



Case study Laverstock Park Farm

Flooring

Client: Laverstock Park Farm
Specialist Contractor: Protective Coating Systems
Products Specified: Sikafloor®-20 N PurCem®,
Sika® MonoTop® 620 and Sikagard®-675 W
ElastoColor

When it came to specifying a floor for the slaughter house of a new abattoir at the Laverstock Park Farm in Hampshire, specialist contractor Protective Coating Systems (UK) of Chippenham needed a surface that was hard wearing, resistant and easily cleaned. Sikafloor®-20 N PurCem® from international producer of high quality building products, Sika provided the answer.

Food processing begins in abattoirs and so it is crucial they set the standards for hygiene throughout the industry. Frequent steam cleaning of floor areas is one of the essential operations within the cleanliness regimes, therefore the ability of the floor surface to resist the high temperatures associated with frequent steam cleaning and withstand exposure to blood acids in a continually wet environment is critical. To meet this strict and challenging criteria, Sikafloor®-20 N PurCem®, a high performance flooring system, was specified.

A 9mm thick polyurethane screed of Sikafloor®-20 N PurCem® was quickly and simply applied to surface the slaughter house's 3,500m² concrete floor slab. Sikafloor®-20 N PurCem® was then used for all the coving and detailing around blood pits and upstands.

Sikafloor®-20 N PurCem® is a water-based, coloured, polyurethane resin floor screed system. This creates a jointless surface that, as well as showing no ill-effects of daily steam cleaning, is slip resisting, highly resistant to chemicals and the abrasion and mechanical wear encountered when there are continuous mechanical movements, such as forklift trucks, over the floor surface.

A three part resin rich, water dispersed aggregate and screed, Sikafloor®-20 N PurCem® comes in an almost limitless range of colours. The high resin content makes it an exceptionally fast product to apply, reducing labour costs and subsequently project costs. Its high performance qualities have made it the floor screed of choice for difficult applications such as laboratory, chemical plant, freezer and food plant flooring.

Crucially, Sikafloor®-20 N PurCem® is exceptionally fast curing. After just 12 hours of application it can accommodate foot traffic. Such quick curing properties allowed Protective Coating Systems (UK) to offer the Laverstoke Park Farm an extremely quick turnaround of the project so that the abattoir lost as little operation time as possible.

Protective Coating Systems (UK) also rendered all the walls inside and out of the abattoir with Sika® MonoTop® 620 pore sealer, a one component cementitious polymer modified mortar used to apply thin layer render. The outside walls were given a further protective coating of Sikagard®-675 W ElastoColor, a decorative modified acrylic coating particularly suited as a final protective coating for facades.

The Laverstoke Park Farm received full EC Approval for its Abattoir. Further accreditations include the Soil Association, EFSIS (European Food Standards Inspection Service) – this encompasses the entire meat division from receipt, slaughter, production, storage and distribution of products and ingredients, ABM (Assured British Meat), BQAP (British Quality Assured Pork).



Sikafloor® Systems

System Description

Sikafloor®-20 N PurCem® is a three part, resin rich, water dispersed, high strength, smooth trowel grade, coloured polyurethane modified, cement and aggregate screed suitable for floors subject to heavy loading, abrasion and chemical exposure.

It has a textured aggregate surface providing medium to heavy profile slip resistance and is typically installed at 6 to 9 mm thick.

Uses

In areas subject to heavy loading, abrasion and high chemical exposure, to provide a hard wearing surface, such as in:

- Food processing plants, in wet or dry process areas, freezers and coolers, thermal shock areas
- Chemical plants
- Laboratories
- Workshops

Characteristics /Advantages

- Fluid consistency requires less labour to install than conventional heavy duty modified PU trowel grade screeds
- Excellent chemical resistance. Resists a wide range of organic and inorganic acids, alkalis, amines, salts and solvents. Please refer to the Chemical Resistance Chart or consult your local Technical Dept.
- Similar coefficient of thermal expansion to concrete, allowing movement with the substrate through normal thermal cycling. It will perform and retain its physical characteristics through a wide temperature range from -40°C (-40°F) up to +120°C (239°F)
- Steam cleanable at 9 mm thick
- Bond strength in excess of the tensile strength of concrete. Concrete will fail first

- Non taint, odourless
- VOC free
- High mechanical resistance. Behaves plastically subject to impact. Will deform but will not crack or debond
- Slip resistance. Natural textured surface provides anti-slip traction
- High abrasion resistance resulting from its silica aggregate structure
- Rapid one step application. Normally, no concrete primer or sealer required
- It is possible to apply on to 7 to 10 day old concrete after adequate preparation and with a tensile bond strength in excess of 1.5 MPa (218 psi)
- Sikafloor® - PurCem® screeds (20N) and detailing mortar (29N) can withstand moisture vapor transmission values of 12 lbs/1000 ft² when tested in accordance with the ASTM F 1869 Anhydrous Calcium Chloride Test Method
- Fast curing will allow foot traffic after twelve hours and full service after two days. Production downtime is cut to an absolute minimum.
- Jointless. Extra expansion joints are not necessary; simply maintain and extend existing expansion joints up through the Sikafloor® -PurCem® flooring system
- Easily maintained

Further Information

Sika Construction has a comprehensive range of flooring systems to meet the requirements of virtually any application. These solutions are backed up by a highly experienced technical team, who offer expert specification advice and support. For project specific technical advice please contact our technical department on 0800 1123863 or alternatively email: technical@uk.sika.com

