FOR TENNIS AND MULTISPORTS FACILITIES

ACRYLIC SPORTS SURFACES

TENNIS
BASKETBALL
VOLLEYBALL
FOOTBALL
OVER 100,000,000 m² OF LAYKOLD SPORTS SURFACES INSTALLED SINCE 1970!

Laykold designed FOR ALL SPORTS

The Laykold acrylic system is an all-weather hard court coating that is both hardwearing and durable. It can be easily adapted to meet a whole host of criteria in the areas of performance, playability and appearance. For instance, a specially made rubber cushion can be integrated into the system to improve the cushioning effect and, in turn, the comfort of play. The wide choice of colours allows you to add a creative splash to your asphalt or concrete surfaces whether old or new.

Thanks to the minimal maintenance requirements and low installation costs, you can reinvigorate existing concrete and asphalt surfaces, and extend the life of existing courts. The main application areas are tennis courts and multi-sports surfaces (for basketball, volleyball, football). Laykold is also a popular solution for roller sports or schools.

Laykold was first used in the 1920s until 1930s. Since then, this surface has been installed at more than 100,000 sports facilities throughout the world. During the tennis boom of the 1960s and 70s, Laykold became established as one of the few materials suitable for hard court surfaces. Thanks to the versatility that it offers today, Laykold has become the global market leader for outdoor tennis courts.
Hard Rock Stadium
Miami, Florida
Nike Stanton Street
Courts by KAWS

Andrew Jackson
Elementary School,
Santa Ana CA
Soccer Court
Linden Park, Columbus OH
Soccer Court

Palmer Park, Chicago IL
Soccer Court

Kipp School, Houston TX
Soccer Court
The Laykold ColorCoat acrylic system is an all-weather hard court coating that is both hard-wearing and durable. Its main areas of application are tennis courts and multi-sports surfaces (for basketball, volleyball, football). The wide choice of colours allows you to add a creative splash to your asphalt or concrete surfaces whether old or new. Laykold ColorCoat is laid seamlessly without any joints. With its textured and water-impermeable surface, it offers optimum sporting characteristics.

### System structure

- **Top coat sealant (optional)**
- **Textured top coat**
- **Lines (optional)**
- **Primer (concrete) / New asphalt**

### System properties

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>STANDARD</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness</td>
<td>DIN EN 1969</td>
<td>≥ 1 mm</td>
</tr>
<tr>
<td>Friction</td>
<td>DIN EN 13036-4</td>
<td>101 (dry) / 60 (wet)</td>
</tr>
<tr>
<td>Abrasion resistance</td>
<td>DIN EN ISO 5476-1</td>
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<tr>
<td>ITF coefficient of restitution</td>
<td>ITF CS 01 / 02</td>
<td>0.79</td>
</tr>
<tr>
<td>ITF coefficient of friction</td>
<td>ITF CS 01 / 02</td>
<td>0.68</td>
</tr>
<tr>
<td>ITF Court Pace Rating</td>
<td>ITF CS 01 / 02</td>
<td>35 (medium)</td>
</tr>
</tbody>
</table>

### Colour chart

- **Light grey**
- **Red**
- **Purple**
- **Dark grey**
- **Burgundy**
- **Light blue**
- **Beach beige**
- **Royal Purple**
- **Teal**
- **Pumpkin**
- **Spring green**
- **Arctic**
- **Candy red**
- **Grass green**
- **Dark blue**
- **Coral**
- **Dark green**
The Laykold Masters Color acrylic system is an all-weather hard court coating that is both hard-wearing and durable. Its main areas of application are tennis courts and multi-sports surfaces (for basketball, volleyball, football). Regardless of how and where it is installed, a consistent surface structure can be achieved thanks to the defined quartz sand prefilling. Laykold Masters Color is available in several colours, allowing you to add a creative splash to your asphalt or concrete surfaces whether old or new.

Laykold Masters Color is laid seamlessly without any joints. With its textured and water-impermeable surface, it offers optimum sporting characteristics.

### System structure

1. Primer (concrete) / New asphalt
2. Levelling layer
3. Lines (optional)
4. Textured top coat
5. Top coat sealant (optional)

### System properties

<table>
<thead>
<tr>
<th>PROPERTIES</th>
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<tr>
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<tr>
<td>Friction</td>
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<td>Abrasion resistance</td>
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<tr>
<td>ITF Court Pace Rating</td>
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</table>

The Laykold Advantage acrylic system is an all-weather hard court coating that is both hard-wearing and durable. Its main areas of application are tennis courts and multi-sports surfaces (for basketball, volleyball, football). Regardless of how and where it is installed, a consistent surface structure can be achieved thanks to the defined quartz sand prefilling. Laykold Advantage is available in several colours, allowing you to add a creative splash to your asphalt or concrete surfaces whether old or new.

