

# VICONA DELUX ART TURF

## Installation Technique of Artificial Turf

### I . Photo Steps

#### Artificial Grass Installation Procedure - Picture Data (basic steps)



1: Fixing the center of the sites



2: Unfolding the grass to both sides



3: Cutting and trimming the grass edge



4: Jointing the tape and coating glue on the tape



5: Offer the grass edge together and flattening the grass



6: Filling Quartz Sand



7: Filling rubber granule



8: Cleaning-up site and completing

### II . Detail Steps

#### Chapter1. checking & modification about courts

- 1) Checking the groundient of courts, to make sure it matches the requirements of design.
- 2) Checking and unchoking the gutters around courts,to make sure they are free-flowing.
- 3) Checking the planeness of courts by using 6m-ruler.To prevent seeper,should modify scallops that lower or higher than nomal size:10mm.
- 4) Checking the straightness and flatness of courts' brinks.If there is any place that isn't straight and flat,must modify it to eligibility.

5) Clearing away the sharp acies.

6) Clearing away rubbish completely.

## **Chapter 2. measurement & lineation of courts**

1) Measuring the width and length,checking diagonal fault bit,and making a right record.

2) Rowing transverse and fore-and-aft centerlines.

3) Making centerline as benchmark,to row the location line of courts'gage mark correctly according to 《Lineation Plan of Artificial-turf Football Courts》 ,and check that is correct.

4) Rowing location line on the ground,and to make sure that they won't be scoured off during the period of installation.

## **Chapter 3. splicing and unfolding of artificial turf**

1) Carrying artificial turf rolls to the place beyond sideline on the same side; unfolding the first roll near the middle line,to make the first-tier grass matches courts' centerline. Should make sure the sideline of turf is straight. Neatening it to flat, and making lap marks to be straight.

2) Unfolding the second roll, should make sure it is parallel with first roll,and keeping straight of sidelines.Adjusting its location, making the second roll's sideline be intersected with first roll's,the location of intersection is following standard that the distance between first-roll's latest tier and second-roll's first tier should be in 20mm. Neatening it to flat,and making lap marks to be straight.

3) Unfolding all rolls one by one. The requirements are the same as above.

4) To the unnecessary sidelines, making sure the location is straight when workers are cutting, and also making sure the location of cutting is at least 5mm far away from grass's root.

5) Uncovering 300mm turf for each side that are jointed,and making sure the width of turf uncovered is almost the same.

6) Laying seaming belts (width:250mm) on the ground uncovered, making sure they are straight and in the middle of this ground.

7) Daubing special glue on the surface of seaming belts well-proportionedly,the width of glue daubed cann't be lower than 100mm,and its location must be in the middle of belts'width.

8) Daubing special glue on the back of turf's edge,and the width of glue cann't be lower than 50mm.

9) When menstruum in glue is volatilized to the degree (the surface of seaming belts isn't sticky when touched), pressing turf to seaming belts solidly. If there is any turf stuck by glue, must clear it away.In order to enhance sticky effect, should knock on the places jointed using rubber hammers.

10) Connecting rest turf one by one, and the requirements of installation are the same as above.

11) If sideline isn't straight or somewhere is missed, should put seaming belts on this position, and cut suitable turf to mend it using above methods.

12) If there are lap marks or bulge that can't be straightened, sundering these places, cutting off unnecessary turf, then mending it using above methods.

## **Chapter 4 splicing of marker line**

1) According to the plane layout and dimensioned drawing of artificial-turf football court, calculating the total demand of marker line.

2) According to prescriptive width, cutting white artificial turf into marker lines, and the amount should be a little more than total demand. Making sure the marker lines are straight, and the distance between cutting position and root of turf is more than 5mm.

3) Checking the location lines rowed on ground, sundering turf according to them, and cutting off the turf that is in the location lines(one location line includes two single lines, and they are parallel ).

4) Uncovering 300mm turf for each side of marker line, and making sure the width of turf uncovered is almost the same.

5) Laying seaming belts (to the linear places, using 250mm-seaming belts; and to the cambered places, using 500mm-seaming belts) on the ground uncovered, making sure they are straight and in the middle of this ground.

6) Putting marker lines near location lines, and making them face down for installation.

7) Daubing special glue on the surface of seaming belts well-proportionedly, the width of glue daubed cann't be lower than 250mm,and its location must be in the middle of belts'width.

8) Daubing special glue on the back of turf's edge,and the width of glue cann't be lower than 50mm.

9) Dauding special glue on the marker lines fully and well-proportionedly,making sure that the marker lines and other turf are not polluted by glue.

