
	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Chapter: 01 – Product Requirements Division: 01 60 00 Standards	Section: 01 60 00 Requirements for Division 1
		Date: July 2025
		Author: Program Support & Technical Services

Summary

1. The Work of This Section Includes: Administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
2. Related Requirements:
 - a. Section 011000 "Summary" for Construction Manager requirements related to Owner-furnished products.
 - b. Section 012500 "Substitution Procedures" for requests for substitutions.
 - c. Section 014200 "References" for applicable industry standards for products specified.
 - d. Section 017700 "Closeout Procedures" for submitting warranties.

Definitions


3. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - a. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
 - b. New Products: Items that have not previously been incorporated into another project or facility. Salvaged items or items reused from other projects are not considered new products. Items that are manufactured or fabricated to include recycled content materials are considered new products unless otherwise indicated.
 - c. Comparable Product: Product by named manufacturer that is demonstrated and approved through the comparable product submittal process described in "Comparable Products" Article, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
 - d. Equipment Nameplate Data Matrix: An excel spreadsheet created and distributed by Yale and the construction manager shall populate all building equipment nameplate data and details for transfer to Yale Facility Operations. The Excel spreadsheet is located on the Contractors and Consultants Office of Facilities website.
 - e. Equipment Manual: Equipment Manuals are defined as the manuals that are typically provided by the manufacturer of the equipment at the time of delivery or purchase of the specific piece of equipment. These documents will typically be generic manuals including installation instructions, operating and maintenance procedures, as well as general manufacturer's information about the product.
 - f. Training Manual: Comprehensive pdf file(s) that compiles all the individual training agendas, presentations, and sign in sheets for formal training, ordered by specification section and bookmarked for easy navigation. The training Manual is posted on Yale Archives by Yale Information Resources.
 - g. Warranty Manual: Comprehensive pdf files(s) that compiles all the individual signed warranty documentation ordered by specification section and bookmarked for easy navigation.

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4. **Basis-of-Design Product Specification:** A specification in which a single manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation. Published attributes and characteristics of basis-of-design product establish salient characteristics of products.
 - a. **Evaluating Comparable Products:** In addition to the basis-of-design product description, product attributes and characteristics may be listed to establish the significant qualities related to type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other special features and requirements for purposes of evaluating comparable products of additional manufacturers named in the specification. Manufacturer's published attributes and characteristics of basis-of-design product also establish salient characteristics of products for purposes of evaluating comparable products.
5. **Subject to Compliance with Requirements:** Where the phrase "Subject to compliance with requirements" introduces a product selection procedure in an individual Specification Section, provide products qualified under the specified product procedure. In the event that a named product or product by a named manufacturer does not meet the other requirements of the specifications, select another named product or product from another named manufacturer that does meet the requirements of the specifications; submit a comparable product request or substitution request, if applicable.
6. **Comparable Product Request Submittal:** Refer to Section 3.8 of the Project Conditions regarding Substitutions. An action submittal requesting consideration of a comparable product, including the following information:
 - a. Identification of basis-of-design product or fabrication or installation method to be replaced, including Specification Section number and title and Drawing numbers and titles.
 - b. Data indicating compliance with the requirements specified in "Comparable Products" Article.
7. **Basis-of-Design Product Specification Submittal:** An action submittal complying with requirements in Section 013300 "Submittal Procedures."
8. **Substitution:** Refer to Section 012500 "Substitution Procedures" and Section 3.8 of the Project Conditions for definition and limitations on substitutions.

Quality Assurance

9. **Compatibility of Options:** If Construction Manager is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.
 - a. **Resolution of Compatibility Disputes between Multiple Contractors:**
 - 1) Contractors are responsible for providing products and construction methods compatible with products and construction methods of other contractors.
 - 2) If a dispute arises between the multiple contractors over concurrently selectable but incompatible products, Architect will determine which products will be used.
10. **Identification of Products:** Except for required labels and operating data, do not attach or imprint manufacturer or product names or trademarks on exposed surfaces of products or equipment that will be exposed to view in occupied spaces or on the exterior.

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- a. Labels: Locate required product labels and stamps on a concealed surface, or, where required for observation following installation, on a visually accessible surface that is inconspicuous.
- b. Equipment Nameplates: Provide a permanent nameplate on each item of service- or power-operated equipment. Locate on a visually accessible but inconspicuous surface. Include information essential for operation, including the following:
 - 1) Name of product and manufacturer.
 - 2) Model and serial number.
 - 3) Capacity.
 - 4) Speed.
 - 5) Ratings.
- c. See individual identification Sections in Divisions 21, 22, 23, and 26 for additional equipment identification requirements.

Coordination

11. Modify or adjust affected work as necessary to integrate work of approved comparable products and approved substitutions.

Product Delivery, Storage, and Handling


12. Deliver, store, and handle products, using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
13. Delivery and Handling:
 - a. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - b. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 - c. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - d. Inspect products on delivery to determine compliance with the Contract Documents and that products are undamaged and properly protected.
14. Storage:
 - a. Provide a secure location and enclosure at Project site for storage of materials and equipment.
 - b. Store products to allow for inspection and measurement of quantity or counting of units.
 - c. Store materials in a manner that will not endanger Project structure.
 - d. Store products that are subject to damage by the elements under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation and with adequate protection from wind.
 - e. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
 - f. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
 - g. Protect stored products from damage and liquids from freezing.

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- h. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.


