

# **Gujarat University**

# TECHNICAL SPECIFICATIONS

### MATERIAL MAKE LIST

### Tender No: GU/ESTATE/MSNT/2020-21/05

## TENDER DOCUMENT FOR CONSTRUCTION OF MATERIAL SCIENCE & NANO TECHNOLOGY BUILDING AT GUJARAT UNIVERSITY.

#### LIST OF APPROVED CIVIL MATERIALS / BRANDS FOR BUILDING WORKS

Sr. No.	Item	Approved Make
1.	Cement –SRC	Ultratech, Ambuja, Siddhi ,Wonder Cement, NIRMAX
2.	Reinforcement Steel-Fe 500 SRS	Tata-Tiscon, Vizag, SAIL, Essar, Electro TMT, ASR
3.	Structural Steel	Tata, SAIL, Essar, ASR
4.	Water proofing Compounds	Krishna Concare, Pidillite, Fosroc, Roffe, CICO or equivalent
5.	Hardeners	'Ironite', 'Ferrok', 'Hardonate'or equivalent
6.	Plastic emulsion Paints : Interior	Jotun, Asian Paints, ICI Dulux
7.	Red Oxide (For IPS Flooring)	'Shalimar', 'Garware'or equivalent,
8.	Premium Quality Weather proof paint : Exterior	Jotunjotashield, Apex ultima, Dulux weather shield
9.	Glass/ Structural Glass	Saint Gobain LOW-e, ASAHILOW-e
10.	Ceramic Tiles	Johnson, Somani, Asian, or as approved by consultant.
11.	Vitrified Tiles (Note : Vitrified Tiles shall have to be whole body homogenous & Matt finish)	Johnson, Somani, Asian, or as approved by consultant.
12	Stone	Mirror polished kota, Machine cut river polished granite, as approved by consultant
13.	Water proofing Membrane type	As per specification & as approved by Consultant
14.	Aluminum Sections for Doors/Windows	Jindal, Bianco or as approved by Consultant/Client
15.	Teak Wood	Ghana Teak Wood as approved by Consultant/Client
16.	Ply Wood	Century, Greenply, Marino
17.	Marine ply	Century, Greenply, Marino
18.	PVC Tank	Syntex or as approved by Consultant/Client
19.	Anti-termite materials	Chlorophyriphos or materials as approved by Consultant/Client
20.	Adhesive for tiles fixing	ArdexAndura, MRF
21.	Hardware	Heltich, Dorma, Doorset, Ozone as approved by consultant
22.	Expansion joint sil flex(cap cell HD 100)	Supreme industries, Softex industries pvt.ltd. Bengal bitumen
23	Rolling shutters	Rama shutter.co. , Akash shutter, Olympic rolling shutters
24.	Dowelling and rearing	Hilti system or Equivalent as approved by consultant
25.	White Cement putti	Birla white cement, J K Wall putti
26.	Quartz manufacturer	Classic marble company,jayantilal& sons or as approved by consultant
27.	Stainless steel railing	Ozone, Kitch, Orbit or as approved by consultants
28.	Structural and spider glazing	Dorma, Ozone
29.	Glass railing	Ozone pvt.ltd., Kitch or as approved by consultants
30.	Cubical partition system for restroom	Merino-Bosco.co. or as approved by consultants
31.	Exterior Texture	JotunUltraTEX, Asian- duracast
32.	Epoxy paint	Nerolac, Shalimar, Cico, Dubond, Berger, Asian
33.	Multi-cell Polycarbonate Sheet	Danpalon, DPI Daylighting, Tuflight, Coxwell

