# C
## *Interiors*

This Element describes Caltech design standards for construction which takes place inside the exterior enclosure and does not include any structural walls.

The Design Professional is responsible for coordinating and implementing the standards in this document to create unique solutions to the project program. Any questions or conflicts in the document should be addressed with the Caltech Project Manager for clarification.

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# C10 INTERIOR CONSTRUCTION

## C1010 Interior Partitions

### C1010.10 Interior Fixed Partitions

***1. General:***

**a.** Extend room partitions through ceiling and anchor to structure above. Do not terminate partitions at ceiling grid without prior approval. If approved, trim top edge of gypsum board partition with L-bead metal trim.

**b.** Extend all corridor partitions to structure. Enclose all mechanical and electrical rooms with at least one-hour fire-rated partitions or more, as required by applicable building code.

***Extend room partitions through ceiling and anchor to structure above.***

***2. Metal Framing:*** Comply with ASTM C 645.

**a.** Provide metal backing plate, minimum 6-inch-high by 0.053-inch-thick (16 gage), as necessary, to support wall-mounted products and additional live loads, if any. Additional metal backing plates may be required for future wall-mounted products.

*Provide metal backing plate, minimum 6-inch-high by 0.053-inch-thick (16 gage), as necessary, to support wall-mounted products and additional live loads,*

***3. Plaster Wall Finishes.***

**a.** Portland Cement Plaster: Comply with ASTM C 926.

1) Do not deviate more than plus or minus 1/4 inch in 10 feet from a true plane in finished plaster surfaces, as measured by a 10-foot straightedge placed on surface.

2) Grout hollow-metal frames, bases, and similar work occurring in platered areas, with base-coat plaster material, before lathing where necessary. Except where full grouting is indicated or required for fire-resistance rating, grout at least 6 inches at each jamb anchor.

3) Finish plaster flush with metal frames and other built-in metal items or accessories that act as a plaster ground. Where casing bead does not terminate plaster at metal frame, cut base coat free from metal frame before plaster sets and groove finish coat at junctures with metal.

4) Diamond-Mesh Metal Lath: ASTM C 847 with ASTM A 653, G60 hot-dip galvanized zinc coating; self-furring; 3.4 lb/sq. yd.

a) Paper backed lath is not permitted unless approved by Caltech per Project.

b) Install according to ASTM C 1063.

*Paper backed lath is not permitted*

5) Use zinc and zinc-coated (galvanized) accessories.

***4. Gypsum Board Wall Finishes:***

**a.** Comply with applicable requirements of Gypsum Association (GA) as follows:

1) GA-214: *Recommended Levels of Gypsum Board Finish.*

2) GA-216: *Recommended Specifications for the Application and Finishing of Gypsum Board.*

3) Provide Level 5 finish on gypsum board with semi-gloss or gloss finish.

**b.** Gypsum Board:

1) Thickness: Minimum 5/8-inch-thick, except two layers of 1/4 inch-thick flexible gypsum board may be used for curved applications.

2) Typical Gypsum Board for Interior Partitions, Soffits, Ceilings, and Shaftliner: ASTM C 1396/C 1396M.

3) Abuse-Resistant Gypsum Board: ASTM C 629/C 1629M, for areas where greater resistance to abrasion, surface indentation, and impact is required. Level classification to be determined by the design professional.

4) Tile Backing Panels: Glass-mat, water-resistant backing board comply ing with ASTM C 1178/C1178M or cementitious backer units complying with ANSI A118.9 and ASTM C 1288 or 1325.

5) Gypsum board surfaces to be painted shall have no measurable variation in any 24-inch direction and a maximum variation of 1/8 inch in 10 feet when a straightedge is laid on the surface in any direction. Shim work, if necessary, to comply.

6) Do not exceed 1/16-inch offset between planes of abutting gypsum board panels at edges or ends.

**c.** Metal Trim: Electro-galvanized or zinc-coated.

*Identify firestopping with pressure sensitive, self-adhesive, preprinted vinyl labels.*

1) Control Joints: 1/2-inch-wide maximum joint size, faced with metal control joint accessory.

2) Install control joints in gypsum board ceilings where areas exceed 2500 sq. ft. Distance between ceiling control joints shall not exceed 50 feet in either direction.

