

GUIDE SPECIFICATIONS FOR CONSTRUCTION OF A CONCRETE SUB BASE FOR MATEFLEX TENNIS SURFACE

1. GENERAL REQUIREMENTS

- a. Scope of Work to be Done. The contract work to be performed under these specifications consist of furnishing all of the required labor, materials, equipment, implements, parts and supplies necessary for concrete surface preparation for Mateflex modules.
- b. Insurance. The Contractor shall provide reasonable and adequate casualty insurance, including employer's liability and public liability insurance and include the cost thereof in the contract sum.
- c. Guarantee. The Contractor and any subcontractors hereunder guarantee their respective work against defective materials or workmanship.

2. SITE INSPECTION AND PREPARATION

- a. Inspection and Selection. The site shall have been inspected by the owner and determined by him to be suitable for construction of the tennis court. Inspection shall include examination of the soil by a soil engineer to establish its suitability as a foundation for the court.
- b. Clearing and Grubbing. Trees and other vegetation including their root systems to a depth of not less than twelve inches (12") shall be removed from the site and the soil treated with a sterilizer that will effectively inhibit future growth of flora.
- c. Excavation. The site shall be excavated to a depth so as to provide finished concrete level as required.
- d. Fillings. Soil conditions must be stable and have suitable bearing properties, not wet or spongy. Fill material shall be placed in layers not exceeding six inches (6") each in thickness and compacted to 95 percent standard density at optimum moisture.

3. DRAINAGE PROVISIONS

- a. All drains must be interconnected and empty into drain provided by owner.
- b. Interceptor Drainage System. A peripheral drainage system shall be installed as may be necessary so as to intercept and drain either surface or subsurface water that would otherwise drain over or under the court.

Guide Specifications (Cont'd)

4. BASE CONSTRUCTION

- a. Cushion. Cushion material under paved areas shall consist of a clean 5" layer of granular A (5/8" road gravel) place compacted to 100% Standard Proctor Density.

5. CONCRETE CONSTRUCTION

- a. Air Entraining Agent. An air-entraining agent shall be used to provide the concrete with entraining air of 6% for the total volume of the concrete.
- b. Concrete. A 5" layer of 3000 psi concrete with a nominal size coarse aggregate not to exceed $\frac{3}{4}$ inch.
- c. Reinforcing. One (1) layer of 6/6 No. 6 steel wire mesh placed on compacted granular fill and pulled into concrete as concrete is placed. Mesh to be in concrete slab.
- d. Finishing. Surface to be Darby finished with a magnesium float and final finish with a corn broom for a semi-smooth surface.
- e. Curing Slabs. The concrete immediately after finishing shall be kept continuously moist for seven (7) days by covering with continuously wetted burlap or building paper.
- f. Expansion. Use $\frac{1}{2}$ " x 5" flexcell or fibreboard expansion joint material or saw cut with a concrete saw to a depth of 1". A combination of both methods will prove acceptable.

Fill saw cuts with elastomeric sealing compound.

All expansion joints must be in level plane with concrete surface. No Protrusions or recesses are acceptable.

6. SLOPE REQUIREMENTS

- a. Slope Requirements. All excavating, filling, compacting, grading and leveling work required hereunder shall be performed so that the finished court surface slopes one inch (1") in each fifteen feet (15') on a true plane from side to side toward the drain. (4" drop on 60' of court width.)

Guide Specifications (cont'd)

- b. Extreme care must be taken to insure a dead level finish in the concrete with no pockets to trap and hold water.

7. NET AND EQUIPMENT

- a. Post Foundations. Post foundations shall be not less than twenty-four inches (24") in diameter at the top, not less than thirty inches (30") in diameter at the bottom, not less than thirty-six inches (36") in depth. Foundations shall be so situated as to provide a clear distance between posts of forty-two feet (42'). Concrete for foundations shall be mixed in ratios of six (6) standard 94 pound sacks of cement per cubic yard of concrete, with one (1) such sack of water, attaining a compressive strength of not less than three thousand five hundred (3,500) pounds per square inch at the twenty-eighth (28th) day after pouring. Foundations shall be so designed and poured and the posts so set as to not cause cracking or other damage to the finished surface.
- b. Net Posts. Posts shall be set plumb and true so as to support the net at a height of forty-two and one-half inches (42-1/2") above the court surface at the net posts.
- c. Center Strap Anchor. A center strap anchor shall be positioned and set in concrete footings measuring twelve inches by twelve inches by twelve inches (12" x 12" x 12").