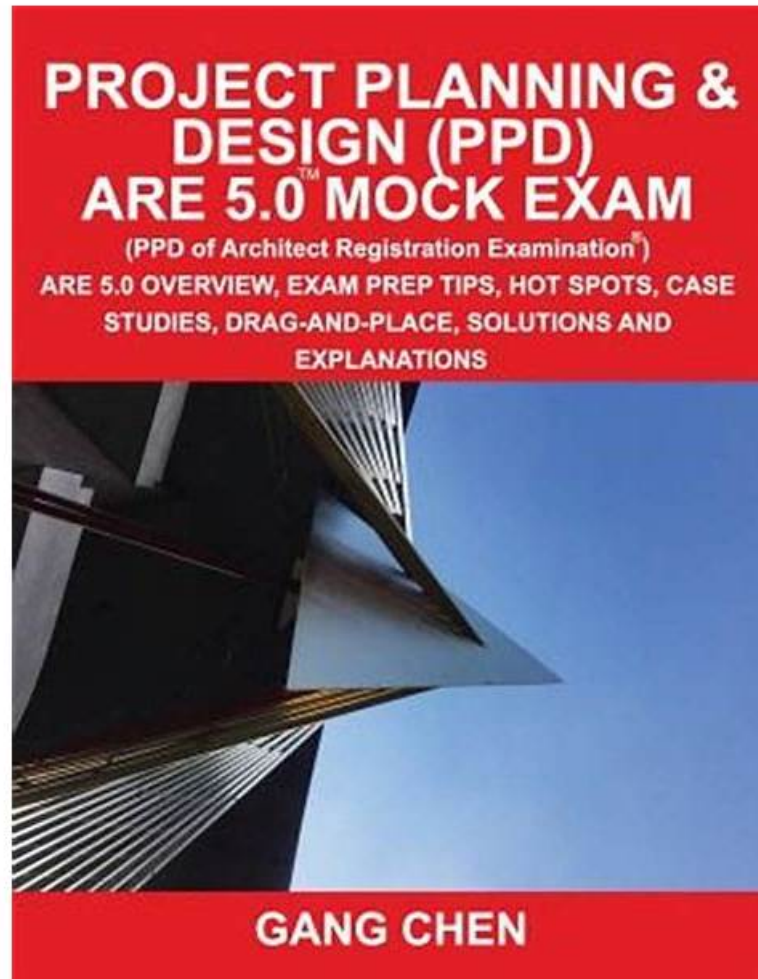


Project-Planning-Design Studienmaterialien: ARE 5.0 Project Planning & Design (PPD) & Project-Planning-Design Zertifizierungstraining



Es ist eine weise Wahl, sich an der NCARB Project-Planning-Design Zertifizierungsprüfung zu beteiligen. Mit dem NCARB Project-Planning-Design Zertifikat werden Ihr Gehalt, Ihre Stelle und auch Ihre Lebensverhältnisse verbessert werden. Es ist doch nicht so einfach, die NCARB Project-Planning-Design Zertifizierungsprüfung zu bestehen. Sie nehmen viel Zeit und Energie in Anspruch, um Ihre Fachkenntnisse zu konsolidieren. DeutschPrüfung ist eine spezielle Schulungswebsite, die Schulungsprogramme zur NCARB Project-Planning-Design (ARE 5.0 Project Planning & Design (PPD)) Zertifizierungsprüfung bearbeiten. Sie können zuerst die Demo zur NCARB Project-Planning-Design Zertifizierungsprüfung im Internet als Probe kostenlos herunterladen, so dass Sie die Glaubwürdigkeit unserer Produkte testen können. Normalerweise werden Sie nach dem Probieren unserer Produkte Vertrauen in unsere Produkte haben.

NCARB Project-Planning-Design Prüfungsplan:

Thema	Einzelheiten
Thema 1	• Environmental Conditions & Context: This section of the exam measures skills of architectural designers and covers how to use site analysis information to determine building placement and environmental planning decisions. It emphasizes applying sustainable principles and considering the neighborhood context to guide project design.

