Project Implementation Unit

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જા.નં.પીઆઈયુ/મુ.ઈ.શ્રી/6391/૨૫ તા. 03/૧૦/ ૨૦૨૫

વિષય : મૂળ અંદાજમાં બ્રાંડ/મેઇક/સ્પેસીફીકેશન મુજબ કામગીરી અનુસરવા બાબત

આરોગ્ય અને પરિવાર કલ્યાણ વિભાગના પ્રોજેક્ટ ઈમ્પ્લીમેન્ટેશન યુનિટ દ્વારા વિભાગ કક્ષાએ પુખ્ત વિચારણાના અંતે હોસ્પિટલ, મેડીકલ કોલેજ, મેડીકલ ડેપો, હોસ્ટેલ, બહુમાળી સ્ટાફ ક્વાર્ટર્સ અને સંલગ્ન હેલ્થ ફેસીલીટીનાં કામો માટે Civil Materials, MEP, HVAC, Fire System, ELV માટે મેઇક લિસ્ટ નક્કી કરવામાં આવેલ છે આ સાથે બિડાણમાં સામેલ પત્રક મુજબ અનુસરવાનું રહેશે. તાંત્રિક અધિકારીશ્રીઓ દ્વારા મંજુરી માટે રજુ થનાર અંદાજો અને DTPમાં અને સ્થળ પર ચાલુ કામોમાં સદર મેઇક લિસ્ટનો માલ સામાન વપરાય તેની ખાસ નોંધ લેવી.

મુખ્ય ઈજનેર
પી.આઈ.યુ. (હેલ્થ)
ગાંધીનગર

બીડાણ: ઉપર મુજબ

નકલ સવિનય રવાના:

૧) અધિક મુખ્ય સચિવશ્રી (ત.સે. અને ત.શી.), આરોગ્ય અને પરિવાર કલ્યાણ વિભાગ, નવા સચિવાલય, ગાંધીનગર, જાણ સારૂં.

૨) કમિશ્નરશ્રી, આરોગ્ય અને પરિવાર કલ્યાણ વિભાગ, જીવરાજ મેહતા ભવન, ગાંધીનગર, જાણ સારૂં.

નકલ રવાના:

૧) તમામ અ.ઈ.શ્રી, પી.આઈ.યુ. (સિવિલ અને ઇલેક્ટ્રિકલ), જાણ તથા અમલ સારૂં.

૨) તમામ કાર્યપાલક ઈજનેરશ્રી, (સિવિલ અને ઇલેક્ટ્રિકલ), જાણ તથા અમલ સારૂં.

૩) તમામ ડિવિઝનલ એકાઉન્ટન્ટ, જાણ તથા અમલ સારૂં.

૪) તમામ નાયબ કાર્યપાલક ઈજનેરશ્રી, (સિવિલ અને ઇલેક્ટ્રિકલ), જાણ તથા અમલ સારૂં.

૫) શ્રી દિલીપ કાપડિયા, આઈ.ટી. આસિસ્ટન્ટ, તમામ ઓનલાઇન ટેન્ડરમાં તમામ આઈટમનું એપ્રુવ લિસ્ટ સામેલ કરવા સારૂં.

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Make List: CIVIL

1) Approved makes of materials are listed below. The contractor should get approved the sample of material/furniture in respect of quality and source of supply manufacturer approved from the Engineer in charge or committee constituted by department. All such approved samples should be kept at site in the custody of PIU. In case of testing of material of the suggested make shall be tested in GERI, Government approved Laboratory / Institute as per relevant codes and standards.

2) Mockup units furniture should be as directed by Engineer in Charge.

CIVIL WORKS

Sr. No.	Item	Brands
1	**Concrete Work**	
a	TMT bars of Virgin Steel (For structure height > G+2 then Tata Tiscon only to be used, For structure height < G+2, then any of these can be used)	Sail, Vizag, Tata – Tiscon, Jindal Panther, Kamdhenu, JSW Steel (Manufacturer Only From Virgin Material), Nilkanth, ANMS, Vizag
b	Sand	As per Mix design for concrete work or zone-II.
		For Masonry and plaster work zone – III
2	**Masonry Work**	
a	Brick Masonry	Having crushing strength not less than 35 Kg/Sq.cm. of Locally Available
b	Aerated Light Weight Concrete Block Masonry (AAC Block Masonry)	AAC blocks shall be manufactured as per ISI or GRIHA approved and the product should be produced as per IS2185 Part-III (1984) for Grade- I. The manufacturer shall provide valid certification to confirm the compliance with these standards.
3	**Structural Steel Work**	
a	Structural Rolled Steel sections -beams, channels, tee, flats, angles, bars(round, square, hexagonal) Structural Hollow steel sections (Square& Rectangular) Structural tubular sections, MS Grill	Tata, SAIL, Jindal, AMNS, Vizag
4	**Wood Work (Door, Window & Interior)**	
4a	Teak Wood	Ghana, Nagpur, Berma Teak (Indian Teak)
4b	Flush Door (decorative / non decorative) & Ply Wood	Greenply, Kit Ply, Century, Archidply.
4c	Poly carbonate sheet	Coxwell, DPI, Lexan, BAYER
4d	Dry Wall Partition	Gypsum India Saint Gobbain
5	Aluminum Work (Door, Window, Structural Glazing &Interior)	Jindal, Hindalco, NALCO
6	Glass Reinforced Concrete (G.R.C) screens	Unistone Asian Everest.
7	ANTI - TERMITE TREATMENT	PI Industries,

