

#### DEPARTMENT OF THE ARMY U.S. ARMY ENGINEERING AND SUPPORT CENTER, **CORPS OF ENGINEERS** 475 Quality Cir NW **HUNTSVILLE, ALABAMA 35806**



**CEHNC** February 2023

#### MEMORANDUM FOR RECORD

SUBJECT: Standard Design Guide for Child Development Center – Ages 6 to 10 Years of Age

- 1. The enclosed Standard Design Guide for Child Development Centers Ages 6 to 10 Years of Age (CDCs) are hereby approved for implementation by The Center of Standardization (CoS) Program. The standard design applies to all Army Child Development Centers for children ages 6 years to 10 years of age. Only the CoS Program Manager with the CoS Technical Manager has the authority to approve exceptions to this standard design guide. Waivers from the CDCs Standard Design must be approved in accordance with CoS standard wavier process.
- 2. The objective of these Standard Design Guide is to provide criteria and guidance for the planning, programming, design, and construction of an Army Child Development Center that will meet the needs for children ages 6 weeks to 5 years of age. These standards provide the functional relationships needed to design the CDC and the associated outdoor activity area.
- 3. The USACE Center of Standardization for Child and Youth Services is Mr. Chris Shepherd, CoS Technical Manager, CEHNC-ED-CS-A, 256-895-1678, Chris.A.Shepherd@usace.army.mil.

Chris Shepherd **CEHNC CoS Technical Program Manager** 



# **US Army Corps of Engineers**

**Engineering and Support Center, Huntsville** 

# STANDARD DESIGN CRITERIA SCHOOL AGE CENTERS

FOR CHILDREN AGES 6 - 10 YEARS

WING ADDITION 60 - 75 CAPACITY

SMALL 105 - 135 CAPACITY

MEDIUM 150 - 180 CAPACITY

LARGE 195 - 225 CAPACITY

# **ROOM BY ROOM DESCRIPTIONS**

**CATEGORY CODE: 74016** 

February 2023

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#### A. GENERAL REQUIREMENTS

#### 1. CRITERIA

- Army Standard Design Criteria. The Army Standard and the Army Standard Design Criteria Room by Room Descriptions is mandatory criteria that must be followed. Per AR420-1, use of the Standard Design is mandatory. The criteria in this document have incorporated relevant sections of AR 608-10 and IMCOM Reg 608-10-1 (latest version) and all applicable Unified Facilities Criteria (UFC).
- Centers of Standardization (COS). The School Age Center (SAC) is the minimum mandatory criteria that must be followed. This document, the Army Standard Design Criteria Room by Room Descriptions, further expands on the requirements of the Army Standard. Deviations not meeting the requirements to the Army Standard, or this document requires a waiver. All facility and playground designs will be reviewed and accepted by CDC COS Huntsville. When Host Nation Requirements or Specific Geographical Requirements conflict with the Army Standard, contact the COS in Huntsville, Alabama. The Army Standard for CDCs may be found at: <a href="https://mrsi.erdc.dren.mil/cos/hnc/cdcu6/">https://mrsi.erdc.dren.mil/cos/hnc/cdcu6/</a>. Information on the waiver process may be found at <a href="https://mrsi.erdc.dren.mil/cos/waiver-process/">https://mrsi.erdc.dren.mil/cos/waiver-process/</a>.
- Army Child & Youth Services (CYS) Review and Approval. All facility and playground design, alteration (to include renovation and repairs), and construction projects shall be reviewed and approved by Installation Management Command (IMCOM) G9 CYS. Involvement of IMCOM G9 CYS is required in all phases of the project, to include planning and design. This document is primarily for New Construction. Any Additions, Repairs, Alterations, and Remolding shall comply with the Standard Design Criteria to the fullest extent possible.
- Architectural Barriers Act (ABA). The School Age Center (SAC) and site must meet all
  requirements of ABA. This includes spaces such as storage rooms, janitor closets, etc.
  Water closets and toilet compartments for children shall comply with ABA Advisory 604.9
  and associated table. This ABA Advisory is mandatory for SAC facilities. Other special
  requirements will be provided in the remainder of this document.
- **UFC 3-600-01, Fire Protection Engineering for Facilities.** The SAC must meet fire protection criteria as expanded by the Army Standard Design Criteria Room by Room Descriptions.
- **UFC 4-010-01 Anti-Terrorism Force Protection (ATFP)**. The SAC must meet all requirements of the minimum ATFP Standards for Buildings.
- Centers of Standardization (COS). The Army Standard for SAC is the minimum mandatory criteria that must be followed. This document, Army Standard Design Criteria Room by Room Descriptions further expands on the requirements of the Army Standard. Deviations not meeting the requirements to the Army Standard or this document require a waiver. When Host Nation Requirements or Specific Geographical Requirements conflict with the Army Standard, contact the COS in Huntsville, Alabama. The Army Standard for

SAC may be found at: <a href="https://mrsi.erdc.dren.mil/cos/hnc/cdcsa/">https://mrsi.erdc.dren.mil/cos/hnc/cdcsa/</a>. Information on the waiver process may be found at: <a href="https://mrsi.erdc.dren.mil/cos/waiver-process/">https://mrsi.erdc.dren.mil/cos/waiver-process/</a>.

