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USACE / NAVFAC / AFCEC / NASA **UFGS-01 33 29.05 20 (March 2019)**

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

UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated October 2020
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SUSTAINABILITY REPORTING FOR DESIGN-BUILD

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SECTION 01 33 29.05 20

SUSTAINABILITY REPORTING FOR DESIGN-BUILD
03/19

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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.

Use a properly edited version of this guide specification for projects that contain one or more buildings with any of the following: new building; stand-alone addition (scoped to function like stand-alone new buildings, except it is attached to an existing building.) larger than 5,000 SF; or in an existing building renovation with total cost (includes new work, renovation, operations and maintenance; sustainment restoration, and modernization associated with an existing building renovation) greater than $3M, regardless of percentage of Estimated Replacement Cost (ERC) or square footage.

Use the HPSB Checklist for the Service who will maintain the building asset in their Real Property Record. Complete the HPSB Checklist for each applicable building in the project, before attaching to this specification. Check with the user Command for additional requirements.

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

a. Navy – Complete the NAVFAC High Performance and Sustainable Building (HPSB) Checklist. Template can be downloaded from the project's eProjects record, or from:
http://www.wbdg.org/ffc/navy-navfac/sustainable-development-program/required-tracking

b. Air Force - Use "AF Sustainability Requirements

Scoresheet, GP version" for applicable projects with design starts 01Dec16 or after:
http://www.wbdg.org/ffc/af-afcec/sustainable-design-development-sdd/sustainability-tracking-reporting

c. Army - Energy & Sustainability Record Card
http://www.wbdg.org/ffc/army-coe/policies-and-guidance-army-design-and-construction/army-energy-sustain-record-card

Adhere to UFC 1-300-02 Unified Facilities Guide Specifications (UFGS) Format Standard when editing this guide specification or preparing new project specifications 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).

This specification is for use on Navy design-build projects, and contains both design and construction requirements. Do not use, or require the use of, UFGS Section 01 33 29 SUSTAINABILITY REPORTING.

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PART 1 GENERAL

1.1 REFERENCES

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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.

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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.

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS (ASHRAE)

ASHRAE 90.1 - IP	(2013) Energy Standard for Buildings Except Low-Rise Residential Buildings
ASHRAE 90.1 - SI	(2013) Energy Standard for Buildings Except Low-Rise Residential Buildings
ASHRAE 189.1	(2014) Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

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 GP Compliance	(2016) GBI Guiding Principles Compliance Program for New Construction (DOD Version)
GBI Green Globes for NC	(2017) Green Globes(tm) for New Construction Technical Reference Manual

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)

FC 1-300-09N	(2014; with Change 4, 2018) Navy and Marine Corps Design

U.S. DEPARTMENT OF ENERGY (DOE)

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

U.S. GREEN BUILDING COUNCIL (USGBC)

GBCI GP Assessment	(2016) Guiding Principles Assessment by GBCI (DOD Version)
LEED BDC Ref Guide	(2013) USGBC LEED Reference Guide for Building Design and Construction, v4

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 Products Containing Recovered Materials

1.2 SUMMARY

This specification includes general requirements and procedures for this project to be designed, constructed, and documented per the federally mandated High Performance and Sustainable Building or "HPSB Guiding Principles" (GP), [Third Party Certification (TPC) requirements], UFC 1-200-02 High Performance and Sustainable Building Requirements, and other requirements identified in this specification.

1.3 SUBMITTALS

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NOTE: Submittals must be limited to those necessary for adequate quality control. The importance of an item in the project should be one of the primary factors in determining if a submittal for the item should be required.

A "G" following a submittal item indicates that the submittal requires Government approval. Some submittals are already marked with a "G". Only delete an existing "G" if the submittal item is not complex and can be reviewed through the Contractor's QC system. Only add a "G" if the submittal is sufficiently important or complex in context of the project.

The "S" following a submittal item indicates that the submittal is required for the Sustainability eNotebook to fulfill federally mandated sustainable requirements in accordance with Section 01 33 29 SUSTAINABILITY REPORTING.

Review submittal description (SD) definitions in Section 01 33 00.05 20 CONSTRUCTION SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project.

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:

Insert Submittal Item; S

"S" submittals are processed as described in Sections 01 33 10.05 20 DESIGN SUBMITTAL PROCEDURES and 01 33 00.05 20 CONSTRUCTION SUBMITTAL PROCEDURES. Edit the following list to reflect only the submittals required for the project.

