

UNIFIED FACILITIES SUPPLEMENT (UFS)

UNIFIED FACILITIES GUIDE SPECIFICATIONS (UFGS) FORMAT STANDARD



FOREWORD

Unified Facilities Supplements (UFS) provide non-mandatory, supplemental information in support of Unified Facilities Criteria (UFC). Only UFC establish enforceable criteria. UFS are For Information Only (FIO) and exist to help users understand and apply UFC requirements.

The purpose of UFS is to offer procedural guidance, best practices, lessons learned, examples, and explanatory materials that clarify how to meet UFC criteria. They may include step-by-step procedures, checklists, illustrations, or decision aids, but they do not create new requirements or modify UFC content.

UFS are developed by Discipline Working Groups (DWGs) and published by the Military Services under MIL-STD-3007. Because they are not criteria, they do not require Coordinating Panel (CP) or Engineering Senior Executive Panel (ESEP) approval.

UFS content may be referenced or incorporated into project documents at the discretion of project delivery teams but are not binding unless explicitly included in contract requirements. For Service-specific supplemental guidance, refer to Facilities Supplements (FS).

UNIFIED FACILITIES SUPPLEMENT (UFS)
UNIFIED FACILITIES GUIDE SPECIFICATIONS (UFGS) FORMAT STANDARD

TABLE OF CONTENTS

CHAPTER 1 INTRODUCTION	1
1-1 BACKGROUND.	1
1-2 REISSUES AND CANCELS.	1
1-3 PURPOSE AND SCOPE.	1
1-4 APPLICABILITY.	1
1-5 REFERENCES.	1
CHAPTER 2 UFGS REQUIREMENTS	2
2-1 UFGS SECTION ORGANIZATION.	2
2-1.1 Construction Specifications Institute (CSI).....	2
2-1.2 Table of Contents (TOC).....	2
2-1.3 Attachments.....	2
2-1.4 Appendices.	2
2-2 CONTENT.	2
2-2.1 UFGS Master Content Guidance.	3
2-2.2 Editing UFGS for Projects.....	3
2-3 FORMAT.	3
2-3.1 Electronic File Format.	3
2-3.2 Section Numbering.	4
2-3.3 Subpart Numbering.....	4
2-3.4 Subpart Titles.....	4
2-3.5 Text Paragraphs within Subparts.....	4
2-3.6 Designer Notes.	5
2-3.7 Units of Measure (Metric or English).....	5
2-3.8 Referenced Publications.....	5
2-3.9 Cross References.	6
2-3.10 Tailoring.....	7
2-3.11 Brackets.....	8
2-3.12 Submittal Items.	8
2-4 WRITING STYLE.	13

2-4.1	Mood, Tense, and Voice.....	13
2-4.2	Abbreviations and Acronyms.....	13
2-4.3	Units.....	13
2-4.4	Terminology.....	14
2-4.5	Symbols.....	15
2-4.6	Pronouns.....	15
2-4.7	Capitalization.....	16
2-4.8	Brand Name Specifications.....	16
2-4.9	“Brand Name or Equal” Specifications.....	16
2-4.10	Warranty Clauses.....	16
2-4.11	Contract Clauses.....	17
2-4.12	Specifying New Items.....	17
2-5	TABLES AND FORMS.....	17
2-6	UFGS MODIFICATIONS.....	18
2-6.1	Clerical Repairs.....	18
2-6.2	Change.....	18
2-6.3	Revision.....	20
2-6.4	Superseding Dates.....	20
2-7	UFGS APPROVAL.....	20
APPENDIX A UFGS ORGANIZATION GUIDANCE.....		21
APPENDIX B REFERENCES.....		31

FIGURES

Figure 2-1	Subpart Numbering.....	4
Figure 2-2	Examples of FAR Titles.....	6
Figure 2-3	Example of Tailoring Format.....	7
Figure 2-4	Examples of Bracket Formats.....	8
Figure 2-5	Style Format of Government (G) Submittal.....	9
Figure 2-6	Example of Information Only Submittal.....	10
Figure 2-7	Style Format of Sustainability (S) Submittals.....	10
Figure 2-8	Example of O&M Data Package Submittal Item.....	12
Figure 2-9	Brand Name Notice.....	16

Figure 2-10 Examples of Section Banner Format Modifications 19
Figure 2-11 Example of Section Date Indicating a Change 19
Figure 2-12 Example of Section Date Indicating Revision, Renumber, or Retitle 20
Figure A-1 Examples of Numeric Format 21
Figure A-2 Example of Ordered List Tagging 22
Figure A-3 Example: Reference Identifier Format within the Reference Article 23
Figure A-4 Example: Reference Identifier Format within Section Subpart Text 23
Figure A-5 Example: Submittal Item Format shown with Tags 24

TABLES

Table 2-1 Symbols Not to Use 15

CHAPTER 1 INTRODUCTION

1-1 BACKGROUND.

Unified Facilities Guide Specifications (UFGS) are the set of standardized, comprehensive specifications used by the DoD for designing and constructing facilities. These specifications provide common requirements across DoD for safety, sustainability, durability, and functionality and reference applicable consensus building codes, DoD-defined requirements, and statutory and regulatory requirements. UFGS ensure consistency, quality, and efficiency across various projects by providing a standardized framework for a project team to use and edit for their project. These specifications help streamline the specification process, reduce errors, and improve communication among architects, engineers, contractors, and other stakeholders involved in design and construction projects.

1-2 REISSUES AND CANCELS.

This UFS reissues and cancels UFC 1-300-02, *Unified Facilities Guide Specifications (UFGS) Format Standard*, dated 1 April 2014 with Changes 1-3.

1-3 PURPOSE AND SCOPE.

This UFS provides guidance for the preparation of UFGS and establishes the general content and format of UFGS and project specifications. Each DWG is responsible for the technical content, format, and overall quality of their UFGS. Publication of UFGS is available by electronic media, not proprietary, and at no cost to the user.

Preparers for both UFGS Masters and project specifications must use this UFS. Specific guidance for each is provided as applicable.

1-4 APPLICABILITY.

This UFS follows the same applicability as UFC 1-200-01, paragraph 1.3 with no exceptions, applying to all the government elements and contractors preparing UFGS for DoD-owned Facilities.

1-5 REFERENCES.

APPENDIX B contains a list of references used in this document. The publication date of the code or standard is not included in this document. Unless otherwise specified, the most recent edition of the referenced publication applies.

CHAPTER 2 UFGS REQUIREMENTS

2-1 UFGS SECTION ORGANIZATION.

This paragraph describes the organization of a UFGS section.

2-1.1 Construction Specifications Institute (CSI).

CSI prescribes the use of three parts in each section and a consistent subject matter sequence within each part. These recommendations are included in Appendix A and must be followed to the extent practical in UFGS. When a part has no content, insert "Not used." in the body of the text.

2-1.2 Table of Contents (TOC).

