## INDIAN INSTITUTE OF TROPICAL METEOROLOGY, Dr. Homi Bhabha Road, Pashan, PUNE - 411 008

Tender No. CE/IITM/works/13-14/04

NAME OF THE WORK: CONSTRUCTION OF CLOUD PHYSICS & DYNAMICS LABORATORY AT IITM, PUNE-8.

# (Techno commercial Bid)

Issue to M/s.

\_\_\_\_\_

### **INDIAN INSTITUTE OF TROPICAL METEOROLOGY PUNE 411 008**

**TERMS & CONDITIONS** 

ENQUIRY NO: CE/IITM/works/13-14/04

Tender No. CE/IITM/works/13-14/04

Sealed item rate tenders are invited from the experienced Contractors registered with PWD, CPWD MES and industrial contractor for carrying out the following work at Indian Institute of Tropical Meteorology, Pune-8.

Sr.No.	Name of Work	Estimated Cost in Rs	Completion Period
1.	Construction of cloud physics & dynamics laboratory at IITM, Pune-8.	Rs. 11,89,000=00	60 days .

Cost of tender documents:- Rs.500=00(Rupees Five Hundred Only). Payable by Demand draft drawn in favour of Director IITM Pune from Nationalized /Scheduled bank. If the tender documents are down loaded from the web site of the Institute Tender fee should be submitted in the techno commercial envelop.

E.M.D : Rs. 30,000=00 (Rs. thirty thousand) only DD/ Bank guarantee from Nationalized /Scheduled bank drawn in favour of Director, IITM Pune . EMD of unsuccessful bidders will be released on award of the work to successful contractor.

#### Following documents are to be submitted along with techno commercial bid:

1) The Tenderer is required to furnish the Permanent Account Number (PAN) and Service

Tax no and VAT registration no.

2) Bank details: RTGS Details

Other terms and Condition:

- 1) This tender is not transferable.
- 2) Tenders received through Fax / E-mail / Telegraphic / Telex will not be considered.
- 3) The tenders must be clearly written or typed without any cancellations / corrections or overwriting.
- 4) Unsigned Tenders will also be rejected.
- 5) Part and incomplete tenders are liable to be rejected.
- Tenders addressed to the Director, Indian Institute of Tropical Meteorology, Pune
   411008 are to be submitted super scribed with Tender No. CE/IITM/works/13-14/04 for
   Construction of cloud physics & dynamics laboratory at IITM, Pune-8.

# 7) The Pre-bid meeting will be held on 19/11/2013 at 11.00 hrs & tenders will be received in the Institute till – 3/12/2013 up to 12.30 hrs and shall be opened on 3/12/2013 at 1500 hrs.

- 8) IITM will not be responsible:
  - a) For delayed / late quotations submitted / sent by Post / Courier etc.
  - b) For submission / delivery of quotations at wrong places other than the Office of Director, IITM, Pune-8,

9) Contractor shall inspect the site before quoting their rates.

10) The rate shall be quoted inclusive of all taxes, duties, octrai etc. complete.

- 13) **Delivery Period**: As time is the essence of the contract, period of completion work (Sixty days including monsoon) mentioned in the work Order should be strictly adhered to.
- 14) **PAYMENT**: a) No advance is be paid.

b) Performance Security: Security deposit 5% of work cost to be deposited in the form of Demand Draft/ Bank Guarantee in favor of Director, Indian Institute of tropical Meteorology, Pashan, Pune-411008 with in 10 (Ten) days from receipt of work order.

c) 95% payment will be made on completion of work & handing over of site; remaining 5% retention money will be released after defect liability period of 12 month from the date of handing over of completed site to the Institute.

15)The prices quoted should be firm and irrevocable and not subject to any change whatsoever, even due to increase in cost of raw material components and fluctuation in the foreign exchange rates and excise duty.

16) IITM will not provide any accommodation/transportation for the Engineers/Representatives.

**17) DEFECT LIABILITY PERIOD**: Defect liability period of the work will be 12 months from the date of actual completion of work and taking over of completed site by the Institute.