Product Warranties and Equipment Manuals

15. Warranties specified in other Sections are to be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Construction Manager of obligations under requirements of the Contract Documents.
 - a. Manufacturer's Warranty: Written standard warranty form furnished by individual manufacturer for a particular product and issued in the name of Owner or endorsed by manufacturer to Owner.
 - b. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner and issued in the name of Owner or endorsed by manufacturer to Owner.
16. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
 - a. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - b. Specified Form: When specified forms are included in the Project Manual, prepare a written document, using indicated form properly executed.
 - c. See other Sections for specific content requirements and particular requirements for submitting special warranties.
17. Submittal Time: Comply with requirements in Section 017700 "Closeout Procedures." Submit comprehensive (limited to 500 pages) pdf file(s) that compiles all the individual equipment documentation provided under this project by specification section and bookmarked for easy navigation.
18. All equipment identified on the Equipment Data Matrix shall be packaged as a dedicated pdf file for each asset, bookmarked with the following corresponding information:
 - a. Final Approved EOR/AOR stamped submittal
 - b. Equipment Manual
 - c. Warranty information
 - d. Specified Form: When specified forms are included in the Project Manual, prepare a written document, using indicated form properly executed.
 - e. Submit a full inventory of contract required spare parts and agreed by Yale to be turned over (quantity, model number, part description). Contractor shall delivery all spare parts to a location determined by Yale Operations.
 - f. Submit final equipment photographs with Yale-supplied QR codes/labels affixed. Annotate photos and compile into a PDF file bookmarked for easy navigation.
19. All submittals shall be organized by discipline and CSI section, with sections clearly labeled and bookmarked. Each CSI section and discipline shall be submitted as separate PDF documents limited to 500 pages.
 - a. See other Sections for specific content requirements and particular requirements for submitting

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Product Selection Procedures


20. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
 - a. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - b. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - c. Owner reserves the right to limit selection to products with warranties meeting requirements of the Contract Documents.
 - d. Where products are accompanied by the term "as selected," Architect will make selection.
 - e. Descriptive, performance, and reference standard requirements in Specifications establish salient characteristics of products.
21. Product Selection Procedures:
 - a. Sole Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Construction Manager's convenience will not be considered.
 - 1) Sole product may be indicated by the phrase "Subject to compliance with requirements, provide the following."
 - b. Sole Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Construction Manager's convenience will not be considered.
 - 1) Sole manufacturer/source may be indicated by the phrase "Subject to compliance with requirements, provide products by the following."
 - c. Limited List of Products: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Construction Manager's convenience will not be considered.
 - 1) Limited list of products may be indicated by the phrase "Subject to compliance with requirements, provide one of the following."
 - d. Non-Limited List of Products: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed or an unnamed product that complies with all requirements.
 - 1) Non-limited list of products is indicated by the phrase "Subject to compliance with requirements, available products that may be incorporated in the Work include, but are not limited to, the following."
 - 2) Provision of an unnamed product is not considered a substitution, if the product complies with all requirements.
 - e. Limited List of Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with all requirements. Comparable products or substitutions for Construction Manager's convenience will not be considered.
 - 1) Limited list of manufacturers is indicated by the phrase "Subject to compliance with requirements, provide products by one of the following."

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- f. Non-Limited List of Manufacturers: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed or a product by an unnamed manufacturer that complies with all requirements.
 - 1) Non-limited list of manufacturers is indicated by the phrase "Subject to compliance with requirements, available manufacturers whose products may be incorporated in the Work include, but are not limited to, the following."
 - 2) Provision of products of an unnamed manufacturer is not considered a substitution, if the product complies with all requirements.
- g. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications may additionally indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
 - 1) For approval of products by unnamed manufacturers, comply with requirements in Section 012500 "Substitution Procedures" for substitutions for convenience.
- 22. Visual Matching Specification: Where Specifications require the phrase "match Architect's sample," provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
 - a. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 012500 "Substitution Procedures" for proposal of product.
- 23. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or a similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.
- 24. Sustainable Product Selection: Where Specifications require product to meet sustainable product characteristics, select products complying with indicated requirements. Comply with requirements in Division 01 sustainability requirements Section and individual Specification Sections.
 - a. Select products for which sustainable design documentation submittals are available from manufacturer.

Comparable Products and Substitutions

- 25. Conditions for Consideration of Comparable Products and Substitutions: Architect and Owner will consider Construction Manager's request for comparable product or Substitutions when the following conditions are satisfied. If the following conditions are not satisfied, Architect or Owner may return requests without action, except to record noncompliance with the following requirements:
 - a. Evidence that proposed product does not require revisions to the Contract Documents, is consistent with the Contract Documents, will produce the indicated results, and is compatible with other portions of the Work.

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- b. Detailed comparison of significant qualities of proposed product with those of the named basis-of-design product. Significant product qualities include attributes such as type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other specific features and requirements.
 - c. Evidence that proposed product provides specified warranty.
 - d. List of similar installations for completed projects, with project names and addresses and names and addresses of architects and owners, if requested.
 - e. Samples, if requested.
26. Architect's and Owner's Action on Comparable Products Submittal: If necessary, Architect will request additional information or documentation for evaluation within five days of receipt of a request for a comparable product. Architect will then provide the Owner with its recommendation for accepting or rejecting the proposed Comparable Product or Substitution within five days thereafter. The Owner will notify the Architect and Construction Manager of approval or rejection of proposed comparable product or Substitution within 15 days of receipt of Architect's recommendation, or five days of receipt of additional information or documentation, whichever is later.
- a. Approval of Submittal: Marked with approval notation from Architect's action stamp. See Section 013300 "Submittal Procedures."
 - b. Use product specified if Owner does not issue a decision on use of a comparable product request within time allocated.
27. Submittal Requirements, Two-Step Process: Approval by the Owner of Construction Manager's request for use of comparable product is not intended to satisfy other submittal requirements. Comply with specified submittal requirements.

Product Submittals

28.

END OF SECTION