

**LIST OF PREFERRED MAKES****A. Civil, Interior Finishing Work**

<b>S. No.</b>	<b>Description</b>	<b>Preferred Makes</b>
1	Cement (Grey)	OPC cement of Grade 43/53 (for only Concrete work) of Ultratech , A.C.C., <b>Rajashree</b> , Ambuja/ L & T
2	Portland Pozzolana Fly Ash based cement (for all works Other than Concrete)	Ultratech, A.C.C., Rajashree, Ambuja.
3	Cement (White)	Birla White / J.K.White
4	T.M.T. Reinforcement Steel	SAIL, Tata Steel Ltd., RINL, Jindal Steel & Power Ltd.; Essar and JSW
5	Structural steel	SAIL/TATA/RINL/IISCO
6	Ready Mixed Concrete	ACC/L&T /Ultratech/ RMC/ <b>Godrej / TARMAC</b>
7	Concrete Interlocking Paver Blocks, Concrete retaining / wall face / multi step /erosion control blocks/ Kerb stone	Super Tiles, Vitco , Vyara Tiles, Prayosa Buildmat
8	Antitermite Treatment	PCI, Pecopp, Godrej Hi-Care
9	Stainless Steel	Jindal/SAIL/ Mukand/ Outokumpu
10	Ceramic Tiles	Kajaria / (I)/NITCO / H.R.Johnson
11	Italian Marble	As approved by Architect
12	Factory made Concrete cover blocks	Raj cover blocks / Astra concrete products
13	Geosynthetics:- Geotextile –Non Woven, Woven ; Gabions, Geo composites ,soil improvement ; soil retaining HDPE sheet	Maccaferri Solutions; Garware wall ropes, Strata Geosystems (India)
14	External Paver Tiles Series	H. R. Johnson (I)-Endura/Vyara Tiles/ SUPER TILES/ Pavit
15	Agglomerate Composite Marble	CMC/Asian/Johnson
16	Kotha Stone	As approved by Architect

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

17	Granite Stone	As approved by Architect
18	Paint –Interior & Exterior – Acrylic based Epoxy Paint for structural steel Fire Resistant intumescent Paint	Asian Paints / Nerolac /Akzo Nobel (Dulux)/ Berger Special Decorative Textured /metallic Interior Paint –Royal Play series – Asian Paints Epoxy Paint for structural steel – Berger/ Asian / Akzo Nobel/Sigma Fire Resistant intumescent Paint – Nobel Paints/ Akzo Nobel Paints/Berger Paints
19	Texture Paint - External	Renova –Damani Dye Stuff / Ruff Cote -Indian Paints / Asian Paints
20	Clear Float, frosted Translucent, Fire Rated Glass for Door & Window & Partition Reflective Solar Control Glass	Clear Float Glass –Planilux -Saint Gobain/ Asahi India Glass Ltd / Gujarat Guardian - Modiguard Frosted Translucent Glass - Satinovo Mate –Saint Gobain Fire Rated Glass- Vetrotech Saint Gobain Glass / Shakti Hormann Reflective Solar Control Glass –Saint Gobain Glass
21	Aluminium Sections For Doors, Windows	Jindal/ Hindalco
22	Steel Doors, Windows & Pressed Steel Door Frames	Godrej/ Shakti Hormann / NCL Alltek & Seccolor Ltd Steel Fire Proof Door- Promat, Shakti Hormann/Godrej

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

23	Anodized aluminum fittings for doors/windows	Geeta Aluminium / Crown/ Classic/ Argent
24	Flush Doors/ Moulded Panel Doors-Engineered Wood Solid Core/ Natural Wood Solid Core timbers /Block Board core  Sound proof doors  Radiation Protection (lead line) doors	Anchor (Indian Plywood Manufacturing) / Merino Ply / Shreeji Woodcraft / Century / Kutty  Kutty's Nishabdh- sound proof doors- Kutty  Kutty's lead line doors-
25	Laminate	Greenlam /Merino / Royale touche Century
26	Integral Water Proofing Compound	MC-Special DM -MC Bauchemie/ CICO No 1- CICO/BASF/ Fosroc/ STP/ Sika/ Penetron.
27	White cement based putty for concrete / plastered surfaces	Wall care putty of M/s. Birla White./J.K White/ Plasto Shine wall putty of M/s. Walplast Products Pvt.
28	Floor spring & floor lock	Dorma/Godrej/ Enox/ Sevox / /Hardwyn /Hettich
29	Water Proof cement paint	Snowcem/Shalimar Paints/Kansai Nerolac
30	Welding Rods (Electrodes) for structural steel fabrication	ADOR/ Esab India/ D& H India
31	Fastner	Hilti India/ Fischer(Bosch) / Powers
32	AAC block	Xtralite -Ultratech / Aerocon/ Siporex/ Hindustan Concrete Block
33	Thin jointing adhesive polymer material for AAC blocks	Fixoblock – Ultratech / Blokset – Weber Saint Gobain / MYK Laticrete
34	Ready mix plaster	Readiplast -Ultratech/ Superplast RMP 1 -Ashtech /Buildwell -Wal Plast products/ Sound Buildcare
35	Cement bonded particle board	Bison -NCL Industries Ltd. Cement fibre Board – Shera
36	Vitrified Tiles  Heavy Duty Vitrified Tiles	RAK / Kajaria/ Restile/H.R.Johnson (I) /Nitco /Somany
37	Structural / Curtain wall Glazing	

