

**सीएसआईआर-केन्द्रीय खनन एवं ईंधन अनुसंधान संस्थान**  
**CSIR-CENTRAL INSTITUTE OF MINING & FUEL RESEARCH, DHANBAD**

**निविदा आमंत्रण सूचना / NOTICE INVITING TENDER**

सं./No. 23(817)/2017-GA/

दिनांकित/ Dated: 17/08/2017

केन्द्रीय लोक निर्माण विभाग, राज्य लोक निर्माण विभाग, एमईएस, रेलवे, रक्षा और अन्य सरकारी विभाग, सीएसआईआर या अन्य किसी प्रयोगशाला के साथ पंजीकृत प्रामाणिक सरकारी संविदाकारों, जिन्होंने पिछले 7 (सात) वर्षों में कम से कम 3 (तीन) (समान प्रकृति के कार्य) अनुमानित मूल्य के 40% के समान, (2 (दो) (समान प्रकृति के कार्य) अनुमानित मूल्य के 60% के समान (या 1 (एक) (समान प्रकृति के कार्य) अनुमानित मूल्य के 80% के बराबर (सफलतापूर्वक संपन्न किया है, से मुहरबंद निविदाएँ आमंत्रित की जा रही हैं।/ Sealed tenders are hereby invited from bonafide govt. contractors, registered with CPWD, State, PWD, MES, Railway, Defence and other Govt. Department, CSIR or any of its laboratories, who have successfully completed at least 3 (three) similar type (equal to 40% of the estimated value) or 2 (two) similar type (equal to 60% of the estimated value) or 1 (one) similar type (equal to 80% of the estimated value) in last (7) seven years.

क्र.सं. Sl.No.	कार्य का विवरण Description of work	अनुमानित मूल्य Estimated Value	बयाना राशि Earnest Money	कार्य पूर्ण करने का समय Time of completion	निविदा प्रलेख की लागत Cost of Tender Documents
1.	सीएसआईआर-सीआईएमएफआर, मुख्यालय धनबाद के कार्यालय क्षेत्र में कंटीन का नवीकरण / Renovation of office canteen at CSIR-CIMFR HQ, Dhanbad.	13,70,792.00	27,416.00	4 माह/ 4 Months	500.00

निविदा जमा करने के समय विधिवत रूप में अनुप्रमाणित निम्नलिखित दस्तावेजों का प्रमाण प्रस्तुत किया जाना है।/ The following proof of documents in duly attested to be submitted alongwith submission of tender.

- वैध विक्रय कर / जिएसटी, पंजीकरण संख्या एवं निकासी प्रमाण पत्र और पैन कार्ड / Valid sales tax / GST, registration no. & Clearance certificate and PAN card.
- संबंधित विभाग के किसी अधिकारी जो कार्यकारी अभियंता के पद से नीचे के न हो, से यथा-उल्लेखित समान मूल्यों के कार्य) अनुसूची सहित (के लिए प्राप्त भुगतान के साथ समापन प्रमाणपत्र। /Completion certificate alongwith payment received of the similar works (including schedule) of values as mentioned above from an officer not below the rank of Executive Engineer of the concerned Department.
- सीपीडब्ल्यूडी, राज्य पीडब्ल्यूडी, एमईएस, रेलवे, रक्षा और अन्य सरकारी विभाग से प्राप्त पंजीकरण प्रमाण पत्र।/ Registration certificate from CPWD, State PWD, MES, Railway, Defence and other Govt. Department.

**निविदाएँ 2 भाग प्रणाली में प्रस्तुत की जानी हैं**

**Tenders to be submitted in 2 Part System**

**1. भाग - I/ Part - I**

**में निम्नलिखित दस्तावेज शामिल हैं**

**Consists of following documents**

- उपर्युक्त दस्तावेजों का प्रमाण (1-3)/ Proof of documents as mentioned above (1-3)
- बयाना राशि/ Earnest Money

**2. भाग - II / Part-II**

**में निम्नलिखित दस्तावेज शामिल हैं**

**Consists of following documents**

- विभिन्न नियमानुसार सभी करों एवं उपकरों को सम्मिलित करते हुए कार्य से संबंधित मदों की पूर्ण विनिर्देश सहित लागत/ Costing along with full specifications of the items involved in the work including all Taxes & Levies as per different laws.

