

Floor Finishes for Food Facilities

County of Orange, Health Care Agency, Environmental Health 1241 E. Dyer Rd., Ste. 120, Santa Ana, CA 92705 (714) 433-6074

Orange County Environmental health enforces California Retail Food Code which specifies the requirements for acceptable flooring in food facilities. Floor finishes in all areas, other than customer waiting or dining areas must be smooth, nonabsorbent, easily cleanable, and durable. Floors shall be of an approved type that continues up the wall four (4) inches, in a seamless manner, forming a 3/8 inch minimum radius cove as an integral unit. The following information outlines the acceptable flooring materials, applications, and installation requirements for tile, commercial sheet vinyl, troweled-on flooring, and concrete. Details on coved base installation and curb construction area also available. This document is not to be considered a complete guide to restaurant construction. For more details see the plan check construction guide.

I. Commercial Grade Sheet Vinyl

- A. Minimum thickness of the wear layer is 0.05 inch gauge. The total thickness is 0.080 inch. Thin sheet vinyl with foam backing or a no wax finish are not acceptable.
- B. The sheet vinyl should be installed with a cove stick behind the 3/8 inch radius cove and a metal cap at the top of the base.
- C. Should not be installed in areas equipped with floor drains.
 - 1. An exception to this rule is the Altro Flooring which is securely installed around specially designed floor drains.
 - 2. Since floor drains are not permitted with sheet vinly floors, none of the nonskid types of sheet vinyl would be accepted, except again for the Altro flooring.
- D. Sheet vinyl should not be installed in areas which are maintained either below 55°F or above 85°F.

II. Quarry and Ceramic Tiles

- A. Minimum thickness is ½ inch.
- B. The tiles and grout must be sealed so as to be impervious, grease, and acid resistant.
- C. Nonskid tiles may be used if floor drains are provided. Dependent on the amount of nonskid agent used, a high pressure cleaning system may also be required.
- D. Nonskid tiles may only be installed in traffic areas. The flooring below equipment and on coved bases must be smooth.

III. Troweled-on Flooring

- A. Minimum thickness is 3/16 inch.
- B. The flooring must be sealed so as to be impervious, grease, and acid resistant.
- C. The flooring material must be installed beneath all equipment and equipment legs.

- D. The flooring must be self-coved up the walls at least six inches with a minimum 3/8 inch smooth radius cove at the juncture of the floor and walls.
- E. Nonskid agents may be added only to the flooring in traffic areas. The flooring below equipment and on coved bases must be smooth.
- F. Nonskid tiles may be used if floor drains are provided. Dependent on the amount of nonskid agent used, a high pressure cleaning system may also be required.
- G. A metal cap must be installed at the top of the coved base.

IV. Sealed concrete

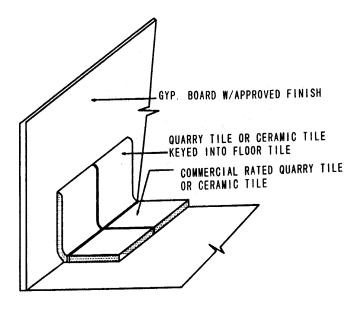
- A. Concrete which is self-coved up the wall is acceptable.
- B. The concrete must be sealed with a clear, grease, and acid resistant sealer.
- C. Pigmented sealers are not acceptable.
- D. If the concrete is cracked and deteriorated, one of the approved floorings must be installed on top of the concrete.

V. Coved Base

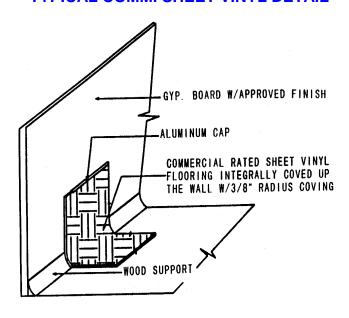
- A. Minimum 4 inches high with a 3/8 inch minimum radius cove.
- B. Types
 - 1. Vinyl, rubber, or metal topset.
 - a. Vinyl and rubber topset: may only be used in dining areas, sales areas, and storerooms in which all food product is in its original shipping container
 - b. Metal topset: may be used in lieu of continuously coved flooring only against metal walls or equipment. The topset and wall or equipment must be the same type of metal, i.e, aluminum topset on an aluminum wall.
 - 2. Troweled-on coved bases
 - a. Epoxy coves : must be provided with a metal cap at the top of the base
 - b. Concrete coves
 - 3. Quarry or ceramic/coved base: must be "keyed-in" so as to provide a smooth cove transition.

