations duly sealed and super-scribed on the envelope with the name of work reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The Quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated
4. Payment terms :
 - I. **75% Payment against delivery in good condition without defect/damage at site and inspection.**
 - II. **20% payment on commissioning and completion of successful running period**
 - III. **Balance 5% payment will be released on completion and submission of seasonal test report.**
5. **Warranty: Three years warranty from the date of acceptance and taking over of installation should be indicated clearly.**
6. **Delivery Period: Within 10 Days from the date of issue purchase order and work order. In case there is any deviation in the delivery schedule, liquidated damages at the rate of 1% per week on quoted amount will be enforced. .**
7. The quotation may be sent to the “The Registrar, Indian Institute of Technology Palakkad, Ahalia Integrated Campus, Kozhipara, Palakkad -678 557. The quotation sent by fax and e-mail will not be accepted.
8. Acceptance and Rejection: I.I.T Palakkad has the right to accept the whole or anyparts of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

Terms & Conditions:

1. The indoor units shall be ceiling suspended type. The indoor unit should be placed in the corridor outside the shown in the room layout.
2. The indoor unit shall comprise of Fan, copper Cooling Coil, Filter and Expansion device.
3. The Outdoor unit shall comprise of Hermetic scroll compressors. Air cooled copper condenser & Condenser fan. If multiple compressors are offered, they shall have independent refrigerant circuits.
4. Also, Compressors shall be cut-off automatically under part load conditions
5. The units shall have microprocessor controls & flurr nuts in the outdoor units
6. Scope shall include all supports for the indoor and outdoor units. The units shall be selected for Palakkad Ambient Conditions as specified. The units shall be factory assembled and only the refrigerant piping carried out at site. The tenderer shall submit the phamlet of the model/make of the unit / Operation manual along with tender.
7. Water tripping should be avoided at all cost during and after installation.
8. The successful tenderer will have to arrange all the tools & ladder conveyance for the work.
9. The successful tenderer should submit the design calculation indicating flow velocity, friction, mass phase velocity, mass outlet in velocity , flow velocity etc.
10. The Split AC shall be almost (low db level) silent operation.

REGISTRAR, IIT PALAKKAD

ADDITIONAL TERMS & CONDITIONS

1. The contractor shall execute the whole work in the most substantial and workman like manner in strict accordance with the specifications, approved design, drawings, particular specifications, special conditions, additional conditions and instructions of the Engineer-in-Charge.
2. Before tendering, the contractor shall inspect the site of work.
3. It shall be deemed that the contractor has satisfied himself as to the nature and location of the work, transport facilities etc.
4. The work shall be carried out in such a manner so as not to interfere or adversely affect or disturb other works, if any.
5. Any damage done by the contractor to any existing works shall be made good by him at his own cost.
6. The work shall be carried out in the manner complying in all respects with the requirement of relevant rules and regulations of the local bodies under the jurisdiction of which the work is to be executed and nothing extra shall be paid on this account.
7. The works to be governed by this contract shall cover delivery and transportation up to destination, safe custody at site, insurance, erection, testing and commissioning of the entire works.
8. No payment shall be made to the contractor for damage caused by rain, whatsoever during the execution of works and any damage to the work on this account shall have to be made good by the contractor at his own cost.
9. No claim whatsoever for idle labour, additional establishments, costs of hire and labour charges for tools and plants, scaffolding etc, would be entertained under any circumstances.
10. The Contractor(s) shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night. In case of any accident of labours/ contractual staffs the entire responsibility will rest on the part of the contractor and any compensation under such circumstances, if becomes payable, shall be entirely borne by the contractor.
11. The contractor shall make his own arrangement for storage & watch ward of materials at his own cost till the final handing over the installation to client department.

