Ruchira Group Pavitra Conbuild Pvt. Ltd, NOIDA

Registered Office B-20, 3rd Floor Sector 63, NOIDA (UP)

Email: ruchiragroup@gmail.com Website: www.ruchiragroup.com www.Sapphiresmarthomes.com

PROJECT SPECIFICATION

FOR CONSTRUCTION OF

MULTI-STOREIED FLATS

RUCHIRA GROUP PROJECT SAPPHIRE

JAIPURIA SUNRISE TWONSHIP

PLOT: GH01, OPPOSITE – COLUMBIA ASIA HOSPITAL

NH-24, GHAZIABAD

Pavitra Conbuild Pvt Ltd – Project Specfications

A. Overall General Specifications

- 1. Name of the Project: "THE SAPPHIRE"
- 2. Address of the Project: Plot No.2, Opp. Columbia Aisa Hospital, Village-Shahpur, Bamheta, NH-24, GZB, UP
- 3. Connectivity of the Project: Ghaziabad, NH-24
- 4. Total plot area of the project (in sq. ft.): 76252 sq ft
- 5. Ownership details of the plot (in case of JDA, please provide details of landowners and share in the project): **100% (PAVITRA CONBUILD PVT LTD)**
- 6. Total Saleable area of the project (in sq. ft.): 422664 sq ft
- 7. Saleable area pertaining to borrower group: N/A
- 8. Status of approvals required: ALL APPROVED

Project Clearance Details

Approved Plans for project	YES	29-4-14
Fire NOC	YES	21-8-14
Environment Clearance Certificate	YES	30-09-12
UP State Pollution Control Board	YES	02-12-14
Airport NOC	YES	07-07-14

- 9. Project Component: (No of tower, No of Units): (NO. OF TOWER-2, NO.OF UNIT-306)
- 10. Carpet and Other Area Details

Ruchira Group - Sapphire Affordable Housing - Apartment wise SBA, Carpet Area and Other Area Details													
UNIT TYPE	Carpe	t Area	Built-u	p Area	Saleable Area (Excluding Car Parking)		Super Built Up Area - SBA (Car Parking Included)		Wall area		Balcony area		No. of
	Sq. Mt.	Sq. Ft.	Sq. Mt.	Sq. Ft.	Sq. Mt.	Sq. Ft.	Sq. Mt.	Sq. Ft.	Sq. Mt.	Sq. Ft.	Sq. Mt.	Sq. Ft.	balcony
Type-A, 2BHK	46.776	503.497	62.430	672	86.12	927	97.83	1053	5.904	63.551	9.926	106.843	3
Type-B, 2BHK	50.021	538.426	67.168	723	92.62	997	105.41	1135	6.670	71.796	10.537	113.420	3
Type-C, 2BHK	55.544	597.876	73.114	787	100.98	1087	114.92	1237	6.047	65.090	11.422	122.946	2
Type-D, 3BHK	69.784	751.155	95.318	1026	131.36	1414	149.49	1609	7.147	76.930	18.143	195.291	3
Type-E, 3BHK	86.919	935.596	114.270	1230	157.66	1697	179.41	1931	8.620	92.786	18.026	194.032	3
Type-F,3BHK	86.919	935.596	114.270	1230	157.66	1697	179.41	1931	8.620	92.786	18.026	194.032	3
Type-G, 3BHK	88.172	949.083	120.308	1295	166.02	1787	188.93	2034	11.252	121.117	21.615	232.664	4

B. PROJECT TECHNICAL SPECIFICATION

Boundary Wall:

Boundary wall shall be constructed and provided with M S R ailing of approved pattern to required height with Gates, wicket Gates, Security Guard Huts as per Local Bye Laws and approved drawings. Each dwelling unit shall be provided with security system from Guard's hut at the gate.

Foundations:

Raft Foundation for multi-storied blocks compliant to earthquake resistant design shall be provided. The minimum grade of concrete used shall be of grade M-25.

Earth Quake Resistant Structure:

The building with frame shall be designed as per provisions of Earth Quake resistant Codes IS 1893 (Pt-I) 2002 – criteria for Earthquake Resistant Design of structures – General provisions and buildings and IS 4326:1993 -Earthquake Resistant Design and Construction of Buildings Code of Practice (for Zone-IV)

Superstructure:

Framed structures in RCC with brick partition walls in cement mortar shall be provided. The concrete used for columns shall be of minimum grade M-30 and for other structural members shall be of grade M-25 minimum. For RCC work, grade of concrete used shall be grade of not less than M-25.