- **Technical Instruction (TI) 800-01.** TI 800-01 is an obsolete document and shall not be used in the design or review of a SAC.
- Caring for Our Children. Caring for Our Children Health and Safety Guidelines by the American Public Health Association (APHA) and American Academy of Pediatrics (AAP) is used as the reference guide for Lighting Levels.

#### 2. CLARIFICATIONS TO THE ARMY STANDARD:

The Army Standard is the mandatory criteria from which this document was developed. The following items are clarifications or updates to the information in the Army Standard. Where there is a conflict between the Army Standard and the Design Criteria, the information below serves to clarify the requirements of the Army Standard.

- In the Accessibility requirements listed in the Army Standard, add the following, "The
  Department of Justice has determined that facilities in compliance with the Architectural
  Barriers Act (ABA) Accessibility Standards for Department of Defense Facilities, as
  adopted by the Department of Defense in Oct., 2008, are compliant with ADA."
- CCTV requirements at the Control Desk (Central Counter/Reception Desk in the Army Standard) are provided in this document in Section 8. Security and Monitoring Closed Circuit Television (CCTV).
- In the Outdoor Activity Area requirements listed in the Army Standard, delete the word, "OPTIONAL". An age-appropriate composite play structure sized for 15-30 children with poured-in-place surfacing in the use zone is now required.
- The finish schedule on page 18 in this document (Section 11. Room Finish Schedule) replaces the finish schedule provided as guidance in the Army Standard.
- In the references listed in the Army Standard, replace "AR 415-5 Appendix L" with "AR 420-1, Section VII.
- The POC for the USACE Center of Standardization for Child and Youth Services is Michael Johnson, CEHNC-ED-CS-A, Michael.R.Johnson2@usace.army.mil, (256) 895-1409.

#### 3. HAZARDOUS MATERIALS

- Flammability Codes and Standards. Use textiles and upholstered components that comply with the applicable interior finish requirements stated in UFC 3-600-01, Fire Protection Engineering for Facilities. See Sections 4 (Architectural) and 11 (Room Finish Schedule) under General Requirements for more information on Interior Finishes requirements.
- Radon. Check the EPA's *Map of Radon Zones* (by state), EPA 402-R-93-071 (available from <a href="http://www.epa.gov/">http://www.epa.gov/</a>), to determine the radon priority area. Provide passive sub-slab depressurization systems for projects located in Priority Areas No. 1 (predicted average radon level is greater than 4/pCi/L). Change the system to active, if needed, based on

follow-up testing. Check the latest editions of the following EPA documents available from the EPA Radon Information Center, (703) 356-5346:

- EPA's Model Standards and Techniques for Control of Radon in New Residences, U.S. Environmental Protection Agency, Air and Radiation (6604-J), EPA 402-R-94-009.
- Radon Prevention in the Design and Construction of Schools and Other Large Buildings, EPA/625/R-92-016.
- Radon Measurement in Schools, EPA/402/R-92-014.
- **Contaminants.** Evaluate the site for potential soil and groundwater contamination. Check with the Environmental Installation Restoration Program and the Underground Storage Tank Program. Also, check previous uses of the site.
- Lead-Based Paints. Lead-based paint is prohibited throughout all buildings—interior and exterior, including playground equipment. All painted areas suspected of containing lead (manufactured before 1978) should be tested and managed by the Garrison Department of Public Works (DPW).
- **Asbestos**. Materials containing asbestos are forbidden throughout the facility. Any suspected asbestos containing material should be identified and abated by a certified contractor and monitored by the Installation Asbestos Management Program (IAMP).

#### 4. ARCHITECTURAL

- **Construction.** The School Age Center shall meet commercial construction standards and designed in accordance with UFC 1-200-02. The building may be rotated or mirrored on the site.
- **Spaces.** Minimum Program Space sizes are mandatory and may not be reduced in size from what is shown in this document (See Section 12. Net Areas and Total Gross Building Area) and the Army Standard without an official waiver.
- Roof. Roofs shall be a simple gable or hip with minimal level changes to maintain the
  residential feel of the overall facility. The roof slope shall be a minimum of 3:12 for pitched
  roofs or as defined by the Installation Design Guide, State Historic Preservation Office
  (SHPO), and other standards as may apply. Flat roofs are not allowed (unless compatibility
  to an existing structure is required).