3) Install control joints in gypsum board partitions where distances exceed 30 feet and are not interrupted by doors or windows.

4) Apply metal trim, in longest lengths practicable, at exterior corners and at interior corners where gypsum board intersects metal or other dissimilar materials. Run trim straight and square with planes.

### C1010.90 Interior Partition Supplementary Components

***1. Firestopping:*** Provide firestopping systems with current ICBO ES reports, and produced and installed to resist the spread of fire and the passage of smoke and other gases in compliance with California Building Code and UL requirements.

**a.** Submit evidence of fire-resistive joint systems' compliance with ICBO Evaluation Service Acceptance Criteria AC30, from ICBO Evaluation Service.

**b.** Acceptable Manufacturers: Hilti and 3M.

**c.** Identify firestopping with pressure sensitive, self-adhesive, preprinted vinyl labels. Attach labels permanently to surfaces of penetrated construction on both sides of each firestopping installation where the labels will be visible to anyone seeking to remove penetrating items or firestopping.

***2. Fire-Resistive Joint Sealants In and Between Fire-Resistive-Rater Constructions:*** Provide systems with assembly ratings equaling or exceeding the fire-resistive ratings of construction that they join, and with movement capabilities and L-ratings as required.

**C1030 Interior Doors**

***1. Interior Doors Performance Requirements:***

**a.** Select door products and finishes for ease of maintenance and durability, with a uniform level of quality throughout the project.

**b.** Match existing adjacent doors in remodeling projects.

***Match existing adjacent doors in remodeling projects.***

**c.** Review security requirements with Caltech security department.

**C1030.10 Interior Swinging Doors:**

***1. Wood Doors:*** Provide Solid core wood; hollow core wood doors are not permitted.

***2. Hardware:***

**a.** Mandatory Meetings: Design Professional shall request a hardware meeting with Campus Lockshop to determine specific existing site requirements and standards.

**b.** Refer to Section 08 71 00 - *Door Hardware* Caltech Master Specification in Appendix IV.

***hollow core wood doors are not permitted.***

**C1060 Raised Floor Construction**

***1. Raised Floor Construction Performance Requirements:***

**a.** Select raised flooring system with adequate loading capacity to support all dead and live loads to be imposed upon it. Coordinate with Caltech to determine loading requirements of access flooring.

**b.** Comply with ASCE 7 *Minimum Design Loads for Buildings and Other Structures*, Chapter 13, including 13.5.7.

**c.** Provide raised floor panels that inhibit fungus, mold, mildew, and gram-positive and gram-negative bacteria and showing no mold, mildew, or bacterial growth when tested according to ASTM D 3273 and evaluated according to ASTM D 3274 or ASTM G 21.

*Provide sealer on concrete substrate.*

**C1060.10 Access Flooring**

***1. Installation Preparation:***

**a.** Provide sealer on concrete substrate.

**b.** Seal underfloor air cavities at construction seams, penetrations, and perimeter to control air leakage when used as underfloor air plenum.

## C1070 Suspended Ceiling Construction

***1. Suspended Ceiling Construction Performance Requirements:*** Comply with the following seismic standards:

**a.** ASTM E 580/E 580M Standard Practice for Application of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Subject to Earthquake Ground Motions.

**b.** CISCA's Guidelines for Seismic Restraint of Direct-Hung Suspended Ceiling Assemblies (Zones 3-4).

**c.** ASCE 7, Minimum Design Loads for Buildings and Other Structures, Section 9 Earthquake Loads.

**d.** California Building Code.

**e.** Suspended Ceiling Systems for Acoustical Tile and Lay-in Panels shall be standardized throughout the project utilizing standard exposed Tee grid systems. This system shall be in labs and areas that require regular maintenance and access. Acoustical Tile and Lay-in Panels shall be of Mineral Fiber type with NRC of no less than .70. Confirm with Caltech Project Management prior to selection of ceiling tile.

***2. Suspension System Structural Classification:*** Heavy-duty system.

***3. Ceiling Clearance:***

**a.** If the building is sprinklered, a minimum of 18" clearance is required between the ceiling and any object stored on shelves, book cases, etc.

**b.** If the building is not sprinklered, a minimum of 24" clearance is required between the ceiling and any object stored on shelves, book cases, etc.