**18)** No sub-contracting will be allowed for installation or maintaining system/ equipment/ instrument during or after warranty period.

**19)** Discount if any offered should be mentioned clearly in the commercial bid only.

### 20) PENALTY CLAUSE:

If the work is not completed by scheduled time or if you leave work in half complete stage, the **liquidated damages** will be charged or deducted 1.0% per week of the work order cost and the maximum to 10% value of work order.

### 21) EXTRA ITEM:

The rate for **Extra Item** shall be worked out in accordance with the following rules:

a).The rates for the extra items shall be derived from the rate of an appropriate item of similar class for which the rate already has been accepted, where same can be directly derived.

b) The contractor shall bound to carry out any extra items of work as per site requirement. The rate for extra items shall be derived from the rate already quoted. Where the items are not specified in the BOQ the rate shall be worked out at cost of material +labour cost+10% over heads, wastage, transportation & profit.

22) Corrupt or Fraudulent Practices.

A) IITM requires that the bidders/contractors under this tender observe the highest standards of ethics during the procurement and execution of such contracts. In pursuance of this policy, IITM:

i) Defines for the purposes of this provision, the terms set forth as follows:

a) "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of the public official in the procurement process or in contract execution; and

b) "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or a execution of a contract to the detriment of IITM, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive IITM of the benefits of the free and open competition;

ii) Will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt of fraudulent practices in competing for the contract in question;

B) IITM will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt and fraudulent practices in competing for, or in executing, a contract.

**23)** Conditional Offers will not be considered.

24) All disputes are subject to exclusive jurisdiction of Competent Court and Forum in Pune, India only.

25) The Director, Indian Institute of Tropical Meteorology, Pune **411 008**, India reserves the right to accept any tender in full or in part or to reject the lowest or any or all tenders without assigning any reason.

26) The Director, Indian Institute of Tropical Meteorology, Pune will be the final authority to decide the appropriate action and it will be binding on the Vendor.

For Director

Email: anupam@tropmet.res.in

# **COMERCIAL- BID**

**NOTE:** 1) Contractor shall inspect the site before quoting their rates.

2) The rate shall be quoted inclusive of all taxes, duties, octroi etc. complete.

### **BOQ for Construction of cloud physics & dynamics laboratory at IITM, Pune-411008**

SR. NO.	ITEM DESCRIPTION	QTY.	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	Breaking of <b>BBM</b>	2.50	CUM		
	Breaking of BBM including plaster by electric				
	chipper including cleaning debris, removing the				
	stuff outside factory premises etc. complete.				
2	Removing Wall Partitions	12.00	SQM		
	Removing of existing Dry wall partitions				
	including scaffolding, removing and carting				
	scrap material in the SAPL scrap yard or as				
	directed by engineer in charge. The work				
	should be carried out strictly with safety and at				
	most care so that no damage will occur while				
	during the work. Item to include necessary				
	labour, tool & tackles, scaffolding, cleaning etc				
	complete. The dismantled material will be owner's property.				
	owner's property.				
3	Removing Windows & Glass Partitions	11.00	SQM		
5	Removing of Existing Windows & Glass	11.00	JQIVI		
	Partitions including stacking or carting of				
	removed material as directed by engineer in				
	charge. The work should be carried out strictly				
	with safety and at most care so that no damage				
	will occur while during the work. Item to include				
	necessary labour, tool & tackles, scaffolding,				
	cleaning etc complete. The dismantled material				
	will be owner's property.				
4	Fly ash brick masonary 150 mm thk	2.00	SQM.		

