

BUILDING PLANS EXAMINER CONTENT OUTLINE

EXAM ID: B3

- **70 multiple-choice questions**
- **3-1/2-hour time limit**
- **Open book**

01. GENERAL ADMINISTRATION 9%

0101. Project Administration 6%

Verify that plans, specifications and other project information is provided and is complete. Verify that the project is designed by approved persons when required, and has required approvals. Verify that design calculations are submitted in support of structural designs. Verify that alternative materials and methods of construction which are not specified by the building code are listed by an approved standard and approved by the building official. Verify that estimated project valuations are consistent with industry norms.

0102. Public Information and Legal 3%

For new and existing structures, answer questions about the need for permits and inspections including special inspections and structural observations, general code compliance of designs, procedures and materials.

02. BUILDING PLANNING 21%

0201. Building Location 1%

Verify from the site plan that the building or structure location is in compliance with the requirements of the local ordinances, fire separation regulations, fire access, and setbacks. Verifies that final grade will provide the required slope away from the footing or foundation wall. Verify finish floor elevation in flood-hazard areas for compliance with local and federal requirements.

0202. Allowable Increases 2%

Verify that allowable height and area increases are based on the open perimeter, and compliance of access to the open space. Verify compliance of allowable area modifications for automatic fire suppression and special occupancies.

0203. **Use and Occupancy Classification** **4%**
- Verify that use and occupancy classification, incidental use areas, accessory uses, and mixed occupancies are correct.
0204. **Special Detailed Requirements Based On Use and Occupancy** **2%**
- Verify that special use and occupancy classification is correct. Verify compliance of special provisions for atria, covered mall buildings, high-rise buildings, hazardous occupancies, stages, amusement buildings, and other occupancies or uses.
0205. **Type of Construction** **4%**
- Verify that the type of construction is correct for the type of occupancy. Verify that structural members, interior walls, floor/ceiling and roof/ceiling assemblies, roofs and stairways conform to type of construction requirements.
0206. **Height and Area Design** **3%**
- Verify that the actual and allowable height and floor area designs are correct.
0207. **Exterior Walls, Openings** **1%**
- Verify that exterior walls, openings, parapets and projections conform to the fire-resistive requirements for the type of construction, location on the site, and proximity to other buildings.
0208. **Interior Environment** **1%**
- Verifies compliance of minimum room dimensions and openings. Verify compliance of lighting, ventilation, exhaust, and minimum sanitation systems.
0209. **Safeguards During Construction** **1%**
- Assures that the precautions are taken for the safety at the construction site are specified in the construction documents.
0210. **Accessibility** **1%**
- Verify accessibility of facilities and building elements to physically disabled persons.

0211. Materials Specifications	1%
Verify that materials specifications comply with minimum code requirements and listing.	
03. FOOTINGS AND FOUNDATIONS	8%
0301. Footings and Foundations	3%
Verify that necessary reports are submitted of the building site's soil capacity and stability when required. Verify that footings are specified with correct size, setbacks and extend below the frost line. Verify that footing and foundation reinforcement meets minimum requirements.	
0302. Stepped Footings and Special Foundations	2%
Verify that stepped footings, piles, piers and special foundations are correctly specified. Verify that wood members are protected against insects and decay.	
0303. Foundation Walls	3%
Verify that foundation stem walls are correctly sized and have sufficient height above grade. Verify that foundation wall reinforcement, anchor bolts and fasteners are correct type, size, spacing and grade. Verify that foundation dampproofing and waterproofing is specified where required. Verify maximum unbalanced fill height.	
04. FLOOR CONSTRUCTION	4%
0401. Floor Systems	3%
Verify that floor system spans, bearing and connections comply with minimum code requirements. Verify that materials are protected against insects and decay where required. Verify that subflooring and decking has required thickness, span and grade and meets installation specifications. Verify compliance of floor design. Verify that crawlspaces have required clearance, ventilation, insulation, screening and access openings.	
0402. Concrete Slabs and Floor Systems	1%
Verify that concrete slabs and floor systems are designed in compliance with standards and material characteristics for specified exposure conditions.	

