



## FLOOR MATERIALS FOR RETAIL FOOD FACILITIES

### General

Appropriate floor, wall, and ceiling finishes promote good sanitation. Sanitation is an important component of public health protection. Disease outbreaks have been linked to harmful microorganisms growing on finishes. The easier it is to monitor and clean these finishes, the more likely it is that the task will get done regularly and properly. This is important, since failure to keep a food facility clean is a major cause of vermin (rodent and insect) infestations. Additionally, a leading cause of workers compensation injuries is slips and falls. Keeping floors clean and dry, and also proper footwear for employees, can help reduce these types of costly accidents.

Except in areas used exclusively for dining or point-of-sale, floors must be smooth, durable, nonabsorbent, impervious to water, grease, and acid, and of easily cleanable construction. Acceptable floor materials include the following:

- Quarry tile, ceramic tile
- Sealed curbed concrete
- Seamless poured epoxy minimum 3/16-inch thick. (**Note: Seamless poured epoxy is not paint.**)
- Commercial-grade sheet vinyl (**no felt backing**) at least 0.080-inches thick, with heat-welded seams, may be suitable for some applications if also consistent with manufacturer's specifications. Where sheet vinyl is used as the floor material, a cove backing (cove stick) must be used at the wall/floor and toe-kick/floor junctures.

Vinyl composition tile (VCT) with vinyl or rubber-base coving is not recommended and will only be considered in those areas where coving (as described below) is not required. Carpet and wood are only allowed in areas used exclusively for dining or point-of-sale.

### Coving

Coving is the floor material found at the base of walls (wall/floor junctures) and equipment toe-kicks (toe-kick/floor junctures). Toe-kicks include the bases of counters, cabinets, salad bars, and other floor-mounted equipment (including floor-mounted mop sinks) that is not placed on approved legs or casters. In most areas of a food establishment, it is required that the floor material extends integrally up the walls and toe-kicks as the coving. (Topset coving is not allowed in any area requiring integral coving.) For example, in the following areas the floor material must extend integrally up the walls and toe-kicks at least 4-inches with a minimum 3/8-inch radius at the wall/floor and toe-kick/floor junctures: (**the foot of the cove base has to extend out to 1/4-inches**)

- Food preparation, storage, handling, and packaging areas
- Utensil washing and storage areas



- Interior waste disposal areas (garbage, refuse, grease)
- Restrooms
- Handwashing areas
- Janitorial facilities
- Walk-in refrigerator and freezer units outside)
- Bars (employee side)
- Customer self-serve areas where non-individually prepackaged foods or beverages are sold or dispensed (e.g., salad bars, buffets, bulk food sales, beverage stations)
- Employee change and storage areas
- Wait stations

Integral coving is not required in areas used exclusively for dining, point-of-sale, or the storage of food or utensils contained in the original **un-opened** containers. In un-opened container storage areas, it is recommended that integral coving still be provided for both sanitary reasons and because it allows the operator more options should future storage needs or use of these areas change.

Food preparation includes the making of ice, combining of ingredients to make beverages, partitioning, packaging, washing produce, and cooking operations, and that utensils include kitchen equipment, disposable utensils, and take-out containers. For example, an area used to store opened boxes of take-out drink cups must have finishes appropriate for a utensil storage area.

## Floor Drains

Floor drains are required in, but not limited to the following areas:

- Where floors are water-flushed for cleaning (e.g., kitchens generating grease, meat or fish handling areas, produce trimming areas, refuse disposal areas, dishwashing areas, bars)
- Where pressure spray methods are used for cleaning.
- Where Type I hoods without built-in cleaning systems are in use.

Where floor drains are provided, the floor surface must have a slope of at least 1:50 to the drains. As a general rule, provide one floor drain in approximately the center of each area 30 feet in diameter (or less). An additional 4-foot x 4-foot depression may be required around the floor drain, depending on the slope of the floor and/or the slope toward the drain—this depression should not be in a traffic area where it might cause a tripping hazard. The drains are to be located for ease of inspection and maintenance. They must not be located inside walk-in refrigerator or freezer units, in food or utensil storage rooms, inside or underneath cabinets or counters, or in inaccessible locations. Floor drain grates must be provided and installed flush with the surrounding floor. Regardless of the establishment, the floor construction must not allow the accumulation of standing water, grease, or food debris—or pose any sort of slipping or tripping hazard.

