

**TENDER FOR CONSTRUCTION AND DEVELOPMENT WORKS OF 38 Nos.
STUDENTS HOSTEL BUILDINGS AT
NALANDA UNIVERSITY, RAJGIR, BIHAR.**



MATERIAL MAKE LIST

NAME OF WORK :- CONSTRUCTION AND DEVELOPMENT WORKS OF 38 NOS. STUDENT HOSTEL BUILDINGS AT NALANDA UNIVERSITY, RAJGIR

SUBJECT: APPROVED MAKES FOR CIVIL WORK

SR. NO.	ITEM DESCRIPTION	APPROVED MAKE
1	Chlorpyriphos - Anti termite	UPL limited
		Bayer crop science ltd
		PI industries ltd
		Applicator
		Rentokil PCI
2	Sepration membrane of impermeable plastic sheeting of 125 micron thick.	CPC Pest control
		Surti pest control
		Supreme silpaulin
		Venus plastic
		Madras canvass
3	Cement	Vijay packaging
		ACC Limited
		UltraTech cement LTD.
		Ambuja Cements Limited
		Birla gold
4	White Cement	J.K. white cement
		Birla white cement
		Travankor cement
		5
6	Plasticizers/ Admixture/ Construction chemicals/Tile adhesive	SAIL
		RINL-Vizag Steel
		JSW steel LTD
		Fosroc Chemicals (India) Private Limited
		Sika India Private Ltd.
7	Tapered/parallel threaded couplers (all dia.)	BASF India Limited
		Mapei
		MYK Arment
		Sanfield India Limited
		SNTF Mechanical Splicing System
8	Backer rod/Filler board	Lokpal industries- noida
		Unitech
		Fosroc Chemicals (India) Private Limited
		Sika India Private Ltd.
		Supreme Industries
9	Polysulphide/ Epoxy sealant	Fosroc Chemicals (India) Private Limited
		Sika India Private Ltd.
		BASF India Limited
		MYK Arment
		Mapei
		Cico technologies ltd

		Pidilite
10	Expansion joint flexi strip	Fosroc Chemicals (India) Private Limited
		Sika India Private Ltd.
		MYK Arment
		MC Bauchemie (I) Pvt. Ltd.
		BASF
11	Core cutting	Hilti (India) Pvt. Ltd.
		Fischer
		Wuerth India pvt.Ltd.
		Dishmaan
		Shakti Greens Projects Pvt. Ltd.
12	GRC jali	Lithos studio
		Swastik GRC jali
		Everest
13	WPC door-window frame, flush door fluted panel	Green plastwood
		Century
		Winstone
14	Plywood	Green ply
		Century ply
		Kitply
		Duro
15	Flush doors	Green ply
		Century ply
		Kitply
		Duro
		Kutty's
16	High pressure laminates	Greenlam
		Formica
		Sunmica
		Merino
17	Glass	St. gobain
		Modiguard
		AIS
18	Natural wood Veneer	Greenply Industries Limited
		Century ply
		Kitply
		Duro
19	Non asbestos fibre cement board	Shera
		Visaka -v board
		Everest
		Century ply
		NCL Industires (Bison)
20	Aluminium extrusions	Jindal
		Hindalco
		Balco
21	Hardware & door fitting	Kich
		Dorma

		Dorset
		Hafele
		Geze
		Ozone
22	Mirror	Saint Gobain India Pvt. Ltd.
		Pilkington
		AIS
23	Structural steel	TATA steel ltd.
		Sail
		RINL
		JSW steel ltd
		JSPL
24	Dash fasteners/ anchor bolts	Hilti
		Fischer
		Bosch
25	Ceramic tiles	Kajaria
		HR Johnson
		Orient Bell
		Somany
26	Vitrified tiles	Kajaria
		HR Johnson
		Orient Bell
		Somany
		AGL
27	Polymer modified cementitious grout/ mortar/ non-shrink grout/ epoxy grout	Pidilite
		Fosroc
		MYK laticrete
28	Autoclaved Aerated concrete block	Brixo
		Optima cube
		Biltech
		Magicrete
		Ultratech x-tralite
29	Paints	ICI
		Nerolac
		Asian paints
		Berger paints
		Jenson & nicholson
30	Epoxy paint	Asian Paints Ltd.
		ICI
		Berger Paints India LTD
31	Melamine polish	Asian paints
		Burger
		ICI dulux
		Nerolac
32	Silicon Water repellent	Waker
		ICI
		FOSROC
		MYK schomberg
		BASF

