

INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY ESTATE OFFICE, POWAI, MUMBAI, MAHARASHTRA – 400 076

TEL. 022 2576 4995 E-mail: drestate@iitb.ac.in

IIT Bombay invites digitally signed Technical Bid & Financial Bid for following work from the contractors having **similar** experience in Central Government Departments / State Government Departments / Central or State Autonomous Bodies / State or Central Public Sector Undertakings & Large Private Organizations. The detail of work is given below:

Sr. No.	Name of Work	Estimated Cost (In Rs.) Incl. 18% GST	EMD (Rs.)	Time Limit	RFX No.
	External repairs and painting along with chemical waterproofing on terrace of Sahayadri Building at Hillside area. EO/A/HILLSIDE/WKS-197/24-25		Rs.2,00,000/-	06 months	6100005065

Intending bidders needs to be register themselves on IIT Bombay portal i.e. https://ental.iitb.ac.in/vrp/index.jsp to get User ID and Password. View the open tender on https://ental.iitb.ac.in/vrp/vrp_srm_docs.jsp for configuration process and user manual. Queries regarding to vendor registration please contact on 022 – 2159 3001(ASC Help-desk) and queries regarding to online Bid submission please contact to +91 82915 56277/6377 or mail us at srm@iitb.ac.in

Date and time of submission of tender documents digitally are from 04.03.2025 to 12.03.2025 till 11:15 a.m. Date of opening of Technical Bid will be 12.03.2025 at 11.30 a.m. and Financial Bid 19.03.2025 (Tentative)

Interested contractors/agencies are requested to upload Technical bid and Financial bid on the SRM tendering portal of IIT Bombay.

- (A) All contractors/agencies should upload technical bid with the following documents on SRM tendering portal, failing to which their tender will be summarily rejected from the tendering process:
 - 1) i. Experience of having successfully completed works during the last 7 years ending last day of the month previous to the one in which applications are invited:
 - Three **similar completed works** costing not less than the amount equal to 40% of estimated cost put to tender, OR
 - Two **similar completed works**, costing not less than the amount equal to 60% of the estimated cost put to tender Or
 - One **similar completed work** of aggregate cost not less than the amount equal to 80% of the estimated cost. AND
 - ii. One completed work of any nature (either part of (i) or a separate one) costing not less than the amount equal to 40% of the estimated cost put to tender with some Central Government Departments / State Government Departments / State or Central Autonomous Bodies / State or Central Public Sector undertakings.
 - 2) Detail statement for work completed, work in hand including balance commitment of work should be enclosed for last three year commencing from 1st April and ended with 31st March and contractor should submit his details as per Annexure'A' format with support of xerox copies of work order and work completion certificates, otherwise the bid capacity will not be calculated and his technical bid will be summarily rejected, and no Financial Bid will be opened. (All contractors/agencies are hereby informed that they should upload Technical bid as per format of Annexure "A", changing in format is not allowed).
 - 3) Upload a scan copy of the information in respect of **manpower/mandays** for above said work must be given **in undertaking** with official signature and seal/stamp, otherwise tender will be **rejected**.
 - 4) Bank Solvency certificate 40% of estimated amount issued within one year from any Nationalized / Schedule Bank from the date of publishing of Tender.
 - 5) P. F. registration certificate.
 - 6) P. F. challans of last 12months.
 - 7) (i) ESIC registration certificate and copies of ESIC challans of last 12months.
 - (ii) Contractors' all risks insurance (CAR policy) / Mediclaim policy.
 - 8) PAN card.
 - 9) GST registration certificate.
 - 10) Income Tax Return for last 03 years i.e. of 2021-22, 2022-23 and 2023-24.
 - 11) List of Equipment's, Machinery, Tools.
 - 12) List of Technical Staff with copies of their Degree/diploma certificate.

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- 13) The contractors who were empanelled under Estate Office under (2018-23) list need not have to upload Demand Draft. The contractors other than empanel list that are applying for tender need to upload a scan copy of Demand Draft / Pay Order for Rs.2,00,000 /-(EMD amount) drawn in favour of "The Registrar, IIT Bombay" on online Tendering Portal.
- 14) Power of Attorney, if any.
- 15) Proof of Constitution: An affidavit in case of Sole Proprietorship, Partnership Deed in case of Partnership Firm, Article of Association in case of Private / Public Limited Companies.
- 16) **Litigation history** of the agency is required to be submitted along with the application. A tender would not be awarded if any inquiry proceeding / criminal case is found pending against the agency.

Note:

Those contractors who do not have documents mentioned above from <u>Sr. No. 1 to 16</u> need not apply as it is mandatory documents to qualify in technical bids.

Upload all your relevant documents in the serial order mentioned above. It is **advisable** not to make more than <u>03 folders of 5MB</u> while uploading documents.

The work will be executed with lowest bidder as per the terms and conditions of work order and tender documents signed by the lowest bidder. (All agencies are requested to upload a scan copy of Terms and Conditions with official signature and seal/stamp on SRM online tendering portal)

The validity of the bids will be valid for 6 months from the date of opening of tender.

If agency fails to submit the above mentioned documents by uploading to the online portal, their technical bid may be rejected.

Litigation history of the agency is required to be uploaded along with the application. Tender would not be awarded if any inquiry proceeding / criminal case is found pending against the agency.

No work will be subleted to third party. If found payment of final bill will not be processed and the contractor's name will removed from the enlistment without giving him further notice.

