

# TOP CLAY®



**VIGANÒ PAVITEX®**  
**TOPS FOR TENNIS**





# CLASSIFIED COURT PACE

1  
SLOW

## TOP CLAY® (clay-dressed)

as supplied by

Viganò Pavitex S.p.A.

has been classified as

## CATEGORY 1 - Slow

Expiry Date : 14 November 2024



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Head, Science & Technical

This Classification was established using the product composition described in test report no. 01/02-21-F-LFR-951-A

# TOP CLAY®

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# Surface Classification

A Document of the French Federation of Tennis.

MAIN CATEGORY	SUBCATEGORY	DESCRIPTIONS	CODE
CLAY	TRADITIONAL CLAY	FRENCH CLAY: Stabilized Base – Limestone layer + crushed brick	TB
		LOCAL CLAY : Stabilized Base – Ready-to-use products + crushed brick	
	ARTIFICIAL CLAY	<ul style="list-style-type: none"> <li>• Hard surface + crushed brick (indoors only)</li> <li>• Needle-punch textile + crushed brick</li> <li>• Synthetic grass + crushed brick or hardened rock/crushed brick</li> </ul>	TA
HARD	ACRYLIC	<ul style="list-style-type: none"> <li>• Resin-bound impervious surface</li> <li>• Rubber mat + resin-bound surface</li> <li>• Wooden panels + resin-bound surface</li> </ul>	RES
	POROUS CONCRETE	Bound porous surface (built onsite or pre – fabricated)	BP
	POROUS ASPHALT	Bound porous surface	EP
GRASS	NATURAL GRASS	Natural grass	GAZ
	SYNTHETIC GRASS	<ul style="list-style-type: none"> <li>• Red synthetic grass + colored red sand and/or white sand</li> <li>• Green synthetic grass + white sand</li> <li>• Synthetic Grass semi-sanded infill</li> </ul>	GAS
OTHERS	PARQUET	Wood parquet	PAR
	PLASTIC TILES	Thermo-plastic tiles	DTP
	CARPET	Needle-punch carpet	MOQ
	RUBBER CARPET	Rubber granulates	TC
	SYNTHETIC CARPET	PVC or PU carpet (prefabricated or poured in-situ)	TS
	BEACH TENNIS	Sand	BT

# Features

## Play:

- ▶ Speed of play classified as “Slow Class 1” by the International Tennis Federation
- ▶ True ball bounce over the entire surface
- ▶ Spins are reproduced naturally, as on traditional clay
- ▶ All levels of play, from beginners to the highest competitive level, play 12 months a year
- ▶ Drainage is efficient, thanks to the fully porous textile membrane supporting layer. The (sometimes) hours waiting for traditional hard and clay courts to dry are greatly reduced
- ▶ To sum it up, TOP CLAY® = “Play on Clay”