SpecsIntact has two options for printing the Table of Contents using the Print/Publish function: 1) For the entire project or master, and 2) For the section. The Project or Master TOC is printed as a separate document. The Section TOC is printed within the section when the Combine Sections and Section TOC is selected. For instructions, refer to the SpecsIntact eLearning modules found in Chapter 4: Process and Print/Publish on the SpecsIntact website (<https://www.wbdg.org/dod/specsintact/elearning>).

2-1.3 Attachments.

Attachments are files included at the end of an individual section Portable Document Format (PDF). Section attachments (such as Figures and Forms) can be listed in the Section TOC by using the attachment tag, <ATT>, around the attachment title in the section text. For instructions, refer to the SpecsIntact Tags topic (ATT Tag) on the SpecsIntact Web-based Help website (<https://www.wbdg.org/tools/specsintact/Help/index.htm>).

2-1.4 Appendices.

Appendices are files included at the end of the specifications package PDF. Do not attach appendices to individual specification sections.

2-2 CONTENT.

UFGS are for the purpose of translating design criteria into construction requirements that have been coordinated with industry, thereby providing requirements for specifiers to incorporate into construction contracts. Appendix A provides the organizational guidance for UFGS and recommends the approach to addressing content. Refer to the SpecsIntact eLearning modules found in Chapter 7: Master Preparation on the SpecsIntact website.

2-2.1 UFGS Master Content Guidance.

Write the UFGS Master in a clear, concise, complete, and correct manner. Reference non-Government standards to the greatest extent possible in lieu of repeating their requirements. UFGS are broad and non-geographical in technical content.

Provide bracketed or tailored options when requirements may vary. Accompany bracketed or tailored options with designer notes to provide direction on identifying and selecting the appropriate options. For example, when the selection of a material, component, or system for corrosion prevention, life cycle cost effectiveness, or durability depends on the location, application, conditions, or atmospheric and chemical environment.

2-2.2 Editing UFGS for Projects.

Use the latest version of UFGS in accordance with UFC 1-200-01, paragraph 1-3 and paragraph 1-6.3.3. The UFGS are master guide specifications that provide the minimum level of quality. Do not specify lesser quality requirements than provided in the UFGS. Edit the specification sections for project requirements. Add, modify, and delete content as required for each project scope. Do not repeat requirements from the drawings.

2-3 FORMAT.

The UFGS format is based on the Construction Specifications Institute (CSI) SectionFormat™ and is designed for use with SpecsIntact software. Use of SpecsIntact and the UFGS database is mandatory. SpecsIntact includes the UFGS Section Template that complies with this UFS and can be used as a starting point for preparing new UFGS sections. Specifications must be in UFGS format, comply with this UFS, and be prepared in SpecsIntact.

2-3.1 Electronic File Format.

The UFGS Section Template provides the page layout, banners, notes, text paragraphs, tables, fonts, page numbers, headers, and other basic elements of a UFGS. SpecsIntact files are in Extensible Markup Language (XML) format with a SEC extension. SpecsIntact can also publish UFGS in PDF using the SpecsIntact PDF printer setting and Microsoft Word™ (.docx) formats. Download SpecsIntact through your Agency's software process or from the SpecsIntact website along with the PDF SpecsIntact Installation Guide for setup and configuration instructions located on the Support & Help Center on the SpecsIntact website. For additional assistance, refer to the SpecsIntact eLearning modules, which provides instructions for its use.

The most current version of UFGS is available from the Whole Building Design Guide (WBDG) DoD webpage (<https://www.wbdg.org/dod/ufgs>). Individual sections are available in both PDF and SEC formats. The entire UFGS Master is available in SEC format in a zipped file with the extension ZIP.

2-3.2 Section Numbering.

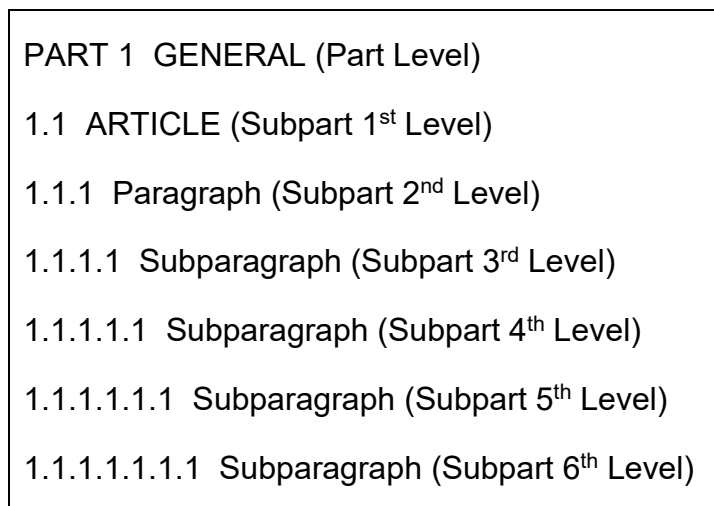
Each UFGS carries a unique section number and title in accordance with the CSI MasterFormat®, Numbers & Titles (latest version). If a number listed in MasterFormat® is used, then use its exact title as listed.

UFGS with the 5th level designator denote Agency-specific UFGS on the same subjects: "10" for Army, "20" for Navy, and "30" for Air Force (for example, 01 78 24.00 10 is Army specific). These 5th level designators facilitate management of specifications and provide identification within the WBDG and SpecsIntact.

2-3.3 Subpart Numbering.

Number subparts within the UFGS in accordance with the numeric system described in the SpecsIntact eLearning modules found in Chapter 3 Editing. Each subpart down to the sixth level is numbered as shown in Figure 2-1. Do not exceed the sixth level subpart numbering in a section.

Figure 2-1 Subpart Numbering



2-3.4 Subpart Titles.

Subparts must have titles, with full uppercase for the first subpart level (ARTICLE) and title case for lower-level subparts, as shown in Figure 2-1.

2-3.5 Text Paragraphs within Subparts.

Use no more than two untitled text paragraphs within a numbered subpart. If there are more than two text paragraphs, either include them in an ordered list (<OLG> and <OLI> tags) or create subparagraphs (<SPT>, <TTL>, and <TXT> tags).

2-3.6 Designer Notes.

Notes provide directions and criteria for the designer to choose options available in the pertinent subpart, and to identify when tailoring options are present. Provide notes between the subpart title and text paragraph to indicate when to use the paragraph, how to choose bracketed items, and to indicate what tailoring tags are in the text paragraph. Provide the note within tailoring tags if the note only applies when the tailoring option is selected; thus, the note will be deleted if the tailoring option is not selected.

2-3.7 Units of Measure (Metric or English).

For UFGS masters, provide measurements in both metric and English units, with metric units first. The format is: “text<MET> 50 mm</MET><ENG> 2 inches</ENG> text;” with no space between the text before the MET tag, a space before the measurement within the tags, and no space between tags. Provide conversions in accordance with IEEE/ASTM SI 10 or industry practice or standard. Do not use parenthesis to show both metric and English units.