Contractor's/Agencies/Proprietor's are requested to give Power of Attorney to your representative to deal any matter with any Officers or Staff of IIT Bombay on behalf of you or your agency.

The rates are taken from CPWD 2021 and rate analysis.

The contractor have to quote his own rates online against each item of work and need to select N5 tax code thereafter.

Scan and upload all the above mentioned documents in "C folder" of online SRM tendering protal.

IIT Bombay reserve its rights to reject any or all tenders without assigning any reason and without any reference.

No queries will be entertained within 24 hours prior to the opening of the tender. We kindly request all contractors to upload their quotations well in advance of the submission deadline to ensure a smooth and timely process.

Superintending Engineer (I/C)

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TO BE UPLOADED ON SRM TENDERING PORTAL WITH FINANCIAL BID ·

ANNEXURE 'A' (FORMAT) TECHNICAL BID

File No.: EO/A/HILLSIDE/WKS-197/24-25

Name of Work :External repairs and painting along with chemical waterproofing on terrace of Sahayadri bldg at Hillside area.

Name of the Contractor -----

Sr. No.	Name of Client	Name of Works	2021-22 (In Lakhs)	2022-2023 (In Lakhs)	2023-2024 (In Lakhs)	2024-2 (In La	*
						Completed	Balance
,			_	-	-		-
			<u> </u>	-	-	-	-
		Total Amount (In Lakhs)		-	-	-	

Note: Contractor must submit his details as per Annexure 'A' with declaration stating that he is possessing all the original copies of work orders and experience certificates, it will be produced as and when required to IIT Bombay. However, if it is found false at later stage, the contractor will be debarred or blacklisted. Whereas, if information is not submitted as per Annexure 'A' format his bid capacity will not been calculated and his tender will be summarily rejected.

Superintending Engineer (I/C)

Signature of Contractor Name & Address in full

WORKS UNDERTAKING

EO/A/HILLSIDE/WKS-197/24-25

To, Superintending Engineer (I/C) Indian Institute of Technology, Powai, Mumbai – 400 076.

Sub: External repairs and painting along with chemical waterproofing on terrace of Sahayadri bldg at Hillside area.

Dear Sir,

We are hereby quoting all the rates for the attached schedule of short tender of the above mentioned job.

We hereby accept & signed all the General Terms and Conditions and special Conditions of Contract.

The work will be completed within specified time limit of 06 Months as mentioned in the notice inviting for short tenders.

The following information is required to be provided.

I / We agree to keep the tender open for One Hundred and Eighty (180) days from the due date of its opening / One Hundred and Eighty days from the date of opening of financial bid in case tenders are invited on 2/3 envelope system and not to make any modification in its terms and conditions.

	Male	Female
No. of Unskilled casual labour to be required per day.		***************************************
No. of Skilled casual labour to be required per day.		
Total Mandays required for completion of work.		

Thanking you,

Yours faithfully,

Signature of the Contractor With official Seal / Stamp of the firm

INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY POWAI, MUMBAI-400 076.

EO/A/HILLSIDE/WKS-197/24-25 /

ESTATE OFFICE

Name of Work :- External repairs and painting along with chemical waterproofing on terrace of Sahayadri bldg at Hillside area. \nearrow

Schedule of Work

Sr No.	Description Of Work	Qty.	Unit
1	Carefully removing internal or external plaster in patches or any length and at any height without damaging structure or brickwork in the vicinity including using electric cutting tools including cutting a groove first to demarcate exact area of damage taken place and removing with chisel & hammer including stacking the debrises with in 50 meter, cleaning the site etc. complete. including using stepladder for internal plaster wherever required covering the furniture, floor, windows and partitions with plastic sheets Note: a) No extra payment shall be made for extra thickness removed. b) The area in vertical plane area shall be measured.	1400.00	Sqm
2	Chipping and exposing the damaged RCC members with chisel & hammer and cleaning the rusted reinforcment and exposed surface by wire brush or mechanical device or any other established method and applying rust convertor (Rustkill A) of approved make and quality with cotton waste swab to reinforcement and allowing to dry the same for 24 hour, brushing of loose particles and applying first coat of rust preventive coating of polymer and cement slurry in 1:1.5 proportion with soft brush without adding water including applying another coat of rust preventing after 4 hours allowing air curing for 48 hours etc. Covering with plastic as directed. Cleaning and unloading the debrises upto ground level.	450.00	Sq.m
3	Providing and applying an effective bond coat of Polymer (SBR) Stuco latex of structural waterproofing (Cicco)/Resicon 400, and cement in the proportion of 1:1 by using brush in multiples of coat as required to accommodate the whole thickness of PMM wherever required on the surface of old concrete / repaired concrete Polymer (SBR) of approved manufacturer should have the following properties:will be paid under respective item. Suspended solid particles should not be less than 40%. Specific gravity should not be more than 1.01 PH should not be less than 8.5 Note: The actual consumption of polymer shall be measured for payment on weight basis. Challans of authorized dealer will be verified. The chemical to be procured in sealed container & seal to be opened in presence of the IITB representatives	840.00	Kg

