

# **PARKING STANDARDS**

## 603.303 BUILDING COMPONENTS, INTERIORS, FINISHES

This document contains requirements for finish elements for a parking structure and is in alignment with the UniFormat II, Level 2 classification -C30. The document is subdivided into the following parts per the UniFormat II, Level 3 classifications.

UNIFORMAT II classification							
Level 1 Major Elements		Gro	Level 2 oup Elements		Level 3 Individual Elements	Document Number	
С	Interiors	C30	Finishes	C3010	Wall Finishes		
				C3020	Floor Finishes	(02.202	
				C3025	Base Finishes	603.303	
				C3030	Ceiling Finishes		

<u>ELEMENT C3020, FLOOR FINISHES</u>. Includes general design requirements for interior flooring finishes. Specific items of note include:

- 1. Design requirements
- 2. Substrate requirements
- 3. Testing requirements
- 4. Moisture mitigation
- 5. Submittal requirements
- 6. Flooring material requirements
- 7. Installation requirements



# ELEMENT C3020 – FLOOR FINISHES

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## PART 1 - GENERAL

#### 1.01 OVERVIEW

- A. This document includes requirements for protecting parking slabs from the effects of moisture, salts, and other chlorides. This includes requirements for new parking structures and requirements for maintaining existing parking structures.
- B. This document includes requirements for penetrating sealers.
- C. This document includes requirements for crack repair.
- D. This document includes requirements for traffic bearing membranes.
- E. This document considers precast concrete and post-tensioned cast in place concrete parking structures.

#### PART 2 - DESIGN CRITERIA

#### 2.01 GENERAL

- A. Coordinate product selection and application requirements with a company experienced in providing waterproofing systems for parking garages.
- B. Three materials are described in this document for protecting slabs and each are designed for specific conditions. The requirements for waterproofing sealers, crack repair materials, and traffic bearing membranes are described herein. In all instances, evaluate the performance requirements, exposure, traffic conditions, etc. and provide membrane recommendations to BJC Corporate Architect for consideration.
- C. Verify coefficient of friction for waterproofing systems comply with all codes and regulations. Coordinate with the manufacturer for application of sand, quartz, aluminum oxide, or other similar broadcast materials to increase slip resistance as necessary.

## 2.02 WATERPROOFING SYSTEMS

A. Waterproofing sealers shall be penetrating type sealers containing silane, siloxane, and/or silicate. Sealers shall be vapor permeable in particular for slab-on-grade applications. Topical, non-penetrating sealers are not permitted as it may lead to slip resistance issues in wet conditions.



- 1. Provide waterproofing sealer on all exposed horizontal concrete surfaces that are not scheduled to receive traffic bearing membrane or not scheduled to receive a flood coat crack repair application.
- B. Crack repair (healer and sealer) products shall be either methacrylate or epoxy type.
  - 1. Larger cracks shall be properly cleaned and injected.
  - 2. Smaller cracks may be protected by flood coating the surface.
- C. Traffic bearing membranes shall be fluid-applied modified polyurethane, elastomeric type. The membrane shall be a two-coat application with the base layer being the waterproofing protection and the top layer being the wear layer. Evaluate the performance requirements, exposure, traffic conditions, etc. and provide membrane recommendations to BJC Corporate Architect for consideration.
  - 1. Do not install traffic bearing membranes on slab-on-grade conditions.
  - 2. Install traffic bearing membrane on the following elevated concrete decks:
    - a. Directly above interior rooms including but not limited to mechanical/electrical closets, elevator equipment, storage, garage office, lease spaces, and other habitable interior areas. Membrane shall extend a minimum of 10' horizontally beyond the footprint of the space it is protecting below.
    - b. At entire level of entrance and exit from the garage (where such areas are elevated slabs and not slab-on-grade). Membrane shall be installed for the entire elevated level associated with the entrance and exit.
    - c. On ramps with parking from the entrance level to the next level above.
    - d. On all speed ramps.
    - e. On distressed concrete slabs.

## 2.03 PARKING STRUTURE CONSIDERATIONS

- A. Post-Tensioned Cast-In-Place Concrete Structures. Waterproofing approach should consider the inherent movement in these structures and select products that can maintain waterproof qualities while permitting structural movement and flexibility of the system.
- B. Precast Concrete Structures. Waterproofing approach should consider the joint between the precast concrete tees as the weak point in the waterproofing system. Proper detailing of the joint and proper ongoing inspection and maintenance is imperative to maintaining a proper waterproof system.

# PART 3 - SPECIAL CONTRACT DOCUMENT REQUIREMENTS

## 3.01 GENERAL

A. Identify types and locations of water infiltration protection for slabs on plans.



- B. Where traffic bearing membranes are required, extend traffic bearing membranes and sealers for entire module width (wall to wall). Avoid creating a patchwork of disconnected or discontinuous membranes.
- C. Properly detail all precast joint conditions and indicate on plans.
- D. Properly detail building expansion joints and indicate on plans. Waterproofing approach should consider the inherent movement in these structures and select products that can maintain waterproof qualities while permitting structural movement.

## PART 4 - PRODUCTS

4.01 GENERAL

A. Coordinate with entity specific standards regarding acceptable manufacturers and products.

End of C3020 – Floor Finishes

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# MANUAL OF PRACTICE

## **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					() ()												
	Corporate Architect	Corporate Engineer	Director of Planning	Director of Design	Director of Construction	Other:	Clinical Asset Management (CAI	Risk Management	Real Estate	Ergonomics	Infection Prevention (IP)	Info Systems, Data, Telecom (IS	Other:	Standards Review Committee	Facilities Engineering	Housekeeping	Security	Other:
Primary Authorship	$\square$																	
Secondary Authorship		$\square$		$\square$	$\boxtimes$													

#### DOCUMENT REVISION HISTORY

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

603.303 – Interiors, Finishes							
Issue	Description of Issue	Prepared by					
2016 v1	Original Issue	G. Zipfel					
2018 v1	Misc. updates and renumbered to 603.303	G. Zipfel					