



Installation Manual

Herculan TC Pro

Herculan BV has prepared this manual to assist applicators in the installation of this system. Any references to consumptions are approximate due to variations of site conditions and application techniques. Before starting any work, the applicator must become familiar with all product installation procedures.

Our recommendations concerning the technical application of the product, whether through oral or written communication or through demonstration, are given to the best of our current knowledge; however, any such instruction shall be without commitment, including where any protective rights of third parties are involved. They do not free you of the obligation to check the products supplied by us for their suitability for the procedures and applications envisaged. The (intended) use and application of the products are beyond our control. They are therefore your personal responsibility. In the event that Herculan proves liable, such liability shall be limited in all cases of damage to a sum not exceeding the actual value of the goods supplied by us and used by you. It goes without saying that we guarantee the good quality of our products, in accordance with the standards set out in our General Terms of Sale and Delivery.

TABLE OF CONTENT

1 Surface pre-treatment	3
2 System Build Up	4
3 Required installation equipment	4
4 Installation manual	5

Limitation

- Do not apply over damp or wet substrates.
- Do not apply to surfaces during the out-gassing of vapor.
- Minimum application and curing temperature 15°C.
- Relative humidity must be between 30% and 70% during the whole installation and drying proces.
- Maximum substrate temperature 30°C.
- Minimum curing time of concrete is 28 days.
- Maximum moisture content of concrete is 3%.
- Minimum curing time of asphalt is 2 weeks.
- Substrate temperature must be a minimum of 4°C above the dew point.
- Each individual layer must be installed within 48 hours after the installation of the previous layer.
- All tools and machinery should be cleaned immediately after final usage. For proper cleaning Herculan Solvent TC can be used.
- We advise you to read the Safety Data Sheets before installation. In this way you are prepared in case something unexpected happens.
- Please write down the batch numbers to simplify the traceability of the materials.

1 SURFACE PRE-TREATMENT

Prior to installation of the system, it is important to ensure that the receiving substrate is properly prepared, clean, free from any imperfections and substances such as grease, oil and hydraulic fluid which could affect the long term performance of the Herculan TC Court Pro system.

It is also important to ensure that each completed layer of the system is properly cured before installing the next layer. The surface must also be dust free, free of cement laitance and open textured.

- **New concrete** must be at least 28 days old before installing the Herculan TC Court Pro system . Concrete floors may have a maximum moisture content of 3% before the first layer can be applied. The moisture percentage can be checked by using a calcium-carbid meter. The moisture percentage of the substrate must be determined before installation. If the moisture percentage is not higher than the maximum of 3% one can proceed with the installation. The floor must also be free from damp, dew and condensation. New concrete floors can best be prepared by vacuum shot blasting or diamond grinding and vacuum cleaned afterwards. Using this method produces a sound surface, free from slime membranes, with an open concrete surface. When other mechanical methods are used they may not exceed the desired roughness of 1mm.

- **Old concrete** can also best be prepared by vacuum shot blasting or diamond grinding and vacuum cleaning afterwards. If there are scratches, holes or other irregularities in the floor surface they must be repaired before installation of the Herculan TC Court Pro system .

- **Sand cement floors** may have a maximum moisture content of 3% before the first layer can be applied. The moisture percentage can be checked by using a calcium-carbid meter. The moisture percentage of the substrate must be determined before installation. If the moisture percentage is not higher than the maximum of 3% one can proceed with the installation.

The floor must be mechanically sanded and vacuum cleaned before the new flooring system can be installed. Be aware that a sand cement floor cannot be shot blasted. It will damage the floor!

Note that the target requirement of the surface regularity, measured with a 3 meter straight edge, is ≤ 6 mm. (according to EN 14877).

2 SYSTEM BUILD UP

Table 1 – System Build Up

Layer	Product	Consumption
Base Layer	Herculan UN 700 + Cushion MF	0,70 kg/m ²
Pore Filler	Herculan EG 120	0,60 kg/m ²
Scratch layer (optional)	Herculan EX 800	0,20 kg/m ²
Self-leveling layer	Herculan EX 800	2,00 kg/m ²
Top Coat	Herculan Court S	0,560 kg/m ²
Game Line Paint	Herculan GLP TC	0.04-0.05 kg/m ²

3 REQUIRED INSTALLATION EQUIPMENT

- ✓ Rubber squeegee, soft, 45 degree edged, 90 cm. (the hard version is optional for 4th layer in this installation manual)
- ✓ Swedish Knife or toothed trowel
- ✓ Straight trowel
- ✓ UN 700 adhesive blade
- ✓ Adjusting roller for mat
- ✓ Disk grinder or hand held grinder (sanding paper K 120)
- ✓ Vacuum cleaner
- ✓ Radiator brush.
- ✓ Mixer with adjustable RPM and at least a 900 Watt motor.
- ✓ Electrical extension coil.
- ✓ Pincers to open boxes.
- ✓ Measure tape minimum 25 meter.
- ✓ Chalk line or normal building line.
- ✓ 14 rolls of 50 mm masking tape.
- ✓ 1 roll of plastic sheet.
- ✓ Water and buckets.
- ✓ 50 mm oval paint brushes.
- ✓ Small window wiper.
- ✓ Tape roller.
- ✓ Carpet knife with straight knife blades.
- ✓ Small mixer.
- ✓ Scale
- ✓ Cleaning cloths
- ✓ Gloves