The preferred roof for the SAC is a standing seam metal roof system. Provide snow guards as needed.

- **Minimum Floor and Base Construction.** For finish materials refer to the Room Finish Schedule unless additional guidance is provided in the individual space descriptions which follow. Salient characteristics include: durable, easy to clean and easy to maintain. A base material, appropriate for the flooring material used, is required.
- **Minimum Wall Construction**. Unless additional guidance is provided in the individual space descriptions which follow, salient characteristics include shall be easy to clean and

maintain and shall be durable. Unless noted otherwise, interior walls between rooms shall be provided with acoustical batt insulation, or other approved system, to obtain a Sound Transmission Class (STC) rating of at least 45.

- Minimum Ceiling Construction. Unless additional guidance is provided in the individual space descriptions which follow, salient characteristics include ease of accessibility to mechanical system above ceiling, durable, and shall provide an aesthetically pleasing surface, free of sags or other defects. Acoustical tile ceilings shall have a minimum Noise Reduction Class (NRC) rating of 0.85 throughout the facility. Unless noted otherwise, Ceiling Attenuation Class (CAC) ratings shall be a minimum of 35.
- Recycling. A designated recycling area(s) may be included in the facility. However, the space allotted cannot be taken from Program Area square footage requirements (e.g., Activity Room).
- Ceiling Heights. Unless noted otherwise in this document, all ceiling heights shall be a nominal 9'-0" minimum. Ceilings in the kitchen may exceed 9'-0". Furr-down over the Central Counter may be lower than 9'-0", but no less than 7'-0". Ceilings in storage rooms are desired to be 9' in order to allow increased storage under the "fire" line which is located at 18" below the lowest part of the sprinkler head, or in accordance with NFPA 1.
- Exterior Doors. All exterior doors from the facility shall be flush within ¼" with the exterior sidewalk. All Activity Rooms must have a direct exit to the outside. The exterior pathways from activity room and corridor doors shall meet the requirements of the ABA. All exterior doors shall be hollow metal with a half-height glass view window unless noted otherwise. All exterior doors shall be provided with hardware on the exterior side that allows for reentry. All exterior exit doors shall have panic hardware and self-closing devices. All exit door hardware shall be located 44" above the finished floor and shall have a clear opening width of 32" minimum.
- Intrusion/Exit Alarms: An exit notification system with keyed manual override is required
  on all exterior doors that do not exit into a fenced area from normally child occupied spaces
  and corridors, except for the main entrance and kitchen. These alarms must provide
  immediate notification; they cannot have a delay. In addition, the alarm must provide
  notification at the central counter with a recessed, wall-mounted notification panel.
- Interior Doors. Salient characteristics include durability. Doors, frames, and hardware shall be able to withstand constant opening and closing. Unless noted otherwise, doors shall be solid core wood doors, stain grade. All interior doors shall be half-height glass, except for adult toilet room doors. Glazing in interior half-height glass doors shall be a minimum of 5 square feet of exposed clear safety glass. All doors opening into corridor/atrium and all doors into toilet rooms must be provided with self-closing devices. School Age Activity Room (NOT offices or any ancillary room like the janitor closet) doors that open into corridor/atrium to include the Computer Lab, Homework Center, Arts & Science Activity Room, Performing Arts Activity Room, and General Activity Rooms shall have magnetic hold open devices that tie into the fire alarm system. All fire rated doors shall meet UFC 3-600-01 requirements to include self-closing devices. Metal frames shall be painted, and doors shall be stained and sealed.
- Interior Walls. Unless noted otherwise, interior walls between rooms shall be provided with acoustical batt insulation to match the stud wall thickness and on top of the acoustical

ceiling system in addition to the required ceiling insulation to achieve the required R value. All interior walls shall contain 5/8" drywall and all wall electrical outlets shall be staggered. Unless noted otherwise, interior walls between rooms shall be provided with acoustical batt insulation, or other approved system, to obtain an STC rating of at least 45.

