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# PROPOSED RESIDENTIAL FACILITIES AT GUJARAT BIOTECHNOLOGY UNIVERSITY



## SUGGESTED LIST OF MAKES

REPORT NO.: 202210-GBU-S4-LOM-01

DATED: 14.06.2024

CLIENT



GUJARAT BIOTECHNOLOGY UNIVERSITY

ARCHITECTS



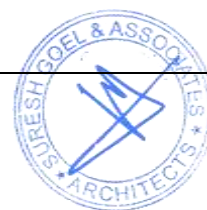
SURESH GOEL AND ASSOCIATES

OBSERVATION	REVISION	DATE



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### 1. SUGGESTED LIST OF MAKES

Specification/brands names of materials (Refer materials, whichever are applicable for the scope of work) and finishes approved by the Architect/Engineer-in-Charge are listed below. However approved equivalent material and finishes of any other specialized firms may be used, in case it is established that the brands specified below are not available in the market but only after approval of the alternate brand by the Architect/Engineer-in-Charge. (See also condition of contract).

Sl.No.	Material	Approved Makes / Brands		
1.	Ordinary Portland Cement / Portland Pozzolona Cement	Birla	Ultratech	J. K Cement
		Hathi	Ambuja Cement	Siddhi
2.	White Cement	Birla White	J.K. White	Nuvoco
3.	Ready Mix Concrete	ACC	Ultratech	JK lakshmi
		Lafarge	L&T	AB Dinesh
4.	Reinforcement Steel (CRS TMT- Fe 500D/CRS 550D )	SAIL	Tata Steel	RINL
		JSW Steel Ltd	Electro Thermo	Jindal Steel & Power Ltd
5.	Structural Steel / M.S. Tubes	TATA	JSW Steel Ltd	SAIL
		Jindal Steel & Power Ltd	Rashtriya Ispat Nigam Ltd	
6.	Plasticizer, Super Plasticizer, Admixtures, Other construction chemicals		Fosroc	Pidilite
		CICO	Sika	BASF
7.	Waterproofing	BASF	Sika	
	Compound (Crystalline)	Fosroc		Tapecrete
		Pidilite		CICO
8.	Waterproofing Self Adhesive membrane (HDPE)		Fosroc	Pidilite
			CICO	
9.	EPDM Water proofing Membrane		Pidilite	STP
		Fire Stone		

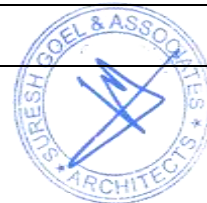


10.	PU Elastomeric Membrane (spray applied for Deck Waterproofing)	BASF	Fosroc	Sika
		Pidilite		
11.	Glasswool Insulation	UP Twiga	Poly Glass	Ownsorning
12.	Rock Wool Insulation	Lloyds	Roxul Rockwool	
13.	Swellable Bar	Pidilite	Fosroc	
			Sika	CICO
14.	Polycarbonate Sheet	Bayer	Lexan	
15.	Decking Steel Sheet	TATA Steel	Lloyds	JSW
16.	Shuttering Ply	Archid	Century	Merino
		Kitply	Greenlam	
17.	Rebarring Chemical	Hilti	3M India	Birla
18.	Fire Sealant	Hilti	3M India	Fischer
19.	Parallel Threaded Couplers (Compliant to IS 16172:2014)	Dextra	Halfen Moment	G-Tech
20.	Extruded Polysterene Board	STP	UP Twiga	Ownes Corning, Shalimar, Technicol
22.	AAC Mortar	Fosroc	Roff	Sika
23.	Moisture Resistant Board	Saint Gobain	Gyprox	USG Boral
		Greenlam		Merino
24.	Veneered Particle Board	Merino		Greenlam
		Kitply	Archid	
25.	Laminated Particle Board / Laminates	Merino	Greenlam	Century
		Novapan	Duro	Archid
	Flush door / Laminated	Century	Greenlam	Merino



26	Flush Doors	Duro	Archid	Kitply/ Swastic
27.	Toilet Cubicles	Merino	Greenlam	Dorma
28.	Hardware for Fire Check Door	Dorma	Hettich	Hafale
29.	Plywood/ Veneer/Laminate	Merino	Greenlam	Century
		Everest	Greenply	
30	Expansion Joint - Modular	C.S.	Herculus	Z-Tech
		Vexcolt	Devin	Sainfield
31.	Polyster Powder Coating Paints Repellent /Weather Sealant	Nerolac	Berger	Akzonobel
			Wacker	STP
32.	Poly-Sulphide Sealant	Fosroc	Pidilite	Sika
		Myk Laticrete	Wacker	Dow Corning
33.	Wall Putty	Birla Wall Care	JK White	Saint Gobain
		Asian paint		
34.	Curing Compound	Fosroc	Sika	Cico
		STP	Pidilite	BASF
35.	Oil Bound Washable Distemper	Asian Paints	AkzonobelDulux	Berger
		ICI	Nerolac	
36.	Acrylic Distemper	Berger	Asian	Dulux
37.	Premium Acrylic Emulsion paints	Dulux	Nerolac	Asian Paints
		Berger		
38.	Cement Primer	BP White (Berger)	Decoprime WT (Asian)	Akzonobel (Dulux)
		Nerolac		

