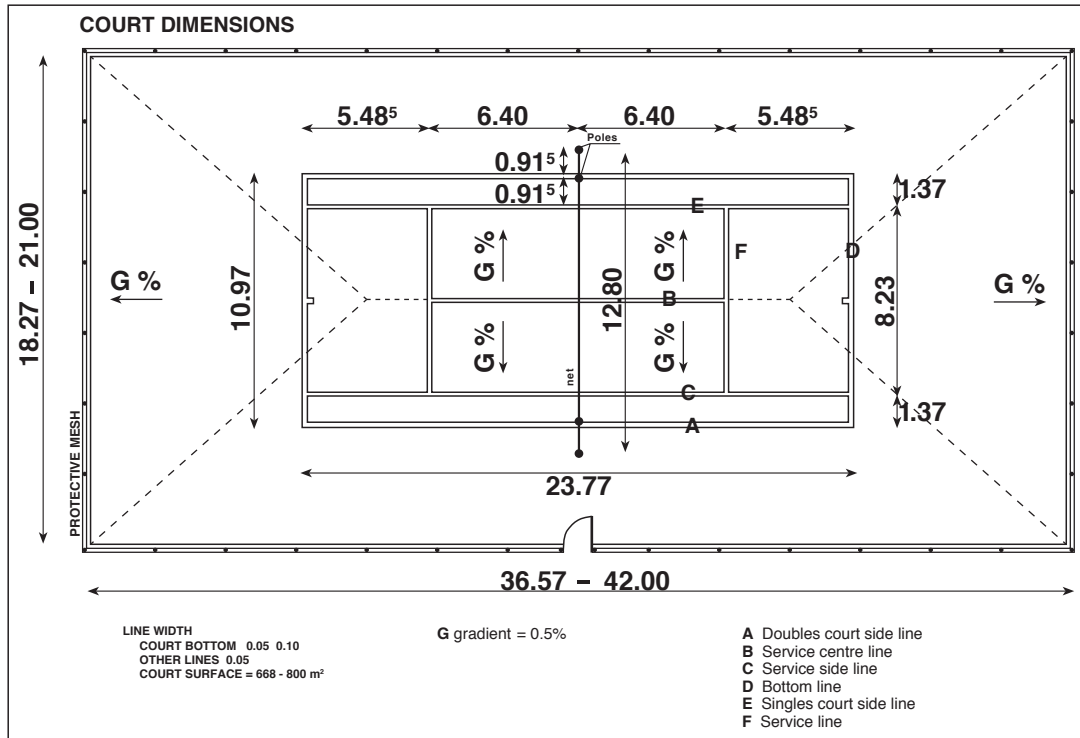
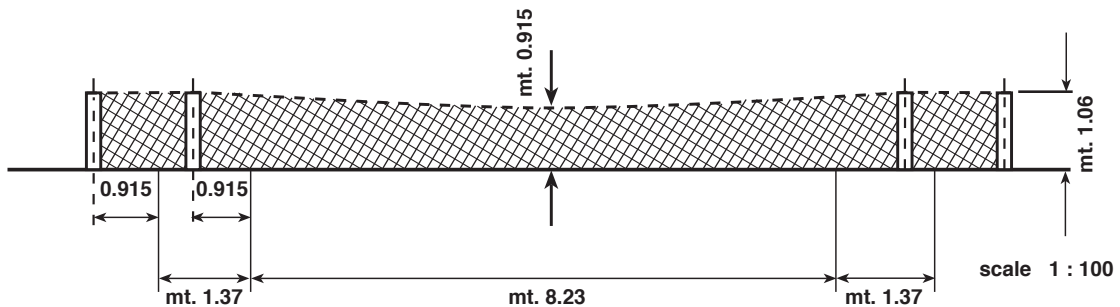


