

# Element B | Shell

Superstructure

## B1010 Floor Construction

---

### PART 1 - GENERAL

---

#### 1.01 OVERVIEW

- A. Floor structural frame, bridge structural frame, slabs and decks as applicable.

---

### PART 2 - DESIGN CRITERIA

---

#### 2.01 GENERAL

- A. Building areas that require heavier floor loading for equipment, including equipment access pathways, or for future flexibility shall be arranged in increments of entire structural bays.
- B. Floor design live load criteria shall be in accordance with Facility Program requirements.
- C. Design floor elevation construction tolerance in accordance with Facility Program requirements.
- D. Design details for openings shall be coordinated with the particular type of waterstop and fire/smoke seal that must typically be provided at each penetration.

#### 2.02 FACILITIES WITH RESEARCH LABORATORIES

- A. For facilities with sensitive equipment, provide vibration control in the structure to equal a  $V_{rms}$  Velocity Curve of 2000  $\mu$  in/s. Provide stiffer system if required for specific equipment.
- B. Develop a planning grid that can adapt to laboratory, clinical, and vivarium functions.
- C. Develop a structural grid to be consistent with the planning grid.
- D. Shift structural grid approximately one (1) foot off planning grid in order to locate beams and girders out from under walls and benches wherever possible.
- E. In vivarium areas, slope floor to drain where drains are provided.

---

### PART 3 - SPECIAL CONTRACT DOCUMENT REQUIREMENTS

---

- A. Drawings shall note the requirement that the underside of all post-tensioned concrete beams be identified with the words "POST TENSIONED BEAM - DO NOT DRILL". The painted labeling is to be 3" high, red stenciled lettering, and be repeated at 20' intervals, maximum, for beams longer than 20'.
- B. Drawings shall note the requirement that the underside of all post-tensioned concrete. Identify slabs with the words "POST TENSIONED SLAB - DO NOT DRILL". Painted labeling is to be 3" high, red stenciled lettering, and placed in each structural bay at maximum 500 square feet intervals.

# Element B | Shell

Superstructure

## B1010 Floor Construction

### PART 4 - DOCUMENT REVISION HISTORY

Issue	Date	Revision Description	Revised By
	<b>20190301</b>	<b>Original Issuance</b>	
Rev. 1			
Rev. 2			
Rev. 3			
Rev. 4			
Rev. 5			

END OF ELEMENT B1010