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

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Submittals requirements are specified in the technical sections using Submittal Description (SD) numbers and titles. Submittals requiring Government approval use a "G" or submittal designator in the UFGS sections. In addition, submit the GPV[and TPC]-required sustainability documentation in this specification as "S" submittals. Submittals not having a "G" designation are for Contractor Quality Control approval.

Submittals with an "S" are for inclusion in the Sustainability eNotebook, in conformance with the requirements of this Section.

Government approval is required for submittals in RFP Part 2 with a "G" designation. Additional construction submittals reserved for Government approval are listed in the Section 01 33 00.05 20 CONSTRUCTION SUBMITTAL PROCEDURES. Submittals with a "G" designation found in the sections used by the Contractor to create construction specification, require DOR approval.

DOR approved submittals are also listed in the "Construction Submittals" paragraph in each RFP PART 4, Performance Technical Specifications. Provide required certification or validation submittals in accordance with Section 01 33 10.05 20 DESIGN SUBMITTAL PROCEDURES, Section 01 33 00.05 20 CONSTRUCTION SUBMITTAL PROCEDURES, FC 1-300-09N, Navy and Marine Corps Design Procedures, and as identified below.

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NOTE: For projects that require an interim Government review prior to SD-11 Final Sustainability eNotebook Submittal, and with sufficient in-house Government resources available to determine submittal approval, keep "G" submittal action code for required SD-01 and SD-05 High Performance and Sustainable Building Checklist and Sustainability eNotebook Submittals.

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SD-01 Preconstruction Submittals

Preliminary High Performance and Sustainable Building Checklist[; G]

Sustainability Action Plan

[Preliminary Sustainability eNotebook[; G]

] SD-05 Design Data

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

][Final Design Sustainability eNotebook[; 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

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NOTE: Choose bracketed option for "Third Party Certification Certificate, Assessment, or Validation" for TPC projects.
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[Third Party Certification Certificate, Assessment, or Validation; G

]1.4 GUIDING PRINCIPLES VALIDATION (GPV)

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NOTE: GUIDING PRINCIPLES VALIDATION (GPV) is required for all buildings (vertical construction) 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. Obtain HPSB checklist from respective agency. See the notes under this specification's title above.
****

Provide sustainability documentation to verify achievement of HPSB Guiding Principles Validation (GPV).

Provide the following for GPV:

a. Refer to HPSB Checklist at the end of this specification section. These requirements are based on legislative mandates that must be met by all projects. (Multiple checklists indicate multiple buildings that require individual HPSB Checklist tracking.)

b. No changes to the HPSB Checklist are allowed without approval from the Contracting Officer, in accordance with Section 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.

c. All work, including "S" submittals, required to incorporate the applicable HPSB Guiding Principles Requirements indicated on the HPSB Checklist and in this contract.

d. Sustainable Action Plan.

e. Design and construction related documentation for the project Sustainability eNotebook, and keep updated with regularly-scheduled construction meetings. Include design and construction related documentation containing the following components;

(1) HPSB Checklist

(2) Sustainability Action Plan

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

1.4.1 Costs

Bear all costs associated with designing, constructing, demonstrating and documenting that project complies with approved HPSB Guiding Principles Requirements.

1.4.2 Calculations

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

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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. Each new building with construction cost greater than $3M.
2. In existing building over 5,000 SF, renovation with total cost greater than $3M and 50 percent or more of the Estimated Replacement Cost (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).

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[1.4.3 Third Party Certification (TPC) Documentation

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NOTE: Choose the rating system below that best assists with Guiding Principles Validation, and

delete the others. If Navy is executing design and construction for Army or Air Force, verify rating systems approved for use by Service.

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 "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 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 BDC Ref Guide", 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 BDC Ref Guide", and enter the target level in the bracket.

b. For Guiding Principles Assessment for Department of Defense (by GBCI), choose GBCI GP Assessment", 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 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.

Obtain, fill out, and include TPC checklist with this UFGS. 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.

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1.4.3.1 TPC Registration Required

Register and achieve Third Party Certification (TPC), by meeting all TPC and project requirements for a level of [LEED BDC Ref Guide [_____]] [GBCI GP Assessment] [GBI 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 plaque].

