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Tony Gagliardi, R. S. - Forsyth County Health Department, Issue paper FE-2005-19

It is my position that the use of 3" legs for equipment that is as large as 40" in one plane is just not workable. I have tried to get under equipment at this height above a table top and I cannot reach 20" (allowed by the standard) under the equipment. I would suggest that this vertical distance be left at 4" above the table top or the horizontal distance stated in the standard be changed from 20" to 10".

My recommendation would be to change the standard to either state that 4" legs must be used or that when 3" legs are allowed that the standard be changed to state that "provided that no part of the counter top under the unit is more than 10 in (25cm) from the point of cleaning access".

5.x Equipment mounting

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5.x.2 Counter-mounted equipment shall be designed and manufactured to be:

- portable; or
- sealed to the counter; or
- elevated on legs that provide a minimum unobstructed clearance beneath the unit of 4.0 in (100 mm); or
- elevated on legs that provide a minimum unobstructed clearance beneath the unit of 3.0 in (76 mm) provided that no part of the counter top under the unit is more than ~~20~~10 in (~~50-250~~mm) from the point of cleaning access; or
- elevated on legs that provide a minimum unobstructed clearance beneath the unit of 2.0 in (50 mm) provided that no part of the counter top under the unit is more than 3.0 in (76 mm) from the point of cleaning access.

Steve Tackitt

Section 5 - Design and Construction. Maybe change the word 'under' to 'within'.

5 Design and construction

This section contains design and construction requirements for equipment covered ~~under~~ within the scope of this Standard.

Joe Phillips

Requirement: Standard 2, Item 4.43; Standard 4, Item 4.30.2; Standard 8, Item 4.31

Interpretation: Glass complying with BS857:1967 of the British Standards Institute shall be considered meeting the above requirements.

5.x Breakable glass components

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5.x.3 Glass, other than light fixtures, that may be subject to contact during use and routine maintenance and cleaning shall conform to the impact test in ANSI Z97.1 or to the impact test within ANSI/UL 197.

— Note: Glass complying with BS857:1967 of the British Standards Institute shall be considered meeting the above requirements.

J. Douglas Park, US FDA, Dept. of Health & Human Services

Sec. 5.4.4, 5.5, and 5.24.3 make reference to 'deburred' without any following reference to finish requirements. Deburring simply removes sharp edges and shearings from stamped, crimped or sheared metal or projections and flux from welded/brazed or other joined edges. When such areas must be safe for use and/or easily cleanable, the finished surface requirement must be further prescribed. One can still slice a bare hand on an edge deburred with an axial grinding wheel.

5.x Edges and nosings

If a shelf or unit top is reinforced by forming its edge into a structural shape (nosing) and there is an adjoining vertical surface (i. e., cabinet body), the following requirements shall apply:

- the nosing shall be integral with the shelf or unit top; and
- the edge shall be deburred; and
- the nosing and adjoining vertical surface shall be closed or shall have a clearance of at least $\frac{3}{4}$ in (0.75 in, 19 mm) or $\frac{1}{3}$ of the nosing's vertical dimension, whichever is greater.

If the profile edge is turned in to form a channel-like configuration, the return (horizontal) shall not exceed $\frac{1}{2}$ in (0.50 in, 13 mm) and shall be angled downward at least 5° from the horizontal plane. This requirement does not apply to readily removable or knockdown shelves.

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5.x Louvers

5.x.1 Louvers that may be subject to overhead splashes, spills, and drips shall be of a deflecting design, or they shall be readily removable and the space immediately behind the louver easily cleanable.

5.x.2 If electrical safety requirements prohibit the use of readily removable louvers, then such louvers need only be removable.

5.x.3 Louvers shall be deburred and shall have spaces large enough to allow for easy cleaning.

5.x.4 Screening on louvered openings, if provided, shall be 16 mesh (16 strands per 1.0 in [25 mm]) or greater and removable.

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5.x Joints and seams

5.x.1 Permanent joints and seams in a food or splash zone shall be sealed and smooth.

5.x.2 Permanent joints and seams in a nonfood zone shall be closed. Welded joints and seams in a nonfood zone shall be deburred.

Philippa Durbin, Standards Administrator, NSF International

Shouldn't that opening phrase say "openings **to** food zones"? It seems to be that this could be a pretty big difference.

5.15 Openings to food zones

Openings **into** food zones shall be protected to prevent the entry of seepage, condensation, and spills. In areas where liquids may accumulate, top openings into food zones shall be protected by a raised rim that extends at least $\frac{3}{16}$ in (0.19 in, 5.0 mm) above the liquid level (see figure 3).

Mike Kohler

I would like to propose a change to the boilerplate language for fasteners.

Rational: Strain relief devices are necessary to comply with electrical safety standards. A common type of strain relief device uses threaded fasteners to clamp the electrical cord in place. The number of exposed threads on such strain relief devices exceeds the number permissible by the NSF Standards.

5.5 Fasteners

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5.5.5 There shall be no exposed threads, projecting screws, or studs in a food or splash zone. There shall be no more than 2.5 exposed threads or $\frac{1}{4}$ in (0.25 in, 6.4 mm) of exposed threads, whichever is less, in a nonfood zone. Exposed threads on electrical cord strain relief devices in a nonfood zone shall be exempt.

Unknown proponent:

1.2 Scope

Equipment covered by this Standard includes, but is not limited to, bakery, cafeteria, kitchen, and pantry units and other food handling and processing equipment such as tables and components, counters, hoods, shelves, and sinks.

Section 7 of this Standard pertains to food handling and processing equipment that has been designed and manufactured for special use purposes. Food equipment designed and manufactured with a security package is utilized in environments such as correctional facilities, mental health facilities, or some schools. For these environments, where both sanitation and security are concerns, 7 contains exceptions to this Standard that shall only be applicable to the splash and nonfood zones of food equipment provided with a security package.

Equipment components and materials covered under other NSF or NSF/ANSI Standards or Criteria shall also ~~comply with~~ conform to the requirements therein. This Standard is not intended to restrict new unit design, provided that such design meets the minimum specifications described herein.

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5.13.8 All internal corners and angles of roll covers, tilt covers, and other similar covers that are less than 135° ~~shall be more than 135°~~ or shall have a minimum smooth radius of $\frac{1}{8}$ in (0.13 in, 3.2 mm). Solder or other fillet material may be used to provide a minimum radius on the underside of roll-type covers.