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		BAYER Bharat Rasayan KALYANI INDUSTRIES
8	**Ceiling**	
8a	Calcium silicate board / Gypsum Board.	Saint Gobain Hilux, Aerolite, ARMSTRONG
8b	Aluminum Metal False Ceiling	Gyproc- Saint Gobain, Aerolite, Armstrong Linder Middle Hunter Douglas Oculus, Conwed, Metafino
8c	Mineral Fibre False Ceiling	Gyproc- Saint Gobain, Aerolite, Armstrong Linder Middle Hunter Douglas
9	Dead Locks/ Mortiselocks/ Narrowstile deadlocks/ Tubular locks	Kich, Dorma, Dorset, Godraj, Onyx
10	**Glass Work**	
10a	Float Glass, Wired Glass, Mirror, Reflective Glass, Glass Processor for HS/HT, Bulletproof, DGU, Toughness, lamination, Hermetically Sealed Insulated Glass etc.	Saint Gobain, Float Glass India Ltd., AIS SISECAM Modi Guard,
11	**Tile Work**	
11a	Ceramic Tiles / Glazed Tiles / Vitrified Tiles (Full Body, Double Charges, Matt Finish) / Heat Resistant Tiles	AGL, Johnson, Kajaria, Somany
11b	Tile Adhesives & Grouting material	BAL, Laticrete, Kerakoll, Pidilite(Dr. Fixit)
11c	Vinyl Flooring	FORBO GerFloor Armstrong Tarkett
11d	White Cement, Putty	Birla White, J.K., Dulux
11e	Dry cladding/ terracotta (Exterior rainscreen	Claytone,

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	Facade)	Tempo, Moeding.
12	Paint Work	Asian Paint, Berger, Nerolac Birla Opus
13	Natural Stone Texture External	Asian Berger NEROLAC, Ultratech Texture
14	ACP (Aluminium Composite Panel) (FRGrade for two hrs. Resistance)	Alu Décor, Alucobond, Eurobond, Jindal
15	Construction Chemicals (Plasticisers, Bonding agents, SBR Latex, Micro Concrete)	BASF, Fosroc, Sika India Pvt. Ltd., Pidilite,
16	**Water Proofing Chemicals**	
16a	Chemical Water proofing & Integral Water Proofing Compound	Fosroc, Pidilite Ind Ltd Sika, Dr.FIXIT, Plastocrete plus
16b	Epoxy Grouting	Laticrete, Dubond, K2-Epoxy, Kerakoll,
16c	Reber and anchor fastner	Hilti, Fischer, Fosroc.
17	Silicon Sealant/ Silicon Paint & Poly sulphide Sealant	Wacker, Hilti Fischer, Fosroc Pidilite
18	PVC Water Stop	Arti Cables Baroda, Fixopan, Maruti
19	Door Window Hardware (other than locks) & Floor Spring and Door closer	Kich, Dorma, Godrej, hettich, Hafle Ebco
20	Stainless steel hand Railing & S S daso	KICH EBCO DORMA

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21	Pre-coated Steel Roofing/ Walling Sheets 550 Mpa	Tata Bluescope, Interarch, Nippon Dendro (poly steel)
22	Fire Door (Metal / Fully Glazed)	Navair, Accodor, Vetrotech, Shakti hormann, Radiant
23	WPC doors, WPC panels, and frames.	Greenply, Archidply, Centuryply
24	Corner Guard / Wall Guard	Kleenclad Inprocorp Windowtech
25	Expansion Joint	Vexcolt, Kantaflex 3R
26	Lead Lined Door / Clean Room Door	Shakti Hormann, Acodoor, Navair, Iclean, JC Fire Door
27	Fire Mortar & Fire Sealent	Armacell Aerocell Hilti

Notes: **(a)** The contractor shall produce samples of the materials for approval to Engineer in charge.

(b) In case of materials for which approved makes are not specified above and / or short off in market, the makes shall be decided by the Engineer in charge or committee constituted by department.

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Make List: Plumbing

LIST OF MAKES FOR SANATARY AND PLUMBING WORK		
Sr. No.	**Item**	**Brands**
1	Vitreous China Sanitary ware with Seat Cover	Jaquar (Premium series Only) Kohler (Premium series Only) Grohe (Premium series Only)
2	Stainless Steel sinks	Nirali, Johnson,
3	C. P. Fittings & Accessories	Jaquar – Opal Prime (Premium Specified series Only) Kohler – Aleo Plus (Premium Specified series Only) Grohe – Baudge (Premium Specified series Only)
4	Ultra Voilet Water Purifier	Ion Exchange, Thermax, Wipro,
5	Hydro pneumatic System and Water Supply Pumps	Grundfoss, Kirloskar, CRI, Xylem, Lubi, KSB
6	G. I. Fittings	Unik, DRP, UNCO, ZOLOTO, TATA
7	G. I. Pipe/M. S. Pipes	Tata, Jindal, Surya, Asian, Appolo
8	CPVC, UPVC, Soundproof Multilayer Pipes & Fittings	Astral, Supreme, Finolex Prince
9	Gun metal valves	Zoloto, Leader, Sant, L&K, Aatco, Honeywell, Kartar
10	CI Sluice Valves, Check valves	Kirloskar, Burn, William Jacks, Indian Valve (IVC), Advance, Leader, Zoloto, Kartar
11	Ball Cocks	Sant, L & K., Honeywell,

