

tech-check interiors | special uses

This is a template, so some items will apply to your project, and others won't or will be missing. When using the list, make the changes needed for your project.

Content of the Tech-Check Lists is based on several sources including MASTERSPEC®.

1 SELECTIVE DEMOLITION

- - Indicate the disposition of each item using the following terms:
 - Remove: Detach items from existing construction and dispose of them off-site.
 - Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and [deliver to Owner ready for reuse] [store].
 - Remove and Reinstall: Detach items from existing construction, in a manner to prevent damage, prepare for reuse, and reinstall where indicated.
 - Existing to Remain: Leave existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.
 - Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.
 - Consider using photographs to show extent of demolition.
 - Locations of structures or improvements near selective demolition operations that are to remain.
 - Indicate existing utility services and mechanical/electrical systems are to be disconnected and sealed.
 - Indicate existing utility services and mechanical/electrical systems to remain in service.
 - Indicate areas to be occupied or that will remain functioning during selective demolition operations.
 - Indicate NIC areas.

2 CONCRETE

- **POLISHED CONCRETE**
 - Extent of polished concrete floors.
 - Extent of each type and color of stain if any.
 - Locations of decorative scoring if any.
 - Locations, and size of mockups.

3 METALS AND RAILINGS

DECORATIVE METALS

- Location and extent of each decorative metal item with adequately dimensioned plans and details. Coordinate terminology with the Specifications.
- Details of decorative metal items. Include cutouts, reveals, edge finishing, jointing, and anchoring.
- Types of metal, thicknesses, and manner of forming if more than one is used or if not fully specified.
- Metal characteristics if not specified and if necessary to obtain satisfactory qualities.
- Metal finishes if more than one. Coordinate terminology with the Specifications.
- Types of exposed fasteners if not specified.
- Details of anchorages to the adjacent construction.

**PIPE AND TUBE RAILINGS (INTERIOR OR EXTERIOR)**

- Locations and the extent of railings with adequately dimensioned plans and details. Show guard infill design to the extent it is not specified.
- Material sizes and types.
- Finishes: Galvanized for exteriors, primed for interiors. Location of each metal finish if more than one.
- Locations of removable railing sections, if any.
- Railing details at bends and returns, handrail bracket design and connections, and connections of railings to building structure.
- Infill panels type.

**DECORATIVE METAL RAILINGS**

- Locations and extent of railings, dimensioned and detailed.
- Material sizes and types.
- Location of each metal and finish if more than one.
- Locations of removable units if any.
- Details of guard construction and spacing of elements.
- Anchorage and connection details.
- Species and profiles of wood handrails if not specified.
- Locations of expansion joints if any.
- Railing details at bends and returns, handrail bracket design and connections, and connections of railings to building structure.
- Lengths or the number of fluorescent tubes for illuminated decorative railings if any. Indicate circuiting of illuminated railings on electrical Drawings.

**DECORATIVE GLASS RAILINGS**

- Locations and extent of railings, dimensioned and detailed.
- Material sizes and types. Coordinate terminology with the Specifications.
- Location of type of glazing and each metal and finish if more than one.
- Glass is either fully tempered or laminated (both are "safety glazing").
- Anchorage and connection details.
- Glazing details.
- Railing details at bends and returns, handrail bracket design and connections, and connections of railings to building structure.
- Lengths or the number of fluorescent tubes for illuminated decorative railings if any. Indicate circuiting of illuminated railings on electrical Drawings.

4 METALS - LADDERS AND STAIRS

**LADDERS**

- DO NOT detail ladders: Ladders have strict OSHA requirements so are pre-manufactured. O'Keeffe's. Is the basis of design product. Choose a ladder model - call for recommendations if unsure - and insert cut sheet in the drawings. <http://okeeffes.com/>

**STAIRS CODE COMPLIANCE**

- Landing and adjacent doors: Accessibility clearance.
- Plan, elevations, and sections: Widths.
- Projections on the width.
- Headroom clearances.
- Tread size and configuration.
- Handrails configuration and heights.
- Handrails extensions at top and bottom of stairs.
- Space under stairs is open.

**METAL PAN STAIRS (THESE ARE OUR STANDARD PRE-MANUFACTURED FIRE STAIRS)**

Basis of Design Manufacturer: American Stair.

