

CO₂-reduced industrial floor across 28,000 m²

Sustainability meets durability



Project Overview

Client	Fiorini International, Trecastelli (AN), Italy
Project	New production facility
Year	2025
Area	28,000 m ²
Industry	Packaging / Manufacturing
KORODUR System	NEODUR HE 3 green
Contractor	ITS (Italy)
KORODUR Representative	Alberto Pozzato, Matera (Italy)

Background

Fiorini International - a family-owned business since 1946, approximately 420 employees, customers on every continent is building a new production facility with 28,000 m² of usable floor space in Trecastelli, Italy. Named "Leader della Sostenibilità" three years running (Il Sole 24 Ore/Statista 2023-2025), the company sets high standards: the entire facility is targeting LEED certification. Adjacent to the hall, a 16-hectare forest of native tree species is being planted - sustainability here is more than a buzzword.

Floor Requirements

- **High mechanical load capacity:** forklift traffic, heavy production machinery, intensive logistics operations
- **Verifiable CO₂ reduction** in flooring materials - contributing to the targeted LEED certification
- **Verified environmental data** rather than industry averages - the client accepts only independently tested evidence
- **Long service life and wear resistance** for continuous operation in packaging production

Solution: NEODUR HE 3 green

The entire 28,000 m² floor area was installed with NEODUR HE 3 green - a CO₂-reduced hard aggregate dry-shake material that combines sustainability with high performance. The CO₂ footprint of the binder has been reduced by 50-60% compared to conventional dry-shake products. **This significant reduction in CO₂ emissions was a key factor for the project and directly supports the building's sustainability targets.** At the same time, NEODUR HE 3 green is the world's first hard aggregate dry-shake material with a product-specific Environmental Product Declaration (EPD-Kiwa-EE-163392-EN), verified data instead of industry averages. This EPD feeds directly into the LEED building assessment.



Results & Benefits

- **High mechanical load capacity maintained:** Compressive strength C 70, flexural strength F 9, wear resistance $\leq 5.0 \text{ cm}^3/50 \text{ cm}^2$ (Böhme test)
- **CO₂ savings:** Equivalent to approx. **240,000 km of gasoline consumption of a car** through reduced binder content across **28,000 m²**
- **Verified sustainability:** World's first dry-shake material with a product-specific EPD, listed in the DGNB Navigator
- **LEED contribution:** EPD data directly supports building certification
- **Proven application:** Installed by ITS using the standard dry-shake method - identical application process as the conventional product, no special procedures required

KORODUR on Site

Project support in Italy was provided by Alberto Pozzato of Materia, KORODUR's representative in Italy – ensuring continuous on-site support from initial consultation through to installation.

