## NATIONAL FERTILIZERS LIMITED - PANIPAT

CIVIL ENGINEERING DEPARTMENT

Name of work- Renovation of Washrooms in different locations of Public Building, Office at NFL Panipat.

TENDER	ISSUED	TO:	M/s	

## Estimate Number - NFL/PT/Civil/816

## DUE DATE OF RECEIPT OF TENDERS : 15.07.2024 UPTO 15:00 HOURS

		UNIT			Per Unit Rate	Amount
<b>Sr.</b> No.	DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)
1	CARRIAGE OF MATERIALS up to 01 km					
	By Mechanical Transport including loading, unloading and stacking					
(a)	Lime, moorum, building rubbish, demolishaed material etctc	Cum	75.00			
(b)	Earth	Cum	100.00			
2	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 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.					
	All kinds of soil.	Cum	160.00			
3	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	65.00			
4	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete	Cum	10.00			
	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up	Sqm	500.00			

_		UNIT			Per Unit Rate	Amount
<b>Sr.</b> No.	DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)
	to 1.5 m.					
6	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :					
	1:2:4 (1 cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size).	Cum	30.00			
7	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 above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size).					
	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) : 3 graded stone aggregate 20 mm nominal size).	Cum	19.00			
8	Centering and shuttering including strutting, propping etc. and removal of form for all heights:					
(a)	Foundations, footings, bases of columns, etc. for mass concrete	Sqm	10.00			
(b)	Suspended floors, roofs, landings, balconies and access platform	Sqm	170.00			
(c.)	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm	15.00			
(d)	Columns, Pillars, Piers, Abutments, Posts and Struts	Sqm	15.00			
9	Reinforcement for RCC work ( Tor or Mild ) including bending, binding, straightening and placing in position complete (Tor / Mild steel will be supplied by NFL free of cost).	Kg	1600.00			

		UNIT			Per Unit Rate	Amount
<b>Sr.</b> No.	DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)
	Brick work 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 in all shapes and sizes in : 1:6 (1 cement : 6 Sand)  Note- Brickwork may be executed in Full Brickwork or Half Brickwork, above Plinth or Below Plinth or in repair of damaged walls as per site requirment.	Cum	105.00			
11	Cement Plaster in Fine Sand :					
	12 mm cement plaster of mix : in 1:4 (1 cement: 4 fine sand)	Sqm	500.00			
12	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.					
	Nominal concrete 1:3:6 or richer mix	Cum	12.00			
13	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material with in 50 metres lead as per direction of Engineer - in- charge.	cum	6.00			
	Extra for cutting reinforcement bars mannually / by Mechanical means in R.C.C. or R.B. work(Payment shall be made on the cross sectional area of R.C.C. or R.B. work). As per Direction of Engineer in Charge	Sqm	15.00			
15	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.	Cum	30.00			
	Dismantling doors, windows and clerestory windows (steel or Aluminium or PVC or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead:	Each	50.00			

		UNIT			Per Unit Rate	Amount
<b>Sr.</b> No.	DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)
17	Dismantling of Dado or Tile work in floors, walls and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm	sqm	740.00			
18	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	Sqm	100.00			
	Dismantling W.C. or Urinal or Washbasins of all sizes / Type with all Fitting & Fixtures(flushing tank, waste /pvc pipe etc) including disposal of dismantled materials i/c malba all complete as per directions of Engineer-in- Charge.	Each	75.00			
20	Hacking of CC flooring including cleaning for surface etc. complete as per direction of the Engineer-in-Charge.	Sqm	50.00			
	Providing and fixing water closet squatting pan (Indian type W.C. pan ) with 100 mm sand cast Iron / uPVC P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), PVC Connection pipe with union conforming to IS: 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required: - White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests (W.C seat & Flushing cistern must be of same brand)	Each	19.00			
	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern including flush pipe, with manually controlled device (handle lever), 8mmdia Jet, CI brackets, PVC Connection pipe, flowtrap etc conforming to IS: 7231, with all fittings and fixtures complete, including cutting and making good the walls and	Each	15.00			