**c.** Provide adequate clearance above ceiling tiles for general maintance and access.

***Review signage requirements with Caltech Safety Officer and with authorities having jurisdiction over the Project.***

## C1090 Interior Specialties

## C1090.20 Information Specialties

***1. Visual Display Boards:***

**a.** Markerboards: Porcelain-enamel-clad steel with low gloss matte finish and magnet capability.

***2. Interior Signage:***

**a.** Review signage requirements with Caltech Safety Officer and with authorities having jurisdiction over the Project.

**b.** Toilet Room Signs: Etched stainless steel to be selected by Design Professional, with concealed attachment. Provide signs required by California Building Code. Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's *ADA-ABA Accessibility Guidelines for Buildings and*

*Facilities*. Provide rectangular signs with pictogram, raised copy, and California Braille tags.

1) Men's Room: 12-inch equilateral triangle, vertex pointing up.

2) Women's Room: 12-inch-diameter circle.

**c.** Stair Signs: Signs shall identify each stairway, indicate whether there is roof access, the floor level, and the upper and lower terminus of the stairway.

1) Mohawk "Series 200A Sand-Carved;" 1/8-inch thick, hard phenolic ES plastic laminate and raised copy, Grade 2 California Braille.

2) Color and Size: As selected by Design Professional; letter style, Helvetica.

**d.** Stairway Floor Level Identification Signs: Provide signs at each floor level in all stairways, and wherever required by California Building Code.

**e.** Elevator Signs: Etched stainless steel to be selected by Design Professional.

1) Text at Elevator: "IN CASE OF FIRE, USE STAIRS"

**f.** Evacuation Signs: Etched stainless steel to be selected by Design Professional.

1) Text: Graphic signage indicating evacuation routes as required by Califonia Building Code.

**g.** Entry Decals: Provide minimum 4-inch-square decal with International Symbol of Access (ISA), white on blue background with white border, applied to glass at accessible entry doors.

**h.** Room Capacity Signs: Etched stainless steel to be selected by Design Professional.

1) Text: "MAXIMUM OCCUPANCY: _____ PERSONS"

2) Size: 1-inch-high letters.

**i.** Laboratory Signs: Manufacturer and design to be selected by Design Professional.

**j.** Laboratory and Science Entrances: Provide each interior laboratory entrance with a Caltech Emergency Information sign holder:

1) Acrylic oversized 8-1/2 by 11 inch holder, top feed with bottom stop.

2) Caltech will provide inserts for holders with the following information:

a) Emergency contacts.

b) Hazards present.

c) National Fire Protection (NFPA) diamond.

d) Proposition 65 warning.

**k.** Radioactive Materials:

1) Entrance: Provide each laboratory where radioactive materials are used or stored with sign posted at the entrance "CAUTION RADIOACTIVE MATERIAL."

2) Radioactive Area: Areas where radiation levels might expose a person to five millirem in any one hour shall be posted with a "CAUTION RADIATION AREA" sign.

**l.** Laser Lab, Entrance:

1) The entrance to a lab with Class 2 and 3a lasers that do not exceed the

maximum exposure limit for irradiance shall be posted with "CAUTION LASER" signs.

2) The entrance to a lab with Class 3a lasers that exceed the maximum exposure limit for irradiance and Class 3b and 4 lasers shall be posted with "DANGER LASER" signs.

**m.** Magnetic Field, Entrance:

1) The entrance to a facility that contains a strong magnetic field shall be posted with:

"WARNING STRON MAGNETIC FIELD"
"NO PACEMAKERS"
"NO NEUROSTIMULATORS"
"NO LOOSE METAL OBJECTS"

*While room numbering systems vary between buildings, unless there is a significant need for change, existing room numbers should be retained.*

**n.** Gaseous Fire Suppression System, Entrance: The entrance to a facility that contains a gaseous fire suppression system shall be posted with:

"CAUTION"
"This Area is Protected by *insert name for type of gas* System"
"In case of discharge exit from the projected area immediately."

**o.** Biosafety, Entrance: The entrance to a biosafety Level 3 and 4 facility shall be posted with:

1) Entry requirements (immunization and clothing).
2) Emergency contacts.