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

a)	Aluminium Section	Jindal / Hindalco / Nalco/Vedanta
b)	D.G.U. Glass , Fire Rated Glass, S.G.U. Glass	Saint Gobain/Gujarat Guardian - Modiguard / Asahi India Glass Ltd
c)	Aluminium Composite Panel	Alucobond-3 A Composites/ Aludecore Lamination /Altobond-Deist Buildwell
38	Wooden Flooring - Laminated / Veneer Flooring/ Engineered hard wood	Titan "x" -Pergo/ Green ply – Floormax /Xylos Arteriors India /Armstrong
39	Commercial Plywood, Marine Plywood & Block Board	Century/Green/Kit ply/ Anchor
40	Cement Particle block board	Bison Panel –NCL
41	Veneer	Century / Durian,/ Timex/Anchor
42	Carpentry (Furniture ) fittings , Panic hardware fittings	Godrej/ Hettich/ Kich Architectural Products/ Dorma/Hafele
43	Plain / Designer Acrylic Sheets	Palram India/Acrylic Sheet India/ Acry Plus
44	Plain / Designer (Non Asbestos) Fiber reinforced cement False ceiling / Flexo board Corrugated (Non Asbestos) Fiber reinforced cement roof sheets	Ramco / Everest
45	Acoustic Barrier Acrylic	Palram India
46	Bitumen	STP/ Tikitar Danosa/ IWL
47	Gypsum Putty /Plaster of Paris	Khatri India/ Gyproc Champion Putty -Saint Gobain Gyproc
48	Fibres in Plaster mix & Concrete - Polypropylene Fibres / Alkali resistant Glass Fibres	Polypropylene Fibres -Reliance - Recron 3S

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

49	High Pressure Compact laminate - Cubicle Toilet Partition	Besco-Merino/ Sturdo -Greenlam / <b>Stylam/Inner space</b>
50	Brickbat Cementitious waterproofing	Waterproofing system as per India Water Proofing company or equivalent of :- MC <b>Bauchemie</b> /Chryso India/CICO
51	Terrace , Sunken Toilet Waterproofing System – elastomeric cementitious coating, Acrylic based polymer modified cementitious coating Admix for Shrinkage Compensating, Expanding Grout Admixture with Plasticizer	<b>Mc Bauchemie / Mapei India</b> / Sika/ Fosroc / BASF / Dr. Fixit –Pidilite Acrylic based Polymer Modified Cementations Flexible Composite coating- CICO TAPECRETE P151- CICO / Mapelastic smart -Mapei Cement based styrene acrylic polymer based- Seal & Dry – Ultratech cement Admix for Shrinkage Compensating, Expanding Grout Admixture with Plasticizer - Sunplex – Sunanda/ Chryso Excem CGA- Chryso/ Cebex 100- Fosroc
52	Terrace Waterproofing Membrane Sheets :- APP , Anti root type APP membrane ; TPO ,EPDM	APP :- Sika/ <b>STP/ Tiki Tar Danosa/ IWL</b> EPDM , TPO: – STP/ Carlisle
53	Crystalline Waterproofing Liquid	Xypex India/ Evercrete India / Kryton India
54	Liquid applied polyester resin base, flexible, UV resistant waterproofing system	<b>Kemperol V210 – Kemper systems</b>
55	Polyurea waterproofing	Polyurea WH 200 -Fosroc / <b>Chryso India</b>
56	Solar Reflection waterproofing coating	Aquaflex Roof HR- Mapei

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

57	Waterproofing coating Good for Drinking water –to internal surface of Drinking water tank	Idrosilex Pronto - Mapei
58	Tape used in waterproofing systems –in Tunnels & building Terrace joints	Tape -Mapeband TPE- Mapei Waterproofing Sealant – Mapeflex PU 45- Mapei
59	DPC layer (waterproofing layer )	Liquid layer - Nitoflor DPM –Fosroc Bitumen layer –STP/Tikitar Danosa/ IWL
60	Non shrink cementitious Grout for below structural steel base plates	Sika / Fosroc / BASF
61	Hydrophilic Swellable water bar, Profiles , Sealants	Sika / BASF / <b>Adeka India</b>
62	Tile Bedding – Polymer modified cement based Tile adhesive Tile joint Grout – Polymer modified cement based Grout	Tile Bedding - Polymer modified cement based Tile adhesive Laticrete 335 thin set adhesive of MYK Laticrete Equivalent of Weber / Goldstar of Ardex Endura Tile Grout- polymer modified cementitious water repellent joint filler ( Colour, drop effect water repellent & Mould resistance) for wet areas – Ultracolor Plus – Mapei,