## Comfort:

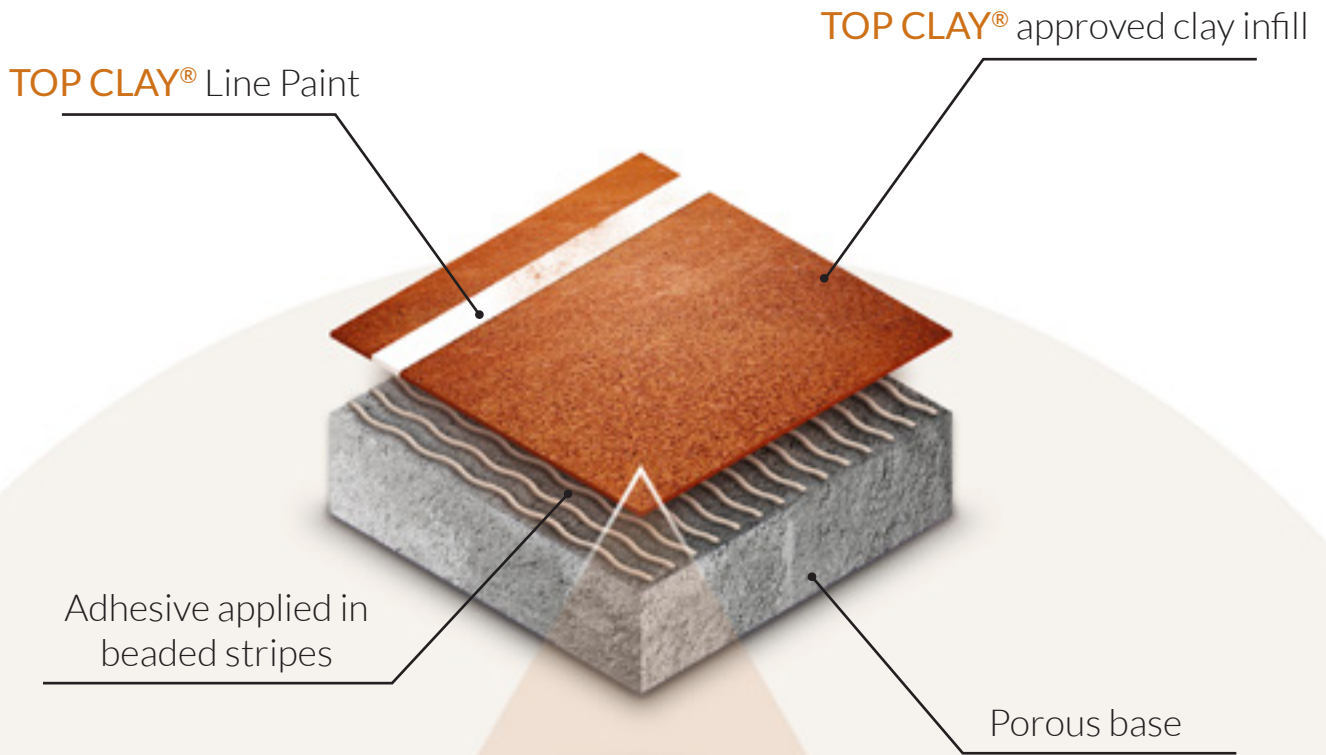
- ▶ The legendary comfort of clay court play, all year long
- ▶ Natural shock absorption due to the clay topping and the inherent qualities of the TOP CLAY® textile membrane supporting layer
- ▶ The loose elements of the clay surface greatly ease foot pivot, thus contributing to the feeling of comfort
- ▶ Stops, starts, and slides are “clay-controlled”, similar to traditional clay courts
- ▶ The deep burgundy red clay color is pleasing, retaining its color all year long, contributing to good ball vision, as well as esthetic comfort

## Financial:

- ▶ Playable 12 months a year, exception made for snow
- ▶ Maintenance costs greatly reduced. Annual spring maintenance is no longer needed
- ▶ Court watering costs are reduced by from 50 – 75% compared to traditional clay courts
- ▶ Dries rapidly following rain storms. This means hours of additional play
- ▶ Changing an existing hard court to TOP CLAY® is practical, without extensive construction works. The transformation is reasonably priced
- ▶ Choosing TOP CLAY® -- Leader in the category with over 1000 courts in play in 28 countries over some 20 years -- means that mid and long-term costs are minimal and easy to anticipate. Armed with this knowledge and experience, a world-wide network of builders assures the service that our customers deserve