#### LIST OF APPROVED PLUMBING MATERIALS / BRANDS FOR BUILDING WORKS

Sr. No.	Item	Approved Make
	SWR PVC PIPE & FITTINGS 6 KG CM <sup>2</sup> ;	
1	FITTINGS : 6 KG CM <sup>2</sup>	FINOLEX /PRINCE
	ECO. DRAIN PIPE & FITTINGS	SUPREME/ ASTRAL
2	GULLY TRAP	GIRCO / TIRUMALA / SUPREME/ ASTRAL
3	RCC HUME PIPES EXTERNAL MAIN UNDER GROUND PIPE	INDIAN HUME PIPE / PRANALI
5	C.I. PIPE & FITTINGS	NICO OR EQ.
6	PPR PIPES & PPR FITTINGS	SUREME/PRINCE/
7	M.S/G.I. PIPES FOR WATER SUPPLY	TATA / JINDAL/ SWASTIK
8	ASTM/CPVC PIPE & FITTINGS FOR WATER SUPPLY	ASTRAL / SUPREME/ASHIRWAD /
9	COMPOSITE PLUMBING PIPE & COMPOSITE FITTINGS	KITEC OR EQ.
10	G.I. PIPES FITTINGS WATER SUPPLY	DRP-M / R-BRAND / ZOLOTO
11	GI TO GI JOINTS	CHAMPION / EQUIVALENT
12	SOLVENT CEMENT	SUPREME / KISSAN / FINOLEX
13	BALL VALVES	LEADER / ZOLOTO / AUDCO
14	WHEEL VALVES	LEADER / ZOLOTO/AUDCO
15	DCV / NRV	ZOLOTO/SPIREX/AUDCO
16	TAR	SHALIBIND / TIKIBOND-BS
17	SELF PRIMING SEWAGE PUMPS	HBD / GRUNDFOS
18	VALVES	AUDCO/ZOLOTO / R.B. / KBL / KSB
19	PUMPS	KIRLOSKAR / GRUNDFOSS/
20	STARTER	SIEMENS / L&T
21	PRESSURE GAUGE	BELLS / H GURU
22	BOTTLE TRAP & WASTE COUPLING	GROHE / JAQUAR / KOHLER
23	DEWATERING PUMPS	GROUNDFOSS/KIRLOSKAR/ KSB
24	HYDROPNEUMATIC SYSTEM	GRUNDFOSS OR EQUIVALENT
25	SANITARY FIXTURES	HINDWARE / PARRYWARE / CERA /KOHLER
26	PLUMBING FITTING	GROHE / JAQUAR / KOHLER or as approved by consultants.
27	METALLIC BELLOWS	BELLOW FLEX / PRICISION / DHRUV / B.D. ENGR.
28	R.O.PLANT	ION EXCHANGE /POWER H20 / THERMAX
29	SOFTENER PLANT	ION EXCHANGE /POWER H20 / THERMAX
30	SOLAR SYSTEM	SOAHEART/RACOLD/TATA-BP
31	ELECTRIC GEYSER	A-O SMITH/ RACOLD/SPHERHOT
32	HOT WATER GENERATOR	THERMAX/A.O.SMITH / KEPL/ BENCHMARK OR EQUIVALNET
33	SEWAGE TREATMENT PLANT	THERMAX / ION EXCAHNGE / EQUIVALNET

<u>Consultant/Client is ask to choose any make from above. Any other item which has not</u> <u>mention in make list, consultant/Engineer-in-charge is final authority to suggest.</u>