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

63	<p>Glass mosaic tiles –Grout &amp; Bedding</p> <p>Tile Grout - three component <b>epoxy system</b> chemical resistant , Hygiene ,wet areas , fungus resistance, resistance to stains &amp; chemical resistance</p> <p>Tile Grout - 2 component, 100% solid epoxy based tile/stone filler which allows light to pass through the grout itself to create an unique reflective appearance,low shrink &amp; resistant to crack.</p> <p>Tile Grout (Green Product) - 2 component, 100% solid epoxy based, which provides photo luminescence during dark.</p>	<p>Glass mosaic tiles – Bisazza/Palladio-Piccolo mosaic/Italia</p> <p>Tile Grout- Stain Free Epoxy Grout Latapoxy SP-100 of MYK Laticrete</p> <p>Tile Bedding - thin set Laticrete 317 of MYK Laticrete</p> <p>Equivalent of Weber / Ardex</p> <p>Endura Laticrete 3701 mortar admix / Weber set Plus (white) tile adhesive</p> <p>Tile Grout which allows light to pass- Weber pearl armor</p> <p>Tile Grout – Green Product which provides photo luminescence during dark.- Weber knight armor</p>
64	Adhesive for Granite, Marble Stone Joinery	Araldite (Standard Type) -Huntsman Advanced Material
65	Polyester , PU Coating on Veneer, wood, Melamine coating on Veneer, wood	MRF Corp/ ICA /Asian Paints
66	False ceiling -Gypsum Board & Moisture Resistant Gypsum Board ;Mineral Fibre Board, wood Panels; Metal Grid Ceiling; Baffle Ceiling; Silhouette Slot System	<p>Gypsum - Saint Gobain Gyproc India/ USG Boral India</p> <p>Mineral Fibre, Metal, Wood Panels-Armstrong / Saint Gobain Gyproc India/ <b>USG Boral India</b></p> <p>Baffle ceiling – Ecophon Solo Saint Gobain/ Armstrong /USG Boral India</p>
67	Adhesive for Wood, Laminate	Marine Fevicol-Pidilite / <b>Euro - Jyoti Resins &amp; Adhesive</b>
68	<b>Adhesive for PVC Laminate</b>	Fevicol Probond –Pidilite/ Karigar PVC weld- Super Bond

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

69	Silicone Based Clear Water Repellant coating	Techrepel -Choksey chemical/ Dulux Weathershield Clear -Akzo Nobel/ Antipluviol -Mapei
70	Elastomeric Exterior Paint	Dr Fixit Rain Coat - Pidilite / Clear Seal -Apurva Make
71	Epoxy Resin Old To New Bonding Agent	Fosroc / Sika / BASF
72	Reinforcement Rust Preventive Coating	Krishna Conchem/ Sunanda / Choksey Chemicals
73	Dry Cladding (Porcelain)	Techlam-Classic./ H.R. Johnson / Kale or Equivalent as approved by Architect.
74	Structural Silicon Sealant	Dow Corning/GE-Momentive Performance Materials India/ Wacker India
75	Aluminium Facade Sun Louvers System /Sun control systems Roll formed Aluminium fins	Hunter Douglas/ Construction Specialties
76	Stainless Steel Kitchen Sink	Nirali –Jyoti India Metal/ Neelkanth-Tropical Industries/ Jayna Sinks-Jain Brothers Sanitation
77	Stainless Steel Pipe For Handrailing	For Pipe-Jindal/Zenith Birla /Mukand; Fabricated Pipe Handrailing- Kich India/ Indiana
78	Stainless Steel cladding / skirting	JSL Lifestyle Ltd / Mukand/ Outokumpu
79	Glass Fibre Reinforced Concrete Chajja/ Cornice/Fins	Birla White Cement -GRC Division/ Everest Composites
80	PVC Edge Banding	Rehau/Pegasus/Fibro