For projects, select either metric or English units when setting up the Job. Avoid using both metric and English units, however, if the section requires, both metric and English can be selected in SpecsIntact.

2-3.8 Referenced Publications.

All publications referenced in the UFGS section subparts are also listed in the REFERENCES Article. The Reference Identifier (RID) tag must be used for each publication referenced within the REFERENCES Article and at every occurrence of the publication referenced in the section subpart text. Publication references found in designer notes do not require the RID tag. If a referenced publication appears in the REFERENCES Article but is not used elsewhere in the section subpart text, it will automatically be removed from the section during processing, when the Reconcile References checkbox is checked. Do not update references before their effective date.

2-3.8.1 Standards Organizations.

For UFGS Masters, identify standards-producing organizations cited in the section text with the acronym in the Unified Master Reference List (UMRL) or provide an appropriate acronym if the UMRL Manager has not assigned one. Where a reference uses a joint designation to identify the standards-producing organization and the proponent organization, list the publication under the proponent organization in the REFERENCES Article. For example, for the Institute of Electrical and Electronics Engineers/American National Standards Institute (IEEE/ASTM), use ASTM. The RID must include the organization acronym and publication number as stated in the UMRL.

For projects, if a standards organization is not included in the UMRL, provide it as a supplemental reference. Include the organization’s contact information in Section 01 42 00.

2-3.8.2 Federal Acquisition Regulation (FAR) Clauses.

Avoid referencing FAR clauses, as they are provided in the Contract's procurement requirements. When referencing a clause cannot be avoided, use the FAR number followed by the title (in title case) in the text. Do not include the date of the FAR clause. Do not include the FAR clause in the REFERENCES Article. Verify FAR titles at Acquisition.GOV (<https://www.acquisition.gov/>), and follow the examples shown here in Figure 2-2.

Figure 2-2 Examples of FAR Titles

FAR 52.243-4 Changes
FAR 52.236-2 Differing Site Conditions

2-3.8.3 Reference Dates and Titles.

Use the most current standard referenced in the UFGS in accordance with UFC 1-200-01 unless a specific reason exists to cite an earlier version of the standard. The reference's title must consist of the year of publication in parenthesis followed by the title as stated in the UMRL. Separate the date of a reference's revision (R), change (C), or similar edition (for example, editions and errata), from the original date with a semi-colon (2009; R 2010; C 2011; Errata 2012), and exactly as it appears in the UMRL. Use the UMRL in conjunction with the SpecsIntact software to automatically update the standards referenced in the UFGS. Reference industry standards to the maximum extent possible for products and their installation to reduce the written text in the body of the UFGS.

2-3.8.4 Quoting Reference Standards.

Do not quote or repeat portions of the referenced standard in the text of the guide specifications unless it is necessary to improve clarity and readability.

2-3.9 Cross References.

Avoid cross-referencing UFGS sections and paragraphs in other UFGS sections or within the same section. When a section cross-reference is necessary, reference with the following format: Section <SRF>01 23 40</SRF> MISCELLANEOUS (where MISCELLANEOUS is the full Section Title). When referencing paragraphs within the same section, reference by paragraph title, not by paragraph number, for example, paragraph EQUIPMENT. Paragraphs automatically renumber after changes, but paragraph titles do not change.

Do not reference UFC in UFGS sections, with exception to:

- Designer Notes as guidance to the specification editor and designers
- Design-Build projects and its tailoring

2-3.10 Tailoring.

Tailoring options in the UFGS allow pre-editing of information such as materials, methods, DoD Service-specific, or regional requirements in the creation of the project specification. The tailoring option provides a higher level of editing that reduces editing time.

For clarity in viewing a UFGS in a format other than SpecsIntact, consider providing tailored items as part of a complete sentence rather than items within a sentence. Refer to Figure 2-3 for an example of the tailoring format.

Figure 2-3 Example of Tailoring Format

<p>Show as:<TAI OPT> Use galvanized steel.</TAI><TAI OPT> Use stainless steel.</TAI></p> <p>Do not show as: Use <TAI OPT>galvanized </TAI><TAI>stainless </TAI>steel.</p>

2-3.10.1 Service-Specific Tailoring.

Master UFGS writers must reconcile Agency differences to the greatest extent possible to avoid the need for Service-specific paragraphs within a specification. When more than one Service-specific paragraph is required within a specification, incorporate Service-specific tailoring. In most cases:

- Do not use both tailoring and bracketed paragraphs to resolve a particular DoD Service-specific requirement within a specification.
- Use caution when brackets and tailoring options are in the same specification. Ensure bracketed options are correctly placed in or out of tailoring options to include all necessary Services.
- Along with tailoring options, provide a designer note to identify the tailoring in the text and the criteria for selecting the tailored option.

2-3.10.2 Design-Build or Design-Bid-Build Tailoring.

Some UFGS Masters are developed to have tailoring options for design-build or design-bid-build contracts, as well as options for Service-specific requirements. Ensure that design-only requirements for design-build projects are captured in tailoring tags. Use these tailoring options to distinguish between Design-Build versus Design-Bid-Build requirements that are service-specific:

- Air Force Design-Build
- Air Force Design-Bid-Build
- Army Design-Build
- Army Design-Bid-Build
- Navy Design-Build
- Navy Design-Bid-Build

Use the following where requirements apply to all Services:

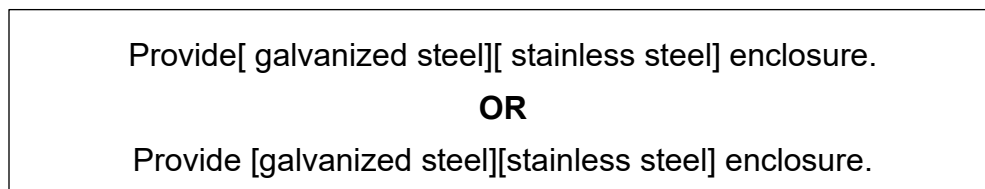
- Design-Build
- Design-Bid-Build

2-3.11 Brackets.

Use brackets for choices of multiple items and for blank options requiring designer input. In addition, brackets may be used to identify text that may not be applicable to all projects, such as regional requirements, Agency requirements, or non-standard technical requirements. If the same bracketed choices are used multiple times in the UFGS section, consider tailoring. Do not use both tailoring and bracketed paragraphs to resolve a particular requirement within one specification.

Organize bracketed options in the order of the most used item first. Provide brackets around five blank underscored characters ([____]) to indicate the designer is to provide wording. Unless the bracketed choices are known industry practices, provide a designer note to assist in the editing of the bracketed items or filling in the blank. To ensure proper spacing when unselected brackets are removed, apply spacing to brackets in a consistent manner throughout. See Figure 2-4 for examples of bracket formats.

Figure 2-4 Examples of Bracket Formats



2-3.12 Submittal Items.

