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USACE / NAVFAC / AFCEC / NASA **UFGS-01 33 29 (February 2021)**

Preparing Activity: NAVFAC **Superseding**
UFGS-01 33 29 (February 2017)
UFGS-01 33 29.05 20 (March 2019)

UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated January 2021
****

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SECTION 01 33 29

SUSTAINABILITY REQUIREMENTS AND REPORTING

02/21

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SECTION 01 33 29

SUSTAINABILITY REQUIREMENTS AND REPORTING
02/21

****

NOTE: This guide specification covers the requirements for providing sustainability documentation for Guiding Principles Validation (GPV) and Third Party Certification (TPC). GPV is equivalent to meeting the requirements of UFC 1-200-02 "HIGH PERFORMANCE AND SUSTAINABLE BUILDING REQUIREMENTS." All projects must meet the requirements of UFC 1-200-02.

This guide specification includes tailoring for both DESIGN-BUILD and DESIGN-BID-BUILD.

This guide specification includes tailoring for ARMY. Deselect the ARMY tailoring option for Navy-executed projects.

Use a properly edited version of this guide specification for projects that contain one or more buildings that meet one of the following:

a) For Army and Navy, new buildings or stand-alone additions greater than or equal to 10,000 SF; for Air Force, all new buildings or stand-alone additions.

b) Comprehensive replacement in an existing building that is greater than or equal to 10,000 SF, with total cost (includes new work, renovation, operations and maintenance, sustainment, restoration, and modernization associated with and existing building renovation) greater than $3M and 50-percent or more Estimated Replacement Cost (ERC).

Use the HPSB Checklist for the Service who will maintain the building asset in their Real Property Record. Complete an HPSB Checklist for each applicable building in the project, before attaching to this specification. Checklist(s) must be completely filled out before being used in a solicitation. Check with the user Command for

additional requirements. Each Component's HPSB Checklist may be found at: https://www.wbdg.org/ffc/dod/tri-services-sustainability-program/tracking-reporting

(Where Internet address appears on multiple lines, copy full address into Internet browser.)

Adhere to UFC 1-300-02 Unified Facilities Guide Specifications (UFGS) Format Standard when editing this guide specification or preparing new project specification sections. Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable item(s) or insert appropriate information.

Remove information and requirements not required in respective project, whether or not brackets are present.

Comments, suggestions and recommended changes for this guide specification are welcome and should be submitted as a Criteria Change Request (CCR).
****

PART 1 GENERAL

1.1 REFERENCES

****
NOTE: This paragraph is used to list the publications cited in the text of the guide specification. The publications are referred to in the text by basic designation only and listed in this paragraph by organization, designation, date, and title.

Use the Reference Wizard's Check Reference feature when you add a Reference Identifier (RID) outside of the Section's Reference Article to automatically place the reference in the Reference Article. Also use the Reference Wizard's Check Reference feature to update the issue dates.

References not used in the text will automatically be deleted from this section of the project specification when you choose to reconcile references in the publish print process.
****

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

COUNCIL ON ENVIRONMENTAL QUALITY (CEQ) (WHITE HOUSE)

HPSB Guiding Principles (2016) Guiding Principles for Sustainable Federal Buildings and Determining

	Compliance with the Guiding Principles for Sustainable Federal Buildings

GREEN BUILDING INITIATIVE (GBI)

GBI DOD GP Compliance	(2017) GBI Department of Defense Guiding Principles Compliance Program for New Construction
GBI Green Globes for NC	(2017) Green Globes(tm) for New Construction Technical Reference Manual

GREEN BUSINESS CERTIFICATION INC. (GBCI)

GP Assessment (DOD)	Guiding Principles Assessment for Department of Defense

INTERNATIONAL CODE COUNCIL (ICC)

ICC IGCC	(2018) International Green Construction Code

SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION (SMACNA)

ANSI/SMACNA 008	(2007) IAQ Guidelines for Occupied Buildings Under Construction, 2nd Edition

U.S. DEPARTMENT OF AGRICULTURE (USDA)

FSRIA 9002	Farm Security and Rural Investment Act Section 9002 (USDA BioPreferred Program)

U.S. DEPARTMENT OF DEFENSE (DOD)

UFC 1-200-02	(2020) High Performance and Sustainable Building Requirements
UFC 3-210-10	(2015; with Change 3, 2020) Low Impact Development
UFC 3-600-01	(2016; with Change 5, 2020) Fire Protection Engineering for Facilities

U.S. DEPARTMENT OF ENERGY (DOE)

Energy Star	(1992; R 2006) Energy Star Energy Efficiency Labeling System (FEMP)

U.S. GREEN BUILDING COUNCIL (USGBC)

LEED v4 BD+C	LEED v4 Building Design and Construction

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

10 CFR 433.300	Subpart C - Green Building Certification for Federal Buildings
40 CFR 247	Comprehensive Procurement Guideline for

1.2 SUMMARY

This section includes requirements for Sustainability documentation and reporting submittals per the federally mandated High Performance and Sustainable Building (HPSB) or HPSB "Guiding Principles" (GP),[and Third Party Certification (TPC) requirements,] in accordance with UFC 1-200-02 High Performance and Sustainable Building Requirements, and other identified requirements.

1.3 SUBMITTALS

****

NOTE: Review Submittal Description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list, and corresponding submittal items in the text, to reflect only the submittals required for the project. The Guide Specification technical editors have classified those items that require Government approval, due to their complexity or criticality, with a "G." Generally, other submittal items can be reviewed by the Contractor's Quality Control System. Only add a "G" to an item if the submittal is sufficiently important or complex in context of the project.

For Army projects, fill in the empty brackets following the "G" classification, with a code of up to three characters to indicate the approving authority. Codes for Army projects using the Resident Management System (RMS) are: "AE" for Architect-Engineer; "DO" for District Office (Engineering Division or other organization in the District Office); "AO" for Area Office; "RO" for Resident Office; and "PO" for Project Office. Codes following the "G" typically are not used for Navy, Air Force, and NASA projects.

The "S" classification indicates submittals required as proof of compliance for sustainability Guiding Principles Validation or Third Party Certification and as described in Section 01 33 00 SUBMITTAL PROCEDURES.

****

****

NOTE: Sustainability requirements have been identified in many of the technical performance sections. Include additional sustainability requirements throughout the technical specification sections according to goals of this project. Identify products and other submittals required for Guiding Principle Validation (GPV) and Third Party Certification (TPC) where applicable, with an "S" next to the submittal item. Use the following format to add submittal items in the technical sections to comply with the requirements of this section:

<ITM>_{Insert Submittal Item};
_S</ITM>

Make corresponding edits in technical sections' Part 1, Part 2 Products or in Part 3 Execution to differentiate those pieces of equipment, products, or activities related to GPV and TPC.

****

****

NOTE: Choose the following bracketed paragraph for all projects except Navy-executed DESIGN-BUILD.

Choose the first bracketed item for Navy, Air Force, and NASA projects, or choose the second bracketed item for Army projects.

****

[Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are [for Contractor Quality Control approval.][for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government.] Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:
]

****

NOTE: For Air Force only: For every Air Force DESIGN-BUILD project, keep all bracketed SD-01, SD-05, and SD-11 submittals. For every Air Force DESIGN-BID-BUILD project, keep all SD-01 and SD-11 submittals

Add other Checklist and Sustainability eNotebook submittals to match the number of design submissions, based on the project scope, and add requirements paragraphs in Part 1.

****

SD-01 Preconstruction Submittals

****

NOTE: For Navy projects in the NAVFAC PAC Area of Operation only: remove the "G" designation from all SD-01 Preconstruction Submittals.

****

[Preliminary High Performance and Sustainable Building Checklist; G [, [_____]]

] Sustainability Action Plan; G[, [_____]]

[Preliminary Sustainability eNotebook; G[, [_____]]

] SD-05 Design Data

****

NOTE: The following four Submittals are tailored for DESIGN-BUILD.

****

[Interim Design High Performance and Sustainable Building Checklist; G[, [_____]]

][Interim Design Sustainability eNotebook; G[, [_____]]

][Final Design High Performance and Sustainable Building Checklist; G [, [_____]]

][Final Design Sustainability eNotebook; G[, [_____]]

] SD-06 Test Reports

****

NOTE: For DESIGN-BID-BUILD projects, delete the following submittal if it is not part of the contractor's scope.