# Datasheet

## TOP CLAY®



Not to scale

# Datasheet

Description	Needle punch tennis surface. Support layer of 100% structured polypropylene fibre with total impregnation, in-filled with crushed brick clay.
Destination	Outdoor and Indoor tennis courts.
Support layer	Hot rolled impermeable asphalt 0/4-0/6, non-porous concrete with cross-slope. Porous concrete. Porous asphalt. Base horizontal plane must be checked before starting installation. Deviations of 6 mm under a 3 meters rule will be tolerated. Outside this limit the base must be levelled using an appropriate and approved technical solution.
Colour	Red
Membrane Mass	1.400 g/m <sup>2</sup> ± 10 %
Membrane Thickness	9 mm ± 10 %
Standard roll Width	2 m
Standard roll Length	36,20 m
Standard roll Weight	approx. 102 kg
Fire Rating	Bfl s1
Court markings	TOP CLAY® Line Paint and Finisher, approx. 65 kg per court.
Infill	0/1 mm TOP CLAY® approved clay infill 3 to 4,5 T. per court.
Adhesive	Two-component PU glue in stripes approx 750 g/m <sup>2</sup>
Playing features	ITF Category 1 «Slow». Ball bounce and playing comfort identical to traditional clay courts.
Warranty	10 years Degressive Warranty (see warranty conditions, available upon request).
Maintenance	See TOP CLAY® Maintenance Guidelines.
Installation	See TOP CLAY® Installation Guidelines.
Certification	ISO 9001:2015. Certificate Number : IT 240282



*We reserve the right to amend these specifications*

# Installation Guidelines

## INSTALLING THE SURFACE

**TOP CLAY®** is a tennis court surface. The playing surface consists of clay infill worked into a bonded synthetic fibre membrane, which is glued to a firm base layer. The court markings are painted on the playing surface prior to spreading the clay infill.

The components of the court, which are supplied by **Viganò Pavitex S.p.A.**, are:

- ▶ **TOP CLAY®** bonded synthetic fibre membrane
- ▶ **Viganò Pavitex-2 Comp PU glue** (Polyurethane two-components adhesive) for fixing the membrane to the base
- ▶ **TOP CLAY®** approved Line Paint and finisher for court markings.
- ▶ **TOP CLAY®** red clay infill.

## BASE

The base for a **TOP CLAY®** tennis court surface may be Porous Concrete or Draining Asphalt; or, **TOP CLAY®** Courts may be placed over existing impervious bases which should have a slope of 0.5% to 1.0%. In all circumstances, the base must be firm, and not a stabilised compacted base course.

**In the case of a renovation (i.e. laying **TOP CLAY®** on an unsatisfactory existing base) the preparatory works consist of:**

- ▶ Verifying the permeability of the base, and, if necessary, taking all necessary actions to restore the permeability to a satisfactory level.
- ▶ Inspecting for crackings and low-spots. The areas should be addressed and corrected prior to the application of the adhesive and membrane.
- ▶ Checking that the existing support layer is free from moisture, algae, moulds, or fungus growth before applying the adhesive (the adhesion of the **TOP CLAY®** membrane depends on this factor).

ITF and National Standards for Bases for Sports Surfaces may be used as a reference.

## STORAGE CONDITIONS

The rolls of **TOP CLAY®** membrane should be stored horizontally on a dry, flat and even surface. When stored, rolls should not be stacked in order to avoid any deformation.

The other components (adhesive, **TOP CLAY®** Line Paint, Finisher and Clay infill) should be protected from sun, frost and rain.

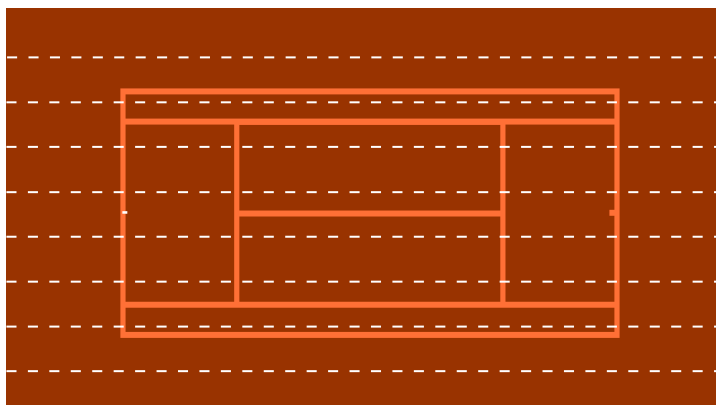
## POSITIONING THE ROLLS

The minimum ambient temperature on the base should be 15°C.