Thema 2	• Project Integration of Program & Systems: This section of the exam measures skills of project architects and focuses on integrating decisions about environmental conditions, codes, and building systems into one cohesive project design. It highlights how to configure the building and incorporate both program requirements and contextual conditions in a unified design approach.
Thema 3	• Codes & Regulations: This section of the exam measures the skills of project architects and focuses on applying zoning laws, environmental rules, and building codes during the planning stage. Candidates are tested on how to integrate multiple regulatory requirements into a project's design effectively.
Thema 4	• Building Systems, Materials, & Assemblies: This section of the exam measures skills of architectural designers and covers the understanding of building systems such as mechanical, electrical, and plumbing, along with structural and specialty systems. It also involves selecting appropriate materials and assemblies to align with program needs, budgets, and regulations.
Thema 5	• Project Costs & Budgeting: This section of the exam measures skills of architectural designers and assesses the ability to evaluate design alternatives based on program goals, perform cost evaluations, and manage cost considerations throughout the design process.

>> Project-Planning-Design Testing Engine <<

Project-Planning-Design Antworten & Project-Planning-Design Prüfungsaufgaben

Möchten Sie die nur mit die Hälfte Zeit und Energie bestehen? Dann wählen Sie DeutschPrüfung. Nach mehrjährigen Bemühungen ist die Bestehensquote von der Webseite DeutschPrüfung in der ganzen Welt am höchsten. Wenn Sie die Genauigkeit der Fragenkataloge zur NCARB Project-Planning-Design Zertifizierungsprüfung aus DeutschPrüfung prüfen möchten, können Sie ein paar Exam Fragen auf der Webseite DeutschPrüfung herunterladen, damit bestätigen Sie Ihre Wahl.

NCARB ARE 5.0 Project Planning & Design (PPD) Project-Planning-Design Prüfungsfragen mit Lösungen (Q93-Q98):

93. Frage

An architect is designing a multistory student housing project to be built of light wood framing. The following criteria must be met:

Minimize the floor assembly thickness

Maximize ceiling height

No individual HVAC room controls

No exposed ductwork

Which HVAC system should be selected for this project?

- **A. Four-pipe fan-coil system**
- B. Packaged terminal units (PTAC)
- C. Variable air volume (VAV)

Antwort: A

Begründung:

For multistory residential buildings such as student housing with light wood framing, HVAC system selection must balance space constraints and occupant comfort. The requirement to minimize floor thickness and maximize ceiling height typically rules out bulky ductwork or ceiling-mounted systems.

Packaged Terminal Air Conditioners (PTACs) provide individual room control and require wall penetrations, conflicting with the "no individual HVAC room controls" and likely leading to more complex maintenance.

Variable Air Volume (VAV) systems typically require extensive ductwork and ceiling space, contradicting the goal to minimize floor thickness and eliminate exposed ductwork.

The Four-pipe fan-coil system is an efficient choice for this application: it uses small fan coil units within the ceiling or wall cavities with chilled and hot water supply pipes running vertically. This system minimizes the thickness of mechanical floors and allows centralized control rather than individual room controls. The fan coil units can be concealed, addressing the "no exposed ductwork"

criterion.

This approach aligns with NCARB's guidance on HVAC system selection for multifamily and residential occupancies where ceiling height and floor thickness are critical constraints, and centralized control systems are preferred for ease of maintenance and energy management.

References:

ARE 5.0 PPD Study Guide - Building Systems and Assemblies

The Architect's Handbook of Professional Practice, 15th Edition - Mechanical Systems NCARB Guidelines on HVAC Systems for Residential Buildings

94. Frage

An elementary school requires a renovation, selective demolition, and a major addition in order to accommodate a growing student population. An architectural firm has prepared schematic design plans incorporating the school's increased programmatic needs, including an enlarged library, cafeteria, and gymnasium; a secure courtyard; and additional space for administrative offices and classrooms. The main entrance was relocated in order to improve the traffic and pedestrian flow at the beginning and end of the school day, and additional parking was provided to comply with current zoning requirements.

The existing single-story masonry building was built in 1950. Two small additions were built later: the north addition will be kept and repurposed, but the south addition will be demolished. The building contains asbestos and lead in roof soffits, floor tiles, pipe insulation, and window paint. All existing mechanical systems need to be replaced; new systems have not been selected.

Considerations for the renovation include:

*The relocated front entrance must be easily recognizable, highly visible, and secure.

*Interior and exterior materials need to be durable and maintainable in order to withstand frequent student abuse, but also economical due to strict budget limitations.

*Good indoor air quality and increased energy efficiency are priorities for the selection of mechanical equipment.