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81	Aluminium /PVC Bird Net	Geeta Aluminium / Balaji Safety Nets / Nets "N" Screens/ Reach Nettings
82	Sentry Glas / Laminated Glass Coloured lacquered Glass Pattern -Interior Glass Self cleaning Glass Laminated & lacquered Glass Mirror Thermal Insulation Glass Fire resistant Glass with Solar Control Fire resistant Glass	Saint Gobain/ DuPont Coloured lacquered Glass- Planilaque- <b>Saint Gobain</b> Pattern -Interior Glass –Décor Glass - Saint Gobain Self cleaning Glass- Bioclean - Saint Gobain Laminated & lacquered Glass- Planisafe –Saint Gobain Mirror- Miralite – Saint Gobain Thermal Insulation Glass- Planitherm – Saint Gobain Fire resistant Glass with Solar Control –Vetroflam 60 - Vetrotech Saint Gobain Fire resistant Glass- Pyrobel of Asahi India Glass Ltd
83	Stepping Stone for treads & Risers Full body vitrified	H.R. Johnson Endura Series / <b>Vyara</b>
84	Polymer Expansion Joint Filler Board & closed cell Polymer backer Rod	Supreme Industries (Dura board & Rods)
85	Sealant Polyurethane based over Polymer board Sealant Bitumen based over Bitumen filler board	Sealant Polyurethane based over Polymer backer rod/board - Mapeflex PU 65 – Mapei Sealant Bitumen based over Bitumen filler board- STP/Tiki tar Danosa/ TWT

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

86	False ceiling -Calcium Silicate Board	Ramco Hilux/Armstrong / Danapole
87	XPS /EPS Insulation Board _Styrofill geof foam (Filler )	BASF / Owens Corning / Carlisle
88	UPVC Fins	Citadel /Everwood WPC
89	Fly Ash Bricks	Jindal Mechno Bricks/ Anjaneya /Aditi Group
90	Concrete Pipes , Precast Ready made compound walls	Spun Concrete Pipes :- Raj Concrete Products / India Hume pipe Precast Readymade Compound wall- Raj Concrete Products
91	Corten steel ( Weathering steel facade)  Copper facade	Corten steel-Vijaynath interiors/ Kingspan  Copper façade – KME -Vijaynath interiors/Aludecor
92	Railing	Viva railing/Kich
93	Automatic Sliding door	DORMA/Hafele
94	Styrofill	Truepack/Infinite propack
95	Fine Aggregate	Approved Source
96	Coarse Aggregate	Approved Source
97	Galvanisation	Jenco/Steelite
98	2Hr. Fire rated glass	Pyroshield of Pilkington
99	Aluminium doors & windows	Alumi lite/Aluplex/Permisa/SP fap
100	Roch anchors	Fresinet/VSL/BBR
101	Rolling shutter	Gandhi Automation/Standard/Swastik/Avians
102	High pressure laminate	Fundermax

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103	Toilet Compact Cubicle	Merino/Stylam
104	LOGO	Alpha plus/Eigma Enterprises/Motif Graphis
105	Tensile roof	Ferrari/ <b>NEHLEK/HIRAOKA</b>

**B LIST OF APPROVED MAKES :- PLUMBING****(Note: - Fittings with IS mark preferred)**

<b>Sr. No.</b>	<b>Description</b>	<b>Approved Manufacturer / Suppliers</b>
1.	GM gate, check, globe valves	Leader, Zoloto with IS Mark or equivalent
2.	CI foot valve & Strainer	NECO or equivalent
3.	CI NR valves	NECO or equivalent
4.	Ball / Butterfly Valve	Zoloto, Audco, C & R, Kitz or equivalent
5.	Pressure Regulating Valves	Danfoss, Zoloto or equivalent
6.	ARV	Jain, crispin, Valmatics or equivalent
7.	CP brass ware fittings (Cocks, mixers etc)	Parryware, Kohler, Jaquar or equivalent
8.	CP Flush valve	Nelson, Jaguar or equivalent
9.	GI pipes	Tata, Zeniths, <b>Birla</b> , Jindal or equivalent
10.	CPVC pipes & fittings	Astral, Supreme, Prince (SMARTFIT, EASYFIR), Finolex. <b>or equivalent</b>
11.	UPVC -SWR pipes & fittings	Astral, Supreme, Prince (SMARTFIT, EASYFIR), Finolex <b>or equivalent</b>
12.	GSW pipes	Perfect or equivalent
<b>13.</b>	<b>Water pump</b>	<b>DAF, Kirloskar, Crompton, or equivalent</b>

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

<b>Sr. No.</b>	<b>Description</b>	<b>Approved Manufacturer / Suppliers</b>
14.	De -watering pump	Kirloskar or equivalent
15.	Electric Motors	Siemens, Kirloskar, Crompton or equivalent
16.	Electric panel components	Siemens, LT/LK or equivalent
17.	Pressure Gauge	Ficbig, H. Guru, Staneo or equivalent
18.	CI surface box	IS Mark
19.	Cables	Polycab,KEI or equivalent