**p.** Donor Signage: Embossed stainless-steel, flush plate with recessed stainlees-steel letters.

1) Letter Style and Mounting: As determined by Design Professional and Caltech.

***Room numbering proposals for individual buildings or floors must be approved by Facilities Design & Construction***

***3. Room Numbering:*** While room numbering systems vary between buidings, unless there is a significant need for change, existing room numbers should be retained. However, for new construction and/or significant interior remodeling which require entire building re-numbering, it is proposed that standardized systems be employed to aid in way-finding, fire & life safety, delivery, and location tracking. Some of the aspects of this proposal, particularly for non-assignable space, may be implemented for existing buildings independent of remodeling.

**a.** Room numbering proposals for individual buildings or floors must be approved by Facilities Design & Construction (D&C) prior to finalization. Room numbering for new buildings should conform to the following guidelines:

1) Above ground floors should be designated (from the ground up) as 1, 2, 3, etc.
2) Below ground floors should be designated (from the top down) as B1, B2, etc.
3) If it is uncertain if a floor is above or below ground level, the designation G may be used.
4) All interior space must be designated by a room number.

***Each room number within a building must be a unique combination of alphanumeric characters regardless of floor.***

5) Each room number within a building must be a unique combination of alphanumeric characters regardless of floor.
6) Room numbers and/or room suites for above-ground assignable rooms with doors entering off of a common and/or publicly-accessible hall should be designated with 3-digit integer numbers reflecting floor and room number (such as 101).
7) Room numbers and/or room suites for below-ground assignable rooms with doors entering off of a common and/or publicly-accessible hall should be designated with 3-digit integer numbers preceded by the letter "B" (such as B101).
8) Rooms within a suite (or within another room) should share a room number followed by a letter suffix (such as 101A).
9) Rooms within rooms within a suite (including closets) should be designated by the room number followed by a letter and a number (such as 101A1).
10) Rooms along a corridor should be numbered with even numbers on one side and odd numbers on the other in a systematic fashion.
11) In order to allow for future modifications of space, room numbers may occasionally not be sequential if there is a probability or likelihood of future changes (that is in the case of classrooms or other larger-sized rooms, neighboring rooms on one side of the hall may be 110, 120, 130, etc.).
12) Room numbering systems should include non-assignable rooms such as restrooms, custodial closets, and mechanical rooms.
13) Room numbers should not include a leading zero.

*Room numbers should not include a leading zero.*

14) Assignable room numbers should not include numbers ending in "00" (such as 100 or 200 or B100). These should be reserved for assignment by D&C staff, preferably for non-assignable circulation areas.

*Assignable room numbers should not include numbers ending in "00"*

15) Non-assignable spaces will have room numbers assigned by Design & Construction Staff and are differentiated by a two-letter suffix depending on the purpose of the room as follows:

a) CO – Corridors (Note: Corridors on different sides of a door should be given different room numbers. Corridor segments may be given separate room numbers if there is a particular reason such as a change in direction.)
b) DT – Data Rooms (wiring for central computer or data systems)
c) EL – Electrical Rooms
d) EV – Elevators (shafts should be numbered on each floor and vertically consistent throughout the building such as 191EV, 291EV, 391EV, B191EV etc.)
e) JN – Janitor, custodial or housekeeping rooms (including storage of supplies)
f) LO – Publicly-accessible lobbies or vestibules
g) ME – Mechanical rooms or rooms housing specific machinery

*Although not technically "rooms," covered-un-enclosed areas should also be identified and numbered*

h) PK – Garages for vehicle parking
i) RR – Unisex restroom
k) RW – Women's restroom
l) SH – Shower facilities
m) ST – Stairs and stairwells
n) TL – Telephone systems (if both telephone and data, use "DT")
o) XX – Vertical shafts for equipment or ductwork (counted at each floor level)

16) Donor-funded or special "named" areas should be appropriately desinated.

17) Although not technically "rooms," covered-unenclosed areas (roofed walkways or porches that are open to the outside on one or more sides) should also be identified and numbered so that when maintenance is needed or when gross space calculations are required, they can be included. Covered-unenclosed areas will be numbered with a CU suffix.