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

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

a. Project Title First Line: 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, Owner: Executing DoD Service's Project Manager or Design Manager

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

g. Building Owner Organization Project Number

h. Additional Contact, Building Owner: Base Civil Engineer (Air Force), Department of Public Works (Army), Public Works Officer (Navy), or Designee.

1.4.3.2 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.

c. Complete all design and construction work to incorporate the

applicable TPC Requirements.

d. Maintain the design and construction related information, and provide replacement pages, 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 [Online]forms for each identified prerequisite and credit.[Upload onto the TPC Online documentation website.]

(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 or validation

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.

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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 CxA 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.

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[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 Authority (CxA) 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.

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[k. Provide TPC [Plaque and]Certificate, assessment, or validation. Use the following format to create the Plaque, Certificate, assessment, or validation 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.

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

]1.5 SUSTAINABILITY ENOTEBOOK

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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. Sustainability eNotebook must contain all required data to support full compliance with the HPSB Guiding Principles Requirements, including:

a. HPSB checklist

b. Sustainable Action Plan

c. calculations

d. labels

e. "S" submittals (sustainability documentation requirements)

[f. Certifications, assessments, or validations

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

] 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, until information is updated and on track per project goals.

1.5.1 High Performance Sustainable Building (HPSB) Checklist

Provide 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.]Attach final HPSB Checklist to each DD1354 Real Property Record Submittal.

1.5.2 Sustainability Action Plan

Include the following information in the Sustainability Action Plan:

a. Planned method to achieve each GP requirement.

b. Provide 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.

c. 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.

d. Include the Indoor Air Quality plan with the Sustainability Action Plan.

1.5.3 "S" Submittals for Sustainability Documentation

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

Submit the GPV[and TPC] sustainability documentation required in this specification 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 (the sustainability documentation requirements) are included in each Sustainability eNotebook submittal.

1.5.4 Sustainability eNotebook Submittal Schedule

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

****
NOTE: For projects that require an interim Government review before the Final Sustainability eNotebook Submittal, and with sufficient in-house Government resources available to determine submittal approval, keep one or both 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] for approval at the Post award Kickoff meeting (PAK), in

accordance with Section 01 31 19.05 20 POST AWARD MEETINGS.

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

Include the number of electronic copies in the bracketed phrase.
****

][b. 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[[_____] electronic copies on DVDs]to the Contracting Officer for approval.
]
****
NOTE: Include the bracketed phrases for projects required to obtain TPC.
****

c. Construction Progress 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 number of electronic copies in the second bracketed phrase.
****

d. 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. Obtain DOR approval and submit [_____] electronic copies on DVDs to the Contracting Officer for approval.

****
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.

Include the number of electronic copies in the second bracketed phrase.

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[e. 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 [_____] final electronic copies of the Amended Final Sustainability eNotebook Submittal on DVDs to the Contracting Officer no longer than 30 days after the GP[, TPC] designated data collection period.

]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.

Keep 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 (an LCCA is required as proof for justifying missed energy or water targets);
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 (an LCCA is required as proof for justifying missed energy or water targets);
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

For the submittal documentation below, follow the steps of design optimization, as applicable, in ASHRAE 189.1 Section F1.1.1 (Charrette Process), with the exception that F1.1.1, b. does not apply.

1.6.1.1 Design Submittal Documentation

a. Provide listing 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 the list and descriptions up-to-date 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 lifecycle 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)

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NOTE: Include UFGS Section 01 91 00.15 TOTAL BUILDING COMMISSIONING for projects that require commissioning.

****

Develop and incorporate Commissioning requirements into the documents. Submit Final Commissioning Report required by Section 01 91 00.15 TOTAL BUILDING COMMISSIONING as proof of this tracking requirement.

1.6.3 Optimize Energy Performance

****

NOTE: Choose the first bracketed paragraph for all new construction projects, and for renovation

projects that substantially replace the building from the foundation up, that conform to the cited standard for commercial and multi-family high-rise buildings.

Choose the second bracketed paragraph for all new construction projects, and for or renovation projects that substantially replace the building from the foundation up, that conform to the cited standard for low-rise residential buildings.

Choose any one of the remaining options for all other renovation projects.

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[For Commercial and Multi-Family High-Rise Residential Buildings, meet the requirements of ASHRAE 90.1 - SI ASHRAE 90.1 - IP, and achieve at least 30 percent energy efficiency below baseline, when life cycle cost effective.

