**DESIGN A/E NOTE - GUIDE SPECIFICATION CONVENTIONS**

**Color-highlighted text**

**Yellow: Editor’s Notes. Comments inserted into the text are addressed to the A/E, not the Contractor. Editor’s Notes are formatted as hidden text. Editor’s Notes are not identified with an update. Do not print Editor’s Notes in issue for distribution to Bidders/Contractors.**

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**Red: Text updated in 1st quarter. April – June.**

**Strikethrough text and highlighting (not text) in previously issued quarters are deleted. Only 1st quarter highlighted updated text is indicated.**

**Turquoise: Text updated in 2nd quarter. July – September.**

**1st quarter updated text remains highlighted.**

**Pink: Text updated in 3rd quarter. October – December.**

**1st and 2nd quarter updated text remain highlighted.**

**Bright Green: Text updated in 4th quarter. January – March.**

**1st, 2nd and 3rd quarter updated text remains highlighted.**

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 **Click Replace tab, Replace All, OK, Close. Save.**

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**IMPORTANT: Retain month and year under section title on first page indicating updated Guide Specification Section issue used.**

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NOTE, TURN THEM ON AS FOLLOWS.

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HIDDEN TEXT.

**FOR MICROSOFT WORD 2007,** CLICK ON MICROSOFT OFFICE ICON LOCATED IN UPPER LEFT

CORNER OF MENU BAR. CLICK ON WORD OPTIONS AT BOTTOM OF DROP DOWN. THEN CLICK

ON DISPLAY. CHECK THE HIDDEN TEXT BOX.

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SECTION 01 33 29

SUSTAINABLE DESIGN REPORTING

(Edited from DeCA June 2022 Design Criteria)

This Section specifies certain general requirements and procedures pertaining to sustainable resources and construction practices that are to be performed by the Contractor.

This Section does not specify requirements for planning and design which are addressed in the DeCA Design Criteria Handbook Division 01 Section 01 33 29, Sustainable Design Reporting that are the responsibility of the A/E. It also does not specify sustainable design requirements that are based on design features or product selection, to the extent that they are the responsibility of the A/E rather than the Contractor. This Section also does not include certain requirements that are specific to only a few materials and which can easily be included in Divisions 02 through 33 Sections. This Section does not include requirements for construction waste management or commissioning, which are included in Division 01 Sections Environmental Management and General Commissioning Requirements.

Specifier notes referring to Guiding Principles indicate that the source of the requirement is from "Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings."

1. GENERAL
	* + 1. SUMMARY
				1. Section Includes:

General requirements and procedures for compliance with Executive Order (EO) 13423 – Strengthening Federal Environmental, Energy, and Transportation Management, as identified in the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding, Executive Order (EO) 13514 -Federal Leadership in Environmental, Energy and Economic Performance, and Executive Order (EO) 13693 - Planning for Federal Sustainability in the Next Decade.

A LEED Silver design target of 55 points under the LEED for Retail NC Rating System is required for all new DeCA facilities. Design teams will not be required to register and certify the building through USGBC, unless advised otherwise by DeCA. However, design teams will need to present DeCA with a completed LEED scorecard during the early design phases of the project demonstrating compliance with a LEED silver target. The scorecard shall indicate the credits they would pursue as part of the design process, in addition to meeting the required pre-requisites and minimum program requirements (MPR’s) set forth by the LEED rating system. At the end of the project the design team will be expected to provide DeCA with a report showing they have complied with the requirements of all LEED credits they elected to pursue at the beginning of the Project.

* + - * 1. Related Sections:

Divisions 01 through 33 Sections for sustainable design requirements specific to the Work of each of these Sections. Requirements will include reference to required LEED submittals.

* + - 1. DEFINITIONS

Below defines "certified sustainable wood" that is indicated as a Bio-Based Content product.

* + - * 1. Certified Sustainable Wood:

Chain-of-Custody Certificates: Certificates signed by manufacturers certifying that wood used to make products was obtained from forests certified by an FSC-accredited certification body to comply with FSC STD-01-001, "FSC Principles and Criteria for Forest Stewardship". Certificates shall include evidence that manufacturer is certified for chain of custody by an FSC-FSC-accredited certification body.