39.	Cement Paint	Snowcem Plus	Berger(Durocem Extra)	Nerolac (Nerocem with Titanium)
		Asian		
40.	Steel / Wood Primer	Akzonobel (Dulux)	Nerolac	Asian Paints
		Berger	Jenson & Nicholson	
41.	Textured Exterior Paint	Akzonobel (Dulux)	Asian (Apex Ultima)	Nerolac Kansai (Excel)
			Unistone	Berger
42.	Synthetic Enamel Paint	Akzonobel (Dulux)	Asian (Apolite)	Kansai Nerolac (Synthetic Enamel)
		Berger		
43.	Epoxy Paint	Kansai Nerolac	Asian Akzonobel(Dulux)	FOSROC
		ICI		
44.	Epoxy Flooring	Pidlite	BASF	FOSROC
45.	Fire Paint	asian		Akzonobel
46.	Heat Resistant Tiles	Swastik	Thermax	NTC
47.	Gypsum Plaster	Ferrous Crete	Elite (90)	Ultratech
48.	Pre-Cast GRC & GFRC Jali	Unistone	Birla White GRC	Ecovision
49.	Stainless Steel	Salem Steel	Jindal Alloys	SAIL
50.	Welding Electrodes	Advani	Oerlikon	Modi
		L & T		
51.	Stainless Steel Hardware	Dorma	Hafale	Hettich
			KICH	OZONE



52	Formwork systems	Peri	Doka	Symons
53	Aluminium Shuttering	Maini	S-Form	
		MFE Form Work	Mivan	
54	Metal Standing Seam roofing system.	MULTI- INFRA TECH -Multi- Zip	LYSAGHT Flex- lok of Tata Blue Scope	Lloyd
55	Automatic Sliding Door	Dorma	Ozone	Geze

## FALSE CEILING

S. No.	Material	Approved Makes / Brands		
1	False Ceiling – Gypsum	Saint Gobain	India Gypsum	Boral Lafarge
		Armstrong	Aerolite	
2.	False Ceiling – Metal	Saint Gobain	Hunter Douglas	Armstrong
3.	Gyp Board	Saint Gobain	Boral	Lafarge
4.	Open Cell Ceiling	Armstrong		
		Hunter Douglas		
5.	False Ceiling Grid System	Gyproc	Grid System	Aerolite
		Gridline	Armstrong	Boral Lafarge
6.	Baffle Ceiling	Armstrong		Hunter Douglas
7.	Accoustical Tile False Ceiling	Armstrong	Aerolite, Denosonic	Himalaya Acoustic
8.	Acrylic Solid Surfaces	Hanex	L.G-Hymac	Dupont

## FLOORINGS

S. No.	Material	Approved Makes / Brands		
1	Mosaic / Chequered Tiles	Bisazza	NITCO	Unitile
				ZICO
	Ceramic Tiles	RAK	Somany	OASIS

2.	Glazed Tiles	Asian (AGL)	Orient, Bell	Kajaria
3.	Vitrified Tiles (Antiskid / Matt / Glazed)	OASIS	RAK	Kajaria
		Asian (AGL)	Orent Bell	Somany
4.	PVC Flooring	Armstrong	Target	Pergo
5.	Cement Concrete Tiles / GRC Pavers (Designer Tiles)	Unistone	Ultra	Eurocon
		Laxmi	Zico	Nitco
6.	Paver Block & Kerb Stone	NITCO	Unitile	Ultra
			Zico	
7.	Tile / Stone Adhesive / Tile / Epoxy Grout	Pidilite	Ferrous Crete	MYK Laticrete
		Fosroc	BASF	
S. No.	Material	Approved Makes / Brands		
8.	Dash / Anchoring Fasteners	Hilti	Fisher	Bosch
9.	Floor Hardener	Ironite	Fosroc	Hardonite
		Sikka		
10.	Laminated Floor	Armstrong	Tesa	Pergo
11.	Composite Marble / Granite / Engineered Stone	Asian	Johnson	Kalinga
12.	Water Based Melamine Polish	Asian Paint	Pidilite	ICI Dulux
		Berger		
13.	Fire Retardant Paint	Asian Paint	Berger Paint	Shalimar
14.	Clamp System For Dry Stone Cladding	Hilti	Fischer	Bosch
15.	Calcium Silicate False Ceiling	Everest	NCL	Aerolite



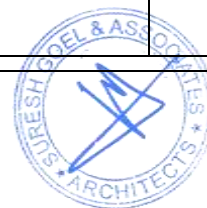
16.	Calcium Silicate Ceiling Tile / Board			
GLAZINGS				
S. No.	Material	Approved Makes / Brands		
1.	Anodised Aluminum Hardware (Heavy Duty)	Hardima	Indalco	Hindalco
		Everite	Godrej	
2.	Aluminum Structural Members – Windows, Glazing and Partitions	Jindal	Indalco	Hindalco
		Nalco		Alom
3.	Glazing Structural Suspended / Skylight	Saint Gobain	Pilkington	Glaverbal
4.	Clear / Float / Frosted Glass	Saint Gobain	AIS	Pilkington
		MODI Guard		
5.	Glass Spider Fittings	Dorma	Hafale	Ozone
6.	Stainless Steel Railing, Accessories etc. in Grade SS 304 & 316	Dorma	D-line	Geze
		Ozone		
7.	Hermitically Sealed performance Toughened Glass glass	Saint Gobain		Pilkington
		Modiguard	ASAHI	
8.	Fire Rated Vision Panels	Pilkington	Schott	
		Saint Gobain	Glaverbel	
9.	Ceramic panel Cladding	Hunter Douglas		
10.	Aluminum Louvers	Hunter Douglas	Kawneer	Colt
11.	Aluminium Composite Panels		Alucobond	
		Aludecor	Alstrong	

