



NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 620 015

ESTATE MAINTENANCE DEPARTMENT

NOTICE INVITING TENDERS NO: NITT/EMD//Civil / 2015

TENDER NOTIFICATION

Ref: NIT-T/EMD/ CoW/Civil Works / 2015

Date.13.08.2015

The **Chief of works**, Estate Maintenance Department, NIT-Trichy - 620 015 invites on behalf of The Director, NIT,Trichy-620 015 sealed item rate tenders from the approved and eligible contractors of NITT/CPWD and those in the appropriate list of Tamil Nadu state PWD, Railways, MES and BSNL for the following work. Sealed tenders will be received by the Registrar, National Institute of Technology, Tiruchirappalli-15 up to **3.00 p.m on 27.08.2015**. The tender will be opened at 3.30. p.m of Registrar **Office**.

En.No	Est. Id No	Name of work	Estimate Cost Rs.	E.M.D Rs.	Last Date for submission of tenders	Tender cost
5.1	56	Modification of class room,L Hall, RsC room & extension of parking facilities for ICE Dept.	6,32,592/-	12,660/-	27.08.2015	150/-
5.2	57	Removing, laying tiles, painting in faculty and HOD room in Energy Environmental Dept.	7,89,103/-	15,785/-	27.08.2015	150/-
5.3	61	Modification of rooms 107 - 109 at SJB for ECE dept.	5,10,820/-	10,220/-	27.08.2015	150/-

Tender details in this regard may also be seen in the Notice board of office of the Estate office, Estate Maintenance Department, NIT, Trichy -15 during office hours on any working days.

The tender document can be downloaded from the Institute Web Site www.nitt.edu/home/others/tenders/. The tender cost and Earnest money should be enclosed along with tender schedule in the form of separate **Demand Draft** of any Nationalized bank Drawn in favour of **“The Director, NIT,Trichy – 15**.

**-Sd-
Chief of Works**

NAIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI - 620015
DEPARTMENT OF ESTATE MAINTRNANCE

TENDER DOCUMENT

N/W : Modification of class room,L Hall, RsC room & extension of parking facilities for ICE Dept.

Ref : NITT/EMD/CoW/Civil Works/En. No.5.1(56)/dated 24. 07.2015 & 13.08.2015

Due On 27.08.2015

Name of the Agency :

ITEM No	SUB-HEADS AND ITEM OF WORK	QUANTITY	UNIT	RATE (Rs)	RATE (In Words)	AMOUNT(Rs)
1.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.	6.00	cum			
1.1.1	All kinds of soil					
1.2	Supplying and filling in plinth with river sand under floors, including watering, ramming, consolidating and dressing complete.	1.70	Cum			
2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :	18.50	Cum			
2.1.1	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)					
3.1	Brick work with common burnt clay modular bricks of class designation 3.5 in foundation and plinth in:	3.50	Cum			
3.1.1	Cement mortar 1:4 (1 cement :4 coarse sand)					
4.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).	0.50	Cum			
4.1.1	Sal wood					

4.2	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:	55.00	Each			
4.2.1	100 x 75 x 4 mm					
4.3	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :	20.00	Each			
4.3.1	100 x 10 mm					
4.4	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :	20.00	Each			
4.4.1	100 mm					
4.5	Providing and fixing magnetic catcher of approved quality in cupboard / ward robe shutters, including fixing with necessary screws etc. complete.	10.00	Each			
4.5.1	Double strip (horizontal type)					
4.6	Providing and fixing sliding arrangement in racks/ cupboards/cabinets shutter by with stainless steel rollers to run inside C or E aluminium channel section (The payment of C or E channel shall be made separately)	75.00	Each			
4.7	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality	8.50	Sqm			
4.7.1	1.0 mm thick					
4.8	Providing and fixing cup board shutters with 25 mm thick veneered particle board IS : 3097 marked, exterior grade (Grade I), of approved make, including IInd class teak wood lipping of 25 mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges, complete as per direction of Engineer-in-Charge.	11.00	Sqm			
4.8.1	With decorative veneering on one side and commercial veneering on other side					
5.1	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.	180.00	Sqm			
5.1.1	40 mm thick with 20 mm nominal size stone aggregate					