- Extent of metal pan stairs. Include plans, elevations, and details. Indicate types of metal pan stairs if more than one type.
- Extent of railings. Include plans, elevations, and details. If railings are included with preassembled stairs and railing configuration is specified in this Section, do not show details that limit the manufacturer's construction methods unnecessarily.
- Profiles of treads and risers.
- Types of treads and landings if more than one type.
- Types of nosings. Include profiles and dimensions.
- Finishes: Primed for field painting for interiors; galvanized for exteriors.
- Supporting construction and methods of attachment.
- Elements of fire-resistive construction enclosing the stairs.

5 FLOOR FINISHES

**TRAFFIC COATINGS**

Basis of Design Manufacturer: Dex-O-Tex.

- Locations and extent of traffic coatings for each type.
- Details at deck-to-wall and deck-to-curb terminations.
- Details and flashings at drains and other waterways.
- Details of coating terminations at the edges of expansion and seismic joints.
- Details of preparation, treatment, joint sealants, and bond breaking at substrate joints and cracks.
- Details to control upward hydrostatic pressure of slabs-on-grade that receive traffic coatings, such as a vapor barrier and drainage aggregate.
- Layout of pavement markings.

WOOD ATHLETIC FLOORING

- Specify a manufacturer in the USA that distributes where the project is.
- Location and extent of each type of wood athletic flooring.
- Details of the interface of wood athletic flooring with supporting construction, and requirements for the assembly thicknesses. Detail slab depressions and other transitions to accommodate the height of floor assemblies; consider that systems of different manufacturers might have different heights.
- Locations and details of equipment anchors and inserts, floor outlets, and other interruptions of the floor surface.
- Layouts, widths, and colors of game lines and court markings to extent not specified. Coordinate with applicable athletic organization standards.
- Details of special logos.
- Pattern and orientation of wood flooring to extent not specified.
- Floor finishes factory-applied or field apply. Verify with manufacturer.
- Locations and details of expansion provisions. Include wall base, thresholds, and other trim.
- If space has bleachers:
 - Locations of areas requiring additional support or reinforcement, harder resilient pads, and so on, such as areas under telescoping bleachers.
 - Locations of areas requiring different grades of maple flooring, such as areas that are normally concealed from view under stacked portions of telescoping bleachers.

RESINOUS FLOORING (EPOXY)

Always talk to the manufacturer before selecting a product. Explain use.

Basis of Design Manufacturer is Rustoleum.

- Locations and extent of each type, material, texture, design, thickness, and color of resinous flooring. Show in finish schedules or on floor plans.
- Details at resinous flooring perimeters, terminations, and penetrations. Include integral cove base, floor drains, and expansion, isolation, and other joints.
- Details of special color patterns.
- Show wall base, integral or separate. Document color and height.

6 FIRE PROTECTION

**APPLIED FIREPROOFING**

- Locations and extent of fireproofing. **DO NOT indicate thickness unless YOU GET THEM FROM THE MANUFACTURER'S TECHNICAL REPRESENTATIVE.**
- Schedule or details indicating UL-design designations or designations of another testing and inspecting agency for each assembly if required for permitting.
- Locations of restrained beams if designated by the structural engineer.
- Finishes (texture and paint) required for fireproofing exposed to view are indicated - this includes exposed under deck fireproofing. **COORDINATE WITH FIREPROOFING MANUFACTURER.**
- Locations and types of auxiliary materials required.
- Details of fireproofing assemblies using metal lath and lathing accessories, if any.
- Details of construction that encloses or covers fireproofing. Coordinate with fireproofing thickness.
- Details of penetrations through fireproofing showing coordination with firestopping.

**INTUMESCENT FIREPROOFING**

MAKE ABSOLUTELY SURE YOU ARE WORKING WITH INTUMESCENT FIREPROOFING AND NOT INTUMESCENT PAINT". STICK WITH "ALBI" TO MAKE SURE YOU HAVE THE RIGHT PRODUCT.

