

OFFICE STANDARDS

503.302 BUILDING COMPONENTS, INTERIORS, STAIRS

This document contains requirements for stair elements for an office building and is in alignment with the UniFormat II, Level 2 classification – C20. The document is subdivided into the following parts per the UniFormat II, Level 3 classifications.

UNIFORMAT II classification						MoP Document Number
Level 1 Major Elements		Level 2 Group Elements		Level 3 Individual Elements		
C	Interiors	C20	Stairs	C2010	Stair Construction	503.302
				C2020	Stair Finishes	

[ELEMENT C2010, STAIR CONSTRUCTION](#). Includes general design requirements for egress and monumental type stairs. Specific items of note include:

1. Construction
2. Materials

[ELEMENT C2020, STAIR FINISHES](#). Includes general design requirements for the interior finishes of egress and monumental type stairs. Specific items of note include:

1. Wall finishes
2. Tread and riser finishes
3. Stringer finishes
4. Submittal requirements

ELEMENT C2010, STAIR CONSTRUCTION

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PART 1 - GENERAL**1.01 OVERVIEW**

- A. Includes construction of stairs and associated railings.

PART 2 - DESIGN CRITERIA**2.01 EGRESS STAIRS**

- A. Typical egress-type stairs shall consist of concrete filled metal pan treads, steel risers, and structural channel stringers. Intermediate landings shall be reinforced concrete metal pan construction with steel channel supports connected to surrounding structure.
- B. Handrails at both sides of stairs shall be 1-1/4" diameter steel pipe. All welded connections shall be ground smooth before finishing.

2.02 MONUMENTAL STAIRS

- A. Where provided, coordinate layout and design of monumental stairs with Director of Design.

PART 3 - SPECIAL CONTRACT DOCUMENT REQUIREMENTS**3.01 GENERAL**

- A. In addition to incorporating all applicable life safety and building code requirements, provisions described within this Element shall be included within the Project Contract Documents.
- B. Indicate code required clearances in egress stairs at all landings. Indicate and dimension any structural elements, utilities or other obstructions within the stair to ensure they do not encroach on egress requirements.
- C. All standpipes shall be dimensioned (where occurs) and all valves and fittings shall be indicated and shown to comply with egress clearance requirements.
- D. Clearly indicate stair wall construction. Indicate fire-resistance ratings and indicate all thru-penetration assemblies.

PART 4 - PRODUCTS

4.01 GENERAL

A. Not Applicable.

End of C2010 – Stair Construction

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ELEMENT C2020 – STAIR FINISHES

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PART 1 - GENERAL**1.01 OVERVIEW**

- A. Includes finishes for treads, risers, landings, exposed structure, handrails and guardrails.
- B. Includes requirements stairs as part of the shell and core of an office building.

PART 2 - DESIGN CRITERIA**2.01 GENERAL**

- A. Designs should encourage and promote stair travel for all BJC facilities.
- B. Stair finishes will vary depending on the type of stair. The three basic stair types are as follows.
 - 1. Functional Egress Stair. The characteristics of the functional egress stair are that it meet the egress requirements for the building and that the stair is not expected to receive traffic during normal operations. The finishes are generally minimal.
 - 2. Decorative Egress Stair. The characteristics of the decorative egress stair are that the stairs are in most cases needed to meet the egress requirements for the building and that the stair may be expected to receive traffic during normal operations. The purpose of enhancing the design and finishes is to promote healthier lifestyles by encouraging stair travel. The level of finishes and design of the space are both subject to review and approval by BJC Director of Design.
 - 3. Monumental Stair. The characteristics of the monumental stair are that they may or may not be needed to satisfy egress requirements, but they are open or unenclosed, adjoining or within primary gathering spaces such as entrance lobbies, connect primary 2 levels, are typically within atrium type spaces, and as a focal point should receive the highest level of finishes for all the stair types. BJC Director of Design shall approve the use of, location, and design of monumental stairs. The level of finishes and design of the space shall be developed jointly with the Design Professional and BJC Director of Design and will be subject to review and approval.
- C. Coordinate with code requirements for acceptable finishes in required egress stairs.
- D. Coordinate with BJC Director of Design for stair location and finishes for decorative egress stairs and monumental stairs.