5	<ul> <li>design etc., all complete shall be as per specification and laid as directed. (Rate including cost of steel reinforcement)</li> <li>Fly ash bricks masonary in superstructure</li> <li>Providing and constructing 230 mm thick fly ash brick masonry at all elevations and heights in cement mortar 1:6 using standard size of bricks of approved make with minimum crushing strength 9 N / mm2. including all scaffolding, staging, racking the joints, curing etc., at all heights, elevations above and below finished</li> </ul>	2.50	CUM	
	floor level etc., all complete shall be as per specification and laid as directed.			
6	Internal cement plaster (with neeru finish)	21	SQM	
-	Providing and applying Plastering of internal walls and ceiling with cement mortar 1:4, 12 - 15 mm thick with neeru finish according to specifications. Rate includes providing & fixing in position expanded metal plaster mesh [			
	Arpitha make ] or equivalent minimum 6" wide strips at the junctions of R.C.C columns/ beams/slab with brick work or wherever necessary, properly fixed, abutting the wall surfaces so as to get the plaster in line and plumb, necessary staging, scaffolding and curing at all levels and elevations etc. complete as directed.			
7	Arpitha make ] or equivalent minimum 6" wide strips at the junctions of R.C.C columns/ beams/slab with brick work or wherever necessary, properly fixed, abutting the wall surfaces so as to get the plaster in line and plumb, necessary staging, scaffolding and curing at all levels and elevations etc. complete as	41	SQM	

8	Supplying and installing in position Aluminium partially glazed partition system, using aluminium channels of size 50mm wide and 35mm high to a height of 3000mm from finished floor level. The partition to comprise of 12mm thick prelaminated particle board in the bottom portion upto 1200mm from floor level. Above the Particle board the partition to be closed using 5mm thick float glass from saint gobain, asahi,or equivalent make. The particle board and glass pane to be saperated using aluminium section. The aluminium sections are to be anodised matt finish. The shade of Prelaminated Particle board is to be approved before ordering. The aluminium partition to be ensured for stability by giving required proper MS supports at proper intervals. <b>Deck Sheet</b>	25.00	SQM	
	Supplying and installing in position METAL DECKING sheet in 52mm depth profiles with thickness 1.25mm. and a decking profile of 52/271 (having 52mm depth x 845mm width) on HR Steel as per IS:1079 / Galvanized Steel (as per IS:277) Galvanized finish. The metal sheets to be fixed to the structural framework with the help of Thru-bolts with a minimum diameter of ½" and shall be hot-dipped galvanized or stainless steel. Silicon washers to be used on the top and bottom of the sheet while bolting. item includes all material, labour, tools & tackles, Scaffolding, cleaning etc complete.(approx weight - 12.92 kg / Sqm)			
9	Cement concrete M25 grade			

	Providing and casting in situ cement concrete of M 25 grade concrete of trap metal as per detailed designs including dewatering, centering formwork with shuttering ply & steel plates, compacting with vibrators, placing & fixing inserts (viz. plates, pipes for cutouts, anchors), formation of cutouts, chases etc. as per detail drawing and curing complete. RCC structures shall be Fair Finish. Rate shall include concrete brought from RMC plant or batching plant installed on site or outside site premises by contractor.(Rate at all heights & levels and excluding tor / mild steel Reinforcement), haking of surface to form key wherever plaster is to applied.etc complete.	3.00	CUM	
10	Tor steel bar reinforcement	215.00	KG	
	Providing and fixing reinforcement for RCC work with Thermo mechanically treated (TMT) bar of various diameters and grade of steel as specified below conforming to IS or equivalent BS specification including cutting, bending, hoisting, fabricating and placing in position according to drawings and binding the reinforcement with MS binding wire of double fold of 18 gauge and providing PVC /Precast concrete cover blocks for placing the reinforcements in position and for maintaining the cover specified and/or according to relevant IS or equivalent BS code.			
11	Structural steelwork in hot rolled sections	1.20	M.T.	