- **Wall Finish.** Impermeable wall finishes, such as vinyl wall covering or Fiberglass Reinforced Paneling (FRP), are not acceptable, unless noted otherwise. This is a mold prevention issue.
- Corner Guards. Corner guards are to be surface mounted and provided on all outside
  corners of interior walls. Corner guards are to be integral color, radiused, sufficiently
  durable to prevent damage to the wall corners and injury to the children, and mechanically
  fastened (not through tape or adhesives) to the wall. Corner guards are to be caulked and
  sealed to prevent harborage of vermin and accumulation of debris. Corner guards shall be
  minimum 48" high and set flush and tight to the adjacent walls.
- Sharp Edges. Radius corners shall be provided on all millwork up to 48" Above Finished Floor (AFF). Ease or file smooth all sharp points and edges on wall tile, cabinetry, windows, doors and frames, plumbing fixtures, exposed piping, etc. The intent is to eliminate all sharp corners, points, and edges that will cause injury to children up to a height of at least 48" AFF.
- General Cabinetry. Salient characteristics include: easy to clean, maintain and repair.
  Cabinets shall be durable and be able to withstand impact without showing damage. For safety, all edges, both vertical and horizontal, shall be eased or rounded. No sharp edges may be provided. Cabinetry is to be caulked and sealed to prevent harborage of vermin and accumulation of debris.

Cabinets shall be a minimum of Architectural Woodwork Institute (AWI) 400B, Custom Grade, minimum 5-ply hardwood plywood veneer core (particle board and MDF is not acceptable) clad with High-Pressure Laminate (HPL). Other finishes meeting or exceeding the performance of HPL (such as a high-pressure, solid composite surface material) may be considered.

All base cabinets in the facility denoted as lockable shall be keyed alike.

Countertops shall be a durable, low maintenance, stain resistant, solid surface quartz (quartz agglomerate – NSF certified, non-porous solid surface) with integral back splash unless otherwise noted. Countertops shall be sealed to the base cabinetry and have rounded/radius corners and edges (refer to Sharp Edges above).

• Exterior Windows. Exterior windows shall comply with the Army Standard and UFC 4-010-10 ATFP requirements. Salient characteristics include easy to clean and able to withstand continuous use. Individual windows shall be single or double hung, with only the top portion operable. If double hung windows are provided the bottom sash must be secured so that it cannot be opened, and such modification shall not affect the warranty on the window. Full height Insect screens shall be provided. Secure insect screens with interior metal clips to preclude children from removing the clips. Windows shall be provided with a manual locking mechanism in addition to the sash latch mechanism and with a non-

porous, smooth and easily cleanable, solid surface quartz windowsill mounted 30-34" above the finish floor. Wood and plastic laminate windowsills are not allowed. Exposed edges shall be eased per the Sharp Edges paragraph above. Where windows with sash latching mechanisms higher than 80" AFF are provided, the Building Construction Contractor shall also provide a minimum of one (1) latching/unlatching mechanism (pole mounted) for each room with operable windows.

- Glass. All glass shall be provided with a manufacturer's label indicating that the glass is safety glass.
- **Mirrors.** All mirrors in the facility shall be a tempered safety glass mirror, with stainless steel surround, including a clear film applied to mirrored surface to retain glass pieces, if somehow the tempered mirror is cracked accidentally.
- **Vision Panels.** Vision Panels are 3'-4" wide x 3'-4" tall interior windows with the top of the window frame aligned with the top of the door frame. See Atriums for more details.
- Kitchen Pass-Thru Windows. Provide two (2) 3' wide single vertical sash-style aluminum, exterior type pass-through windows (in this case only, bottom sash operable) for the openings between the kitchen and demo kitchen. No track on the bottom/counter. These windows are provided to restrict the passage of smoke only, and there is no requirement that these be fire- rated or connected to the fire alarm system. No roll up curtains, fire shutters, horizontal sliding or hinged windows will be allowed.
- **Caulking.** All caulking used inside the building shall be US Department of Agriculture (USDA) or National Sanitation Foundation (NSF) approved caulking.
- **Grout.** Where porcelain, ceramic or quarry tile is provided, grout shall be non-staining and resistant to liquid absorption.
- **Showers.** Showers and changing rooms are not allowed due to child abuse prevention measures.
- **Toilet Partitions.** Toilet partition doors shall include latching hardware but shall not include coat hooks. Toilet partitions shall have a headrail (overhead braced) or shall be otherwise mounted to assure rigidity of all posts and panels. ABA toilet stalls shall be provided with one out-swinging ABA-compliant (min. 32" clear opening width) door. Floor mounted partitions are required. Partitions shall be color-through phenolic or solid plastic (HDPE). Exposed boots and hardware shall be non-corrosive material.
- Child Lockers. Lockers shall be provided for the maximum youth occupancy of the facility. Lockers shall be secured to the wall and sealed to the adjacent walls and floor. Lockers shall be 12" W x 15" D x 30" H with 4" base, double stacked except where provided at vision panels. Where single tier lockers are provided (in front of vision panels or in islands), provide a solid surface quartz countertop cap rigidly attached to the lockers. Countertop cap shall have rounded corners and edges. Top of double stacked lockers shall be sloped to discourage the accumulation of dust. Locking mechanisms shall be padlock type with padlocks provided by the users; combination lockers are not acceptable.