After completion, the entire school should look uniform, without a distinctive difference between the existing building and new addition.

Building information:

*Construction Type is II-B.

The following resources are available for your reference:

*Existing Plans, including site and floor plans

*Proposed Plans, including site and floor plans

*Cost Analysis

*Zoning Ordinance Excerpts, for off-street parking requirements

*IBC Excerpts, showing relevant code sections

*ADA Standards Excerpts, showing relevant sections from the ADA Standards for Accessible Design An elementary school library has an occupancy load of 150.

What is the minimum clear opening width required?

- A. 36"
- B. 30"
- C. 32"

Antwort: A

Begründung:

Comprehensive and Detailed Explanation From Exact Extract:

According to ADA Standards and IBC egress requirements for an occupancy load of 150, the minimum clear opening width for doors must be at least 36 inches to accommodate the expected occupant flow and provide accessible egress.

30" or 32" openings are too narrow for this occupancy load.

Ensuring the minimum door width meets code is essential for safe and accessible design.

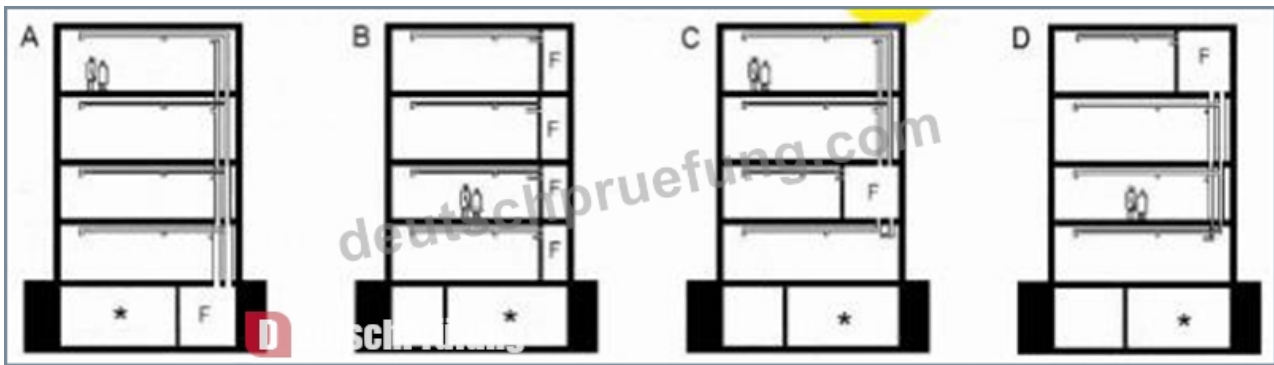
References:

ADA Standards for Accessible Design

IBC Chapter 10 - Means of Egress

ARE 5.0 PPD - Codes and Regulations

95. Frage



Refer to the exhibit (four building sections with fan locations (F) and boiler/chiller equipment (*)).

Which of the fan locations (F) indicated for a four-story office building would allow the most efficient provision for weekend cooling?

- A. A
- B. D
- C. B
- **D. C**

Antwort: D

Begründung:

Comprehensive and Detailed Explanation From Exact Extract:

For efficient weekend cooling in a multi-story office building, placing fan equipment centrally between the conditioned spaces reduces duct lengths, allows better zoning, and minimizes energy use.

In option C, fans are located mid-building between office floors and other uses, allowing for more efficient distribution and individual zone control.

Other options (A, B, D) place fans either all at one end or stacked at one side, increasing duct runs and reducing flexibility in zoning, which can lead to inefficiency during reduced loads like weekends.

NCARB PPD guidelines emphasize mechanical system design that optimizes equipment placement to balance energy efficiency, occupant comfort, and system flexibility.

References:

ARE 5.0 PPD - Building Systems and Assemblies, HVAC System Design

The Architect's Handbook of Professional Practice, 15th Edition - Mechanical Equipment Layout

96. Frage

An architect is designing an office building on an infill lot. The client wants to look at site design strategies to prevent erosion and collection of excess surface water resulting from the new construction.

Which one of the following strategies directly addresses the client's requirement?

- A. Install a catchment area
- **B. Install pervious paving**
- C. Install horizontal overhangs

Antwort: B

Begründung:

Comprehensive and Detailed Explanation From Exact Extract:

Pervious paving allows water to infiltrate through surfaces, reducing runoff and preventing erosion and surface water accumulation on site. It is an effective stormwater management technique suited to infill sites where space is limited.