निविदा प्रपत्र दिनांक 24/08/2017 से 04/09/2017 तक सीआईएमएफआर वेबसाइट मे उपलब्ध होगा। निविदा दस्तावेज की लागत के साथ अग्रधन राशि किसी भी राष्ट्रीयकृत अनुसूचित बैंक द्वारा जारी आदाता खाता डिमाण्ड ड्राफ्ट के माध्यम से निदेशक, सीआईएमएफआर, धनबाद के खाते में भुगतान होगी। / Tender paper will be available from 24/08/2017 to 04/09/2017 on CIMFR website [www.cimfr.nic.in](http://www.cimfr.nic.in). Cost of Tender Documents will be submitted along with earnest money separately in the form of Account Payee D.D. from any nationalized schedule bank drawn in favour of Director, CIMFR, Dhanbad.

भाग- I और भाग- II को अलग-अलग मुहरबंद लिफाफों में बंद कर एक अन्य तीसरे मुहरबंद लिफाफे में जमा किया जाना है, जिसके ऊपर भी स्पष्ट एवं बड़े अक्षरों में कार्य का नाम, निविदादाता का पता लिखा होना चाहिए तथा इसे प्रशासनिक अधिकारी/ अनुभाग अधिकारी से दिनांक, हस्ताक्षर प्राप्त करने के पश्चात प्रशासनिक अधिकारी, सीआईएमएफआर मुख्यालय, धनबाद के कार्यालय में रखे निविदा पेटी में दिनांक 07/09/2017 अपराह्न 3.00 बजे तक या उससे पूर्व जमा किया जा सकता है। भाग- I (तकनीकी बोली) पहले अपराह्न 3.30 बजे खोली जाएगी, ईएमडी के सत्यापन के पश्चात् भाग- II (वाणिज्यिक बोली) समुचित समबाद के बाद अर्हता प्राप्त निविदादाता या उनके अधिकृत प्रतिनिधियों की उपस्थिति में खोली जाएगी / The Part-I & Part-II are to be

individually sealed in separate envelopes and are to be put in a 3rd envelope which shall also be sealed and superscribed with the name of work in bold letters, address of the depositors and to be dropped in the Tender Box kept in the Office of the Administrative Officer, CIMFR, Dhanbad, after obtaining date, signature of Administrative Officer / Section Officer on or before **07/09/2017** at 3:00 P.M. and Part – I (Technical bid) will be opened 3.30 P.M., after verification of EMD. Part – II (Commercial bid) will be opened on later stage, in presence of the qualified tenderers or their authorized representatives after proper communication.

- > **बयाना राशि को किसी भी राष्ट्रीयकृत अनुसूचित बैंक द्वारा जारी आदाता खाता डिमाण्ड ड्राफ्ट के माध्यम से ,जो निदेशक, सीआईएमएफआर धनबाद के स्टेट बैंक ऑफ इंडिया ,हीरापुर) कोड (1670-खाते में भुगतये हो ,जमा किया जाना होगा// EARNEST MONEY SHOULD BE DEPOSITED IN THE FORM OF ACCOUNT PAYEE DEMAND DRAFT FROM ANY NATIONALIZED SCHEDULE BANK PAYABLE AT SBI, HIRAPUR (CODE- 1670) DHANBAD IN FAVOUR OF DIRECTOR, CENTRAL INSTITUTE OF MINING & FUEL RESEARCH, DHANBAD.**
- > **अपूर्ण निविदादेर ,विलंब से प्राप्त निविदाएँ साथ ही ,बिना बयाना राशि की निविदाएँ भी सरसरी तौर पर अस्वीकृत कर दी जाएगी// INCOMPLETE TENDERS, LATE/ DELAYED TENDERS AS WELL AS TENDERS WITHOUT EARNEST MONEY SHALL BE SUMMARILY REJECTED.**
- > **निदेशक, सीएसआईआर-सीआईएमएफआर, किसी भी निविदा को अंशतः या पूर्णतः स्वीकार करने अथवा सभी को बिना कोई कारण बताए निरस्त करने का अधिकार रखता है। / DIRECTOR, CSIR-CIMFR, RESERVES THE RIGHT OF ACCEPTING ANY TENDER IN PART OR IN FULL OR REJECTING ALL WITHOUT ASSIGNING ANY REASON.**
- > **न्यूनतम बोली लगाने वाले फर्म को कार्यदेश जारी करने से पूर्व नियमानुसार निष्पादन गारंटी राशि जमा करना होगा// LOWEST QUOTING FIRM HAS TO SUBMIT PERFORMANCE GUARANTEE AS PER RULE BEFORE AWARDING THE JOB.**
- > **आकलन राशि डीएसआर-2014 और पीएमआर पर आधारित है। ESTIMATE BASED ON DSR – 2014 & PMR.**
- > **कार्य निष्पादन के दौरान सीपीडब्ल्यूडी के विनिर्देशों का सख्ती से पालन किया जाएगा// CPWD SPECIFICATION WILL BE FOLLOWED STRICTLY DURING EXECUTION.**
- > **बोलीदाताओं से हस्तलिखित निविदाएँ स्वीकृत नहीं की जाएँगी। / HAND WRITTEN TENDER WILL NOT BE ACCEPTED FROM BIDDERS.**