**OPTION:** For colder climates, consider providing 15" W x 18" x 36" H lockers to accommodate heavier coats, boots, etc.

- Kitchen Equipment. Shall be commercial equipment NSF approved. Kitchen equipment will comply with UFC 3-600-01, equipment will be contractor furnished and contractor installed (CFCI). All equipment must be designed and installed in accordance with the Technical Bulletin Medical (TB) Med 530 Tri-service Food Code.
- Special Kitchen Requirements. Kitchen designs are provided in the standard designs.
  On condition that the COS do not have the expertise available, it is recommended the final
  kitchen design be verified by a certified kitchen designer in accordance with TB Med 530
  Tri-service Food Code and in coordination with IMCOM G9 CYS and the Preventive
  Medicine Proponent.

#### 5. MECHANICAL

- **Temperature Controls.** The required temperatures in child activity rooms shall be maintained at no less than 68 degrees F in the winter and no higher than 78 degrees F in summer with a combination of conditioned and natural air. Tamper proof temperature and air quality measurement/monitoring devices shall be installed with the operable mechanism mounted at 44" 48" elevation above floor with temperature control set to provide winter and summer room temperatures. A relative humidity of between 35 and 50 percent will be maintained in the facility, especially in the activity rooms, to prevent drying of mucous membranes, to control the spread of diseases, and to prevent mold growth. The thermostat shall be located in the wall near the center of the activity space, not adjacent to the entry door.
- Water Temperature. The appropriate temperature for the water in child accessible areas is a range of 80 to 95 degrees F, with a maximum of 110 degrees F in child accessible sinks. Water temperature in the laundry room, janitor's closet and the kitchen is required to be 140 degrees F. The final rinse (sanitization) of the dishwasher and ware washing will be 180 degrees F provided by means of an adequately sized booster heater.
- **Automatic-Sensor Plumbing Fixtures.** Automatic flushing water closets and automatic lavatory faucets are not allowed in SACs.
- **Urinals.** Waterless urinals are not allowed.

#### 6. ELECTRICAL

• Receptacles. Wall mounted receptacles shall generally be mounted 18" above finished floor unless otherwise noted. Above counter receptacles shall be mounted in the vertical wall space above the counter-top unless otherwise noted. Outlets shall be tamper-resistant throughout the facility in accordance with the National Electric Code. As a minimum provide one (1) combination 3.1 Amp charger USB/electrical outlet on each wall of every child activity room, reception counter, staff lounge, training room, administrative and office areas, to include the cook's workstation. All floor outlets shall be combination USB/electrical outlets.

- Lighting. There is a mixture of natural and artificial light which can be adjusted by the staff to changing outside light levels. Lighting in the Activity Rooms shall be overhead and be provided with multi-ballast fixtures to provide lighting flexibility of all lamps/all fixtures on, half lamps/all fixtures on, and all lamps/fixtures off. The intent is to be able to reduce lighting levels to address different activities and to address natural daylighting. Lighting shall be controlled by manual wall switches located at the room entrance door and at the direct exit to the outside. If dimmer controls are used in lieu of multiple switches, provide lighting fixtures which will not oscillate visibly at low intensities. Roof overhangs, shades and window treatments control the natural light-brightness ratios and lateral differences in illumination. Lights come from behind most activities and children. There are sufficient controls over the natural and artificial light to give lighting flexibility. Multi-ballast switches, dimmer switches, track lighting, movable lights, etc., are used to meet this requirement.
- **Lighting Controls.** Due to child abuse prevention measures, automatic motion light switches (occupancy sensors) are allowed only in rooms that are not accessible to users and staff of the SAC.
- Telephone/Intercom.

**TELEPHONE:** Each activity room shall be provided with a system that is capable of making local and long-distance calls. Incoming calls shall be received at the reception desk, and the reception desk can then forward the call to the appropriate room as necessary.

**INTERCOM:** The Building Construction Contractor shall provide a two-way addressable system capable of allowing program staff to communicate (hands free) with the main reception desk and other locations of the facility as noted throughout this document. System shall be audible throughout the entire space. Each station shall have the ability to receive and send. The system should enable front desk staff at the master console to contact rooms individually and all rooms simultaneously. Operable mechanisms shall comply with ABA. The mechanical, communication, and electrical rooms do not need to be on this system.