- E. At floor levels and stair landings, surfaces shall be slightly different color to create a visual cue for people with vision impairments.
- F. There shall be no exposed sharp metal edges in stairways.
- G. All handrails shall return to a wall, post or guardrail. Coordinate with AHJ for bottom of run handrail extension requirements.
- H. All exposed steel in stairs shall be primed and painted.
- I. Avoid surface mounted conduit. Where possible, conceal conduit within walls and ceiling construction.
- J. Where egress stairs continue below the level of exit discharge, a gate and sign approved by the AHJ shall be installed at the floor level before the start of the stair run. Gate shall be metal, primed and painted with bumpers to prevent metal to metal contact. Sign shall be shown in the contract documents, and noted as Owner furnished and installed.

2.02 FUNCTIONAL EGRESS STAIRS

- A. Stair finishes for this stair type are as follows:
 - 1. Floor levels and intermediate stair landings: Concrete, sealed. Slip resistant.
 - 2. Stair treads: Concrete, sealed with metal nosing. Slip resistant.
 - 3. Walls: Painted gypsum board. One color.
 - 4. Ceilings: none at underside of stair runs, landings and floor levels. Painted gypsum board ceiling only at top of stair shaft.
 - 5. Miscellaneous elements.
 - a. Stringers, guardrails, handrails, metal deck at underside of landings, underside of tread pan and riser, miscellaneous exposed steel surfaces shall be primed and painted. Handrails and guardrails shall be welded and all surfaces ground smooth before finishing.
 - 6. Lighting. Approved surface mounted fixtures, typical.
- B. Coordinate with entity specific requirements.

2.03 DECORATIVE EGRESS STAIRS

- A. Stair finishes for this stair type are as follows:
 - 1. Floor levels and intermediate stair landings: Tile carpet. Slip resistant.
 - 2. Stair treads: Sealed concrete, sheet carpet, vinyl treads, or vinyl tread/riser units. Slip resistant.
 - 3. Walls: Painted gypsum board. Accent paint.
 - 4. Ceilings: Coordinate with BJC Director of Design if gypsum board ceilings are required at underside of stair runs, landings and floor levels. Painted gypsum board ceiling at top of stair shaft.

5. Miscellaneous elements.
 - a. Stringers, guardrails, handrails, metal deck at underside of landings, underside of tread pan and riser, miscellaneous exposed metals shall be primed and painted. Handrails and guardrails shall be welded and all surfaces ground smooth before finishing.
 6. Lighting. Approved surface mounted fixtures, typical.
- B. Coordinate with entity specific requirements.

2.04 MONUMENTAL STAIRS

- A. Stair finishes for this stair type are as follows:
1. Floor levels and intermediate stair landings: Materials and finishes will vary depending on the design. Surfaces must be slip resistant.
 2. Stair treads: Materials and finishes will vary depending on the design. Surfaces must be slip resistant.
 3. Walls: If partially enclosed, painted gypsum board surfaces including accent paint and/or supergraphics as per the BJC Director of Design.
 4. Ceilings: Will vary based on the design.
 5. Miscellaneous elements. Exposed primed and painted steel is not a common finish in this stair type.
 - a. Stringers. Steel shall be covered or coated. Stainless steel, sealed wood, or other decorative materials shall be considered.
 - b. Guardrails. Decorative metal, glass, etc.
 - c. Handrails. Stainless steel, wood, etc.
 - d. Underside of landings, underside of tread pan and riser shall not be visible.
- B. Where provided, coordinate layout and design of monumental stairs with BJC Director of Design.

PART 3 - SPECIAL CONTRACT DOCUMENT REQUIREMENTS

3.01 GENERAL

- A. Submit interior material control samples to BJC Design Project Manager for review.

PART 4 - PRODUCTS

4.01 GENERAL

- A. Not Applicable.

End of C2020 – Stair Finishes

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RESPONSIBILITY MATRIX

The following matrix identifies those individuals, roles or departments responsible for maintaining the accuracy of the information and those responsible for providing input. Refer to Preface for detailed explanation.

	BJC HealthCare													Hospital/Entity				
	PD&C						Clinical Asset Management (CAM)	Risk Management	Real Estate	Ergonomics	Infection Prevention (IP)	Info Systems, Data, Telecom (IS)	Other:	Standards Review Committee	Facilities Engineering	Housekeeping	Security	Other:
	Corporate Architect	Corporate Engineer	Director of Planning	Director of Design	Director of Construction	Other:												
Primary Authorship	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Secondary Authorship	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DOCUMENT REVISION HISTORY

The following table indicates the date the document originated and any subsequent revisions.

503.302 – Interiors, Stairs		
Issue	Description of Issue	Prepared by
2018 v1	Original Issue	G. Zipfel