निदेशक, सीआईएमएफआर से अनुरोध है कि वे कृपया सरकारी विभागों में लागू अनुमोदित डीएवीपी दर में प्रेस विज्ञापन के लिए अनुमोदन प्रदान करें। / D’CIMFR may kindly approve for press advertisement in approved DAVP rate as applicable to Govt. Deptt.

हस्ताक्षरित/-  
अनुभाग प्रमुख, सिविल  
HOS, Civil

हस्ताक्षरित/-  
अनुसंधान समूह प्रमुख, सेवा विभाग  
HORG, Service Dept.

हस्ताक्षरित/-  
प्रशासनिक अधिकारी  
Administrative Officer.

हस्ताक्षरित/-  
निदेशक  
Director, CIMFR

## INSTRUCTION TO BIDDER

1. Tenders are hereby invited for the work of I) **Renovation of office canteen at CSIR-CIMFR HQ, Dhanbad** from contractors of appropriate class of CPWD, Railways, MES, Post & Telegraph Department and/ or from those who have carried, out similar, works for CSIR and Semi-Govt. Organisations amounting to 1) **Rs. 13,70,792.00 (Rupees thirteen lacs seventy thousand seven hundred ninety two only)** and above. The tenders are required to produce proof of fulfilling these conditions alongwith latest Income Tax Clearance Certificate while making request for issue to Tender documents.
2. Estimated cost is 1) **Rs. 13,70,792.00 (Rupees thirteen lacs seventy thousand seven hundred ninety two only)**.
3. Time for carrying out the work will be **04 (four) months** and the date of commencement shall be reckoned from the tenth day of issue of award letter.
4. Complete Contract documents to be compiled with by the tenderer whose tender may be accepted can be seen at the office of **Civil Engineering Section, CIMFR, Dhanbad**.
5. Tenders should be on the specified form (Non-transferable) which may be obtained from the office of **Administrative Officer, CIMFR, Dhanbad** during office hours on payment of **Rs. 500/-**. In case (non-refundable) Those parties who submit their tenders, shall be required to pay the above mentioned amount (*Cost of Tender Documents*) in the form of account payee D.D. drawn in favour of Director, CIMFR, Dhanbad payable at SBI, Hrapur, alongwith their Technical Bid. Sale of tenders shall be stopped two days before the date of opening of tenders.
6. Tenders should be submitted in double sealed covers superscribed with the name of the work, date and time of opening written both on the inner and outer envelopes. They will be received upto 3.00 P.M. on **07/09/2017** and will be opened at 3.30 P.M. on same day in the office of **Administrative Officer, CIMFR, Dhanbad** Tenders should be dropped in the tender box before the closing date and time indicated. CIMFR will not be held responsible for delay, loss or non-receipt of application or tender document of either side if sent by post and will not entertain any correspondence in this regard. Tenders sent by Telex/Telegram/Fax/E-mail/Post).
7. The Earnest Money amounting to **Rs. 27,416/- (Rupees twenty seven thousand four hundred sixteen only)** & cost of tender document **Rs. 500/- (Rupees five hundred only)** as demand draft or pay order of a schedule bank and drawn in favour of Director CIMFR, Dhanbad should accompany the tender. Tenders received without earnest money will be invalid.
8. The employer does not bind himself to accept the lowest or any tender and reserves to himself the right of accepting the whole or any part of the tenderer shall be bound to perform the same at the rates quoted.
9. Canvassing in connection with the tenders is prohibited and the tenders submitted by the contractor who resort to canvassing are liable for rejection.
10. The tender shall not be permitted to tender for works in the concerned unit of CSIR in which a relative is posted in grade between Controlled of Administration and Junior Engineer, (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or subsequently employed by him and who are relatives as mentioned above.  
*NOTE : A person shall be deemed to be a relative of another if, and only if, (a) they are members of a Hindu undivided family or (b) they are husband and wife or (c) the one is related to the other in the following manner : father's, mother (including step mother), Son (including step son), Son's wife, Daughter (including step daughter), father's father, son's son, Son's son's wife, son's daughter husband, Daughter's husband, Daughter's son. Daughter's son's wife, Daughter's daughter, Daughter's daughter's husband, Brother (including step brother), Brother's wife, Sister (including step sister), Sister's husband.*
11. Tender submitted shall remain valid for 90 days from the date of opening for the purpose of acceptance and award of work, validity beyond 90 days from the date of opening shall be by mutual consent.
12. The tenderer shall quote rates both in figures and words. He shall also work-out the amount for each item or work and write in both figures and words. On check if there are differences between the rates quoted by the tenderer in words and in figures or in the amount worked out by him the following procedure shall be followed :
  - i) When there is a difference between the rates in figures and in words, the rates which correspond to the amounts worked out by the tenderer shall be taken as correct.
  - ii) When the amount of an item is not worked out by the tenderer or it does not correspond with the rate written either in figures or in words, the rate quoted by the tenderer in words shall be taken as correct.
  - iii) When the rate quoted by tenderer in figures and in words tallies but the amount is not worked out correctly the rate quoted by the tenderer shall be taken as correct and not the amount.
13. The tenderer should see drawings and in case of doubt obtain required particulars, which may in any way influence his tender from the Engineer as no claim whatsoever will be entertained for any alleged ignorance thereof.