][For Low-Rise Residential Buildings, meet the requirements of International Energy Conservation Code (IECC), and achieve at least 30 percent energy efficiency below baseline, when Life cycle cost effective.

][Reduce measured building energy use by at least 30 percent compared to building energy use in 2003 or a year thereafter with metered energy use data.

][Reduce measured building energy use by at least 20 percent compared to building energy use in 2015 or a year thereafter with metered energy use data.

][Reduce modeled energy use (from all sources including renewable energy) by 20 percent compared to the ASHRAE 90.1 - SI ASHRAE 90.1 - IP baseline building design.

] If none of the reduction choices is life-cycle cost-effective, modify the design of the proposed building system(s) to achieve an energy consumption level at the highest level of energy efficiency that is life-cycle cost-effective.

****

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

****

[1.6.3.1 Design Submittal Documentation

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 individual building energy system) 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 product that are life-cycle cost effective. Provide only energy using product that meets FEMP requirements for low standby power consumption. Energy efficient products can be found at: http://www1.eere.energy.gov/femp/ 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

Provide project energy needs thru on-site renewable energy generation, when life-cycle cost effective.

1.6.5.1 Design Submittal Documentation

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.

b. Provide design drawings, equipment ratings, and calculations that demonstrate the generation capacity of the system in mmbtu/year for thermal and kwAC for electricity

c. Provide life cycle cost analysis (LCCA).

1.6.6 Solar Domestic Hot Water (SDHW)

Provide 30 percent or more of domestic hot water needs through solar thermal water heating, when life-cycle cost effective.

1.6.6.1 Design Submittal Documentation

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.

b. Provide design drawings, equipment ratings, and calculations that demonstrate the generation capacity of the system in mmbtu/year for thermal and kwAC for electricity

b. Provide life cycle cost analysis (LCCA).

1.6.7 Building-level Power Metering

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

1.6.7.1 Design Submittal Documentation

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

b. Provide manufacturers data validating compatibility with base-wide system and component advanced meter requirements.

1.6.8 Indoor Water Use

a. Meet the requirements of ASHRAE 189.1 Section 6.3.2 (Building Water Use Reduction), which incorporates USEPA WaterSense-labeled products. Water closet replacements in renovations may have a flush value of up to 1.6 GPF (6.1 LPF) to accommodate existing plumbing capacity.

b. Meet the requirements of ASHRAE 189.1 Section 6.4.2 (Building Water Use Reduction).

c. Meet the requirements of ASHRAE 189.1 Section 6.4.3 (Special Water Features).

1.6.8.1 Construction Submittal Documentation

Provide proof that fixtures are labeled EPA WaterSense or Energy Star, for products available with EPA WaterSense or Energy Star labeling; for all other fixtures, proof they comply with the cited efficiency requirements.

1.6.9 Indoor Water Metering

a. Provide building-level meters for potable water use.

1.6.9.1 Design Submittal Documentation

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

b. Provide manufacturers data validating compatibility with base-wide system and component advanced meter requirements.

1.6.10 Outdoor Water Use

Potable water use is prohibited for irrigating new landscaping, other than for plant establishment. When non-potable water is life cycle cost effective and is used for new, permanent irrigation, provide the following:

1.6.10.1 Design Submittal Documentation

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).

1.6.11 Outdoor Water Meters

a. Provide building-level meters for potable water used for existing irrigation systems using potable water and serving more than 25,000 square feet of landscape, when life-cycle cost effective.

b. Provide manufacturers data validating compatibility with base-wide system and component advanced meter requirements.

1.6.11.1 Design Submittal Documentation

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

b. Provide life cycle cost analysis (LCCA).

1.6.12 Alternative Water

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

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

1.6.14 Ventilation and Thermal Comfort

Meet the requirements of UFC 3-410-01.

1.6.14.1 Design Submittal Documentation

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

1.6.15 Daylighting

Achieve the minimum daylighting requirements of ASHRAE 189.1, Section 8.4.1.2 "Minimum Sidelighting effective Aperture for Office Spaces and Classrooms" or Section 8.5.1.2 "Usable Daylight Illuminance in Office Spaces and Classrooms". Provide automated lighting controls in accordance with UFC 3-530-01.

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

Meet the requirements of ASHRAE 189.1 Section 10.3.1.5 (Moisture Control), UFC 3-410-01, Chapter 3, Sections 3-2 and 3-3 (Ventilation Air), and UFC 3-101-01 Chapter 3 (Building Envelope Requirements).