Laykold Advantage is laid seamlessly without any joints. With its textured and water-impermeable surface, it offers optimum sporting characteristics.

### System structure

1. Primer (concrete) / New asphalt
2. Levelling layer
3. Lines (optional)
4. Textured top coat
5. Top coat sealant (optional)

### System properties

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>STANDARD</th>
<th>RESULT</th>
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<tbody>
<tr>
<td>Thickness</td>
<td>DIN EN 1969</td>
<td>≥ 1 mm</td>
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<tr>
<td>Friction</td>
<td>DIN EN 13036-4</td>
<td>99 (dry) / 60 (wet)</td>
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<td>ITF Court Pace Rating</td>
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</table>
**Laykold Masters 5**

**Comfort of play like no other thanks to the cushioning effect of the Laykold Masters 5**

Laykold Masters 5 is an all-weather acrylic system that is both hard-wearing and durable with a cushioning effect to improve the comfort of play. Its main areas of application are tennis courts and multi-sports surfaces (for basketball, volleyball, football). Regardless of how and where it is installed, a consistent surface structure can be achieved thanks to the defined quartz sand prefilling. Laykold Masters 5 is available in several colours, allowing you to add a creative splash to your asphalt or concrete surfaces whether old or new.

Laykold Masters 5 is laid seamlessly without any joints. With its textured and water-impermeable surface, it offers optimum sporting characteristics.

**System properties**

<table>
<thead>
<tr>
<th>PROPERTIES</th>
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<td>Vertical deformation</td>
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<td>Vertical ball behaviour</td>
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<td>98 %</td>
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<td>Angled ball behaviour</td>
<td>DIN EN 13865</td>
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<tr>
<td>Friction</td>
<td>DIN EN 13036-4</td>
<td>99 (dry) / 65 (wet)</td>
</tr>
<tr>
<td>Abrasion resistance</td>
<td>DIN EN ISO 5470-1</td>
<td>0.52 g</td>
</tr>
<tr>
<td>Tensile strength (EN 12230)</td>
<td>DIN EN 12230</td>
<td>0.65 MPa / 60 %</td>
</tr>
</tbody>
</table>

**Laykold Masters 8**

**Optimum sporting characteristics with Laykold Masters 8**

Laykold Masters 8 is an all-weather acrylic system that is both hard-wearing and durable and features a superb cushioning effect to improve the comfort of play. Its main areas of application are tennis courts and multi-sports surfaces (for basketball, volleyball, football). Regardless of how and where it is installed, a consistent surface structure can be achieved thanks to the defined quartz sand prefilling. Laykold Masters 8 is available in several colours, allowing you to add a creative splash to your asphalt or concrete surfaces whether old or new.

Laykold Masters 8 is laid seamlessly without any joints. With its textured and water-impermeable surface, it offers optimum sporting characteristics.

**System properties**

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>STANDARD</th>
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<tbody>
<tr>
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<tr>
<td>Impact absorption</td>
<td>DIN EN 14808</td>
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<td>Vertical deformation</td>
<td>DIN EN 14809</td>
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<td>Vertical ball behaviour</td>
<td>DIN EN 12235</td>
<td>103 %</td>
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<td>Angled ball behaviour</td>
<td>DIN EN 13865</td>
<td>30 (slow)</td>
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<tr>
<td>Friction</td>
<td>DIN EN 13036-4</td>
<td>99 (dry) / 65 (wet)</td>
</tr>
<tr>
<td>Abrasion resistance</td>
<td>DIN EN ISO 5470-1</td>
<td>0.52 g</td>
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<tr>
<td>Tensile strength (EN 12230)</td>
<td>DIN EN 12230</td>
<td>1.81 MPa / 53 %</td>
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</table>
With acrylic tennis court coatings, the flatness requirements for the formation are extremely stringent. Melos GmbH recommends having a water-impermeable asphalt to serve as a sub-floor. The following non-binding recommendation applies to all Laykold systems.

It is also possible to install Laykold systems on a concrete formation/base.

However, concrete surfaces (particularly outdoor ones) tend to develop stress cracks because concrete is a hard/brittle material. Laykold ColorCoat, Advantage and Masters Color do not have any crack-bridging properties and so any cracks that occur in the concrete base may also appear in the Laykold systems.

Melos GmbH expressly draws attention to the fact that no claims for defects in the supplied products can be made as a result of this.

### Slope

It is absolutely essential that outdoor asphalt/concrete tennis courts be constructed with a uniform slope (running from side to side). Tennis court slopes are supposed to have a steepness of 0.8% (tolerance +/-0.2%).

We recommend a slope of 1%. This is conducive to water drainage and helps to remove residual water. Indoor courts can be constructed without a slope.