**C APPROVED MAKE LIST – ELECTRICAL WORKS**

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

Electrical & ELV system Make list		
Sr.No.	Description	Makes / Brand
1	PVC Conduit-(HMS)	Polycab/Legrand/ Precision/ Diamond
2	PVC Casing Capping	MODI / DIMOND / Austo Plast/Polycab
3	Under Floor junction / PVC ROH	M.K./Honeywell
4	PVC wires	RR Kable/Polycab /KEI
5	Modular Switches/Sockets/Modular Plates	Legrand / Schneider /L&T/ MK / Anchor/Panasonic / Hager / ABB
6	Electronic Step Regulator	Legrand / Schneider / MK / Hager /L&T/ ABB/Panasonic/Anchor
7	Telephone Jack	Legrand / Schneider / MK / AMP/D-Link/Anchor/Panasonic / Hager / ABB/L&T
8	TV Sockets	Legrand / Schneider / MK /AMP/D-Link /Anchor/Panasonic/ Hager / ABB/L&T
9	Computer Jack	AMP /Legrand / Schneider / Systimax /D-Link/L&T
10	Bell indicator	Legrand/M.K./ L&T/Schneider/Hanger/Anchor/Panasonic
11	Telephone Cable	RR Kable/ Polycab /KEI /Anchor
12	Co-Axial Cable	RR Kable/Polycab /KEI /Anchor
13	Telephone Instrument	Panasonic/ Beetal/ G.E
14	CAT-6 Cable	Amp/ Systimax/ Legrand / Schneider /D-link
15	Wi-Fi Instrument	Cisco/ MOJO / Aruba /HP
16	LED Lamps	Philips / Crompton / Panasonic
17	LED Indoor Luminaries	Bajaj / Wipro / Philips / Crompton / Panasonic

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

18	Street Light LED Fitting/ Bollards	Bajaj / Wipro / Philips / Crompton / Panasonic
19	Outdoor Landscape Light fitting	Philips / Crompton / HYBEC
20	Exhaust Fans	Almonard/ Bajaj/Crompton/Orient
21	Sweep Ceiling fan	Almonard/ Bajaj/Crompton/Orient
22	Industrial type exhaust fans	GE / Almonard/ Bajaj/Crompton/Orient
23	Water Heaters	Bajaj / Recold / AO-Smith / Crompton
24	Split AC	Mitshubishi/Toshiba / Daikin
25	Water Cooler	Voltas / Usha
26	Water Purifier	Aqua guard / Kent / Ao-Smith/ PUREIT
27	Inverter	APC / Sukam / Neowatt - Consul / Emerson - / Numeric- Legrand /Schneider/Eton
28	UPS	APC / Neowatt - Consul / Emerson - / Numeric- Legrand /Schneider/Eton
29	Batteries	Exide / Amaron/ Standard /Amara Raja
30	Modular DB, MCB/MCCB / RCCB / RCBO	Legrand / Schneider /L&T/ ABB / Siemens
31	Industrial Sockets	Legrand / Schneider /L&T/ ABB
32	HT Metering	Huphen/As per MSEB approved make
33	11 kV Kiosk	As per MSEB approved make
34	APFC Panel	L & T / Siemens / Schneider / ABB / Legrand/Malde
35	PVC /XLPE Armoured Cables	RR Kable/ Polycab /KEI / Gloyster
36	HDPE Pipe	Finolex / Abhay Polyster/Gyamsin India
37	Cable Tray	Indiana/ Dumas / Profab / Indiana

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

38	GI Pipe Pole	TATA / Jindal / Mittal steel
39	High Mast	Bajaj / Wipro / Philips / Crompton / Panasonic
40	Octagonal Pole	Bajaj / Wipro / Philips
41	Maintenance free earthing	Ashlok / Equivalent
42	Transformers	Kirloskar/ABB/Crompton/Volt Amp/ Siemens
43	DG Set	Engine -Cummins /Caterpillar / Kirloskar / Perkins/Greaves Alternator- Stamford/Kirloskar/Greaves/Caterpillar/Perkins
44	Pump / Motor Starter	L&T / Siemens / ABB / Schneider
45	Decorative Luminaires	Bajaj / Wipro / Philips / Crompton / Panasonic / K-Lite/ HYBEC/Lighting Technology
46	Exit Signage - self powered	Clipsal / Pro-lite / Bajaj
47	MV Panel	L & T / Siemens / Schneider / ABB / Legrand
48	MV /LV Switchgears	<b>ACB</b> -L & T (Omega) / Siemens (3WL) / Schneider (NW) / ABB (E-max 2) <b>MCCB</b> - L & T (D-sine) / Siemens (3VA) / Schneider (NSX) / ABB (T-max )
49	HT Panel	L & T / Siemens / Schneider / ABB / CGL
50	PIR Motion Sensor	Bajaj / Wipro / Legrand
51	11 KV VCB	L & T / Siemens / Schneider / ABB / CGL
52	11 KV RMU	L & T / Siemens / Schneider / ABB / CGL
53	Decorative Pole	Bajaj / Wipro / Philips / Crompton / Panasonic / K-Lite/ HYBEC/Dwarka
54	PTL / Bollards	Bajaj / Wipro / Philips / Crompton / Panasonic
55	MDF Box	Krone / ITI / Equivalent
56	Krone Module	Krone / ITI / Equivalent