## Anti-slipping Agents

Anti-slipping floor agents, such as abrasives or raised tread patterns, are restricted to traffic areas only. These floors must slope to a floor drain. Flooring in non-traffic areas, under equipment, and at the wall/floor and toe-kick/floor junctures, must be smooth. If the degree of roughness in traffic areas is deemed excessive, high-pressure hot water cleaning systems (with floor drains) will be required.

## **Dissimilar Materials**

Where dissimilar floor and/or coving materials are joined, this juncture must be easily cleanable, durable, and have a smooth integral transition. Do not top set install one material on top of another.

## **Metal Coving in Walk-in Units**

Where metal coving is installed inside walk-in refrigerator or freezer units with a metal floor, the coving must be installed in a smooth transition with a minimum 3/8-inch radius at the wall/floor junctures. The metal coving is not to be top set installed.

## **Grout**

Where floor grout is used, an acceptable grout additive must be included with the grout to make it resistant to grease, oil, acid, and water. Acceptable additives include epoxy, silicone, and polyurethane.

## **Pest Control**

For pest control purposes, particularly in storage areas, consider providing a 12-inch wide white-colored stripe on the floor at the wall/floor junctures. This is a useful aid to monitoring for rodents and other pests.

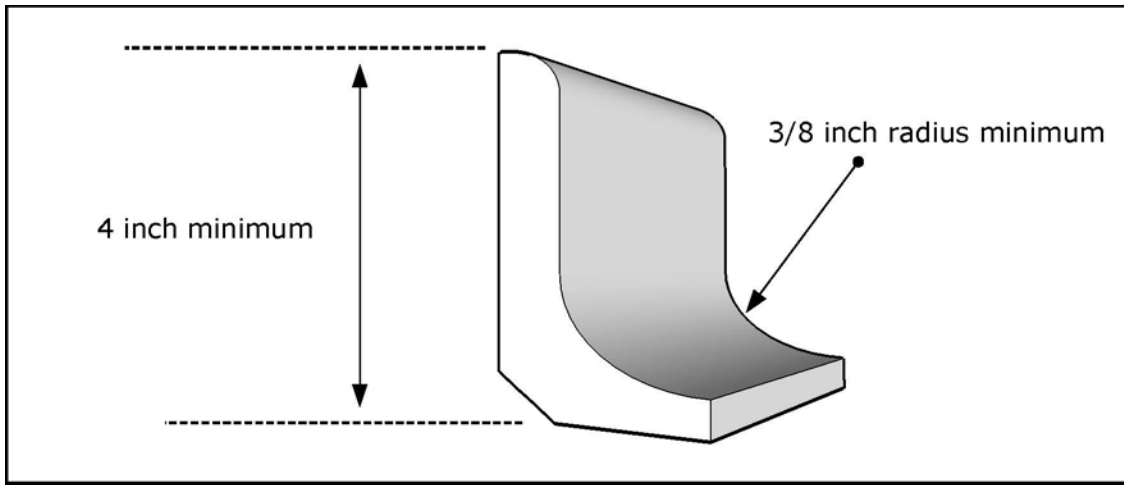
## **Grease Trap Covers**

When a grease trap is installed in traffic area, the grease trap lid must be installed flush with the floor. The cover must also be readily accessible for inspection and cleaning.