Acceptable Floor Installation Method Orange County Environmental Health

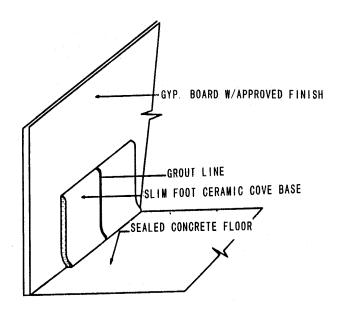
TYPICAL CERAMIC OR QUARRY TILE

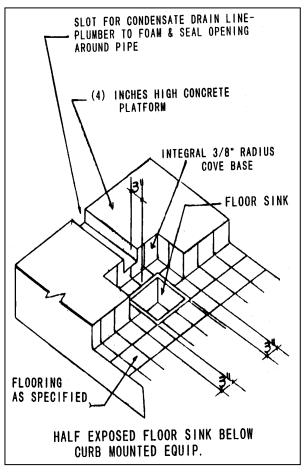


TYPICAL COMM. SHEET VINYL DETAIL



TYPICAL CERAMIC "SLIM-FOOT" ON CONCRETE





Examples of Approved Concrete Sealers

The following represents a list of concrete and tile sealers that claim to be **clear**, **water**, **grease**, **and acid resistant**. As we become aware of additional sealers that are **clear**, **water**, **grease**, **and acid resistant**, they will be added to this list. Sealers that are currently included may be removed from the list if it is determined they no longer meet the established standards or are no longer available. It is important that all sealers listed are allowed to cure before food is stored or processed to prevent contamination of food by the emitted vapors. **Please note that sealers may need to be reapplied every six (6) months to remain effective.** Most of the concrete sealers listed below must be ordered via the phone or Internet. Concrete sealers that are available in retail stores have been indicated.

Distributor	Concrete Sealer Brand Name	Address	Phone Number	Website and E-mail Contacts
Prime Time Solutions	Aqua Mix Penetrating Sealer Aqua Mix Sealers Choice Gold	23 Garfield St. Torrington, CT 06790	1-800-333-9325	www.aqua-mix.com e-mail: CustomerService@aqua-mix.com
Curecrete Distribution Inc.	Ashford Formula	1203 West Spring Creek Place Springville, UT 84663	1-800-998-5664	www.ashfordformula.com
Glaze N' Seal	 Glaze N' Seal Multi-Purpose Sealer Glaze N' Seal Wet Look 2000 Lacquer Glaze N' Seal Stone Sealant Impregnator 	18207 McDurmott, Suite C Irvine, CA 92614	(949) 250-9104	www.glaze-n-seal.com e-mail: info@glaze-n-seal.com
ABC Construction Specialties	PERMAGUARD SPS	1777 W. Arrow Hwy Upland, Ca. 91786	(909) 982-5556	www.lmcc.com
ABC Construction Specialties	Pega-Cote 9200	1410 S. Acacia Ave., Unit C Fullerton, CA 92831	1-800-201-0022 (Toll free) (714) 956-4286	www.abcconstructionspecialties.com e-mail: Brandon@abcconstructionspecialties.com
Paul Wolff	Royal-SheenShur-SealThermosheen	536 West Southern Ave. Orange, CA 92865- 3218	1-877-974-0630	www.paulwolff.com
Rust-Oleum	Rust-Oleum 6010 System Water-Based	11 Hawthorn Parkway Vernon Hills, IL 60061	1-800-323-3584 (Customer Service) 1-847-367-7700	www.rustoleum.com
Orange Paint	Techgard High Solids Epoxy Floor Coating	396 W. Chapman Ave. Orange, CA 92866	1-800-BUY-PRATT (1-800-289-7728) (714) 538-3052	www.prattandlambert.com
Tesco Products Inc.	Tesco Crystal Seal Tesco Crystal Seal II	25601 Avenue Stanford Valencia, CA 91355	(661) 257-0153	www.tescoproductsinc.com e-mail: sales@tescoproductsinc.com