- Locations and extent of fireproofing. **DO NOT indicate thickness unless YOU GET THEM FROM THE MANUFACTURER'S TECHNICAL REPRESENTATIVE.**
- Finishes required for fireproofing exposed to view are indicated. COORDINATE WITH FIREPROOFING MANUFACTURER.
- Schedule or details indicating UL-design designations or designations of another testing and inspecting agency for each assembly if required for permitting.
- Locations and types of auxiliary materials required.
- Locations and extent of mockups.

**PENETRATION FIRESTOPPING - THIS IS FOR PENETRATIONS (HOLES) IN RATED ASSEMBLIES**

- Most of the locations of fireproofing in the project are only known at the time of construction. A few we can identify at the time of documenting the project (for example, electrical boxes in rated partitions) and those are in the Detail library. At the time of construction, a licensed subcontractor will make an inventory of the penetrations and should submit a schedule with the selected assemblies for each case. We only acknowledge that the inventory was made and received by us; we DO NOT REVIEW IT for accuracy or completeness.
- If you are adding a detail because of permitting authority requires it, MAKE SURE that the assembly was tested by UL or another testing agency. If you cannot find one, call either TREMCO or HILTI.
- **NEVER NEVER NEVER** design your own firestopping assembly.

**JOINT FIRESTOPPING - THIS IS FOR JOINTS IN RATED ASSEMBLIES (EDGE OF SLAB, HEAD OF RATED PARTITIONS, FOR EXAMPLE**

- Locations and fire-resistance ratings of joint firestopping are identified. Coordinate with fire-resistance ratings of constructions in which fire-resistive joints are located. In architectural projects, **ALWAYS TALK TO THE MANUFACTURER (TREMCO OR HILTI)** and get the appropriate assembly from them. For interior partitions, if the detail is not in the Detail Library, look in the manufacturers website for tested assemblies or call the manufacturer.
- **DO NOT EVER DESIGN YOUR OWN ASSEMBLY.** If the manufacturer hasn't tested an assembly exactly like yours, they can give you an "engineering judgement".
- Make sure you work with actual joint widths. Coordinate with maximum widths allowed for selected fire-resistive joint systems.
- Details of perimeter fire-resistive joint systems. Show relationships to curtain-wall assemblies, spandrels, and adjoining floor assemblies.

7 JOINT COVERS

**INTERIOR EXPANSION JOINT COVER ASSEMBLIES**

- Locations and types of expansion joint cover assemblies. Include adequately dimensioned plans, sections, and details.
- Detail of joint corners.
- Joint size, movement capability, and the type of movement (thermal, wind sway, or seismic) for each expansion joint.
- Three-dimensional illustration showing where expansion joint cover assemblies make transition of planes or change direction, IF REQUIRED FOR CLARITY
- Material types.
- Types of finish materials to be applied to expansion joint cover assemblies, IF ANY.
- Continuity between floor, wall, and ceiling expansion joint cover assemblies.
- Locations and fire-resistance ratings of fire-rated expansion joint cover assemblies. Include UL designations.

8 OPENINGS

**ALL GLASS ENTRANCES (FRAMELESS GLASS DOORS)**

- Locations and extent of all-glass entrance systems.
- Type, color, and finish if more than one of each are required.
- Glass type and thickness.
- Dimensions and configuration requirements of all-glass systems, including swing (hand) or slide directions for all-glass entrance doors.
- Patch-,rail-,and accessory-fitting requirements.
- Locations and requirements of push-pull and exit devices and other hardware, to the extent not specified. Use a hardware schedule if requirements are not fully specified.
- Anchorage and overhead steel support requirements.
- Coordination with adjacent construction.

**SLIDING ALUMINUM-FRAMED GLASS DOORS**

- Sliding door schedule if the Project requires several sliding door sizes or performance levels.
- Extent of each type of sliding door. Show operating- and fixed-panel configurations using conventional symbols (e.g., XO, OX, OX-O, and XO-O, where "X" designates fixed panels and "O" designates operable panels).
- Door unit and operable panel sizes.
- Details of typical member profiles if critical to the design, or if variations are acceptable, minimum profile requirements. Include support for fenestration combinations.
- Height, dimensions, profiles, and details of thresholds.
- Hardware if more than one type is required.
- Indicate whether interior or exterior doors.