* + - * 1. EPA:

U.S. Environmental Protection Agency.

* + - * 1. LEED:

Leadership in Energy and Environmental Design.

Below defines "rapidly renewable resources" that is indicated as a Bio-Based Content product.

* + - * 1. Rapidly Renewable Resources:

Materials made from plants that are typically harvested within a 10-year or shorter cycle. Rapidly renewable materials include products made from bamboo, cotton, flax, jute, straw, sunflower seed hulls, vegetable oils, or wool. For a more complete list, see the U.S. Green Building Council website, www.usgbc.org.

* + - * 1. Recycled Content:

Definition in first paragraph below is from Guiding Principles V.A.

For EPA-designated products, use products meeting or exceeding EPA's recycled content recommendations. For other products, use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least 10 percent (based on cost) of the total value of the materials in the Project. LEED Credit MR 4

"Post-consumer" material is defined as waste material generated by DeCA facilities in their role as end users of the product, which can no longer be used for its intended purpose.

"Pre-consumer" material is defined as material diverted from the waste stream during the manufacturing process. Excluded is reutilization of materials such as rework, regrind, or scrap generated in a process and capable of being reclaimed within the same process that generated it.

Definition in paragraph below is from Guiding Principles V.A.

Comprehensive Procurement Guidelines for Construction and Landscaping and the latest list of designated items can be downloaded at the EPA website <http://www.epa.gov/cpg/index.htm>. It is Department of Defense Policy that 100 percent of the purchases of these designated items meet or exceeds the EPA guidelines.

Definition below is from Guiding Principles V.B.

* + - * 1. Bio-Based Content:

For USDA-designated products, use products meeting or exceeding USDA’s bio-based content recommendations. For other products, use bio-based products made from rapidly renewable resources and certified sustainable wood products. For a complete list, see U.S. Green Building Council website.

* + - 1. SUBMITTALS
				1. Refer to Division 01 Section Administrative Requirements for procedures.

Submit additional sustainable design submittals required by other Specification Sections.

Sustainable design submittals are in addition to other submittals. If submitted item is identical to that submitted to comply with other requirements, submit duplicate copies as a separate submittal to verify compliance with indicated sustainable design requirements.

* + - * 1. Submittal Schedule:

Provide the indicated quantity by the delivery date.

* + - * 1. Submittal List:

 Reference Submittal Item Quantity Action

 1.3D Sustainable Design Action Plans X I

 1.3E Sustainable Design Progress Reports X I

 1.3F Sustainable Design Documentation Submittals X I

X Submit quantity specified in Division 01 Section Administrative Requirements.

R Review each submittal, mark to indicate action taken, and return.

I Submittal is for information or record purposes only. No action will be taken.

* + - * 1. Sustainable Design Action Plans:

The number of days and date is indicated in Part 7 – Waste Management and Disposal of the Section indicated below.

Solid Waste, Construction, and Demolition Debris Waste Management plan complying with Division 01 Section Environmental Management. (LEED Credit MR 2.1)

Construction indoor-air-quality management plan complying with requirements of Division 23. (LEED Credit IEQ 3.1)

* + - * 1. Sustainable Design Progress Reports:

A "Solid Waste Disposal Report", submitted on a quarterly basis, is required in Part 7 – Waste Management and Disposal of the Section indicated below.

Solid waste disposal progress reports complying with Part 7 - Waste Management and Disposal of Division 01 Section Environmental Management. (LEED Credit MR 2.1)

* + - * 1. Sustainable Design Documentation Submittals:

Documentation below is required in Guiding Principles II.B

Measurement and Verification (M&V): Comply with sustainable design submittal requirements of Divisions 23 and 26. (LEED Credit EA 5)

Documentation below is required in Guiding Principles V.A.

Recycled Content: Provide a listing of the total supplied building materials and products, and list the materials and quantities of the materials and products designated as recyclable content and identify their costs and the total costs of materials and products for the Project. Provide documentation verifying that the identified recyclable content materials and products have been purchased and used on the Project. (LEED Credit MR 4)

Documentation below is required in Guiding Principles IV.E 1.