**Before gluing, the base must be completely dry.**

The adhesive used is a two-component PU glue; this type of adhesive is extremely sensitive to moisture and should not be applied if rain or heavy fog is expected. Weather forecast should be consulted prior to the application.

Standard rolls of **TOP CLAY®** membrane are supplied in 36,20 m lengths, which should be laid lengthwise on the court.



Rolls should be placed on the court perpendicular to the net line, laid edge to edge and adjusted so that the surface is totally homogenous and void of any creases or wrinkles whatsoever.



## ADHESIVE APPLICATION

This process is essential as concerns the durability of the work and the playing conditions of the court.

On an impervious base the membrane may be fully glued to the surface course

while on porous asphalt or concrete the adhesive must be applied in stripes

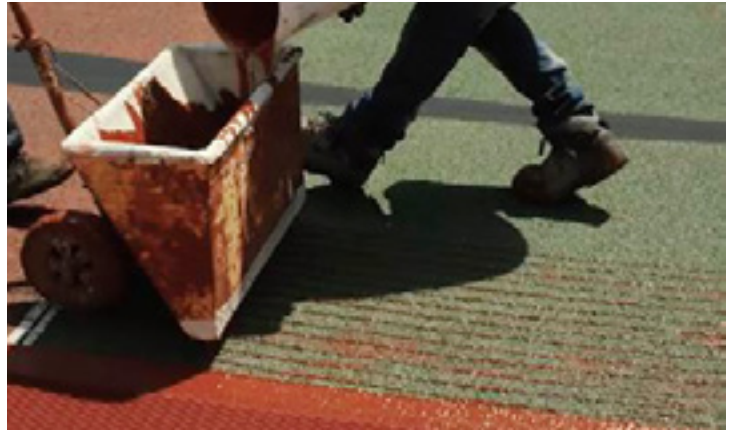
to prevent clogging up the base course, which could adversely affect permeability.

## ROLLING THE MEMBRANE

Rolling the membrane is a crucial stage to the successful laying of a **TOP CLAY®** court.

The expansive nature of the PU glue may have a tendency to lift membrane in some areas.

To avoid lifting and unevenness in the finished surface's plane, the rolls should be pressed down continuously with a roller during the complete polymerisation process of the adhesive. Depending on temperature, this stage may last several hours.



## COURT MARKINGS

The court markings are installed on the textile membrane with **TOP CLAY®** Line Paint.

**TOP CLAY®** line paint is applied with a spatula after installing two masking tapes 5 cm apart (or according to the rules of tennis). The role of the line paint is to fill up the tri-dimensional structure of the membrane and obtain a thickness of approx. 1 mm as will be the level of the infill to be installed.

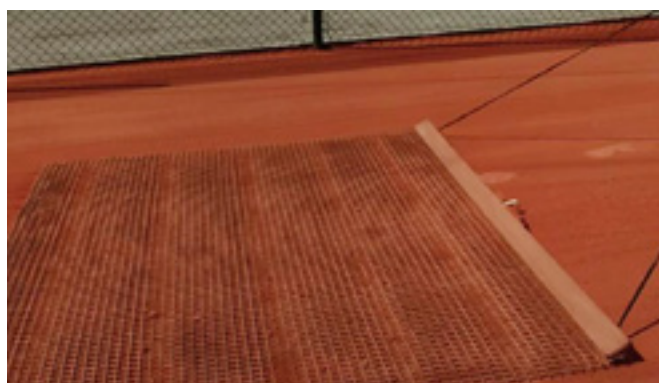
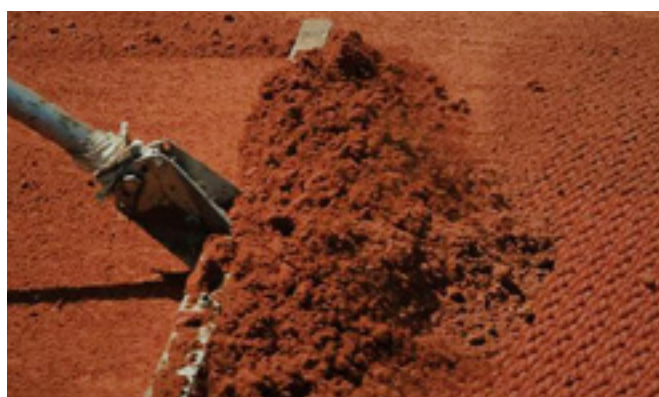
## CLAY INFILL