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		Kartar, Zoloto
12	UPVC Borewell Column pipe	Astral, Supreme, Precision
13	HDPE Pipes	Duralinr, Penwalt Agru, Nocil, Jain, Supreme, Reliance
14	Fiber reinforced R.C.C. Manhole Cover	Pratibha, Himalaya, Alcock, Thermodrain
15	C. I. Manholes Covers and Frames	Ashok Iron, Raj, Neco,
16	Submersible Drainage Pumps	Kirloskar, Mather &Platt, KSB, Grundfos, Xylem, CRI, Lubi
17	Liquid Level Controllers Liquid Level Indicators	Hema, Minilec, Radar, Sant, Gelco, Honeywell
18	Borewell Pump	KSB, Kirloskar, Mather & Platt, Lubi
19	Mirror	Modiguard, Asahi, Saint Gobin
20	Water Treatment Plant	Enviro Engineers, Think Green, Flow-Dynamics, Ion Exchange
21	Drinking Water Cooler	Usha, Bluestar, Voltas
22	Chlorine Dosing System	Toshcon, Chloromax, Astalm
23	Butterfly Valve	Audco, C & R, Zoloto, Kartar
24	Gunmetal Non Return Valve	Leader, Audco, Zoloto, Sant
25	Water Meter	Kapstan Bombay, Voltas Kent, Siemens
26	SWR Pipe	Astral,

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		Supreme, Finolex
27	Copper Pipe	IBP-Neco, Rajco
28	Hot Pipe Insulation	Armacell,
29	RCC Hume Pipe and Fittings	Patel Hume Pipes, Alcock, Indian Hume Pipe
30	Poly ethylene Composite Pressure Pipe	KITEC
31	Pump Set	KSB, Kirlosker, Wasp, Crompton, Beacon, Grundfos, Beacon, Lubi
32	PVC Water Tank (3 Layer)	Astral, Supreme, Sintex

Notes: **(a)** The contractor shall produce samples of the materials for approval to Engineer in charge.

(b) In case of materials for which approved makes are not specified above and / or short off in market, the makes shall be decided by the Engineer in charge or committee constituted by department.

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Make List: Fire Fighting

LIST OF MAKES FOR FIRE FIGHTING SYSTEM		
Sr. No	**Item Description**	**Approved make / Manufacturer**
1	CO2 FIRE EXTINGUISHER	Safex, Numax, Kanex , Safron, Ceasefire
2	Fire Hydrant pumps	Precession, Kirloskar, Willo, Lubi, KSB
	Fire Spinklars	Safex, Kanex , Ceasefire, Numax
3	Control panel	Standard Fabrication CPRI Approved
4	Cable	Finolax , Polycab, RR cable
5	Earthing	Erico, Rapid, Electroearth, Ashlok
6	Pressure Guage	Fiebig, hguru, Bumer
7	Pressure Switches	Indofoss, Denfoss
8	M.S. ERW Heavy Duty pipes	Jindal, Tata, SAIL, AMNS, VIZAG, Asian, Appolo
9	Butterfly Valve	Audco, Intervalve , Sarka , Zoloto, Kartar
10	Dual Plate CI non-return Valve	Audco, Intervalve , Sarka , Zoloto, Kartar
11	S.S ball Valve	Audco, Intervalve , Sarka , Zoloto, Kartar
12	Hose Pipe	Safex, Numax, Kanex, Newage, Ceasefire
13	Metal Branch	Safex, Numax, Kanex, Newage, Ceasefire
14	First aid fire hose	Safex, Numax, Kanex, Newage, Ceasefire
15	Fire hose cabinet	Safex, Numax, Kanex , Newage, Ceasefire
16	Air Release Valve	Sant , Zoloto, Leader, Kartar
17	Autoglow Signages	Prolite , EVecab, Aniket

Notes: **(a)** The contractor shall produce samples of the materials for approval to Engineer in charge.

(b) In case of materials for which approved makes are not specified above and / or short off in market, the makes shall be decided by the Engineer in charge or committee constituted by department.