****

[Third Party Certification Design Compliance Report; G[, [_____]]

] SD-11 Closeout Submittals

Final High Performance and Sustainable Building Checklist; G[, [_____]]

Final Sustainability eNotebook; G[, [_____]]

[Amended Final Sustainability eNotebook; G[, [_____]]

][Amended Final High Performance and Sustainable Building Checklist; G[, [_____]]

]

****

NOTE: Choose bracketed option for "Third Party Certification Certificate, Assessment, or Validation and Compliance Report" for TPC projects that require the Contractor to obtain the TPC certification.

****

[Third Party Certification Certificate, Assessment, or Validation and Compliance Report; G[, [_____]]

]1.4 GUIDING PRINCIPLES VALIDATION (GPV)

****

NOTE: GUIDING PRINCIPLES VALIDATION (GPV) is required in accordance with UFC 1-200-02 HIGH PERFORMANCE SUSTAINABLE BUILDING REQUIREMENTS and the notes under this specification's title above.

Complete Preliminary HPSB Checklist and include at the end of this specification. For projects with multiple buildings, attach HPSB Checklist for each building. See the notes under this specification's title above.

****

Provide the following sustainability activities and documentation to verify achievement of HPSB Guiding Principles Validation (GPV):

a. Analysis of each Guiding Principle Requirement and how project complies. Include final government approved narrative(s) in the HPSB Checklist submittal. Multiple checklists indicate multiple buildings that require individual HPSB Checklist tracking.

****
NOTE: Choose first bracket for all projects except Navy-executed DESIGN-BUILD. Choose second bracket for Navy-executed DESIGN-BUILD only.
****

b. No changes to the HPSB Checklist are allowed without approval from the Contracting Officer, in accordance with Section[01 33 00 SUBMITTAL REQUIREMENTS][01 33 00.05 20 CONSTRUCTION SUBMITTAL PROCEDURES and Section 01 33 10.05 20 DESIGN SUBMITTAL PROCEDURES, paragraph DESIGN CHANGE AND VARIATION]. Immediately bring to the attention of the Contracting Officer any project changes that impact meeting the approved HPSB Guiding Principles Requirements for this project. Demonstrate the change will not increase the life-cycle cost and maintains or improves the building performance.

c. Documentation of all work required to incorporate the applicable HPSB Guiding Principles requirements indicated on the HPSB Checklist and in this contract, including all "S" submittals.

d. Sustainability Action Plan.

****
NOTE: The following paragraph is tailored for DESIGN-BUILD.
****

e. Design and construction related documentation for the project Sustainability eNotebook and keep updated with regularly-scheduled Construction Quality Control Meetings. Include design and construction related documentation containing the following components:

****
NOTE: The following paragraph is tailored for DESIGN-BID-BUILD.
****

e. Construction related documentation for the project Sustainability eNotebook and keep updated with regularly-scheduled Construction Quality Control Meetings. Include construction related documentation containing the following components:

(1) HPSB Checklist(s)

(2) Sustainability Action Plan

(3) Documentation illustrating HPSB Guiding Principles Requirements compliance, including "S" submittals

1.4.1 Sustainability Action Plan

Include the following information in the Sustainability Action Plan:

a. Analysis of each HPSB Guiding Principles Requirement and how project will comply. Final government approved narrative(s) must be included in the HPSB Checklist submittal.

b. Name and contact information for: Contractor's Point of Contact (POC) ensuring sustainability goals are accomplished and documentation is assembled. For TPC that include on-site visit by third party representative, provide list of required attendees.

c. Indoor Air Quality plan.

1.4.2 Calculations

****
NOTE: The following paragraph is tailored for DESIGN-BUILD.
****

Provide all design data, calculations, product data, labels and product certifications required in this specification to demonstrate compliance with the HPSB Guiding Principles Requirements.

****
NOTE: The following paragraph is tailored for DESIGN-BID-BUILD.
****

Provide all calculations, product data, labels and product certifications required in this specification to demonstrate compliance with the HPSB Guiding Principles Requirements.

1.5 SUSTAINABILITY SUBMITTALS

Provide HPSB Checklist and other documentation in the Sustainability eNotebook to indicate compliance with the sustainability requirements of the project.

1.5.1 High Performance Sustainable Building (HPSB) Checklist

Provide construction documentation that provides proof of, and supports compliance with, the completed HPSB Checklist.

1.5.1.1 HPSB Checklist Submittals

Submit updated HPSB Checklist with each Sustainability eNotebook submittal. Include the final HPSB Checklist(s) with the interim DD1354 Real Property Record Submittal.

1.5.2 "S" Submittals for Sustainability Documentation

****
NOTE: Include the bracketed phrases below for projects required to obtain TPC.
****

"S" submittals are the sustainability documentation requirements cited in the various sections of this contract. Submit the GPV[and TPC] sustainability documentation required in this section as "S" submittals in all affected UFGS Sections.

a. Highlight GPV[and TPC] compliance data in "S" submittal.

b. Add "S" submittals to the Sustainability eNotebook only after submittal approval, and bookmark them as required in paragraph SUSTAINABILITY ENOTEBOOK below.

c. Ensure all approved "S" submittals are included in each Sustainability eNotebook submittal.

1.5.3 Sustainability eNotebook

****
NOTE: Include the bracketed TPC phrases for projects required to obtain TPC.
****

The Sustainability eNotebook is an electronic organizational file that serves as a repository for all required sustainability submittals. To support documentation of compliance with an approved HPSB[and TPC] checklist, provide and maintain a comprehensive and current Sustainability eNotebook. Include all required data in Sustainability eNotebook, to support full compliance with the HPSB Guiding Principles Requirements, including:

a. HPSB checklist

b. Sustainability Action Plan

c. Calculations

d. Labels

e. "S" submittals

[f. Certifications, assessments, or validations and compliance report

][g. TPC documentation required in paragraph THIRD PARTY CERTIFICATION (TPC).

]1.5.3.1 Sustainability eNotebook Format

Provide Sustainability eNotebook in the form of an Adobe PDF file; bookmark each HPSB Guiding Principles Requirement[, TPC requirement,] and sub-bookmark at each document. Match format to HPSB Guiding Principles numbering system indicated herein. Maintain up-to-date information, such as spreadsheets, templates, with each current submittals.[For TPC projects, provide a second Table of Contents using TPC numbering system, for maintaining documentation unique to TPC.]

Contracting Officer may deduct from the monthly progress payment accordingly if Sustainability eNotebook information is not current and on track per project goals.

1.5.3.2 Sustainability eNotebook Submittal Schedule

Provide Sustainability eNotebook Submittals at the following milestones of the project:

****
NOTE: Choose submittal paragraphs, based on scope of project. In each of the following paragraphs, include the first bracketed phrase for projects required to obtain TPC.
****

[a. Preliminary Sustainability eNotebook

Submit preliminary Sustainability eNotebook with updated Preliminary High Performance and Sustainable Building Checklist[and TPC checklist] at the first post award meeting in accordance with Section 01 30 00 ADMINISTRATIVE REQUIREMENTS.

]

****
NOTE: The following two paragraphs are tailored for DESIGN-BUILD.

Choose submittal paragraphs, based on scope of project. In each of the following paragraphs, include the first bracketed phrase for projects required to obtain TPC. Include the second bracketed phrase for Navy-executed DESIGN-BUILD only.
****

[b. Interim Design Sustainability eNotebook

Submit updated Sustainability eNotebook with updated Interim Design High Performance and Sustainable Building Checklist[with TPC Checklist] with the final design[, in accordance with Section 01 33 10.05 20 DESIGN SUBMITTAL PROCEDURES]. If issues relating to achieving the sustainability goals of the project are subsequently identified, identify reasons and mitigation from DOR, and resubmit to the Contracting Officer for approval.

][c. Final Design Sustainability eNotebook

Submit updated Sustainability eNotebook with updated Final Design High Performance and Sustainable Building Checklist[with TPC Checklist] with the final design[, in accordance with Section 01 33 10.05 20 DESIGN SUBMITTAL PROCEDURES]. If issues relating to achieving the sustainability goals of the project are subsequently identified, identify reasons and mitigation from DOR, and resubmit to the Contracting Officer for approval.