12.	G.I. Steel Door Frame	Synergy Thrislington	Navair	Shakti
13.	Friction Stay Hinges	Dorma	LG Sysmac	Dorset
14.	EPDM Gasket	Hanu	Anand	Osaka / Alps
15	Glass Processor for making DGU / Toughing	Art N Glass		
		ASAHI	Gold Plus	Kaenat Glass
S. No.	Material	Approved Makes / Brands		
16.	Mirror Glass	Atul	Modi Guard	Saint Gobain
		Glalverbel	AIS	
17.	UPVC Doors & Windows	Fenesta	Wintech	
		Windowmagic		
18.	Poly Sulphide Sealant	Fosroc Wacker	Dow Corning	GE
19.	Silicone / Weather Sealant	Fosroc Wacker	Dow Corning	GE

HARDWARE				
S. No.	Material	Approved Makes / Brands		
1	Nuts / Bolts / Fastners / Screws	GKW	Atul	Hilti
2.	Door/Window Fittings	Godrej	Everite	Doorset
		Hardwyn		
3.	Door Closer	Dorma	Godrej	Hettich
		Everite	Hardwyn	
4.	Die Cast Patch Fittings	Dorma	Geze	AssaAbloy
		Hettich	Ozone	

5.	Fire Rated Doors	Tata Pravesh	Shakti	
		Navair		Godrej
6.	Floor Springs	Dorma	Geze	Hettich
		Dorset	Everite	
7.	SS Mortise lock with one dead bolt and pair of SS handles steel grade SS 316	Dorma	Godrej	Hafele
		Dorset		
8.	SS Mortise latch & lock with six levers and pair of SS handles steel grade SS316	Dorma	Godrej	Hafele
		Dorset		
9.	SS Tower bolt	Dorma	Godrej	Hafele
10.	SS Butt hinges with ball bearing grade SS 316	Dorma	Godrej	Ingersoll Rand
11.	SS Hardware fitting	Kitch	Hafele	Godrej
12.	Pull handle back to back of length 150mm of Steel Grade SS 316	Godrej	Geze	Ozone
13.	Pull handle, single side of length 150mm of Steel Grade SS 316	Godrej	Geze	Ozone
14.	Aluminium lever Handles	Hardima	Godrej	Everite
15.	Lever handle in SS 316 finish	Dorma	Hafele	Godrej
16.	Magic Eye	Dorma, Godrej, Ingersoll Rand		

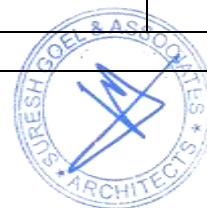
HVAC / VENTILATION SYSTEM				
S. No.	Material	Approved Makes / Brands		
1	Chillers	York	Carrier	Daikin
			Trane	
2	Chilled/ Condenser Pumps:	Kirloskar	Bell & Gossett	Wilo (Mather+Platt)
		Grundfos		
3	Cooling Towers	Mihir	Advance	Paharpur
4	Hot Water Generator	Rapid Cool	Emerald	Sandhu
5	Air Handling Units & TFA:			
5a.	Air Handling Units (Eurovent certified)	VTs	System Air	Stulz
		Flaktwood	Edgetech	Zeco
5b.	Cooling Coil	As per manufacture standard of AHU		
5c.	Fan	Kruger / Comferi	Airflow	Nikotra
6	Fan Coil Unit & Cassette Unit	Sinko	Carryaire	Trane
7	Split AC	Daikin	Hitachi	Toshiba
		Carrier		
8	M.S. Pipes: - Any dia	Tata	Jindal Hissar	Sail
9	Butterfly Valves	Advance	L&T	Danfoss
		VTM	Axim	
10	Motorized Butterfly Valve	Belimo	Danfoss	Siemens
		Oventrop		



11	Pressure independent control valve (PICV)	Belimo	Danfoss	Siemens
		Oventrop		
12	Check Valves	Advance	L&T	Danfoss
		VTM	Axim	
13	Ball valve	Zoloto	Audco	RC
		VTM	Axin	
14	Balancing Valves	Danfoss	Advance	Danfoss
		VTM	Axin	
15	2-way Modulating Valves with Thermostat	Belimo	Honeywell	Siemens
16	2-way on off valve with thermostat for FCU	Belimo	Honeywell	Siemens
17	Expansion Bellows	Resistoflex	Easyflex	Areaflex
		Dunlop	Axin	
18	Pot/Y-Strainers	Sandhu	Rapid Cool	Emerald
		Axin		
19	Suction Guide with Strainer	Anergy	Armstrong	Emerald
		Axin		
20	BTU meter	Belimo	Siemens	Honeywell
		Shenitech		
21	RH Sensor	Belimo	Honeywell	Siemens
		Omnicon		
22	Thermostat	Danfoss	Belimo	Honeywell
		Siemens	Omnicon	
23	Pressure Gauge	Feibig	H. Guru	Emerald