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![Fig. 1: Lengthways gable roof slope](image1)

![Fig. 2: Crossways gable roof slope](image2)

![Fig. 3: Pent roof slope](image3)

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**Sub-floor recommendation**

**Installation of the Laykold Systems**
Recommended care and cleaning

1. General cleaning and maintenance

Laykold systems generally require minimal care and maintenance. The amount of work required depends heavily on the local environmental conditions and how intensively the court is used. The conditions can be divided into two categories:

a. Low-maintenance environments

Environments with low levels of dust and minimal dust. This means, for example, that indoor spaces are classed as low-maintenance areas.

- Outdoor areas
  Depending on the amount of surface dirt, the courts must be cleaned roughly once a week with a broom, air blower or wet broom. Foreign matter must be washed away with a water hose if possible.

- Indoor areas
  Depending on how intensively the court is used, indoor areas must be cleaned once every 2 to 4 weeks with a walk-behind (or similar) cleaning machine to get rid of any dust and dirt. Heavy soiling or stains must be removed with a floor scrubber machine with a soft brush/pad. Dirty water should be drained directly from the surface.

b. Maintenance-intensive environments

Environments with significant levels of pollution (such as dust, foliage and traffic fumes) are classed as high-maintenance environments; generally, these will be outdoor areas.

Use a water hose to remove foreign matter from the surface at least once a week to prevent pollutants from accumulating. If the surface gets dirty or stained, it can be cleaned with a floor scrubber machine with a soft brush/pad. When cleaning the surface, you should also use a biodegradable cleaning agent.

When using a cleaning agent, observe the manufacturer’s specifications and rinse it off immediately with clean tap water.

2. Possible types of contamination

a. Contamination caused by vegetation

Courts that have a lot of trees and vegetation nearby must be properly looked after to prevent excessive ingress of organic matter from plants (e.g., leaves and grass clippings). Certain constituents of foliage/plants will cause stains if they are left lying around for too long.

Furthermore, mould may form in these areas if they are allowed to combine with rainwater.

We recommend the following cleaning process:
- Sweep away foreign matter (such as foliage/plants) with a broom.
- Wash the surface with clean water.
- Use a diluted sodium hypochlorite solution (liquid swimming pool chlorine); the dilution rate will depend on the extent of the mould infestation.
- Spread the solution over the mould-infested area with a broom and leave it to work for 10 to 15 minutes. Do not allow it to dry.
- Hose the surface down thoroughly with clean water to remove any residual solution.
- More heavily infested areas may require additional treatment. In particularly difficult cases, the surface will have to be sprayed with a powerful jet of water and treated with sodium hypochlorite. Other moss and algae killers are available from retail outlets.

b. Contamination caused by organic animal matter

Prolonged exposure to bird droppings and worms will cause the Laykold surface to decompose. Therefore, these contaminants must be removed immediately with a mechanical scraper and/or a high-pressure cleaner. If the desired cleaning results are not achieved, you can use a residue-free, biodegradable cleaning agent (rinse it off with water).

If the organic animal matter cannot be removed, the system may start to blister or flake (with the damage extending as far as the asphalt). In this case, the defect will have to be repaired by a Laykold specialist company.

c. Food and drink residues

We recommend wet cleaning the surface immediately. If any stains appear, use the same cleaning methods as for contamination caused by vegetation.

Treat chewing gum residues with a freeze spray and carefully remove them mechanically with a rubber scraper.

d. Fat and oil residues

We recommend using a residue-free, organic cleaning agent to remove these contaminants. Several cleaning cycles may be required. After treating the area, rinse it with clean water.

e. Signs of wear and tear

Only wear shoes with white and/or abrasion-resistant soles.

People using the court should clean their shoes before stepping onto it so that no stones, twigs or other sharp objects can damage the surface. Certain soles may leave black marks on the surface. These marks can generally be removed by using a residue-free, biodegradable cleaning agent and a brush with rigid bristles. Marks caused by shoe soles will be more obvious on new surfaces.

Laykold Masters surfaces are resistant to normal racket contact. Nevertheless, if the surface receives heavy blows from a metal racket at a sharp angle, minor scratches may be caused. This type of damage is normally restricted to the upper layers and can be easily repaired. In this case, the defect should be repaired by a Laykold specialist company.

Notes:

- We recommend that you test all cleaning methods and their effects on an inconspicuous area to make sure they are compatible before you start using them more generally.
- Do not use any solutions made from powdered calcium hypochlorite, as these will leave white residues behind on the surface once dry.
- Keep the product away from plants, animals and children, and wear protective clothing.
- Observe the local environmental regulations.
- Laykold surfaces must not be used on solvent-based products such as thinning agents and similar products.
- Avoid point loads such as metal chair legs, heavy trolleys/carts and stiletto heels.