]

****
NOTE: For projects required to obtain TPC, include the bracketed paragraph when seeking approval of TPC design requirements. This is the preferred method to obtain TPC, and it is preferred this report is obtained prior to construction award. For DESIGN-BID-BUILD projects, delete this report if it is not part of the contractor's scope.
****

[d. Third Party Certification Design Compliance Report

Obtain Third Party Certification Design Compliance Report after final design submittal is approved. Submittal must indicate 100 percent compliance with applicable design requirements. File approved submittal in the Sustainability eNotebook.

]

****
NOTE: Include the bracketed phrases for projects required to obtain TPC.
****

e. Construction Quality Control Meetings.

Provide up-to-date GP[and TPC] documentation in the Sustainability eNotebook[and TPC Online tool] for each meeting.

****
NOTE: Include the first bracketed phrase for projects required to obtain TPC.

Include the second bracketed phrase for Navy-executed DESIGN-BUILD only.
****

f. Final Sustainability eNotebook

Submit updated Sustainability eNotebook with updated Final High Performance and Sustainable Building Checklist[with TPC Checklist][, in accordance with Section 01 33 00.05 20 CONSTRUCTION SUBMITTAL PROCEDURES] at Beneficial Occupancy Date (BOD). Final progress payment retainage may be held by Contracting Officer until Final Sustainability construction phase documentation is complete.

****
NOTE: Include the following paragraph when an amended Sustainability eNotebook is required (due to post-construction activities such as commissioning). Include the first bracketed phrase for projects required to obtain TPC.
****

[g. Amended Final Sustainability eNotebook

Amend and resubmit the Amended Final Sustainability eNotebook with Amended Final High Performance and Sustainable Building Checklist[and amended TPC Checklist], to include post-occupancy corrections, updates, and requirements. Final progress payment retainage may be held by Contracting Officer until amended final sustainability documentation is complete. Submit the Amended Final Sustainability eNotebook Submittal on DVDs to the Contracting Officer no later than 30 days after final GP[, TPC] determination.

]1.6 DOCUMENTATION REQUIREMENTS

a. Incorporate each of the following HPSB Guiding Principles requirements into project and provide documentation that proves compliance with each listed requirement. Items below are organized by

HPSB Guiding Principles. For life-cycle cost analysis requirements, one document with all analyses is acceptable, with Contracting Officer approval.

b. For each of the following paragraphs that require the use of products listed on Government-required websites, provide documentation of the process used to select products, or process used to determine why listed products do not meet project performance requirements.

****

NOTE: The following subparagraphs provide Guiding Principle Requirements.

Choose requirements that can be fully achieved, or partially achieved to the greatest degree possible. For partially achievable requirements, track them as "yes" only with one of the following justifications:

1. Life-cycle cost-effectiveness and energy model;
2. Mission restriction (ex: 24/7 operation);
3. Location/regional restriction (ex: availability of high-efficiency equipment service);
4. Locale restriction (ex: proximity of existing buildings restricts daylighting).

Delete requirements that are not applicable to the project. Non-applicability requires one of the following justifications:

1. Life-cycle cost-effectiveness and energy model;
2. Mission exclusion (ex: no daylighting in a theater or a SCIF);
3. Location/regional exclusion (ex: no local recycling facility); or
4. Locale exclusion (ex: there is no steam to meter).

****

1.6.1 Integrated Design Process

****

NOTE: This paragraph is tailored for DESIGN-BUILD.

****

For the submittal documentation below, demonstrate compliance with UFC 1-200-02.

1.6.1.1 Design Submittal Documentation

a. List the sustainability integrated design team, and a description of their roles in all stages of a project's planning and delivery:

(1) Include Contractor's Sustainability Coordinators; Architecture and Engineering disciplines involved on the project, and the DOR in charge of the overall project and each discipline; Construction Subcontractors and the company representatives that align with each architectural and engineering discipline, Planning, Public Works, Environmental Specialist and other appropriate installation personnel.

(2) Describe their roles and responsibilities and plan-of-action for how each team member will be involved to achieve the project sustainability requirements, and how the Contractor will coordinate with Government personnel.

(3) Maintain an up-to-date list with descriptions throughout the project.

b. Provide narratives that:

(1) Indicate performance goals for siting, energy, water, materials, and indoor environmental quality along with other comprehensive design goals and ensures incorporation of these goals throughout the design and life cycle of the building.

(2) Demonstrate integration of the goals into design and construction.

(3) Demonstrate collaboration with other providers, such as Commissioning Authority[and Third Party Certification].

1.6.2 Commissioning (Cx)

****
NOTE: Choose the first bracketed phrase for Air Force and Army projects. Choose the second bracketed phrase for Navy projects.
****

Develop and incorporate Commissioning requirements into the documents, in accordance with Section [01 91 00.15 10 TOTAL BUILDING COMMISSIONING][01 91 00.15 20 TOTAL BUILDING COMMISSIONING].

1.6.3 Optimize Energy Performance

****
NOTE: This paragraph is tailored for DESIGN-BUILD.
****

For the submittal documentation below, demonstrate compliance with UFC 1-200-02.

1.6.3.1 Design Submittal Documentation

****
NOTE: For determining energy consumption reduction levels, comply with UFC 1-200-02 HIGH PERFORMANCE AND SUSTAINABLE BUILDING REQUIREMENTS, paragraphs titled "Life-Cycle Cost Analysis," "Energy Efficiency," and "Energy Compliance Analysis."
****

a. Narrative that provides a summary of:

(1) The decision-making process leading to the selection of at least three energy-efficient solutions (for each system contributing to the energy footprint of the building) to be analyzed; and the selected design solution(s)

(2) The specific energy standard and version utilized; and the software used in the analysis

(3) The calculated energy consumption and energy use intensity (EUI in kBTU/sf/yr) of the baseline building and the proposed design alternatives

b. A minimum of the following energy modeling files and summaries for the baseline and proposed alternatives:

(1) Input, schedules and libraries; and output

(2) Calculated energy use by energy type

(3) Calculated energy use by building system

c. The life-cycle cost analysis input and output files for the baseline and the proposed alternatives

1.6.3.2 Construction Submittal Documentation

Provide revised energy modeling for actual system constructed.

1.6.4 Energy Efficient Products

Provide only energy-using products that are Energy Star rated or have Federal Energy Management Program (FEMP) recommended efficiency. Where Energy Star or FEMP recommendations have not been established, provide most efficient products that are life-cycle cost-effective. Provide only energy using products that meet FEMP requirements for low standby power consumption. Energy efficient products can be found at: https://www.energy.gov/eere/femp/federal-energy-management-program and http://www.energystar.gov/.

For construction submittal documentation, provide proof that product is labeled energy efficient and complies with the cited requirements.

1.6.5 On-site Renewable Energy Generation

****
NOTE: This paragraph is tailored for DESIGN-BUILD.
****

For the submittal documentation below, demonstrate compliance with UFC 1-200-02.

1.6.5.1 Design Submittal Documentation

Provide life-cycle cost analysis (LCCA). When found to be LCCE, do one of the following options:

a. Provide design drawings and calculations that demonstrate total on-site renewable energy as an annual percentage of proposed building energy consumption in kBTU/year; and provide equipment ratings, and calculations that demonstrate the generation capacity of the system in kBTU/year for thermal and kwh for electricity.

b. Provide documentation that renewable energy development at the Installation level is planned.

1.6.6 Solar Domestic Hot Water (SDHW)

****
NOTE: This paragraph is tailored for DESIGN-BUILD.
****

For the submittal documentation below, demonstrate compliance with UFC 1-200-02.

1.6.6.1 Design Submittal Documentation

Provide life-cycle cost analysis (LCCA). When found to be LCCE, provide design drawings and calculations that demonstrate total on-site renewable energy as an annual percentage of proposed building energy consumption in kBTU/year; and provide equipment ratings, and calculations that demonstrate the generation capacity of the system in kBTU/year for thermal.

1.6.7 Building-level Power Metering

Provide building-level meters for electricity, natural gas, and steam where applicable.

1.6.7.1 Design Submittal Documentation

****
NOTE: The following paragraph is tailored for DESIGN-BUILD.
****

Provide design drawings that highlight meter locations on the site.

1.6.7.2 Construction Submittal Documentation

Provide manufacturer's data validating compatibility with base-wide system and component advanced meter requirements.

1.6.8 Indoor Water Use

Provide Construction Documentation proof that fixtures are labeled EPA WaterSense, for products available with EPA WaterSense labeling; for all other fixtures, proof they comply with EPA WaterSense efficiency requirements.