10) When menstruum in glue is volatilized to the degree (the surface of seaming belts isn't sticky when touched), pressing one side of turf to seaming belts solidly,and making sure there is no turf stuck by glue.If there is any turf stuck or polluted by glue, must clear it away.

11) Pressing marker lines to seaming belts solidly.The marker lines must nuzzle green turf stuck on the seaming belts,and make sure they are straight. Making sure there is no turf stuck by glue.If there is any turf stuck or polluted by glue, must clear it away.

12) Pressing another side of turf to seaming belts solidly,and making sure there is no turf stuck by glue.If there is any turf stuck or polluted by glue, must clear it away.

13) In order to enhance sticky effect,should knock on the places jointed using rubber hammers.

## **Chapter 5 filling quartz sand and strike-off**

1) Calculating total area (including buffer area and subsidiary area) of artificial-turf football courts correctly . And calculating the total amount of quartz sand, according to the amount of quartz sand for per square meter.

2) Quartz sand must be bought in advance and dry.If it is wet ,must be exposed under sun until it is dry before installation.

3) There are two methods for filling quartz sand:one is filling by workers;another is filling mechanically. Following is the detailed explanation of filling by workers.

- 4) Making the square area of 4m(total 16m<sup>2</sup>) as an unit,putting quartz sand that this area needs on this grass area,then tedding them well-proportionedly.
- 5) Filling all the quartz sand as described above.
- 6) Should pay attention to this condition:if filling quartz sand for filament-turf,must fill more carefully,and make less filament be pressed by sand as possible.
- 7) After finishing filling,should clear out the filaments pressed by sand using hard-thorn broom,and make surface of sand more flat.If necessary, can increasing work hours and intensity to get better effects.

### Chapter6 filling rubber granule and strike-off

- 1) Calculating total area (including buffer area and subsidiary area) of artificial-turf football courts correctly . And calculating the total amount of rubber granule, according to the amount of rubber granule for per square meter.
- 2) Rubber granule must be bought in advance and dry.If it is wet ,must be exposed under sun until it is dry before installation.
- 3) There are two methods for filling rubber granule: one is filling by workers;another is filling mechanically. Following is the detailed explanation of filling by workers.
- 4) Making the square area of 4m(total 16m<sup>2</sup>) as an unit,putting rubber granule that this area needs on this grass area,then tedding them well-proportionedly.
- 5) Filling all the rubber granule as described above.
- 6) Should pay attention to this condition:if filling rubber granule for filament-turf,must fill more carefully,and make less filament be pressed by rubber granule as possible.
- 7) After finishing filling,should clear out the filaments pressed by rubber granule using hard-thorn broom,and make surface of rubber granule more flat.If necessary, can increasing work hours and intensity to get better effects.

### Chapter7 clear-out of courts

- 1) After filling, must check all the positions of courts.If there is any problem or any place unsatisfied,should mend it timely.
- 2) Clearing away the rest turf,filament,packages,tools etc to make courts clean .
- 3) If conditions permit,can spray the courts to make better fixedness of turf by quartz sand and rubber granule.And making turf more clean.
- 4) There is a point needs to explain,for the new installed courts,the surface of quartz sand and rubber granule may not be very flat, but this

## III. Infilling Sand Details

### Quantity/Weight of Quartz Sand and Rubber Granule for Straight Artificial Grass

Pile Height	Quartz Sand Size	Rubber Granule Size	Quartz Sand Filling Quantity	Rubber Granule Filling Quantity	Filled Pile Height
( mm )	( cm )	( cm )	( kgs/m <sup>2</sup> )	( kgs/m <sup>2</sup> )	( mm )
50	0.2~0.63	0.3~0.8	25-30	6-8	10-15
40	0.2~0.63	0.3~0.8	20	6	10-15
30	0.2~0.63	0.3~0.8	15	5	10
20	0.2~0.63	0.3~0.8	10-15	3	10
10	0.2~0.63	0.3~0.8	5-8	0	5

**Note:** All the above data is only for the reference. Practical case should be treated in accordance with the actual situation.

- Remarks:**
- 1. Quartz sand requirements:**
    - ① Quartz sand should be spherical and roundness to avoid sharp edges cutting grass pile
    - ② Quartz sand should have necessary hardness
    - ③ Quartz sand should not contain too much powder. Too much powder will fade grass color and make the pile brittle
  - 2. Rubber granules requirements:**
    - ① Rubber granules should not contain too much powder
    - ② Rubber granules size is Uniform
    - ③ Rubber granules is flexible
    - ④ It is better that the Rubber granules do not contain heavy metals