33	Waterproofing compound	FOSROC
		Cico
		MC bauchemie
		MYK schomberg
		BASF
		Sika
	Applicator	India water proofing cervices
		Vipul Water Proofing
		FOSROC
34	Hydro swelling water bar	BASF
		Sika
		FOSROC
35	Atactic polypropylene (app membrane)	STP
		Texas
		BASF
		FOSROC
		Sika
36	Geotextile lining	Garware
		Macafferi
		Du-Pont
		Terram
37	Paver block,kerb stone, tactile block	Vyara tiles
		Super tiles
		Savar infra - patna
38	Safety and road marking paint & equipment	3M
		Protector
		Ananta Inc
		Asian Paints Ltd.

NAME OF WORK :- CONSTRUCTION AND DEVELOPMENT WORKS OF 38 NOS. STUDENT HOSTEL BUILDINGS AT NALANDA UNIVERSITY, RAJGIR

SUBJECT: APPROVED MAKES FOR **PLUMBING WORK**

SR. NO.	ITEM DESCRIPTION	APPROVED MAKE
1	Americans with disabilities act toilet Set	Jaquar / Hindware / Parryware / Cera / Kohlar
2	Sanitary ware	Jaquar / Hindware / Parryware / Cera / Kohlar
3	C P Fittings & Bathroom Accessories	Jaquar / Hindware / Parryware / Cera / Kohlar
4	Cistern and WC Connector	Jaquar / Hindware / Parryware / Cera / Kohlar
5	Stainless Steel Sink	Jaquar / Hindware / Parryware / Cera / Kohlar
6	Geyser	Jaquar/ Stiebel Eltron/ AO Smith
7	C P Grating	Chilly/ ACO/ Neer/ Kessel
8	UPVC Pipes/ PVC Agriculture Pipes /Fittings	Ashirvad/ Astral/ Supreme / Finolex
9	SWR Pipes/Fittings	Ashirvad/ Astral/ Supreme / Finolex
10	Mineral Reinforced Polypropylene Pipes/Fittings	Wavin/ Huliot/ Astral Silenco /
11	Rain Water Outlet/ Scupper drain/Parking/Garden Drain	Chilly/ ACO/ Neer/ GMGR/ Kessel/ MEA/ MIFAB
12	HDPE Pipe	Reliance/ Time/ Delta
13	HDPE Electrofusion Fittings	Kimplas/ Presto/ CPL
14	RCC Hume Pipes	Indian Hume Pipe/ Jay Ambe/ Pranali/ Southern Concrete
15	FRP Manhole & Gully Cover	Thermodrain/ Everlast
16	CPVC Pipes/ Fittings	Ashirvad/ Astral/ Supreme/ Finolex
17	Polyethylene (PE-Xc) pipe	TECE/ Geberit/ Veiga
18	Nitrile Rubber insulation	Inner Engineering/ Armacell/ Aerocell
19	Ball Valve Manual & Electric Actuator operate	Lehry/ Honeywell/ Audco/ L&T/ Kitz
20	Gate/Sluice Valve Manual & Electric Actuator operate	Lehry/ Honeywell/ Audco/ L&T/ Kitz/ Indian Valve Company
21	Butterfly Valve manual & Electric Actuator operate	Lehry/ Honeywell/ Audco/ L&T/ Kitz/ Indian Valve Company
22	Electrical Actuator	Lehry/ Honeywell/ Beacon Rotork/ Auma/ Limitork, Marsh/ Bray
23	Non-Return Valve	Lehry/ Honeywell/ Audco/ L&T/ Kitz/ Indian Valve Company
24	Strainer	Honeywell/ Audco/ L&T/ Kitz
25	FRP Manhole & Gully Cover	Thermodrain/ Hp International
26	Ductile Iron Pipes & Fittings	Electro Steel Casting/ Jindal SAW Ltd/ Tata/ Kejriwal Casting
27	Expansion Bellow	Dhruv/ Audco/ Precision/ Techno flex/ Precise Eng./ Flexican Bellows & Hoses
28	Pressure / Compound Pressure Gauges	Bells/ H. Guru/ Waree