Construction Indoor Air Quality Management (IAQ) During Construction. Comply with sustainable design submittal requirements of Division 23 (LEED Credit IEQ 3.1)

Documentation below is required in Guiding Principles IV.E 2.

Construction Indoor Air Quality Management (IAQ) Before Occupancy. Comply with sustainable design submittal requirements of Division 23 (LEED Credit IEQ 3.2)

Documentation below is required in Guiding Principles IV.D 1.

Documentation listing the adhesives, sealants, sealant primers, and aerosol adhesives used inside the weatherproofing system. For each listed product, state the VOC level, the applicable standard, the classification of material and the VOC limit. (LEED Credit IEQ ~~4~~) Indicate they do not exceed the following requirements.

Adhesives, Sealants, and Sealant Primers: South Coast Air Quality Management District (SCAQMD) Rule #1168 requirements in effect on January 1, 2003 and rule amendment date of October 3, 2003.

Aerosol Adhesives: Green Seal Standard GC-36 requirements in effect on October 19, 2000.

Documentation below is required in Guiding Principles IV.D 2.

Documentation listing all paints and coatings used inside the weatherproofing system. For each product, state the VOC level, the applicable standard, the classification of material and the VOC limit. (LEED Credit IEQ 4) Indicate they do not exceed the VOC limits and do not include any of the chemical components limited or restricted by the following standards.

Topcoat Paints: Green Seal Standard GS-11, Paints, First Edition, May 20, 1993.

Anti-Corrosive and Anti-Rust Paints: Green Seal Standard GS-03, Anti-Corrosive Paints, Second Edition, January 7, 1997. (For applications on ferrous metal substrates.)

All other Architectural Coatings, Primers, and Undercoats: South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on January 1, 2004.

Documentation listing all gypsum board, insulation, acoustical ceiling systems, and wall coverings used inside the weatherproofing system. (Credit IEQ 4) All materials should meet the following standard.

The testing and product requirements of the California Department of Health Services Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda.

Documentation below is required in Guiding Principles IV.D 4.

Documentation listing all composite wood products used in the building and state that they contain no added urea formaldehyde resins and list all the laminating adhesives used in construction and state that they contain no urea formaldehydes. Provide the documentation for all core and adhesive products used on the Project indicating that the products used contain no added urea formaldehydes. (Credit IEQ 4)

1. PRODUCTS

Recycled content of materials is in accordance with Guiding Principles V.A.

* + - 1. RECYCLED CONTENT OF MATERIALS
				1. General:

For EPA-designated products, use products meeting or exceeding EPA’s recycled content recommendations. For other products, provide building materials with recycled content such that post-consumer recycled content plus one-half of pre-consumer recycled content constitutes a minimum of 10 percent of cost of materials used for Project (LEED Credit MR 4).

Cost of post-consumer recycled content of an item shall be determined by dividing weight of post-consumer recycled content in the item by total weight of the item and multiplying by cost of the item.

Cost of pre-consumer recycled content of an item shall be determined by dividing weight of pre-consumer recycled content in the item by total weight of the item and multiplying by cost of the item.

Do not include mechanical and electrical components, and specialty items such as elevators and equipment in the calculation.

* + - 1. CERTIFIED WOOD
				1. General:

Provide a minimum of 50 percent (by cost) of wood-based materials that are produced from wood obtained from forests certified by an FSC-accredited certification body to comply with FSC STD-01-001, "FSC Principles and Criteria for Forest Stewardship". (LEED Credit MR 7).

Wood-based materials include, but are not limited to, the following materials when made from wood, engineered wood products, or wood-based panel products:

The listing below includes products usually used in DeCA commissaries.

Miscellaneous carpentry.

Finish carpentry.

Architectural woodwork.

Wood cabinets.

* + - 1. LOW-EMITTING MATERIALS

Adhesives and sealants are required in many Specification Sections where, without being specifically mentioned, they may be specified only by the requirement to install products according to manufacturer's written instructions. For this reason, the first paragraph below is included.

* + - * 1. Adhesives and Sealants:

For field applications that are inside the weatherproofing system, use adhesives and sealants that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (LEED Credit IEQ 4):

The listing below includes products usually used in DeCA commissaries.