The origin of the clay is of extreme importance as concerns the final result of a **TOP CLAY®** court. Its choice is the subject of special attention.

Approved **TOP CLAY®** is the recommended infill for **TOP CLAY®** courts.

After all the rolls of the **TOP CLAY®** membrane are properly placed, glued, seamed and rolled, and the playing lines are completely dry, a specific clay infill should be worked into the voids of the membrane. Installation is similar to that of a traditional clay court.

Approximately 3 – 4,5 tons of clay 0/1 mm will be needed per court. Thoroughly brush the membrane to work the clay infill into the **TOP CLAY®** membrane's fibres. The clay should barely cover the frame of the membrane, avoiding any extra thickness.



# Maintenance Guidelines

TOP CLAY® playing conditions are the same as a traditional clay court but maintenance is appreciably less.

The purpose of this document is to set out the principles of the maintenance routine in order to provide optimal playing conditions. This routine differs between outdoor and indoor courts as well as on surfaces with a cross fall from side to side of the court.

The maintenance operations are divided into three categories:

- ▶ Daily Maintenance
- ▶ Mid-Term Maintenance (approximately during the first 5 years)
- ▶ Long-Term Maintenance

## DAILY MAINTENANCE

### TOP CLAY® Surfaces on Support Layers with a Cross-fall

Existing impervious asphalt or concrete hard courts with a cross-fall, often with acrylic or painted surfaces, can be suitable as a support layer for a TOP CLAY® surface.

**The cross-fall should not exceed 1%.**

Owners and operators may notice that after a heavy rain on such a TOP CLAY® surface, rainwater carries some of the crushed brick towards the low edge of the slope, thus creating a concentration of clay along the lower length of the court. As soon as this clay has dried, it needs to be pushed back onto the playing surface, using a non-pronged flat-faced plane.

The clay is then evenly distributed on the surface, using an appropriate drag mat.

**For all TOP CLAY® surfaces.**

#### Brushing (Drag Mat) For Regular Play

The court should be brushed after each change of players or at a minimum once per day, in order to evenly distribute the clay on the playing surface. The appropriate equipment should be used in such a manner as to bring clay back from the sides to the center of the surface.

**A general principle is to apply the quantity of clay required to achieve a layer of a maximum of 1 mm thickness above the membrane.**

#### Brushing for Tournament Play

During tournament play on TOP CLAY®, the brushing will be the same as for tournament play on traditional clay courts.

## Additional infill

During heavy play seasons or, as required by players, it may become necessary to apply a light coating of clay infill.

Quantities may depend on:

- ▶ Number of hours of court use
- ▶ Humidification rate (see advice below for indoor courts)
- ▶ Wind conditions
- ▶ Rainfall
- ▶ Players preference.

## HUMIDIFICATION

The objective of humidification is to keep the clay playing surface damp, in order to provide optimal clay court playing conditions. The court should be humidified on an “as needed” basis. The surface must not be flooded.

### Outdoor

Humidification may be renewed during the day, as needed. During the hottest part of the summer months an application of MAGNESIUM or CALCIUM CHLORIDE may help moisture retention.