14. Before tendering, the tenderer shall inspect the site to fully acquaint himself about the condition in regard to accessibility of site, nature and extent of ground, working condition of site and locality including stacking of materials, Installations of tools and plants (T & P) etc., conditions affecting accommodations and movement of labour etc. required for the satisfactory execution of the work contract. No claim whatsoever on such account shall be entertained by the Employer in any circumstances.
15. Earnest money will be forfeited if the contractor fails to commence the work as per letter of award.
16. Except writing rates and amount, the tenderer should not write any conditions or make any changes, additions, alterations and modifications in the printed form of tenders. Tenderers who are desirous to offer rebate the same should be brought out separately in the covering letter and submitted alongwith the tender.
17. Some of the provisions of General Conditions of Contract are given below. Interpretation however shall be as given in the General Conditions of Contract.
- DEFECTS LIABILITY PERIOD: TWELVE months from the date of completion as certified by the Employer.
  - MINIMUM VALUE OF WORK FOR THE INTERMEDIATE CERTIFICATE: Rs.----- (Rupees -----). Intermediate certificate for a lesser amount can be admitted for payment at the discretion of the Engineer.
  - SECURITY DEPOSIT : Security deposit shall be deducted from the running bills of 10% of the gross value of work done and measured inclusive of Earnest Money subject to a maximum of Rs. ----- (Rupees -----)
  - COMPENSATION : Contractor shall pay as compensation an amount equal to one percent or such smaller amount as the Employer (whose decision in writing shall be final) may decide on the cost of the whole work shown in the agreement, for every week that the work remains uncommenced or unfinished or due quantity of work remains incomplete after the proper dates. Compensation to be paid shall not exceed ten percent of the estimated cost of work as showing in the agreement.
18. Schedule showing approximate quantity of materials to be supplied by the Employer under Clause : 6 of the General conditions of contract for works contracted to be executed and the rates at which they are to be charged for :

Particulars of materials	Approx. Qty.	Rates at which the material will be charged to the contractor			Place of delivery
		Unit	(Rs.) (Figure)	Rupees (Words)	

NOTE : The Tenderer shall ensure that particulars in the above form are filled in by the Engineer before he submits the tender.