Only submittal items are allowed in the SUBMITTALS Article; do not include instructions or other explanatory text. Each submittal item must be within one set of submittal tags, for example, _{Item}, do not list multiple submittal items separated by commas within submittal tags, for example, _{Item 1, Item 2}. Commas are field separators in the submittal register data file and commas within submittal tags will cause problems when imported into the Resident Management System (RMS) or Excel

spreadsheets. Double-space submittal items. Format submittals within the SUBMITTALS Article as shown in Appendix A, Figure A-1.

2-3.12.1 Submittal Descriptions (SD).

UFGS 01 33 00 contains general requirements for each submittal description number, such as SD-01, SD-02. UFGS writers must compare the requirements of each submittal item in a technical section to the item descriptions provided in UFGS 01 33 00 paragraph Submittal Descriptions.

2-3.12.2 Submittal Naming Convention.

Use unique names for submittal items to differentiate them from each other. For example, if the submittal item, "Wall Louvers" is required under both SD-02 Shop Drawings and SD-04 Samples, use the unique submittal names, "Wall Louvers" under SD-02 and "Wall Louver Samples" under SD-04.

2-3.12.3 Submittal Items Tagged in the Section Subpart Text.

Each submittal item in the SUBMITTALS Article must appear tagged only once outside the SUBMITTALS Article in the section subpart text. In cases where the submittal item is part of tailored or bracketed text, the submittal item may appear more than once in the section subpart text. Submittal items must appear, within the tags, exactly as written in the SUBMITTALS Article and in the section subpart text with the exception of the case; submittal items are not case-sensitive. Provide a detailed description of the submittal item and its requirements in the section subpart text, and not in the SUBMITTALS Article. Do not repeat information already provided in UFGS 01 33 00.

2-3.12.4 Submittal Classifications.

2-3.12.4.1 Government (G) Submittals.

When a "G" follows a submittal item, it indicates Government approval is required for that item. Only use a "G" in submittal tags for items deemed sufficiently critical, complex, or aesthetically significant to warrant approval by the Government. See Figure 2-5 for an example of a submittal requiring Government approval.

Figure 2-5 Style Format of Government (G) Submittal

<ITM>_{Fire Hydrants}; _{G<TAI OPT=ARMY>, [_____]</TAI>}</ITM>

2-3.12.4.2 Information Only Submittals.

Submittal items for information only or approved by the Contractor QC System, depending on the Agency's terminology, have no additional designation following the submittal item. See Figure 2-6 for an example of an information only submittal.

Figure 2-6 Example of Information Only Submittal

```
<ITM><SUB>Fire Hydrants</SUB></ITM>
```

2-3.12.4.3 Sustainability (S) Submittals.

Use an "S" following a submittal item to designate sustainability submittals required by UFGS 01 33 00 and described in more detail in UFGS 01 33 29 when used. These submittals are compiled by the Contractor into the electronic Sustainability eNotebook. Provide these "S" submittal items under the appropriate submittal description (SD) in the SUBMITTALS Article. Unlike a whole product submittal, these submittals are intended to only provide and highlight the information required to validate compliance with UFGS 01 33 29.

When revising Masters:

- Ensure each product within a Master has been researched for industry minimum availability.
- Add the minimum compliance supported by industry as the default requirement.
- Ensure that the sustainability requirement is provided in the related subpart text.
- Ensure submittal tagging is added for each individual sustainability requirement per product. This ensures that when UFGS are edited for projects, deleted products that have associated "S" submittals will also be deleted. See Figure 2-7 for how to format Sustainability (S) Submittals.

Figure 2-7 Style Format of Sustainability (S) Submittals

```
<LST><SUB>SD-03 Product Data</SUB></LST>  
  
  <ITM><SUB>Recycled Content for Carpeting</SUB>; <SUB>S</SUB></ITM>  
  
<LST><SUB>SD-07 Certificates</SUB></LST>  
  
  <ITM><SUB>Indoor Air Quality for Rubber Cushion</SUB>; <SUB>S</SUB><ITM>  
  
  <ITM><SUB>Indoor Air Quality for Polyurethane-Foam Cushion</SUB>; SUB>S</SUB><ITM>
```

2-3.12.5 Submittal Item Reviewers.

2-3.12.5.1 Army.

When the US Army Corps of Engineers is the Designated Construction Agent, the brackets following a "G" on a submittal item indicate a specific Government reviewer and approval is required for that item. For submittals requiring Government approval on Army projects, a code of up to three characters within the submittal tags must follow the "G" designation to indicate the approving authority.

Codes for Army projects 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

"PO" for Project Office

2-3.12.5.2 Navy.

When the Naval Facilities Engineering Command is the Designated Construction Agent, do not use the brackets following the "G". For projects, edit UFGS 01 33 00, paragraph Forwarding Submittals Requiring Government Approval, to designate who approves Government Approved submittals.

2-3.12.6 Design-Build Submittals for Design after Award.

2-3.12.6.1 Army.

For Army only, when a "D" follows a submittal item, it indicates Designer of Record Approval (DA) is required for that item. When a "C" follows a submittal item, it indicates Government Conformance Review of Design (CR) is required for that item. When an "R" follows a submittal item, it indicates both a Designer of Record Approval and Government Conformance Review (DA/CR) are required for that item. When an "A" follows a submittal item, it indicates both a Designer of Record Approval and Government Approval (DA/GA) are required for that item.

2-3.12.6.2 Navy.

For Navy only, comply with FC 1-300-09N and Contract documents.

2-3.12.7 Operation and Maintenance (O&M) Data.

2-3.12.7.1 O&M Data Packages.

Data packages are provided for a complete assembly and specified in the technical sections. Use UFGS 01 78 23, paragraph Schedule of Operation and Maintenance Data Packages to choose which data package to specify. Create a submittal item for that package in the paragraph Submittals under SD-10 Operation and Maintenance

Data. Annotate the data package type after the submittal item, and as shown in the example below. The data package required depends on the complexity of the system, where package complexity increases from Data Package 1 to Data Package 5. Generally, technical specifications with complex equipment or systems that contain commissioned or energized moving parts (for example, Fire Protection, Mechanical, and Electrical systems), require a Data Package submittal. The data packages are described in UFGS 01 78 23, paragraph O&M Manual Content. If additional content is required in the data package, add that information into the section subpart text where the submittal item is specified. Figure 2-8 is an example showing the submittal item in SD-10, and text describing additional or detailed content of the package within a subparagraph of the section.

