

# Top Sand®



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





**CLASSIFIED  
COURT PACE**

**2**  
**MEDIUM-SLOW**

**TOP SAND® (sand-dressed)**

as supplied by

**Viganò Pavitex S.p.A.**

has been classified as

**CATEGORY 2 - Medium-slow**

Expiry Date : 28 October 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-1057-A

# Top Sand<sup>®</sup>

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# Features

## Play:

- ▶ Speed of play classified as “Medium-Slow Class 2” by the International Tennis Federation
- ▶ True ball bounce over the entire surface
- ▶ Spins work naturally, similar to clay courts
- ▶ Foot slide is controlled, not slippery
- ▶ Choice of play on a humid or dry court is up to the preference of the players
- ▶ The sand, even when dry in the summer, isn't blow off the surface by strong winds. In covered courts the walls and ceilings of the building aren't soiled, nor are paths or the clubhouse

## Comfort:

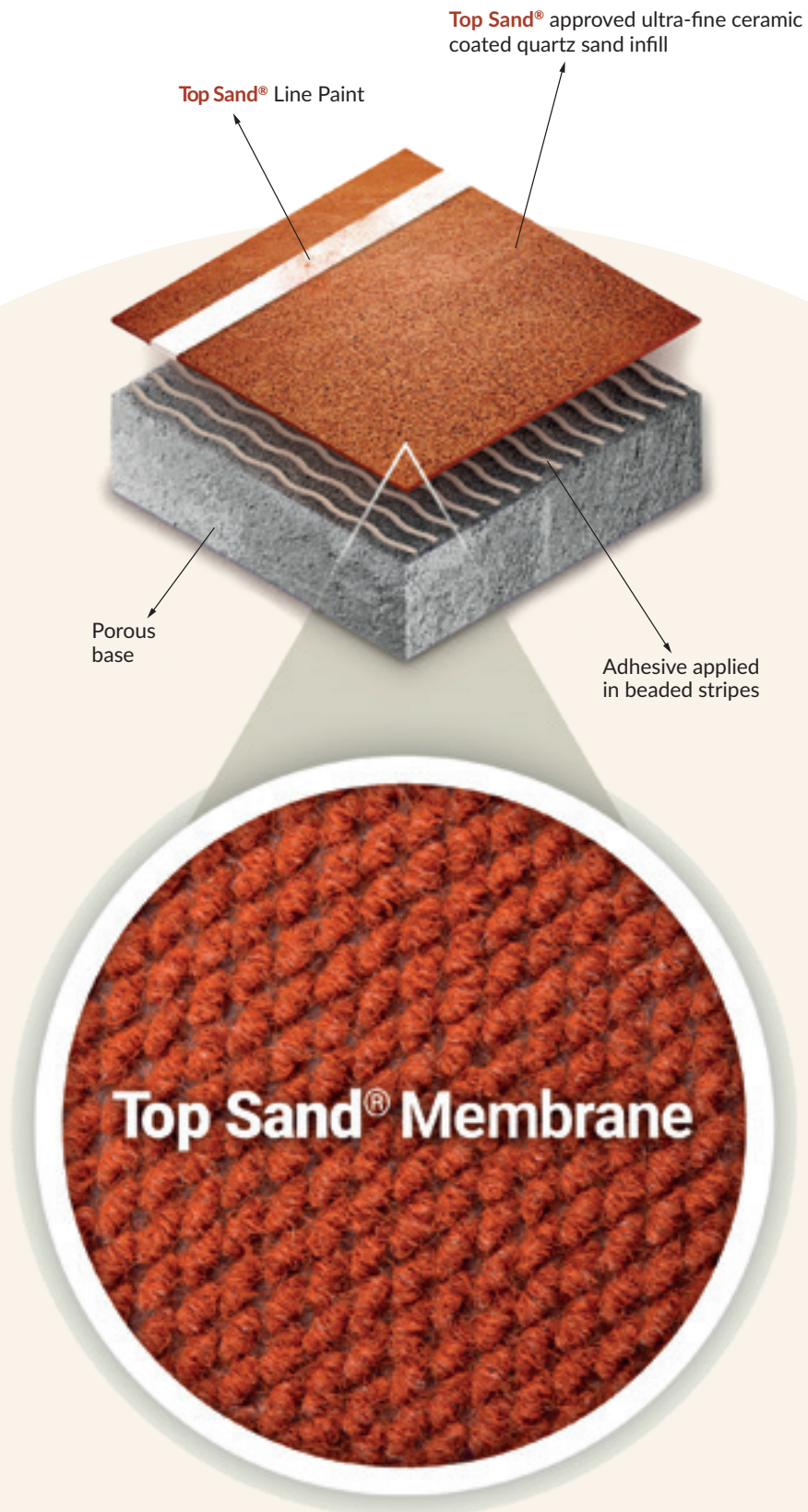
- ▶ Natural shock absorption due to the sand topping and the inherent qualities of the Top Sand® textile membrane supporting layer
- ▶ The loose elements of the ultra-fine sand greatly ease foot pivot, thus contributing to the feeling of comfort
- ▶ Players, if they wish, can slide, similar to clay. Those who prefer not to slide, will find the sand footing comfortably firm.
- ▶ Either in red or green sand, the colors and the texture are pleasant and welcoming, creating a sense of comfort. The ultra-fine sand keeps its colors for years