4	Providing and Placing in position readymix polymer mortar manufacture by Dr. Fixit, Sunanda, Roff, MC Bouchmey, Chembond and approved and adding water in the proportion of 1:0.14 (polymer mortar: water) in prepared grooves / cracks of the concrete court in layers as directed including mixing the polymer mortar with water using forced action mixer mild curing with water for 3 days etc. Complete. (Payment will be paid for the actual quantity of polymer mortar PX used on weight basis. Challans of authorised Dealer will be verified etc all complete as directed by Estate office).		Kg
5	Cutting, demarcating grooves at any height with electrically operated cutter machine between sound and unsound plaster, cracks on external wall, separation cracks etc. complete.		Rmt
6	Providing and filling separation crack of 75mm width and 25mm deep with polymer modified cementatious mortar. a) Demarcating groove, removing plaster / concrete carefully, washing with potable water. b) Filling polymer modified cementatious mortar in layers of 20mm thick (applying bond coat at every layer) upto profile of concrete in vicinity (composition of mortar: cement 1Kg.: polymer (SBR) of approved manufacturer 15% by wt. of cement: 3Kg silica sand (grading IS 383, zone II, silt content = 0%) over a polymer + cement bond coat including applying making tape on both side of groove, cleaning, finishing to match the plaster in vicinity, disposing of debrises anywhere in IITB campus, cleaning as directed etc. complete. c) Proportion d) Bond coat e) SBR polymer + cement in the ratio 1:1 by volume f) Polymer modified cementitious mortar g) SBR polymer 150ml. h) Cement 1 Kg. i) Silica sand 3.0 kg. (Note: - Demarcating groove, breaking plaster / concrete shall be paid under respective items).	500.00	Rmt

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7	Apply external waterproof plaster using factory made ready mix cement mortar plaster. 1) Providing and rending the prepared surfaces with new sand faced cement plaster of minimum 20mm thick in two coats by using factory made ready mix cement plaster waterproofing plaster of IITB approved make 2) The base coat of minimum 12mm thick using above ready mixed mortar plaster to proper plumb level & line including making the plaster surface rough (all as per the manufacturer's specification) to receive the top finish coat 3)Applying top/finish coat plaster of minimum 8mm thickness with similar ready mix polymer cement mortar plaster finishing in perfect plumb. Line & level so as to obtain fine sand grain finish by using branded approved variety sponge or using machnised devise including adding additional required quantity of cement for managing richer mix preferable ordinary portland cement curing for minimum 7 days etc complete.4) The rate shall as per the specifications prescribed at above upto the required height and doing work at all heights and lifts.	1340.00	Sqm
8	Providing and fabricating structural steel works in rolled sections like joists, channels, angles, tees etc. as per detailed designs & drawings including fixing in position with connecting plates, braces and welding, as necessary including a coat of zinc primer & two coat of anti corrosive Paint etc. complete.	720.00	Kg
9	Removing the old cement concrete or any type of tiles from flooring/dado including back coat plaster levelling the surface, cleaning the site including sorting out servisable tiles and stacking the same and debris disposing off upto a distance of 50 meters (as directed by Engineer Incharge)	15.00	Sqm
10	Providing and laying cement concrete leveling course 40mm thick with (1:1½:3) cement concrete laid to proper line level and slope including compaction, filling joints, finishing with brooming to receive granite, etc., as directed, and curing complete.	15.00	Sqm
11	Providing and laying telephonic black colour veined granite_slabs_16_to_18mm_thick_of_approved quality colour and veins windows sill / cladding, on a bed of 1:4 cement mortar including rounding / moulding of nozzles / adjust, filling joints with whit cement to match colour of slab, curing polishing etc complete. a)100/110mm wide	50.00	Rmt

12	Providing and laying black colour machine cut mirror polished granite stone slab in single piece of required size and 16mm to 18mm thick of approved quality for window sill at any level/floor in required pattern laid on a bed of cement mortar 1:6 including making arrangements for shifting the granite sheet at any floor/level ,neat cement float, filling joints with neat coloured cement slurry, curing, hand polishing and cleaning complete. b) area of slab over 0.5 m2	20.00	Sqm
13	Labour charges for modification of the existing hall window MS grills by means of cutting, fabricating,welding etc and refixing it in position/line/level/plumb ,taking care of necessary safety precautions at site	2.00	Nos
14	Labour charges for modification of the existing guest bedroom and master bedroom window MS grills by means of cutting, fabricating,welding etc and refixing it in position/line/level/plumb ,taking care of necessary safety precautions at site	6.00	Nos
15	Providing and laying super fluid micro concrete of approved manufacturer at any floor after reinforcement treatment coat including mixing with 10mm to 5mm size quartz aggregate in the ratio of 1 part / IIT approved brand to 0.75 part of quartz aggregate by weight providing plywood form work in line and level, cleaning, curing etc. complete. the compressive strength of super fluid micro concrete should b 25N / mm2. at any floor level.	2500.00	Kg
16	Providing and fixing C-Class G.I. pipes 15mm internal diameter heavy type weight and outer dia ,as per IS requirement and embossed at every meter as ISI mark and name of the manufacturer Like, Tata/ Jindal/ Zenith etc. to walls, ceilings,etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps etc. projecting 50mm from face of wall and fixing on wall by means of galvanised bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer including necessary drilling in holes in walls / slabs and remaking good the demolished portion to restore the same in original condition neatly and applying zinc primer and two coats of SEP painting including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item	50.00	Rmt