Figure 2-8 Example of O&M Data Package Submittal Item

```
<SPT=1.2>1.2 <TTL>SUBMITTALS</TTL>
```

```
<LST><SUB>SD-10 Operation and Maintenance Data</SUB></LST>
```

```
  <ITM><SUB>Electrical Systems</SUB>, Data Package 5; <SUB>G</SUB></ITM>
```

```
  <ITM><SUB>Metering</SUB>, Data Package 5; <SUB>G</SUB></ITM>
```

```
</SPT=1.2>
```

Within the section text:

```
<SPT=1.5.1>1.5.1 <TTL><SUB>Electrical Systems</SUB></TTL>
```

```
<TXT>Provide operation and maintenance manuals for electrical systems in accordance with Section <SRF>01 78 23</SRF> OPERATION AND MAINTENANCE DATA that provide basic data relating to the design, operation, and maintenance of the electrical distribution system for the building. In addition to the requirements, include the following:</TXT>
```

```
<OLG>
```

```
  <OLI ITEM=a.>a. Single line diagram of the "as-built" building electrical system.</OLI>
```

```
  <OLI ITEM=b.>b. Schematic diagram of electrical control system (other than HVAC, covered elsewhere).</OLI>
```

```
  <OLI ITEM=c.>c. Manufacturers' operating and maintenance manuals on active electrical equipment.</OLI>
```

```
</OLG>
```

```
</SPT=1.5.1>
```

2-3.12.7.2 O&M Manuals.

O&M Data Packages, when required by the technical UFGS sections, are assembled into O&M Manuals for the project. The requirements and format of the O&M Manuals are provided in UFGS 01 78 23. Additional O&M Manual requirements for the Army are provided in UFGS 01 78 24.00 10, and additional requirements for the Navy are provided in UFGS 01 78 24.00 20.

2-4 WRITING STYLE.

Write in a direct, active voice with simple, concise sentences. Avoid ambiguous, indefinite terms such as "too short" or "relatively simple." Define what applies instead of using "applicable" or other indefinite wording. Do not use "as shown on the drawings" as this phrase is frequently overlooked. If used in a UFGS and the item is not shown on the drawings, then the item is not specified. For additional guidance, see the Federal Plain Language Guidelines (<https://www.plainlanguage.gov/guidelines/>).

2-4.1 Mood, Tense, and Voice.

Use the imperative mood (such as, Install equipment) except when clarity requires the use of the indicative mood (such as, Equipment must).

Speak only to the Contractor, not the subcontractor, supplier, or manufacturer. Directing the Contractor through these parties can be misinterpreted as indicating responsibility. Stating "the manufacturer must provide," could be incorrectly interpreted as informing the Contractor that a party other than the Contractor is responsible. It is unnecessary to differentiate between the Contractor's actions and the Contractor's various suppliers, as this could be interpreted as assigning work. Do not use the specification to instruct the Contracting Officer.

2-4.2 Abbreviations and Acronyms.

Use of abbreviations and acronyms must follow the practices within the discipline involved. At the first use, write out the term completely and follow with the abbreviation or acronym in parentheses. Use abbreviations for units such as psi, cfm, and kW, and be consistent in their use.

2-4.3 Units.

Spell out numbers zero - nine, except units of time and measurement, and use numerals for numbers 10 and above. Avoid starting a sentence with a number, but when unavoidable, always spell out the number when it is the first word of a sentence. Do not repeat a spelled-out number with a numeral in parentheses.

2-4.4 Terminology.

- The use of “shall” is prohibited. “Shall” imposes an obligation to act but may be confused with prediction of future action.
- Avoid the use of "must". If use cannot be avoided, use “must” to prescribe mandatory requirements, actions, and procedures. “Must” imposes obligation and indicates a necessity to act.
- Do not use the word "should" in the specification text for mandatory requirements as "should" implies a recommendation. "Should" may be in designer notes to indicate desirable procedures that are advisory in nature.
- Do not use “Contractor must provide”, use “Provide”. Project specifications are already directed to the Contractor, who is responsible for performing the work as shown and specified.
- Do not use the term "furnish" unless only delivery of material to the site is required. Similarly, do not use the term “install’ unless the Government or others will furnish equipment or materials and Contractor will install. Use "provide" to mean "furnish and install".
- Do not use “to be” for describing work that will be accomplished by the Contractor. “To be” implies that someone will accomplish the work other than the Contractor, such as the Government or another Contractor.
- Do not use “proposed”, as it can be interpreted to mean future work by others or work not in this Contract. If work will be accomplished by the Government, for example, say “Government will remove storage building prior to start of construction”.
- Do not use the word "per", use "in accordance with".
- Avoid the use of colloquial terms or jargon. For example, do not use "deck" for floor, or "head" for toilet.
- Eliminate redundant wording such as "conforming to", "all", and "type". For example, when stating “paint doors”, all doors are implied.
- Do not use indefinite items such as "etc.", "any", and "and/or".
- Do not use vague words and phrases or escape clauses such as "in this specification", "as may be required", "as necessary", "an approved type", "as approved/directed/determined by the Contracting Officer", "first class workmanship", "securely", "thoroughly", "suitable", "properly", "good working order", "neatly", "carefully", and "installed in a neat and workmanlike manner".

- Do not use long, compound, or hyphenated words such as "hereinbefore" and "hereinafter."
- Use the term "Contracting Officer"; do not use terms such as "Officer in Charge of Construction", "Contracting Officer Representative", or "Government Representative".

2-4.5 Symbols.

Because of potential problems, do not use the symbols shown in Table 2-1 below. Instead, replace the symbol with the corresponding wording.

However, feet and inch symbols are acceptable only when both are in a dimension (for example, 8'-8") and in tables. Avoid or minimize the use of parentheses and quotation marks.

Table 2-1 Symbols Not to Use

Do Not Use	Use
'	foot
"	inch
#	pound
%	percent
°	degree
+	plus
-	minus
+/-	plus or minus
•	by
x	by
/	per
@	at
&	and

2-4.6 Pronouns.

Use pronouns sparingly, if at all; it is better to repeat the noun. If pronoun use is unavoidable, do not use pronouns like "he", "his", "this", "they", "their", "who", "it", and "which". Use generic "they" and "their" instead of male or female-specific pronouns if they cannot be avoided.

2-4.7 Capitalization.

Capitalize "Contractor", "Contracting Officer", "Government", and "Contract" in specifications.

2-4.8 Brand Name Specifications.

Do not use brand name or restrictive requirements. Brand name items have been the subject of many Contract claims. Use of brand name items is prohibited unless guidance and formal written approval, in the form of a justification and approval (J&A), is obtained from the Contracting Officer. To ensure the product is not deemed proprietary, follow Agency FAR requirements on acceptable number of manufacturers or suppliers capable of providing the product.

Any specification section that contains brand name items must include a notice to that effect on the first page of the section. Place the brand name notice in Figure 2-9 above the section number and title at the top of the first page of the section.

Figure 2-9 Brand Name Notice



2-4.9 "Brand Name or Equal" Specifications.

Do not use "Brand Name or Equal," unless formal written approval, in the form of a justification and approval (J&A), is obtained from the Contracting Officer in accordance with DFARS 206.302-1(c). Refer to Federal Acquisition Regulation (FAR) Clause 52.211-6 Brand Name or Equal. In accordance with FAR 36.202(c), if allowed to specify an item as "Brand Name or Equal", clearly identify in the UFGS the salient characteristics which are considered essential to satisfy the requirement, to determine equality.

2-4.10 Warranty Clauses.

