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NAVFAC PTS-E10 (September 2022)  
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Preparing Activity: NAVFAC SUPERSEDING PTS-E10 (December 2018)  
  
PERFORMANCE TECHNICAL SPECIFICATION  
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SECTION E10  
  
EQUIPMENT  
09/22

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NOTE: This section is intended to be used as a guide and contains requirements that are common to fire stations; however, not all requirements and equipment items will be applicable to all projects. In addition, there may be special requirements for a particular project that are not addressed at all. The RFP preparer may have to incorporate additional information to address these special requirements in this PTS and corresponding Part 3 ESR. If the RFP preparer chooses to delete building elements that are not required for the project, do not change the remaining Uniformat paragraph designations (example - A102001). Uniformat designations are unique to the products they are assigned to. However, the subparagraph numerical extensions (example – 1.2 or a,b,c) of the Uniformat designations may change if subparagraphs are deleted.  
  
This guide specification is formatted utilizing Uniformat II, an industry recognized standard, ASTM E 1557. When the RFP preparer chooses to add a paragraph that does not apply to an existing building element already included in the specification, refer to the Uniformat/WBS located on the NAVFAC Design-Build Website for a listing of Uniformat II designations and definitions.  
  
NOTE: The RFP preparer may view or hide the criteria notes in this PTS section by modifying the WORD preferences for "Hidden text". To view the criteria notes, choose "File" then "Option". Click "Display" then check the "Hidden text" box under "Always show these formatting marks on the screen". In the same section, check the box for "Print hidden text" under "Printing options" to print the criteria notes.  
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NOTE: The following Table of Contents is for navigation purposes within the document and is not intended to be part of the final edited documents.  
  
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**E10 GENERAL**

RFP Part 3 including the Engineering System Requirements (ESR) provide project specific requirements. The RFP Part 4, Performance Technical Sections (PTS) provide generalized technical requirements that apply to multiple facility types and include more requirements than are applicable to any one project. Therefore, only the RFP Part 4 requirements that apply to the project and further define the RFP Part 3 project specific requirements are required.

**E10 1.1 GENERAL REQUIREMENTS**

Where required by the project program, obtain the services of equipment specialists to specify any audiovisual, shop, fitness equipment, or other specialty equipment. Equipment specialists must not have any affiliation with the product specified. All specialty equipment must be installed by qualified installers regularly engaged in installing the specialty equipment. Systems furnishings installers must be the systems furniture manufacturer's dealer of record.

**E10 1.2 DESIGN GUIDANCE**

Provide the design and installation in accordance with the following references. This Performance Technical Specification (PTS) adds clarification to the fundamental requirements contained in the following Government Standards. The general requirements of this PTS section are located in PTS Section Z10, *General Performance Technical Specification*.

Industry standards, codes, and Government standards that are referenced in the section text that are not found in the [Unified Master Reference List (UMRL)](https://www.wbdg.org/ffc/dod/unified-master-reference) in the [Federal Facility Criteria (FFC)](https://www.wbdg.org/ffc/federal-facility-criteria) at the [Whole Building Design Guide (WBDG)](https://www.wbdg.org/) website, are listed below for basic designation identification. Comply with the required and advisory portions of the current edition of the standard at the time of contract award.

**E10 1.2.1 Government Standards**

UNIFIED FACILITIES CRITERIA (UFC)

|  |  |
| --- | --- |
| UFC 1-200-01 | DoD Building Code  (A reference in this PTS section to UFC 1-200-01 requires compliance with the Tri-Service Core UFCs that are listed therein, which includes the following significant UFC(s): UFC 3-101-01, Architecture; UFC 3-120-10, Interior Design) |
| UFC 1-200-02 | High Performance and Sustainable Building Requirements |

**E10 1.3 PERFORMANCE VERIFICATION AND COMPLIANCE TESTING**

Provide verification of satisfactory special equipment and furnishing systems performance via Performance Verification Testing, as detailed in this section of the RFP.