#### LIST OF APPROVED ELECTRICAL MATERIALS / BRANDS FOR BUILDING WORKS

SR NO.	ITEM	APPROVED MAKE
1	Capacitor (APP / Heavy duty type)	Havells, Epcos, Subodhn, Schneider, Matrix
2	Main Cables Upto 185 Sq.mm	XLPE armored cable for 1.1 KV Polycab, Havells, RR Kabel, Avocab
3	Main Cables Above 185 Sq.mm	XLPE armored cable for 1.1 KV Polycab, Havells, RR Kabel, Avocab,
4	Glands	Double Compression type, Siemens type with rubber ring and double washers. – Comet, Standard Metal Industries
5	Distribution Boards	Legrand, Schneider, MK, Mitsubishi
6	MCBs	Legrand-DX3, MK, Schneider, Mitsubishi
7	МССВ	Legraand DPX/DPX <sup>3</sup> , Schenider NSX, Mitsubishi
8	ACB (Should have inbuilt power metering)	Legrand DMX <sup>3</sup> (MP4 release), Schenider Masterpact (NT relese), Mitsubishi
9	Switches & Its accessories	MK Blenze, Legrand Myris, Schenider Zenselo,
10	Flexible Wires (FRLS)	Polycab, Havells, Lapp INFRA
11	Light Fixtures	Lighting Technology, Crompton, Ensave – Approved model only by consultant
12	Chemical type earthing	Erico, Rapid, Doksun, Greenwire
13	Cat-6	Legrand, Schneider, D-link, Havells
14	Meter (Digital)	Elmeasure, Legrand, SEMS, Conzerv, HPL
15	PVC PIPE & Accessories	1.6-1.8 mm wall thickness ISI & FIA approved & manufactured from virgin4 material. Precision plastic industries, Polycab, Nihir, Vraj
16	Raceway	MK, Legrand
17	Lightening Arrestor	Rapid, Doksun
18	PA System / Music System	Stone Water, JBL, Austrailian Monitor, TOA, Tennoy
19	ССТV	HONEYWELL/ BOSCH/ AXIS / VIVOTEK
20	Fire Alarm System	HONEYWELL / SIEMENS/ TYCO / EDWARDS /

		JOHNSON & CONTROL.
21	Panel Vendor	Active Engineers, Swati switchgear, Dynamic Control
22	Indoor Wireless Access Points	Hp / Cisco / Juniper
23	Rack With Accessories	Apw/Rittal/Netrack
24	Cable Manager	Apw/Rittal/Netrack
25	6 Core Single Mode Multitube Fiber Cable Armoured Lszh	Molex / Tyco / Legrand
26	24 Port Fiber Liu Loded - Single Mode	Molex / Tyco / Legrand
27	Layer 2 Fully Managed Networking Switch	Hp / Cisco / Juniper
28	Ups	Emersion / Apc / Eaton
29	DECORETIVE LIGHTING	VIZION / ENDO / WIPRO / PHILIPS

#### LIST OF APPROVED MAKES FOR INTERIOR WORKS

Sr.	Component	Approved Make
No.		
1	Float Glass	Modi Guard/Indoasahi/ Saint Gobain
2	Resin Based Adhesive	Fevicol/Vamicol/Blue Court
3	Pin Up Board	Sintatex/Alkosign
4	Ss/Chrome Coated Hardware	Ebco/Dorest/Arkay
5	Laminate	Formica/Decolam/Merino
		Green Lam/Asis/Sunmica
6	Veneer	Green/Century/Natural
7	Aluminium Alloy Extruded	Hindalco/Indalco
	Section	
8	Post Form Board	Merino/Formica/Sunmica
9	Locks	Godrej/Dorset
10	Pivots, Handle Bars Etc	Dorma/Dorest
11	Pre-Laminated Particle Board	Novapan/Kitlam/Merino
12	Plain False Ceiling	Gyproc (Saint Gobin) Or as Approved By
		Consultant Gyp Steel Ultra-With Company
		Section/Specifications Only It Shall Be Executed
		By Company's Authorized Applicator &
		Certificate From The Company Shall Be
		Attached With Final Bill.
13	Grid False Ceiling	Armstrong, Gyproc (Saint Gobin) Or as
		Approved By Consultant With Company section
		/ Specifications Only- It shall Be Executed By
		Companys authorised Applicator & Certificate
		From The Company shall Be Attached With Final
		Bill
14	Acoustic Panelling With	Armstrong Or As Approved By Consultant With
	Fabric Finish	Company section / Specifications Only- It Shall
		Be Executed By Company's Authorized
		Applicator & Certificate From The Company
		Shall Be Attached With Final Bill.
15	Acoustic Paneling With	Armstrong Or As Approved By Consultant With
	Laminate Finish	Company section / Specifications Only- It Shall

