



Design Standards for Federal Public Buildings

Course Number: ST-02-809

PDH: 20

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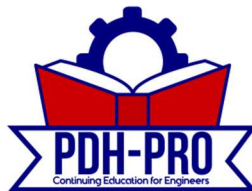
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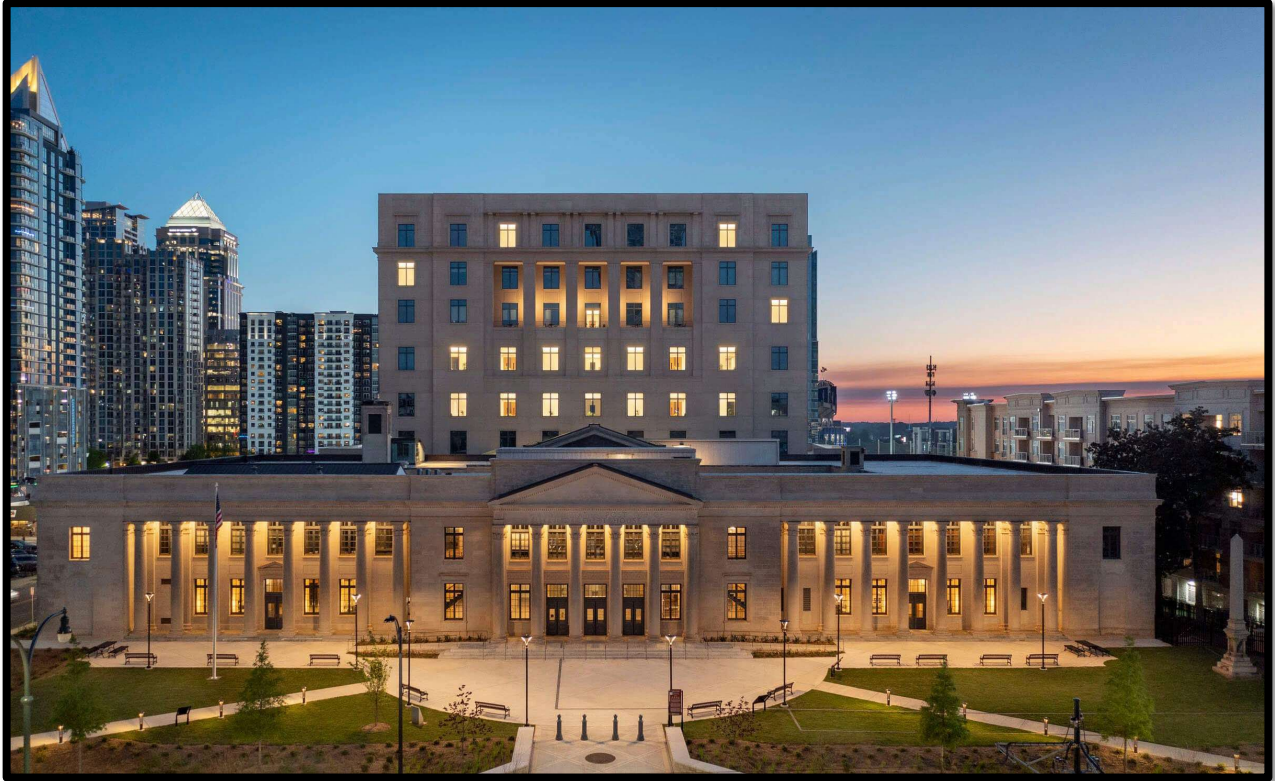
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If you have any questions or technical difficulties, please call (508) 298-4787 or email us at admin@PDH Pro.com.



UPDATING P100

P100 is on a three-year update schedule which closely aligns with other codes and standards. Addendums may be issued in the interim to reflect new legislation, executive orders, or significant updates. A GSA Steering Committee is responsible for updating requirements and working with industry on new developments. The latest updates, guidance, and training are available at www.gsa.gov/p100. Change proposals are accepted through this [form](#). Proposals will be reviewed for the next update or addendum. Questions about P100 or the update process can be directed to p100@gsa.gov.



*Figure 3: Jonas Federal Building and U.S. Courthouse
Charlotte, NC*



The design team must review and show compliance with the building program and performance at each stage of the project, as required in Appendix A. This ensures that the requirements of the program, P100, and relevant codes and standards have been met and to guard against unplanned expansion of the program because of design and engineering choices.

All prospectus-level projects are required to follow the [Design Excellence Policies and Procedures](#)

1.1 PURPOSE OF THE FACILITIES STANDARDS

P100 is a mandatory standard. It is not a guideline, textbook, handbook, training manual, nor substitute for technical competence. P100 represents the current state of practice in designing facilities to meet GSA's commitments, maximize the efficiency of business processes, and comply with the requirements of law.