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57	POE / Non POE Network Switch	Cisco / HP / Juniper/Aruba
58	Fiber LIU & accessories	Amp / Legrand / D- Link / Schneider/ Systimax
59	Network Rack	CISCO/ Aruba/ Juniper
60	Fibre Optic cable and Accessories	Amp / Legrand / D- Link / Schneider / Systimax
61	Beam Detector	System Sensor / Fire Ray / Siemens / Notifier /Simplex/Honeywell
62	Response Indicator	Ravel / Agni /Siemens / Notifier /Simplex/Honeywell
63	FRLS Armoured Cable (Red Colour)	Polycab /Lapp / Caliplast / Neolex
64	Cat 6 Armoured cable	Amp / Legrand / D- Link / Schneider / Systimax
65	Outdoor Twin wall Junction BOX	Valrack / Rittal / Sell Rack
66	Wireless LAN controller	Cisco /HP/Mojo
67	EPABX	NEC / LG / Matrix / Panasonic /Sony
68	Fire Alarm Control Panel	Notifier / Siemens / GE Edward / Simplex /Honeywell
69	Repeater Panel	Notifier / Siemens / GE Edward / Simplex /Honeywell
70	BMS & GUI software	Notifier / Siemens / GE Edward / Simplex /Honeywell
71	Detectors (Smoke, Heat, Muti sensor)	Notifier / Siemens / GE Edward / Simplex
72	Beam Detectors	System Sensor / Fire ray /Siemens /Notifier
73	Manual Call point	Notifier / Siemens / GE Edward / Simplex



**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

74	Control/ Monitor Module	Notifier / Siemens / GE Edward / Simplex /Honeywell
75	Strobe cum sounder / Hooter	Notifier / Siemens / System Sensor
76	Response Indication	Ravel / Agni / Siemens /Honeywell
77	SMPS DC Power Supply	Micro Power / Syntel
78	Speaker (Cone / Box Type / outdoor)	Honeywell / Bosch / Ateis / JBL / Sony / Cisco
79	IP Based Zone Controller	Honeywell / Bosch / Ateis / JBL / Sony / Cisco
80	Digital Amplifier / Power Amplifier	Honeywell / Bosch / Ateis / JBL / Sony / Cisco
81	Mixer Amplifier	Honeywell / Bosch / Ateis / JBL / Sony / Cisco
82	Microphone (MIC) / Call station	Honeywell / Bosch / Ateis / JBL / Sony / Cisco
83	Wireless Microphone	Honeywell / Bosch / Ateis / JBL / Sony / Cisco
84	Music Player	Philips / LG / sony / Samsung or Equivalent
85	Speaker Armoured / Flexible cable	Polycab / Lapp / RR / Neolex / Caliplast
86	IP Dome Type Camera	Sony / Bosch / Honeywell
87	IP Bullet Type Camera	Sony / Bosch / Honeywell
88	IP PTZ Camera	Sony / Bosch / Honeywell
89	Network Video Recorder (NVR)	Sony / Bosch / Honeywell
90	Video management Software	Bosch / Honeywell / Milestone / Genetec / cisco / polycom
91	Surveillance Hard disk	Seagate / WD / sony
92	Server / CCTV Workstation	Dell / HP / Lenovo
93	CCTV Monitors	Sony / Samsung / LG / Philips / Panasonic

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94	Biometric Reader & controller	Verdi / Smart I / Spectra / HID
95	Access Control Software	Verdi / Smart I / Spectra / HID
96	Smart Card	HID
97	Electro Magnetic Door Lock & door Sensor	Trimac / BEL / Draficas / Algateel / Dorma
98	Exit Switch Button (bell push type)	Anchor / Legrand / Honeywell
99	Hotel Door Lock System with software	Onity / Ingersoll Rand / Assa Abloy
100	Projector	Sony / Epson / Panasonic or Equivalent
101	Motorized Screen	Dalite / Liberty / Elite / Panasonic
102	HDMI cable	Kramer / MX /BELDEN
103	Lighting Automation	Lutron / Creston / Schneider Eleelctric / Siemens
104	Smart TV	Sony / Samsung / LG / Philips / Panasonic
105	FRLS Flexible Cable	Polycab/ RR Kabel / Neolex / KEI / Finolex
106	Lifts	Otis / Kone / ThyssenKrupp/ Mitsubishi
107	Solar PV Panel	Havells Enviro, Tejonidhi infrastructure Pvt. LTD Technologies Pvt. Ltd.,Tata Power Solar Systems Ltd. Green Brilliance energy PVT.LTD, Jain Irrigation System Ltd / Warry/ Sun Technich
108	Solar Inverter	Schneider / Solar Edge / Sungroew/ Delta/Solax /SMA / Fronius / Polycab/ Microtech / Excide / DB
109	VOLTMETER ( AC / DC)	L & T / SCHNEIDER / SIEMENS / RISHABH / MECO / AE/ SELECT/TRINITY
110	AMMETER ( AC / DC)	L & T / SCHNEIDER / SIEMENS / RISHABH / MECO / AE/ SELECT/ TRINITY