**OVERHEAD COILING DOORS**

- Door types, locations, and dimensions. I
- Locations of perforations, fenestrations, and vision panels in door slats.
- Details of head and jamb conditions and guide mounting.
- Door operation method. Indicate chain, crank, or electric motor operator and location of these devices.
- Type and location of emergency manual operation.
- Clearance dimensions for motors, cranks, chains, and maintenance service.
- Mounting details for doors and tracks.
- Locations for controls and operators.
- Locations and characteristics of electrical power to motors and controls. Coordinate with electrical Drawings.
- Fire Rated Doors: Related walls and construction for fire-rated doors must be equal or greater fire resistance than door.

DECORATIVE GLAZING

- Extent of each decorative-glass product. Use designations indicated in the Section Text for the different types of glass.
- Complete glazing details. Show glazing channels or rabbets and the kind of glazing method required for each, wet or dry.
- Mounting system if application other than glazing is required. Show mounting fittings, hardware, or other support. Coordinate with the Section in which items that decorative glass is built into are specified.
- Locations where safety glazing is required.
- Dimensions of each decorative-glass glazed opening. Show opening dimensions rather than actual sizes (width and height) of glass lites.
- Dimensions of each decorative-glass panel if not installed in a glazed opening.
- Glass-lite or panel-face or surface orientation. Consider using a numbering system. For example, corridor-side surface is No. 1; exposed surface is No. 2. Include pattern runs of multiple-unit applications.
- Orientations and directions in which patterns run and faces are placed.
- Locations of drill holes, notches, and other cutouts.
- Profiles and dimensions of exposed finished edges.

**ALL-GLASS ENTRANCES**

- Locations and extent of all-glass entrance systems.
- Color and finish as required.
- Glass designations.
- Dimensions and configuration requirements of all-glass systems, including swing (hand) or slide directions for all-glass entrance doors.
- Patch-, rail-, and accessory-fitting requirements.
- Locations and requirements of push-pull and exit devices and other hardware.
- Coordination with adjacent construction.

**MIRRORS**

- Location of each type of mirror.
- Size and shape of each mirror unit; sizes, shapes, and locations of cutouts and notches.
- All mirrors are safety glass.
- Method of mounting or support.

**FIRE RESISTANT GLAZING**

- Extent and location of each different fire-resistant glass product. Tags for each type of product and rating.
- Dimensions of assemblies. Show framing system or glass opening dimensions rather than actual sizes (width and height) of glass lites.
- Unless Contractor is allowed to use any glazing method approved by testing agencies that listed and labeled fire-resistant glazing products, show complete glazing details. Show glazing channels or rabbets and the kind of glazing method required for each.

9 PARTITIONS

**SHAFT WALLS**

- Extent of each gypsum board shaft wall assembly. Tag is the same throughout.
- Design designations of a qualified testing agency that has determined the fire-resistance rating of the assembly.
- Locations and thicknesses of gypsum board or other finish panels, and the number of layers applied to the room or shaft side of the assembly for each application.
- Control joints location or include in sheet note.
- Locations requiring sound attenuation blankets or other acoustical treatment. Indicate the location of STC-rated assemblies.
- Locations of sprayed fire-resistive materials. Show details of shaft wall assemblies terminating at surfaces protected by sprayed fire-resistive material.
- Locations of building structure and other penetrations in gypsum board shaft wall assemblies.
- For elevator hoistways, locations of door frames, electrical boxes, elevator call buttons, elevator floor indicators, and similar items. Indicate details of door head and jamb framing.
- Locations of fixtures and handrails requiring supplementary framing or blocking.

10 FURNISHINGS

**METAL LABORATORY CASEWORK**

COORDINATE THE FOLLOWING WITH OWNER'S REPRESENTATIVE. ASK FOR THE INFORMATION IN WRITING AND AS A LIST.