29	Online Monitoring system	E&H/ ABB
30	Air Valve	Lehry/ Honeywell/ Audco/ L&T/ Kitz/ Indian Valve Company
31	Polyethylene water storage tank	Syntex/ Supreme
32	Flow Meter	ABB/ E+H/ Krohne/ Siemens/ Honeywell
33	Water Cooler	Oasis/ WAE/ Blue star/ Voltas/ Eureka Forbes
34	Online Water Chiller Plant	Oasis/ WAE
35	Ductile Iron Manhole Cover	Kejriwal/ Bengal Iron Corporation
36	Water Level Indicator	Sigma/ Honeywell/ Auto Pump/ Pumptrol
37	Hydro Pneumatic System	Grundfos/ Xylem/ KSB/ Lubi
38	Anti-Vibration Mount Pads	Cori/ Flexionics/ Kanwal (Easyflex)/ Resistoflex/ Vimpa
39	Water Treatment & RO Plant	Gopani/ Ion Exchange/ Thermax/ Power H2O
40	Sewage Treatment Plant	Ion Exchange/ Thermax/ Aakar Engineer/ Power H2O
41	Submersible Pumps	Grundfos/ Xylem/ KSB/ Lubi
42	De watering Pump for Rain water	Grundfos/ Xylem/ KSB / Lubi
43	Mud pump for Drainage	Grundfos/ Xylem/ KSB/ Lubi
44	UV System	Alfa UV/ Wallance & Tiernan/ Aquatech/ Sukrut
45	EOT Crane	W.H. Brady & Co. Ltd/ Hercules Hoist Ltd/ Eddy Cranes
46	Bearing for all equipments	SKF/ FAG/ NBC
47	Water level indicator	Sant/ Sigma/ Gelco/ Honeywell
48	Float / buoyancy / displacer level switch	ATMI, E+H/ Nivelco/ P+F/ Pune Techtrol/ SBEM/ Baumer
49	Float & Board type Level Gauge	Nivo, Pune Techtrol/ Revathi/ S.B. Electro/ Levcon
50	Starter	SIEMENS/ L&T
51	Cables	Havells/ Finolex/ Polycab/ RR Kabel
52	Led indictors	ESBEE (L & T)/ SIEMENS/ SCHNEDIER/ ABB/ RAAS CONTROL/ TEKNIK/ VAISHNO/ BINAY
53	Push button	L & T/ SIEMENS/ SCHNEIDER/ ABB/ RAAS CONTROL/ BINAY
54	Selector switch	Legrand (Myrius)/ Schnieder (Opale)/ Havel's (Crabtree-Verona)
55	Epoxy cast resin c.t	L & T/ PACTIL/ ASHMOR/ KAPPA/ C & S/ SILKANA/ GILBERT/ PRECISE
56	Electronic motor protection device	SCHNEDIER/ L & T/ SIEMENS/ C & S/ ABB/ SOFTHARD
57	Cable termination kit (lugs & glands)	Compression type/ Heavy duty and deep threding with rubber-ring and double washers. (Sample to be approved)/ HMI, Comet/ Dowells/ 3-D (Copper long nack)
58	Digital meters	L&T/ Salzer
59	Analog meters	MECO/ RISHLINE/ IMP/ AE/ RISHABH (L