See 44. SPACE: Playground/Outdoor Play Areas for exterior intercom requirements.

- **Panels.** In general, electrical circuit breaker panels shall be located in appropriate electrical rooms. If this cannot be accommodated, panels may be located in the corridors if provided with keyed locks.
- **GFI.** Ground Fault Interrupter (GFI) outlets shall be installed per electrical code.
- Water Coolers. Electricity for the Electric Water Coolers (EWC) shall be per manufacturer's instructions, but in no case shall the electrical outlet and cord be located outside of the area encompassed by the EWC, where it would be easily accessible. EWCs located in the facility shall be provided with an automatic water bottle filler. All EWCs shall be GFI protected.
- CYS Commercial Internet/Wi-Fi: Entire facility shall be commercial Wi-Fi enabled and shall be capable of supporting Virtual Lab School (VLS) training, child programming, teaching curriculum, etc. See Section 9. CYS/MWR Commercial Enterprise Network (CEN) for further details.

#### 7. FIRE PROTECTION

- **Emergency Lighting.** Emergency lighting shall be provided in occupied rooms, including the Mechanical Room and Electrical Room.
- Fire Protection Systems. Occupancy Classification is "Educational and Assembly" where applicable in accordance with NFPA 101, Life Safety Code. Provide complete automatic sprinkler system, fire alarm/mass-notification system, and carbon monoxide detection in accordance with UFC 3-600-01 and UFC 4-021-01. Provide smoke detection in all areas including closets over 20 sq. ft. except the kitchen and spaces not climate controlled such as the attic, walk-in coolers, and the mechanical equipment room. Maintain smoke detectors at least 3 ft. from all HVAC diffusers. Heat detectors are not required in any area because the facility is fully protected with a sprinkler system. Fire caulking shall be red in color and easily distinguishable from standard caulking.
- Fire Extinguishers. Provide portable fire extinguishers in accordance with UFC 3-600-01.
- Fire Extinguisher Cabinet. A recessed fire extinguisher cabinet shall be provided where
  portable fire extinguishers are required. Kitchen, mechanical and electrical do not require
  cabinet.
- Storage Height Limitation Line. In rooms where shelves are provided (to include Janitor Closet, Storage Rooms, etc.), interior walls shall be marked with a red line 1" in width located 18" below the lowest point of the sprinkler head. The red line shall be provided on the walls with shelves as a minimum. In addition, where adjustable shelves are provided in storage rooms, shelving standards shall be mounted so that the top of the bottom shelf can be located 1.5' 2' above the floor. There is no need to plan for the top shelf to be any higher than 3' below the ceiling.

# 8. SECURITY AND MONITORING – CLOSED CIRCUIT TELEVISION (CCTV)

• **Requirements.** CCTV shall include visual and audio recording. See section 13. SPACE: CCTV Equipment Room for additional information.

#### Power.

CAMERA POWER SUPPLY: Power for the CCTV cameras shall be distributed from the SER rack mount power supply to each camera location (Class 2 limited power source - low voltage system - 24VAC to the cameras). The number of cameras provided for each facility shall be as indicated on the SECURITY & MONITORING PLAN included in the Child Development Center (CDC) Standard Designs for Children 6 - 10 years old.

SURVEILLANCE EQUIPMENT RACK (SER): The circuit shall be terminated with a 3-prong receptacle (L5-30P3W125V) recess-mounted in the location designated for the SER.

Small Facility – At a minimum, a dedicated NEMA 30 Amp 125V circuit is required.

Medium And Large Facilities - Two (2) at a minimum, a dedicated NEMA 30 Amp 125V circuit is required.

PARENTAL VIEWING MONITOR (PVM): A standard 110 VAC receptacle shall be installed at the location designated for the PVMs. The receptacle shall be above the drop ceiling and can be tied to any circuit in the facility.

PVM WORKSTATION (PWS): A standard110 VAC outlet shall be made available at the reception desk for the PVM workstation.

- **Electrical Metallic Tubing (EMT).** EMT shall be sized in accordance with the National Electric Code based upon the type, gauge and quantity of cabling and wiring installed within the EMT. The conduit fill rate shall conform to the National Electric Code standard.
- **Power Cable.** Note: Cameras are not analog. They are digital and run on Power Over Ethernet (POE). Preferred cable is Multi-Conductor Enhanced Category 6 Non-bonded Pair Cables 4-pair U/UTP CMP Reel-in-Box Gray, such as Belden 2413008A1000.

All cables shall be one continuous run. Splicing is not acceptable.

In the location designated for the SER (CCTV Equipment room), leave 20' excess coil of power cable.