1.6.9 Indoor Water Metering

Provide building-level meters for potable water use. Provide the requirements cited in the following paragraphs:

1.6.9.1 Design Submittal Documentation

****
NOTE: This paragraph is tailored for DESIGN-BUILD.
****

Provide design drawings that highlight meter locations on the site.

1.6.9.2 Construction Submittal Documentation

Provide manufacturer's data validating compatibility with base-wide system and component advanced meter requirements.

1.6.10 Outdoor Water Use

Where new irrigation is required, provide only non-potable sources. Provide the requirements cited in the following paragraphs:

1.6.10.1 Design Submittal Documentation

****
NOTE: This paragraph is tailored for DESIGN-BUILD.
****

a. Provide design drawings and analysis that identify the non-potable water source used and demonstrate the non-potable water source is appropriate for landscape irrigation.

b. Provide life-cycle cost analysis (LCCA).

1.6.10.2 Construction Submittal Documentation

Provide manufacturer's data validating compatibility with base-wide system and component advanced meter requirements.

1.6.11 Outdoor Water Meters

Provide meters for outdoor systems that use potable water. Provide the requirements cited in the following paragraphs:

1.6.11.1 Design Submittal Documentation

****
NOTE: This paragraph is tailored for DESIGN-BUILD.
****

a. Provide design drawings that highlight meter locations on the site.

b. Provide life-cycle cost analysis (LCCA).

1.6.11.2 Construction Submittal Documentation

Provide manufacturer's data validating compatibility with base-wide system and component advanced meter requirements.

1.6.12 Alternative Water

****
NOTE: This paragraph is tailored for DESIGN-BUILD.
****

Use alternative sources of water to replace potable water usage, when life-cycle cost-effective and to the extent permitted by local laws and regulations.

1.6.12.1 Design Submittal Documentation

a. Provide design drawings and calculations that demonstrate the alternative water sources used, potable water savings as compared to non-alternative water sourcing, and projected annual potable water savings.

b. Provide life-cycle cost analysis (LCCA).

1.6.13 Stormwater Management

****
NOTE: This paragraph is tailored for DESIGN-BUILD.
****

Develop and incorporate stormwater requirements into the documents. Submit design and construction documentation required by UFC 3-210-10 and Service processes, as proof of this tracking requirement.

1.6.14 Ventilation and Thermal Comfort

****
NOTE: This paragraph is tailored for DESIGN-BUILD.
****

For the submittal documentation below, demonstrate compliance with UFC 1-200-02.

1.6.14.1 Design Submittal Documentation

Provide design drawings and calculations that demonstrate HVAC systems and the building envelope have been designed to meet the requirements.

1.6.15 Daylighting

****
NOTE: This paragraph is tailored for DESIGN-BUILD.
****

For the submittal documentation below, demonstrate compliance with UFC 1-200-02.

1.6.15.1 Design Submittal Documentation

a. Provide floor plans and elevations.

b. Provide design analysis delineating requirements, to include compliant reflective surface locations and shading devices (where applicable).

1.6.16 Moisture Control

Provide the following:

1.6.16.1 Design Submittal Documentation

****
NOTE: This paragraph is tailored for DESIGN-BUILD.
****

Provide drawings of building envelope details and HVAC humidity controls.

1.6.16.2 Construction Submittal Documentation

Ensure construction materials are separated and protected in accordance with other sections in this contract document, with adequate humidity controls during construction. In accordance with Section 01 78 23 OPERATION AND MAINTENANCE DATA, includes plan for ongoing building moisture control.

****
NOTE: Choose the first bracketed item for Air Force and Army projects; choose the second bracketed item for Navy projects; choose the third bracketed item for NASA projects.
****

Coordinate with the moisture control requirements of Section [01 45 00.00 10][01 45 00.00 20][01 45 00.00 40] QUALITY CONTROL.

1.6.17 Reduce Volatile Organic Compounds (VOC) (Low-Emitting Materials)

Meet the requirements of Table 3-1 at the end of this specification.

For Construction submittal documentation, provide certifications or labels that demonstrate compliance with cited requirements, based on the attached TABLE 3-1.

1.6.18 Indoor Air Quality During Construction

Prior to construction, create indoor air quality plan. Develop and implement an IAQ construction management plan during construction and flush building air before occupancy.

****
NOTE: Choose the first bracketed sentence for new construction or renovation projects in buildings that are not occupied during construction.

Choose the second bracketed sentence for Navy-executed only.

Choose the third bracketed sentence for renovation projects in buildings that remain occupied during construction.
****

[For new construction and for renovation of unoccupied existing buildings, meet the requirements of ICC IGCC 1001.3.1.5 (10.3.1.4) Indoor Air Quality (IAQ) Construction Management.] [Coordinate with moisture control requirements in Section 01 45 00.00 20 Quality Control.] [For renovation of occupied existing buildings, meet the requirements of ANSI/SMACNA 008 IAQ Guidelines for Occupied Buildings Under Construction.]

****
NOTE: Choose "building" for all new construction projects, and for renovation projects that substantially replace the building from the foundation up. Choose "area" for all other

renovation projects.
****

Provide documentation showing that after construction ends and prior to occupancy, HVAC filters were replaced and [building][area] air was flushed out in accordance with the cited standard.

1.6.19 Recycled Content

Comply with 40 CFR 247. Refer to: https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program for assistance identifying products cited in 40 CFR 247. Selected products must comply with non-proprietary requirements of the Federal Acquisition Regulation and must meet performance requirements.

1.6.19.1 Construction Submittal Documentation

a. Provide manufacturers' documents stating the recycled content by material, or written justification for claiming one of the exceptions allowed on the cited website.

b. Substitutions: Submit for Government approval for proposed alternative products or systems that provide equivalent performance and appearance and have greater contribution to project recycled content requirements. For all such proposed substitutions, submit with the Sustainability Action Plan accompanied by product data demonstrating equivalence.

c. In order to complete compliance with FAR 52.223-9 Estimate of Percentage of Recovered Material Content for EPA Designated Items, refer to submittal requirement for recycled/recovered material content in Section 01 78 00 CLOSEOUT SUBMITTALS.

1.6.20 Bio-Based Products

Provide products and materials composed of the highest percentage of bio-based materials (including rapidly renewable resources and certified sustainably harvested products), consistent with FSRIA 9002 USDA BioPreferred Program, to the maximum extent possible without jeopardizing the intended end use or detracting from the overall quality delivered to the end user and when available at a reasonable cost. Use only supplies and materials of a type and quality that conform to applicable specifications and standards.

Comply with FSRIA 9002 USDA BioPreferred Program. Refer to www.biopreferred.gov for the product categories and BioPreferred Catalog. Selected products must comply with non-proprietary requirements of the Federal Acquisition Regulation and must meet performance requirements. Provide the following documentation:

a. USDA BioPreferred label for each product; for bio-based products used on project but not listed with BioPreferred program, provide bio-based content and percentage.

b. In order to complete compliance with FAR 52.223-1 Biobased Product Certification, refer to submittal requirement for biobased products in Section 01 78 00 CLOSEOUT SUBMITTALS, paragraphs CERTIFICATION OF EPA DESIGNATED ITEMS and CERTIFICATION OF USDA DESIGNATED ITEMS.

1.6.21 Waste Material Management (Recycling – Design)

****
NOTE: This paragraph is tailored for DESIGN-BUILD.
****

For the submittal documentation below, demonstrate compliance with UFC 1-200-02.

For design submittal documentation, provide drawing showing an appropriately sized and placed dedicated storage area for recyclables.

1.6.22 Waste Material Management (Recycling – Construction)

****
NOTE: Verify division percentage in Section 01 74 19 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL.
****

Divert demolition and construction debris in accordance with Section 01 74 19 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL.

[1.6.23 Address Climate Change Risk

****
NOTE: This paragraph is tailored for DESIGN-BUILD.

Address only government-provided, specific scope direction related to the following paragraph. If none has been provided in the DD1391 or scope, delete this paragraph, and document on HPSB Checklist and other required tracking locations as "N/A due to location/regional exclusion".
****

For design submittal documentation, provide narrative of decisions for design associated with scoped requirements.

][1.6.24 Additional Sustainability Requirements

Provide the additional sustainability requirements cited in this paragraph.

****
NOTE: In addition to GPV and Sustainability eNotebook, Third Party Certification (TPC) is required for projects that meet the thresholds cited in Table 1-1 of UFC 1-200-02.