		& T)
60	Panel board manufacturer	CPRI APPROVED (TO BE GOT APPROVED PRIOR TO SUPPLY)
61	Accessories of wiring	GEWISS / LEGRAND / MG / LK / PRECISION / ABB / ANCHOR / JAINEX / CLIPSEL / OR EQUIVALENT
62	Programmable logic controllers (plc)	ABB, HONEYWELL, ROCKWELL (ALLEN BRADLEY), SCHNEIDER, SIEMENS
63	Auxiliary control relays	OEN, PLA, OMRON, PHOENIX, ABB
64	Cast aluminum junction boxes	Ex-Protecta, CEAG, Sudhir, Baliga
65	Panel enclosures	Eldon, BCH, Enklotek, Rittal, Bartakke
66	Panel mounted indicator	Masibus, Multispan, Rdx, Selec
67	Instrument Valves and Manifolds, Tube Fittings, Pneum. Brass Fittings	Excel Hydropneumatic, Industrial Enterprise, Festo, Multimetal Industries, Placka, SMC, Technomatic
68	Miniature relay	ABB, OVEN, Omron, Phoenix
69	Indication pilot lamps (led type)	Teknic, Schneider, Siemens, equi. reputed
70	DC Power Supplies (DIN Rail mounted)	Phoenix, Omron, Aplab, IFM, equi. reputed
71	Terminals	Elmex, Phoenix, Wago, Connectwell
72	Panel wires	Finolex, Havell's, R R Kabel, Lapp Cable, L & T
73	Panel illumination	Philips, Crompton, GE
74	Cable glands	Ex-protecta, Braco, Sudhir, Comet, Connectwell, HMI
75	Receiver indicators (panel mounted)	ABB, Masibus, Nivam, Nishko, Electronet, Multispan
76	Ethernet switches	D-link, Phoenix, Alen Bradely, Siemens
77	Instrument cables (power, signal, control)	Associated Cables, Brooks Cable, Udey Pyro Cable, Havells, R.R. Kabel
78	Signal (analog) cables	Associated Cables, Associated Flexibles & Wires, Brooks Cables, Delton, Havells, Uday Pyro, Poly cab
79	Communication cables	D-Link, Delton, Finolex, Lapp Cable, Molex
80	Ultrasonic type level / diff. Level / loh & rof / open channel flow transmitter	ABB, E+H, Krohne, Siemens, Vega
81	Hydrostatic type level transmitter	ABB/Altop/Detriv/General Instruments Consortium (Gic)/Wika
82	Differential pressure / pressure / temperature transmitter	ABB, Emerson, E+H, Honeywell, Siemens, Yokogawa
83	Process instruments	Siemens / Abb / Schneider
84	Orifice plate	Baliga / Micro-Precision / Placka / Star Mech / Daniel
85	Level sensor & transmitter	Toshiwal/Level Tech System/Sbem
86	TEFC Motor for Mechanical Screen	Siemens/ABB/Kirloskar/Bharat Bijlee/WEG/AEG,
87	Motor	KEC/KBL/Jyoti/Crompton/Siemens/NGEFB/HEL/Havells

88	Chain pully block	W.H. Brady & Co. Ltd/Hercules Hoist Ltd/Eddy Cranes
89	Manual screen	JAPS / JASH / TRIVENI / JOHNSON / SHIVPAD
90	Gear box	Greaves/Elecon/Alen Berry/ Mazda
91	Mechanical seals	EAGLE SEALS (SEALOL) / DURAMETALLIC / BURGMAN
92	Fasteners	PRECISION / DARUKHANAWALA / ECHJAY / TATA / SUNDARAM
93	Tools	EVEREST / GEDOR / JHALANI / MEKASTER / TAPARIA

Note:

1. All materials shall conform to the relevant standards or code of Bureau of Indian Standards and shall have ISI mark validated for the period of installation and take over. They shall also fulfil all hydraulic tests at site and shall be free from all noticeable deficiencies during the guarantee period as well.
2. All makes and product catalogue numbers should be got approved from Architect before procurement by the contractor.
3. Client/Consultant can insist on any one particular make.