	Providing fabricating & erecting structural steelwork in hot rolled sections For columns, tie beams, trusses, purlins, gantry, monorail columns, plates, cable trays,pipe racks ,castellated beams, plate girder, staircase & other structural members with all bracings, gusset plates etc. as per detailed drawing or as directed at all heights and levels including removing the scales & burrs, cleaning with Phosphoric acid, marking, cutting, fabrication, hoisting, erecting & fixing in position, making alignment of members making welded / bolted / riveted Connections and finishing with two coats of synthetic enamel paint of approved quality and colour over one coat of approved red-oxide paint etc complete.			
12	HRS for spiral/dog legged/straight Staircase	2	MT	
	Providing fabricating & erecting structural steelwork in hot rolled sections for spiral / dog legged/straight Staircase with grated trays all bracings, bolts, plates etc. as per detailed drawing or as directed at all heights and levels including removing the scales & burrs, cleaning with phosphoric acid, marking, cutting, fabrication, hoisting, erecting & fixing in position, making alignment of members, making welded / bolted / riveted connections and finishing etc complete.			
13	Foundation bolts			
	Providing & fixing foundation bolts with nuts & washers in RCC columns or foundations at all depths & heights as per detailed drawings including fixing in position with holdfasts, setting it by laser theodolite, welding wherever necessary etc. complete.			
	<ul><li>A) High tensile foundation bolt [Grade 8.8]</li><li>B) M.S. foundation bolt</li></ul>	20	KG KG	
	-,	23		
14	Kota stone flooring	60	SQM	

	Providing and laying in all position polished kota stone flooring 25 mm thick of 550 x 550 mm size in plain pattern on a bed of cement mortar 1:4 including laying in required position and in line and level, cement float, filling joints with neat cement Slurry, curing, polishing, cleaning etc. compete. (Tiles to be hand dressed and to fit correctly and sluggishly against each other and shall form very fine joint.) Note:-color of Kota should be uniform.(Basic Rate- 30 sqft)			
15	Polished kotta for sill, treads, risers, skirting	12	SQM	
	Providing and laying approved quality polished kotta stone 20 mm thk for sills, treads, risers, skirting and cladding as directed on a bed of 1:4 cement plaster including laying in required position and in line and level, filling joints with neat cement slurry, curing, polishing exposed edges, cleaning etc. complete. (Basic Rate - 30 sqft)			
16	Vinyl Flooring	23.15	SQM	

Providing and laying in pattern 2mm thick vinyl flooring roll form of Mipolam & Triplan series of Gerflor or Armstrong or approved quality, make fixed with approved adhesive as per the manufacturers specifications. The adhesive used for laying the vinyl floor shall be as per the written recommendation made by the manufacturer. The vinyl flooring shall be laid having seamless joints with proper joint treatment using matching shade PVC trims with soft welding as per manufacturers specifications and as approved by the Architects. The copy of the Adhesive recommendation, Original warranty Certificate for minimum of 10 years against de-colourisation, de-lamination of vinyl floor, PVC trims and soft welding shall be submitted with the Handing Over Report after the completion of installation at site from the Principal manufacturer. This also includes providing, laying and curing of average 5mm thick self leveling compound of Roffee/ Fosroc or approved equivalent make below the Vinyl flooring for achieving the smooth, hard and absolutely leveled surface to avoid undulations in the top vinyl flooring. Procurement and Installation of the vinyl flooring shall be started, only after Architects written approval on shade, make and methodology statement submitted by the Vendor. (Basic price of the vinyl tiles/ roll = Rs 135/- per sft inclusive of duties and taxes)			
Gypsum Ceiling	25	SQM	