P100 must be used in conjunction with the governing standards referenced in this document, as well as the building program for each project. If conflicts exist between the facilities standards and a specific program or project requirements, contact the PBS Office of Architecture and Engineering for resolution.

Since 2014, P100 has moved to more performance-based requirements. A large portion of the standard now specifies levels of performance, allowing a project team and GSA's other professional partners to identify and implement the best strategies to meet those goals.

Design Excellence Policies and Procedures identifies the Regional Project Management Team (RPMT) as the primary contact for design and construction projects. The RPMT is made up of the regional project manager, the contracting officer, and the regional chief architect. The RPMT have many responsibilities related to the implementation of P100 and are referenced throughout for resolutions and access to certain information.

In general, four levels of performance are defined throughout P100 in matrices. It is the RPMT's responsibility to use the [P100 Performance Matrix](#) to document the "baseline" performance for their project. Different building types may have a higher starting threshold, and the Matrix attempts to identify these cases, but the program specific guides listed in P100 provide the final requirements. Each project may implement any combination of performance levels to prioritize opportunities that stem from climate, site, program, mandates, and other conditions. Performance goals must be validated at various phases of design with Design Excellence and through construction with total building commissioning.

Links to documents, websites, and other information are provided throughout P100 for convenience. It is the design team's responsibility to use the correct reference or information at the time of project solicitation.

1.2 APPLICATION OF P100

Once issued, P100 is required and must be listed in the initial contract for a project advertised after the issuance date. A new P100 is not retroactive to contracts that are already underway or to existing facilities, equipment, structures, or installations that have no projects.



P100 applies regardless of the funding source. Thus, P100 applies equally to projects funded through BA51 New Construction, BA54 Minor Repairs and Alterations, and BA55 Major Repairs and Alterations, BA61 Operating Funds (including work performed under operations and maintenance contracts), BA63 Energy Rebates, BA64 Historic Preservation, as well as customer-funded projects through BA80 Reimbursable Work Authorization and privately financed projects such as an Energy Savings Performance Contract. This document also applies to certain BA53 lease construction facilities.

1.2.1 REPAIRS AND ALTERATIONS

A repair is to restore an item to good working order or safe condition, to fix, or to improve a damaged condition. An alteration is any work that adds, removes, or replaces items to the building, systems, or equipment. Compliance with P100 is required for repairs including “in kind” and alterations to the extent the work is identified in the approved and funded project scope of work. A waiver is required for any deviations from P100.

Abandonment-in-place of unused elements is not permitted within the scoped work area of a repair or alteration. Further removal may be required by code.

1.2.2 LEASE CONSTRUCTION

Lease construction is new construction of a facility for Government use required by GSA’s formal Request for Lease Proposals (RLP).

P100 must be included where GSA's formal Request for Lease Proposal (RLP) has an option for GSA to purchase the building at a future date. The requirements of P100 will be included in the RLP on a case-by-case basis, in consultation with the Chief Architect. Exclusion of P100 from lease construction facilities where GSA's formal RLP has an option for GSA to purchase the building requires Chief Architect written approval. In addition to the GSA-adopted nationally recognized codes and requirements, state and local government codes apply. If a conflict exists between applicable state and local government codes and the GSA requirements, the developer must identify these conflicts in writing and request a resolution from the GSA contracting officer.

1.2.3 TENANT IMPROVEMENTS

Tenant Improvements (TI) are the customized alterations GSA makes to configure the space for the needs of the tenant.

The GSA PBS [Pricing Desk Guide \(PDG\)](#) defines the policies used by PBS to price real estate and related services to federal customer agencies.

PDG sets policy for the entire PBS owned and leased portfolio, provides pricing direction for both cases and special circumstances. It is designed to guide PBS employees in the performance of their work and serve as a resource for Customer Agencies seeking a more thorough understanding of the PBS Pricing Policy and its application.

Utilize the latest PDG edition at the time of project solicitation. Coordinate Tenant Improvement alterations and renovations with the PBS P-120 cost and schedule management requirements.