05. WALL CONSTRUCTION AND COVERINGS	12%
0501. Wood Wall Systems	2%
Verify compliance of wall systems for proper spans, spacing, bearing and connections. Verify that pre-engineered wall systems are specified in accordance with their listing and manufacturer's specifications. Verify that wood members are protected against insects and decay where required.	
0502. Steel Framing Systems	1%
Verify steel wall system spans, spacing, bearing and connections. Verify that pre-engineered steel wall systems are in accordance with their listing and manufacturer's specifications.	
0503. Masonry Wall Systems	3%
Verify compliance of masonry grouting, bonding, mortar type, height, size, lintels, reinforcement and distance between lateral supports for masonry walls.	
0504. Concrete Wall Systems	1%
Verify compliance of height, size, attachments, bracing and distance between lateral supports, and reinforcement for concrete wall systems.	
0505. Prefabricated Wall Systems	1%
Verify that prefabricated wall systems are in accordance with their listing and manufacturer's instructions.	
0506. Exterior Wall Coverings	2%
Verify that exterior veneers and siding have correct anchorage, support and backing. Verify that a weather-resistant barrier is correctly specified for all walls and around all wall openings. Verify that exterior sheathing materials are correctly sized and specified. Verify that plaster, stucco and metal lath have correct thickness and fasteners.	
0507. Interior Wall Coverings	2%
Verify that wall and ceiling coverings are correct type and thickness, and correctly supported and fastened, and meet minimum sanitation requirements.	

06.	ROOF/CEILING CONSTRUCTION	4%
	0601. Roof/Ceiling Assemblies	3%
	Verify compliance of roof / ceiling construction for span, grade, type, connections and bearing. Verify that trusses are specified in accordance with their listing and manufacturer's specifications. Verify compliance of roof access and roof top structures. Verify that roof/ceiling insulation is of allowable materials, and is correctly specified. Verify that vapor and moisture barriers are correctly specified. Verify ventilation, screens and access of attic and ceiling area construction.	
	0602. Roof Coverings	1%
	Verify correct classification of roof coverings, roof slope, installation, flashings and details, and method of roof drainage.	
07.	PUBLIC SAFETY AND SPECIAL CONSTRUCTION	42%
	0701. Means of Egress Systems	5%
	Verify general means of egress requirements, exit access, exits and exit discharge. Verify compliance of public way, public use areas, and the use of public property. Verify emergency escape and rescue requirements.	
	0702. Number, Width and Arrangements of Exits	4%
	Verify that the occupancy load calculations are correct. Verify that the correct number of exits and required egress width are provided. Verify that arrangement of exits conform to requirements for separation, travel distances and intervening rooms. Verify compliance of corridor arrangement and dead ends.	
	0703. Exit Stairways and Ramps	4%
	Verify that stairways and ramps have correct width, rise, run, slope, landings, headroom and height. Verify correct escape illumination, signage, handrails, guards and other requirements.	
	0704. Exit Doors and Egress Windows	3%
	Verify that exit doors have the correct direction of swing, size, and type of hardware. Verify that windows intended for use as emergency egress have correct clear opening areas, width and heights.	

0705. **Protected Exitways** **3%**
- Verify that corridors, exit passageways, stairway enclosures, horizontal exits, exit balconies and exit courts are provided where required and have the correct fire-protection.
0706. **Special Exiting** **1%**
- Verify correct number and width of aisles and correct seat spacing. Verify requirements for grandstands, bleachers and specific occupancies and uses.
0707. **Fire Alarm and Extinguishing Systems** **2%**
- Determine when fire alarm, sprinkler and standpipe systems are required; verify compliance of fire suppression systems.
0708. **Area and Occupancy Separations** **4%**
- Verify that area separation and occupancy separation walls and floor/ceiling assemblies are located where required and have correct fire-resistance.
0709. **Fire-Resistive Construction** **4%**
- Verify that the materials used for structural members, walls, floor/ceiling and roof/ceiling assemblies and shaft enclosures comply with requirements for fire-resistive protection. Verify that fire resistance rated construction and location is in compliance with the code and tested assembly requirements.
0710. **Heat and Smoke Protection** **2%**
- Verify that heat, smoke detection, smoke barriers and control systems are provided where required, and are correctly powered and listed. Verify that curtain boards, smoke and heat vents are correctly specified.
0711. **Interior Finishes** **2%**
- Verify that interior finishes meet required Flame-spread and smoke developed classifications based on location, use and occupancy classifications, and are correctly supported.
0712. **Safety Glazing** **1%**
- Verify that safety glazing is specified where required.

0713. Opening Protectives, Penetrations and Joint Systems **3%**

Verify compliance of opening protectives, penetrations and joint systems in fire rated assemblies. Verify that fire blocking and draft stopping is specified where required.

0714. Miscellaneous Construction **1%**

Verify that exterior stairs, ramps, porches, decks and balconies which are open to the weather support designed loads, are of suitable materials, and have required slope and width, tread, riser, headroom, guards and handrail dimensions.

0715. Building Services and Special Construction **2%**

Verify compliance of existing structures, membrane structures, temporary structures, pedestrian walkways, tunnels, awnings and canopies, marquees, signs, towers, antennas, elevators and conveyance systems. Verify seismic restraint, high-wind and snow-load design requirements. Verify that elevator lobbies, cars and hoistways are correctly specified. Verify that elevator shafts are properly vented.

0716. Fireplaces and Chimneys **1%**

Verify that fireplaces, flues and chimneys are correctly designed and have required clearances from combustible construction.