Reinforcement Steel:

The steel used for reinforcement will be of grade Fe-500.

Beams/Lintels/Slabs/Columns etc.:

Reinforced cement concrete of Grade M-30/m-25.

Brickwork:

All brickwork shall be carried out with bricks of first class designation 100 minimum. Thickness of Brickwork shall be as per approved drawings. However, all external walls shall be minimum 230 mm thick.

Doors/Windows:

All door frames shall be kiln seasoned Meranti wood. The main entrance door shutter shall be 35 mm thick teak wood panelled door with teak wood styles and rails and teak wood panels, and polished. Internal doors and doors opening to balconies shall be provided with 35 mm thick flush door shutters finished with synthetic enamel paint of approved shade and make. All Windows shall be of Polyester Powder Coated Aluminium having double shutters, glazed with 5 mm thick float glass and SS wire mesh including accessories, either sliding or side hung as per approval by NHDO, frames shall be Polyester Powder Coated Extruded Aluminium Sections with minimum wall thickness of not more than 14 Gauge. The windows shall also be provided with aluminium grill of approved pattern and thickness.

Flooring:

Vitrified tile flooring shall be provided in all rooms except in the drawing and dining rooms where ultra-glazed vitrified tiles of approved make shall be provided. Matt finished ceramic tiles of

approved make shall be provided in verandas/balconies with minimum thickness of 10.0 mm and above. Udaipur green stone flooring shall be provided on staircases and corridors. Granite stone (of approved shade) flooring and cladding shall be provided in Lift and entrance Lobbies.

Wall & Ceiling Finish:

All internal walls and ceiling shall be plastered with cement mortar and provided with White Cement Putty and finished with acrylic paint

External Facade:

External facade to be finished with textured paint of spectrum/Heritage brand.

European Water Closet:

Wall Hung EWC

Wash Basin:

550 mm * 400mm with built in counter or Granite top counters provided with single whole CP Brass basin-mixer of approved make and model.

Bath Fittings:

CP Brass Wall mixer with shower rose of minimum 100 mm dia.

Kitchen:

Granite stone working top with ceramic glazed wall tiles up to 600 mm height on walls above the working top, with minimum thickness of 6.0 mm and anti-skid matt finished heavy duty tiles for flooring with minimum thickness of 10 mm. Kitchen sink of stainless steel with 250 mm deep bowl with draining board shall be provide with swinging type sink mixer. Hot water connection from solar hot water tank shall be provided in the kitchen.

Water Proofing:

- (i) Terrace: Mud Phusks / Brick Bat Coba as per CPWD specifications and relevant IS Codes or as per specifications approved for Sapphire Standard Housing Scheme
- (ii) OH Water Tanks: Injection grouting from inside with 10 years guarantee.
- (iii) Retaining Walls of Basement/UG Tank: Box type Kota Stone Water Proofing as per CPWD specifications and relevant IS Codes.
- (iv) Sunken Slabs: Three course acrylic based water proofing treatment.

Internal and External Piping:

Approved make CPVC pipes conforming to IS: 15778 shall be used for internal water supply for the dwelling units. UPVC pipes conforming to IS: 7834-1975 shall be used for External Water Suppl. UV stabilized soil, waste and rain water pipes conforming to IS: 13592-1992 Type B shall be used with V-shaped Rubber Ring conforming to IS: 5382.

Roads:

(i) Sub-grade to be compacted at OMC in layers not exceeding 20cm depth to achieve 95% of dry density.

- (ii) Water Bound Macadam (WBM) 150mm thick with stone aggregate 90mm to 45mm including 13mm size stone screening duly compacted.
- (iii) Top layer of Cement Concrete M-20, 150mm thick, vibrated, vacuum dewatered, skim floated and power towelled top surface with broom finish, laid in panels, with side slopes as necessary, including providing grooves as required for expansion joint and filling the grooves with a mixture of 80 kg of hot bitumen, 1 kg cement and 0.25 cu m of coarse sand.

Letter Boxes and Number Plates:

Decorative Number plates of design and material approved by NHDOP for Blocks and dwelling units are to be provided to display the number prominently.