17	Providing and fixing C- Class G.I. pipes 20mm internal diameter heavy type weight and outer dia,as per IS requirement and embossed at every meter as ISI mark and name of the manufacturer Like, Tata/ Jindal/ Zenith etc. to walls, ceilings,etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps etc. projecting 50mm from face of wall and fixing on wall by means of galvanised bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer including necessary drilling in holes in walls / slabs and remaking good the demolished portion to restore the same in original condition neatly and applying zinc primer and two coats of SEP including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item	80.00	Rmt
18	Providing and fixing C-Class G.I. pipes 25mm internal diameter heavy type weight and outer dia,as per IS requirement and embossed at every meter as ISI mark and name of the manufacturer Like, Tata/ Jindal/ Zenith etc. to walls, ceilings,etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps etc. projecting 50mm from face of wall and fixing on wall by means of galvanised bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer including necessary drilling in holes in walls / slabs and remaking good the demolished portion to restore the same in original condition neatly and applying zinc primer and two coats of SEP including removing the existing pipe,if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item .	290.00	Rmt
19	Providing and fixing C-Class G.I. pipes 32mm internal diameter heavy type weight and outer dia,as per IS requirement and embossed at every meter as ISI mark and name of the manufacturer Like, Tata/ Jindal/ Zenith etc. to walls, ceilings,etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps etc. projecting 50mm from face of wall and fixing on wall by means of galvanised bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer including necessary drilling in holes in walls / slabs and remaking good the demolished portion to restore the same in original condition neatly and applying zinc primer and two coats of SEP including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item.	60.00	Rmt

2	20	Providing and fixing C-Class G.I. pipes 40mm internal diameter heavy type weight and outer dia,as per IS requirement and embossed at every meter as ISI mark and name of the manufacturer Like, Tata/ Jindal/ Zenith etc. to walls, ceilings,etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps etc. projecting 50mm from face of wall and fixing on wall by means of galvanised bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer including necessary drilling in holes in walls / slabs and remaking good the demolished portion to restore the same in original condition neatly and applying zinc primer and two coats of SEP including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item .	200.00	Rmt
	21	Providing and fixing C-Class G.I. pipes 50mm internal diameter heavy type weight and outer dia,as per IS requirement and embossed at every meter as ISI mark and name of the manufacturer Like, Tata/ Jindal/ Zenith etc. to walls, ceilings,etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps etc. projecting 50mm from face of wall and fixing on wall by means of galvanised bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer including necessary drilling in holes in walls / slabs and remaking good the demolished portion to restore the same in original condition neatly and applying zinc primer and two coats of SEP including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item .	· 70	Rmt
2	22	Providing and fixing 25 mm dia (n.b) gun metal UTAM make heavy gate valve bearing IS marks including necessary fixtures and fittings such as sockets, union etc. as required and fixing in proper position all complete. contractor will be allowed to take away old gate valve and for which 5% deduction will be made of schedule rate of this item. Etc. complete.	24.00	per No.
2	23	Providing and fixing 40 mm dia (n.b) gun metal UTAM make heavy gate valve bearing IS marks including necessary fixtures and fittings such as sockets, union etc. as required and fixing in proper position all complete. contractor will be allowed to take away old gate valve and for which 5% deduction will be made of schedule rate of this item. Etc. complete.	8	per No.
4	24	Providing and laying temporary loop connection to main water supply inlet and outlet of water tank with 'C' class pipe of required length and dia elbows, tees, reducers, plugs, clamps etc. including other connections and commissioning the water supply line and remaking to original connections after all repair work of tank etc. complete.	2.00	Per Job

25	Providing and fixing ISI-1729-2002 grade 75mm dia. ISI make NECO/ ALCO cast iron waste water pipe with lugs necessary fittings such as bends, tees, single junctions, double junctions, slotted vent, offsets on walls or into the ground including filling joints with cement mortar 1:2 proportion fixing on wall by means by galvanised bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer projecting 50mm from face of wall and painting the exposed faces with one coat zinc primer and two coats of anti corrosive paint removing the existing AC/CI/PVC pipe if available contractor will be allowed to take away old pipes and for which 5% deduction will be made of schedule rate of this item etc.	280.00	Rmt
26	Providing and fixing ISI-1729-2002 grade 100mm dia. ISI make NECO/ ALCO cast iron waste water pipe with lugs necessary fittings such as bends, tees, single junctions, double junctions, slotted vent, offsets on walls or into the ground including filling joints with cement mortar 1:2 proportion fixing on wall by means by galvanised bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer projecting 50mm from face of wall and painting the exposed faces with one coat zinc primer and two coats of anti corrosive paint removing the existing AC/CI/PVC pipe if available contractor will be allowed to take away old pipes and for which 5% deduction will be made of schedule rate of this item etc.	210.00	Rmt
27	Providing and fixing heavy duty P.V.C. rain water pipes of approved brand for 160mm outer dia. conforming to I.S. including proper rain water receiving recess with P.V.C. plug bend, necessary fittings such as offsets, shoes including fixing the pipe on wall using approved G.I. brakets projecting upto 50mm from face of wall & fixing with heavy duty PVC clips of approved quality & number, filling the joints using rubber gasket with solvent cement and properly resting the shoe of pipes on C.C. or masonry blocks, and maintenance for 3 years for any leakages or dislocation of pipes. All the PVC fittings and additional two piece socket clips shall be got approved from engineer in charge complete. (scaffolding will be paid in separate item if required)	210.00	Rmt
28	Providing & fixing PVC temporary drain pipe line with fittings, necessary Coupling, bends, tees by supporting and maintaining the same from time to time till the new permanent drain pipes are laid and connected a) 75mm dia		Rmt
	b)100mm dia	150.00 /	Rmt