- Video Camera Cable. Note: Cameras are not analog. They are digital and run on Power Over Ethernet (POE). Power and Video shall be on the same POE cable. Preferred cable is Multi- Conductor Enhanced Category 6 Non-bonded Pair Cables 4-pair U/UTP CMP, such as Belden 2413008A1000.
  - \* Note: EMT, cables, and power cables that are specifically designated for use by the CCTV system should homerun to the CCTV SER in the CCTV Equipment Room, not the (NIPR/NEC) Communication Room.

Cable runs should be kept under 275 ft. where possible, and should not exceed 327 ft. This distance can be lengthened with the use of extenders, however it does result in degradation of signal and should be avoided whenever possible.

For MILCON CAT6 recommend terminated, labeled, and tested end-to-end with test results. For exterior junction boxes, ensure grounding is executed. (Note: between junction and camera mounting location the use of Liquid Tight conduit or Metal Flex for runs less than nine feet in length).

**Ceiling Installations.** In areas with drop ceilings (ceilings < 16 ft.), run conduit (w/ video and power cabling) above the ceiling from SER location to each camera location. Leave 6' excess coil of power and video cable tied up at the camera location.

In areas w/o dropped ceilings (or open/high ceilings > 16ft.), run conduit (w/ video and power cabling) above ceiling from SER location to each camera location. Provide one (1) single gang receptacle box, recess mounted on the wall no more than 12', and no less than

8', above the fixed floor at each camera location (the closer to 12' is preferable for greater field of view.) All receptacle boxes in the same area shall be mounted at the same distance from the fixed floor.

In areas with exposed conduit, provide one (1) octagon box surface mounted on the wall no more than 12', and no less than 8', above the fixed floor at each camera location (the closer to 12' is preferable for greater field of view). All receptacle boxes in the same area shall be mounted at the same distance from the fixed floor.

• Exterior Cameras. In areas where cameras are to be installed on building exterior, run conduit (w/ video and power cabling) from SER location to the adjacent interior location. Leave the requested 6' excess coil of power and video cable tied up at the location. Do not penetrate the wall, if required, a 4"x 4" junction box and sleeve will be installed during camera installation. Request a #12 solid ground wire at each designated exterior camera location.

#### Suggested grounding options are:

Grounding wire(s) to be attached to a grounded conduit run or run grounding wire from communication room/SER location to exterior cameras. If option #2 is the method of grounding, provide a #6 or #8 ground wire from communication room/SER location to a power panel.

- Cat-6 Cable and Connection. A 10/100/1000 Base-T CAT-6 circuit shall be provided between the facilities administrator's office and the SER location. A second 10/100/1000 Base-T CAT-6 circuit shall be provided between the PVM workstation location at the reception desk and the SER. This shall include a terminated RJ-45 receptacle at the administrator's office and the PVM workstation location. At the SER, both circuits shall be un-terminated with 20' excess coiled in overhead.
- **Pull Box.** A pull box shall be installed at the PVM with an EMT wire path between it and the PVM workstation location. All EMT shall be a minimum of one inch in diameter.
- **Diffusers/Register/Grilles.** Do not install diffusers, registers, or grilles above a location designated for SER. Forced heat during winter months may cause over-heating of equipment.
- Cable Trays. Use cable trays throughout the facility. Recommend using tray to get camera
  wires as close to the camera locations as possible. Then run conduit to the exact locations
  using the most direct route.

# 9. CYS/MWR COMMERCIAL ENTERPRISE NETWORK (CEN)

- **Requirements.** External Wide Area Network (WAN) connectivity to the CEN will be provided by a single carrier with a minimum bandwidth speed of 1G.
- Rack/Space/Power.

Rack Requirement: At least 12U of rack space. Depth should have a maximum of at least

22 inches. Enclosure should be lockable. Can be on floor or wall mounted.

Power Requirement: At least 6 outlets close to the rack for power on 2 separate and dedicated 120v circuits.

- Communications Room. A dedicated room shall be made available for the existence of telecommunications and IT related equipment/switches. Room sizing and conduit fill rate shall conform to National Electric Code requirements. See Section 36. SPACE: Communication Room(s) for additional information.
- **Fiber Availability.** For external building connectivity to the Network Enterprise Center (NEC), fiber will be made available by the Government to the CEN service provider. For internal building extensions fiber should be run to supplementary communication closets/racks for any distance exceeding 275ft from main communication closet.
- Cabling and Inside Wiring: Access Points for Wi-Fi access to users run on Power Over Ethernet (POE). Preferred cable is Multi-Conductor-Enhanced Category 6 Nonbonded-Pair Cables 4-pair U/UTP CMP Reel-in-Box Purple, such as Belden 2413008A1000. Likewise, any direct connections to wired user equipment will use the same specifications for CAT6 cabling.
- Ceiling Installations. In areas with drop ceilings (ceilings < 16 ft.), run conduit (w/ fiber optic cable and/or CAT6 cabling as appropriate) above the ceiling to each general access point (AP) location. Service provider will patch/extend to precise AP installation per design criteria.</li>