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

111	POWER CONTACTORS	ABB / SIEMENS /L&T/ SCHNEIDER
112	INDICATING LAPS ( LED type) :	L & T / SCHNEIDER / SIEMENS / TEKNIC/ TRINITY
113	PUSH BUTTONS	L & T / SCHNEIDER / SIEMENS / TEKNIC/ TRINITY
114	AUTO / MANUAL SELECTOR	L & T / SCHNEIDER / SIEMENS / TEKNIC/ SELECT/ TRINITY
115	TIMERS	L & T / SCHNEIDER / SIEMENS / TEKNIC / EAPL / SELECT/ TRINITY
116	TERMINAL BLOCKS	ELMEX / WAGO / CONNECTWELL / PHEONIX CONTACT/ TRINITY
117	CURRENT TRANSFORMERS	AE / INDCOIL / KAPPA / VOLTAMPS / RICCO
118	OVER LOAD RELAY	ABB / SIEMENS /L&T/ SCHNEIDER
119	SINGLE PHASE PREVENTORS	ABB / SIEMENS /L&T/ SCHNEIDER
120	ENGINE CONTROL SELECTOR	SALZER / L & T / KAYCEE / SIEMENS / SCHNEIDER/ SELECT
121	MAIN SUPPLY SELECTOR – DPMCB	ABB / SIEMENS /L&T/ SCHNEIDER
122	BATTERY CHARGING SEL	SALZER / L & T/ KAYCEE
123	BATTERY CHARGER	KAYBEE POWEREC / CHABBI
124	SIREN / HOOTER	KHERAJ/EQUI.
125	TOGGLE SWITCH	JAY / EQUI
126	RODENT SYSTEM	VARNA ENTERPRISES / MESSAR/ DAKSHATA INDIA

**D LIST OF APPROVED MAKES FOR FIRE FIGHTING & FIRE****ALARM SYSTEMS****A) Water Based Systems:**

SR NO.	DESCRIPTION	MANUFACTURER/VENDOR
1.	M.S. ERW Pipes	Jindal/Tata
2.	C.I. Sluice Valve	Venus/H.Sarkar/ Kirloskar /Aarco
3.	G.M. Gate Valve	Leader/Zoloto/Sant/Strong Steel
4.	C.I. Non-return Valve	Castle/Univas/C & R
5.	C.I. Butterfly valve	Castle/Audco/C & R/Danfoss
6.	C.I. Foot valve with strainer /Strainer	Kirloskar / Hammer / Sir
7.	G.M. 63 mm dia single hydrant oblique pattern valve	Newage/Minimax/Essel/Safex
8.	G.M. 63mm dia branch pipe with nozzle/G.M. male-female couplings	-----do-----
9.	Fire hose RRL	Newage /Safex/ Minimax/Essel
10.	Ms hose box of 18 SWG sheet	Jay / Equivalent
11.	4 way Siamese connection	Newage / Minimax / Safex
12.	Anti-corrosive tape 4mm & primer	IWL/IPL
13.	Pressure switch	Indfoss / Switzer

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

14.	Priming tank with 100 mm dia flanged outlet	Sintex
15.	Hume pipe	Local
16.	Fire Pumps	Kirloskar/ Mather Platt
17.	Electric Motor	Kirloskar/Crompton/Siemens/ABB
18.	Fire panel	Main components :Merlin Gerin / L & T
19.	Alarm Valve	HD / Viking / Spraysafe / Tyco
20.	Sprinklers	HD / Viking / Spraysafe / Tyco
21.	Cables	Polycab / RR Kable/ Finolex
22	Pressure Gauge	H Guru / Febig

**B) Fire Alarm System & Extinguishers:**

SR NO.	DESCRIPTION	MANUFACTURER/VENDOR / SUPPLIERS
1.	Main Fire Alarm Panel (UL / FM / LPCB Approved)	Notifier/Edwards/Simplex/ Apollo
2.	Smoke / Heat Detectors with Base (UL / FM / LPCB Approved)	Notifier/Edwards/Simplex/ Apollo
3.	Devices & Modules (UL / FM / LPCB Approved)	Notifier/Edwards/Simplex/ Apollo