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The state of the s	29	Providing and applying exterior coating for walls of multistoried building including mechanical cleaning of the external surface and treating surface in sound, clean and free from dirt, oil and other loose material and may be done with vacuum cleaning if required. All surface cracks upto 5 mm width will be filled up with Dr. Fixit Crack X paste or similar material. The external surface will be primed with Dr. Fixit Primeseal (or equivalent BASF/FOSROC/STP) diluted with potable water in the ratio of 2:1 by volume prior to application of Dr. Fixit Raincoat waterproof coat. Allow it to dry for at least 2 to 3 hours and then apply Dr. Fixit Raincoat waterproof coat or equivalent (BASF/FOSROC/STP) having DFT of 100-120 micron DFT.Apply second coat of Dr. Fixit raincoat Select Top Coat with interval of 6-8 hours to achive DFT of 60-70 microns. Apply with roller or spray allow it to air cure for 7 days. Do not dilute Dr. Fixit Raincoat waterproof Select top coat by any means. Work includes cleaning the surface thoroughly, watering the surface etc. complete including covering the floor, window glass with plastic sheet, removing & refixing existing grill while work in progress and as directed by this office. and work shall be guaranteed for 3 years by the contractor on requisite stamp paper. The maerial having following technical properties: Elongation of >100% as per ASTMD 412; Tensile strength 2.50Mpa per ASTM D 412, passes water resistance as per SS500 standard, complies to anti carbonation test as per EN 1062 part 6. (Double steel scaffolding will be paid in respective item)	3000.00	Sqm
	30	Providing and applying three coats of Dr. Fixit Roofseal coat as per manufacture's specification on Building roofs / Terraces — Flat & slope. Over existing cementitious waterproofing treatments like brick-bat coba with IPS/China mosaic top, concrete screeds, acrylic coatings, etc. and as per the method of surface preparation given below Dr. Fixit Newcoat (for horizontal surface/ terrace) Method of Application 1)Cleaning the existing surface and fiilling the cracks by recommanded crack filling material. Apply the first coat of Dr. Fixit roofseal at the rate of 2 m2 per litre and allow it to dry before taking up the second and third coats, the rate of application being the same. 2) The sequence of colours viz-a-viz pink, green and grey can be decided depending on the desired top coat colour. 3) In case only two colours are being used, ensure that the colour of the first and the third coat are the same. This would ensure correct	80.00	Sqm /
		consumption of material that will deliver a total DFT of 1 mm. Covering Guarantee period for 3 years on requisite stamp paper. (During defects liability period if any leakages are found and due to continuous rains if rectification work is not possible then it should be covered by tarpaulin sheet on urgent basis by the contractor and if not attended, the same will be done by IITB on risk and cost basis and necessary payment for the same will be deducted from security deposit amount / any other payments payable to the agency)		

31	Providing and applying zinc priming coat over steel and other metal surfaces etc including preparing the surface by thoroughly cleaning oil, grease, dirt, and other foreign matter with wire brushing, fine fire steel wool, and sand paper step ladder etc. Complete. (Note:- Contractors have to procure the paint materials in sealed containers. Containers will be opened in presence of IIT representative. Spilling over paint on other areas externally as well as internally such as wall, floor furniture's etc are not allowed. If it occurs, it has to be cleaned by contractors completely at his own cost.)	440.00	Sqm
32	Providing and applying two coats of synthetic enamel paint of approved colour to new/old structural steel work and wood work in buildings including cleaning and preparing surfaces by solvent, degreasing and derusting by manual scrapping/mechanically by sand blasting/shot blasting flame cleaning/by chemical methods complete. (Note:- Contractors have to procure the paint materials in sealed containers. Container will be opened in presence of IIT representative. Spilling over paint on other areas externally as well as internally such as wall, floor furniture's etc are not allowed. If it occurs, it has to be cleaned by contractors completely at his own cost.)	440.00	Sqm
33	Removing any kind debris including loading in truck and conveying to dumping point approved by BMC, unloading spreading etc, complete with all leads and lifts. 30% voids will be deducted in case of truck/stock measurements.(The debrises /boulders /excavated stuff/surplus material to be taken away and permission from the Executive Engineer(SWM) is required to be obtained for dumping the debrises in MCGM approved dumping ground before commencement of work.	110.00	Cum
34	Providing waterproof plaster in over head water tank 20mm thick for base and side wall in cement mortar 1:3 with neat finishing, floating using waterproofing compound at the rate of 1 kg per bag of cement of approved make and manufacturer and curing filling joints of any outlet properly etc. Complete.	70.00	Sqm
35	Labour charges for modification of the existing window MS grills by means of cutting, fabricating, welding etc and refixing it in position/line/level/plumb ,taking care of necessary safety precautions at site a)For Staircase and Lobby grill	20.00	Sqm
36	Providing and fixing 20mm thick cement bonded wood particle board (bison panel) to cover kitchen/toilet duct at terrace level on M.S. Angle frame which will be paid under respective item, providing suitable hole for fixing nuts and bolts and vent pipe of any diameter complete as directed.	50.00	Sqm