1. New building or stand-alone addition greater than or equal to 10,000 SF, with construction cost greater than $3M.

2. Comprehensive replacement in an existing building that is greater than or equal to 10,000 SF, with total cost greater than $3M and 50-percent or more ERC.

TPC is the generic term for a third party product that provides either certification of the third

party vendor's proprietary product requirements (examples LEED, Green Globes), or a validation program by the third party vendor that UFC 1-200-02 requirements have been met (examples: Guiding Principles Assessment, Guiding Principles Compliance).

For each building that meets item 1 or item 2 above, choose one of the following paragraphs titled "Third Party Certification (TPC) Documentation" below, based on how TPC is executed, and delete the others.

****

[1.6.24.1 Third Party Certification (TPC) Documentation

****

NOTE: This paragraph is tailored for DESIGN-BUILD.

****

Third Party Certification certificate, assessment, or validation, and compliance report requirements are in addition to all requirements under header above GUIDING PRINCIPLES VALIDATION (GPV).

1.6.24.1.1 TPC Registration Required

****

NOTE: Choose the rating system below that best assists with Guiding Principles Validation and delete the others. Verify rating systems approved for use by Service.

Obtain, fill out, and include TPC checklist with this section. For projects with multiple buildings, attach completed TPC Checklist for each building that requires TPC.

For certifications, assessments, or validations that include a plaque, include the bracketed phrase in the first paragraph.

For Air Force ONLY: Choose one of the following methods for executing TPC:

a. For Guiding Principles Assessment for Department of Defense (by GBCI), choose "GP Assessment (DOD)", use only DOD version, and ask for it when registering.

b. For Green Building Initiative (GBI) Department of Defense Guiding Principles Compliance, or "GBI DOD GP Compliance", use only DOD version, and ask for it when registering.

For Army projects ONLY: Choose only the following method for executing TPC:

a. For USGBC LEED v4, choose "LEED v4 BD+C", and enter "Silver" in the bracket. For use of alternate certification systems, a waiver must be submitted

per the current Army Sustainable Design and Development Policy.

For Navy ONLY: Choose one of the following methods for executing TPC:

a. For USGBC LEED v4, choose "LEED v4 BD+C", and enter the target level in the bracket.

b. For Guiding Principles Assessment for Department of Defense (by GBCI), choose "GP Assessment (DOD)", use only DOD version, and ask for it when registering.

c. For Green Building Initiative (GBI) Department of Defense Guiding Principles Compliance, or "GBI DOD GP Compliance", use only DOD version, and ask for it when registering.

d. For "GBI Green Globes for NC", enter the target level in the bracket.

e. For an alternate certification system, use only those that comply with the minimum requirements of 10 CFR 433.300 Subpart C – Green Building Certification for Federal Buildings, and insert the name of the compliant system in the empty bracket. Facilities Engineering Command (FEC) Capital Improvements (CI) Core must authorize the use of alternative system.

****

Register and achieve Third Party Certification (TPC), by meeting all TPC and project requirements to achieve [LEED v4 BD+C [_____]] [GP Assessment (DOD)] [GBI DOD GP Compliance] [GBI Green Globes for NC [_____]] [[_____][_____]], or Government-approved equivalent TPC sustainability certification, assessment, or validation. An equivalent TPC organization must demonstrate equivalency for Government consideration and meet the requirements of 10 CFR 433.300, prior to use on the project. Third Party Certification is met when Government receives TPC organization certificate, assessment, or validation and compliance report[and plaque].

Register project with TPC organization using the following format and content:

a. Project Title First Line: Building Owner (US Army, US Air Force, US Navy or US Marine Corps), Building Name (if known)

b. Project Title Second Line: MILCON P#, DD1391 Project Name

c. Project Address: UIC (Installation code), Category code, RPUID (Real Property Unique Identifier) Number

d. Project Owner Organization: US Army, US Air Force, US Navy or US Marine Corps

e. Primary Contact, Project Owner: Executing DOD Service's Project Manager or Design Manager

f. Building Owner Organization: US Army, US Air Force, US Navy or US Marine Corps

g. Building Owner Organization Project Number

****

NOTE: Choose first bracket for Air Force projects and delete the others. Choose second bracket for Army projects and delete the others. Choose third bracket for Navy projects and delete the others.

****

h. Additional Contact, Building Owner: [Base Civil Engineer][Department of Public Works][Public Works Officer] or Designee.

1.6.24.1.2 TPC Management and Certification

Execute the following TPC Certification, assessment, or validation requirements:

a. Refer to TPC Checklist at the end of this specification section. (Multiple checklists indicate multiple buildings that require TPC.)

b. Immediately bring to the attention of the Contracting Officer any project changes that impact meeting the approved TPC Requirements for this project. Demonstrate the change will not increase the life-cycle cost and maintains or improves the building performance.

c. Complete all design and construction work to incorporate the applicable TPC Requirements.

d. Maintain the design and construction related information in the Sustainability eNotebook pertaining to additions and changes to the approved sustainability requirements. Maintain the Sustainability eNotebook in electronic format. Refer to explanation in the paragraph SUSTAINABILITY eNOTEBOOK. Provide the following components in the Sustainability eNotebook, in addition to the GPV components listed above:

(1) TPC Checklist

(2) Completed TPC forms. Transmit by the method required by TPC organization.

(3) Copy of all correspondence with the TPC organization. Provide proof of TPC registration.

(4) Documentation illustrating compliance with TPC requirements and additional documentation as requested by the Third Party certifier.

(5) TPC Award Certificate, assessment or validation and compliance report.

e. Provide the following information in the Sustainability Action Plan. Provide this TPC information in addition to the Sustainability Action Plan items above:

(1) Planned method to achieve each TPC requirement.

(2) Provide analysis of each TPC credit and how project will comply.

(3) Provide names and contact information for: Contractor sustainability point of contact (POC) and other names of sustainability professionals on the Contractor's Staff responsible for ensuring TPC sustainability goals are accomplished and documentation is assembled.

****

NOTE: For certifications, assessments, or validations that include a plaque, included the bracketed phrase.

****

f. Bear all costs associated with designing, constructing, demonstrating, and documenting that project complies with approved TPC requirements, including but not limited to:

(1) Registration, review, certification, assessment, or validation[and plaque] fees.

(2) Online (or offline with secure facilities) TPC management and documentation.

(3) Obtaining TPC certification, assessment, or validation based on Government-approved sustainability goals.

(4) Design and construction work required to incorporate TPC requirements.

(5) Submittals required to demonstrate compliance with Government approved TPC checklists.

g. Provide all design data, calculations, product data, and certifications, assessments, or validations required in this specification to demonstrate compliance with the TPC Requirements.

h. Provide all online (or offline, with secure facilities) TPC management and documentation.

i. Provide all required responses to third party organization.

****

NOTE: Include the bracketed paragraph below for TPC that includes required site visit by a TPC representative. Coordinate with the TPC representative, Project Manager, Design Manager, and Construction Manager to determine participating team members. Include commissioning provider on applicable projects.

For projects that require the Construction Contractor to obtain TPC, the Construction Contractor’s designated Sustainability POC is responsible to coordinate the TPC site visit.

****

[j. Facilitate and participate in required TPC site visit. Coordinate with the Executing DOD Service's Project Manager and Design Manager,

to determine participating team members. Include Commissioning provider on applicable projects.

]

****

NOTE: Include the bracketed paragraph below for TPC that include a certification, assessment, or validation. For TPC that include a plaque, include the bracketed phrases.

****

[k. Provide TPC [Plaque and]Certificate, assessment, or validation. Provide TPC compliance report that includes level achieved and reasons for non-compliance or not applicable elements. Use the following format to create the Plaque, Certificate, assessment, or validation, compliance report, and Letter of Congratulations. Forward to parties designated by Contracting Officer:

[(1) Plaque:

Name: Final Building Name. If unknown, use the Form DD1391 Project Name.

] (2) Certificate, Assessment, or Validation:

Project title, first line: P-(X); (1391 Project Name). Project title, second line: UIC (installation code)

(3) Letter of Congratulation (when provided):

Address letter to the Facility's Installation Commander Name. Address the letter to an individual person.

(4) Compliance Report:

Title page must cite Project title: P-(X); (1391 Project Name); Final Building Name if known; UIC (installation code); Owner Service; User organization if known; date of compliance.

Include TPC scoresheet if applicable.