Name of work: SITC of 8.5 TR ductable split AC for PhD room (room 02) at IIT Palakkad

Sl.no.	Description	Quantity	Unit	Rate	Amount
1	SUPPLY AND INSTALLATION				
1.1	Supply, installation, testing and commissioning (SITC) of 8.5 TR capacity air cooled Ductable split with scroll compressor, Ceiling Suspended Indoor Units (IDU) and all standard fittings, IDU SS drain pan, as per specifications complete with all accessories, hermetically sealed scroll compressor, electronic microprocessor pendant controller with digital display, R 407c of equivalent refrigerant gas, vibration isolator pads, condenser stand and safety devices like thermal protector, pressure relief valve, over load relays, single phase preventer, high-low pressure cut out, suitable for three phase 440V supply. (Blue Star/Hitachi/Carrier/Voltas)	1	nos		
1.2	Supply, installation, testing and commissioning of suitable hard drawn copper refrigerant piping for 8.5 TR machine with 13mm nitrile rubber insulation interconnecting the condensing unit to evaporating unit for ductable split units as per site conditions	15	mtr		
1.3	Supply, laying, termination, testing and commissioning of PVC insulated PVC sheathed steel armoured copper 1100V grade power/control cable as required.				
1.3.1	4C X 6 Sqmm	20	mtr		
1.3.2	6C X 1.5 Sqmm	15	mtr		
1.3.3	End Termination	1	job		
1.4	Supply, installation, testing and commissioning of PVC drain pipe of 25mm dia ISI marked, connecting the drain lines from the indoor unites to floor sump, with 9mm nitrile rubber insulation as per specification	1	job		
2	AIR DISTRIBUTION	10	mtr		
2.1	Sheet Metal work using factory made 120GSM corrugated to be considered to increase the rigidity of the ducting by 300 %, circular ducting with duct fittings like elbow, reducers, end cap, offset, collars, veins. Thickness of the corrugated circular duct should be as per SMACNA standard. Rate includes all mobilization of material from manufacturer point to delivery point at IIT Palakkad.				
	CORRUGATED ROUND DUCTING				
2.1.1	24G – 450mm dia	4	mtr		
2.1.2	22G – 600mm dia	6	mtr		
2.2	Supply, installation, balancing and commissioning of factory fabricated GSS sheet metal ducts rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter, dampers, vanes, hangers, supports, etc as per approved drawings & specification of following sheet thickness				
2.2.1	22 g ducting	5	sqmtr		

Sheet1

2.3	Supply & fixing of Acoustic insulation for supply air duct using 9mm thick class O rating open cell nitrile rubber elastomeric insulation with density of 140 – 180 kg/m ³ . The insulation manufactured as per BS 476 part 7 & which should also meet UL 94 test supplementary materials for air distribution system which should not absorb less 0.2% water by volume (ASTM c 209), should not support microbial growth (ASTM c 2180, G21, G22) and should not emit objectionable odors (ASTM c 665) and should have thermal conductivity of 0.04 W/m K @ 20 degC as per DIN EN 12667 and water vapour permeance of 0.10. Adhesive shall be used additionally with VOC level not exceeding 50 grms/ Litre (Armaflex/K Flex or equivalent)	14	sqmtr		
2.4	Supply, fabrication, installation, testing of flexible connections made out of fire resistant flexible double canvas sleeve.	1	job		
2.5	Supplying, fixing testing and commissioning of supply air liner grill of powder coated aluminum with aluminum volume control dampers with 30 deg deflection.	2	sqmtr		
2.6	Supplying, fixing testing and commissioning of return air grill of powder coated aluminum without aluminum volume control dampers with 15 deg deflection	2	sqmtr		
2.7	Supply and fixing of panels for making boxing for RA boxing. The boxing shall be made out of isowal panels of 50 mm thick expanded polystyrene, TF quality. Both sides of the panel shall be laminated with 0.50 mm thick galvanized steel sheet coated with polystyrene paint with strippele polythese sheet. Boxing work shall be executed at site as modular unit making use of pre fabricated factory fixing arrangement.	15	sqmtr		
2.8	Supply and fixing of fresh air dampers with 20 micron filters, cowl as rainwater protection and bird mesh.	1	job		
2.9	Minor civil works, including cutting way of wall, plastering, painting the wall etc.	1	job		
Total					