37	Providing and fixing in position steel TMT bar reinforcement of various diameters for slabs/columb/beam as directed by Engineer Incharge including cutting, bending, hooking the bars,cost of welding rod for welding to existing reinforcement in layer welding and supporting as required complete.	100.00	Kg
38	Providing and erecting steel tublar props of required height upto 14' feet, L head or flat head braced at center at center and supporting a continuous 2" x 3" wooden runner, resting on wedge and block minimum capacity 3 ton to support the structure provisionally during repair and jacketing etc. And maintaining them in position till required item etc. Complete. The props are erected in perfect vertical in plumb taking/ transferring the load equally/ uniformly. The location of every prop should be one over another floor and it should not be eccentric. The tightening of every prop should be uniform to all props to strain the building uniformly, removing the same as and when directed by structural Engineer/ site Engineer. The work should be carried out with all the safety measures like helmet, safety belt and adequate labour insurance under the supervision of qualified supervisor and remove the same completion of all related repair work irrespective of time duration etc. complete	50.00	per No.
39	Providing and fixing PVC Mesh for windows grill (hall,bedrooms,kitchen)using tie hooks to prevent entry of monkey for New C type building including step ladder etc complete.		Sqm
40	Providing and fixing SS 304 mosquito mesh shutter in existing 2 track aluminium sliding window of any size by providing and fixing new U channel, single track 38 x 25 x 1.30mm, interlocking handle section 40 x 18 x 1.5mm, top/bottom bearing handle section 40 x 18 x 1.5mm, side handle section single 40 x 18 x 1.5mm including p/f 6"star lock with all the necessary fittings like screws, along with anodizing filling the gaps with binding material like silicone sealant etc including removing existing aluminum window and refixing the same after necessary addition and alteration for smooth operation and mosquito proof window including p/f new clear pvc and bearing for existing shutter as directed by Engineer incharge Mode of measurement will be full area of single track window.	15.00	Sqm

**************************************	41	Providing and fixing SS 304 mosquito mesh shutter in existing 3 track sliding aluminum window by p/f new U channel ,interlocking handle section 40 x 18 x1.5mm, top/bottom handle section 40 x 18 x 1.5mm, 25mm tee including p/f 6"star lock with all the necessary fittings like screws,along with anodizing filling the gaps with binding material like silicone sealant etc including removing existing aluminum window and refixing the same after necessary addition and alteration for smooth operation and p/f new clear pvc and bearing for existing shutter as directed by Engineer incharge Note: Mode of measurement will be the newly provided mosquito net shutter.	3.00	Sqm
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	42	Providing and fixing SS 304 mosquito mesh shutter in existing 4 track sliding aluminum window by p/f new U channel ,interlocking handle section 50 x 25 x 1.5mm, top/bottom bearing handle section 60 x 25 x 1.5mm, 25 x 25mm tee including p/f 6"star lock with all the necessary fittings like screws,along with anodizing filling the gaps with binding material like silicone sealant etc including removing existing aluminum window and refixing the same after necessary addition and alteration for smooth operation and p/f new clear pvc and bearing for existing shutter as directed by Engineer incharge Note: Mode of measurement will be the newly provided mosquito net shutter.	5.00	Sqm
The second secon	43	Providing and fixing 4 track aluminum sliding window in heavy anodised section 15 micron including framing of aluminium box hollow section of size 123mm x 24mm x 2 mm by p/f track bottom of size 123x31.75x1.5mm, track sides/top of size 123 x31.75x1.5mm, shutter of interlocking section 40 x 18 x 1.29@0.547kg/mtr,bearing bottom 52 x 18 x 1.3mm@0.547kg/mtr,handle section of 40x18x 1.29mm @0.456kg/mtr with 3/8" channel including fixing of 5mm thick plain glass and p/f 8"star lock with all the necessary fittings like rubber gasket, wool foil ,screws,including additional ss 304 mosquito mesh shutter along with anodizing of alumunium section, filling the gaps with binding material like silicone sealant etc including removal of existing MS collapsible gate and keeping it aside as directed by Engineer incharge Contractor will be allowed to take away old/damaged/broken grill and for which Rs.20 per kg deduction will be made from the bill.	20	Sqm
	44	Providing, making and fixing fully opaque aluminium fixed window in balcony railing area using 63mm x 38mm x 1.65mm (not less than 0.942kg/mtr)15 micron / powder coated anodized aluminium single groove partition section and 63mm x 38mm x 1.53mm (not less than 0.942kg/mtr) 15 micron / powder coated anodized aluminium double groove partition section for frame, providing and fixing 5mm thick glass of approved make with glazing clips, rubber gasket etc. complete.	15	Sqm

45	Providing and fixing cup lock type scaffolding system on the exterior side, made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineer- in-charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once for all related work irrespective of duration of scaffolding.	2200	Sqm
46	Providing and erecting arrester/safety net in double layer mesh having first layer 4mm PP rope in 100mmx100mm and second layer with blue fish net with 18mm mesh supported by border rope and tie cord 12mm PP at terrace floor level (6th floor level) to prevent the debris from falling on ground during progress of work and keeping the same during the entire period.	2200	Sqm
47	Providing and fixing Jute kantan (Tarat) screen to the scaffolding of external wall removing the same after the work is over etc. complete		Sq.m
48	Scrapping the entire wall / ceiling surface thoughly with patra & sand paper, filling the holes with lambi / POP, Providing and applying one coat of seal cement primer of IITB approved brand, applying the entire area with readymade wall putty, covering the floor, windows, instruments during priming coat as required etc. Complete.	200	Sq.m
49	Providing and applying two coats of 1st quality Acrylic distemper of approved brand quality colour and shade (of Asian paints, Berger or any other approved product of ICI or Goodlass, Nerolac) on old/new wall surfaces as per manufacturers specification in two coats & necessary levelling to undulated surfaces & preparing the surfaces smooth with the readymade putty – medium finish & POP wherever required with the help of step ladder & cleaning the stains on flooring surfaces etc. all complete as directed.	200	Sq.m
50	Dismantling plain cement concrete work at any height & any fllor including breaking concrete by chiselling, wedging etc., lowering down debrises, stacking the serviceable materials and stacking the debris upto a distance of 50 metres from building or spreading as directed.	25	Cum