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

4.	Cables	Polycab / RR Kabal/ Finolex
5	Fire survival cable	AFW / FRTEK / RAVIN / BONTON / TYCO
6.	Extinguishers	Ceasefire / Minimax

**E LIST OF APPROVED MAKE - LIFT**

<b>List Of Approved Makes for LIFT</b>		
<b>SR No.</b>	<b>Items</b>	<b>Makes (ISI marked)</b>
1	Passenger/ Service Lift	Otis / ThyssenKrupp/ Mitsubishi / Kone/ <b>Schendler</b>
2	Dumbwaiter Lift	Monarch/ Mitsubishi/ Shree Elevators/Franco elevators/ <b>Hyundai</b>

**F APPROVED MAKE LIST – HVAC WORKS**

<b>S.NO.</b>	<b>COMPONENT</b>	<b>APPROVED MAKE</b>
1	VRF MAKE	MITSUBISHI/ TOSHIBA / DAIKIN
2	AHU	EDGETECH/ NEUTECH/WAVE/ZECO/CITIZEN
3	BUTTERFLY/BALL VALVE	AUDCO / KEYSTONE / ADVANCE / CASTLE
4	PRE-INSULATED DUCT	PAL / AASAWA / ZECO

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

5	DX INVERTER UNITS	mitsubishi/ TOSHIBA / DAIKIN/VOLTAS
6	VRV PIPING WITH INSULATION	MANDEV/RAJCO/OEM APPROVED
7	PIPE - CPVC / UPVC	ASTRAL/PRINCE
8	INSULATION (NITRILE RUBBER)	ARMAFLEX/ARMACELL/LP
9	EPS/ THERMOCOLE	BEARDSELL/ COOLINE
10	PROPELLER FANS	NICOTRA/KRUGER/ CROMPTON/ALSTOM
11	PLENUM BOXES	COSMOS / RUSKIN TITUS/AIR MASTER
12	DIFFUSERS/GRILLS	COSMOS / RUSKIN TITUS / AIR MASTER
13	DUCTING SHEETS	SAIL / JINDAL / TATA / UTTAM
14	ANCHOR FASTNERS	HILTI/ FISCHER
15	MCB / MCCB	L&T / SIEMENS / SCHNEIDER/ABB
16	FIRE DAMPERS/DAMPERS	COSMOSS/RUSKIN TITUS/AIR MASTER
17	VCD (G.I.)	COSMOSS/RUSKIN TITUS/AIR MASTER
18	TEMP SENSOR & PR. SENSOR, FIELD DEVICES	H-GURU, DANFOSS, BELIMO, HONEYWELL, JOHNSON CONTROLS/SIMENS
19	ELECTRICAL CABLING	POLYCAB/RR KABALS/CCI
20	FLEXIBLE DUCTING	TWIGA/OWENS
21	PANEL	URMI TECHNOLOGIES
22	PIPE FITTINGS & GASKET	TYCO/VICTAULIC/MECH(JINAN MEIDE)
23	INSULATED FLEXIBLE DUCT	TWIGA/OWENS
24	DRAIN PUMP	INFINITY/LIBERTY/ASPEN/SAURMEN

**1900000133 – ENCLOSURE 21 – LIST OF PREFERRED MAKES**

25	BMS/DDC Control	SIEMENS/JOHNSON CONTROL/HONEYWELL
26	FAN	KRUGER/HUMIDINE/NICOTRA
27	VFD	DANFOSS/JOHNSON CONTROL/ABB/SIEMENS/L&T

**G LIST OF APPROVED MAKES FOR STP:-**

<b>S.NO.</b>	<b>COMPONENT</b>	<b>APPROVED MAKE</b>
1	Bar Screen	As per manufacturer's design
2	Air Blower	Airvac/Everest / Vardhaman or equivalent
3	Diffusers	Scogen / Everest/Equivalent
4	MBBR Media, Tube settler	As per manufacturer's design
5	Hypo Dosing Tank	Sintex/Thermax or Equivalent
6	Hypo Dosing Pump	Asia LMI/Thermax/ equivalent
7	Ozonator	Ozonics/ Ozonetek/Aquazone/equivalent
8	Agitator for brine tank	as per manufacturer's design
9	Float switch	Innovative / equivalent
10	Equalized waste water transfer pump	Johnson / Kirloskar / wilo/equivalent
11	Soft Water lifting pumps	Johnson / Kirloskar / wilo/equivalent
12	Sludge pump, Filter pump	Johnson / Kirloskar / wilo/equivalent
13	Electrical Switchgear	Siemens/ L&T/ Schneider



**1900000133 - ENCLOSURE 21 - LIST OF PREFERRED MAKES**

14	PLCs	Siemens, Allen Bradley, Schneider/equivalent
15	Electrical cabling/wiring	Polycab / Universal /RR Kabal//equivalent