Electrical:

Copper wiring of adequate size as per IS specifications to match the power requirement of each dwelling unit to be provided in MEDIUM GRADE concealed PVC conduits with MCBs and ELCBs with modular switches. All these items shall be approved make.

TV / Telephone / Internet Points:

TV / Telephone / Internet points shall be provided in the living / bed rooms of all dwelling units. Minimum number of such points shall be as follows:

Light Fittings:

Electrical light fittings, fans / exhaust fans, etc. are not to be provided in the dwelling units, however all common areas, such as Basements, Stilts, Corridors, Staircases, Lift Lobbies, Machine Room, Lift Pit, Community Centre, Guard Rooms, Sub-station Building, Pump Room, Street Lights, Gate Lights, etc. Shall be provided with fittings of approved make and model to achieve the desired Lux level of illumination and air circulation as per National building Code-2015.

Water Supply System:

Source of water-supply at one point with pumping arrangement to individual/common water tanks on top of the buildings for each flat shall be provided. Raw water and Drinking water pumps shall be of adequate capacity and of approved make.

Sewerage System:

Properly designed underground sewerage system with manholes shall be provided with a Sewage Treatment Plant based on Sequential Batch Reactor (SBR) technology of adequate capacity as per NBC – 2015 and taken to external sewerage system of the local authority for final disposal of the treated sewage. The offer shall be inclusive of three years operation and maintenance.

Water Harvesting:

Properly designed water harvesting arrangements shall be provided as per the requirements of the local/central sanctioning authority.

Lifts:

Minimum tow lifts of suitable capacity, automatic type, conforming to National Building Code - 2015, of approved make with Switching panels of approved make shell be installed in each tower. One of the passenger lifts shall be for Bed Lift (13 person's capacity). Other lifts shall be for minimum 8 passengers.

Electric Sub- station:

Electric sub-station with adequate capacity of Transformers of approved make shall be installed for power supply to the housing complex.

External Electrification Works:

It shall include

- (i) Power supply at 33/11kv voltage shall be taken form concerned power supply authorities.
- (ii) Establishing adequate number of 11/0.433 KV substations of requisite capacity with VCBs/GODO switches, etc.
- (iii) Distribution of LT power supply through LT panels feeder pillars and cabling network to all user points.
- (iv) Providing individual power supply meters /dual meters to each dwelling unit by the power supply authority and generator supply in the metering boards to be provided at appropriate location.
- (v) Metering of common services power load.
- (vi) Back-up power supply with current limiting device for individual dwelling units as laid down above.
- (vii) Firefighting Arrangements: Provisions laid down in National Building Code of India 2015, and requirements specified by appropriate Fire Officer of the state government and/or local Bodies shall be fully complied with for design and construction of firefighting arrangements for the full housing complex. Fire pumps, sprinkler pumps and jockey pump shall be of adequate capacity and of approved make.

BOM and BOQ Specification for Sapphire Affordable Housing

S.No.	Details of	Manufacturer's Name
	Material/Equipment	
1.	Thermo Mechanical	Kamdhenu, Rathi, Or Equivalent
	treated Bars	
2.	Ordinary Portland	ACC, J.K, Birla, Vikram, Ultratech Or Equivalent
	Cement Grade – 43/	
	PPC Cement	
3.	Flush Door shutters	Archid Ply, National, Green Ply, Alpo, jota Ply Or
		Equivalent
4.	Float Glass	Saint Goblin, assai, Emirates, Glaverbel, Pilkington Or
		Equivalent

