



Pharmaceutical Manufacturing Facility

## **norament® grano Measures up to FDA GMP Regulations**

Ten years after it was poured, the epoxy flooring in the manufacturing areas of a major pharmaceutical producer was showing signs of wear—cracks, chips and stains—on the floor’s surface that were unacceptable in this U.S. Food and Drug Administration Good Manufacturing Practices (FDA GMP) facility.

“Ours is an environment in which we conduct environmental testing on a daily basis to maintain the highest levels of cleanliness and appearance,” said the company’s project manager. “That commitment comes with the work we do and the requirements of the FDA. So when the epoxy floor covering no longer met those standards, we searched for a replacement floor—something that we could install without impacting product and without impacting our environment.”

Eager to avoid the cracking they had experienced with epoxy, the company turned to resilient floor coverings that would be more resistant to chipping and staining. Just as important, a resilient floor could be laid on top of the epoxy, eliminating the need to shut down production, cover equipment and shot blast the old floor—a disruptive, time-consuming and costly process that distributes particulates in the air as the subfloor is prepared for new epoxy. According to the project manager, the company tested as many as seven different products before choosing norament® grano from nora systems, Inc.

In fact, the decision took months and followed a series of tests and a pilot installation. “We hit the floor with hammers, tried gouging it with knives and dropped a variety of substances on it, including liquid nitrogen and a number of other chemicals typically used in our facility. The nora® flooring best suited our needs, both in terms of the testing we did and its installation,” the project manager explained.



The installation of almost 50,000 square feet of 3.5 mm norament grano took place over 18 months, working room by room and around production schedules. In fact, the flexibility of the floor covering and the installation process enabled the company to complete the installation without disrupting its manufacturing schedule—so important to a facility that manufactures a high-demand product in regulated quantities. “We absolutely could not afford to shut down and short the market of our product.”

Even the challenges of low clearances and as many as 70 pedestals that support equipment in a single room did not impede the installation process. “The people at nora were very good at working with us,” the marketing manager recalled.

The end result is more than the company originally bargained for. The floor covering met their installation needs while offering the wear and stain resistance they required. Additionally, the floor delivered important environmental benefits.

“We try to be a green company,” said the project manager, “So, the fact that the nora floor is as durable as it is means we won’t have to replace it anytime soon, saving on a number of resources. Also, the safety issue of no off-gassing and no acrylic smells impacting our employees was an important benefit. And, the floor is definitely more comfortable to stand on, and has contributed to a quieter environment, benefits that our employees appreciate on a daily basis.”

Finally, the floor features a nonporous, dirt repellent, low-maintenance surface that ensures an attractive appearance, even with regular applications of the harsh disinfectants common to a clean room environment.

When asked if they are confident in their decision to use norament grano, the company representative responded, “Absolutely! I think this is the most documented floor in the history of floors, because we did so much research, testing and debating before making the selection that we made.

**nora systems, Inc.**

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“Our industry is typically very set in our ways and a bit reluctant to step out of the box and break with tradition—like moving from an epoxy to a rubber floor covering,” he continued. “In this case, we did our due diligence and made an informed choice. We definitely ended up with the right product for our application and in the process, we found a company in nora that impressed us with their willingness to work with us, the quality of the solutions they offered and the high level of professionalism they demonstrated throughout the process.”

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