- Extent, types, and configuration of laboratory casework.
- Identify doors, drawers, countertops, shelves, and other components by conventional symbols and notes.
- Indicate basic dimensions of cabinets, tops, sinks, shelves, and accessories.
- Indicate configurations and basic dimensions of casework by the manufacturer's standard unit designations if desired.
- Indicate types of countertops, sinks, shelves, and accessories.
- If furniture is custom: Typical sections showing countertop widths, edge conditions, moldings, backsplash profiles, utility-space widths, reagent-shelf details, and upper-cabinet and shelf mounting heights.
- Mounting: Show or note metal reinforcements for anchoring laboratory casework and hanging strips, if used, for upper cabinets.
- Hardware, especially locks. Use conventional symbols and notes to identify hardware types and locations.
- Physical relationship of laboratory casework to equipment such as fume hoods, under-counter refrigerators, and such. Note if Owner provided or furnished.
- Cutouts for installing laboratory equipment.
- Locations and types of service fittings.

VISUAL DISPLAY UNITS

- Locations, types, and sizes of units. Show on both plans and elevations.
- Mounting heights if not specified.
- Extent of floor-to-ceiling visual display assemblies. Include locations of joints between panels.
Location and extent of rail support systems as well as type, size, and quantity of visual display panels to be suspended from them.
- Locations of joints within visual display board assemblies (where the total length exceeds the manufactured length), and joints between different types of visual display panels (e.g., between chalkboards and tackboards) within combination visual display assemblies.
- Schedule of units if there are many units of the same general type. Include sizes, types, mounting heights, and other pertinent data, such as colors and fabric types. If only one or two colors are required and they are easily described, include this information in the Specifications.
- Details of special units if required.
- Locations, sizes, and details of mockups if any.
- Details of accessories and methods of installation.
- Locations and descriptions of concealed structural support and wall reinforcing if any.
- Locations of electrical controls for power-operated units.

CUBICLE CURTAINS and TRACK

- Configuration of curtain tracks and their relationship to other tracks, sprinklers, lighting, and other surrounding work.
- Coordination of cubicle tracks with lighting layout to avoid dark areas created when curtains are drawn.
- Details of tracks, curtain tiebacks, and support structure.
- Track elevation and wall-bracket mounting for suspended track.
- Cubicle-curtain lengths.
- Ceiling supports for tracks. Show blocking where required.
- Schedule curtain manufacturer, types of hanging, fabric type, color and pattern.

FOLDING PANEL PARTITIONS

- Locations and extent of operable panel partitions.
- Locations of pass doors. Show the swing of each pass door.
- Reflected ceiling plan with panel stacking configuration(s), pocket and pocket-door dimensions (coordinated with largest anticipated panel width, thickness, clearances, and accessories), track, switches, and intersections.
- Elevations of operable panel partitions with dimensions. Indicate pass doors, chalkboards, markerboards, tackboards, chalk trays, exit signs, chair rails, or other partition-mounted accessories.
- Joint and seam locations and pattern matching of facings and work surfaces if any.
- Details of jambs, closures, trim, and intersections at ceilings, columns, posts, and permanent walls. Show or do a note for blocking and reinforcement at junction with adjacent construction.
- Details showing continuity of acoustical construction at walls and jambs in rooms formed by operable panel partitions. Include acoustical details of plenum sound closure, sound attenuating ducts, and floor sound barrier. See ASTM E 557 for recommended details.
- Continuity of fire-rated construction at ends and above operable fire-rated panel systems.
- Details of intersections of multiple operable panel partitions.
- Coordinate overhead support structure and mounting for track with structural.
- Seismic-restraint details for overhead support structure and attachment of track.
- Schedule of partition finishes.
- Locations of motor operators and controls if any, and details of mounting and support.
- Location of electric controls.

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- Locations of sprinklers required by some model codes for use with some finish-facing options.
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11 SPECIAL CONSTRUCTION



RADIATION PROTECTION

- Location(s), height(s), and extent of each type of shielding.
- Required thickness of lead, concrete, or other shielding.
- Required thickness of lead for doors, door frames, observation-window frames, penetration shielding, joint strips, and other items located in lead-lined assemblies unless specified in the Section Text.
- Lead equivalence for lead glass and lead glazing plastic unless specified in the Section Text.
- Details and sections showing construction of partitions, floors, and ceilings, especially the following:
- Joints between shielding units at corners and intersections
- Joints between shielding at columns, door and window frames, duct openings, electrical boxes, and piping
- Details of doors and window assemblies. Show door swing. Tag.
- Extent, details, and installation details of modular shielding partitions. Show components and component thicknesses. Indicate locations of vision panels.

END OF CHECK-LIST