	Providing and fixing false ceiling system by Armstrong World Industries or equivalent using hot dipped galvanized steel section, rotary stitched main tee of size 15mm x 42 mm web height, having 0.36 mm gauge at every 600 mm centre to centre maximum and rotary stitched cross tee of size 15 mm x 42 mm, having 0.33 mm gauge at every 600 mm. c/c. and wall angle of size 19 x 19 mm., having 0.35 mm gauge fixed to the periphery of the wall. The above grid is suspended at every 600mm c/c. in both directions using 2.0 mm. thick pre- straightened GI wire with butterfly clips, laying FINE FISSURED MICROLOOK WITH SILHOUETTE GRID(BLACK REVEAL) ceiling tiles by Armstrong World Industries or equivalent, of size 600mmx600mmx15mm having NRC 0.55, Light reflectance of >84% (WT), thermal conductivity k = 0.052-0.057 W/m0K, Humidity Resistance of 99%, having Fire Performance CLASS O / CLASS 1 (BS 476), surface having 3 coats of white paint with Fine Fissured, back of the tile duly sanded and finished with a coat of protective paint over the formed grid complete			
10	lucher	140	6014	
18	Luster	140	SQM	
	Providing and applying Luster of approved make and shade on all surfaces at all heights in three coats including scaffolding, preparing the surface by brushing and brooming down, applying primer two coats and final luster paint applying and levelling the surface with coat of Birla white putty before and after the primer coat and also after the first coat etc. complete. The dry/wet cleaning of floors/pipes/glass etc. after painting is to be carried out, protection of surfaces before painting is included in the item.			
10	Fully glazed aluminium windows			
19	runy giazeu alunninun winuuws			

	Providing and fixing in position approved make fully glazed aluminum windows manufactured out of HE 9 WP high grade aluminum alloy sections (Zindal make) confirming to I.S. specifications with sub frame framing 100x40 mm, sliding sections of 25 mm series as per the detail drawing with mitered shutter joints including glass as described below, nylon moldings inside, concealed mid lock, nylon rollers, approved quality PVC lining for glass, handle, hinges and weather strips with all necessary fixtures, powder coating 50 microns thk. Of approved shade from approved agency, sealing the crevices around the frame with approved sealant, fixtures and fastenings, cleaning etc. complete. A) Two track two shuttered window with 5 mm thick clear glass of 'Modi' make. B) Three track two shuttered window with 5		SQM		
	mm thick clear glass of 'Modi' make. And single shutter Mosquito net.	18.00	SQM		
20	MS grill	18	SQM		
	Supplying fabricating and installing in position MS grill made out of the combination of 12mm x12mm square bars and 25mm x 25mm x 4mm angle sections as per detail drawings. The grill has to be painted with two quotes of red oxide paint and two quotes of synthetic enamel paint. Etc complete.				
21	Technical frame				
21	<b>Teak wood frame</b> Providing and fixing Teak wood frame as per detailed drawings with M.S. hold fasts 4 nos. on each side, bar spacer(12mm dia) bolted at the bottom of the frame as per details etc. complete including making the frame, fixing TW cover molding around the frame of 25x6 mm, applying a coat of bitumen paint for faces of the frame adjacent to wall and applying two coats of synthetic enamel paint of approved shade and make over a coat of primer on the either faces.				
	A) 100 mm x 75 mm(with enamel paint)	5.2	RMT.		
	B) 125 mm x 75 mm(with enamel paint)		RMT.	1	

22	Flush door	2.1	SQM	
	Providing and fixing approved quality factory			
	made solid core flush door in single/double leaf			
	38mm thick BWR type plywood surface on both sides and laminated with 1.5 mm thick water			
	proof laminate of approved make and shade,			
	TW bidding on all edges ,doors to be of			
	exterior grade as per the detailed drawings etc			
	.complete.			
b	Same as above with double leaf	3.6	SQM	
23	S.S. fixtures and fastenings for single leaf door	3.00	NO	
	Providing and fixing S.S. fixtures and fastenings			
	for single leaf door as per following details-			
	Fixtures to be for one door-			
	1.Dorma/or equivalent make Round knob Handles			
	with cylindrical lock arrangement 1			
	Set.			
	2. Hinges 100mm x 2mm thk 4			
	Nos.			
	3. Door buffer 1			
	Nos.			
	4. Dorma/or other approved make door closer 1 Nos.			
	5. Door stopper 1			
	Nos			
24	Trap door	2.25	SQM	