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Make List: ELECTRICAL

SR.	ITEM DESCRIPTION	MAKE LIST
1.	HT VCB	L&K (PREVIOUSLY L&T) / SEIMENS / ABB / SCHNEIDER ELECTRIC. HT PANEL SHALL BE OEM OR OEM APPROVED PARTNER ONLY.
2.	PROTECTION RELAY FOR HT PANEL	ABB / L&K (PREVIOUSLY L&T) / SEIMENS / SCHNEIDER / CSPC / ALSTOM
3.	H.T XLPE CABLE	FINOLEX RR CABLE POLYCAB HAVELLS
4.	H.T JOINT (HEAT SHRINKABLE)	RAYCHEM / 3M
5.	DRY TYPE TRANSFORMER	SCHNEIDER VOLTAMP ABB
6.	SWITCHGEAR	L&K (PREVIOUSLY L&T) / LEGRAND / SEIMENS
7.	MEDIEM VOLTAGE CABLE / CONTROL / FLEXIBLE CABLE	RR CABLE / HAVELLS / POLYCAB / FINOLEX / KEI
8.	DG SET	CUMMINS KIRLOSLAR SUPERNOVA PERKINS
9.	DG SET AMF PANEL	AS PER DG SET SUPPLIER. (SWITCHGEAR AS PER MAKE LIST)
10.	LT PANEL AS PER IEC 61439 (TTA) PANELS	LEGRAND / L&K (PREVIOUSLY L&T) / SEIMENS OEM CERTIFIED IEC – 61439 REQUIRED.
11.	LT PANELS AS PER CPRI	FABRICATED PANELS WITH STANDARD APPROVED SWITCH GEARS & ACCESSORIES CPRI / ERDA APPROVED PANEL SUPPLIER, 65 KA SHORT CIRCUITE WITHSTAND STRENGTH. OEM
12.	APFC PANEL	SCHNEIDER – VARSET / DATAR / L&K (PREVIOUSLY L&T) / EPCOS / NEPTUNE
13.	CAPACITOR	SCHNEIDER / EPCOS / CONZERV
14.	DISTRIBUTION BOARD	LEGRAND / L&K (PREVIOUSLY L&T) / SEIMENS / SCHENIDER
15.	LT ACB	LEGRAND / L&K (PREVIOUSLY L&T) / SEIMENS / SCHENIDER
16.	LT MCCB WITH EARTH FAULT.	LEGRAND / L&K (PREVIOUSLY L&T) / SEIMENS / SCHENIDER
17.	LT MCB, ELCB, ISOLATOR	LEGRAND / L&K (PREVIOUSLY L&T) / SEIMENS / SCHENIDER
18.	LT SFU	LEGRAND / SCHNEIDER / SEIMENS / L&K (PREVIOUSLY L&T) / HONEYWELL
19.	LT CONTACTORS	LEGRAND / SCHNEIDER / SEIMENS / L&K (PREVIOUSLY L&T)/ HAGER / C&S / HONEYWELL
20.	CURRENT TRANSFORMER & POTENTIAL TRANSFORMER	AE / ASHMOR / SEI / SARTHI / L&K (PREVIOUSLY L&T)
21.	METERS (DIGITAL)	CONZERVE / SCHNEIDER / SECURE / L&K (PREVIOUSLY L&T)/
22.	LOAD MANAGER / MFM	CONZERVE / SCHNEIDER / SECURE / L&K (PREVIOUSLY L&T)/
23.	PROTECTION RELAYS – EARTH FAULT	SIEMENS / L&K (PREVIOUSLY L&T) / SCHNEIDER / ABB / ALSTOM / CSPC
24.	INDICATING LAMP	SIEMENS / SCHNEIDER ELECTRIC / L&K (PREVIOUSLY L&T)
25.	ELECTRIC TIMER	SIEMENS / L&K (PREVIOUSLY L&T) / LEGRAND / CONSERVE/
26.	ROTARY SWITCH	SIEMENS / SCHNEIDER ELECTRIC / TEKNIC - KEYCEE/ SALZER /
27.	PUSH BUTTON & PUSH BUTTON SET	SCHNEIDER ELECTRIC / L&K (PREVIOUSLY L&T)/ BINAY / RAAS
28.	SELECTOR SWITCH	TEKNIC - KEYCEE / SALZER / L&K (PREVIOUSLY L&T)
29.	ANNUNCIATOR	PROTON / EAPL / TEKNIKA
30.	LUGS / BIMETALLIC LUGS	DOWELL`S / HMI / COMETV/ HEX