***Partitions shall be ceil-ing-hung with concealed hardware. No partition gaps allowed.***

**b.** *Stakeholders for Consultation:*

*1) Academics (Occupants)*
*2) Cost Studies*
*3) Telecommunications*
*4) Security*
*5) Key Shop*
*6) Maintenance*
*7) Mail & Deliveries*
*8) IMSS*

**C1090.25 Compartments and Cubicles**

***1. Toilet Compartments:*** *Partitions shall be ceiling-hung with concealed hardware. No partition gaps allowed. Recommend stainless steel partitions.*

***Provide corner guards of appropriate design in high traffic areas and utility corridors to protect walls.***

**C1090.35 Wall and Door Protection:**

***1. General:***

**a.** Provide corner guards of appropriate design in high traffic areas and utility corridors to protect walls.

***2. Corner Guards:*** Stainless steel, ASTM A 240/A 240M, Type 304.

**C1090.40 Toilet Accessories:**

***1. Paper Towel Dispenser:*** Dispense paper rolls and be ADA compliant.

**a.** Recommend: Bobrick models B-39617, B-396034.

***2. Warm-Air Dryers:***

**a.** Recommend: Bobrick B-748.

***A ratio of one soap dispenser per every two sinks is required.***

***3. Toilet Tissue Dispenser:*** Capability to dispense multi-rolls.

**a.** Recommend: Bobrick model B-4388 for recessed dispensers, B-357 for partition-mounted, and B-4288 for surface-mounted dispenser.

***4. Sanitary Dispensers:*** Each Women's restroom shall have a sanitary napkin and tampon dispenser unit with a 25-cent operation dispenser.

**a.** Recommend: Bobrick B-3500 (recessed).

***5. Sanitary Disposal Unit:*** Women's restroom shall have in each stall a sanitary disposal unit.

**a.** Recommend: Bobrick B-4354 (if tissue dispenser unit is not equipped with disposal unit).

***6. Toilet Seat Covers:*** Each toilet compartment and single toilet room shall have a seat cover dispenser unit with the capability of disposing half fold covers. No roll units allowed.

**a.** Recommend: Bobrick B-4221 or B-221 (if tissue dispenser unit is not equipped with dispenser).

*Provide ADA-compliant paper roll towel dispenser in kitchens and laboratories.*

***7. Soap Dispensers:*** A ratio of one soap dispenser per every two sinks is required.

**a.** Recommend: Bobrick B-42 (wall mounted), B-822 (lavatory mounted), and B-824 (automatic).

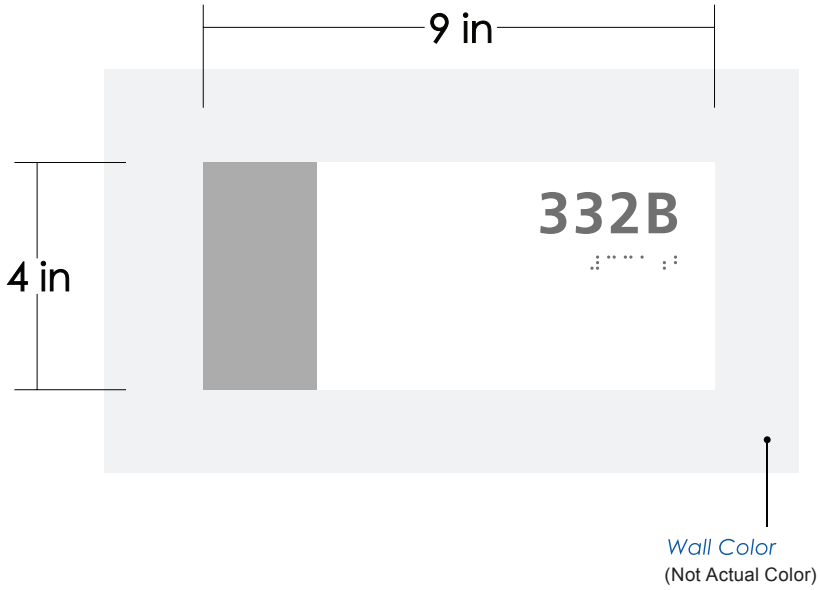
***8. Mirror:*** Each lavatory counter shall have a mirror.