Wood Glues: 30 g/L.

Metal-to-Metal Adhesives: 30 g/L.

Adhesives for Porous Materials (Except Wood): 50 g/L.

Plastic Foam Adhesives: 50 g/L.

Carpet Adhesives: 50 g/L.

VCT Tile Adhesives: 50 g/L.

Cove Base Adhesives: 50 g/L.

Gypsum Board and Panel Adhesives: 50 g/L.

Rubber Floor Adhesives: 60 g/L.

Ceramic Tile Adhesives: 65 g/L.

Multipurpose Construction Adhesives: 70 g/L.

Fiberglass Adhesives: 80 g/L.

Contact Adhesive: 80 g/L.

Structural Glazing Adhesives: 100 g/L.

Plastic Cement Welding Compounds: 250 g/L.

ABS Welding Compounds: 325 g/L.

CPVC Welding Compounds: 490 g/L.

PVC Welding Compounds: 510 g/L.

Adhesive Primer for Plastic: 550 g/L.

Sheet Applied Rubber Lining Adhesive: 850 g/L.

Aerosol Adhesive, General Purpose Mist Spray: 65 percent by weight.

Aerosol Adhesive, General Purpose Web Spray: 55 percent by weight.

Special Purpose Aerosol Adhesive (All Types): 70 percent by weight.

Other Adhesives: 250 g/L.

Architectural Sealants: 250 g/L.

Non-membrane Roof Sealants: 300 g/L.

Single-Ply Roof Membrane Sealants: 450 g/L.

Other Sealants: 420 g/L.

Sealant Primers for Nonporous Substrates: 250 g/L.

Sealant Primers for Porous Substrates: 775 g/L.

Other Sealant Primers: 750 g/L.

* + - * 1. Paints and Coatings:

For field applications that are inside the weatherproofing system, use paints and coatings that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (LEED Credit IEQ 4):

The listing below includes products usually used in DeCA commissaries.

Flat Paints, Coatings, and Primers: VOC not more than 50 g/L.

Non-flat Paints, Coatings, and Primers: VOC not more than 150 g/L.

Anticorrosive and Antirust Paints Applied to Ferrous Metals: VOC not more than 250 g/L.

Stains: VOC not more than 250 g/L.

Primers, Sealers, and Under-coaters: VOC not more than 200 g/L.

Dry-Fog Coatings: VOC not more than 400 g/L.

Zinc-Rich Industrial Maintenance Primers: VOC not more than 340 g/L.

Pretreatment Wash Primers: VOC not more than 420 g/L.

Aromatic Compounds: Paints and coatings shall not contain more than 1.0 percent by weight total aromatic compounds (hydrocarbon compounds containing one or more benzene rings).

Below is in accordance with Guiding Principles IV.D.4.

* + - * 1. Products Containing Urea-Formaldehyde Resin:

Do not use composite wood or agrifiber products or adhesives that contain urea-formaldehyde resin. (LEED Credit IEQ 4)

1. EXECUTION
	* + 1. REFRIGERANT REMOVAL
				1. General:

Remove CFC-based refrigerants from existing HVAC&R equipment indicated to remain and replace with refrigerants that are not CFC based. Replace or adjust existing equipment to accommodate new refrigerant as described in Division 23 Sections and Division 01 Section Environmental Procedures for Refrigerants. (LEED Prerequisite EA 3)

* + - 1. MEASUREMENT AND VERIFICATION

Below is in accordance with Guiding Principles II.B.

* + - * 1. General:

Implement measurement and verification plan consistent with (LEED Credit EA 5):

Option D: Calibrated Simulation, Savings Estimation Method 2 or Option B: Energy Conservation Measure Isolation in the EVO's "International Performance Measurement and Verification Protocol (IPMVP) Volume III: Concepts and Options for Determining Energy Savings in New Construction," April 2003.

OR

Option B: Energy Conservation Measure Isolation as specified in the EVO's "International Performance Measurement and Verification Protocol (IPMVP) Volume III: Concepts and Options for Determining Energy Savings in New Construction," April 2003.