## Financial:

- ▶ Playable 12 months a year, exception made for snow
- ▶ Maintenance costs greatly reduced. No spring maintenance
- ▶ Daily maintenance is reduced to use of the drag mat as needed
- ▶ Watering is not a necessity. Better players may appreciate being able to hand water to obtain maximal playing conditions, as needed, on warm days
- ▶ Dries rapidly following rain storms. This means hours of additional play
- ▶ Changing an existing hard court to Top Sand® is practical, without extensive construction works. The transformation is reasonably priced.

# Datasheet

## Top Sand®



Not to scale

# Datasheet

Description	Needle punch tennis surface. Membrane composed of 100% structured polypropylene fibre infilled with coloured ultra fine ceramic quartz sand.
Destination	Outdoor and Indoor tennis courts.
Support layer	Hot rolled impermeable asphalt 0/4-0/6 with cross-slope. Porous concrete. Porous asphalt. Base horizontal plane must be checked before starting installation. Deviations of 6 mm under a 3- meter rule will be tolerated. Outside this limit the base must be levelled using an appropriate and approved technical solution.
Color	Red Green
Membrane Mass	1.550 g/m <sup>2</sup> ± 10 %
Membrane Thickness	10 mm ± 10 %
Standard roll Width	2 m
Standard roll Length	36,20 m
Standard roll Weight	approx. 112 kg
Fire Rating	Bfl s1
Court markings	Line Paint, approx. 60 kg per court.
Infill	Ultra-fine ceramic quartz sand supplied or authorized by Viganò Pavitex. Red or green. Standard quantity: 7 k./m <sup>2</sup> approx.
Adhesive	Two-component PU glue in stripes approx. 750 g/m <sup>2</sup>
Playing features	ITF Category 2 «Medium-Slow».
Warranty	7 years Degressive Warranty (see warranty conditions, available upon request)
Maintenance	See <b>Top Sand</b> <sup>®</sup> Maintenance Guidelines.
Installation	See <b>Top Sand</b> <sup>®</sup> Installation Guidelines.
Certification	ISO 9001:2015. Certificate Number: IT 240282



***We reserve the right to amend these specifications***

# Installation Guidelines

## INSTALLING THE SURFACE

Top Sand® is a tennis surface for outdoor and indoor courts.

The playing surface consists of sand 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 sand infill.

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

- ▶ Top Sand® bonded synthetic fibre membrane
- ▶ Viganò Pavitex-2 Comp PU glue (Polyurethane two-components adhesive) for fixing membrane to the base
- ▶ Top Sand® approved Line Paint for the court markings
- ▶ Top Sand® ultra-fine sand infill (red or green)

## BASE

The base for a Top Sand® tennis court surface may be Porous Concrete or Draining Asphalt; or, Top Sand® 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 stabilized compacted base course.

**In the case of a renovation on an existing base that requires preparatory works, these 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 cracks and uneven areas that are not within locally applicable tolerances. The areas should be corrected prior to the application of the adhesive and membrane.
- ▶ Checking that the existing support layer is free from moisture, algae, moss, or fungus growth before applying the adhesive (the adhesion of the Top Sand® membrane depends on this factor).

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

## STORAGE CONDITIONS

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

The other components (adhesive, Top Sand® Line Paint, Finisher and Sand infill) should be protected from sun, frost and rain.