S.No.	Details of	Manufacturer's Name
	Material/Equipment	
5	Source of Toughening	Gold Plus, Asahi,GSC, Allied Glasses, Sejal Or Equivalent
	of glass	
6	Fire Check Doors	Navair, Pacific, Tristar, Promat Or Equivalent
10	Silicon Sealants	Dow Corning, Wacker, GE Silicon Or Equivalent
11	Special Enamel Paint	OIKOS (I)Ltd., Asian Paints, ICI, Nerolac Or Equivalent
12	Mirror	Saint Goblin, Atul, Modi
13	Vitrified Tiles	Kajaria (World),RAK Ceramics,Somany,Johnson,Marbitto Or Equivalent
14	Ceramic Glazed Tiles	Kajaria ,Somany,Johnson,Orient,Regency Or Equivalent
15	Antiskid Ceramic/	Kajaria, Somany, Johnson, Asian Or Equivalent
	Heavy Duty matt	
	finished Floor Tiles	
16	Paint Distemper	ICI, Asian, Jhonson & Nicolson, Nerolac Or Equivalent
17	Poly Carbonate Sheets	Danpalon(Dan Pal (I) Pvt. Ltd.), GE Plastic Or Equivalent
18	Gypsum Board	Lafarge, India Gypsum(Gyprock-Saint Goblin) Or Equivalent
19	Calcium Silicate False Ceiling Tiles	Aerolite, Hilux or approved equivalent Or Equivalent
21	Masking Tapes, Polymer	Sun control, wonder Or Equivalent
22	SS Screws for	Kundan ,puja, atul Or Equivalent
	Fabrication	
23	Dash fasteners, Anchor Bolts	Hilti,Fischer,Bosch Or Equivalent
24	EPDM Gaskets	Anand,Roop Or Equivalent
25	Broken AAC Blocks	Bilt or Approved equivalent
26	Water Proofing	Kerakol,BalEndura,Pidilite,Sika,Fairmate,Bostik,latricette
	Chemicals	Or Equivalent
27	Admixtures/Pigments	Pidilite,Structural Waterproofing Co., Fosroc, Chemistik, Argui
28	Paver blocks	NITCO,Unistone,Pavit,Hindustan Or Equivalent
29	Prelaminated Particle Board	Archid Ply, alpro, jota, Merino Or Equivalent
30	Aluminium Louvers	Hunter Douglas or approved equivalent
31	White Cement	JK, Birla,ACC,Jaypee Or Equivalent
32	Cement Primer	Oikos Italy, Dulux, Asian, Nerolac, ICI Or Equivalent
33	Exterior Grade Paint	Asian, Nerolac,ICI Or Equivalent
34	Cement Paint	Spectrum or Approved Equivalent Or Equivalent
35	Polysulphide Sealant	Pidilite, Firmate, Fosroc Or Equivalent
36	GI Pipes	Prakash, Swastic Or Equivalent Or Equivalent
37	GI Fittings	Unik, Zoloto Or Equivalent Or Equivalent

S.No.	Details of	Manufacturer's Name
	Material/Equipment	
38	Sluice Valve	Kirloskar, Indian Valve Company Or Equivalent
39	Butterfly Valve	Zoloto, Audco, Jayahiwa, Advance Or Equivalent
40	Pressure Reducing	Leader, Zoloto,RB Or Equivalent
	Valve	
41	EWC Pan	Hindware, Standard, Parryware, Roca Or Equivalent
42	Wash basin	Hindware,Parryware,Roca Or Equivalent
43	Urinal	Hindware,Parryware,Roca Or Equivalent
44	CP Fittings	Prayag, Or Equivalent
45	Water Treatment plant	Ion Exchange, thermax, pentair Or Equivalent
46	Sewage Treatment	Ion Exchange, thermax,Pentair Or Equivalent
	Plant	
47	Water Supply Pumps	Kirloskar, Crompton,KSB,Jyoti,BE,Voltas,Greaves Or
		Equivalent
48	Electric Motors	Kirloskar,ABB,Siemens Or Equivalent
49	Non-return Valves	Kirloskar or approved equivalent
50	Ball Valves	Normex or Approved Equivalent
51	CPVC Internal Pipes	Astral, Lubrizol Or Equivalent
52	UPVC Pipes	Supreme,Prince,Kissan Or Equivalent
53	Pressure Gauge	H-Guru or approved equivalent
54	WC Flusher/Urinal	Jaquar,Kohler,American Standard ,AOS Or Equivalent
	Flusher	
55	Auto Water Tap	Jaquar,Kohler,American Standard ,AOS Or Equivalent
56	Angle	Jaquar,Kohler,Grohe,American Standard Or Equivalent
	Valve/mixer/bottle	
	valve	
57	SS Sink	Nilkanth, Jayna Or Equivalent
58	Wall Putty	Birla white Putty, JK White Or Equivalent
59	11 KV H.T Switch gear/	ABB, Schneider, Crompton, Siemens Or Equivalent
	VCB SF-6/ Compact	
	RMU	
60	11/ 0.433 kv Package	ABB, Schneider, Crompton, Siemens Or Equivalent Or
	Substation 630 KVA and	Equivalent
	1000KVA	
61	Transformer 11 KV/440	Kirloskar, ABB, Crompton, Schneider, Areva
	v,250/500 kva	
	conventional outdoor	
	type	
62	Transformer 11kv/440	Danish, Kotson, Schneider, Areva, IVL, Crompton, Kirloskar Or
	v for package	Equivalent
	substation	