A catchment area (B) collects water but does not prevent erosion or surface water by itself.

Horizontal overhangs (C) provide shading and weather protection but do not affect surface water runoff.

NCARB PPD guidelines emphasize permeable surfaces as key components of sustainable site design to manage stormwater onsite.

References:

ARE 5.0 PPD - Environmental Conditions and Context, Site and Stormwater Design The Architect's Handbook of Professional Practice, 15th Edition - Sustainable Site Design

97. Frage

An architect has just received client approval of the Schematic Design documents for a three-story, outpatient medical clinic. The clinic is located within a mixed-use development governed by a City-approved Planned Development (PD) document. The medical clinic design utilizes standardized departmental layouts and includes outpatient clinics, as well as treatment spaces, administrative spaces and public/lobby spaces.

The site needs to accommodate four different vehicular traffic flows: patient traffic, staff traffic, service and delivery traffic, and emergency services traffic. In addition, a pedestrian plaza must connect to the mixed-use development sidewalks. The plaza must provide space for bicycle parking and will serve as the future bus stop.

The site design addresses several challenges related to building orientation. The southeast facade, with excellent visibility from the highway, is the location of all service equipment. The building entrance faces northwest, convenient to the parking but not visible from the highway.

The client believes future patient volumes will outgrow the clinic. The PD document allows for a planned Phase 2 development on the adjacent vacant site to the southwest. Phase 2 would include a second building (2 story, 80,000 BGSF) and/or a parking deck. Other considerations for the project include:

- * Protected tree requirements are defined in the PD document.
- * Easy pedestrian access must be provided from Sycamore Boulevard.
- * All required parking for the clinic must be accommodated on site.
- * Programmed area includes 109,450 Departmental Gross Square Feet (DGSF) / 130,184 Building Gross Square Feet (BGSF).
- * Exterior material percentages are dictated by the PD document and shall not exceed specific percentages for Primary and Secondary Finishes.
- * All service equipment needs to be screened; see PD document for restrictions.
- * Signage opportunities are important to the client.
- * Acoustical privacy is a concern of the healthcare system.

The following resources are available for your reference:

- * Drawings, including a perspective, plans, and exterior elevations
 - * Building Program, including client's departmental program and detailed program for Treatment 01 (Infusion)
 - * Exterior Material Cost Comparisons
 - * Planned Development Document
 - * IBC Excerpts, showing relevant code sections
 - * ADA Excerpts, showing relevant sections from the ADA Standards for Accessible Design
- The client proposes massing changes to the current design as well as programming for future phases.

Which of the following scenarios is permitted?

- A. Combine the two phases into a single six-story building.
- **B. Design an additional parking lot for use by local businesses after office hours.**
- C. Program the next phase on the adjacent vacant site for inpatient services.

Antwort: B

Begründung:

Comprehensive and Detailed Explanation From Exact Extract:

Under the Planned Development (PD) document constraints and the mixed-use setting:

Option C is permitted: Designing additional parking that can be shared with local businesses after office hours promotes efficient land use and aligns with mixed-use development goals. Shared parking arrangements are often encouraged in PD documents to maximize utilization and reduce overall parking demand.

Option A is likely restricted as the PD document specifically governs use types and programming; inpatient services may not be allowed or permitted without separate approvals.

Option B combining two phases into a single taller building would typically violate PD restrictions on building height, massing, or gross floor area, unless explicitly allowed.

Therefore, only option C is permitted without additional regulatory hurdles.

References:

Planned Development Document

ARE 5.0 PPD - Project Integration of Program and Systems

The Architect's Handbook of Professional Practice, 15th Edition - Zoning and Land Use Controls

98. Frage

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Bemühen Sie sich noch um die NCARB Project-Planning-Design Zertifizierungsprüfung? Wollen Sie schneller Ihren Traum verwirklichen? Bitte wählen Sie die Project-Planning-Design Schulungsmaterialien von DeutschPrüfung. Wenn Sie DeutschPrüfung wählen, ist es kein Traum mehr, das NCARB Project-Planning-Design Zertifikat zu erhalten.

Project-Planning-Design Antworten: <https://www.deutschpruefung.com/Project-Planning-Design-deutsch-pruefungsfragen.html>

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