	Providing and fixing in position Trap door of size 1.5m x 1.5m.The frame of the door is to be made out of 50mm x 50mm x6mm angles welded to the mezzanine framework. The door panes to be made out of 25mm x 25mm x 4mm MS angle frame with 50mm wide 4mm thick ms plate support to hold a 19mm thick BWR grade Plywood which is to be fized into the door pane frame with the help of screws. The door and its frame to be finally painted and finished to the approved shade. The door panes to be fixed to the MS frame with the help of heavy duty Hinges. I tem to Include all necessary accessories like door handles, Tower bolts, Hinges, Locking arrangement,ozone, Dorma or equivalent make. etc complete.			
25	Al sliding Door	4.5	SQM	
	Providing and fixing in position approved make partially glazed aluminum sliding door with 40mm thick door shutter rebeted on 4 sides of 1.8m wide and 2.4m high size including 6 mm clear toughened float glass, EPDM frame seal,mortice lock prepared for client supplied profile cylinder sealing the crevices around the frame with sealant, powder coating 50 microns thk. of approved shade from the approved agency, including all accessories fixtures such as hinges, handles, locking arrangement, sliding track of ozone, Dorma or equivalent make. etc complete.			
26	MS Grill Door double leaf	1	NOS	

	Providing & fixing MS Grill door of size 1.5m x 2.1m. Double leaf with MS sheet 18 gauge minimum at bottom upto 1200mm above with grill work to be done in MS square rods of 10mm thick. The door styles are to be of MS Hollow pipe of size 50mm x 25mm to which the MS Sheet and MS rods will be welded and fixed. This door panel is to be fixed to a door frame made out of MS Angles of Size 35mm x 35mm x 4mm with the help of hinges. The door frame to be fixed to the wall with anchor fastners. The door is to be provided with Locking assembly, latch lock, tower bolts, aldrop, and other necessary accessories. Finally the door is to be painted and finished with a coat of red oxide and two coats of synthetic enamel paint.			
27	Wall mounted wash basin	1.00	NO	
	Supplying and fixing approved colour glazed wall mounted Washbasin with pre fabricated brackets using Mild Steel members fixing to Wall dado with required materials like teak wood plugs, packing pieces, screw nails, testing including applying two coats of anticorrosive paint over one coat of primer for bracket etc complete. B) 32mm dia brass CP bottle trap with waste coupling and joints and 32 mm dia concealed outlet pipe up to the nearest nahani trap. C) Feed pipe with all Brass specials. D) Fixing one no.12mm dia Brass CP heavy type press/ push down pillar tap of "Jaguar "make. E) 12mm dia Brass CP heavy angle stop cock - one no. of "Jaguar" make. F) 12 mm dia. flexible pipe supply from angled stop cock.			
28	Nahani trap	1.00	NO	
	Providing and fixing in position 100 mm dia C.I. NAHANI TRAPS including necessary beddings, up to the outside face of the wall & stainless steel heavy type grating with ring of approved type complete.			
29	Inspection Chambers			

	Providing and constructing masonry INSPECTION CHAMBERS up to 1500 mm depth in 230 mm thick conventional brick masonary in C.M. 1:6, including excavation up to required depth in all kind of strata, 100 mm thick 1:3:6 P.C.C. bedding, plaster in C.M. 1:4 from inside & outside surfaces with smooth cement plaster rendering on the internal surface, haunches, channels including CI medium duty frame and cover (75 kg by weight) fixed in cement Concrete 1:2:4 and three coats of bituminous paint to the frame and cover.			
	A) 600 mm x 450 mm		NO.	
	B) 600 mm x 600 mm	1.00	NO	
30	PVC Pipes			
	Supplying P.V.C Pipe ASTRAL MAKE conforming to IS 13592 and pipe specials conforming to IS 5382, cutting to required length, fixing pipe specials along with P.V.C. Pipe, Making ring seal couplers to join the pipe and pipe specials for 110 mm dia and 90 mm dia, using solvent cement solution to pipes of 75 mm dia to 40 mm dia laying the pipes to a gradient for works below floor level with 150 mm thick gravel of 15 mm size all around the embeded pipe, fixing the pipe and pipe specials in vertical locations using pipe clamps connecting to brackets, making holes in masonry, cutting grooves to conceal the pipes, restoring damaged portion to their original condition using cement, river sand, bricks, jelly etc conducting water test for leak proof joints Fixing & removing scaffolding for pipe work in all locations etc. complete.			
	90 mm dia pipe work		RMT.	
	75 mm dia pipe work	10	RMT.	
31	Table			