	(Industrial Type)	Axin		
24	Differential Pressure Switch	Siemens	Rapid Contro	Anergy
		Sant		
25	Thermometers	Feibig	H.Guru	H.Guru
		Emerald	Axin	
26	Closed Expansion Tank	Anergy	Bell & Gossett	Sandhu
		Emerald		
27	Air Separator	Anergy	Emerald	Sandhu
28	Auto Air Vent	Anergy	Rapid Cool	Oventrop
29	Plug Valve	Anergy	Rapid Cool	
30	G.I. Sheets	Sail	Tata	Jindal
31	MS. Sheets	Hindalco	Balco	NALCO
32	Fire Dampers	Systemair	Caryaire	Ruskin
		Greenheck		
33	Damper Actuator	Belimo	Sinider	Sinider
34	Grills/Diffusers	Systemair	Caryaire	Titus
		Trox		
35	Fresh Air Louvers	Systemair	Caryaire	Titus
		Trox		
36	Resinbonded Glass Wool Insulation	UP TWIGA	Owens Corning	Kimmco
		K-flex		
37	Protective Coating over insulation (Lag coating)	Pidilite	Foster	Idendan
		CISBOND		
38	Resinbonded Glass Wool Acoustic Insulation	UP TWIGA	Owens Corning	Kimmco
		K-flex		



39	Insulation Adhesive	Pidilite	Foster	CISBOND
		Henkel		
40	Factory Made ducting	Rolastar	Ductofab	Zeco
		Technofab	Ecoduct	
41	Filters (in Air-conditioning system)	Thermodyne	Purolator	Anfilco
	Ventilation Fans:	Mackmark		
42	Tube/Vane Axial	Kruger	System Air	Greenheck
43	Inline (Centrifugal)	Kruger	System Air	Caryaire
		Ostberg		
44	Propeller Fans	Kruger	GE	Crompton
45	Air Washer/Scrubber	Edgetech	Zeco	System Air
		VTS	Crystal Air	
46	Fan	Kruger	Nikotra	Comferi
47	Pump	Kirloskar	Beacon	Wilo
48	Filters	As per manufacturer's standard		
49	Heat Recovery Wheel units	DRI	Enventus (Ostberg)	Flakt
50	Heat Pipe	HPT	SPC	VTS
51	Vibration Isolator	Easyflex	Resistoflex	Dunlop
52	Anchor/Fastener	Hilti	Fisher	Gripple
		Rawlplug		
53	Duct Support	GPL	Gripple	Easyflex Zip-Clip
54	PUF Saddles	Lloyds	Beardsell	Malanpur
55	FCU link	ATS (CSI)	Oventrop	CIM



56	Sound Attenuator	Ruskin	Systemair	Trox
57	CO Sensor	Siemens	Omicron	Johnson
58	VFD	Danfoss	ABB	Siemens
		Fuji		
59	CO2 Sensor	Siemens	Omicron	Johnson
	Demand Ventilation System			
60	Equipment	Conaire	Glenstorm	Tristar
61	Motorized Assembly	Conaire	Glenstorm	Tristar
62	Integrator	Conaire	Glenstorm	Tristar
63	High Density PVC Pipe	Finolex	Kissan	Prince
		Supreme		
64	UVCI	Universal UV Solutions	UVTronix	Supco
65	Online Scale preventer	Scale Guard	Ristello	Supremo
66	Electronic Air Filtration System	Honeywell	Trion	Trane
67	VRF/VRV System	Daikin	Tosiba	Samsung
		Mitsubishi Electric		
68	Copper Refrigerant Pipe	Camipro	Rajco	Mandev
<b>FIRE FIGHTING</b>				
S. No.	Material	Approved Makes / Brands		
1	M. S Pipe	Tata	Jindal Hissar	Prakash Surya
		SAIL		
2	G. I Pipes	Jindal Hissar	Prakash Surya	SAIL
		TATA		





3	Forged Fittings	SS	VS	True Forge
4	ERW / butt Welded Fittings	MEC (Jainsons)	Unik	
5	Groove Fittings (UL listed)	Victaulic	Jainson	New
6	Ball Valve / Gate Valve (Gunmetal)	Sant	Leader	Zoloto
		CIM	Cassle	
7	Butterfly Valve	Zoloto	Kirloskar	Leader
		Audco		
8	Motorized Butterfly Valve	Advance	AUDCO	L&T
		Zoloto	Cassle	
9	Balancing Valve	Cassle	Utam& VTM	L&T
10	Non Return Valve	Cassle	Utam& VTM	L&T
11	Y-Strainer	Emerald	AUDCO	kirloskar
		Zoloto		
12	Pot Strainer	Rapidcool	Emerald	Sant
		AUDCO	Zoloto	
13	Thermometer	Emerald	Anergy	Honeywell
14	PICB Valve	Danfoss	Frees	Ovenrop
		Spirotech	Reflex	
15	Control Valve	Cassle	Viking (VL Listed)	
16	Airvent	Anergy	Siemens	Emerald/CIM /Advance/ Honeywell
17	Expansion Tank	Anergy	Emerald	
18	Hot Water	Sant	Emerald	Rapidcool