					Per Unit Rate	Amount	
<b>Sr.</b> No.	DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)	
	lid. (European W.C seat, Flushing cistern, seat cover must be of same brand)						
	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with fittings, standard size flush pipe(pvc pipe), spreaders with unions and clamps (all in C.P. brass/pvc) with waste pipe & fitting as per IS: 2556, C.I. trap / uPVC Flow Trap, PTMT urinal cock, coupling, waste pipe,outlet grating with hole for waste pipe including painting of fittings and cutting and making good the walls and floor wherever required.						
	Single half stall urinal	Each	27.00				
	Providing and fixing wash basin with C.I. brackets, 15 mm PTMT pillar cock, 32 mm PTMT waste coupling and PVC heavy duty waste pipe, PVC connection pipe with Union, uPVC flow trap, grating with hole of for waste pipe including						
	painting of fittings and brackets, cutting and making good the walls wherever required. White Vitreous China Flat back wash basin size 550x400 mm or as per deirection of Engineer-in-charge	Each	30.00				
25	Providing and fixing/placing wash basin with C.I. brackets, 15 mm dia CP Brass						
	single hole basin mixer of approved quality and make, PVC / hot water Connections including painting of fittings and brackets, cutting and making good the walls wherever required:-						
	(a) White Vitreous China Wash basin size 550x400 mm with a CP Brass waste Coupling,15 mm CP Brass basin mixer of required shape and Size (Table Top wash basin of required Size with necessary fixing arrangements)	Each	3.00				
	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineerin- charge.	Each	3.00				

		UNIT			Per Unit Rate	Amount
<b>Sr.</b> No.	DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)
27	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete	Each	26.00			
28	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with Bevelled Edged of approved make and shade with 6 mm thick hard board backing fixed with SS brackets:  Rectangular shape 1500x450 mm	Each	10.00			
29	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	Each	75.00			
30	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.	Each	42.00			
31	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end): 25 mm nominal bore.	Each	21.00			
32	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :					
(a)	15 mm nominal bore	Each	3.00			
(b)	25 mm nominal bore	Each	3.00			
33	Providing and fixing gun metal non- return valve of approved quality					

			Per Unit Rate		Amount	
DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)	
(screwed end) : 25 mm nominal bore						
Horizontal	Each	1.00		<del>7</del>		
Vertical	Each	1.00				
tank, IS: 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.: Circular Tank	Per Liter	3000.00				
15 mm nominal bore, weighing not less than 32 gms	Each	3.00				
25mm nominal bore, weighing not less than 62 gms	Each	3.00				
102mm, height of 75mm with concealed fitting arrangements, weighing not less	Each	32.00				
	Each	50.00				
Concealed stop cock 15 mm nominal bore, 108 mm long, weighing not less	Each	35.00				
	Each	65.00				
	25mm nominal bore, weighing not less than 62 gms Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth	(screwed end): 25 mm nominal bore  Horizontal  Vertical  Each  Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS: 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.: Circular Tank  Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour.  15 mm nominal bore, weighing not less than 32 gms  Each  25mm nominal bore, weighing not less than 62 gms  Each  Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.  Each  Providing and fixing PTMT bib cock of approved quality and colour. 15 mm nominal bore, 165 mm long, weighing not less than 110 gms  Each  Providing and fixing PTMT stop cock of approved quality and colour:  Concealed stop cock 15 mm nominal bore, 108 mm long, weighing not less than 108 gms  Providing and fixing PTMT angle stop cock 15 mm nominal bore, weighing not	(screwed end): 25 mm nominal bore  Horizontal  Vertical  Each  1.00  Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS: 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank:: Circular Tank  Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour.  15 mm nominal bore, weighing not less than 32 gms  Each  25mm nominal bore, weighing not less than 62 gms  Each  3.00  Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.  Each  32.00  Providing and fixing PTMT bib cock of approved quality and colour. 15 mm nominal bore, 165 mm long, weighing not less than 110 gms  Each  50.00  Providing and fixing PTMT stop cock of approved quality and colour:  Concealed stop cock 15 mm nominal bore, 108 mm long, weighing not less than 108 gms  Providing and fixing PTMT angle stop cock 15 mm nominal bore, weighing not  Each  65.00	(screwed end): 25 mm nominal bore  Horizontal  Vertical  Each 1.00  Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS: 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.: Circular Tank  Per Liter 3000.00  Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour.  15 mm nominal bore, weighing not less than 32 gms  Each 3.00  25mm nominal bore, weighing not less than 62 gms  Each 3.00  Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.  Each 32.00  Providing and fixing PTMT bib cock of approved quality and colour. 15 mm nominal bore, 165 mm long, weighing not less than 110 gms  Each 50.00  Providing and fixing PTMT stop cock of approved quality and colour:  Concealed stop cock 15 mm nominal bore, 108 mm long, weighing not less than 108 gms  Providing and fixing PTMT angle stop cock 15 mm nominal bore, weighing not  Each 65.00	(screwed end): 25 mm nominal bore  Horizontal  Vertical  Each 1.00  Froviding and placing on terrace (at all floor levels) polyethylene water storage tank, IS: 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank:: Circular Tank  Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour.  15 mm nominal bore, weighing not less than 32 gms 25mm nominal bore, weighing not less than 62 gms  Each 3.00  Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.  Each 3.00  Froviding and fixing PTMT bib cock of approved quality and colour. 15 mm nominal bore, 165 mm long, weighing not less than 110 gms  Each 50.00  Providing and fixing PTMT stop cock of approved quality and colour: Concealed stop cock 15 mm nominal bore, 108 mm long, weighing not less than 108 gms  Providing and fixing PTMT angle stop cock 15 mm nominal bore, weighing not less  Each 55.00	