***9. Trash Containers:*** Each restroom shall have a trash container with a lid by exit door.

***10. Provide ADA-compliant paper roll towel dispenser*** in kitchens and laboratories.

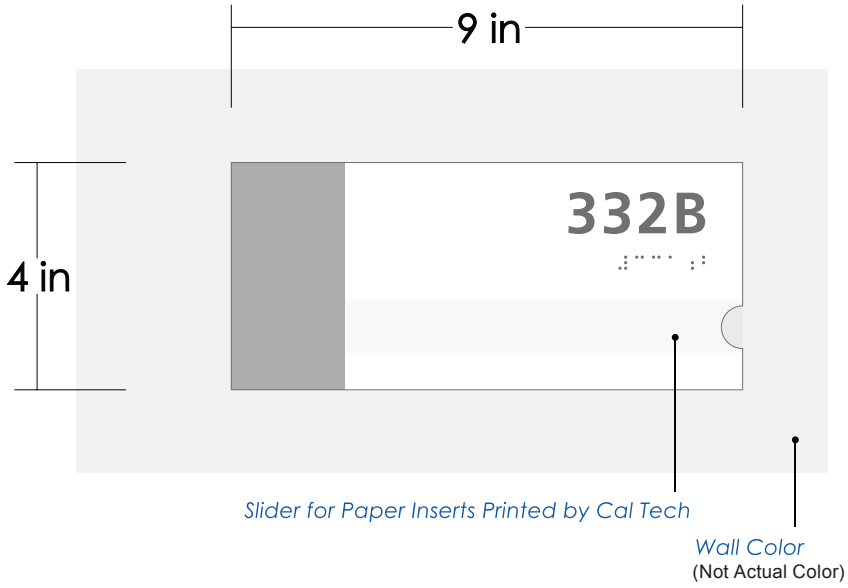
**a.** Recommend: Bobrick B-2860.

## SIGN SPECIFICATIONS & ELEVATION




**SLIDER WINDOW:**
Clear Window
**MATERIAL:**
1/8" Clear Non-Glare Acrylic (Face)
1/8" White PVC (Backer)
**GRAPHICS:**
Raised Room Number & Accent Bar
Color: Dark Silver Grey **Recommended**
**SIZE:**
9" x 4" x .625"
**MOUNTING:**
VHS - Double Sided Tape

## SIGN SPECIFICATIONS & ELEVATION




**SLIDER WINDOW:**
Clear Window
**MATERIAL:**
1/8" Clear Non-Glare Acrylic (Face)
1/8" White PVC (Backer)
**GRAPHICS:**
Raised Room Number & Accent Bar
Color: Dark Silver Grey **Recommended**
**SIZE:**
1 Name Window - 9" x 4" x .625"
**MOUNTING:**
VHS - Double Sided Tape

# C20 INTERIOR FINISHES

## C2010 Wall Finishes

### *1. General:*

**a.** Select wall finishes for ease of maintenance and durability, with a uniform level of quality throughout the project.

**b.** Submit a finish schedule and finish board(s) with samples of all exposed finish materials selected by the design professional to be incorporated into the project prior to completion of design development phase.

**c.** Maintenance instructions to be furnished by contractor for all finishes.

**d.** Maintenance material submittals ("attic stock") for each color, type, pattern, etc. of the materials (and others, as appropriate) to be furnished by contractor per Section Z10. Each is to be packaged, protected, identified, and stored by the contractor at a location to be determined by Caltech and indicated in the specifications.

***Do not use vinyl wallcovering on interior face of exterior walls.***

### *2. Wall Coverings:*

**a.** Do not use vinyl wallcovering on interior face of exterior walls.

### *3. Tile Wall Finishes:*

**a.** Comply with applicable ANSI standards and current edition of Tile Council of North America *TCNA Handbook for Ceramic, Glass, and Stone Tile Installation.*

***Provide Sherwin Williams Emerald Low VOC, Interior Acrylic Latex Satin K37 Series...***

### *4. Interior Wall Painting:*

**a.** Provide Sherwin Williams Emerald Low VOC, Interior Acrylic Latex Satin K37 Series paint as a baseline for all interior architectural coatings.

## C2030 Flooring

### *1. General:*

**a.** Select floor finishes for ease of maintenance and durability, with a uniform level of quality throughout the project.