NAME OF WORK: CONSTRUCTION AND DEVELOPMENT WORKS OF 38 NOS. STUDENT HOSTEL BUILDINGS AT NALANDA UNIVERSITY, RAJGIR		
SUBJECT: APPROVED MAKES FOR ELECTRICAL WORK		
SR. NO.	ITEM DESCRIPTION	APPROVED MAKE
1	Rigid PVC Conduit	ISI & FIA approved & manufactured from virgin material. Astral, Precision PPI., AKG, Panasonic
2	Accessories for conduit	Same make as of pipe.
3	Flexible Copper Wires	FRLS type : Havell's, Finolex, RR Kabel, KEI
4	Switches	MK(Blenze), Legrand(Myrius), Havell's(Carabtree-Verona), Schneider(Opale), Siemens(Marq)
5	Light Fixture	Phillips, Wipro, Klite, Regent, Crompton, Keselec Schreder, Havell's (As suggested by architect - Sample to be approved)
6	FTL/CFL/Lamps or any kind of light source	Osram, Philips, GE
7	Ceiling Fans	Crompton, Usha
8	Fan box	Heavy duty PVC
9	Exhaust Fan	Crompton, Almonard, Bajaj
10	Call bell	Anchor Ding Dong type
11	PVC tape	Steel grip, Anchor
12	Distribution boards	Legrand (MDS-lexic - DX3), Schneider (MG - Acti 9N), L&T (AU), ABB (iTUS), Siemens (8GB) - Factory fabricated double door type
13	MCB/RCCB/RCBO & Acc	Legrand (MDS-lexic - DX3), Schneider (MG - Acti9N), L&T (AU), ABB - SB200M, Siemens (5TJ)
14	LT Cables	Finolex, Havells, Polycab, KEI
15	Panel Fabricators	CPRI Approved Panel builder
16	Load Manager / Energy Meter	Conzerve, Secure, Elmeasure, L&T, Siemens (Suitable for PC Connected and LAN with open protocol, Sample to be approved)
17	Meters (Digital : V,A,PF etc)	Conzerve, Secure, Elmeasure, L&T
18	Timer	Theben, Legrand, L&T
19	APFC Panel	Datar, Epcos, Power Matrix, Shreem, Neptune Ducati, L&T
20	APFC Relay	Beluk (Germany), Conzerve, Neptune Ducati, L&T, Secure
21	Capacitor (APP type)	L&T, Conzerv, Shreem, Legrand
22	Relay	Areva, Siemens, L&T, ABB, CSPC, Schneider
23	MCCB	Legrand - DPX-3, Schneider (MG - NSX), L&T (D-sine DZ), ABB (T-Max), Siemens (3VJ)
24	ACB	Legrand - DMX-3, Schneider (MG Masterpact NW), L&T (U-Power Omega), ABB (E-max-2), Siemens (3WJ)
25	On Load Changeover	C&S, HPL, Havell's
26	Connectors	Elmex, Wago, Connectwell
27	SFU - Switch Fuse Unit	Schneider MG, Siemens, L&T, Havell's (AC 23 duty only)
28	HRC Fuses & Fuse-Base	Schneider MG, Siemens, L&T, Havell's
29	Glands	Compression type heavy duty with rubber ring &

		washers – HMI, Comet, Dowells
30	Cable Lugs	Dowells, 3-D (Copper long neck)
31	Metal Clad & Weather proof Plug-socket	Legrand, Indoasian, RR PCE, BCH, Schneider
32	Button holder / Angle holder / Ceiling rose	Anchor, CPL
33	M.S. Conduit ISI	BEC, Steel Craft, AKG
34	M.S. Boxes	Fabricated out of CRCA sheets / Angle / Strip continuously welded with powder coating (sample to be approved)
35	Cable Tray	Indiana, Rushabh Steel, Profeb
36	Raceway	MK (Ega), Legrand, OBO
37	Chemical Type Earthing	Cape, OBO, Axis
38	Lightening Surge Protector	Cape, OBO, JEF, Axis
39	DB Surge Protector	Legrand, Schneider, OBO, L&T
40	Anchor Fastener	Hilti, 3M, Wurth
41	Fire Stopper / Mortar	Hilti, OBO, Wurth (Promat)
42	Fire Stop Sealant / Foam	Hilti, OBO, Wurth (Promat)
43	Fire Resistant Cable Coating	Hilti, OBO, Wurth (Promat)
44	Current Transformer	AE, Virat, Narmada
45	Indication Lamp	LED Type : Schneider, Sumo, L&T, RASS
46	Voltage Selector Switch	L&T, Salzer
47	Ammeter Selector Switch	L&T, Salzer
48	Power Pack	Gogate / Eq.
49	Thermoplastic Boxes	Hensel, Spelsberg
50	UPS	Emerson, Eaton, Delta
51	Battery	Global (Rocket), HBL (Life), Exide, Amarraja, Hitachi
52	Isolation Transformers	Automatic Electric, Servomax, Aplab
53	Lightning Protection System	Cape, OBO, Axis
54	Light Pole	Reytek, Bajaj, K-Lite
55	Gas based Fire Suppression System	Ceasefire, Firetrace
56	ATS	ASCO, Socomec, ABB
57	Occupancy Sensors	Honeywell, Legrand, Finder
58	Rubber Mat	Duratuf, Vardhman