51	Laying dry trap/ rubble stone soling of 230mm size thickness including hand packing and compacting using IITB stone including breaking and making/cutting stone/boulders in required size, lead and lift from any where in the campus etc. Complete.		Cum
52	Providing and laying in situ plain cement concrete M-20 of trap metal for foundation and bedding including bailing out water manually, wherever reqired , formwork, compacting and curing as directed.		Cum
53	Providing and fixing in position best quality salt glazed stone ware gully trap with 150mm x 150mm square inlet and 100 mm n.b. outlet conforming to IS 651 including embedding the trap in M-15 (1:2:4) cement concrete, construction of brick masonry chamber 300mm x 300mm internal in 230mm thick brick masonry, plastering, finishing with neat cement floating coat, providing and fixing C. I. cover and frame weighing not less than 7 kg. etc including removing the old damaged gully trap, connecting all old and new inlets and out let pipes including running lines, jointing etc. all complete as directed.		Per Nos
54	Removing the loose/damaged cement concrete top layer/IPS layer/China chips layer of thickness upto 50mm, manually /by mechanical means without damages/ distubring to slab/ beam,column/ Brick bat coba/ any RCC members/ Structural including disposing of material within 50 meter lead as per the direction of Engineer-in-charge (throwing down the material from terrace will not be allowed). Note: This item will be considered for payment only for top layer removal i.e. IPS/China Chips above Brick Bat Coba	170	sqm ″
55	Removing the existing loose and damaged brickbat coba waterproofing treatment including loose/damaged cement concrete top layer/IPS/China Chips layer from the top of terrace up to any thickness(till naked slab) with out making any damages to the roof slab with the use of sharp chisels, electric cutter(pulversing/boshing tool/ breaking machine to avoid crack and vibration to structure) levelling and cleaning the roof surface for providing new specialised waterproofing treatment etc. all complete. The waterproofing has to be cut before breaking by cutter machine in a suitable grid of not more than 60 cm x 60 cm upto any depth without damaging the slab concrete.	85	sqm
56	Removing the loose mortar joints between the brickbat coba waterproofing layers on terrace and brick walls carefully with sharp chisels with out damaging the waterproofing treatment and brick walls cleaning washing with water and filling the joints with cement mortar 1:2 adding recommended waterproofing admixture, filling water for 03 days, testing the leakages etc. complete.	750	sqm

57	Providing and laying brick bat coba waterproofing treatment of 115mm av. thickness consisting of 25mm thick layer in cement mortar 1:3 as base layer with water proofing compound Impermo/Accoproof or any other IIT approved 2% by weight of cement as per manufacturer specification, thoroughly cleaning the surface with water upto the RCC slab, removing all the debris, dust by using vacuume pump applying cement slurry at rate of 2.75kg of blanded cement per sqm coverage before laying the base coat cement mortar and also before the finishing over brick bats—constructing and laying brick bat coba and filling joints while laying of topping cement mortar with waterproof compound as stated above and finishing with 20mm thick cement plaster layer in cement mortar 1:3 with Impermo/Accoproof or any other IIT approved water proofing compound making proper slope to drain off water entirely including watta at the junction of parapet and work upto a height of 300mm or as directed and including finishing the top layer of water proofing treatment with/without china chips as directed curing for 28 days and covering the whole treatment with minimum of Five years' guarantee, on requisite nonjudicial stamp paper etc. complete, including Note: Contractor will provide minimum of 05 years quarantee for work carried out his/her side	10	cum
58	Providing and laying water proofing cement concrete flooring to terrace to average 50mm thickness with 1:2:3 cement concrete laid to proper level and slope using silt free clear river sand including compaction, filling joints, adding recommended waterproofing admixtures at the rate of 1Kg per cement bag, laying in required position flooring of broken china mosaic (broken piece of glazed tiled) of approved colour & pattern over a bed of cement mortar1:4 adding waterproofing compound as per manufacturer's specification, finishing with neat cement float, giving proper slopes, compaction, curing, finishing preparing bell mouth including all lead and lifts etc. testing the roof by ponding with water for 14 days, providing waterproofing guarantee for Minimum of 5 (Five) years in requisite non judicial stamp paper in favour of IITB etc. Complete. Note: In case of leakage during monsoon, contractor has to rectify leakage within 24hrs of intimation given by Estate Office, else Estate Office shall cover the surface with tarpaulin sheet at contractor's risk and cost.	170	sqm
59	Providing sand face plaster externally using approved screened sand in all positions including base coat of 15mm thick in cement mortar 1:4 using water proofing compound per cement bag as per manufacturer specification and curing the same for not less than two days and keeping the surface of base coat rough to receive the sand faced treatment not to exceed 8mm thick in cement mortar 1:4 using water proofing compound per cement bag as per manufacturer specification as per manufacturer specification, finishing the surface by taking out grains and curing for 14 days, scaffolding etc. Complete.	20 /	sqm

