

**Task Group on Design and Construction Requirements**  
**49i173Dr1 Straw Ballot**  
**May 1, 2024**

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**Purpose**

The purpose of this ballot is to affirm revised and new language related to the many design and construction requirements throughout Standard 49.

**Background**

Issue paper **BSC-2022-03 – Design and Construction Requirements** highlighted that the design and construction requirements in sections 4 and 5 haven't seen much evaluation in many years. The issue proponent suggested the establishment of task group (TG) to discuss these sections. This issue was presented to the JC during the 2022 Face-to-Face meeting at which time the TG was motioned into existence. Since that time, the TG has met four times and conducted a straw ballot with feedback in November 2023.

The straw ballot was quite extensive with good feedback, and the TG discussed breaking up the proposal into several subsection ballots to make the work more digestible. During the most recent meeting (April 22, 2024) the issue proponent presented 18 different subsections and the group agreed to send each to straw ballot first with this TG. Any subsections receiving no further revision proposals will then be sent to the full JC for approval ballot. In this manner, some if not all of the proposed revisions will be ready for the next publication and the entire ballot will not be held up by a few subsections.

This ballot language reflects **i173D – Work Surfaces**

The **grey highlighted** portions of the language are proposed additions to the language of the standard.  
The **strikeout** portions of the language are proposed deletions to the language of the standard.

An **affirmative (yes) vote** on this straw ballot means you agree with the revised language as submitted.

A **negative (no) vote** on this straw ballot means you disagree with the revised language as submitted. A negative vote must include an explanation of why you disagree with the revised draft.

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[Note – the recommended changes to the standard which include the current text of the relevant section(s) indicate deletions by use of ~~strikeout~~ and additions by **grey highlighting**. Rationale statements are in *red italics* and only used to add clarity; these statements will NOT be in the finished publication.]

## NSF/ANSI International Standard for Biosafety Cabinetry —

### Biosafety Cabinetry: Design, Construction, Performance, and Field Certification

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#### 5 Design and Construction

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##### 5.7 Internal corners and angles

###### 5.7.1 Interior work surfaces

###### 5.7.1.1 Two-plane intersection

An internal angle of 2 rad (110°) or less formed by the intersection of two planes, which is subject to manual cleaning, shall have a minimum continuous and smooth radius of 0.13 inch (3.2 mm) (see Figure 2).

###### 5.7.1.2 Three-plane intersection

An internal corner formed by the intersection of three planes at 2 rad (110°) or less, subject to manual cleaning, shall have a minimum continuous and smooth radius of 0.25 inch (6.4 mm) for a vertical or horizontal intersection. The alternate intersections shall have a minimum continuous and smooth radius of 0.13 inch (3.2 mm) (see Figure 2).

###### 5.7.1.3 ~~—————~~ Fillet material

~~Parent material or hard solder may be used as fillet material in structurally sound seams.~~