	Generator			
19	Air Pressure Valve	Anergy	Flemco	Castle
		SKS	Leader	
20	C.I. Double flanged sluice valves	Kirloskar	Zoloto	Sant
		IVC		
21	C.I. Double flanged Non-return valves	Kirloskar	Zoloto	Cassle
		IVC		
22	Dual Plate / Wafer Type Non-return valves	Kirloskar	Zoloto	Cassle
		IVC		
23	Foot valve with Strainer	Kirloskar	Leader	Zoloto
24	Y-Type / Pot / Suction Strainer	Kirloskar	Leader	Zoloto
		Tyco	Advance	
25	Fire Extinguishers	Zenith	Minimax	Safex
		Ceasefire	Newage	Safe Fire
26	First Aid Hose Reel Drum	Superex	Newage	Safex
		Safe Fire		
27	Thermo Plastic Hose Reels for Drums	Superex	Newage	Safex
28	R.R.L. Hose & C.P. Hose	Superex	Newage	Eversafe
		Safe Fire		
29	Branch Pipe, Nozzle, Coupling etc.	Superex	Newage	Eversafe
		Minimax	Lifeguard	Safeguard
		Safe Fire		
30	Landing Valves	Superex	Newage	Eversafe



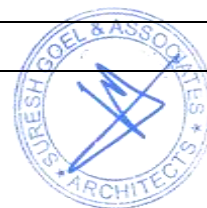
		Safe Fire		
31	Fire Brigade Connections	Superex	Newage	Eversafe
		Minimax	Safe Fire	
32	Fire Fighting Equipment not covered elsewhere	Superex	Newage	Eversafe
33	Hose Box	Superex	Newage	Eversafe
34	Sprinkler & Rosette Plates	Tyco	Viking	HD
		Spray Safe		
35	Flexible Connector (Drop) for Sprinkler	Easyflex	Viking	Newage
36	Flow Switches	System Sensor	Honeywell	Potter
		Tyco		
37	Inspector Test valve	Viking	Tyco	Hd
38	Pre-Fabricated Structural supports and clamps	Chilly	Hitech	Camry
		Easyflex		
39	Pressure Gauge	Emerald	Fiebig	H.Guru
		Danfoss		
40	Alarm Valve	Viking	Tyco	HD
41	Ant suction & delivery flexible pipe connectors	Easyflex	Resistoflex	Dunlop
		SAIL	Tata Steel Ltd	RINL
42	Flexible Duct Connector	Mapro	Kanwall Industrial corporation	Resistoflex
43	Stainless Steel Brach	Safex	Padmini	GETech



	Pipe			
44	Fireman Axe / Installation Control Valve	Safex	Padmini	GE Tech
45	2-way / 4-way FBC	Safex	Newage	GETech
46	Sprinkler Heads	Tyco	HD	Omax UL
47	Pipe Protection Pypcoat wrapping	IWL	Taxa	Mac-poly coat
48	Rubber Bellow	Kanwal Industrial Corporation	Resistoflex	AIP Valves
49	Deluge Valve	Safex	Tyco	HD
50	Flexible Drop (UL Approved)	Safex	HD	Kofulso
51	Anti Vibration Pad	Cori Dunlop	Diamond Pipe Support	Easyflex
		Flexionics	Resistoflex	Emerald
52	Motors for Fire Pumps	Siemens	Kirloskar	Crompton
		ABB		
53	Fire Pumps	Kirloskar	Mather & Platt	Grundfoss
		Siemens	Schneider	ABB
54	Electrical Switch Gears	Siemens	Schneider	ABB
		L&T	Legrand	
55	Power and Control Cables	Universal	Polycab	Havells
		Finolex	Paramount	KEI
56	Control Panel of Terrace Pumps	Advance panel & Switchgear	Adlec	Tricolite Elect Industry
		Zeniya	Neptune	Precision System



				Control
57	Voltmeter & Ammeter	Schneider	Neptune	Rishabh
		Conserve		
58	Indicating Lamp and Selector Switches	BCH	Rishabh	Conserve
59	CT	AE	Kappa	Nutech Electrical
60	MCCB / MPCB / MCB/RCCB	Siemens	Schneider	Legrand
		ABB	Hager	
61	Contractors / Times, Overload Relays / Starter	L&T	Siemens	Schneider
62	Annunciation panels	PCD	Agni	Tricolite
		Adlec		
63	Single phase preventor	Minilac	L&T	Siemens
64	Anti Vibration Mounting	Kanwal Industrial Corporation	Resistoflex	Ewren
65	Starter	L&T	Siemens	Crompton
		GE	ABB	BCH
66	Current Transformer (Cast Resin)	AE	L& T	Kappa
67	Nuts / bolts	Lakshmi	Unbrako	
INSULATION				
S. No.	Material	Approved Makes / Brands		