### Indoor

Lack of air circulation considerably decreases the need for humidification. In certain well insulated halls, the playing surface may be humidified as infrequently as twice a week for 30 seconds each time. Humidification is best carried out by hand, distributing a light mist rather than drops of water, thus avoiding any accumulation of water particularly around the base line.



## CLEANING

All dirt (from tree leaves, papers...) must be:

- ▶ regularly brushed off the court with appropriate equipment
- ▶ collected and taken out.

**NB: Prevent any rotting of leaves or grasses, as they may degrade, and make the surface impervious in those areas.**

## MID-TERM MAINTENANCE

During the first years of play, some clubs may notice small areas near the baseline where the clay is beginning to “cake”. This can be treated with a small hi-water pressure apparatus which will easily and quickly break up and dislodge the clay. The clay can then be vacuumed with a small dirt/water vacuum, or picked up with a small shovel. When the surface is dry, new dry clay can then be in-filled.

### Clay infill renewal

Depending on the amount of surface contamination from nearby trees, shrubs, grasses, weeds, pollution, etc., it is sometimes necessary to rejuvenate the TOP CLAY® surfacing by removing “dead” infill in certain high play areas, using a high water pressure machine that vacuums up the infill. Once the surface is dry, new dry clay needs to be added. This renewal should be planned after approximately 3 - 5 years. TOP CLAY® approved clay is the recommended infill suitable to redress TOP CLAY® courts.

During winter, the clay should be limited to barely cover the uppermost surface of the membrane, thus avoiding any extra moisture retention.

### Play lines

Renew playing lines when necessary using only the approved TOP CLAY® Line Paint kit.

### Weeds and moss

It may happen that seeds germinate on the surface. Generally these will rapidly wilt except in very moist and badly ventilated areas; to prevent this problem from spreading, appropriate weed killers should be applied.

Moss can appear, particularly in shady areas. An appropriate moss killer should be applied, and when the moss has died, it needs to be removed. Preventive treatments for moss sometimes are effective.

### Freezing and thawing

Freezing is not critical for a TOP CLAY® court. The surface is hard but play is still possible.

Thawing is gradual. During this time, play will not be possible. Let the court thaw completely and then resume play.

Additional clay infill is to be avoided during this period.

## LONG-TERM MAINTENANCE

### After 5 – 8 years of play

After approximately 5 – 8 years of play, it may be necessary to maintain an area at the base line in order to remove and replace caked red clay. This operation should be carried out using a specialized maintenance machine which simultaneously pressure washes the area and vacuums the red clay that has been dislodged. This maintenance operation will be carried out only once during the 10-year warranty period.

New TOP CLAY® certified red clay should then be added.

This operation should be carried out under supervision of the contractor.

Depending on wear of the membrane, which can be seen after removal of the clay, it may sometimes be necessary to replace some of the membrane near the baselines of the court. Only a contractor trained and authorized by Viganò Pavitex Spa is qualified to carry out this work.

After this operation, new dry, approved clay will be infilled. The surface will then play as new.

## MAINTENANCE TOOLS

The tools that may be necessary and/or useful to maintain a **TOP CLAY®**:

- ▶ Drag mat (refer to Daily Maintenance).
- ▶ Line Brush. Essential to brush clay off the playing lines.
- ▶ Wide brush (approx. 200 cm). Useful, weekly if necessary, to spread clay back onto the center of the playing area.
- ▶ Rubber Squeegee. Useful for leveling when new clay is applied.
- ▶ Aluminum levelling tool. Also useful for taking the clay back to the center of the court from the sides.
- ▶ Leaves blower.

**Brushes equipped with metal or hard plastic prongs must not be used on the surface. They will damage the membrane.**



France, Divonne (01), 2 courts



Switzerland, Sion, 3 courts



France, Villebon s/ Yvette (91), 1 court



Norway, Oslo (OTK), 2 courts



Sweden, Varberg, 5 courts



Estonia, Tallinn, 4 courts



Poland, Katowice, 6 courts

*Please contact our offices to receive the  
complete Reference List*

# TOP CLAY®

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