19. For all specialist jobs e.g. lights for conditioning, Public address, fire protection, security sruveillance and building management systems, technical (covering also general conditions and commercial terms) and financial offers will be given separately in two sealed covers.

- 20 a) Issue of cement and steel are subjected to availability in CIMFR Stores and the recovery of materials will be made as stated in SI No. 18 of BOQ, in case issue is made from CIMFR Stores.
- b) In case of non-availability of materials i.e. cement and steel in CIMFR Store, the agency has to procure the same after obtaining due authorization from the department and the materials to be got approved by the Engineer-in-Charge and materials brought to site are to be entered in store's ledger before using the same to work. No extra carrying cost for transportation of materials will be paid by the department.

Cement to be used - Fresh Portland cement of 15 specification IS-1911-1967.

Steel to be used - Top steel of required section drawn from SAIL, Billets of ISI specifications. CIMFR/ CSIR General conditions of contract will be followed.

**Materials approved as per Indian Standard**

<b>Sl. No.</b>	<b>Materials</b>	<b>Approved brand &amp; Manufacture</b>
1.	Cement	ACC/ Ultratech /Ambuja
2.	Reinforcement/ Structural Steel	SAIL/TATA as per IS
3.	White cement based putty	Birla/Shailimar or equivalent
4.	Oil bound distemper, cement primer, synthetic enamel paint, water proofing cement paint including cement primer, Acrylic emulsion paint, Anti corrosive bitumastic paint, Textured paint exterior, Plastic emulsion paint.	Dulux/Asian paint/Berger/ Snowcem
5.	600x120x5 mm glass shelf with bracket, PVC low level flushing cistern, Kitchen sink, Wash hand basin, 600x450 bevelled edge mirror, Water closet squatting pan (Indian type) Orissa pattern, pedestal type Water closet (European type), CP brass long body bib cock, CP brass shower, CP brass stop cock, CP brass angle valve for mixer etc. C.P. brass bib cock, C.P. brass angle valve.	Jaquar/Hindware/Parryware
6.	G.I. pipes	TATA/SAIL or equivalent
7.	PTMT towel rail, CPVC pipe, PTMT towel ring	Prayag or equivalent
8.	PVC Water Tank	Sintex/Himgiri/Duroplast.
9.	Ceramic glazed wall tiles & floor tiles	Kajaria / Nitco/Somany
10.	PVC pipes & necessary fittings like bend/tee etc.	Prince/ Phenolex/Usha-80
11.	Vitrified tiles	Kajaria/Nitco/Somany
11a.	Floor & Wall Digital vitrified tiles	Kajaria/Nitco/Somany
12.	Gun metal valve	Zollotto make or equivalent
13.	Water proofing compound as per IS 2645	Roff/Dr. Fixit or equivalent
14.	APP modified prefabricated five layer- 3 mm thick 2 mm thick	Dr. Fixit/Shalimar or equivalent.
15.	Paver block best quality M-30 grade.	Polished
16.	Bitument primer for bitumen membrane.	Dr. Fixit/ Shalimar
17.	Gypsum board	Saint Gobain or equivalent as per IS.
18.	Kitchen Accessories	Best Make & Best Quality.

**CENTRAL INSTITUTE OF MINING & FUEL RESEARCH, DHANBAD**  
**(Council of Scientific & Industrial Research)**

Name of work: **Renovation of office canteen at CSIR-CIMFR HQ, Dhanbad**

Sl.	Description	Qty	Unit	Rate (in Fig. & Words)	Amount
1	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
	In cement mortar	13.129	Cum		
2	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	0.932	Cum		
3	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.				
	For thickness of tiles 10 mm to 25 mm	15.97	Sqm		
4	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of :				
	G.S. Sheet	9.75	Sqm		
5	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
	Cement mortar 1:4 (1 cement :4 coarse sand)	14.04	Sqm		
6	12 mm cement plaster of mix :				
	1:6 (1 cement: 6 fine sand)	30.03	Sqm		
7	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. Granite of any colour and shade.				
	Area of slab over 0.50 sqm	19.27	Sqm		