1	Glass Wool	U.P. Twiga	Owen Corning	
2	Nitrile Rubber	Armacell	K-flex	Aerocell
3	Expanded polystyrene	SHI	Beardshell	Styrene packaging
4	Vibration isolator pads	Resistoflex	Kanwal	
5	Paracoat BPC	Paramount	Pidilite	
<b>PUMPS AND WATER TREATMENT SYSTEM</b>				
S. No.	Material	Approved Makes / Brands		
1	Pumps	Grundfoss	Xylem	WILLO
		KSB		
2	Submersible Drainage Pumps	KSB	Grundfoss	Crompton
3	Ball Valves	Cassle	SANT	Zoloto
4	Butterfly Valve	KSB	Cassle	AUDCO
5	C.I. double flanged sluice valve	Zoloto	Sant	Castle
		Kartar		
6	Non Return Valve	Zoloto	Sant	Castle
		Kartar	Leader	
7	Y – Strainers	Zoloto	Sant	Castle
		Kartar		
8	Float Switch	Nolta	Danfoss	Honey Well
9	Pressure Gauge	Fiebig	H. Guru	Danfoss
10	Dosing system	Milton Roy	Asialmi	Grundfoss

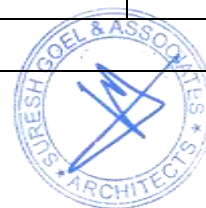
11	Liquid Level Controllers/ Liquid Level Indicator	Advance	Honey Well	Danfoss
12	Filter / Softener	Ion Exchange	Renaissance Aqua	Pentair
		Watcon		
13	Salt Saturator	Ion Exchange	Renaissance Aqua	Pentair
		Watcon		
14	Water Meter	Kent	Marshall	Sant
15	Water Treatment Plant	Ion Exchange	Brisanzi	Netsol
		Thermax	Hydro tech Paryavaran	
16	Vessels	Astral	KGM	Structural
17	Mechanical Seal	Burgmann	Sealol	
18	Grease Trap / Separator	ACO	Wade	Kassel

## SEWAGE TREATMENT PLANT (STP)

S. No.	Material	Approved Makes / Brands		
1	C.I. double flanged sluice valve	Kirloskar	Leader	Sant
2	C.I. Disk Type non return valves (65mm dia and above – Dual plate type)	Kirloskar	Leader	Sant
3	C.I. Strainer more than 65mm dia	Leader	Sant	Castle
4	PVC Valves	Cepex	Astral	Audco
5	C.I./D.I. Manholes cover	NECO	Kartar	SKF
6	Plastic Encapsulated	KGM	KK	SKF



	Foot Rest			
7	Filter feed pump	Grundfoss	ITT	WILO / KSB
8	Hydro-Pneumatic Pumping Systems (Flushing, Soft and garden hydrant)	Grundfoss	ITT	WILO / KSB
9	Submersible Sump Pumps for collection chamber, qualization tank, Plant room drainage, Filter backwash sump	KSB	Grundfoss	Crompton
10	Domestic Hydro pneumatic transfer pump	Grundfos	DP-Holland	Willo - Mather
11	Pressure Transmitters / Hydrostatic Level Indicators	WIKA	Siemens	Johnson Control
12	Pressure Gauges	Fiebig	H. Guru	WIKA
13	Dosing System	ASIA LMI	Milton Roy	Grundfoss
14	Pump Vibration Pads & Suction & Delivery Flexible Connectors	Easyflex	Resistoflex	Dunlop
15	Pressure Sand & Activated carbon filter	M.S. Prefabricated	BRISANZA	FONTUS
16	Air Blowers	Everest	Beta	ABL
S. No.	Material	Approved Makes / Brands		
17	Ultra Violet Disinfection for Treated Effluent	Alpha UV	Sukrut	Neotec
18	Air Diffusors	BOBKAY	MM Aqua	REHAU



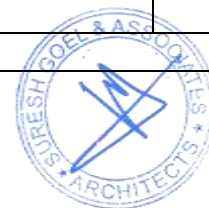


19	MBBR media for Aeration tank	MM Aqua	PP Aqua	Tecpro, INDION (ION Exchange)
20	Dosing Pumps	Milton Roy	Asia LMI	Grundfoss
21	Sludge Pumps (Centrifugal)	Kirloskar	Grundfoss	ITT Industries
22	Sludge Pumps (Screw)	Roto	UT Pumps	Stork
23	Tube Settler media	MM Aqua	PP Aqua	Tecpro
24	Centrifuge	Hiller	Alpha	Humboldt Wedag
25	Pressure Gauge	H. Guru	Fiebeig	WIKA
26	Level Gauge	H. Guru	Fiebeig	WIKA
27	pH Meter	Hach	Toshniwal	Ionix
28	Conductivity Meter	Hach	Toshniwal	Ionix
29	DO Meter	Hach	Toshniwal	Oakton
30	TDS Meter	Hach	Toshniwal	Oakton
31	Ultra Violet Water Purifier (WTP / STP)	Alfa UV Mumbai	Pentair	Eureka Forbes
32	Syphonic Roof Drainage System	Geberit	Saint Gobain	
33	Ozonisation System	Oraipl	Ozonics	Voltas
34	Geared Motor	Bonfiglioli	Grease Cotton	Motovariorio
35	Exhausters	Nicotra	Kruger	Green Heck
36	Compost Plant	Excel, Smart Enviro Bombay	Ecoman	Clean India
37	Solid Waste Handling and Conveying	Env Tech (P) Ltd.	Rosa Roca	

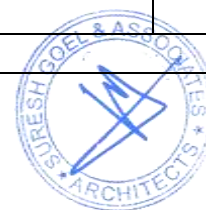
38	Preferred STP Assembler	Venza	Enhance Ecotech	Brisanzia Tech
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## ELECTRICAL WORKS