5.2	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete.	6.00	sqm			
5.2.1	Size of Tile 600x600 mm					
5.3	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge.	82.00	Sqm			
5.3.1	Size of Tile 600x600 mm					
5.4	Providing and laying Vitrified tiles in different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer, in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).	83.00	Sqm			
5.4.1	Size of Tile 600x600 mm					
6.1	12 mm cement plaster of mix :					
6.1.1	1:6 (1 cement: 6 fine sand)	50.00	Sqm			
6.2	Applying priming coat :					
6.2.1	With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood)	50.00	Sqm			
6.3	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :					
6.3.1	Two or more coats on new work	210.00	Sqm			
6.4	Floor polishing on masonry or concrete floors with wax polish of approved brand and manufacture.	570.00	Sqm			
7.1	White washing with lime to give an even shade					
7.1.1	Old work (one or more coats)	230.00	Sqm			

7.2	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :	551.46	Sqm			
7.2.1	One or more coats on Old work					
8.1	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete:	6.00	Meter			
8.1.1	300 mm dia RCC pipe					
9.1	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) :	100.00	Kg			
9.1.1	For fixed portion					
9.1.1.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)					
9.1.2	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)	50.00	Kg			
9.1.2.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)					
9.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.	30.00	Sqm			
9.2.1	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side					

9.3	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):	10.00	Sqm			
9.3.1	With float glass panes of 5.0 mm thickness					
10.1	Brick work with common burnt clay modular bricks of class designation 3.5 in superstructure above plinth level up to floor V level in all shapes and sizes in Cement Mortar 1:6	3.00	Cum			
10.2	Supplying and fixing the 5mm thick sun control film for glazed windows, door, ventilator shutter including the cost of all materila and labour charges etc.	70.00	Sqm			

SIGNATURE OF CONTRACTOR

NAIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI - 620015
DEPARTMENT OF ESTATE MAINTRNANCE
TENTER DOCUMENT

N/W : Removing and laying the Tiles and painting in Faculties and HOD room in Energy & Environment Department

Ref : NITT/EMD/CoW/Civil Works/En. No.5.2(57)/dated 24.07.2015 & 13.08.2015

Due On 12.08.2015

Name of the Agency :

ITEM No	SUB-HEADS AND ITEM OF WORK	QUANTITY	UNIT	RATE (Rs)	RATE (In Words)	AMOUNT(Rs)
1.0	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.	1.00	Cum			
1.1	All kinds of soil					
2.0	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.	950.00	Kg			
2.1	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works					
3.1	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :	210.00	Sqm			
3.1.1	25 mm Thick					
3.2	Providing and fixing Ist quality ceramic glazed 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.	81.00	Sqm			

3.3	Providing and laying Vitrified tiles in different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer, in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).	7.00	Sqm			
3.3.1	Size of Tile 600 x 600 mm					
3.4	Providing and laying Vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS:15622 , of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).	50.00	Sqm			
3.4.1	Size of Tile 600 x 600 mm					

4.1	<p>Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :</p>	85.00	Sqm			
4.1.1	12.5 mm thick tapered edge gypsum fire resistant board conforming to IS: 2095- Part I					
5.1	12 mm cement plaster of mix :	60.00	Sqm			
5.1.1	1:6 (1 cement: 6 fine sand)					

5.2	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :	85.00	sqm			
5.2.1	Two or more coats on new work					
5.3	Floor polishing on masonry or concrete floors with wax polish of approved brand and manufacture.	580.00	Sqm			
6.1	White washing with lime to give an even shade :	600.00	Sqm			
6.1.1	Old work (one or more coats)					
6.2	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade :	1530.00	Sqm			
6.2.1	One or more coats on old work					
6.3	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :	175.00	Sqm			
6.3.1	One or more coats on old work					
7.1	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.	115.00	Sqm			
7.1.1	For thickness of tiles 10 mm to 25 mm					
7.1.2	For thickness of tiles above 25 mm and up to 40 mm					
7.2	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	4.00	Cum			

8.1	Providing, laying and making kerb channel 30 cm wide and 50 mm thick with cement concrete 1:3:6 (1 cement: 3 coarse sand:6 graded stone aggregate 20 mm nominal size) over 75mm bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth etc. complete and as per direction of Engineer-in-charge.	0.80	Sqm			
8.2	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	50.00	Sqm			
9.1	Brick work with common burnt clay modular bricks of class designation 3.5 in superstructure above plinth level up to floor V level in all shapes and sizes in Cement Mortar 1:6	5.00	Cum			

SIGNATURE OF CONTRACTOR

NAIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI - 620015
DEPARTMENT OF ESTATE MAINTRNANCE

TENDER DOCUMENT

N/W : Modification of class rooms 107 – 109 at SJB for ECE Department.