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<b>Sr.</b> No.	DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)
40	Providing and fixing PTMT grating of approved quality and colour-					
(a)	125 mmnominal dia with 25 mm waste hole	Each	15.00			
. ,	Rectangular type with openable circular lid -150 mm nominal size square 100 mm diameter of the inner hinged round grating	Each	2.00			
	Providing and fixing PTMT swivelling shower, 15 mm nominal bore, weighing not less than 40 gms	Each	4.00			
	Providing & fixing uplasticised PVC connection pipe with brass unions :15 mm nominal bore with 45 cm length	Each	5.00			
	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings (Socket, Reducer(of required dia at site), nipple, Cap, plug, Reducer -Tee, Elbow(bend), Tee, Union, Cross Tee, Coupler) i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.  Concealed work, including cutting chases and making good the walls etc.					
			250.00			
(a)	20 mm nominal bore.	mtr	350.00			
(b)	25 mm nominal bore.	mtr	30.00			
	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings (Socket, Reducer(of required dia at site), nipple, Cap, plug, Reducer -Tee, Elbow(bend), Tee, Union, Cross Tee, Coupler) i/c fixing the pipe with clamps at required spacing. This includes jointing of pipes & fittings					

		UNIT			Per Unit Rate	Amount	
Sr. No.	DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)	
	with one step CPVC solvent cement including testing of joints complete as per direction of Engineer in Charge. (exposed on wall at all locations)						
	20 mm noninal outer dia pipe	Mtr	110.00				
	25 mm noninal outer dia pipe	Mtr	100.00				
45	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.  15 mm nominal bore-	each	12.00				
46	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge Coupling/ Socket For 15.88 mm outer dia	Each	5.00				
47	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931. :-15 mm nominal bore	Each	8.00				
48	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931. :- 15mm nominal bore	Each	12.00				
49	Constructing brick masonry manhole in cement mortar 1:4 (1 cement: 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement: 4 coarse sand: 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design:						

					Per Unit Rate	Amount	
<b>Sr.</b> No.	DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)	
	Inside size 90x80cm and 45cm deep including C.I. cover with frame (medium duty) 455 x 610 mm mm internal diamensions total weight of cover and frame to be not less than 38kg (weight of cover 23 kg and weight of frame 15 kg.  With common burnt clay FPS(non modular) bricks of class designation 7.5	Each	10.00				
50	Providing & fixing square mouth S.W. gully trap class SP -1 complete with C.I. Grating brick masonry chamber with water tight CI cover with frameof 300X300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design						
	180x 150 mm size P Type with Common burnt clay FPS( Non Modular ) bricks of class designation 7.5	Each	30.00				
51	Cleaning and desilting of gully trap chamber, including removal of rubbish mixed with earth etc. and disposal of same, all as per the direction of Engineer-in-charge.	Each	10.00				
52	Providing and fixing 18 mm thick gang saw cut, mirror polished, pre-moulded and prepolished, machine cut for kitchen platforms, vanity counters, doors/window sills, steps, skirtings, floor, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm or more thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy, including rubbing, curing, Moulding and Polishing of edges (visible faces) to give high gloss finish etc. complete at all levels.						
	Granite of any colour and shade decided by NFL Engineer - Area of slab 0.50 sqm or any area	Sqm	100.00				
53	Extra for Fixing, Moulding and Polishing of edges (front and side faces) to give high gloss to marble /granite stone, over and above corresponding basic item, in facia, nosing and drops of width upto 150 mm with epoxy	Mtr	10.00				