As the Herculan TC Pro is a multi-layer system, it is important that after each layer has been completed, the installation technicians thoroughly clean and prepare all items of equipment prior to the application of the next layer of the system.

4 INSTALLATION MANUAL

1. Herculan UN 700 adhesive

- The Herculan UN 700 must be applied using a specific toothed trowel (type B2).
- Herculan UN 700 is a 2-component material, consisting of a Resin and a Hardener, which must be mixed to each other prior to installation.
- Usage approximately 0,7 kg/m², depending on the roughness of the surface.
- The application time is about 25-30 minutes at 20 °C.

2. Herculan Cushion MF rubber mat

- The Herculan Cushion MF must be laid into the Herculan UN 700 within 20 minutes after application of the Herculan UN 700.
- Keep the rubber mat approximately 2 cm away from the sides but as close to each other as possible.

3. Herculan EG 120 pore filler

- The Herculan rubber layer must be closed with Herculan EG 120 pore filler using a straight trowel.
- Herculan EG 120 is a 2-component material, consisting of a Resin and a Hardener, which must be mixed to each other prior to installation.
- Usage approximately 0,6 kg/m²
- The application time is about 20-25 minutes at 20 °C.
- Herculan EG 120 is recoatable after 16 hours and within 48 hours at 20 °C.

4. Herculan EX 800 scratchlayer (optional)

- The Herculan EG 120 must be fitted with the Herculan EX 800, using a straight trowel.
- Herculan EX 800 is a 2-component material, consisting of a Resin and a Hardener, which must be mixed to each other prior to installation.
- Usage approximately 0,2 kg/m²
- The application time is about 15-20 minutes at 20 °C.
- Herculan EX 800 is recoatable after 16 hours and within 48 hours at 20 °C

5. Herculan EX 800 self-leveling, base layer

- The Herculan EG 120 must be fitted with the Herculan EX 800, using a Swedish knife or a straight trowel.
- Herculan EX 800 is a 2-component material, consisting of a Resin and a Hardener, which must be mixed to each other prior to installation.
- Usage approximately 2 kg/m²
- The application time is about 15-20 minutes at 20 °C.
- Herculan EX 800 is recoatable after 16 hours and within 48 hours at 20 °C

6. Herculan Court S

- The Herculan EX 800 must be fitted with the Herculan Court S using a rubber squeegee.
- Herculan Court S is a 2-component material, consisting of a Resin and a Hardener, which must be mixed to each other prior to installation. After mixing these 2 components, the mixture is filled with Herculan Filler S adding a percentage of 60% (parts by weight) of Herculan Filler S to the Herculan Court S. After mixing the Filler S, water must be added in a percentage of 10% (parts by weight) to the complete mixture.
- Usage approximately 0,210 kg/m² for the 1st layer and 290 kg/m² for the 2nd layer.
- The application time is about 45 minutes at 20 °C. After pouring out the material, it strongly depends on the circumstances how long the material is workable.
- Herculan Court S is recoatable and walkable after 12 hours at 20 °C and within 48 hours at 20 °C and 50% RH.

7. Herculan GLP TC

- The Herculan Court S must be fitted with the Herculan GLP TC using a small window squeegee.
- Measure in the inner court completely and mark the future lines on both sides with 50 mm masking tape. In this way you can paint the area between the tape which will leave you a straight game line.
- When the masking tape is place on the floor, make sure you roll the tape afterwards so it will completely stick on the floor avoiding paint going underneath it, causing bad lines.
- Take out the tape at the cross-sections so no blank spots will occur after painting and removing the tape.
- Herculan GLP TC is a 2-component material, consisting of a Resin and a Hardener, which must be mixed to each other prior to installation. After mixing these 2 components, the mixture is filled with Herculan Filler S adding a percentage of 20% (parts by weight) of Herculan Filler S to the Herculan GLP TC.
- Usage approximately 0,04-0.05 kg/m¹ (at a line width of 5 cm)
- The application time is about 45 minutes at 20 °C. After pouring out the material, it strongly depends on the circumstances how long the material is workable.
- Herculan GLP TC is recoatable and walkable after 16 hours at 20 °C and within 48 hours at 20 °C and 50% RH.

Take some measurements to avoid people to walk on the floor when it is still wet.