Special Notes:

- The successful tenderer will have to supply the makes from above in consultation with the Client/Architect/Consultant without any extra cost.
- tender, in covering letter of separate letter enclosure. However, the final decision for accepting make specified by tenderer would be of client/Architect/Consultants.
- As far as possible, the successful tenderer will have to place order directly to the manufacturer OR it's authorized dealer.

- The Client/Architect/Consultants have right to check the challans of supplier.
- The MCB and MCB DBs must be of same make.
- Make of components required to be used by contractor to complete the installation, if not mentioned anywhere, shall be required to GOT IT APPROVED by Client/Architect/Consultant before installation in writing manner.
- Within a week of work order, the contractor shall submit the sample of each item / component of above mentioned approved make for the approval of the Client/Architect/Consultant.

NAME OF WORK: CONSTRUCTION AND DEVELOPMENT WORKS OF 38 NOS. STUDENT HOSTEL BUILDINGS AT NALANDA UNIVERSITY, RAJGIR

SUBJECT: APPROVED MAKES FOR **FIRE FIGHTING SYSTEM**

SR. NO.	ITEM DESCRIPTION	APPROVED MAKE
1	Air Release Valve	Swati/ Shah Bhogilal/ Sant/ NVR
2	Air Vessel	Anu Designer/ Diamond Machinery/ Lalit Engineers
3	Batteries	Exide/ AMCO/ Amar Raja
4	Butterfly Valves, Sluice Valve and Non return Valve	Sant/ Zoloto/ NVR
5	Centrifugal Pumps	Mather & Platt - Wilo/ Kirloskar brothers/ Lubi
6	Coating wrapping material for Underground pipe	IWL/ STP/ Tikidan
7	Fire Bridged Inlet Connection	Swati/ Safex/ Shah Bhogilal
8	Fire Extinguishers	Kanex/ Safex/ Minimax
9	Ball Valve	Sant/ Zoloto/ NVR
10	Hose Reel drum & Hose reel	Swati/ Safex/ Shah Bhogilal
11	M. S. pipes	TATA/ Jindal (Hissar)
12	Motor	ABB/ CGL/ Siemens/ Havells
13	Pressure gauge	H. Guru/ HD/ Wika
14	Pressure switch	Honeywell/ Indfoss/ Switzer/ System Sensor
15	Power and Control cable	Finolex/ Havell's/ Polycab
16	Panels	CPRI Approved
17	Strainer	Sant/ Zoloto/ NVR
18	Signages	Prolite/ Signsutra/ Instamark
19	Hangers supports / Anchor Fastener / Pipe Supports	Hilti / Fischer / Wurth
20	Forged fittings	Sant / Vijay Fit / NVR