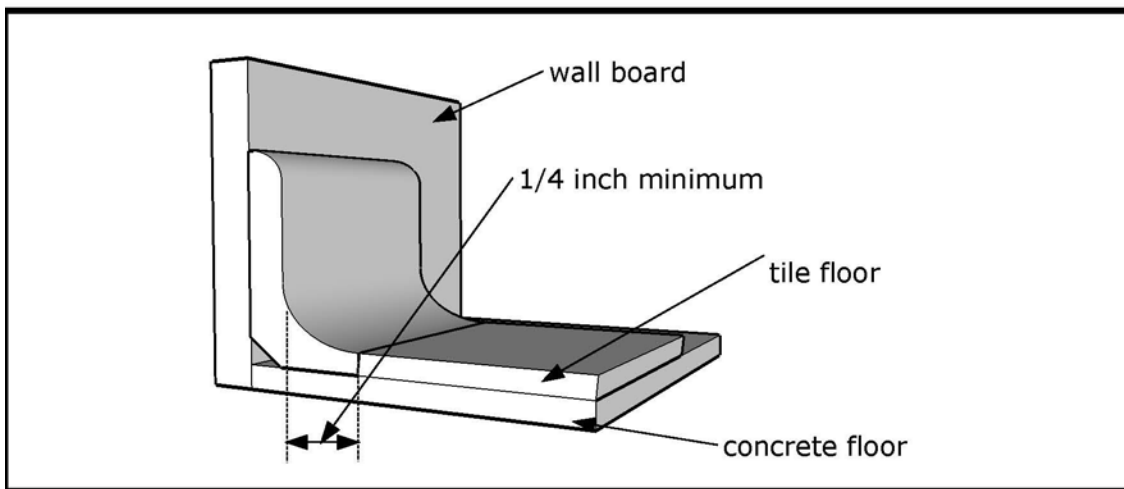
## **Bars**

Bars are considered a wall surface and as such the floor material must extend up the bar structure (employee side) at least 4-inches with a minimum 3/8-inch radius at the bar/floor junctures.