**b.** Select heavy-duty seamless flooring with minimum 4-inch-high integral base in laboratories.

*Select heavy-duty seamless flooring with minimum 4-inch-high integral base in laboratories.*

**c.** Submit a finish schedule and finish board(s) with samples of all exposed finish materials selected by the design professional to be incorporated into the project prior to completion of design development phase.

**d.** Maintenance instructions to be furnished by contractor for all finishes.

**e.** Maintenance material submittals ("attic stock") for each color, type, pattern, etc. of the materials (and others, as appropriate) to be furnished by contractor per Section Z10. Each is to be packaged, protected, identified, and stored by the contractor at a location to be determined by Caltech and indicated in the specifications.

**f.** Perform relative humidity test using in situ probes, ASTM F 2170, prior to installation of finish flooring. Proceed with installation only after substrates have a

maximum 75 percent relative humidity level measurement.

**g.** If no reliable evidence exists that vapor retarders are installed directly under existing on-grade concrete floor slabs, or relative humidity of substrate exceeds 75 percent, provide surface-applied moisture mitigation product compatible with finish flooring and installation method.

*Provide sealer or coating adequate for wear and dust protection on exposed concrete floors.*

### C2030.10 Flooring Treatment

***1. Concrete Floor Finishes:*** Provide sealer or coating adequate for wear and dust protection on exposed concrete floors.

### C2030.20 Tile Flooring

***1. General:***

**a.** Comply with applicable ANSI standards and current edition of Tile Council of North America TCNA Handbook for Ceramic, Glass, and Stone Tile Installation.

**b.** Perform Calcium Chloride Test (RMA Test) with subfloor temperature not less than 55 degrees F. If emissions exceed limit recommended by tile manufacturer, do not install flooring until conditions are corrected and verified by retesting moisture content.

### C2030.50 Resilient Flooring:

*Install integral-flash-cove-base accessory, where required.*

***1. Vinyl Sheet Flooring:*** Unbacked vinyl sheet floor covering complying with ASTM F 1913, 0.080 inch thick.

**a.** Trowelable leveling and patching compound.

**b.** Water-resistive type adhesive recommended by manufacturer. Use adhesives that have a VOC content of not more than current SCAQMD regulations.

**c.** Install integral-flash-cove-base accessory, where required. Cove floor covering 6 inches up vertical surfaces. Support floor coverings at horizontal and vertical junction by cove strip. Butt at top against cap strip.

***2. Seamless Installation:***

**a.** Heat-Welded Seams: Comply with ASTM F 1516. Rout joints and use welding bead to permanently fuse sections into a seamless floor covering. Prepare, weld, and finish seams to produce surfaces flush with adjoining floor covering surfaces.

*Provide non-slip finish on stair treads.*

### C2040 Stair Finishes

***1. Slip Resistance:*** Provide non-slip finish on stair treads.

## C2050 Ceiling Finishes

***1. General:***

**a.** Select ceiling finishes for ease of maintenance and durability, with a uniform level of quality throughout the project.

**b.** Submit a finish schedule and finish board(s) with samples of all exposed finish materials selected by the design professional to be incorporated into the project prior to completion of design development phase.

**c.** Maintenance instructions to be furnished by contractor for all finishes.

**d.** Maintenance material submittals ("attic stock") for each color, type, pattern, etc. of the materials (and others, as appropriate) to be furnished by contractor per Section Z10. Each is to be packaged, protected, identified, and stored by the contractor at a location to be determined by Caltech and indicated in the specifications.

***Reveal- and tegular-edge panels are not permitted in laboratories.***

## C2050.20 Plaster and Gypsum Board Finish

***1. Plaster Ceiling Finishes:*** Refer to Plaster Wall Finishes in C3010.10 Interior Fixed Partitions.

***2. Gypsum Board Ceiling Finishes:*** Refer to Gypsum Board Wall Finishes in C3010.10 Interior Fixed Partitions.

## C2050.80 Acoustical Ceiling Treatment

***1. Acoustical Ceiling Panel Finishes:*** For acoustical panel ceilings in laboratories, select flat, lay-in panel configuration. Reveal- and tegular-edge panels are not permitted in laboratories.

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