NAME OF WORK: CONSTRUCTION AND DEVELOPMENT WORKS OF 38 NOS. STUDENT HOSTEL BUILDINGS AT NALANDA UNIVERSITY, RAJGIR

SUBJECT: APPROVED MAKES FOR HVAC WORK

SR. NO.	ITEM DESCRIPTION	APPROVED MAKE
1	Air handling units	Zeco/ Edgetech/ Systemair/ Citizen/ Aermac/ Daikin
2	Water Cooled VRV	Daikin/ Samsung/ Mitsubishi Electric/ Carrier Midea/ Mitsubishi Heavy/ LG
3	G.I. threaded rods	Hi tech/ Rolastar/ Diamond/ Mupro/ grippl/ hilti
4	Copper tubes (Ref. Pipes)	Rajco/ Mandev
5	Ceiling suspended fans (propeller)	Kruger/ System Air/ Greenheck/ Airflow/ Humidin
6	Closed cell cross link polythene	Armaflex/ Vedoflex/ K-flex/ ALP
7	EPDM nitrile rubber insulation	Armaflex/ Vedoflex/ K-flex/ ALP
8	Extruded polystyrene insulation	Owens-Corning/ Pactiv/ Vedoflex/ K-flex
9	Flexible pipe	Armaflex/ Aeroflex/ Dunlop/ Resistoflex/ Kanwal
10	Starbond 30-36 solution	Paramount/ Polytrear
11	Adhesive for pipe	Armaflex 520/ Polygrip/ Armaflex/ Vedoflex/ K-flex/ ALP/ Pidilite
12	Anchor fastener	Fischer/ Hilti/ Metaflex/ Diamand
13	Anti vibration mounting & flexible connections	Cori/ Dunlop/ Easyflex/ Flexionics/ Resistoflex
14	Welding rod	Advani Orlekon/ Cosmos/ Esab/ Super Bond (S)
15	Fire Sealant	BTMH Engineering/ Birla 3 M/ Hilti/ Promat
16	Anti Vibration Mounting & Flexible Connections	Cori/ Dunlop/ Easyflex/ Flexionics/ Resistoflex
17	Paints	Asian Paints/ Berger/ ICI/ Shalimar Paints
18	Thermometers	H.Guru/ Teddington/ Warry/ Dwyer
19	Solenoid Valves	Sporlan/ Rapid Control/ Honeywell/ Johnson Control
20	Proportionate Controller Thermostat / Humidistat	Johnson-Control/ Honeywell/ Sauter-Race/ Siemens
21	Temperature Sensor	Siemens/ Honeywell/ Schneider/ Azbil
22	Ambient Temperature& RH sensor	Siemens/ Honeywell/ Schneider/ Azbil
23	Current Relay	Siemens/ Schneider/ Minilec/ L&T
24	Pressure Switch / Pressure Control Switch	Danfoss/ Indfoss/ Potter/ Switzer/ Thermax/ Azbil
25	Temperature Sensor	Danfoss/ Forbes Marshall/ Honeywell/ Azbil
26	Thermostatic valve	Oventrop/ Danfoss/ Azbil
27	Level Indicator (Oil)	Forbes Marshall/ Scientific Devices/ Cirrus Engineering
28	Preinsulated Pipes	Lloyd/ Perma Pipes/ Zeco/ 7 Star

29	Pipes	Tata / Jindal/ SAIL/ Apollo
30	Butterfly	L&T/Advance/ Kitz / NVR//Lehri / Oven trap
31	Drain Pipe	Astral/ Ashirwad/ Supreme/Finolex/Prince
32	Ss 304 Pipes	Viega/Ratnamani / Conex
33	Ss 304 Pipes Fittings	Viega/Ratnamani / Conex
34	GI Pipes Fittings	Unik / Zoloto M / DRP
35	GI Pipes	Jindal Hissar / Tata / Asian
36	Pipe Clamp & Supports	Chilly / Euroclamp / Mupro
37	Anti Corrosive Tape For Pipe Protection (Asper IS: 1022 1982)	Pypcoat / Marphalt
38	Air Release Valve	Arco / Fouress / Sant / AIP
39	Mechanical Seal	Burgmann / Sealol
40	Couplings	Lovejoy / Universal
41	Rigid PVC FR Conduit & Accessories for conduit	MMS/ HMS category/ Precision plastic industries, Polycab, AKG/NIHIR
42	Flexible Wires - Cu FRLS	Finolex, RR kabel, Havells, Polycab
43	Switches / Back box / Plates	Legrand (Arteor), MK (Blenze), Schneider (Zencelo), Cabtree
44	DB/MCBs/ ELCB/Ind plug socket	Schneider Acti 9, Legrand, Hager/ L & T/ABB
45	Cat 6 E/ Fiber optic Accessories- Rack / Patch Panel / Cord	Legrand, Digilink / d-link
46	Cables	Havells, Polycab, Ravin, Gems cab, AVOCAB
47	Cable Glands	Double / Single Compression type comet, Standard Metal Industries /HMI / polycab
48	Cable Lugs	Dowells, 3-D / polycab
49	Connector (Polyamide stud type)	Connect Well /Elmax / Wago
50	M.S. Conduit ISI marked	BEC, Steel Craft, Vimco
51	ACB/MCCB / etc all switchgears for panels	Schneider/ L & T/ SIEMENS/ABB / Legrand
52	Cable Tray Perforated 14 G hot dip GI	Indanaa, Legrand, OBO, Parmar metals
53	Thermo Plastic Junction Boxes	Hensal/ Spelsberg /SCAME/ Schneider
54	Starter & controller	Schneider/ L & T/ SIEMENS/ABB / Legrand
55	Voltmeter / ammeter	Schneider / HPL/L&T / Secure
56	Single phase preventor	L&T / Siemens / ABB
57	Thermal Relays	Schneider/ L & T/ SIEMENS/ABB / Legrand
58	Indicating Lamps	Siemens / L&T (Esbee) / Schneider
59	Cable Lugs	Dowell / Jainson
60	Relays	Siemens / Schneider / ABB / C&S
61	Current Transformer	Precision / C&S / Alstom / Pragati
62	Switch Fuse & Fuse Switch Unit	Schneider/ L & T/ SIEMENS/ABB

