**6. ENGINEERING SYSTEMS REQUIREMENTS**

**C20 STAIRS**

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SYSTEMS REQUIREMENTS  
STAIRS TEMPLATE 02/18  
   
Instructions for using this template: There are template files for each UNIFORMAT Level 2 Group Elements. This template is for Group Element C20 STAIRS. Text such as this is hidden text that will not print when the hidden text box in "Print/Options" is un-checked.  
   
The Architectural Team Member must edit this template for the requirements of the project. The SYSTEMS REQUIREMENTS are intended to define items that are required throughout the facility or on a system wide basis that is common to several rooms. Room-specific requirements are defined in the Part 3 Chapter 5 ROOM REQUIREMENTS section. Coordinate with the lead programmer for ROOM REQUIREMENTS. Editing is required where brackets [ ] appear. Delete all building elements that are not required for the project. If additional elements or sub-elements are required for the project that do not appear in the template, refer to the NIST UNIFORMAT II publication for additional building element numbers and descriptions. The Uniformat II Work Breakdown Structure can be found at** [**www.wbdg.org/ndbm/**](http://www.wbdg.org/ndbm/) **. Coordinate with the PERFORMANCE TECHNICAL SPECIFICATION SECTION C20 to ensure that performance requirements are provided for all of the Building Elements listed here and that paragraph numbering matches.  
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**SYSTEM DESCRIPTION**  
Provide stairs, including stair construction and stair finishes as required by the building code to provide egress from the building from above or below grade level floors. Stairs must be in accordance with Unified Facility Criteria (UFC) 1-200-01, *DoD Building Code (General Building Requirements)*.

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NOTE: Wood stairs may only be used in residential construction. Fire escape stairs are only permitted on certain existing buildings.  
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**GENERAL SYSTEMS REQUIREMENTS**  
 **C2010 STAIR CONSTRUCTION**

**C201001 INTERIOR AND EXTERIOR STAIRS**

Provide interior stairs constructed of [steel] [steel with concrete filled pans] [or] [cast-in-place concrete].

Provide exterior stairs constructed of [galvanized steel] [or] [cast-in-place reinforced concrete].

Concrete is an acceptable finish for exterior stairs. Provide cast aluminum treads with abrasive surface for all exterior concrete stairs.

Steel stairs must be primed and painted.

**C201002 FIRE ESCAPE STAIRS**

Provide fire escapes of the type and arrangement to conform to Fire Escape Stairs, of National Fire Protection Association (NFPA) 101, *Life Safety Code*.

**C201090 HANDRAILS, GUARDRAILS, AND ACCESSORIES**

Provide [painted steel] [galvanized steel] [stainless steel] [prefinished aluminum] [prefinished steel] [glass] [wood] handrails and guardrails. Handrails and guardrails must present a smooth, unbroken surface throughout the length of the stair.

Handrails and guardrails must be finished to withstand extreme wear conditions.

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NOTE: Provide ladders where permitted by building code. Cages are required by 29 CFR 1910.27 OSHA where the ladder is more than 20 feet (6000 mm) tall.  
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[Metal] [Fiberglass Reinforced Plastic (FRP)] ladders and railings complying with Occupational Safety and Health Administration (OSHA) requirements must be provided for access and protection to any mechanical mezzanines, lofts or other similar spaces.

--End of Section--