

Tremco Commercial Sealants & Waterproofing

The National Institutes of Health

Point of Interest:

- Quick Cure Vehicular Deck Coating Technology
- Demanding deadline for an installation of over 92,000 sq ft.

Project:

- Busy hospital with limited parking.
- Facility could only close down parking stalls over a holiday weekend.
- Over 92,000 sq ft of four-layer coating system installed over detailed and patched areas.
- Built in 1980's.
- NIH / O/S Engineers.



Problems & Challenges:



- Spalled concrete needed patching.
- Ability to apply basecoat over patched areas within four hours.



- Sloping water away from vertical to horizontal junctures.
- Ability to apply basecoat over sloped areas within four hours.

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Scope of Work:



- Need to install an extreme duty vehicular deck coating system which consisted of four-layer system over 92,000 sq feet within a time frame of less than 72 hours.
 - Detailed all crack and expansion joints with Vulkem® 360NF.
 - Patched all concrete spalled areas with Vulkem 360NF with aggregate.
 - Sloped all vertical to horizontal areas where ponding water was an issue with Vulkem 360NF with aggregate.
 - Applied 25 mils of an elastomeric basecoat, Vulkem 360NF.
 - Applied two 12 mil layers with backrolled aggregate of high abrasion resistant Vulkem 950NF coating.
 - Applied 12 mil layer with backrolled aggregate of Vulkem 951NF for abrasion resistant, UV exposure and chemical resistance.
- Vulkem 360/950/951NF was initially specified on the project, however; the owner went with an additional layer of Vulkem 950NF for additional longevity and additional slip resistance of the deck coating system.
- Staging with the proper amount of workers and product available was absolutely critical to completing the job on time.
 - Four mixing areas at each end of the top level of the garage were staged. Two applicators were mixing during the day and as many as four applicators mixed at night. Twelve-man crews worked 12-hour shifts. On the crossover of shifts, 24 men worked for two hours so one process could be finished while the next one would get started.

Site Challenges & Unforeseen Issues:

- Had only a three-day weekend to shot blast, patch, slope, detail, and install four layers of coating.
- Ability to staff and stage 24 hours a day with no down time.
- Local availability of product.



Project Status:

- Completed July 3rd thru July 7th (2006) – four days.
- The contractor learned that a quick turnaround was possible as long as they were able to use a fast-drying material to allow multiple coats the same day with a membrane that was easy to apply.
- Profits made? The estimate on savings to NIH was \$20,000 to \$30,000 due to savings on days of application and savings on down time on the garage.