Ref : NITT/EMD/CoW/Civil Works/En. No.5.3(61)/dated 13.08.2015

Due On 27.08.2015

Name of the Agency :

ITEM No	SUB-HEADS AND ITEM OF WORK	QUANTITY	UNIT	RATE (Rs)	RATE (In Words)	AMOUNT(Rs)
1.1	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).	0.40	Cum			
1.2	Centering and shuttering including strutting, propping etc. and removal of form for :	4.00	Sqm			
1.2.1	Suspended floors, roofs, landings, balconies and access platform					
1.3	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand: 4 graded stone aggregate 6 mm nominal size), reinforced with 1.6 mm dia mild steel wire, including centering and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete, excluding plastering of the jambs, sills and soffits	4.00	Sqm			
1.3.1	50 mm thick					
1.4	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.	32.00	kg			
1.4.1	Thermo-Mechanically Treated bars					

2.1	Brick work with common burnt clay modular bricks of class designation 3.5 in foundation and plinth in:	8.00	Cum			
2.1.1	Cement mortar 1:4 (1 cement :4 coarse sand)					
3.1	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, moldings and polishing to edges to give high gloss finish etc. complete at all levels.	3.50	Sqm			
3.1.1	Granite of any colour and shade					
3.1.1.1	Area of slab over 0.50 sqm					
3.2	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.	5.50	Meter			
3.2.1	Granite work					
4.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).	0.15	Cum			
4.1.1	Second class Country wood					
4.2	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	4.00	Each			
4.3	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :					
4.3.1	150 x 10 mm					
4.4	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :	15.00	Each			
4.4.1	100 mm					

4.5	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.	2.00	Each			
4.5.1	Single rubber stopper					
4.6	Providing and fixing bright finished brass 100 mm mortice latch and lock, ISI marked, with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles of approved quality with necessary screws etc. complete.	2.00	Each			
4.7	Providing and fixing cup board shutters with 25 mm thick veneered particle board IS : 3097 marked, exterior grade (Grade I), of approved make, including IInd class teak wood lipping of 25 mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges, complete as per direction of Engineer-in-Charge.	5.00	Sqm			
4.7.1	With decorative veneering on one side and commercial veneering on other side					
5.1	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.	575.00	Kg			
5.1.1	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works					
5.2	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with :	21.00	Sqm			
5.2.1	4.0 mm thick glass panes					
6.1	Providing and laying Vitrified tiles in different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer, in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).	5.00	Sqm			
6.1.1	Size of Tile 600 x 600 mm					
6.2	Providing and laying Vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS:15622 , of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).	130.00	Sqm			
6.2.1	Size of Tile 600 x 600 mm					

7.1	12 mm cement plaster of mix :	75.00	Sqm			
7.1.1	1:6 (1 cement: 6 fine sand)					
7.2	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :	75.00	Sqm			
7.2.1	Two or more coats on new work					
7.3	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :	25.00	Sqm			
7.3.1	Two or more coats on new work					
8.1	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade :	85.00	Sqm			
8.1.1	One or more coats on old work					
8.2	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :	45.00	Sqm			
8.2.1	One or more coats on old work					
9.1	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	16.00	Cum			
9.1.1	In cement mortar					
9.2	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead :	13.00	Each			
9.2.1	Of area 3 sq. metres and below					
9.3	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	16.00	Cum			
9.3.1	In cement mortar					

10.1	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) :	135.00	Kg			
10.1.1	For fixed portion					
10.1.1.1	Powder coated aluminum (minimum thickness of powder coating 50 micron)					
10.1.2	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)	56.00	Kg			
10.1.2.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)					
10.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in paneling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.	22.00	Sqm			
10.2.1	Pre-laminated particle board with decorative lamination on both sides					
10.3	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):	12.00	Sqm			
10.3.1	With float glass panes of 5.0 mm thickness					

SIGNATURE OF CONTRACTOR