		Be Executed By Company's Authorized
		Applicator & Certificate From The Company
		Shall Be Attached With Final Bill.
16	Wood-External Wood	Steam Beach, Teak Wood Or As
		Approved By Consultant 1 <sup>st</sup>
		Quality Imported 95% In Even Color Without
		Knots, Joints & Bend Wood.
17	Wood-Internal Wood	Marandi 1st Quality Imported 95% In Even
		Color Without Knots, Joints & Bend Wood. Or
		As Approved By Consultant
18	Molding/Bending	Steam Beach, Teak Wood Or As
		Approved By Consultant 1 <sup>st</sup>
		Quality Imported 95% In Even Color Without
		Knots, Joints & Bend Wood.
19	Ply Woods & Block Board	
Α.	Block Board	Samrat/Century / Green/
		Sainek/Arched Classic Ply
В.	Ply Wood	Samrat/Century/ Green/
		Sainek/Arched Classic Ply
20	Adhesives	Synthetic Resistant Adhesives /
		Fevicol Sh.
21	Floor Spring	Ozon / Godrej Or Equivalent
22	Door Stop	E.G / Ebco Or Equivalent
23	Hinges	GurgSs Finish / Aucto Closing Heavy Duty
		Approved By Architect.
24	Stoppers	Orbit / Ebco Or Equivalent
25	Drawer Chanel	Ebco / Hettich / Inox Or
		Equivalent
26	Door Closer	Godrej / Ozone Orequivalent
27	Screw	Rk / Gkw / Nettle Fold Orequivalent
28	Finish	
Α.	Polish	Asian Melamine/Mrf Melamine
В.	Paints	Asian Paints/Ici/Nerolac

29	Rollar Blind	Vista/Arolex/Marvel
30	Carpet	Unitex/Rosetta/Bajaj
31	PVC Flooring	Wonder Floor/Poly
		Floor/Tusker
32	Vinyl Flooring	LG / Armstrong / Soli Brite
33	Wooden Flooring	Pergo/ Euro / Vista/ LG /United/ Armstrong
34	Ss Plate For Name Plate	304 Grade Brush Finish
35	Powder Coating	15 Micron As Per Selection
36	Bathroom Cubicals	SS Series - Merino-bosco, Greenlam, Metalium

#### LIST OF APPROVED MAKES FOR HVAC EQUIPMENT & MATERIALS

Equipment / Materials	Manufacturer's Name
Variable Refrigerant Volume/Flow system	Daikin/Mitsubishi/Toshiba/Blue star/ O 'General'
Air Handling Units	Citizen/Edgetech /Nutech/VTS/Zeco/ Ethos
Ventilation Fans	Kruger/ Nicotra / Systemair/ebm-Nadi
G.I.Sheets for ducting	SAIL/Tata/Jindal/Essar
Grilles & Diffusers	Ravistar/Airmaster/Airproduct /Cosmos/Dynacraft
Fire Dampers	Carryaire/Systemair / Ajanta/Ravistar
Expanded Polystyrene	Beardsell/Thermowell/Thermopack /Cooline
Fibreglass material	UP Twiga/KIMMCO /Owvenscornings
Closed cell elastomeric nitrile rubber	Armaflex/A-flex/K-flex/SuperIon
Copper pipe	Mandev/Rajco/Totaline/Maxflow
МССВ	ABB/GE/L&T/MDS Legrand/Schnider/Siemens
МСВ	ABB/GE/Schneider(MG) /Hager-L&T /MDS Legrand
Contactors, Overload relay	Schneider(MG) /GE /L&T/Simens/ABB
Motors	Kirloskar/Crompton Greaves/Bharat Bijlee /NGEF/ABB
Selector Switches	Kaycee /Tecnic
Current transformers	TELK/Kappa/Indcoil
Metering Instruments -Digital	ABB/EI /IME/L&T/Secure/Nippen/Schneider
Indicating lamps & Push Button	GE/Schneider/ Teknik/L&T/Altos
Cables	Polycab/Universal/Gloster/RR/Finolex/Nicco/Torrent
Controls	Honeywell/Sauter/Johnson/ Siemens/TAC/Trane
Vibration isolators	Dunlop/AVM/Ferolastic/Resistoflex
Air curtain	ACME/Tristar/NEC/R-Tek
Propeller fan	GEC/Khaitan

SPECIAL NOTE: Contractors intending to supply other makes of materials than the ones listed above shall indicated clearly the makes in their offers highlighting the salient features and advantages of that make supported by catalogues. The right of accepting such makes rests with he consultants.