]

****

NOTE: Choose first bracket for Air Force projects. Choose second bracket for Army projects. Choose third bracket for Navy projects.

****

l. Once Final Certification is achieved, turn over Administrative rights to online TPC to the [Base Civil Engineer][Department of Public Works][Public Works Office] or designee, contact information provided by the Contracting Officer.

][1.6.24.2 Third Party Certification (TPC) Documentation

****

NOTE: Choose this DESIGN-BID-BUILD "Third Party Certification (TPC) Documentation" paragraph for Third Party Certification, assessment, or validation when the Designer of Record is responsible for the entire TPC process, with the Construction Contractor

providing the construction documentation. This is the preferred method of TPC execution for DESIGN-BID-BUILD (DBB) Delete the other DESIGN-BID-BUILD "Third Party Certification (TPC) Documentation" paragraph option.

****

Third Party Certification certificate, assessment, or validation, and compliance report requirements are in addition to all requirements under header above GUIDING PRINCIPLES VALIDATION (GPV).

1.6.24.2.1 TPC Registration

****

NOTE: Choose the rating system below that best assists with Guiding Principles Validation, complies with Component policy, and delete the others.

Obtain, fill out, and include TPC checklist with this section. For projects with multiple buildings, attach TPC Checklist for each building that requires TPC.

For certifications, assessments or validations that include a plaque, include the bracketed phrase in the first paragraph.

For Air Force ONLY: Choose one of the following methods for executing TPC:

a. For Guiding Principles Assessment for Department of Defense (by GBCI), choose "GP Assessment (DOD)", use only DOD version, and ask for it when registering.

b. For Green Building Initiative (GBI) "Department of Defense Guiding Principles Compliance", or "GBI DOD GP Compliance", use only DOD version, and ask for it when registering.

For Army projects ONLY: Choose only the following method for executing TPC:

a. For USGBC LEED v4, choose "LEED v4 BD+C", and enter "Silver" in the bracket. For use of alternate certification systems, a waiver must be submitted per the current Army Sustainable Design and Development Policy.

For Navy ONLY: Choose one of the following methods for executing TPC:

a. For USGBC LEED v4, choose "LEED v4 BD+C", and enter the target level in the bracket.

b. For Guiding Principles Assessment for Department of Defense (by GBCI), choose "GP Assessment (DOD)", use only DOD version, and ask for it when registering.

c. For Green Building Initiative (GBI) "Department of Defense Guiding Principles Compliance", or "GBI GP DOD Compliance", use only DOD version, and ask for it when registering.

d. For Green Building Initiative (GBI) Green Globes, choose "GBI Green Globes for NC", and enter the target level in the bracket.

e. For an alternate certification system, use only those that comply with the minimum requirements of 10 CFR 433.300 Subpart C – Green Building Certification for Federal Buildings, and insert the name of the compliant system in the empty bracket. Facilities Engineering Command (FEC) Capital Improvements (CI) Core must authorize the use of alternative system.

****

This project has been designed for, and must be constructed to achieve [LEED v4 BD+C [_____]] [GP Assessment (DOD)] [GBI DOD GP Compliance] [GBI Green Globes for NC [_____]] [_____]. Project is already registered with the TPC Organization. Provide construction related sustainability documentation, in the format required by the TPC Organization, to the Contracting Officer for approval, and for final approval by the TPC organization. Third Party Certification is met when Government receives TPC organization certificate, assessment, or validation and compliance report[and plaque]. Execute the following:

a. Refer to TPC Checklist at the end of this specification section. (Multiple checklists indicate multiple buildings that require TPC.)

b. Immediately bring to the attention of the Contracting Officer any project changes that impact meeting the approved TPC Requirements for this project. Demonstrate the change will not increase the life-cycle cost and maintains or improves the building performance.

c. Complete all work required to incorporate the applicable TPC Requirements.

d. Maintain the construction related information in the Sustainability eNotebook pertaining to additions and changes to the approved sustainability requirements. Maintain the Sustainability eNotebook in electronic format. For more explanation, refer to paragraph SUSTAINABILITY eNOTEBOOK. Provide the following components in the Sustainability eNotebook, in addition to the GPV components above:

   (1) TPC Checklist

   (2) Provide construction documentation required to achieve third party certification

e. Provide the following information in the Sustainability Action Plan. Provide this TPC information in addition to the GPV Action Plan items above:

   (1) Planned method to achieve each TPC requirement.

(2) For each TPC requirement that is attempted but not achieved, provide narrative explaining how mission or activity precludes achieving specific sustainability requirement or goal. Provide analysis of particular requirement and level to which project is able to comply.

(3) Provide name and contact information for: Sustainability Point of Contact (POC) and other names of sustainability professionals responsible for ensuring TPC sustainability goals are accomplished and documentation is assembled. Sustainability POCs are also responsible for ensuring GPV required in paragraph GUIDING PRINCIPLES VALIDATION (GPV) above.

f. Bear all costs associated with construction changes that affect sustainability design requirements, constructing, demonstrating, and documenting that project complies with approved TPC requirements, including but not limited to:

(1) TPC coordination with Government's AE and other consultants, TPC website requirements, and management for construction related documentation.

(2) Construction work required to incorporate TPC requirements.

(3) Submittals required to demonstrate compliance with Government approved TPC checklists.

(4) Documentation illustrating compliance with TPC requirements and additional documentation required by the TPC.

g. Provide all calculations, product data, and certifications, assessments, or validations required in this contract to demonstrate compliance with the TPC Requirements of this section.

][1.6.24.3 Third Party Certification (TPC) Documentation

****

NOTE: Choose this DESIGN-BID-BUILD "Third Party Certification (TPC) Documentation" paragraph, if the Construction Contractor is responsible for achieving the final TPC. Use of this method is discouraged. Delete the previous DESIGN-BID-BUILD "Third Party Certification (TPC) Documentation" paragraph option.

****

Third Party Certification certificate, assessment, or validation, and compliance report requirements are in addition to all requirements under header above GUIDING PRINCIPLES VALIDATION (GPV).

[1.6.24.3.1 TPC Registration Required

****

NOTE: Choose this bracketed paragraph if the Designer of Record (DOR) has not registered the project with a TPC organization, and the Construction Contractor must do so. Delete the second bracketed paragraph.

****

****

NOTE: Choose the rating system below that best assists with Guiding Principles Validation complies with Component policy and delete the others.

Obtain, fill out, and include TPC checklist with this section. For projects with multiple buildings, attach TPC Checklist for each building that requires TPC.

For certifications, assessments, or validations that include a plaque, include the bracketed phrases below.

For Air Force ONLY: Choose one of the following methods for executing TPC:

a. For Guiding Principles Assessment by USGBC/GBCI (DOD Version), choose "GBCI GP Assessment", use only DOD version, and ask for it when registering.

b. For Green Building Initiative (GBI) "Department of Defense Guiding Principles Compliance", or "GBI GP DOD Compliance", use only DOD version, and ask for it when registering.

For Army projects ONLY: Choose only the following method for executing TPC:

a. For USGBC LEED v4, choose "LEED v4 BD+C", and enter "Silver" in the bracket. For use of alternate certification systems, a waiver must be submitted per the current Army Sustainable Design and Development Policy.

For Navy ONLY: Choose one of the following methods for executing TPC:

a. For USGBC LEED v4, choose "LEED v4 BD+C", and enter the target level in the bracket.

b. For Guiding Principles Assessment for Department of Defense (by GBCI), choose "GP Assessment (DOD)", use only DOD version, and ask for it when registering.

c. For Green Building Initiative (GBI) "Department of Defense Guiding Principles Compliance", or "GBI GP DOD Compliance", use only DOD version, and ask for it when registering.

d. For Green Building Initiative (GBI) Green Globes, choose "GBI Green Globes for NC", and enter the target level in the bracket.

e. For an alternate certification system, use only those that comply with the minimum requirements of 10 CFR 433.300 Subpart C – Green Building Certification for Federal Buildings, and insert the

name of the compliant system in the empty bracket. Facilities Engineering Command (FEC) Capital Improvements (CI) Core must authorize the use of alternative system.

****

Pay all fees associated with registration and achievement of Third Party Certification (TPC), by meeting all TPC and project requirements to achieve [LEED v4 BD+C [_____]] [GP Assessment (DOD)] [GBI DOD GP Compliance] [GBI Green Globes for NC [_____]], or Government-approved equivalent TPC sustainability certification, assessment, or validation. An equivalent TPC organization must demonstrate equivalency for Government consideration and meet the requirements of 10 CFR 433.300, prior to use on the project. Third Party Certification is met when Government receives TPC organization certificate, assessment, or validation and compliance report[and plaque.]

