

## **SIKA AT WORK**

# Industrial flooring for the model sheep farm MILIORA, Achaia

INDUSTRIAL FLOORING: Sikafloor<sup>®</sup>-3 QuartzTop, Sikafloor<sup>®</sup> Proseal-W, Sikagard<sup>®</sup>-63 N, Sikafloor<sup>®</sup> MultiDur ES-14





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### INDUSTRIAL FLOOR, MILIORA FARM, ACHAIA



#### **PROJECT DESCRIPTION**

MILIORA FARM is a model sheep farm in the province of Achaia, which started its operations in 2016. The unit capacity reaches 2.200 milking sheep, 1.200 lambs and 160 rams. The average daily volume of milk produced reaches 3.000 liters, while 1.500 improved animals are available annually for sale. All these processes take place in installations that extend to a total area of 13.400m<sup>2</sup> and include a modern 72-place milking parlor with electronic dairy metering, growing-up area with capacity of 500 lambs with climate control and separate stalls per category of animal (milking animas, rams, lambs). The breeds of the farm are Lacaune, of French origin and Chios, of local origin. MILIORA FARM is characterized and distinguished for the modern methods it has adopted, such as electronic milking and artificial insemination.

The total investment amounted to € 4 million.

#### PROJECT DEMANDS

The state-of-art rules for the construction, operation and management of a high standard sheep breeding farm, aiming at the healthy development of animals and the maximization of their efficiency impose their placement in a place where strict hygiene rules prevail, as well as the building facilities facilitate the productive process and its uninterrupted operation. In this context, the plant facilities required the construction of a high standard industrial floor. In addition to complying with designed strengths, the floor should feature high surface hardness with minimal dust production as, due to the daily intense use, there was a requirement for high resistance to mechanical stress and abrasion. In addition, surfaces where the milking of animals takes place should be protected from lactic acids with a special coating, while workers' traffic areas should be coated with an anti-slip epoxy floor for safety and hygiene purposes.



#### SIKA SOLUTION

For the industrial flooring, a surface sealing system and curing compound of the concrete floor combined with a surface hardener was proposed, in order to form a surface with high resistance to daily stress as the surface of the existing concrete floor had to be stabilized against dust production.

Therefore, on the freshly-laid concrete industrial floor, the mineral surface hardener **Sikafloor®-3 QuartzTop GR** was applied.



**Sikafloor®-3 QuartzTop GR** contributes to the creation of wearresistant monolithic concrete floors. By applying and incorporating it on the surface of freshly laid concrete, a smooth, abrasion and impactresistant finish is formed. In addition, its use reduces dust production of mineral substrates.



Following, **Sikafloor® Proseal W** curing, hardening and sealing compound was applied to reduce surface dryness and crack formation. As the floor was intenal, there was a requirement for using a LEED certified, aqueous-based, low-volatile organic compound product. **Sikafloor® Proseal W** reduces dust production and further improves resistance to abrasion of the final surface. For these additional reasons, **Sikafloor® Proseal W** has been applied to hardened concrete surfaces as a dust binder. **Sikafloor® Proseal W** is tested and evaluated using a LEED (US EPA Method 24) method for VOC emissions. This was an additional reason for its selection and use.





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In the milking areas the 2-component, epoxy coating **Sikagard®-63 N** was applied to the concrete surfaces.



**Sikagard®-63 N** coating is chemically resistant, features very good mechanical strengths and is impervious to liquids. It is particularly suitable for use in food production and processing areas.

In traffic corridors and areas **Sikafloor® MultiDur ES-14** system was applied. **Sikafloor® MultiDur ES-14** is a smooth, colored, rigid epoxy resin floor coating system. It is especially suitable for concrete and cementitious mortars with normal to medium load loads, as well as for production and processing areas.

#### Sikafloor® MultiDur ES-14 - system configuration:



1. Primer	Sikafloor <sup>®</sup> -161
2. Final coating	Sikafloor <sup>®</sup> -264

It is important to state out that **Sikafloor®-264** epoxy resin coating is certified according to the most stringent and specialized certificates for outgassing, particle emission and biological resistance (CleanRoom Suitable Material).

Both **Sikagard®-63 N & Sikafloor®-264** epoxy coatings carry CE Mark & Declaration of Performance as a Concrete Protection Cocatings, while are tested and compliant regarding their VOC content both according to the European Directive 2004 / 42, as well as to the LEED US EPA Method 24.

PROJECT PARTICIPANTS: Owner: MILIORA S.A.









Our most recent General Sales Terms shall apply. Please consult the most recent Product Data Sheets prior to any use and processing.





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