Roll & Brush Application of *TK-100*[™] *Gloss*, *Hybrid-Polymeric Epoxy* with Aggregate as a Cleanable, Chemical-Resistant *Floor Coating*

SURFACE PREPARATION

Refer to the **TK-100**[™] *Data Sheet* for general product preparation prior to application.

1.) The floor to be coated must be completely clean of all contaminants prior to application: including peeling or oxidized paint, oil, grease, dust, powder, water, rust, etc. Usually, a solvent wipe-down is sufficient to remove minor oils and dust from intact floor coating. Grinding or shot-blasting may be required to "scarify" surface, which will increase **TK-100**™ adhesion dramatically, and remove rust, scale, or existing paint. Prepare surface as needed for any standard epoxy coating. New concrete should cure 28-days.

QUALIFIED, PROFESSIONAL APPLICATION RECOMMENDED

Equipment & materials required:

- Wet Film Thickness (WFT) gauge;
- Appropriate TexShel® aggregate for client use (#AD-4C recommended for most floors);
- ► Standard roller handle, 6-foot pole, extension pole, and pan application equipment;
- Standard masking tape, masking paper, cleaning rags, razor knife, 5-gallon buckets, etc.;
- Solvent-resistant (phenolic) foam or short-nap roller pads;
- Fine bristle (camel hair) brushes of various widths for trim and cut-in;
- Acetone, M.E.K., or Xylene as thinning solvent (if needed to improve surface flow);
- Acetone, Lacquer Thinner, M.E.K., or Toluene as surface wipe-down and cleaning solvent;
- Proper OSHA protective clothing and activated-charcoal filtered breathing mask;
- TK-100™ Data Sheet for complete coverages and characteristics.

COVERAGE:

Theoretical: 1,200 sq.ft./gal at 1-mil DFT = 240 sq.ft./gal at 5-mil DFT 1st coat (over porous concrete): 150 - 175 sq.ft./gallon at 5-mil DFT (7-mil WFT); 2nd coat (over non-porous TK-100[™]): 200 - 225 sq.ft./gallon at 5-mil DFT (6-mil WFT) 3rd coat (over non-porous TK-100[™]): 200 - 225 sq.ft./gallon at 5-mil DFT (6-mil WFT).

APPLICATION:

- 1.) Add amber-clear **TK-100**™ Curing Agent to **TK-100**™ Base Compound at a 1:1 volume ratio. Stir thoroughly by stick or drill-mounted impeller until uniform, or mix by "box" pouring several times from one 5-gallon pail (or smaller) to another. Use a rubber spatula to clear inside of pail. Mix one, two, or four-gallons at a time, in 5-gallon pail.
- 2.) Thinning **TK-100**[™] for floor use is not. Sometimes 2nd or 3rd coat is thinned with 5% Acetone.
- 3.) After thorough mixing, allow **TK-100**[™] mixture to "dwell" for 30-minutes (aka "induction time"). Stir again just prior pouring into roller pan. Normal pot life is at least 8- to 12-hours at 75°F. Cover remaining **TK-100**[™] until needed.
- 4.) To a controllable area (6' x 6'), roll-apply a single coat of **TK-100™** to approx. 6- to 7-mil WFT in even parallel passes, overlapping 50% each pass, and cross roll at right angles, to avoid pinholes and thin areas (aka "holidays"). A large "bead" of paint may be rolled out to assure proper 1st coat thickness.

- 5.) Immediately hand broadcast TexShel[®] aggregate onto wet **TK-100**[™]. Broadcast sparingly: it is easier to broadcast more aggregate to an area than to remove too much. Toss small amounts of aggregate high, to "rain" down onto coating. Remember, aggregate will not bounce and disperse on wet coating. Broadcast heavier in front of doors and hallway entrances.
- 6.) Check wet coating thickness with WFT Gauge <u>until feel for proper WFT</u> is achieved: 7-mil WFT will dry to approx. 6-mil DFT; 6-mil WFT will dry to approx. 5-mil DFT; and 5-mil WFT will dry to approx. 4-mil DFT. Overly thick application of **TK-100**™ may result in prolonged curing time, causing extended elapse time between consecutive coats.
- 7.) Continue above roll-application and broadcasting technique until entire area is covered. It is recommended to do only a small enough area to which 2nd and 3rd coat can be applied without walking on 1st coat. A pole extension can be used for 2nd and 3rd coat roll-application.
- 8.) Any new mixing of additional **TK-100**[™] will require same mixing instruction, and minimum dwell time of 30-minutes prior to application. 2nd and 3rd coat applications may be thinner than 1st coat.
- 9.) Allow 1st coat to "Tack Dry" (sticky, but no color transfer to finger) before roll-application of 2nd coat with pole extension. For wall-to-wall 1st coat applications, allow approx. 8-hours dry time at 77°F before testing for "light foot traffic" (shoe-less or padded) onto 1st coat with aggregate. For every 10°F increase in room temperature, cure time is nearly halved; for every 10°F decrease in room temperature, cure time is nearly doubled.
- 10.) When 1st coat will support "light foottraffic" without marring surface, begin roll-application of 2nd coat.

 NOTE: Second coat will cover greater area (with same amount of **TK-100**™) than first coat.
- 9.) Allow approx. 8-hours dry time at 77°F before removing tape (parallel to floor, at right angle to paint line).
- 10.) Normal foot traffic can resume after 24-hours dry time at 77°F; and wheeled traffic can resume after 36-hours dry time at 77°F. **TK-100**™ will reach optimal chemical-resistance and final hardness in 7-days at 77°F.
- 11.) Any cured **TK-100**[™] coating can be re-coated at any time, with proper surface deaning prior to new application.

TK-100[™] are registered trademark (pending) of:

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