1.6.16.1 Design Submittal Documentation

a. Provide drawings of building envelope details and HVAC humidity controls.

b. Provide plan for construction material storage and protection, humidity controls during construction, and operation and maintenance plan for ongoing building moisture 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 renovation projects in buildings that remain occupied during construction.

****

[For new construction and for renovation of unoccupied existing buildings, meet the requirements of ASHRAE 189.1 Section 10.3.1.4 (Indoor Air Quality (IAQ) Construction Management), with maximum outdoor air consistent with achieving relative humidity no greater than 60 percent.][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 52.223-1 Biobased Product Certification, refer to submittal requirement for recycled/recovered material content in UFGS 01 78 00 "CERTIFICATION OF EPA[AND USDA] DESIGNATED ITEMS."

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. 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 UFGS 01 78 00 "CERTIFICATION OF EPA[AND USDA] DESIGNATED ITEMS."

1.6.21 Waste Material Management (Recycling – Design)

Meet the requirements of ASHRAE 189.1 Section 9.3.4.1 (Storage and

Collection of Recyclables – Recyclables), where markets or onsite recycling exist.

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

1.6.22 Waste Material Management (Recycling – Construction)

****
NOTE: Military installations are required to direct at least 60 percent of their non-hazardous solid wastes (including waste from construction and demolition operations) from the waste stream. Verify division percentage in Section 01 74 19 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL.
****

Divert construction debris from landfill disposal where markets or on-site recycling exists.

Submit in accordance with Section 01 74 19 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL.

****
NOTE: 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".
****

[1.6.23 Address Climate Change Risk

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

]1.6.24 Validation and Certification Restrictions

The purchase of renewable energy credits (RECs) specifically to meet project sustainability goals is prohibited.

****
NOTE: Include the bracketed item below when there are additional sustainability requirements, including specific TPC requirements beyond the above requirements. TPC optional requirements that align with HPSB requirements are mandatory. Add them as requirements in the following paragraph. Coordinate language throughout affected UFGSs in this project.
****

[1.6.25 Additional Sustainability Requirements

1.6.25.1 [_____]

]PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 SUSTAINABILITY COORDINATION

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

3.1.1 Coordinating Sustainability Documentation Progress

Provide sustainability focus and coordination at the following meetings to achieve sustainability goals. Coordinate meeting requirements below with other UFGS meeting requirements in this project. The designated [TPC accredited] sustainability professional responsible for GP [and TPC]documentation must participate in these meetings to coordinate documentation completion.

3.1.1.1 Design Review Meetings

Review progress towards meeting Sustainability requirements[in the Sustainability Action Plan,][and completeness of Sustainability eNotebook][, and TPC Online submission] at the following meetings:

****
NOTE: For all projects that require TPC, keep the associated bracketed phrases.
****

a. Post Award Kick-Off Meeting: Refer to Section 01 31 19.05 20 POST AWARD MEETINGS. Discuss the following: [TPC and] HPSB Checklist[s], Sustainability Action Plan, Design submittal and Construction submittal requirements and schedule, individuals responsible for achieving each Guiding Principle Requirement[and TPC prerequisite and credit].

b. Design Quality Assurance Meetings: [Refer to Section 01 31 19.05 20 POST AWARD MEETINGS for requirements.]Discuss progress toward accomplishing Sustainability goals and obtaining sustainability documentation at each design submittal review. Refer to RFP Part 2 Section 01 33 10.05 20 DESIGN SUBMITTAL PROCEDURES for designated design submittals.

c. Design Complete Review Meetings (No later than 60 days after final design complete submission): Review HPSB Checklist, Sustainability eNotebook[, and TPC submission] for completeness and identify any outstanding issues relating to final score and documentation requirements.

3.1.1.2 Construction Progress Meetings

Review GP[and TPC] sustainability requirements with project team including contractor and sub-contractor representatives. Demonstrate HPSB Checklist[and TPC] documentation is being collected and updated to the

Sustainability eNotebook[and TPC Online tool].