Ordinarily, do not include warranty clauses in the UFGS. A warranty clause is any provision that modifies terms of the 1-year warranty required by the Contract clause of the work performed under the Contract.

There are two classes of exceptions. First, in rare instances, it is acceptable to extend the period of the warranty based on the judgment of the author, if the industry routinely provides such extended periods of warranty and the unusually complex nature of the

product makes the provision cost effective on a life-cycle basis, or if UFGS suggest the extension. Second, it is possible to add terms to a warranty, but only in the rarest of circumstances and with written approval from an appropriate authority or when UFGS indicate such an extension has been reviewed and approved by the Contracting Officer.

2-4.11 Contract Clauses.

Do not repeat the Contract clauses in UFGS. The Contract clauses in the Contract contain requirements which affect the general conduct of the work in the Contract. If these are randomly modified within the specifications, it may weaken or void the Contract clauses.

2-4.12 Specifying New Items.

Requests are made to consider the use of materials that are relatively new to industry. While the Government encourages innovative solutions, manage risk appropriately. Take care in specifying items that have not gained widespread acceptance and use. If service records of new materials do not exist, consult third-party or independent laboratory tests.

These tests:

- Must have been made under the conditions of actual use,
- Must have been conducted by a reputable, independent laboratory, and
- Must have factual documentation sufficient to support evaluation of the material.

Manufacturers will typically provide requested product information, answer questions, and may offer a competitive, generic type specification section to edit the UFGS. Ensure the item specified is not a brand name.

2-5 TABLES AND FORMS.

SpecsIntact-developed tables and forms can be included in the UFGS section. The table font will be the same as the section font. Ensure that the tables do not exceed 100% of the page width. If a table or form cannot be created within SpecsIntact, either provide instructions in the designer notes to download and append to the section in the final electronic PDF file or provide the Uniform Resource Locator (URL) for the Contractor to download.

Verify that URLs in the UFGS are valid and current before publishing the project specifications.

2-6 UFGS MODIFICATIONS.

2-6.1 Clerical Repairs.

A clerical repair consists of non-technical modifications to the specification section. The modifications are administrative in nature, such as typographical corrections, reference updates, spacing corrections, tagging corrections, CSI conformance, and formatting. Do not document clerical repairs in the Section Header (Banner), Change List or Revision List.

2-6.2 Change.

A Change consists of technical modifications to a specific aspect of the specification section. In accordance with MIL-STD 3007, a change amends no more than 40 percent of an existing issuance and has the full authority of the issuance. The 40 percent is based on a single update or the cumulative total of multiple updates. Changes may include the addition of entire chapters or appendices. The number of changes is limited to the number of years in the designated refresh rate of that document, after which, the UFGS must be revised (as a Revision). The modifications are often associated with resolution of a Criteria Change Request (CCR). A Change only addresses the specific issue without a review of the entire specification section. The most recent Change number and Change date are added in the Section Banner and in the Section Date tag; however, they do not affect the Section Date. Provide the nature of the changes to the Database Managers to incorporate in the Change List.

For an example of how to format the Section Banner to indicate a change, see Figure 2-10.

Figure 2-10 Examples of Section Banner Format Modifications

Example of Section Banner Format Indicating Change	Description of Change
<p>***** UFGS-08 34 73 (November 2019) Change 1 - 02/21 ----- Superseding UFGS-08 34 73 (February 2015)</p>	<ul style="list-style-type: none"> • No change to Section Date. • Latest Change Number and release date noted under Banner. Section Number as Change # - MM/YY
Example of Section Banner Format Indicating a Revision	Description of Change
<p>***** UFGS-08 34 73 (November 2019) ----- Superseding UFGS-08 34 73 (February 2015)</p>	<ul style="list-style-type: none"> • Section Date change to current release month and year. • Previous Section Date will become the Superseding Section Date. • Any notation of a previous Change is removed.
Example of Section Banner Format Indicating a Section Renumber or Retitle	Description of Change
<p>***** UFGS-08 34 73 (November 2019) ----- Superseding UFGS-08 34 73.00 10 (February 2015)</p>	<ul style="list-style-type: none"> • New Section Number and Date change to current release month and year. • Previous Section Number and Date will become the Superseding Section Number and Date. • Any notation of a previous Change is removed.

Add Change Number to the Section Date below the Section Title. Figure 2-11 shows a Section Date of 11/19 and a Change 1 Date of 02/21.

Figure 2-11 Example of Section Date Indicating a Change

<DTE>11/19, CHG 1: 02/21</DTE>

2-6.3 Revision.

A Revision consists of updates to various requirements in a UFGS or a complete rewrite of the UFGS. The Revision results in a re-publication of the UFGS with a revised date and a superseded Section Date. Provide the nature of the revisions to the Database Managers to incorporate in the Revision List.

2-6.4 Superseding Dates.

Section Dates will be superseded when the section is revised, renumbered, or retitled. For a Revision to the section, change the date in the Section Banner to reflect the current release month and year. Only the previous Section Number/Date will become the superseding Section Number/Date. For a Renumber or Retitle of the section, use the new Section Number, and current release month and year, and place the old Section Number, and Section Date in the superseded portion of the Section Banner. For examples of the Section Banner format modifications to indicate a Revision, Renumber or Retitle, see Figure 2-10.

Change the Section Date below the Section Title to the current Release Date as shown in Figure 2-12.

Figure 2-12 Example of Section Date Indicating Revision, Renumber, or Retitle

<DTE>11/19</DTE>

2-7 UFGS APPROVAL.

Coordinate UFGS for approval in accordance with MIL-STD-3007. DWG technical representatives must review each UFGS. When appropriate, extend the opportunity for review to major commands, facility users, and private industry. Preparing Activities must coordinate new and changed UFGS within their Agency and with their counterparts in the other Agencies. Changes to UFGS are subject to coordination and approval of the other Agencies whenever the change affects the technical content of the UFGS. However, the Preparing Activity is always obligated to consider and resolve requests from other Agencies for changes to UFGS.

A-2 ORDERED LISTS.

Multi-level, alpha-numeric, ordered lists are allowed under the subpart level. Do not manually enter the lettering/numbering sequence when creating ordered lists. The hierarchy of ordered lists have an alternating alpha-numeric designation with four levels of indentation beginning with the letter “a.” at the first level. Use the tagging system shown in Figure A-2 when creating ordered lists.

Figure A-1 Example of Ordered List Tagging

Format of Ordered List	Ordered List with Tags (highlighted in red)
a. Text. (1 st Level)	<OLG> <OLI ITEM=a.>a. Text.</OLI>
(1) Text. (2 nd Level)	<OLI LEVEL=2 ITEM=a.(1)>(1) Text.</OLI>
(a) Text. (3 rd Level)	<OLI LEVEL=3 ITEM=a.(1)(a)>(a) Text.</OLI>
1. Text. (4 th Level)	<OLI LEVEL=4 ITEM=a.(1)(a)1.>1. Text.</OLI>
(Do not use list progression beyond the 4th level.)	</OLG>

A-3 UFGS ORGANIZATIONAL GUIDANCE.