63	Time delay relay/ limit switch	L&T / Siemens / BCH
64	Electrical panel	APPROVED SYSTEM HOUSE OF APPROVED SWITCH GEAR MANUFACTURER
65	Vendors/OEMS	Azbil/ Secutech/ Honeywell/ Siemens/ Schinder

NAME OF WORK: CONSTRUCTION AND DEVELOPMENT WORKS OF 38 NOS. STUDENT HOSTEL BUILDINGS AT NALANDA UNIVERSITY, RAJGIR

SUBJECT: APPROVED MAKES FOR **ELV WORK**

SR. NO.	ITEM DESCRIPTION	APPROVED MAKE
1	F/UTP CAT6A Cabling System – Cable and components	COMMSCOPE-SYSTIMAX, COMMSCOPE-NETCONNECT, PANDUIT-PANNET, SCHNEIDER-ACTASSI
2	Fiber Optics Components (Data & Voice/Telecom, Single Mode) – Cables, LIUs, Shelves, Pigtailed, Patch-cords, Connectors, Couplers, Splices	COMMSCOPE-SYSTIMAX, COMMSCOPE-NETCONNECT, PANDUIT-PANNET, SCHNEIDER-ACTASSI
3	Outdoor pole mounted enclosure and wall mounted enclosures for faculty Housing	3M, COMMSCOPE, PANDUIT, RAYCHEM, SCHNEIDER, TYCO
4	Networking Racks, Data Centre racks, Distribution Racks – from sizes 15U to 42U	APW-VERO PRESIDENT, PANDUIT-PANNET, RITTAL
5	Networking Switches & NMS – Edge/Access, Distribution, Core Switches and all their accessories and options such as fiber optics interface modules and transceivers & NMS. SM and MM fiber optics transceivers shall be original (OEM supplied). All these components shall be from a single OEM.	CISCO, EXTREME NETWORKS, HP
6	Wi-Fi System - Wireless Access Points, Wireless Controller, Wireless licenses etc. All these components shall be from a single OEM.	CISCO, EXTREME NETWORKS, HP-ARUBA, RUCKUS
7	CCTV / Video-Surveillance All types of Cameras (Indoor and Outdoor) – Fixed Dome, Fixed CS-Mount/Box, PTZ	AXIS – (Europe Made), BOSCH – (Europe make), SONY
8	VMS Software Platform	GENETEC, MILESTONE, QOGNIFY (NICE)
9	Servers for VMS Server & Recorder Function	DELL, HP, LENOVO
10	Storage System for CCTV	EMC2, HP, IBM, NETAPP

11	Industrial Ethernet Switch incl. Power supplies	Industrial Ethernet PoE+ Switch incl. Power supplies
12	Client PCs - Hardware/Computers/Workstations	DELL, HP, LENOVO
13	55" HD/DVi Professional Display for CCTV Monitoring	HITACHI, PANASONIC, SAMSUNG