S.No.	Details of	Manufacturer's Name
	Material/Equipment	
63	Air Circuit Breaker	L&T (U-power), ABB(E-Max), Siemens(3 WL), Schneider
		(Master Pack NW), Crompton
64	11 Kv Isolator Switch	Atlas, SMC, Versatik Or Equivalent
	outdoor and D.O. Fuses	
65	Lightning Arrestor	Elpro, Oblum Or Equivalent
66	L.T. Panels	CPRI Approved Manufactures
67	M.V. Switch Gear	L&T, Schneider,ABB, Siemens Or Equivalent
68	H.T. XLPE aluminium Cables 11 KV&33 KV	Havells, National, Finolex Or Equivalent
69	XLPE Insulated Electrical cable with aluminium/copper conductor 1100 V Grade (L.t.Cable)	Havells, National, Finolex, Polycab Or Equivalent
70	Cable Glands & Thimbles	Comet, Dowell's (Billar India), Cosmos, Hax Brass(Copper Alloy India)
71	APFC Panel & Power	L& T , Schneider
	Factor Correction Relays	
72	Potential Transformer	Automatic electric, Gilbert & Maxwell, Crompton Or
		Equivalent
73	Potential Transformer	Automatic Electric, Gilbert & Maxwell, Crompton Or Equivalent
74	Protection Relays	ABB, L&T, Siemens Or Equivalent
75	Selector Switches & Rotary Switches	Kaycee, Siemens, Salzor (L&T) Or Equivalent
76	Indicating Meters (Voltmeters, Ampere meter etc)	A.E, HPL Or Equivalent
77	Electronic meters	L&T, Siemens , Secure, HPL Or Equivalent
78	Indicating lamps	Rishab, BCH, Siemen Or Equivalent
79	Contactors & Starters	L&T Schneider, ABB, Siemen Or Equivalent
80	Change Over Switches	L&T Schneider, ABB, Siemen Or Equivalent
81	Timers	L&T Schneider, ABB, Siemen Or Equivalent
82	Push Buttons	L&T (Salzar) Schneider, ABB, Siemen Or Equivalent
83	PVC insulated copper Conductor stran ded flexible wire	Skytone,Rallison,Polycab, Finolex, Grandlay Or Equivalent
84	Lighting fixture	Havells, Philips, Wipro, Cromption Or Equivalent
85	MCBs & Earth Leakage Circuit Breakers	Havells, Siemens, Schneider, L&T (Hager) Havells,

S.No.	Details of	Manufacturer's Name
	Material/Equipment	
86	MCB distribution	Havells, Siemens, Schneider, L&T (Hager) Havells,
	Boards	
87	Fire Extinguishers (ISI	Minimax, Safex, Zennith
	marked)	
88	Cable Trays	Maheswari Electrical, Needo, Rico Steel, Legrand, OBO
		Betterman India Pvt.Ltd
89	PVC Conduit	AKG, Supreme, Finolex
90	M.S. Conduit	BEC, AKG, Steel Craft
91	Modular Switches,	Anchor-Roma, Legrand, Havell's Crabtree, North West
	Socket, Bell, Push, Fan	
	Regulators etc	
92	Elevators/ Lifts	OTIS, Kone, Schindler
93	Fire Hose Cabinet/ MS	Omex , Superex, Newage Havells,
	Frames	
94	Landing Valve	Omex , Superex, Newage Havells,
95	Hose Reel Drum	Omex , Superex, Newage Havells,
96	Fire Brigade	Omex , Superex, Newage Havells,
	Inlet/Outlet Conn.	
97	Branch Pipe	Omex , Superex, Newage Havells,
98	Rubber Hose	Jyoti, Padmini, Maruti (ISI Marked) Havells,
99	ERW MS Conduits (ISI	BEC, Steelcraft, AKG (ISI Marked) Havells,
	Marked)	
100	Manual Break Glass	Agni, Burnex Havells,

NOTE: The list is just for reference and may change as per Sapphire Affordable housing construction approved plan for the items listed above and not mentioned here in the list.