The following guidance is based on the paragraph titles and sequence recommended in the CSI Section Format™ Outline. This format has been adopted by the Agencies supporting the SpecsIntact software. Use this arrangement to the extent applicable in the preparation of UFGS by eliminating paragraphs which do not apply and adding additional paragraphs, as necessary. It is important that UFGS authors understand that the paragraphs listed below are not mandatory. Use only those paragraphs that are applicable to the specified subject, and add any applicable requirements not listed. It is important to follow the sequence of information provided below even when adjusting the paragraph titles to fit the specified subject matter.

PART 1 GENERAL

1.1 UNIT PRICES

Specify measurement and payment requirements for work subject to extreme variation in estimated quantity when unit price bidding is required. Do not use this ARTICLE for guide specifications covering building components or for other construction features when quantities can be reasonably calculated from information included in the Contract.

1.2 REFERENCES

List only the publications cited in the text of the guide specification in this paragraph by organization, designation, date, and title. Reference the publications in the text by basic designation (Reference Identifier (RID)) only.

Figure A-3 Example: Reference Identifier Format within Reference Article

```
<REF>      <ORG>ASTM INTERNATIONAL (ASTM)</ORG>  
<RID>ASTM E2129</RID>      <RTL> (2010) Standard Practice for Data Collection for  
Sustainability Assessment of Building Products</RTL>  
</REF>
```

Figure A-4 Example: Reference Identifier Format within Section Subpart Text

```
</SPT = 1.6.1><SPT = 1.6.2>1.6.2 <TTL>Environmental Data</TTL>  
  <TXT> Submit Table 1 of <RID>ASTM E2129</RID> for the following products:  
  [____].</TXT>  
</SPT =1.6.2><SPT =1.6.3>1.6.3 <TTL>Energy Efficiency</TTL>
```

1.3 DEFINITIONS

Only use this paragraph to define terms used in the specification section that are not defined by a commercial or Government standard and to provide a common interpretation of a term for Contractual purposes.

1.4 ADMINISTRATIVE REQUIREMENTS

Use this paragraph to categorize the requirements as related to the specific section when more than one of the subordinate titles is required. Omit this when only one of the subordinate titles is required and use the subordinate title as a primary paragraph title.

1.4.1 Pre-Installation Meetings

Specify requirements for meetings to coordinate the work or to sequence related work for sensitive and complex items in this paragraph.

1.4.2 Sequencing

Specify requirements for coordinating work done in sequence with, or at the same time as, work in another section. Specify the sequence of events here.

1.4.3 Scheduling

Specify requirements for coordinating work that requires unusual scheduling with work in other sections. Specify the schedule of events here.

1.5 SUBMITTALS

Limit Submittals to those necessary for adequate quality control. Organize submittal requirements using the following eleven classifications:

SD-01 Preconstruction Submittals

SD-02 Shop Drawings

SD-03 Product Data

SD-04 Samples

SD-05 Design Data

SD-06 Test Reports

SD-07 Certificates

SD-08 Manufacturer's Instructions

SD-09 Manufacturer's Field Reports

SD-10 Operation and Maintenance Data

SD-11 Closeout Submittals

Figure A-5 Example: Submittal Item Format shown with Tags

```
<LST><SUB>SD-03 Product Data</SUB></LST>  
<ITM><SUB>Submittal Item</SUB>; <SUB>G<TAI OPT= ARMY>, [_____]</TAI></SUB></ITM>
```

1.6 MAINTENANCE MATERIAL SUBMITTALS

Categorize maintenance materials requiring no action other than confirmation of receipt under an explanatory heading.

1.6.1 Spare Parts

Spare parts are generally not allowed. If allowed by the Contracting Agency, use this paragraph to specify extra stock materials and items provided for Government use. Identify the type and quantity here but include the actual characteristics of the materials in Part 2. If allowed by the Contracting Agency, include items that might be difficult to obtain because of color or pattern match, or spare parts needed to ensure continued operation of critical equipment. Identify the items, state the quantities required, and indicate delivery to whom, when, and where.

1.7 QUALITY CONTROL

1.7.1 Regulatory Requirements

This paragraph includes obligations for compliance with specific code requirements for Contractor-designed items such as wood trusses, labeling such as Underwriters Laboratory, Inc., and requirements of public authorities such as state highway departments.

1.7.2 Qualifications

This paragraph includes statements of qualifications for Contractor designers, inspectors, manufacturers, fabricators, welders, installers, and applicators of products and completed work.

1.8 DELIVERY, STORAGE, AND HANDLING

This paragraph includes the necessary requirements on packing and shipping, acceptance at site, and storage and protection.

1.9 PROJECT/SITE CONDITIONS

1.9.1 Environmental Requirements

This paragraph establishes any physical or environmental limitations or criteria. Such conditions might include temperature, weather, humidity, ventilation, and illumination required for proper installation or application.

1.9.2 Existing Conditions

This paragraph includes statements or references to documents where information may be found pertaining to such items as existing structures or geophysical reports.

1.10 WARRANTY

This paragraph describes special or extended (more than one year) warranty or bond covering the conformance and performance of the work of the section. A thorough understanding of warranties is necessary to develop this paragraph.

PART 2 PRODUCTS

2.1 SYSTEM DESCRIPTION

Describe performance or design requirements and tolerances of a complete system in this paragraph. Limit descriptions to composite and operational properties to the extent necessary to link multiple components of a system together, and to interface with other systems.

2.1.1 Design Requirements

Design requirements may include criteria for structural, thermal, acoustical, or other properties. State required tolerances here only as they apply to the performance of the complete system. Include tolerances of fabrication and installation in their respective paragraphs under Part 1.

2.1.2 Performance Requirements

Performance requirements may include criteria for structural, thermal, acoustical, or other properties. State required tolerances here only as they apply to the performance of the complete system. Include tolerances of fabrication and installation in their respective paragraphs under Part 2.

2.2 ASSEMBLY [OR] FABRICATION

This paragraph describes items that must be shop manufactured, fabricated, or assembled before delivery to the site.

2.2.1 Factory Assembly

This paragraph states factory assembly as a result.

2.2.2 Shop Fabrication

This paragraph states shop fabrication as a result, but may include statements of required methods, trial or permanent assembly of equipment and components away from the construction site.

2.2.3 Tolerances

Specify allowable variations from specified requirements here.

2.2.4 Finishes

Specify any shop or factory finishing requirements here.

2.3 MANUFACTURED UNITS

This paragraph provides statements describing a complete manufactured unit, usually a standard catalog item. Statements may include descriptive requirements for the materials, specific fabrication, finishes, and function. Use separate paragraphs for each different item when appropriate. The name used for the manufactured unit must be consistent throughout the guide specification.

2.4 EQUIPMENT

This paragraph provides statements describing the function, operation, and other specific requirements of equipment installed in the work. Use separate paragraphs for each different item when appropriate.