1.2.4 DEVIATIONS FROM P100

1.2.4.1 WAIVERS

Deviations from P100 require an approved waiver except as noted below. Project teams seeking relief from requirements must establish the technical hardships that make compliance impossible. Alternatively, requests for waivers may demonstrate that non-compliance is life cycle cost beneficial. Budget and/or time constraints are not technical hardships and will not be considered as they do not ensure the life cycle cost benefits of GSA's real estate investments. Waivers must be requested in writing by the regional commissioner or designee and approved by the Office of Architecture and Engineering before the final concept submission is presented. The following deviations utilize other processes:

- Waivers for addressing the requirements in Chapter 7, Fire Protection, are not permitted. However, alternative, and equivalent compliance requests for deviations from the requirements in Chapter 7 require an approved alternative and/or equivalent compliance solution in accordance with the requirements in Chapter 1 Alternative and Equivalent Compliance. Such requests for alternative and/or equivalent compliance must also include a concurrence signature from the regional Fire Protection Program Office and follow a similar approval process as the waiver process.
- Waivers or modifications from the Architectural Barriers Act Accessibility Standard (ABAAS) must be approved by the Commissioner of PBS. The ABAAS process is explained in the "[National Accessibility Program—Standards, Policies and Procedures](#)"
- Metric Waivers—See [GSA Metric Order](#), GSA Metric Program, for guidance.

1.2.4.2 ALTERNATIVE AND EQUIVALENT COMPLIANCE

GSA encourages the development of new and innovative building systems. The provisions of this document are not intended to prohibit the use of alternative systems, methods, or devices not specifically addressed by P100. The use of alternative systems, methods, or devices is permitted to meet the intent of the prescribed requirements in P100 were approved as being equivalent. All technical documentation for alternatives must be submitted and approved by the regional program office prior to final concept submission. Proposed alternatives must be equivalent or superior to P100 requirements concerning quality, cost, strength, effectiveness, fire resistance, durability, efficiency, and safety. All proposed alternatives must be accomplished within the project budget and schedule. The approved alternative will be recognized as being an equivalent design solution and compliant with P100. The use of an alternative and equivalent compliance method is not to be considered a waiver.

1.2.4.3 NEWER VERSIONS OF P100

Project teams may choose to apply a newer version of P100 to ongoing projects. If the design team determines benefits to the project from the newer version, they must document potential changes for the appropriate sections of P100 to submit to the RPMT. If approved, a copy of the documentation must be submitted to the central office P100 Waiver Program Manager.

1.3 FEDERAL LAWS, REGULATIONS, AND STANDARDS

The following are federal laws, regulations, and standards applicable to all projects.



1.3.1 PUBLIC BUILDINGS AMENDMENTS OF 1988

The Public Buildings Amendments of 1988, 40 USC §3312, require that each building constructed or altered by GSA, or any other federal agency must, to the maximum extent feasible, comply with one of the nationally recognized model building codes and with other applicable nationally recognized codes. These projects must consider local zoning laws and other local requirements. It also provides for state and local government consultation, review, and inspection and requires the agency to give due consideration to state and local government recommendations.

1.3.2 ENVIRONMENTAL PROTECTION

In addition to building-specific codes, GSA projects must comply with applicable federal, state, and local environmental, energy efficiency, and greenhouse gas emission laws, regulations, and executive orders if more stringent than P100. Project teams are advised to collaborate with the GSA regional environmental coordinator and the Office of Architecture and Engineering for assistance during the design process.

Among the key mandates is the National Environmental Policy Act (NEPA). NEPA requires that federal agencies consider and document the environmental impacts of proposed actions as part of their decision process. Although NEPA activity often takes place prior to design start, it is vital that project teams are aware of any assertions or commitments GSA made during the NEPA process, to ensure that these are adhered to during design. Depending on the outcome of the NEPA process, relevant commitments, or assertions as to the scope, strategy or scale of the project may be found in a Finding of No Significant Impact (FONSI), a Record of Decision (ROD), or even a Categorical Exclusion (CATEX). The project team must be aware of these legally binding commitments and must address them, as appropriate, in the project design.

1.3.3 ENERGY AND SUSTAINABLE DESIGN

Legislation directed toward energy efficiency and sustainability continues to increase.

Laws, regulations, and Executive Orders affecting the design and operation of federal buildings include:

- EO 14057 Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability
- EO 14008 Tackling the Climate Crises at Home and Abroad
- EO 13990 Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis
- Energy Act of 2020
- Energy Independence and Security Act of 2007 (EISA 2007)
- Energy Policy Act of 2005 (EPA 2005)
- [Guiding Principles for Sustainable Federal Buildings \(Guiding Principles\)](#)
- Resource Conservation and Recovery Act of 1976 (RCRA)

1.3.3.1 ENERGY REBATES (BA63)

Project teams must pursue utility rebate and incentive programs and any government grant or incentive programs at the local, state, and federal level. Project teams are encouraged to contact the local utility as early in the design process as possible to determine if the project qualifies for a financial incentive or



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