S. No.	Material	Approved Makes / Brands		
1	Air Circuit Breaker	Schneider - Masterpact Nw	Siemens - 3WL	Legrand - DMX3
		L&T - U Power Omega	ABB Emax	
2	LT Panel	Advance Panel & Switchgear	Adlec	Tricolite
		Zeniya	Precision System control	Neptune
3	TTA (Type Tested Assembly) Electrical Panels	Schneider (Blockset)	ABB (ArtuK)	Siemens (Silvacon-S-8)
		L&T (Ti)	Legrand (XL3)	
4	MCCB	Siemens - 3VA	Legrand - DPX3	Schneider - Easypact
		L&T -D sine, MTX 1.0 MTX-2.0, MTX3.0	ABB Tmax	
5	MCB / MPCB/DB	Siemens - Betagard	Legrand - Ekinox <sup>3</sup>	Schneider - Acti 9
		ABB-S200M	Hager - Novello+	
6	Modular Type light & power Accessories (Switches, socket etc.) G.I. Switch Boxes	Legrand (Myrius)	Schneider Electric (Zencelo)	Panasonic (Vision)
		MK Honeywell (Elements)/	ABB (IVIE)	



7	Multifunction Meters	Schneider	Siemens	Selec
		Secure		
8	Power Contactor-AC 3 Rating / Capacitor Duty Contactor / Starter /Thyrister Module	Siemens	L&T	ABB
		Schneider	Selec	Epcos
9	APFC Panel including all accessories (OEM Mfg only)	Siemens	Schneider	ABB
		L&T	Selec	Epcos
10	Electrical Motor / Motor Starter / Contactor /Switches	Siemens	ABB	Crompton
		L&T		
11	Bus Ducts / Rising Mains (All type)	Schneider	Legrand	ABB
12	FRLS PVC Insulated Copper Wire	Finolex	RR Kable	Polycab
		Havells		
13	Power Cables / Control Cables up to 11 KV	Finolex	RR Kable	Polycab
		Havells		
14	Lugs / Gland	Dowel	Comet	Phenix
15	PVC Conduit	Atul	BEC	Polycab/Tarun
16	MS Conduit ISI Marked	Atul	AKG	Steel Craft
17	DLP Trunking	MK Honeywell	OBO Betterman	Legrand
18	Floor Trunking / Raceway	MK Honeywell	OBO Betterman	Legrand
			True Leader	
19	Cable Tray	Slotco	MEM	
		Steel craft	OBO	



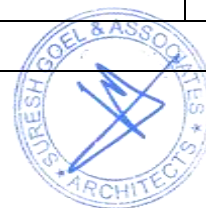
20	Solar Street Light Fitting with pole	Philips	Valmont	Bajaj
		Trilux		
23	Ceiling Fan / Exhaust Fan	Crompton Greaves	Havells	Usha
		Orient	Panasonic	Polycab
24	Octagonal Steel / High mast Pole	Philips	Valmont	Bajaj
25	Internal Lighting LED	Philips	WIPRO	
		Havells	Panasonic	
26	Outdoor Lighting	Keslec	Philips	Wipro
		Trilux	Lighting Technologies	Havells
27	Special Lighting (stadium/Stage lighting/Audi)	Canara	Stage Technologies	ADB
		Leksa Lighting	ADB	
28	Solar water Heating System	Tata BP	Racold	Honeywell

SUBSTATION WORKS				
S. No.	Material	Approved Makes / Brands		
1	Oil Type Transformers	Crompton Greaves	Schneider Electric	Raychem
		PVJ	Wilson Power	Voltamp



2	11/33 KV VCB HT Panels	Crompton Greaves	Schneider Electric	ABB
		Zeniya	Siemens	Advance
3	H.T. Termination & Joining Kit	Ray Chem	M-Seal	Birla – 3M
4	Cables Glands	Comet	Dowell	Electromac
		Siemens	Jainsons	Braco
5	Earthing & Lightning protection System	Cape	Dehn	OBO
		Jef Techno	ABB	
6	Protection Relays	ABB	Schneider Electric	Siemens

DG SETS & RELATED ITEMS				
S. No.	Material	Approved Makes / Brands		
1	Diesel Engine	Cummins	Caterpillar	Mitshubishi
		Baudouin	MTU	
2	Alternator	Siemens	Caterpillar	Stamford
		GE	Crompton	
3	Batteries	Panasonic	Exide	Amaron
4	Batteries Charger	Uptron	Volstat Electronics	Statcon
		AE		
FIRE DETECTION & ALARM SYSTEM				
S. No.	Material	Approved Makes / Brands		
7	SCADA SYSTEM	ABB	Schneider Electric	Siemens



1	Detectors & Devices – Intelligent multi criteria detector, smoke, heat & duct detectors, control & monitor module, fault isolator, hooters etc. Addressable Main Fire Alarm Panel with Digital Voice Evacuation System	Honeywell-Notifier	Bosch	Siemens
		Apollo	Advance	Edward
2	UPS System	APC	RIELLO	Eaton
		Vertiv	Numeric	
3	Public Address & Back ground music system	Honeywell	Bosch	Bose
		TOA	JBL	Heinrich
4	Access Control including Emergency Break Glass Unit	Bosch	HID	Lenel
		Honeywell		