Register project with TPC organization using the following format and content:

a. Project Title First Line: Building Owner (US Army, US Air Force, US Navy or US Marine Corps), Building Name (if known)

b. Project Title Second Line: MILCON P#, DD1391 Project Name

c. Project Address: UIC (Installation code), Category code, RPUID (Real Property Unique Identifier) Number

d. Project Owner Organization: US Army, US Air Force, US Navy or US Marine Corps

e. Primary Contact, Project Owner: Component Project Manager

f. Building Owner Organization: US Army, US Air Force, US Navy or US Marine Corps

g. Building Owner Organization Project Number

h. Additional Contact, Building Owner: Department of Public Works, Public Works Officer, Base Civil Engineer, or Designee

][1.6.24.3.2 TPC Already Registered

****

NOTE: Choose this bracketed paragraph if the DOR has registered the project with a TPC organization and will pass the responsibility for final TPC documentation and certification, assessment, or validation to the Construction Contractor. Delete the previous bracketed paragraph.

****

****

NOTE: Obtain, fill out, and include TPC checklist with this section. For projects with multiple buildings, attach TPC Checklist for each building that requires TPC.

For certifications, assessments, or validations that include a plaque, include the bracketed phrases

below.
****

Project is already registered with TPC organization to achieve [LEED v4 BD+C [_____]] [GP Assessment (DOD)] [GBI DOD GP Compliance] [GBI Green Globes for NC [_____]] [_____]. When applicable, request TPC online access turnover from Government. Manage and provide all documentation for requirements of TPC and obtain Final Certification or validation. Third Party Certification is met when Government receives TPC organization certificate, assessment, or validation and compliance report[and plaque].

]1.6.24.3.3 TPC Management and Certification

Execute the following TPC Certification, assessment, or validation requirements:

a. Refer to TPC Checklist at the end of this specification section. (Multiple checklists indicate multiple buildings that require TPC.)

b. Immediately bring to the attention of the Contracting Officer any project changes that impact meeting the approved TPC Requirements for this project. Demonstrate the change will not increase the life-cycle cost and maintains or improves the building performance.

c. Complete all work required to incorporate the applicable TPC Requirements.

d. Maintain the construction related information in the Sustainability eNotebook pertaining to additions and changes to the approved sustainability requirements. When construction changes are made that affect design sustainability requirements, provide all required updates to affected design requirements and update in the Sustainability eNotebook. Maintain the Sustainability eNotebook in electronic format. For more explanation, refer to paragraph SUSTAINABILITY eNOTEBOOK. Provide the following components in the Sustainability eNotebook, in addition to the GPV components above:

(1) TPC Checklist

(2) Completed TPC forms. Transmit by the method required by the TPC organization.

(3) Copy of all correspondence with the TPC organization including proof of TPC registration

(4) Documentation illustrating compliance with TPC requirements and additional documentation as requested by the TPC

(5) TPC Award Certificate, assessment, or validation and compliance report.

e. Provide the following information in the Sustainability Action Plan. Provide this TPC information in addition to the Sustainability Action Plan items above:

(1) Planned method to achieve each TPC requirement.

(2) For each TPC requirement that is attempted but not achieved,

provide narrative explaining how mission or activity precludes achieving specific sustainability requirement or goal. Provide analysis of particular requirement and level to which project is able to comply.

(3) Provide name and contact information for: Sustainability point of contact (POC) and other names of sustainability professionals responsible for ensuring TPC sustainability goals are accomplished and documentation is assembled. Sustainability POCs are also responsible for ensuring GPV required in paragraph GUIDING PRINCIPLES VALIDATION (GPV) above.

****

NOTE: For certifications, assessments, or validations that include a plaque, included the bracketed phrase.

****

f. Bear all costs associated with construction changes that affect sustainability design requirements, constructing, demonstrating, and documenting that project complies with approved TPC requirements, including but not limited to:

(1) Final TPC review, certification, assessment, or validation[and plaque] fees.

(2) Online (or offline with secure facilities) TPC management and documentation.

(3) Obtaining TPC certification or validation based on Government-approved sustainability goals.

(4) Construction work required to incorporate TPC requirements.

(5) Submittals required to demonstrate compliance with Government approved TPC checklists.

g. Provide all calculations, product data, and certifications, assessments, or validations required in this specification to demonstrate compliance with the TPC Requirements.

h. Provide all TPC management and documentation. Transmit TPC requirements by the method required by TPC organization.

i. Provide all required responses to third party organization.

****

NOTE: Include the bracketed paragraph below for TPC that includes required site visit by a TPC representative (this is typically required for GBI provided TPC). The Government Executing Agent's Project Manager is responsible to coordinate the TPC site visit. Project Manager must coordinate with the TPC representative, Design Manager, and Construction Manager to determine participating team members. Include commissioning provider on applicable projects.

****

[j. Facilitate and participate in required TPC site visit. Coordinate with the Contract Officer to determine participating team members. Include Commissioning provider on applicable projects.
]

****

NOTE: Choose the following paragraph for TPC that includes a certificate, assessment, or validation. For TPC that include a plaque, include the bracketed phrases.

****

[k. Provide TPC [Plaque and]Certificate, assessment, or validation. Provide TPC compliance report that includes level achieved and reasons for non-compliance or not applicable elements. Use format below to create the Plaque, Certificate, assessment or validation, compliance report, and Letter of Congratulations (when provided). Forward to parties designated by Contracting Officer:

[(1) Plaque:

Name: Final Building Name. If unknown, provide Form DD1391 Project Name.

] (2) Certificate, Assessment or Validation:

Project Title, first line: P-(X); Form DD1391 Project Name).

Project Title, second line: UIC (Installation code)

(3) Letter Congratulations (when provided):

Address letter to Facility's Installation Commander Name. Address the letter to an individual person.

(4) Compliance Report:

Title page must cite Project title: P-(X); (1391 Project Name); Final Building Name if known; UIC (installation code); Owner Service; User organization if known; date of compliance.

Include TPC scoresheet if applicable.
]

****

NOTE: Choose first bracket for Air Force projects and delete the others. Choose second bracket for Army projects and delete the others. Choose third bracket for Navy projects and delete the others.

****

l. Once Final Certification is achieved, turn over Administrative rights to online TPC to the [Base Civil Engineer] [Department of Public Works] [Public Works Office] or designee, contact information provided by the Contracting Officer.

]][1.6.25 Additional Sustainability Requirements

****

NOTE: Include this bracketed paragraph when there are additional sustainability requirements, including additional TPC requirements. TPC optional

requirements that align with HPSB requirements are mandatory. Add them as requirements in the following paragraph. Coordinate language throughout affected UFGS Sections in this project.
****

The following requirements are included, as required by the project scope or the applied sustainability Third Party Certification program:

[_____]

]PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 SUSTAINABILITY COORDINATION

****
NOTE: Choose all the bracketed options below for projects required to obtain TPC certification, assessment, or validation.
****

Provide sustainability focus and coordination at all meetings to achieve sustainability goals. Coordinate meeting requirements with other UFGS Sections meeting requirements in this project. Ensure the designated [TPC accredited]sustainability professional responsible for GP [and TPC]documentation participates in these meetings to coordinate documentation completion. Review GP[and TPC] sustainability requirements, HPSB Checklist[and TPC] documentation, Sustainability Action Plan, and completeness status of Sustainability eNotebook[, and TPC status] at the following meetings:

a. Pre-Construction Conference

b. Construction Quality Control Meetings

****
NOTE: The following three items are tailored for DESIGN-BUILD.
****

Refer to Section 01 30 00 ADMINISTRATIVE PROCEDURES for Post Award Meetings.

c. Post Award Meeting

d. Design Quality Assurance Meetings

e. Design Complete Review Meetings

Conduct review no later than 60 days after final design complete submission and identify any outstanding issues that affect correct completion of all documentation requirements, and actions that will achieve requirements. Conduct corrective actions.

****

NOTE: Choose the following bracketed sentences for TPC that require on-site visit.
****

[f. TPC On-site Visit

Execute, coordinate, and facilitate on-site visit by third party representative no later than 60 days before final turnover, or as required by TPC organization, whichever is greater.