31.	CABLE GLAND	JAINSON / COMET / POLYCAB / HEX
32.	CONNECTORS (COLOURS AS PER PHASE	SALZER / ELMEX / L&K (PREVIOUSLY L&T)
33.	ATS	ASCO / SOCOMEC / L&K (PREVIOUSLY L&T)
34.	CABLE TRAY (ALL TYPE)	LEGRAND – CABLOFOIL / OBO BETTERMAN / PROFAB / INDIANA
35.	SPD	NISHARP – CAPE / OBO / LEGRAND / SCHNEIDER
36.	DWC PIPE	REX / ASTRAL / NIHIR
37.	L.T. CABLE JOINTING KIT	RAYCHEM / 3 – M
38.	PVC CONDUITS AND ACCESSORIES	PRECISION / NIHIR / POLYCAB / ASTRAL / BBC / BEC
39.	CASING CAPING	PRECISION / NIHIR / ASTRAL / BEC
40.	FLOOR TRUNKING & FLOOR JUNCTION	MK – HONEYWELL / LEGRAND / OBO
41.	SWITCHES AND ACCESSORIES ANTI-BACTERIAL OLNY	HONEYWELL – BLENZE PRO LEGRAND – MYRIUS ANTI BAC. SCHNEIDER – UNICA PURE PANASONIC – VISION HAVELLS - ATHENA
42.	METAL CLAD SOCKET WITH MCB	HONEYWELL / LEGRAND / SCHNEIDER / HENSEL
43.	PVC TAP	STEEL GREEP / ANCHOR
44.	PVC JUNCTION BOX	PRECISION / NIHIR / POLYCAB / ASTRAL / BBC / BEC
45.	COAXIAL TV CABLE	DELTON / HAVELLS / RR / FINOLEX / POLYCAB
46.	LIGHT FIXTURE	PHILLIPS WIPRO Panasonic CROMPTON HAVELLS LIGHTING TECNOLOGY
47.	HIGH SPEED FAN & EXHAUST FAN	HAVELLS / CROMPTON / ORIENT
48.	POLE	K – LITE / AMBICA / FABRICATED / OR AS PER APPROVED DRAWING
49.	METAL CONDUIT	BEC / AKG / BHARAT / STEEL CRAFT
50.	UPS SYSTEM WITH BATTERY	NUMERIC FUJI VERTIV EATON HITACHI (BATTERY – EXIDE & AMARRAJA)
51.	EARTHING SYSTEM	CAPE – NISHARP / OBO BETTERMAN / ABB / JEF
52.	LIGHTING PROTECTION	CAPE – NISHARP / OBO BETTERMAN / ABB / JEF
53.	IP JUNCTION BOX	HENSEL / LEGRAND / OBO / RITTAL
54.	WATER COOLER	VOLTAS / USHA / BLUE STAR
55.	MOTOR PUMP SET	CROMPTON / KIRLOSKAR / LUBI
56.	CALL BELL	ANCHOR / ORPAT / VISION
57.	BUSDUCT	SCHNEIDER LEGRAND C&S L&T SEIMENS
58.	LIFT	OTIS / MISTUBISHI / SCHINDLER / Jhonson

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SPECIAL NOTE: -

01.	The MCB and MCB DB's must be of same make.
02.	Makes/Models of items of all fixtures/items/materials must be got approved from the engineer in charge well before placing any order to the OEM. The contractor/agency is required to submit all relevant test certificates documents and along with the proposal. The decision of engineer-in-charge is binding in this regard and no variation is acceptable.
03.	All the Material should be IEC compliant as per standard mentioned in tender make list.
04.	The make approved shall be guaranteed to have support from OEM for minimum 10 years with required spares.
05.	The Material with higher delivery lead time shall be immediately informed to client/consultant before order Execution.
06.	Procurement of item with aesthetic value and visibility shall be on prior approval of Engineer in charge for specific area of application.

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Make List: ELV

SR. NO.	ITEM DESCRIPTION	MAKE
1.	Cat6 Components and Its Accessories	CommScope -Tyco, Molex, R & M, Belden, Legrand, D-Link, Panduit
2.	Fiber Optics Components (Single Mode – Cables, LIUs, Shelves, Pigtails, Patch-Cords, Connectors, Couplers Splices	CommScope -Tyco, Molex, R & M, Belden, Legrand, D-Link, Panduit
3.	Core Switches and Block/Cluster Distribution Switches And Their Fiber Interface Modules And Optics Transceivers. All These Components Shall Be from A Single OEM.	Cisco Enterprise, HP Enterprise, Juniper, Extreme Network, D - Link Netgear
4.	Access/Edge Switches, NMS Management Tools, Single Mode or Multimode Fiber Optic Transceivers, Licenses Etc. All These Components Shall Be from A Single OEM.	Cisco Enterprise, HP Enterprise, Juniper, Extreme Network, D - Link Netgear
5.	Wireless Access Points, Wireless Controller, Wireless Licenses Etc. All These Components Shall Be from A Single OEM Single OEM.	Cisco Enterprise, HP Enterprise, Juniper, Extreme Network, D - Link Netgear
6.	Addressable Fire Detection & Alarm System	Honeywell – Notifier, Siemens - Cerberus, Tyco-Simplex.
7.	Public Addressing System	Bosch, Honeywell - Vario Dyn Aetis, Toa
8.	2 X 1.5 Sq. Mm. FRLS Flexible / Armoured Cable for Fire Detection & Alarm System & Public Address	Finolex, Polycab, RR Kable, Havells
9.	CCTV / Video-Surveillance Cameras – Fixed Dome, Fixed Cs-Mount/Box, IR-Bullet (SQTC Certificate Mandatory)	Axis, Bosch, Pelco, Panasonic, Matrix Tyco, Honeywell 60&70 Series
10.	VMS Software Application/Analytics For Cctv/Video-Surveillance	Milestone, Genetec or as per Camera Make.