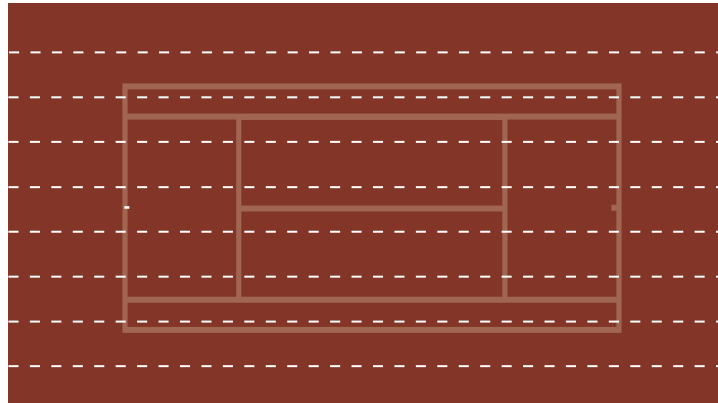
## POSITIONING THE ROLLS

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 Sand®** 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.

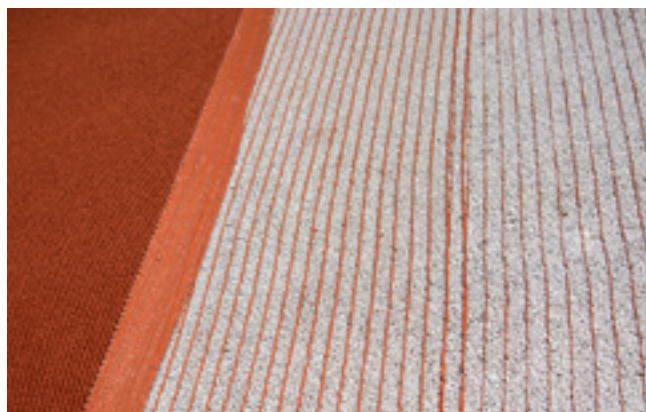
## ROLLING THE MEMBRANE

Rolling the membrane is a crucial stage to the successful laying of a **Top Sand®** 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 polymerization 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 Sand®** Line Paint.

**Top Sand®** 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 tridimensional structure of the membrane. The paint has to be properly worked into the soft top of the membrane, penetrating the fibre and obtaining a thickness of approx 1 mm as will be the level of the infill to be installed.



## SAND INFILL

The quality of the sand is of extreme importance as concerns the final result of a **Top Sand®** court. Its choice is the subject of special attention.

**Top Sand®** ultra-fine sand, supplied and or authorized by Viganò Pavitex Spa is the recommended infill for **Top Sand®** courts.



After all the rolls of the **Top Sand®** membrane are properly placed, glued, seamed and rolled, and the playing lines are completely dry, approximately 7 kg/m<sup>2</sup> of sand per court will be spread.



Thoroughly brush the membrane to work the sand infill into the voids of the **Top Sand®** membrane's fibres. The sand should barely cover the structure of the membrane, avoiding any extra thickness.



# Maintenance Guidelines

**Top Sand®** is an alternative to traditional clay courts with similar playing conditions but significantly less maintenance.

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.

The maintenance operations are divided into four categories:

- ▶ Daily Maintenance
- ▶ Frequent Maintenance
- ▶ Yearly Maintenance
- ▶ Additional Maintenance

## DAILY MAINTENANCE

### Brushing (drag mat) for regular play

In general, the quantity of sand should have a thickness of 1 mm above the membrane.

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

### Humidification

Humidification is not a requirement for a **Top Sand®** surface. Nonetheless, to obtain maximal playing conditions under certain circumstances, manual watering may be useful.

#### Outdoors

During the warm weather months, the better 10 – 20% of tennis players may wish to manually water the surface in order to obtain optimal footwork playing conditions. This should only be carried out on an “as-needed” basis.

#### Indoors

Humidification is not necessary.

## FREQUENT MAINTENANCE

- ▶ Periodically from 1 - 3 months, excess sand from the sides of the court should be brought back to the center. Frequency depends on use.
- ▶ As and when necessary, eliminate leaves, weeds, moss, and any other detritus that may be on the court.

## Additional Infill

During heavy play seasons or, as required by players, the membrane is to be topped up with sand so that the membrane structure is not visible.

Quantities may depend on:

- ▶ Number of hours of court use
- ▶ Rainfall
- ▶ Players preference

## YEARLY MAINTENANCE

### Additional Infill

After the winter season, top up with the sand. (This may be as little as 100 kgs. per court, on each side of the court. Quantity depends on use.)