[a. For TPC that include on-site visit by third party representative, execute, coordinate and facilitate the visit.
]

****
NOTE: For all projects that require TPC, keep the bracketed phrases.
****

b. Facility Turnover Meetings: Refer to Section 01 31 19.05 20 POST AWARD MEETINGS for further requirements. Review HPSB Checklist, Sustainability eNotebook[, and TPC Online submission] for completeness and identify any outstanding issues relating to final documentation requirements.

c. Final Sustainability eNotebook Review

****
NOTE: Choose the following bracketed option 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.
****

[3.2 THIRD PARTY CERTIFICATION CERTIFICATE, ASSESSMENT, OR VALIDATION

Finalize the sustainability certification or validation process and obtain the TPC Certification [Plaque and]Certificate, assessment, or validation, indicating completion of the projects sustainability goals.

****
NOTE: Choose the first bracketed sentence and delete the second when the contract documents give specific instruction for placement of the plaque. Delete the first sentient and choose the second sentence when there is no direction in the contract documents, and Contracting Officer has verified if the building occupant wants a framed certificate, assessment, or validation, and design of framing.

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

[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.]Provide [one][_____] original certificate, assessment, or validation, and deliver 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: ASHRAE 189.1 section 8.4.2(Materials)(Interior Applications Only)

MATERIAL CATEGORY	EMISSIONS REQUIREMENT		MATERIALS WITH ADDED VOC REQUIREMENT	MATERIAL CATEGORY
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; 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).
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 topcoats, primers, undercoaters, and anti-corrosive coatings	**Green Seal Standard GS-11**

TABLE 3-1 Volatile Organic Compounds (VOC) (Low Emitting Materials) Requirements

Source: ASHRAE 189.1 section 8.4.2(Materials)(Interior Applications Only)

MATERIAL CATEGORY	EMISSIONS REQUIREMENT		MATERIALS WITH ADDED VOC REQUIREMENT	MATERIAL CATEGORY
Paints and Coatings	**CDPH/EHLB/Standard method V1.1 (California Section 01350)** (Use "office" or "classroom" space limits for all applications)	or	Concrete/masonry sealers (waterproofing concrete/masonry sealers), concrete curing compounds, dry fog coatings, faux finishing coatings, fire resistive coatings, floor coatings, graphic arts (sign) coatings, industrial maintenance coatings, mastic texture coatings, metallic pigmented coatings, multicolor coatings, pretreatment wash primers, reactive penetrating sealers, recycled coatings, shellacs (clear and opaque), specialty primers, stains, wood coatings (clear wood finishes), wood preservatives, and zinc primers	**California Air Resources Board (CARB) Suggested Control Measure for Architectural Coatings** or **SCAQMD Rule 1113**

TABLE 3-1 Volatile Organic Compounds (VOC) (Low Emitting Materials) Requirements

Source: ASHRAE 189.1 section 8.4.2(Materials)(Interior Applications Only)

MATERIAL CATEGORY	EMISSIONS REQUIREMENT		MATERIALS WITH ADDED VOC REQUIREMENT	MATERIAL CATEGORY
Paints and Coatings	**CDPH/EHLB/Standard method V1.1 (California Section 01350)** (Use "office" or "classroom" space limits for all applications)	or	Basement specialty coatings, high-temperature coatings, low solids 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**
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

TABLE 3-1 Volatile Organic Compounds (VOC) (Low Emitting Materials) Requirements

Source: ASHRAE 189.1 section 8.4.2(Materials)(Interior Applications Only)

MATERIAL CATEGORY	EMISSIONS REQUIREMENT		MATERIALS WITH ADDED VOC REQUIREMENT	MATERIAL CATEGORY
Composite Wood, Wood Structural Panel, and Agrifiber Products particleboard medium density fiberboard (MDF) wheatboard strawboard panel substrates door cores **no added urea-formaldehyde resins** including laminating adhesives for composite wood and agrifiber assemblies	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		none	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.)			

TABLE 3-1 Volatile Organic Compounds (VOC) (Low Emitting Materials) Requirements

Source: ASHRAE 189.1 section 8.4.2(Materials)(Interior Applications Only)

MATERIAL CATEGORY	EMISSIONS REQUIREMENT		MATERIALS WITH ADDED VOC REQUIREMENT	MATERIAL CATEGORY
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
Ceiling and Wall Systems ceiling and wall insulation acoustical ceiling panels tackable wall panels gypsum wall board and panels wall coverings	**CDPH/EHLB/Standard method V1.1 (California Section 01350)** (Use "office" or "classroom" space limits for all applications)		none	none

****

NOTE: Attach completed draft "High Performance and Sustainable Building (HPSB) Checklist". This is required for every project. For projects with multiple buildings, attach 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 --