11.	Server / Client Hardware for Cctv (VMS), i-BMS And Access Control System	Dell, HP, IBM , Lenovo, as per Camera Make
12.	Storage / HDD For CCTV	Lenovo, HP, Hitachi , Infortrend, as per Camera Make
13.	LED Displays	Panasonic, Samsung, LG, Sony
14.	Audio Visual Cables	Liberty AV, Belden, Kramer, Light ware, Crestron, Extron
15.	Networking Racks, Data Centre Racks, Distribution Racks – From Sizes 15U to 42U	Rittal, APC, Elixir, Net-Rack, Val rack
16.	EPABX System	Avaya, Matrix, Cisco, Alcatel-Lucent, Unify
17.	Telephone Instruments	Beetel, Avaya, Panasonic, Alcatel-Lucent
18.	Video Conference System	Cisco / Poly / Avaya
19.	Interactive Display	Samsung / Sony / Panasonic / LG / Newline
20.	Speaker	Bosch / Electro Voice / Toa
21.	Amplifier	Bosch / Electro Voice / Toa
22.	Microphone Wireless	Sennheiser / Biamp / Beyerdynamics / Electro Voice / Telvic
23.	Digital Signal Processor	Amate Audio / Biamp / Sysmetec /Extron/Xilica
24.	20X NDI PTZ Camera for AV	Crestron / Sony/ Lumens / Panasonic
25.	HD Streaming Transmitter / Receiver	Crestron/ Extron/ Light ware
26.	Distribution Amplifier	Crestron/ Extron/ Light ware
27.	Wireless Presentation System	Crestron / Light ware/ Extron / Dynacord / Barco
28.	Mixer	Mark / Yamaha/ Makie/Sound craft /
29.	Conference Systems	Brahler / Sennheiser/ Bosch / Telvic
30.	BMS Software	Johnson Control – Metasys, Siemens - Desigo, Honeywell
31.	Network / Supervisory Controller/Integrator	Johnson Control – Metasys, Siemens, Honeywell
32.	Central and DDC Controllers	Johnson Control – Metasys, Siemens, Honeywell
33.	Tablet / POT	Johnson Control – Metasys, Siemens, Honeywell, Samsung, Lenovo
34.	Temperature Sensor & Transmitter (Duct/Immersion/Room/Wall/Outdoor)	Siemens, Johnson, Honeywell, Nextech

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35.	Temperature & RH Transmitter (Duct/Room/Wall/Outdoor Mount)	Siemens, Johnson, Honeywell, Nextech
36.	Differential Pressure Switch - Air/Water application	Siemens, Johnson, Honeywell, Nextech
37.	Differential Pressure Transmitter -	Siemens, Johnson, Honeywell, Nextech
38.	Static Pressure Transmitter – Water/Air	Siemens, Johnson, Honeywell, Nextech
39.	Level Switch – Water/Diesel application	Siemens, Johnson, Honeywell, Nextech
40.	Flow Switch -Water/Air application	Siemens, Johnson, Honeywell, Nextech
41.	CO2/CO/VOC/PM1,2.5,4,10 Transmitter -(Room/Wall/Duct Mount)	Siemens, Johnson, Honeywell, Nextech
42.	Combined IAQ Transmitter (VOC, CH2O, PM2.5, PM10, CO2, RH & Temperature - Room Mount) – without display/with colour TFT LCD display	Siemens, Johnson, Honeywell, Nextech
43.	Level Transmitter – Water/Diesel	Johnson Control, Siemens, Nextech,
44.	Ultrasonic Clamp on/Electromagnetic Inline Type Flow Meters – Water application	Siemens, Nextech, Dwayer, Kamstrup, Trumen
45.	Ultrasonic Inline type Heat/BTU Meter & Water Meter – water application	Siemens, Nextech, Dwayer, Kamstrup, Trumen
46.	Modulating / ON & OFF type Damber	Johnson Control, Honeywell, Siemens,
47.	Thermostats	T&A, Siemens, Oventrop, Schneider, Honeywell
48.	2-Way/3-Way control valves	Johnson Control, ALC, Siemens, Belimo, Advance, Honeywell
49.	Communication Cable (RS-485)	Delton, Finolex, Havells, Polycab,
50.	Signal Cable	Delton, Finolex, Legrand, Lapp India, Havells, Polycab, Caliplast

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Make List: HVAC

LIST OF APPROVED MAKES OF HVAC WORKS		
SR. NO.	**ITEM DESCRIPTION**	**MAKE LIST**
1.	WATER CHILLER	JCI YORK CARRIER TRANE
2.	PLANT SYSTEM MANAGER/PLANT ROOM OPTIMIZER CONTROLLER	JCI YORK CARRIER TRANE
3.	AIR HANDLING UNITS	ZECO EDGETECH VTS CITIZEN SYSTEMAIR CARRIER NEWTECH
4.	TREATED FRESH AIR UNIT	ZECO EDGETECH VTS CITIZEN SYSTEMAIR CARRIER NEWTECH
5.	CHILLED WATER CASSETTES:	CARRIER CITIZEN YORK KUBIC TRANE
6.	CHILLED WATER FANCOIL UNITS	CARRIER CITIZEN YORK KUBIC TRANE
7.	ADJUSTABLE FREQUENCY DRIVE/ AUTOMATIC AFD BYPASS/ PUMP CONTROLLER/ DIFFERENTIAL PRESSURE SENSOR/TRANSMITTER	XYLEM-ITT GRUNDFOS ARMSTRONG FLOWCON NEXTECH MATHER & PLATT DELTA SIEMENS L&T SCHIENDER ABB
8.	DX UNITS (AIR COOLED SPLIT & PACKAGED)	DAIKIN TOSHIBA MITSUBISHI ELECTRIC CARRIER O GENERL YORK
9.	VOLTAGE STABILIZER	V GUARD / BLUE BIRD / VOLTAS / LOGICSTATE / MICROTEK
10.	MOTORS	SIEMENS / ABB / KIRLOSKAR / BBL / HAVELLS
11.	PUMPS (CONDENSER WATER / PRIMARY TYPE CHILLED WATER)	ARMSTRONG GRUNDFOSS ITT-BELL & GOSSETT MATHER & PLATT XYLEM LUBI WILO

