TECHNICAL SPECIFICATION FOR KOTA STONE
1 Kota Stone Flooring

1.1 Stone Slabs
The slab shall be of selected quality, hard, sound, dense and homogeneous in texture, free from cracks, decay, weathering and flaws. They shall be hand or machine cut to the requisite thickness as indicated and they shall be of uniform colour. The slabs shall have the top (exposed) face polished before being brought to site. Before starting the work, Contractor shall get the sample of slabs approved by the Engineer-in-Charge.

1.2 Dressing of Slabs
Every slab shall be cut to the required size and shape and fine chisel dressed on the sides to the full depth so that a straight edge laid along the side of the stone shall be in full contact with it. The sides (edges) shall be table rubbed with coarse sand or machine rubbed before paving. All angles and edges of the slabs shall be true, square and free from chippings and the surface shall be true and plane. For staircase treads, single piece slab to full length and width of treads shall be provided. The nosing shall be rounded off and three parallel grooves ten by ten (10mm x 10mm) immediately behind the nosing edge shall be provided to avoid skidding. Square or circular holes shall be made carefully to accommodate M.S. Baluster in position.

1.3 Preparation of Surface and Laying

1.3.1 Sub-grade concrete or the RCC slab on which the slabs are to be laid shall be cleaned, wetted and mopped. The bedding for the slabs shall be with cement mortar and the thickness as indicated.

1.3.2 The slabs shall be laid in the following manner:-
Mortar of the specified mix shall be spread under the area of each slab, roughly to the average thickness as indicated. The slab shall be washed and cleaned before laying. It shall be laid on top, pressed, tapped with wooden mallet and brought to level with the adjoining slabs. It shall be lifted and laid aside. The top surface of the mortar shall then be corrected by adding fresh mortar at hollows. The mortar is allowed to harden a bit and cement slurry of honey like consistency shall be spread over the same at the rate of 4 kg of cement per square metre. The slab to be paved shall be lowered gently back in position bedded in level. Subsequent slabs shall be laid in the same manner and joints between adjacent slabs shall be as thin as possible and run in straight line. After each slab has been laid, surplus cement grout coming out of the joints of the slabs shall be cleaned off. The surface of the flooring as laid shall be true to levels, lines and shapes as instructed by the Engineer-in-Charge.

1.3.3 Slabs which are fixed in the floor adjoining the wall shall enter not less than twelve (12) mm under the plaster skirting or dado. The junction between wall plaster and the floor shall be finished neatly and without waviness.

1.3.4 Curing, Polishing and Finishing

1.3.4.1 The floor shall be kept wet for a minimum period of seven (7) days. The surface shall thereafter be ground evenly with machine fitted with fine grade blocks (No. 120). The final grinding with machine fitted with the finest grade grit blocks (No. 320) shall be
carried out the day after the first grinding described above or before handing over the floor, as ordered by the Engineer-in-Charge.

1.3.4.2 For small areas or where circumstances so require, hand polishing may be permitted in lieu of machine polishing after laying. For hand polishing the following Carborundum stones shall be used.

1st grinding  -  Medium Grade Stone (No.8)
Final Grinding -  Fine Grade (No. 120)

1.3.4.3 In all other respects, the process shall be similar as for machine polishing.

1.3.4.4 After the final polish, oxalic acid shall be dusted over the surface at the rates of thirty three (33) gms. per square metre sprinkled with water and rubbed hard with pad of wooden rags. The following day the floor shall be wiped with a moist rag and dried with a soft cloth and finished clean.

1.3.4.5 If any slab is disturbed or damaged, it shall be refitted or replaced, properly jointed and polished. The finished floor shall not sound hollow when tapped with wooden mallet.