IP BASED CCTV/ EPABX. LAN SYSTEM				
S. No.	Material	Approved Makes / Brands		
1	CCTV Cameras, NVR / Video Management Software & Accessories Encoder Decoder/ Weather proofing housing	Axis	Bosch	Avigilon
		Pelco	Mobotix	Honeywell
2	Network Switch (L2 / L3)(Access Switch/ Distribution Switch / Core switches/ Wifi Routers) All Active Components for LAN	Cisco	Ruckus	Alcatel
3	Firewall	Cisco	Fortinet	Palo Alto
4	Boom Barrier	Gunnebo	Speed Gatz	FAAC / Came
5	Co-Axial TV Cable	Finolex	RR Kable	Polycab
		Havells		
6	Optical Fiber cable (Single & Multimode) and all accessories including LIU etc.	Finolex	RR Kable	Polycab
		Havells		
7	CAT6/Cat 6A 24Port Jack Panel /Passive networking - Cat6A cable and all accessories	Finolex	RR Kable	Polycab
		Havells		
8	Networking – IT racks	CISCO	Rittal	APW
		President	MTS	
9	Network Attached Storage	HP	Dell	Lenovo
10	Desktop PC	HP	Dell	Lenovo
11	Professional Display Panel	HP	Dell	Lenovo
12	EPABX / IPABX & Accessories	CISCO	Avaya	Alcatel



ELEVATORS & ESCALATORS				
S. No.	Material	Approved Makes / Brands		
1	Elevators/Escalators	Mitsubishi	Otis	Schindler

BMS WORK				
S. No.	Material	Approved Makes / Brands		
1	IP Based BMS System (All Hardware & Software) including accessories	Honeywell-	Siemens	Johnson Controls
		Schneider Electric		
2	LAN cables for BMS Network	Commscope (Systimax)	3C3	Belden
3	PVC Conduits	BEC	Tarun	ATUL
4	Network Switches	Alcatel	Cisco	Ruckus



BMS WORK				
S. No.	Material	Approved Makes / Brands		
1	Standalone DDCs	Honeywell-Comfort point	Siemens (PX SERIES)	Johnson Controls Metasys
		Schneider Electric Struxureware		
2	Web Based BMS Software with unlimited user license	Honeywell-EBI	Siemens Desigo	Johnson Controls Metasys
		Schneider Electric Struxureware		
3	Web Based Router / Network Area Controller	Honeywell-Comfortpoint	Siemens Desigo	Johnson Controls Metasys
		Schneider Struxureware		
4	Power & Energy Management Software.	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Selec	
5	Duct Temperature Sensor	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
6	Immersion Temperature Sensor	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
7	Room Temperature Sensor	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
8	Duct Humidity Sensor	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
9	Room Humidity Sensor	Honeywell	Siemens	Johnson Controls



		Schneider Electric	Greystone Energy	Omicron
10	Flow Meter	Schenitech	Honeywell	Kampstrup
		Omicron		
11	Duct Static Pressure Sensor	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
12	Water Level Switch	Veksler	Filpro	Sontay
		Omicron		
13	DP Switch – Water	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
14	DP Switch – Air	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
15	CO2 Sensor / IAQ	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
16	Water Flow Switch	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
17	Pressure Transmitter – Water	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
18	Current Relay	Veris	Seto	Mamac
		Omron	ABB	Omicron
19	Voltage / Current / Power Factor Transducer	SETO	ABB	L&T
		Enercon	SETCO	Situ

		Omicron		
20	Flame Proof Level Switch / Level Transmitter	Veksler	Filpro	Sontay
		Techtrol	Omicron	
21	PH Sensor / TDS Sensor	Honeywell	Hach	Greisinger
		Shenitech	Omicron	
22	Personal Computer and Servers	HP	DELL	LENOVO
		TOSHIBA		
23	Colour Monitor	DELL(ULTRA SHARP)	HP(PAVILION)	SAMSUNG (SYNC MASTER)
		ASUS	LG (FLATRON)	Lenovo
24	Printer	HP	EPSON	CANON
25	Copper Conductor Control Cable	Finolex	Skytone	Delton
		Fusion Polymers	Polycab	Excel
26	Communication Cables / Signal Cable	Finolex	Skytone	Delton
		Fusion Polymers	Polycab	Excel
27	LAN cables for BMS Network	Commscope	3C3	Belden
28	PVC Conduits	BEC	Atul	Tarun
29	Network Switches	Alcatel	Cisco	Ruckus

### LIST OF ACCEPTABLE MATERIALS

Note:

1. The Contractor shall obtain prior approval from the Engineer-in-charge before placing order for any specific material or engaging any of the specialized agencies. The Contractor shall make a detailed submittal with catalogues and highlighted proposed specifications, as well as full details of the works proposed to be executed by the specialized agency, as specified.
2. Wherever applicable, the Engineer-in-charge may approve any material equivalent to that specified in the tender subject to proof being offered by the Contractor for equivalence to his satisfaction.

3. Unless otherwise specified, the brand/make of the material as specified in the item nomenclature, in the particular specifications and in the list of approved materials attached in the tender, shall be used in the work.
4. All makes shall further confirm to standard specifications of each items as mentioned in technical specifications of tender documents.
5. Teak wood shall be procured only from Gujarat State Forest Development Corporation Limited's VANIL UDYOG.