	Providing & fixing in position Executive tables with 18 mm MDF with drawers & storages, should have 1 mm thick Laminte of approved quality and shade of Laminate for all exposed surface .All unlaminated faces should have a melamine polish of matching shade of Laminate. Polish and chamfered for edge. The cost includes all necessary hardware like brass hinges/ locks, drawer channel, provision of cable manager, preparation of mockup etc complete. (For keeping keyboard special fixtures like INNOFITT or Equivelent to be provided )			
а	BIG (2485L x 2100W x 750H) (Veener Top with melamine polish)		Nos	
b	MEDIUM (1800L x 1950W x 750H)	1	Nos	
С	SMALL (1500L x 1650W x 750H)		Nos	
d	TRAVEL DESK (1350L x 750W x 750H)		NOS	
32	Chair	1.00	NO	

	Providing and supplying in position revolving chairs having 5 prong FR nylon in black finish or 5 prong aluminium in chrome finish with castors. The seat should be having gas lift adjustment with gas stroke. The mechanism for the chair should be synchronized tilt mechanism with multiple locking position. The seat and back of the chair should be made up of injection moulding PU foam with 12mm thick double ply backing. The seat and back should have fabric upholstry in specified colour and texture. The chair should have adjustable seat depth. The back rest should be made up of poly propylene with height adjustment. The arm rest to be made up of injection moulded PU foam and should be supported on a polypropylene hand rest assembled to the main body of the chair which is made up of polypropylene with fabric/rexine upholstry of approved color & texture. The colour of the fabric/rexine should be as specified by Architect. The chair should confirm the ANSI/BIFMA X5.1 standard. The cost of the chair includes preparation of mock up etc. complete. (The density of the foam should be 45 Kg/m3)			
33	Storago	1.00	NO	
33	Storage Supply of standalone Storages with verious	1.00		
	sizes in Prelaminated Partical Board of			
	18mm Thick with 25mm thick Top with			
	approved finish.			
	Size 1500 x 450 x 1200 mm			
34	Black out blind	61	SQM	
	Providing & Fixing Vertical Blinds , fabric			
	shall be 100% glass fibrefabric with a			
	specially formulated PVC.The PVC fabric shall provide complete .Fabric to be flame			
	retardant and washable. Including all fixture			
	and fastening.			

35	SINTEX' tank	4000.00	LIT		
	Providing and fixing "SINTEX" water storage tank of approved make and of required capacity including all connections, accessories, transportation, hoisting, erection etc. complete.(2000 Litre capacity each)				
26					
36	<b>UPVC Pipes</b> Supplying U.P.V.C Pipe of ASTRAL MAKE or Equivalent conforming to IS 13592 and pipe specials conforming to IS 5382, cutting to required length, fixing pipe specials along with Pipe, Making ring seal couplers to join the pipe and pipe specials laying the pipes to a gradient for works below floor level with 150 mm thick gravel of 15 mm size all around the embeded pipe, fixing the pipe and pipe specials in vertical locations using pipe clamps connecting to brackets, making holes in masonry, cutting grooves to conceal the pipes, restoring damaged portion to their original condition using cement, river sand, bricks, jelly etc conducting water test for leak proof joints Fixing & removing scaffolding for pipe work in all locations etc. complete.				
	A) 15 mm dia. Concealed	2	RMT.		
	B) 20 mm dia. Concealed		RMT.		
	C) 25 mm dia. Concealed	5	RMT.		
	D) 32 mm dia Concealed	15	RMT.		
	E) 40 mm dia.		RMT.		
	F) 50 mm dia.	15	RMT.		
				Total =	

PDTC/CAIPEEX/Dixit\_CPDL\_layout/emergency\_Door.