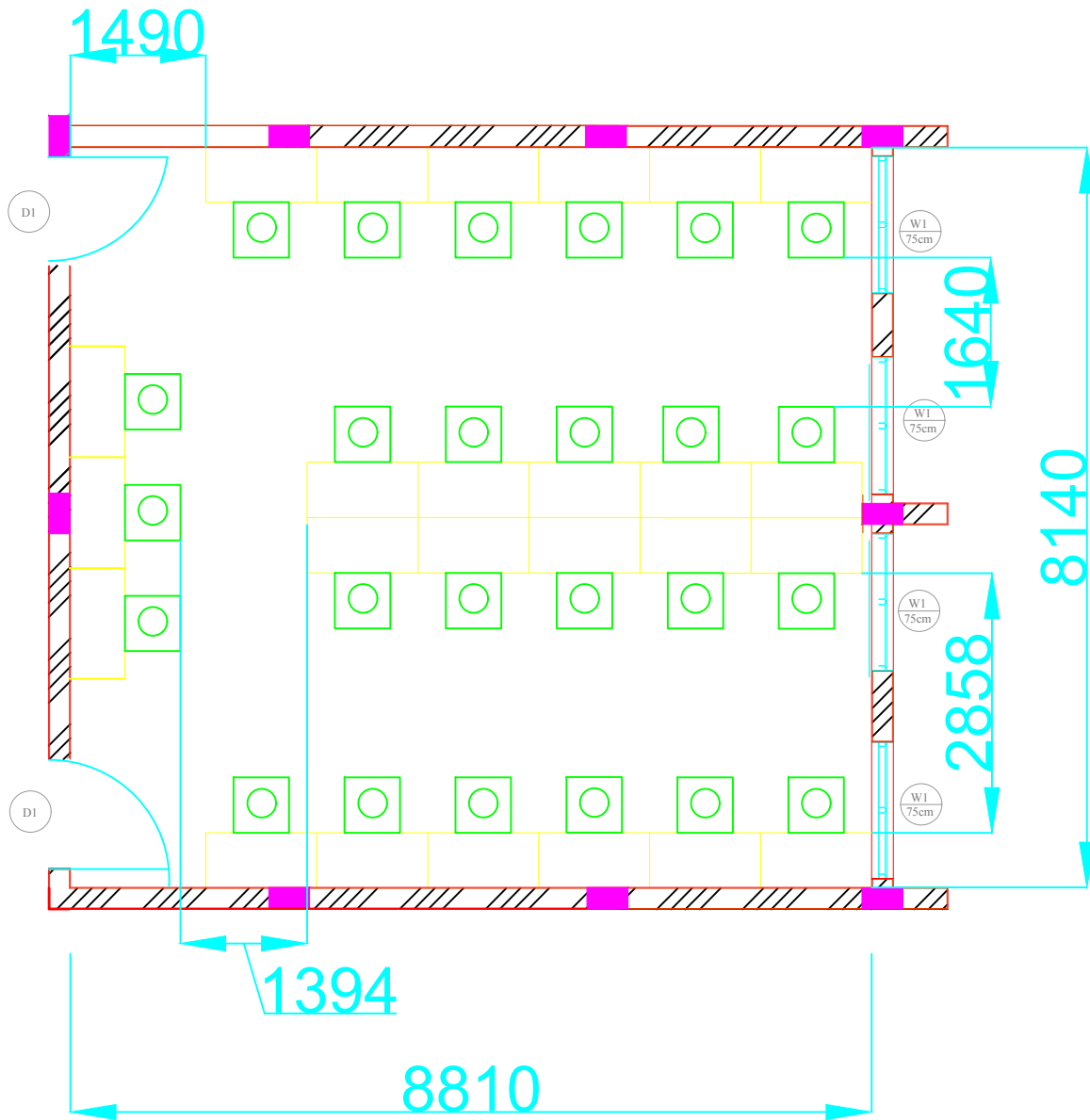


Table - 1220 x 610
 Chair - 610 x 610
 Door - 1200 x 2400
 Window - 1500 x 1650
 All Dimensions in Millimetres