			UNIT		Per Unit Rate	Amount	
<b>Sr.</b> No.	DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)	
	resin based adhesive, including cleaning etc. complete.						
54	Providing and fixing Ist quality ceramic glazed wall tiles (Rectified) conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades including highlighter tile(s) as required of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm or more thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	Sqm	900.00				
55	Providing and laying vitrified floor 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 make, in all colours, design, pattern, finish and shades laid over floor, steps, skirting etc laid on 20mm thick cement mortar 1:4 (1 cement: 4 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.  (Anti-Skid, Anti-Static Doubly Charged Vitrified Tile of Any Colour and Size decided by NFL Engineer)	Sqm	225.00				
	size 400x400 or 500x500 or 600x600 or 300x300 mm						
56	Providing and fixing on wall face unplasticised - Rigid PVC rain waterpipes conforming to IS:13592 Type A including jointing with sealring and Chemical solvent, fixing the pipe with clamps conforming to IS: 5382 leaving 10mm gap for thermal expansion.						
(a)	Single socketed pipes- 75 mm diameter	mtr	310.00				
(b)	Single socketed pipes- 110 mm diameter	mtr	300.00				
57	Providing and fixing on wall face unplasticised PVC moulded fittings/ accessoriess for unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type- A including jointing with seal ring conforming to IS:5382						

	<u></u>	UNIT			Per Unit Rate	Amount
<b>Sr.</b> No.	DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)
INO.	leaving 10 mm gap for thermal expansion.					
(a)	Coupler 110mm	each	2.00			
(b)	Bend 87.5 degreee 110mm bend (with door or without door)	each	70.00			
(c.)	Shoe(Plain) 110mm shoe	each	2.00			
(d)	Single Tee / Y-Bend 110 x 110 x 110 mm - (with door or without door)	each	50.00			
(e)	Single Tee / Y-Bend without door 75 x 75 x 75 mm - (with door or without door)	each	75.00			
(f)	Coupler 75 mm	each	2.00			
(g)	Bend 87.5 degreee 75 mm bend- (with door or without door)	each	80.00			
(h)	Shoe(Plain) 75 mm shoe	each	2.00			
	Providing and fixing factory made PVC door frame made of PVC extruded sections having an overall dimension as below (tolerance ±1mm), with wall thickness 2.0 mm (± 0.2 mm), corners of the door frame to be Jointed with galvanized brackets and stainless steel screws, joints mitred and Plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19 mm and 1mm (± 0.1 mm) wall thickness and 3 nos. stainless steel hinges(4") fixed to the frame complete as per manufacturer's specification and direction of Engineerin- charge (Brand, Colour, Shade, Texture, Finish to be finalized by NFL Engineer)	Meter				
	Extruded section profile size 48x40 mm		260.00			

		UNIT			Per Unit Rate	Per Unit Rate Amount		
<b>Sr.</b> No.	DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)		
	30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm (± 0.2 mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm (± 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness . The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge. (Brand, Colour, Shade, Finish, Texture to be finalized by NFL Engineer)	Sqm	80.00					
	Providing and fixing heavy duty aluminium tower bolts with chrome fishing, 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:							
	200x10 mm	Each	100.00					
	Providing and fixing heavy duty aluminium handles with chrome finishing, 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:							
	125 mm	Each	100.00					
	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete : (copper oxidized as per IS: 1378)	Each	40.00					

					Per Unit Rate	Amount
<b>Sr.</b> No.	DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)
	250 x 16 mm					
63	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 to be paid for separately):					
(a)	For Fixed Portion:- Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	100.00			
(b)	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) :- Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	150.00			
64	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.	0000	20.00			
	Pre-laminated particle board with decorative lamination on both sides	sqm	20.00			
	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the					

		UNIT		Per Unit Rate		Amount
<b>Sr.</b> No.	DESCRIPTION OF ITEM		Quantity	Figure	Words	(Rs.)
	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	sqm	5.00			
66	Providing and fixing white viterous china pedestal for wash basin complete with recessed at the back for reception of pipes and fittings.	each	1.00			
	Execution of any job non-susceptible to measurement which includes all minor consumable material, tools and tackles and the payment shall be on basis of working hours (Major consumable / material shallbe supplied by NFL and the decision of the Engineer-in-Incharge in this regard shall be final.) (Per Day means 8 hours/day)					
(a)	Skilled ( Mason / Carpenter / Plumber / Technician etc.)	Per Day	10.00			
(b)	Unskilled.	Per Day	30.00			