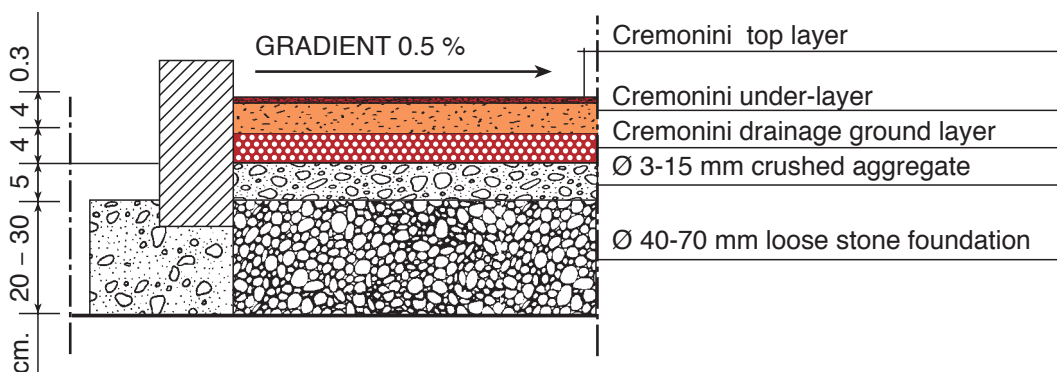
# TENNIS COURT LAYOUT



# NET DIAGRAM



# TENNIS COURT CROSS SECTION



# TENNIS PRODUCTS TECHNICAL DATA SHEET

- **Drainage ground layer:** essentially important to guarantee ideal water drainage from the court. The ground layer material then releases water back to the top layers under the effect of evaporation.
- **Tennis under-layer:** it is the main component of red clay court. Unlike other commercially available materials obtained from demolition by-products, quarry and marble dust, the *Cremonini under-layer* is only obtained with selected bricks, roof tiles and special natural clays, enhancing its colour, compaction, water absorption and filtering.
- **Tennis top layer:** obtained from top quality bricks and roof tiles, the *Cremonini top layer* is known as the “reddest” in the market.
- **Wind-proof tennis top layer:** same colour and mix as the standard top layer, but with a coarser particle size distribution, guaranteeing more efficient adhesion to the court surface.

CHARACTERISTICS	DRAINAGE GROUND LAYER	TENNIS UNDER-LAYER	WINDPROOF TOP LAYER	TENNIS TOP LAYER
PARTICLE SIZE DISTRIBUTION	0-15 mm	0-1.5 mm	0-1.5 mm	0-1 mm
SPECIFIC WEIGHT	1200 Kg/m <sup>3</sup> 1.2 T/m <sup>3</sup>	1250 Kg/m <sup>3</sup> 1.25 T/m <sup>3</sup>	1200 Kg/m <sup>3</sup> 1.2 T/m <sup>3</sup>	1100 Kg/m <sup>3</sup> 1.1 T/m <sup>3</sup>
CONSTRUCTION QUANTITY	48 Kg/m <sup>2</sup> 32 tons	50 Kg/m <sup>2</sup> 33 tons	2.25 Kg/m <sup>2</sup> 1.5 tons	2.25 Kg/m <sup>2</sup> 1.5 tons
RAW MATERIAL	Bricks and roof tiles	Natural clays, bricks and roof tiles	Bricks and roof tiles	Bricks and roof tiles
PACKAGING	In bulk 25 kg bags	In bulk 25 kg bags	25 kg bags	25 kg bags

## CONSTRUCTION RULES OF A RED CLAY TENNIS COURT

The right location for a tennis court should be carefully selected, avoiding areas close to rivers, canals and wherever landslides are possible.

The main steps to follow in order to prepare a tennis court are:

- 1) In order prepare the box to be filled with gravel, dig the ground to a depth of at least 40 cm. Create slopes on all the layers of material for homogeneous draining efficiency. In wet areas, in order to help rain water draining, we advise to build raised tennis court (above the surrounding ground level). If the ground layer happens to be watertight, it is indispensable to build a network of draining pipes to collect water.
- 2) Erection of a reinforced concrete perimeter wall with a cross-section of 15-25 cm and with rounded top edges, to be placed on a suitable lean concrete foundation. The perimeter wall must be prepared for the insertion of metal fence poles, by drilling holes at regular intervals; slots must also be cut in the wall at regular intervals to help surface water draining.
- 3) Construction of water traps inside the perimeter: one at each corner of the court and two in the middle of the longer side.



