TufTile’s Powder Coated Detectable Warnings

The Powder Coating Process
TufTile’s galvanized steel detectable warning program is available unfinished and in 7 Colors

6 Colors are popular federal colors (identified by a 5 digit federal color code) and the 7th is powder coated patina, which simulates the oxidation (rust) visible on weathered cast iron tiles.

- PATINA POWDER COAT Color ID: PAT
- YELLOW Fed #33538 Color ID: YEL
- COLONIAL RED Fed #20109 Color ID: CRD
- BRICK RED Fed #22144 Color ID: BRD
- SAFETY RED Fed #31350 Color ID: 5RD
- DARK GRAY Fed #36118 Color ID: GRY
- BLACK Fed #37038 Color ID: BLK
- NATURAL GALVANIZED Color ID: NAT
The value in TufTile’s powder coat finish is the durability of the finish.

And the durability of the finish is directly related to the finishing process.

The finishing process is what separates us from the competition.
TufTile has made a major investment in a state-of-the-art powder coating system enabling us to control the finishing process. TufTile can now produce the best powder coated detectable warnings available anywhere.
A monorail conveyor system transports our galvanized steel and cast iron tiles through the system transforming a dirty, oily, post-production blank into a brilliant, finished product ready for assembly.
The TufTile powder coat finishing process includes:

1. TufTile employs a seven-stage, computer controlled, pretreatment process. Multiple, sequenced, high-pressure treatments of chemical applications (cleaners, zirconium, and sealer) followed by reverse osmosis, pH controlled, treated water rinses prep the metallic surface for the best possible bond with the powder coat paint.

2. Once all contaminants are removed, tiles move through a 270° dry-off oven followed a trip to the cool-down tunnel. Then the state-of-the-art, computer controlled, powder coating system module applies an Axalta durable, polyester TGIC fast cure, UV resistant finish via the electronic powder coating process.
3. Finished tiles move on the monorail through the 2-story, temperature controlled, forced air, convection curing oven where the finish is baked onto the metallic tile.

4. The tiles are conveyed through a forced air cooling tunnel.

5. Finally, the finished TufTile powder coated product is inspected and the pull-off strength and thickness of the finish is monitored using a quality control process, which includes an Elcometer hydraulic “pull-off” tester to confirm finish bond strength and a finish thickness gauge.

6. Tiles are then assembled and packaged for delivery to our domestic and international distributor networks.
Curing Oven

Elevated Curing Oven

Direct Fire Curing Oven Burner

Waste Water Treatment Area
Both the **water and air** used in TufTile’s powder coating system are treated prior to discharge via an on-board waste water treatment system (WWTS) and exhaust treatment system.

The WWTS includes a reverse osmosis system comprised of; micron filters, activated carbon, water softeners, and ultraviolet light, which captures post treatment finish solids. The discharged water meets or exceeds the highest EPA standards in the U.S.

A centrifugal fan captures and “scrubs” oven exhaust prior to final evacuation from the powder coating system.
Waste Water Treatment System WWTS
TufTile is confident that we bring to market THE best powder coated detectable warnings in the industry.