



PROCESS
INDUSTRY
PRACTICES

June 2021

Coatings

**PIP CTSH2000
Application of Architectural Coatings in
Hygienic Facilities**

PURPOSE AND USE OF PROCESS INDUSTRY PRACTICES

In an effort to minimize the cost of process industry facilities, this Practice has been prepared from the technical requirements in the existing standards of major industrial users, contractors, or standards organizations. By harmonizing these technical requirements into a single set of Practices, administrative, application, and engineering costs to both the purchaser and the manufacturer should be reduced. While this Practice is expected to incorporate the majority of requirements of most users, individual applications may involve requirements that will be appended to and take precedence over this Practice. Determinations concerning fitness for purpose and particular matters or application of the Practice to particular project or engineering situations should not be made solely on information contained in these materials. The use of trade names from time to time should not be viewed as an expression of preference but rather recognized as normal usage in the trade. Other brands having the same specifications are equally correct and may be substituted for those named. All Practices or guidelines are intended to be consistent with applicable laws and regulations including OSHA requirements. To the extent these Practices or guidelines should conflict with OSHA or other applicable laws or regulations, such laws or regulations must be followed. Consult an appropriate professional before applying or acting on any material contained in or suggested by the Practice.

This Practice is subject to revision at any time.

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Data Forms

CTSH2000-D001 – Documentation Requirements Sheet

The following data forms shall be part of this Practice only if indicated on the purchaser's completed Documentation Requirements Sheet.

- CTSH2000-D002** – Color Selection Sheet
- CTSH2000-D100** – User-Defined Coating Systems
- CTSH2000-D101** – Coating System, Epoxy Polyamide, EC
- CTSH2000-D102** – Coating System, Epoxy Polyamide (2 Coats), EC/EC
- CTSH2000-D103** - Coating System, Epoxy Polyamide / Urethane, EC/UR
- CTSH2000-D104** – Coating System, Epoxy Polyamide / Water-Borne Acrylic, EC/WA
- CTSH2000-D105** – Coating System, Methyl Methacrylate (4 Coates), MMA/MMA/MMA/MMA
- CTSH2000-D106** – Coating System, Sealer, SEAL
- CTSH2000-D107** – Coating System, Cementitious Urethane
- CTSH2000-D108** – Coating System, Water-Borne Acrylic, WA
- CTSH2000-F** – Daily Inspection Report
- CTSH2000-T** – Inspection and Testing Requirements Sheet – Application of Coatings to Concrete

1. Scope

This Practice describes the general requirements for surface preparation, application, and inspection of architectural protective coatings utilized for substrates used in hygienic processes and facilities.

2. References

Applicable parts of the following Practices, industry codes and standards, and references shall be considered an integral part of this Practice. The edition in effect on the date of contract award shall be used, except as otherwise noted. Short titles shall be used herein where appropriate.

2.1 Process Industry Practices (PIP)

- PIP CTEG1000 – *Guidelines for Use of Coatings Practices*
- PIP CTCE1000 – *External Coating System Selection Criteria*
- PIP CTCH1000 – *External Coating System Selection Criteria for Hygienic Facilities*
- PIP CTSC1000 – *Application of Coatings to Concrete*
- PIP CTSE1000 – *Application of External Coatings*
- PIP CTSL1000 – *Application of Internal Linings*
- PIP CTSU1000 – *Application of Underground Coatings*

2.2 Industry Codes and Standards

- American Society for Testing and Materials (ASTM)
 - ASTM C307 – *Standard Test Method for Tensile Strength of Chemical-Resistant Mortar, Grouts, and Monolithic Surfacing*
 - ASTM C413 – *Standard Test Method for Absorption of Chemical-Resistant Mortars, Grouts, Monolithic Surfacing, and Polymer Concretes*
 - ASTM C580 – *Standard Test Method for Flexural Strength and Modulus of Elasticity of Chemical-Resistant Mortars, Grouts, Monolithic Surfacing, and Polymer Concretes*
 - ASTM C597 – *Standard Test Method for Pulse Velocity Through Concrete*
 - ASTM D2369 – *Standard Test Method for Volatile Content of Coatings*
 - ASTM D2794 – *Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)*
 - ASTM D3960 – *Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings*
 - ASTM D3359 – *Standard Test Methods for Measuring Adhesion by Tape Test*
 - ASTM D4060 – *Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser*
 - ASTM D4258 – *Standard Practice for Surface Cleaning Concrete for Coating*
 - ASTM D4261 – *Standard Practice for Surface Cleaning Concrete Masonry Units for Coating*
 - ASTM D4262 – *Standard Test Method for pH of Chemically Cleaned or Etched Concrete Surfaces*