**E10 1.4 DESIGN SUBMITTALS**

Provide design submittals in accordance with Part 2 Section 01 33 10.05 20, *Design Submittal Procedures*, Facilities Criteria (FC) 1-300-09N, *Navy and Marine Corps Design Procedures*, UFC 3-101-01, *Architecture*, and UFC 3-120-10, *Interior Design*.

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NOTE: NAVFAC has made every effort to use commercial standards in the PTS sections. This PTS section is designed to only use commercial standards. If project requirements dictate the use of a UFGS sections as a standard, add a paragraph here listing the required UFGS section. State in the paragraph that the DOR must edit this UFGS section in accordance with PTS Z10 and submit it as a part of the design submittal.  
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**E10 1.5 CONSTRUCTION SUBMITTALS**

Submit construction submittals in accordance with PTS Section Z10, *General Performance Technical Specifications*. In addition to the Z10 requirements, the Designer of Record (DOR) must approve the following construction submittals as a minimum:

Field tests of equipment, vault door, loading dock equipment, kitchen equipment and unit kitchens.

Energy efficiency ratings for food service equipment, as applicable.

**E1010 COMMERCIAL EQUIPMENT**

**E101004 LAUNDRY EQUIPMENT**

**E101004 1.1 INDUSTRIAL LAUNDRY EQUIPMENT**

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Note: In the following sub-paragraphs (within E101004 1.1) provide performance criteria for the industrial laundry equipment as identified by meeting with the Activity user and coordination with the “Room Requirements” in Part 3, Chapter 5.  
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Industrial extractors and dryers comply with NFPA 1851 and NFPA 1581.

**E101004 1.1.1 Extractors â€“**

Extractors require vibration isolated concrete foundations.

**E101004 1.1.2 Dyers â€“**

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Note: In the following sub-paragraphs (within E101004 1.2) provide performance criteria for the residential laundry equipment as identified by meeting with the Activity user and coordination with the “Room Requirements” in Part 3, Chapter 5.  
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**E101004 1.2 RESIDENTIAL LAUNDRY EQUIPMENT**

**E101004 1.2.1 Washers â€“**

**E101004 1.2.2 Dyers â€“**

**E1020 INSTITUTIONAL EQUIPMENT**

Institutional equipment includes items that are normally found in hospitals, laboratories, auditoriums, and libraries.

**E102001 MISCELLANEOUS COMMON FIXED & MOVABLE EQUIPMENT**

This section must include fixed workbenches, hazardous and non-hazardous shop materials cabinetry, shop tools, and other fixed and movable equipment.

**E102001 1.1 CEILING FANS**

Ceiling Fans shall be commercial/industrial quality and shall be sized for the area and ceiling height of the space to be cooled. Provide secondary support cable for each unit and downrods where applicable. Provide steel safety cage for each unit and adjustable speed controls. Equipment shall be Underwriters’ Laboratories, Inc. listed.

**E102001 1.2 HOSE STORAGE MOVABLE RACKS**

**E102001 1.3 INSTALLATION GRID COORDINATE MAP**

**E102001 1.4 HOSE DRYING OVEN**

**E102009 AUDIO-VISUAL EQUIPMENT**

**E1030 VEHICULAR EQUIPMENT**

**E103004 AUTOMOTIVE SHOP EQUIPMENT**

This paragraph covers the requirements for automotive vehicle lifts meeting the requirements of ANSI/ALI ALCTV-1998 standards, and other automotive shop equipment such as pneumatic liquids delivery systems. See the project program.

**E103004 1.1 ELECTRIC DROP-CORDS**

Electric drop-cord shall be a ceiling or wall-mounted and retractable. Cord reel housing shall be powder coated metal. Wall-mounted type shall swivel. Grounded service outlets are required. Maximum rating and cord type shall be of capacity for automotive maintenance activity.