### Weeds and Moss removal

It may happen that seeds germinate on the surface. To prevent this problem from spreading, appropriate weed killers should be applied

When the court is dry, in order to kill the moss that may be visible, an appropriate moss killer should be applied. When the moss has died, it needs to be removed. Preventive treatments for moss are sometimes effective.

## ADDITIONAL MAINTENANCE

### Indoors. Fibre Tips removal

During the first weeks of play some minute fibre tips may appear. **This is a perfectly normal effect** due to the manufacturing process **which doesn't affect quality of a Top Sand® surface nor the feature of its play.** While outdoors this is hardly noticeable, indoors it may be advisable to sweep the court during the first weeks of play with a mechanical sweeper.

### Play lines

Renew playing lines when necessary using only the approved **Top Sand®** Line Paint kit.

### Freezing and thawing

Freezing is not critical for a **Top Sand®** court. The surface is hard but play is still possible.

Thawing is gradual. During this time, play will be possible.

**Additional sand infill is to be avoided during this period.**

## Renew the membrane

Depending on wear of the membrane it may eventually 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, **Top Sand®** approved ultra-fine sand 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 Sand®**

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



# References

ANNEE YEAR JAHR ANNO	NATION NATION LAND NAZIONE	PROJET PROJECT KUNDE CLIENTE	Dép. PROV	VILLE CITY STADT CITTA'	COURTS COURTS PLAETZE CAMPI
<b>2015</b>	Sverige	Private Court		Lindome	1
2015	Norge	Sarpsborg TK		Sarpsborg	2
2015	Norge	TC Lillesand		Lillesand	3
<b>2016</b>	Norge	TC Sorumsand Idrettspark		Sorumsand	2
2016	Norge	TC Oslo		Oslo	1
2016	Norge	Grimsrud-Krakstad		Askim	1
2016	Sverige	TC Visby		Visby	2
2016	Sverige	Ericssberg Slott		Kathrineholm	1
2016	Sverige	Private court		HöNö	2
2016	Sverige	Tennis Club		Sandared	3
2016	Sverige	Tennis Club		Skara	3
<b>2017</b>	Danmark	Slangerup Tennis		Slangerup	2
2017	Sverige	Private Court		Malmö	1
2017	Sverige	TC Stora Rör (Öland)		Stora Rör (Öland)	2
2017	Sverige	TC Ekholmsnäs gård (Lidingö)		Ekholmsnäs gård (Lidingö)	1
2017	Sverige	TC Norrviken (Båstad)		Norrviken (Båstad)	2
2017	Sverige	TC Ludvika		Ludvika	2
2017	Sverige	Vifolkavallen (Mjölby Tennisklubb/Befab)		Mjölby	2
2017	Sverige	Brottkarrs Tennisfoerening		Hovas	1
<b>2018</b>	Danmark	O BG Tennis Center		Silkeborg	2
2018	France D/T	Fort Royale Resort Guadalupe		Guadeloupe	2
2018	Norge	TC Sarpsborg		Sarpsborg	2
2018	Norge	TC Trondheim		Trondheim	4
2018	Polska	Private Court		Bolechowice	1
2018	Sverige	Vargarda Tennisklubb		Vargarda	2
2018	Sverige	Brottkarrs Tennisfoerening		Hovas	1
2018	Sverige	Vadstena Tennisklubb		Vadstena	2
2018	Sverige	Snackgardsbadens Samfallighetsforening		Snack	1
<b>2019</b>	France	TC Fontenay sur Eure	28	Fontenay sur Eure	1
2019	France	Tennis Club	73	Gresy sur Aix	2
2019	France	TC Maisons-Lafitte	78	Maisons-Lafitte	1
2019	France	Tennis Club	92	Saint Cloud	1
2019	Great Britain	Middleton Sports Club		Middleton on Sea, West Sussex	2
2019	Polska	Tennis and Country Club		Gielbutow	5
2019	Norge	TC Forde		Forde	1
2019	Norge	TC Nesbru		Nesbru	1
2019	Norge	Selbjorn Skule*		Bekkjarik	1
2019	România	Private Court		Bucuresti	1
2019	South Korea	NH University		Nonghyoup	3
2019	Sverige	TC Granflo		Granflo	1
2019	Sverige	Private Court		Oijared Sateri	1
2019	Sverige	Hosby TK		Torsas	1
2019	Sverige	Ljungskile Tennis		Ljungskile	3
2019	Sverige	Private court		Tranholmen	1
2019	Sverige	TK Ekenåset		Ekenåset	1
<b>2020</b>	France	Particulier	06	Cap d'Antibes	1
2020	France	TC de Courville sur Eure	28	Courville sur Eure	2
2020	France	TC CEA Bagnols Marcoule	30	Bagnols-sur-Cèze	2