12.	VARIABLES SPEED DRIVE SECONDARY CHILLED WATER PUMPING SYSTEM	ARMSTRONG GRUNDFOSS ITT-BELL & GOSSETT MATHER & PLATT XYLEM LUBI WILO
13.	VFD	DELTA / DANFOSS / ALLEN BRADLEY / SCHIENDER / ABB / SIEMENS / L&T / HONEYWELL
14.	CENTRIFUGAL FANS	KRUKGER NICOTRA GREENHECK AIR FLOW MICO (DYNA) VTS HUMIDIN SYSTEMAIR
15.	AXIAL FLOW FANS	KRUKGER NICOTRA GREENHECK AIR FLOW MICO (DYNA) VTS HUMIDIN SYSTEMAIR
16.	INLINE FANS	KRUKGER NICOTRA GREENHECK AIR FLOW MICO (DYNA) VTS HUMIDIN SYSTEMAIR
17.	COOLING TOWER	BELL ADVANCE PAHARPUR BALTIMORE
18.	PROPELLER FANS	KHAITAN / CROMPTON / GE / CARYAIRE / AIRFLOW / KRUGER
19.	BALANCING VALVES / BUTTERFLY VALVES	EMERALD CASTLE SANT LEADER HONEYWELL T&A OVENTROP DANFOSS
20.	P.I.D. VALVES	HONEYWELL / T&A / OVENTROP / DANFOSS
22.	BALL VALVES	HONEYWELL / T&A / OVENTROP / DANFOSS
23.	NON-RETURN VALVES	HONEYWELL / T&A / OVENTROP / DANFOSS
24.	PRE-INSULATED VALVES	HONEYWELL / T&A / OVENTROP / DANFOSS
25.	POT-STRAINER / SUCTION STRAINER / AIR VENT	EMERALD / TRISHUL / CASTLE / SANT / LEADER
26.	COMBINED AIR & DIRT SEPARATOR	BETAFLO / ANERGY / EMERALD / K D AGENCIES / SPIROTECH
27.	CLOSED EXPANSION TANK WITH BUILT-INDEGASSER	SPIROTECH / ITT / ANERGY / EMERALD / K D AGENCIES / ARMSTRONG / GRUNDFOSS

