

Podium Deck Waterproofing

Andaz Palm Springs

2019 PDA Conference
October 17 – 18, 2019
Hilton Orange County/Costa Mesa



Freedom was established in 2006. We recently moved to our new location in Foothill Ranch, CA.



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What is a Podium Deck

A **podium deck** is a structural element that is an elevated platform or one that has a void underneath it. It may have supporting columns that do not pass through this structural element

- Plaza Decks
- Green/Garden Roofs



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Traditional Products

- **Hot Rubber**
 - 350° - 400° F
 - Hot kettle
 - Fabric
 - Protection board
 - Neoprene at transitions
- **Cold Liquid Applied**
 - Extended cure times
 - Multiple applications
 - Protection board
- **Sheet Goods**



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Polyurea Benefits

- Speed of application
- Return to service
- Smaller crews
- Vertical applications
- No protection board required
- No reinforcing sheet required
- Unlimited UV exposure**
- No noxious odors
- Can withstand ponding water

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Andaz Palm Springs

Andaz hotels are upscale lifestyle boutique-style hotels operated by Hyatt. This hotel is set to open Spring of 2020 in downtown Palm Springs.

- Pools
- Shopping
- Restaurants



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Project Details

- 76,000 square foot podium deck in downtown Palm Springs
- Phase 1 started September 2018 and finished in April 2019 (50,000 sqft)
 - Completed in 4 mobilizations
- Phase 2 set to start in November 2019



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Specification Details for Guardian-PD™

- 2K urethane sealant at 90's
- Fast cure high strength concrete to repair uneven concrete surfaces
- Pre-sprayed verticals to allow for installation of flashing to stay on building schedule



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Specification Details for Guardian-PD™

- Broom finish was specified
 - Freedom required adhesion test (ASTM D 4541) to be performed with concrete failure in each location. Typically a shot blast finish is required but was not needed on this project.
- Application of **FT-6160™** epoxy primer
 - 150 sqft per gallon
 - Required primer to be installed during descending deck temperatures to avoid excessive pin holing.



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Specification Details for Guardian-PD™

- Application of FT-2202™ polyurea
 - 96 mils (6 gallons per 100 sqft)



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Challenges

- **Temperatures**
 - More about the temp swings (50 – 115 F)
- **Winds**
 - Afternoon winds OVERSPRAY!!
- **Other trades**
 - Quick set time was a huge savings!!!!



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Quality Control

- Required 3rd party inspection to obtain warranty
- Adhesion ASTM D4541
- Thickness measurements
- High voltage ASTM D-4787 (100 volts per mil of coating)
- Humidity ASTM E 337
- Moisture vapor emission ASTM F 1869-10



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Unforeseen Issue

- Project delay caused delay in overburden installation
 - Traditional products typically need to be buried within 60 days of installation
 - There was a significant delay of more than 5 months before the overburden could be installed
 - The FT-2202™ polyurea was ok to be exposed providing significant savings to the project



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Project Summary

- ~20% savings to client vs hot rubber
 - Time ~5000 sqft vs. 1500 sqft
 - Labor 5 man cure vs. 10 man cure
 - Neoprene & protection board
- Speed up critical path to allow faster build schedule



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