**E103004 1.2 FLOOR SCALE**

**E1040 GOVERNMENT FURNISHED EQUIPMENT**

Refer to the project program.

**E1090 OTHER EQUIPMENT**

**E109002 FOOD SERVICE EQUIPMENT**

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NOTE: The following equipment is a list of the most often used kitchen equipment and the applicable commercial standard for that equipment. The kitchen design requirements should be identified in the RFP Part Three, Project Program.  
  
Do not utilize items from the following equipment list if the items are furnished as Government Furnished Equipment (GFE). List all GFE in the RFP Part Three, Project Program.  
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Provide Food Service Equipment and the kitchen design in accordance with FC 4-722-01N, *Navy and Marine Corps Dining Facilities*. This paragraph covers the items of commercial food service equipment. Included are items used for liquid and solid food storage, food preparation, cooking, display, serving, and clean up equipment. Provide 180 degree F (82 degree C) hot water or chemical treatment for sinks, dishwashers, pot washers, and exhaust ventilator wash down systems.

Provide products that meet or exceed the specified energy efficiency requirements of FEMP designated or Energy Star qualified products. Submit documentation certifying that products conform to Public Law 109-58 by meeting or exceeding Energy Star or FEMP efficiency requirements as defined at "Energy-Efficient Products" at <http://femp.energy.gov/procurement> . Indicate the Energy Efficiency Rating.

**E109002 1.1 RESIDENTIAL OR LIGHT COMMERCIAL ELECTRIC KITCHEN EQUIPMENT**

**E109002 1.1.1 Cooking Top**

Conform to UL 197 and UL 858.

**E109002 1.1.2 Freezer**

UL 250, minimum 14 cubic feet (0.39 cubic meters), frost-free.

**E109002 1.1.3 Refrigerator**

UL 250, refrigerator with frost-proof freezer, minimum 14.6 cubic feet (0.41 cubic meters).

**E109002 1.1.4 Freestanding Ice Maker**

UL listed and NSF approved; self-contained, air-cooled model, minimum ice production of 355 pounds (161 kg) per 24 hours, and a minimum bin storage capacity of 180 pounds (82 kg) of ice cubes.

**E109002 1.1.5 Microwave Oven**

UL 923, minimum 1 cubic foot (0.03 cubic meter) capacity.

**E109002 1.1.6 Oven**

UL 858, self-cleaning and built-in.

**E109002 1.1.7 Kitchen Exhaust Hood**

NFPA 96 and NSF 2, factory fabricated of minimum 18 gage stainless steel.

**E109002 1.1.8 Range Hood**

UL 858, vented or non-vented with two-speed fan.

**E109002 1.1.9 Dishwasher**

UL 921 or UL 749 with detergent dispenser. For heavy-duty dishwasher, provide stainless steel commercial grade with approximately 300-dish per hour and 540 glasses per hour ratings.

**E109002 1.1.10 Residential Garbage Disposal**

UL 430, stainless steel, continuous feed with minimum 1/2 or 3/4 hp motor. Optional 1 hp motor for heavy usage.

**E109007 RECREATIONAL EQUIPMENT**

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NOTE: The following equipment is a list of the most often used recreation equipment and in recreation rooms. The recreation room requirements should be identified in the RFP Part Three, Project Program Room Requirements. Quantities to be identified with the activity user. Coordinate list below with equipment identified by the activity user.  
  
NOTE: Do not utilize items from the following equipment list if the items are furnished as Government Furnished Equipment (GFE). List all GFE in the RFP Part Three, Project Program.  
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Provide Recreation Room Equipment.

**E109007 1.1 RECREATION ROOM EQUIPMENT**

**E109007 1.1.1**

Pool Table with associated equipment

**E109007 1.1.2**

Table-tennis Table with associated equipment

**E109090 OTHER SPECIALIZED FIXED AND MOVABLE EQUIPMENT**

Specialized fixed and moveable equipment not described by the other assembly categories.

-- End of Section --