60	Lowering down the debris of the existing waterproofing treatment from the terrace by any means without causing dust nuisance and damages to structure, stacking the same as and where directed including cleaning the site complete, transporting it to the authorized dumping ground as directed. 30% void will be deducted in case of truck measurement.		cum
61	Providing and fixing 50 mm dia (n.b) gun metal UTAM make heavy gate valve bearing IS marks including necessary fixtures and fittings such as sockets, union etc. as required and fixing in proper position all complete. contractor will be allowed to take away old gate valve if available and for which 5% deduction will be made of schedule rate of this item. Etc. complete.	4	Per No
62	Providing second class burnt brick masonry with conventional / I.S. Type bricks in cement mortar 1:4 in superstructure including striking joints, racking out joints, watering etc. complete.		cum
63	Dismantling R.C.C. work including breaking concrete by mechanical means, chiselling, wedging etc., cutting the reinforcement, stacking the serviceable materials and stacking the debris upto a distance of 50 metres or spreading/leveling in low laying area as directed by Engineer Incharge. as directed.	1	cum //
64	Providing and casting in situ dense and impervious cement concrete M-25 having proportion not less than 1: 1: 2 trap metal for R.C.C. overhead water tank slab, lintel, beam and chajja as per detailed designs and drawing or as directed by Engineer Incharge including erecting plywood shuttering with strutting, propping etc. and removal of formwork, necessary compaction, curing etc Only steel centering and formwork is to be used.	1	cum

65	Treatment for flat surface /vatta /khurra /parapet top/Junction & support of pipes. 1) Thorough cleaning & base preparation. Cleaning the roof slab by brush and broom, if any cracks found shall be filled with approved cementitious/chemical waterproofing coating for Protecting Concrete and Masonry, mortar and making the surface smooth for receiving the water proofing treatment as per manufacturere's specification. 2) Primer coat. Applying a primer coat of chemical water proofing products/brands as per the approved painting policy, over the prepared surface to obtain good bonding between surface & waterproofing membrane as per manufacturere's specification. 3) 1st coat of waterproofing. Applying 1st coat of chemical water proofing products/brands as per the approved painting policy, on the primer coat as per manufacturere's specification. 4) 2nd coat of waterproofing. Applying 2nd coat of chemical water proofing products/brands as per the approved painting policy. Period for air curing of waterproofing process between the coats as per the manufactureres specification. 5)Geoextilecloth/polyster fleece/Reinforcement Providing and laying Geo-textile/Reinforcement membrane of required thickness in between the layers of waterproofing as per manufacturers specification. Note:- In case of leakage/seepage found during rain, contractor has to cover terrace with tarpaulin sheet to stop the leakage /seepage. If contractor fails to do it during rain, Institute will cover the terrace at contractor's risk and cost.	350	sqm
66	Vertical wall waterproofing for internal & external parapet wall, lift machine room walls & junction of pipes. Providing and applying waterproofing treatment for vertical wall with one coat primer and required coat of chemical water proofing products/brands as per the approved painting policy. The item includes the preparation of vertical surface as per the site condition, filling of the cracks and make the surface smooth to receive the waterproofing treatment as per the manufactureres specification. Necessary arrangement for working platform/ scaffolding/ any mechanical means for execution of the waterproofing treatment to the external vertical walls shall be made by the contractor. Note:- In case of leakage/seepage found during rain, contractor has to cover terrace with tarpaulin sheet to stop the leakage /seepage. If contractor fails to do it during rain, Institute will cover the terrace at contractor's risk and cost.	240	sqm
67	Providing and laying protective top layer of screeding/chemical coatings as per the manufactureres specification to protect the entire waterproofing system. The rates inclusive of lead & lift of material, etc all inclusive.	350	sqm /

NOTE:

- 1) Guarantee as per manufactureres specifications on requisite stamp paper including premansoon visit and necessary maintenance during mansoon to avoid leakage/seepage.
- 2) Lift shall not used for the movement of material and labour.
- 3) Proper and necessary safety measures shall be ensured by the contractor during the entire duration of the work.
- 1) Note: This schedule of work is given for reference purpose only. Contractors are requested to quote your rates online in financial bid.
- 2) If you will engage labourer 20 or more any day, you have to get labour licence as per contract Regulation & Abolition Act 1970 Rule 1971, and also, you have to keep all such recored for inspection to the Principal Employer. If you will engage labour up to 10 Nos. per day, you have to file returns after completion of work as per Building & Construction Act to the Office of Regional Labour Commissioner (Central), Sion, Mumbai.
- 3) This work is to be executed as per the the clauses mentioned in the tender document signed by you. In addition to the existing safety clause of the tender document a penalty of Rs.5,000/- per case will be recovered from the bills of the particular works, in case any such safety violations are noticed.
- 4) 01% amount will be deducted from the bills for safety related measures which will be reimburse along with the final bill.
- 5) Taxes as per government notification time to time.
- 6) Contractor must pay GST Taxes to concern authority within 30 days time limit after receipt of payment from IIT Bombay & said record must be submitted to IIT Bombay Accounts Section, otherwise action will be taken as deemed fit.
- 7) If any malpractices / fraud / negligent professional behaviour or any discrepancy / inconsistency / disparity / deviation / disagreement / dissimilarity / mismatch noticed, their contract will be terminated by issuing one month notice by following legal procedure and will be blacklisted and informed to all Government Authorities and Organisations.

Superintending Engineer (I/C)