8	Providing and fixing Ist quality ceramic glazed digital wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.				
	Size of Tile 300 x 600 mm	186.02	Sqm		
9	Marble stone flooring with 18 mm thick marble stone, as per sample of marble approved by Engineer-in-charge, over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry, including rubbing and polishing complete with :				
	Makrana white second quality	100.85	Sqm		
10	Polishing the mosaic floor and wall with machine, stone etc. in a proper way as per specification etc. complete as per direction of EIC.	232.59	Sqm		
11	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	2.37	Cum		
12	Centering and shuttering including strutting, propping etc. and removal of form for :				
	Shelves (Cast in situ)	27.033	Sqm		
13	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
	Thermo-Mechanically Treated bars	136.50	Kg		
14	Making rough the hard surface / floor by chiseling including removing of the rubbish.	100.85	Sqm		
15	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade : Old work (one or more coats)	381.04	Sqm		
16	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	381.04	Sqm		

17	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :				
	One or more coats on old work	134.74	Sqm		
18	Providing and fixing tiled false ceiling of approved materials of size 595x595 mm in true horizontal level, suspended on interlocking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanized butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.				
	8 mm thick fully perforated calcium silicate board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process to give stable crystalline structure with minimum compressive strength 225 kg/ sq. cm, bending strength 100 kg/sq. cm , of size 595x595 mm, having perforation of dia. 10 mm with minimum perforated area 18 % with non woven tissue on the back side, having an NRC ( Noise Reduction Coefficient) of 0.85, with 50 mm thick rockwool of 48 kg /cum backing.	163.68	Sqm		
19	Precast terrazo tiles 22 mm thick with graded marble chips of sizes upto 12 mm, in skirting and risers of steps not exceeding 30 cm in height, on 12 mm thick cement plaster 1:3 (1 cement : 3 coarse sand), jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing and polishing complete with tiles of :				
	Light shade pigment using white cement	67.25	Sqm		



20	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer 3 mm thick water proofing membrane, black finished reinforced with non-woven polyester matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrane manufacture of density at 25°C, 0.87-0.89 kg/ litre and viscosity 70-160 cps. Over the primer coat the layer of membrane shall be laid using Butane Torch and sealing all joints etc, and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 650/ 450N/5cm. Tear strength in longitudinal and transverse direction as 300/250N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane :				
	3 mm thick	134.22	Sqm		
21	Removing of tarfelting properly etc. complete as per direction of EIC.	49.37	Sqm		
<b>Kitchen Accessories</b>					
22	M.S. Pipe "C" Class	225.00	Feet		
23	Elbow (VS or equivalent)	28.00	Each		
24	Tee (VS or equivalent)	12.00	Each		
25	Socket (VS or equivalent)	10.00	Each		
26	Pressure Guze Meter (HPC or equivalent)	3.00	Each		
27	Ad. Pressure Regulator (United or equivalent)	1.00	Each		
28	Bush	15.00	Each		
29	Nipple 6"- 4'	8.00	Each		
30	5/8 Copper pigtal (HPC or equivalent)	5.00	Each		
31	Suraksha Hose Pipe	16.00	Each		
32	Click on type Adaptor (HPC or equivalent)	16.00	Each		

33	Nove returning valve (HPC or equivalent)	12.00	Each		
34	Shut off valve	5.00	Each		
35	3/8 N.C. Valve (HPC or equivalent)	14.00	Each		
36	3/8 Suraksha	4.00	Each		
37	3/8 Copper Pigtal	6.00	Each		
38	Barner set (HPC or equivalent)	4.00	Each		
39	Bansuri single bhatee	1.00	Each		
40	Clamp	20.00	Each		
41	Installation repair & paint charges	1.00	Item		
42	Providing & fixing kitchen chimney of width 60 /75/90 cm, Suction 1000/1200 Cum per hour etc. complete as per direction of EIC.	1.00	Each		
43	Providing & fixing kitchen chimney of width 90 cm, Suction 1385 Cum per hour etc. complete as per direction of EIC.	2.00	Each		
44	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	76.00	Kg		

45	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item):				
	With float glass panes of 5.50 mm thickness	6.00	Sqm		
					(Rs.)

Signature of the contract