Select the option appropriate for the size and nature of the building.

If not already in place, install metering equipment to measure energy usage. Monitor, record, and trend log measurements.

Evaluate energy performance and efficiency by comparing actual to predicted performance.

Measurement and verification period shall cover at least one year of post-construction occupancy.

* + - 1. CONSTRUCTION WASTE MANAGEMENT

Below is in accordance with Guiding Principles V.C.

* + - * 1. Comply with Part 7 - Waste Management and Disposal of Division 01 Section Environmental Management. (LEED Credit MR 2)
			1. CONSTRUCTION INDOOR-AIR-QUALITY MANAGEMENT
				1. General:

Comply with Part 4 - Air Quality of Division 01 Section Environmental Management.

Below is in accordance with Guiding Principles IV.E 1 and 2.

Comply with SMACNA's "SMACNA IAQ Guideline for Occupied Buildings under Construction" 1995, Chapter 3. (LEED Credit EQ 3.1)

Protect stored on-site or installed absorptive materials from moisture damage.

If Government authorizes use of permanent heating, cooling, and ventilating systems during construction period as specified in Division 01 Section Temporary Facilities and Controls, install filter media having a MERV 8 according to ASHRAE 52.2-1999 at each return-air inlet for the air-handling system used during construction.

Replace all air filters immediately prior to occupancy.

Comply with the following requirements (LEED Credit EQ 3.2):

After construction ends, prior to occupancy and with all interior finishes installed, as described in the USGBC Reference Guide, install new filtration media and perform a 72-hour building flush-out by supplying a total volume of 14000 cu. ft. of outdoor air per sq. ft. of floor area while maintaining an internal temperature of at least 60 deg F and, where mechanical cooling is operated, a relative humidity no higher than 60 percent.

The space may only be occupied following delivery of a minimum of 3500 cu. ft. of outdoor air per sq. ft. of floor area to the space and provided the space is ventilated at a minimum rate of 0.30 cfm per sq. ft. of outside air or the design minimum outside air rate, whichever is greater, a minimum of three hours prior to occupancy and continue during occupancy until a total of 14000 cu. ft./sq. ft. of outside air has been delivered to the space.

OR

Conduct baseline indoor-air-quality testing, after construction ends and prior to occupancy, using testing protocols consistent with the United States EPA's "Compendium of Methods for the Determination of Air Pollutants in Indoor Air" and as additionally detailed in the USGBC's Reference Guide.

Demonstrate that the contaminant maximum concentrations listed below are not exceeded:

Formaldehyde: 50 ppb.

Particulates (PM10): 50-micrograms/cu. m.

Total Volatile Organic Compounds (TVOC): 500-micrograms/cu. m.

\*4-Phenylcyclohexene (4-PH): 6.5-micrograms/cu. m.

Carbon Monoxide: 9 ppm and no greater than 2 ppm above outdoor levels.

\*This test is only required only if carpets and fabrics with Styrene Butadiene (SB) latex backing material are installed as part of the base building systems.

For each sampling point where the maximum concentration limits are exceeded, conduct additional flush-out with outside air and retest the specific parameter(s) exceeded to indicate the requirements are achieved. Repeat procedure until all requirements have been met. When retesting non-complying building areas, take samples from same locations as in the first test.

Air-sample testing shall be conducted as follows:

All measurements shall be conducted prior to occupancy but during normal occupied hours, and with building ventilation system starting at the normal daily start time and operated at the minimum outside air flow rate for the occupied mode throughout the duration of the air testing.

Building shall have all interior finishes installed including, but not limited to, millwork, doors, paint, carpet, and acoustic tiles. Non-fixed furnishings such as workstations and partitions are encouraged, but not required, to be in place for the testing.

Number of sampling locations will vary depending on the size of building and number of ventilation systems. For each portion of building served by a separate ventilation system, the number of sampling points shall not be less than one per 25,000 sq. ft. or for each contiguous floor area, whichever is larger, and shall include areas with the least ventilation and greatest presumed source strength.

Air samples shall be collected between 4 and 7 feet from the floor to represent the breathing zone of occupants, and over a minimum four-hour period.

END OF SECTION