

# Hybrid and All-Plastic Running Track Construction Guidelines



# I. Preliminary treatment



## 1. Cleaning:

Before construction, the site should be swept clean, the foundation must be free of dirt and other loose debris.



## 2. Cut groove:

After the ground is cleaned up, the expansion joints of the cement foundation is cut into V groove, and then use the material to make up for the flat.

# II. Foundation waterproof layer

## (1) Construction method of Cement Foundation:

The special primer for cement foundation is F605 primer, which plays the role of isolating moisture and increasing adhesion to the cement foundation.

The old foundation should be polished first, and the new foundation should be cleaned with oxalic acid.

The cement primer F605 is applied evenly on the surface of the cement foundation at *a dosage of 0.15kg/m<sup>2</sup>*.

## (2) Construction method of Asphalt Foundation:

Mix the sealing emulsion W01 with water, then mix with 325# cement and 40 mesh quartz sand according to the proportion, then seal the asphalt foundation.

Ratio:

***Sealing Emulsion:Water:Cement:Quartz Sand=1:1:2:2***

## III. Double-component PU elastic layer

PU elastic layer is a two-component material.

The specifications are 1:5(105A:105B), 1:4(104A:104B) and 1:3(103A:103B), three specifications of elastic layer for users to choose.

Add zinc-bismuth environmentally friendly drying agent 0.3%-0.5% as needed to control the curing time.

You can also add leveling agent to increase the mobility, but the proportion of leveling agent should be controlled, so as to avoid the finished product testing chemical indicators exceed the standard.

## IV. Construction method of PU elastic layer

(1) The mixing place should be paved with plastic sheet to ensure the ground is tidy.

Pour the runway A material (transparent liquid hardener) first, then pour the runway B material (color paste main agent), try to pour in the center of the mixing barrel, do not pour along the side of the barrel, so as to avoid that the material at the side of the barrel can not be completely mixed.

When mixing, the mixer should be moved up and down, so that the material can be fully mixed before adding EPDM particles and mixing evenly.

(2) Pour the well-mixed elastic layer material on the treated runway base with tooth-like PU rake coating (back and forth drag), and control the capacity of 2 to 3 times to achieve the set thickness.

(3) 24 hours after the elastic layer coating, the material has hardened into shape, and then sprinkle water on the surface, and indicate the location of water and then use the same material to make up for the low spots.

(4) If the construction process is mixed with debris or uneven places need to be sanded and smoothed before the construction of the surface layer.

(5) Note:

Before construction, the ground to confirm that the water content can be constructed to the extent that the elastic layer can be scraped.

Construction attention to the material according to the requirements of the ratio, must be stirred to ensure that the mixing is uniform before paving, to avoid raw material.

## **V. Double-component PU runway surface layer**

The runway surface layer is a two-component material.

The specifications are 1:1 (101A:101B), 1:2 (102A:102B), and self-knotting (502A:502B), three specifications of the surface layer material for users to choose.

The construction of the runway surface layer can be added zinc-bismuth environmentally friendly catalyst 0.3%-0.5% to control the curing time.

Add 0.3%-0.5% zinc-bismuth environmentally friendly drying agent to control the curing time.

You can also add appropriate amount of leveling agent to increase the fluidity, but the proportion of leveling agent should be controlled to avoid the finished product testing chemical indicators exceeded.

## VI. Construction method of PU runway surface layer

(1) When the PU runway surface layer is a self structuring surface layer:

Add 20% of 100-120 mesh (No. 8) quartz sand to the self structuring (502A: 502B) two-component surface material selected by the user according to the total amount of runway A and runway B materials, and then add 0.3% -0.5% zinc bismuth environmentally friendly drying agent.

Use a high-pressure spraying machine and a specially designed spray gun to form a 100 degree angle with the ground for spraying.

When spraying, the nozzle should be about 35cm off the ground and sprayed back and forth from left to right. Do not spray too densely. Spray 2-3 times in total on the construction site.

Special note:

The self structuring track A and B materials must not add solvents, and the sprayed material must be smooth in order to spray better and more prominent patterns.



(2) When the runway surface layer is a sprayed particle surface layer, the user's selected 1:1 (101A: 101B) or 1:2 (102A: 102B) double-component surface layer material is sprayed uniformly clockwise and counterclockwise at a rate of 1.2 kg/m<sup>2</sup>, with 1-3mm EPDM particles added at a rate of 1 kg/m<sup>2</sup> and EPDM powder at a rate of 0.2 kg/m<sup>2</sup>.

During construction, 0.3% -0.5% of zinc bismuth environmentally friendly drying agent can be added as needed to control the curing time. Leveling agent can also be added to increase fluidity, but the proportion of leveling agent should be controlled to avoid exceeding the chemical indicators in the finished product testing.

(3) When the runway surface layer is a scattering particle surface layer, apply the 1:1 (101A: 101B) or 1:2 (102A: 102B) surface layer material selected by the user with a 2 kg/m<sup>2</sup> rake tooth trowel.

When it is leveled and in a brushed state, evenly sprinkle 2-4mm EPDM particles at 3-5 kg/m<sup>2</sup>, and recover excess particles after hardening.

During construction, 0.3% -0.5% of zinc bismuth environmentally friendly drying agent can be added as needed to control the curing time. Leveling agent can also be added to increase fluidity, but the proportion of leveling agent should be controlled to avoid exceeding the chemical indicators in the finished product testing.

(4) Note:

After confirming the cleaning of the elastic layer and repairing it with substrate, proceed with the surface layer construction.

The construction material for this layer is a double-component reactive material.

After mixing the double-component materials, they need to be used up within 1 hour (no more than 2 hours at most), otherwise quality problems may occur. Therefore, do not mix too many ingredients at once.

## VII. Delineation

Scribing paint is a double-component material. The ratio of *Hardener : White topcoat = 1:3*. A leveling agent can be added as needed during construction.

According to the standard size measurement positioning, marking the boundary position, with masking tapes along the boundary on both sides of the court, with special marking paint short hair roller in the masking tapes rolled evenly, until the surface is dry, tear off the masking tapes.

## VIII. Notes

- (1) When mixing materials must be weighed accurately and stirred evenly.
- (2) The surface must be kept clean before each procedure of the whole construction process.
- (3) Ventilation must be ensured in the indoor site.
- (4) The site must be kept for more than 3-5 days after laying before being put into use.
- (5) Must be strictly in accordance with the construction process construction, if there are special circumstances, please consult our business manager immediately by phone. Otherwise, our company will not be responsible for any construction quality problems.



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