# EXAMPLES OF FLOORING INSTALLATION

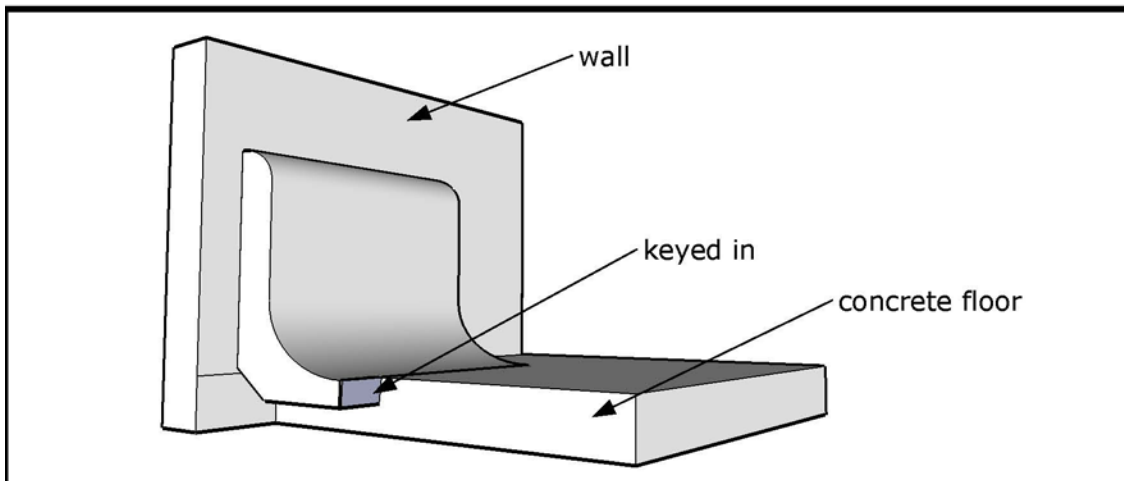


Quarry Tile  
Cove base



Quarry Tile  
Cove base

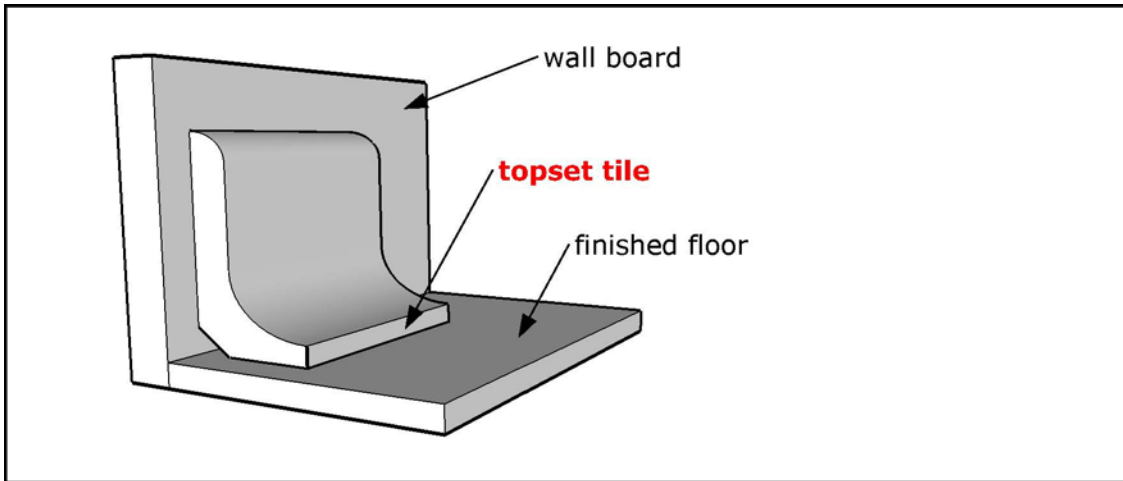
Installed flush  
with the floor



Quarry Tile  
Cove base tile

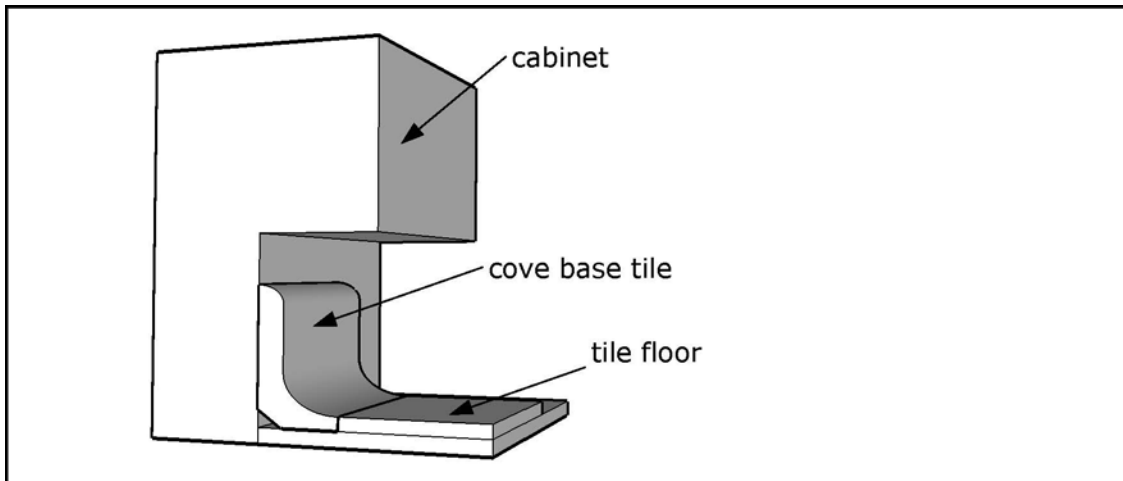
Keyed in integral to  
the concrete floor

# FLOOR MATERIALS FOR RETAIL FOOD FACILITIES

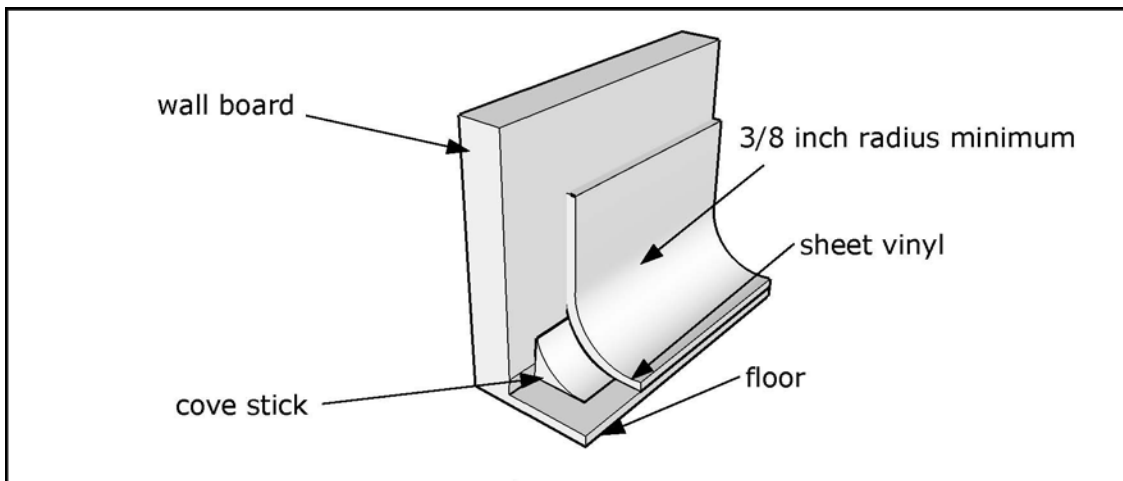


**Quarry Tile**  
Cove base

Incorrect topset  
installation



**Cove Base**  
Cabinet toe-kick



**Sheet Vinyl Floor**

Correct installation