ANNEE YEAR JAHR ANNO	NATION NATION LAND NAZIONE	PROJET PROJECT KUNDE CLIENTE	Dép. PROV	VILLE CITY STADT CITTA'	COURTS COURTS PLAETZE CAMPI
2020	France	Tennis de Soucht	57	Soucht	2
2020	France	Particulier	73	Tresserves	1
2020	France	TC Pringy	74	Pringy	1
2020	France	Complexe Sportif sur les Marais	74	Vallières sur Fier	2
2020	France	TC Douvaine	74	Douvaine	3
2020	France	Tennis Octave Leclerc	76	Lillebonne	2
2020	France	Stade Municipal de Charny	77	Charny	1
2020	France	Tennis Squash Maisons Laffitte	78	Maisons-Laffitte	1
2020	France	USG Union Sportive Grigny	91	Grigny	2
2020	France	TC de Saint Cloud	92	Saint Cloud	1
2020	France	TC Cormeilles-en-Vexin	95	Cormeilles-en-Vexin	1
2020	Polska	TC Rudawa		Rudowa woj. Maloposki	2
2020	Norge	Private court		Paradis, Bergen	1
2020	Norge	TC Molde		Molde	2
2020	Sverige	Marstrand Tennisklubb		Marstrand	1
2020	Sverige	TC Kössö		Kössö	1
2020	Sverige	Private court		Upplands Wäsby	1
<b>2021</b>	France	Residence „Les Hauts du golf”	06	Mougins	1
2021	France	Particulier	18	Clémont	1
2021	France	TC Marsannay la Côte	21	Marsannay-la-Côte	1
2021	France	Particulier	28	Garnay	1
2021	France	TC Voiron	38	Voiron	2
2021	France	TC St Blaise du Buis	38	St Blaise du Buis	2
2021	France	TC Savigneux	42	Savigneux	2
2021	France	TC Chambon Feugerolles	42	Chambon Feugerolles	2
2021	France	TC La Porte du Der	52	Montier en Der	2
2021	France	Complexe Sportif Gaston Lozzia	54	Laxou	1
2021	France	TC Bitschwiller lès Thann	68	Bitschwiller lès Thann	1
2021	France	TC Bantzenheim	68	Bantzenheim	2
2021	France	TC des Trois Vallées	72	Coulaines	4
2021	France	TC Druettaz Clarafond	73	Druettaz Clarafond	2
2021	France	TC Lucinges	74	Lucinges	1
2021	France	Domaine de la Corniche	78	Rolleboise	1
2021	France	Tennis Squash Maisons Lafitte	78	Maisons-Lafitte	1
2021	France	Particulier	78	Feucherolles	1
2021	France	TC Chesnay Roquencourt	78	Chesnay Roquencourt	1
2021	France	TC Bulgnéville	88	Bulgnéville	1
2021	France	TC Etival Clairefontaine	88	Etival Clairefontaine	1
2021	France	TC Chavelot	88	Chavelot	2
2021	France	TC Meudon	92	Meudon	1
2021	France	TC Saint Cloud	92	Saint Cloud	2
2021	France	TCBB Boulogne	92	Boulogne-Billancourt	2
2021	Hellas	Private Court		Paros Island	1
2021	Maldives	TC Male		Male	1
2021	Norge	TC Ramsvik		Hafrsfjord	2
2021	Norge	TC Forde		Forde	1
2021	Norge	TK Snaroya		Snaroya	2
2021	Sverige	Private Court		Visby	1
2021	Sverige	TK Morlanda Säteri		Morlanda Säteri	1
2021	Sverige	TK Länsmansgården		Länsmansgården	4
2021	Russia	Private Court		Moscow	1

Please contact our offices to receive the updated Reference List



Sweden, Hovas, 2 courts – “Ågrenska Pro-Am Tournament play” in Brottkarrs Tennisfoerening



France, Saint Cloud (92), 1 court



Sweden, Sandared, 3 courts



England, Middleton on Sea, West Sussex, 2 courts



Norway, Sarpborg TK, 2 courts



Sweden, Ekholmsnäs gård (Lidingö), 1 court

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