] g. Facility Turnover Meetings

Conduct review no later than 60 days before final turnover and identify any outstanding issues that affect correct completion of all documentation[and final TPC certification, assessment or validation], and actions that will achieve requirements. Conduct corrective actions prior to turnover, to ensure all requirements are achieved.

[3.2 THIRD PARTY CERTIFICATION CERTIFICATE, ASSESSMENT, OR VALIDATION AND COMPLIANCE REPORT

****
NOTE: Choose this bracketed paragraph for projects that require the Contractor to obtain the TPC certification.

For certifications, assessments, or validations that include a plaque, include the bracketed phrase for the plaques.
****

Finalize the process requirements and obtain the TPC [Plaque and]Certificate, assessment, or validation, and compliance report, indicating completion of the project's sustainability goals. Include TPC compliance report with final TPC scoresheet as applicable.

****
NOTE: Choose the first bracketed sentence when the contract documents give specific instruction for placement of the plaque.

Choose the second bracketed sentence if the Contracting Officer has verified the building occupant wants a framed certificate, assessment, or validation, and what kind of framing.

For certification that include a plaque, include the last bracketed phrase.
****

[Provide and hang Plaque in accordance with contract documents.] [Provide one original framed copy of the certificate, assessment, or validation, mounted in 25 mm 1 inch deep metal frames, with double matt, and wire hangers, in location approved by Contracting Officer.]Deliver [one][_____] original certificate, assessment, or validation, and compliance report to Contractor Officer, unless otherwise instructed.[Provide and hang Plaque in a prominent interior location approved by the Contracting Officer.]

]3.3 TABLE 3-1 VOLATILE ORGANIC COMPOUNDS (VOC) (LOW EMITTING MATERIALS) REQUIREMENTS

TABLE 3-1 Volatile Organic Compounds (VOC) (Low Emitting Materials) Requirements Source: ICC IGCC Chapter 8 (Materials) (Interior Applications Only)				
MATERIAL CATEGORY	**EMISSIONS REQUIREMENT**		**MATERIALS WITH ADDED VOC REQUIREMENT**	**EMISSIONS REQUIREMENTS**
Adhesives and Sealants	**CDPH/EHLB/Standard method V1.1 (California Section 01350)** (Use "office" or "classroom" space limits for all applications)	or	Adhesives (carpet, resilient, wood flooring; base cove; ceramic tile; drywall and panel; primers) Sealants (acoustical; firestop; HVAC Air duct; primers) Caulks	**SCAQMD Rule 1168** (Use "other" category for HVAC duct sealant) (for firestop adhesive, UFC 3-600-01 overrides conflicting requirements)
			Aerosol adhesives	**Section 3 of Green Seal Standard GS-36** (except: cleaners, solvent cements, and primers used with plastic piping and conduit in plumbing, fire suppression, and electrical systems; HVAC air duct sealants when the application space air temp is less than 40 F (4.5 C).

TABLE 3-1 Volatile Organic Compounds (VOC) (Low Emitting Materials) Requirements Source: ICC IGCC Chapter 8 (Materials) (Interior Applications Only)				
MATERIAL CATEGORY	**EMISSIONS REQUIREMENT**		**MATERIALS WITH ADDED VOC REQUIREMENT**	**EMISSIONS REQUIREMENTS**
Paints and Coatings	**CDPH/EHLB/Standard method V1.1 (California Section 01350)** (Use "office" or "classroom" space limits for all applications)	or	Flat and nonflat, nonflat high-gloss, specialty, basement specialty, fire-resistive, floor, low-solids, rust preventative, wood, reflective wall coatings; concrete/masonry sealers; primers; sealers; undercoaters; shellacs (clear and opaque); stains; varnishes; conjugated oil varnish; lacquer; clear brushing lacquer	**Green Seal Standard GS-11**

TABLE 3-1 Volatile Organic Compounds (VOC) (Low Emitting Materials) Requirements Source: ICC IGCC Chapter 8 (Materials) (Interior Applications Only)				
MATERIAL CATEGORY	**EMISSIONS REQUIREMENT**		**MATERIALS WITH ADDED VOC REQUIREMENT**	**EMISSIONS REQUIREMENTS**
Paints and Coatings	**CDPH/EHLB/Standard method V1.1 (California Section 01350)** (Use "office" or "classroom" space limits for all applications)	or	Concrete curing compounds; dry fog, faux finishing, graphic arts (sign paints), industrial maintenance, mastic texture, metallic pigmented, multicolor, recycled coatings; pretreatment wash primers, reactive penetrating sealers; specialty primers, wood preservatives, and zinc primers	**California Air Resources Board (CARB) Suggested Control Measure for Architectural Coatings** or **SCAQMD Rule 1113r**
Paints and Coatings	**CDPH/EHLB/Standard method V1.1 (California Section 01350)** (Use "office" or "classroom" space limits for all applications)	or	High-temperature coatings; stone consolidants; swimming-pool coatings; tub- and tile-refining coatings; and waterproofing membranes	**California Air Resources Board (CARB) Suggested Control Measure for Architectural Coatings**

TABLE 3-1 Volatile Organic Compounds (VOC) (Low Emitting Materials) Requirements Source: ICC IGCC Chapter 8 (Materials) (Interior Applications Only)				
MATERIAL CATEGORY	**EMISSIONS REQUIREMENT**		**MATERIALS WITH ADDED VOC REQUIREMENT**	**EMISSIONS REQUIREMENTS**
Floor Covering Materials	For carpet, all locations: **CDPH/EHLB/Standard Method V1.1 (California Section 01350)** or label for **Section 9** of **CDPH/EHLB/Standard Method V1.1 (California Section 01350)**		none	none
Insulation	**CDPH/EHLB/Standard method V1.1** (California Section 01350) (Use "office" or "classroom" space limits for all applications)		none	none

TABLE 3-1 Volatile Organic Compounds (VOC) (Low Emitting Materials) Requirements Source: ICC IGCC Chapter 8 (Materials) (Interior Applications Only)				
MATERIAL CATEGORY	**EMISSIONS REQUIREMENT**		**MATERIALS WITH ADDED VOC REQUIREMENT**	**EMISSIONS REQUIREMENTS**
Composite Wood, Wood Structural Panel, and Agrifiber Products, no added urea-formaldehyde resins including laminating adhesives for composite wood and agrifiber assemblies - particleboard, medium density fiberboard (MDF), wheatboard, strawboard, panel substrates, door cores	Third-party certification (approved by CARB) of **California Air Resource Board's (CARB) regulation**, Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products	or	none	**CDPH/EHLB/Standard method V1.1** (California Section 01350) (Use "office" or "classroom" space limits for all applications) (except: Structural panel components such as plywood, particle board, wafer board, and oriented strand board identified as "EXPOSURE 1," "EXTERIOR," or "HUD-APPROVED" are considered acceptable for interior use.)
Office Furniture Systems and Seating installed prior to occupancy	**ANSI/BIFMA X7.1** **ANSI/BIFMA X7.1:** (95-percent of installed office furniture system workstations and seating units) **Section 7.6.2 of ANSI/BIFMA e3** (50-percent of office furniture system workstations and seating units)		none	none

TABLE 3-1 Volatile Organic Compounds (VOC) (Low Emitting Materials) Requirements Source: ICC IGCC Chapter 8 (Materials) (Interior Applications Only)				
MATERIAL CATEGORY	**EMISSIONS REQUIREMENT**		**MATERIALS WITH ADDED VOC REQUIREMENT**	**EMISSIONS REQUIREMENTS**
Ceiling and Wall assemblies and systems including: acoustical treatments; ceiling panels and tiles; tackable wall panels and coverings; wall coverings; wall and ceiling paneling and planking	**CDPH/EHLB/Standard method V1.1 (California Section 01350)** (Use "office" or "classroom" space limits for all applications)		none	none

****

Attach completed draft "High Performance and Sustainable Building (HPSB) Checklist". For Army and Navy, this is required when project exceeds threshold defined in notes under this section's title. For Air Force, this is required for every project. For projects with multiple buildings, attach completed draft HPSB Checklist for each building.

Attach completed draft TPC checklist. This is required when project exceeds threshold defined in note above the paragraph THIRD PARTY CERTIFICATION (TPC) DOCUMENTATION. For projects with multiple buildings, attach completed draft TPC Checklist for each building that requires TPC.

****

-- End of Section --