2.5 COMPONENTS

This paragraph provides statements describing the specific components of a system, manufactured unit, or type of equipment installed in the work. Use separate paragraphs for each different item when appropriate.

2.6 MATERIALS

Identify the material, system, assembly, or product furnished. Independently incorporate Materials specified here into the work under PART 3 EXECUTION. Consistently use the name for the material throughout the guide specification. Omit this paragraph when the materials can be included with the description of a particular manufactured unit, equipment, component, or accessory.

2.7 MIXES

This paragraph provides proportions and procedures for mixing materials. Mixing is the preparation of materials for use and considered a part of the manufacturing process even when this work is done onsite. This paragraph is required for products such as asphaltic concrete, Portland cement, concrete, mortar, and plaster.

2.8 ACCESSORIES

Provide requirements for subordinate or secondary items that aid and assist primary products specified above or are necessary for preparation or installation of those items. This paragraph should not include basic options available for manufactured units and equipment.

2.9 TESTS, INSPECTIONS, AND VERIFICATIONS

Specify tests, inspections, or verifications of products required at the source here, i.e., plant, mill, factory, or shop.

PART 3 EXECUTION

3.1 EXAMINATION

Specify the act of physically determining that conditions are acceptable to receive the primary products of the section. Specify requirements for verifying suitability of conditions for installation here. Specify requirements for verifying the absence of defects or errors that would cause defective installation or application of products, or cause latent defects in workmanship and function, here.

3.2 PREPARATION

This paragraph covers actions required to physically prepare the surface, area, or site to incorporate the primary products of the section.

3.2.1 Protection

This paragraph specifies requirements for protecting the surrounding areas and surfaces.

3.2.2 Surface Preparation

This paragraph describes preparatory work required prior to installation, application, or erection of primary products.

3.3 ERECTION

This paragraph covers actions required to accomplish a specified unit of work in the section and may include requirements necessary for installation of products furnished under other sections. When installing products according to manufacturer's instructions, the instructions should be a required submittal as evidence of those requirements. Separate paragraphs for each different item, as appropriate, may be used. The names of the products or the type of work may be incorporated into the paragraph titles, in which case the wording should reflect the generic product or terminology used throughout the Contract documents.

3.4 INSTALLATION

This paragraph may be used when more appropriate than paragraph ERECTION.

3.5 APPLICATION

This paragraph may be used when more appropriate than paragraph ERECTION.

3.5.1 Special Techniques

This paragraph describes special procedures for incorporating products. These procedures may include spacing, patterns, or unique treatments. The wording of the paragraph title should reflect the subject matter.

3.5.2 Interface with Other Products

This paragraph provides descriptions specific to compatibility and transition to other materials. This may include incorporating accessories, anchorage, and any special separation or bonding.

3.5.3 Tolerances

This paragraph covers allowable variations in application thickness or from indicated locations.

3.6 FIELD QUALITY CONTROL

3.6.1 Tests

This paragraph defines the tests required for installed or completed work. These tests are different and separate from those required for materials and products prior to installation or application.

3.6.2 Inspection

This paragraph defines the inspections required for installed or completed work. These inspections are different and separate from those required for materials and products prior to installation or application.

3.6.3 Manufacturer Field Service

This paragraph covers specific requirements when manufacturers are to provide field quality control with onsite personnel for instruction or supervision of the installation or application of their products, or for startup or demonstration.

3.7 SYSTEM STARTUP

This paragraph lists actions applicable to the startup of operational systems and equipment.

3.8 ADJUSTING AND CLEANING

This paragraph provides final actions to prepare installed equipment or other completed work to properly function or perform.

3.9 CLOSEOUT ACTIVITIES

This paragraph covers requirements for demonstrating, instructing, and training owner's personnel on sequence of operations, general facility operation, and facility maintenance procedures.

3.9.1 Demonstration

This paragraph covers requirements of the installer or manufacturer to demonstrate the proper operation of equipment.

3.9.2 Training

This paragraph covers requirements of the installer or manufacturer to train the Owner's personnel in the operation and maintenance of equipment for ongoing facility management and maintenance.

3.10 PROTECTION

This paragraph includes provisions for protecting installed work prior to acceptance of the project. Protection of surrounding areas and surfaces during application or installation is included in paragraph PREPARATION. Include only statements unique to the section.

3.11 MAINTENANCE

This paragraph covers provisions for maintenance as applicable to critical systems, equipment, and Storm Water Pollution Protection Plan (SWPPP) landscaping. Service agreements, if not paid in advance, should be separate from the construction agreement to avoid delaying the final payment and holding the Contract open for extended periods.

3.12 SCHEDULES

This paragraph includes schedules that provide coordinating data. Schedules are sometimes placed here in the specification section rather than on the drawings. (Only the format for a schedule would normally be included in a UFGS.)

APPENDIX B REFERENCES

ASTM INTERNATIONAL

<https://www.astm.org>

IEEE/ASTM SI 10, *American National Standard for Metric Practice*

CONSTRUCTION SPECIFICATIONS INSTITUTE (CSI)

<https://www.csiresources.org>

MasterFormat, *Master List of Numbers and Titles for the Construction Industry*

SectionFormat/PageFormat, *The Recommended Format for Construction Specifications*

DEFENSE FEDERAL ACQUISITION REGULATION SUPPLEMENT

<https://www.acquisition.gov/dfars>

DFARS Clause 206.302-1, *Only one responsible source and no other supplies or services will satisfy Agency requirements*

DEPARTMENT OF DEFENSE

<https://www.wbdg.org/dod>

MIL-STD-3007, *Department of Defense Standard Practice: Standard Practice for Unified Facilities Criteria and Unified Facilities Guide Specifications*, Defense Standardization Program

FEDERAL ACQUISITION REGULATION

<https://www.acquisition.gov/browse/index/far>

FAR Clause 52.211-6, *Brand Name or Equal*

FAR Clause 36.202, *Specifications*

SPECSINTACT WEBSITE

<https://www.wbdg.org/dod/specsintact>

SpecsIntact eLearning Modules

SpecsIntact Web-Based Help

UNIFIED FACILITIES CRITERIA

<https://www.wbdg.org/dod/ufc>

UFC 1-200-01, *DoD Building Code*

FC 1-300-09N, *Navy and Marine Corps Design Procedures*

UNIFIED FACILITIES GUIDE SPECIFICATIONS

<https://www.wbdg.org/dod/ufgs>

UFGS 01 33 00, *Submittal Procedures*

UFGS 01 33 29, *Sustainability Requirements and Reporting*

UFGS 01 78 23, *Operation and Maintenance Data*

UFGS 01 78 24.00 10, *Facility Data Requirements*

UFGS 01 78 24.00 20, *Facility Data Workbook (FDW)*

UNITED STATES PLAIN LANGUAGE

<https://www.plainlanguage.gov/guidelines/>

Federal Plain Language Guidelines