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28.	AIR MONITORING SYSTEM	VS ENVIROPURE / EFLOW / ULTRAPURE / NEXTECH
29.	PRESSURIZATION UNITS	XYLEM / ARMSTRONG / SEVCON / EMERALD / ANERGY
30.	COOLING PADS	ECOCOOL / MUNTER (ITALY) / GIGOLA(ITALY)
31.	DE HUMIDIFER UNIT	BRYAIR / DRI / DRY SOLUTION / MUNTER(US) / AQUA AIR
32.	PIPES (MS/GI)	JINDAL HISSAR / TATA / APL APOLLO
33.	FRP LINING FOR CONDENSER PIPING	OWEN-CORNING / UP TWIGA / BINANI
34.	PIPE INSULATION (NITRILE RUBBER)	ARMACELLL / K-FLEX / ARMAFLEX
35.	FLEXIBLE PIPE CONNECTION	RESISTOFLEX / DIAMOND / DUNLOP
36.	INSULATION ADHESIVE	PIDLITE SR-505 / FOSTER / HENKEL.
37.	PROTECTIVE COATING OVER INSULATION (LAG COATING)	PIDLITE / FOSTER / PARAMOUNT / POLYBOND
38.	GROOVED COUPLINGS & FITTINGS	VICTAULIC / JINDAL / TATA / SEVEN STAR /
39.	REFRIGERANT PIPING (COPPER)	RAJCO / MEXFLOW / MANDEV / KWALITY TUBES
40.	DUCT & REFGT. PIPING THERMAL INSULATION CLOSED CELL / CROSS LINKED ELASTOMERIC / POLYETHYLENE FOAM	ARMACELLL / K-FLEX / ARMAFLEX
41.	RP TISSUE	UP TWIGA / OWENS CORNING /STYRENE PACKING
42.	STRIP HEATER	DAS PASS / ESCORTS / KEPL OR EQUIVALENT
43.	V BELT	DUNLOP / FENNER / HILTON
44.	DUCT ACOUSTIC LINING	UP TWIGA / OWENS CORNING / ARMAFLEX / AEROFLEX / SUPREME / K FLEX / KIMMCO / ARMACELLL
45.	XLPE INSULATION	ARMACELLL / K-FLEX / ARMAFLEX
46.	EXPANDED POLYSTYRENE INSULATION	ARMACELLL / K-FLEX / ARMAFLEX
47.	G.I. SHEETS	TATA / SAIL / JINDAL / ESSAR / NIPPON
48.	ALUMINIUM SHEETS	INDALCO / HINDALCO / BALCO / JINDAL
49.	FACTORY FABRICATED DUCTS	DUCTOFAB / NUTECH / WAVES / ZECO / MARUTI HVAC / ROLASTER
50.	CAV BOX	TROX / SYSTEM AIR / RUSKIN TITUS / HONEYWELL / JOHNSON'S CONTROL / BELIMO
51.	SOUND ATTENUATOR	CARYAIRE (NICOTRA) / SYSTEM AIR / RUSKINTITUS / AIR FLOW / MICO (DYNA) / KRUGER
52.	DUCT HANGERS	MUPRO / GRIPPLE / DUCT MATE / DYNAGRIP
53.	DIGITAL THERMOMETER	STAEFA / JOHNSON / SEIMENS / HONEYWELL / SCHNEIDER
54.	PRESSURE GAUGES	JOHNSON / SEIMENS / HONEYWELL / SCHNEIDER / ANERGY / EMERALD / NEXTECH
55.	ALUMINIUM GRILLES / DIFFUSERS	CARYAIRE / DYNACRAFT / SYSTEMAIR / AIRFLOW / GREENHECK / CONAIR / TROX
56.	FLEXIBLE DUCT CONNECTION	AIRFLOW/PYROGUARD / ROLASTAR/ UP TWIGA
57.	FIRE DAMPERS	CARYAIRE / DYNACRAFT / SYSTEMAIR / COSMOS / AIRFLOW / GREENHECK / CONAIR / TROX
58.	ACTUATOR FOR FIRE DAMPER	SIEMENS / BELIMO / SCHNEIDER / HONEYWELL / DANFOSS
59.	ANALOG MEASURING METERS	AE / RISHAB / NEXTECH
60.	P.U.F. PIPE SUPPORTS	MALANPUR / LLOYD / BEARDSELL OR EQUIVALENT

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61.	GATE VALES & GLOBE VALVE (GUN METAL) (DRAIN VALVE)	RAPIDCONTROL / RB-ITAP / SKS / LEADER / ZOLOTO / SANT
62.	PVC / UPVC PIPE	POLYCAB / SUPREME / ASTRAL / FINOLEX
63.	AUTO AIR VENT WITH STOP VALVE	ANERGY / RAPID CONTROL / EMERALD / CASTLE / CALEFFI / SPIROTECH / OPTIVENT
64.	UVGI SYSTEM	ALPHAA UV / RUKS / HONEYWELL / TRANE / NEXTECH
65.	CO / CO2 SENSOR	MSR / GAS ALARM / HONEYWELL / SIEMENS / DANFOSS
66.	RUBBER PADS / VIBRATION ISOLATORS	RESISTOFLEX / EMERALD / KANWAL / EASYFLEX
67.	MODULATING VALVES (3-WAY/2-WAY)	HONEYWELL /JOHNSON / SIEMENS/ ANERGY RAPIDCONTROL / DANFOSS / BELIMO ADVANCE / CASTLE / LEADER / KITZ / OVENTROP / SANT
68.	THERMOSTAT AND ACTUATOR FOR 2-WAY/3WAYVALVE	HONEYWELL / JOHNSON / SIEMENS/ ANERGY / RAPIDCONTROL / DANFOSS / BELIMO
69.	ENERGY METERS	SEIMENS / HONEYWELL / ANERGY / NEXTECH / EQUIVALENT
70.	FLOW SWITCH (BELLOW TYPE)	RAPIDCONTROL / ANERGY / JHONSON / NEXTECH
71.	FLEXIBLE DUCT	PINEAIR / KAAL FLEX / CARRYAIR / GPSPIRA
72.	PRE-INSULATED CHW PIPES	ZECO / TATA / JINDAL / PERMA
73.	ULTRASONIC HUMIDIFIER	CAREL/ DASPASS/ RADIPCOOL/ STULZ
74.	UV LAMP	ALFAA UV/ AEROPURE/ SANUVOX/ RUKS ENGINEERS LTD / HONEYWELL / TRANE / BONPHUL.
75.	HEPA & BIBO	THERMADYNE / SPECTRUM/ CAMFIL/ AMERICAN AIR FILTER
76.	CHEMICAL DOSING	CHEMFLOW / MAXION / N TECH / NALCO
77.	AIR WASHER	ZECO / EDGETECH / SYSTEMAIR / CASILICA / HUMIDIN / VTS / CITIZEN
78.	DRY SCRUBBER	RYDER / TRION / ESPIRE / EDGETECH
79.	AIR FILTER (PRE & FINE)	HONEYWELL / AAF / CAMFILL

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