- 4) Installation (on a 60x50x40 cm concrete foundation) of net-stretching iron pegs with brass rack; the pegs must come out of the court surface by 106 cm and be installed 91.5 cm on the outside of the court side marker lines.
- 5) Construction of the required  $\varnothing$  40-70 mm loose stone foundation to form a 20-30 cm high layer, rolled flat and well compacted by using a heavy roller.
- 6) Foundation filling with  $\varnothing$  3-15 mm crushed aggregate up to a height of 5 cm. Rolling with a max 1.5 T non-vibrating roller.
- 7) Now lay a galvanised iron pipeline for the installation of a hydrant having a diameter not smaller than 25 mm preferably next to the perimeter wall, half way along the longer side.
- 8) Spread **Cremonini Drainage Ground Layer** over the gravel to form a 4 cm layer (corresponding to an amount of 32 tons). Wet with plenty of water and roll in several passages with a max 0.5 T non-vibrating roller.
- 9) Lay the **Cremonini Under-Layer** to a depth of 4 cm (approx. quantity 33 tons). Spread according to level marks and level the dry Under-layer with planks to reach the required thickness (avoid levelling in multiple layers). After levelling, sprinkle the whole surface evenly and consistently with abundant water from above, starting from one end to cover the whole court, until the water has filtered through the under-layer to reach the underlying drainage ground layer. This operation, if carried out correctly, already provides good grip and compactness of the products used.  
Roll the still damp surface (but not so damp that it sticks to the roller) using a max 0.5 T non-vibrating roller. Roll in 3-4 or more passages on each side, going back each time half way up the already rolled surface.
- 10) Lay the **Cremonini Top Layer (or Windproof Layer)** (approx. quantity 1.5 tons) spreading it evenly with a mat.
- 11) Lay the marker lines.

## OPEN-AIR COURT MAINTENANCE

- 1) Brush and remove the grit that has formed on the surface of the court.
- 2) Scrape the surface and eliminate any encrustation with a rake or special tilling machines.
- 3) Lay the *Cremonini Under-layer* (recommended layer thickness: 4 cm), average quantity: 3-4 tons, to be levelled with planks. It is recommended to maintain a 0.5% gradient from the court centre to its bottom.
- 4) Abundantly, homogeneously sprinkle the entire court until water has filtered through the entire under-layer to reach the drainage layer.
- 5) Roll the still-damp surface (but not so damp that it sticks to the roller) using a max 0.5 T non-vibrating roller; roll slowly so that the Under-layer compacts perfectly. Start from the bottom of the court, going back each time half way up the already rolled surface; repeat the same operation from side to side, too.
- 6) Lay the *Cremonini Top Layer (or Windproof Layer)* (approx. quantity 1.5 tons) spreading it evenly with a mat and then rolling it.
- 7) In the days following this early-season maintenance, in order to obtain good compacting, the surface will need warm temperatures, light water sprinkling and possibly more rolling.



# COVERED COURT MAINTENANCE

These courts have a very hard surface as a result of the higher temperatures reached under court covers.

- 1) Till the surface vertically, working throughout the Under-layer depth and breaking any lumps finely with the specially designed tilling machines.
- 2) Lay the *Cremonini Under-layer* (recommended layer thickness: 4 cm), average quantity: 4-6 tons, to be levelled with planks.
- 3) Follow the instructions provided for open-air courts starting from item 4.

## USEFUL TIPS

- Formation of dips in key play areas: scrape the area, spread *Cremonini Under-layer*, sprinkle with abundant water, then roll flat.
- Courts must be kept damp at all times: a court which is too dry creates a crumbly surface that forms dips and rises caused by dust shifting. In-depth wetting must be done in such a way that the water rises to the surface, giving it a glossy appearance but without forming puddles. In hot weather it is advisable to do this several times a day (depending on rainfall). The last wetting operation of the day must be done *in the evening*, when the relatively cool earth and the humidity of the night will ensure that the water reaches underlying layers, thus helping slow, constant and long-lasting evaporation during the day.
- Never roll the court when it is dry.
- To keep the court red: brush periodically, remove the grit that will form on the surface, and top up with a few bags of *standard or windproof Top Layer*.
- To make the court top layer softer, even under covers: lay 1 ton of *Cremonini Windproof Top Layer* on top of the *Tennis Under Layer*, level with the special levelling mat and sprinkle with water. Top up throughout the playing season.
- We recommend to keep minimum product stocks, as playing, wind and rain will gradually erode the surface. This will eliminate the relatively high transport costs of small orders.