In areas w/o dropped ceilings (or open/high ceilings > 16ft.), run conduit (w/ fiber optic cable and/or CAT6 cabling as appropriate) above ceiling to each access point location. All receptacle boxes in the same area shall be mounted at the same distance from the fixed floor.

In areas with exposed conduit, provide one (1) octagon box surface mounted on the wall no more than 12', and no less than 8', above the fixed floor at each AP location. All receptacle boxes in the same area shall be mounted at the same distance from the fixed floor.

- Exterior Access Points. In areas where access points are to be installed on building exterior, run conduit (w/ fiber optic cable and/or CAT6 cabling as appropriate) to the adjacent interior location. Leave the requested 6' excess coil of CAT6 and fiber tied up at the location. Do not penetrate the wall, if required, a 4"x 4" junction box and sleeve will be installed during access point installation. Request a #12 solid ground wire at each designated exterior access point location.
- **Pull Box.** A conveyance riser tube shall be installed at the CEN Rack for distribution of interior fiber and CAT6 cabling runs to facilitate AP connectivity throughout the building as well as wired end user equipment.
- **Diffusers/Register/Grilles.** Do not install diffusers, registers, or grilles above a location designated for the CEN rack. Forced heat during winter months may cause over-heating

of equipment.

- Cable Trays. Use cable trays throughout the facility. Recommend using trays to get
  access point wires as close to the access point locations as possible. From the cable tray,
  J-hooks will be used to run the cable to the location of the Access Point (AP) installation.
  J-hooks are preferred to allow flexibility in moving or adjusting AP location to optimize
  service.
- Network Enterprise Center (NEC): At minimum a pair of single mode fiber optic cable between the NEC and the CYS Facility (either direct or cross-connected from other buildings- direct is preferred) is required. For breaks, future proofing, or expansion, a second or third available pair is preferred. This requirement is in addition to any fiber optic cable that will be used for the NIPRNet and CCTV.

#### 10. SITE AND BUILDING EXTERIOR

- Criteria. Site and building exterior must be in accordance with Host Nation Requirement, Specific Geographical Requirements, Installation Design Guide (IDG) or other garrison criteria.
- Site Size: A Medium SAC requires approximately 6 acres of program space (to include building, playground and parking). Modify acreage accordingly for the Wing, Small and Large SACs. ATFP standoff distances, building and site setbacks, access drives and other Garrison site requirements may vary and affect overall size of the site. Ensure site shape will accommodate the SAC standard design layout.
- Site Layout. The layout of the parking lot and traffic circulation must consider the safety of the children when entering and departing the facility. Parking lots shall be designed such that children are not required to walk behind parked vehicles as they walk from the parking lot to the building. In other words, sidewalks shall be provided immediately in front of, or besides, the parked car. These sidewalks must be sufficient width to accommodate the overhang of the vehicle and still provide ABA width and shall be of adequate width to accommodate patrons with strollers and little children. Eliminate the possibility of a child being required to walk behind a parked car to gain access to the building. If curbside or parallel parking is provided, parking should be restricted to the right side so children will not exit the vehicle on the street side of the vehicle. If the parking lot design requires crosswalks, as a minimum, these must be painted and identifiable with signage in appropriate locations to ensure the safety of the patrons. In addition to the curb ramps required for ABA, provide curb ramps as needed at all crosswalks for parents with strollers and little children. Where a crosswalk crosses the traffic circulation path, consider placing the walkway on top of a speed table to ensure vehicles have slowed at that location.

All sidewalks, ramps and exit pathways must be ABA compliant. The sidewalk around the perimeter of the building shall be 6' wide. The sidewalk around the perimeter of the building must be directly adjacent to the building, with no grass or landscaping between the sidewalk and the building.

Required fire exits (which includes exterior exits from all activity rooms) from the building will lead to a public way or to a clear safe area which is a minimum distance of 50' from the building. If this is located in a fenced area, they shall terminate at a gate in the playground fence.

Locate exterior mechanical and electrical equipment as far from the main entrance as possible. It is recommended that the mechanical yard be located at the side of the facility. Screening is required that is architecturally compatible with the facility.

- Ramps. Exterior ramps shall comply with ABA, including ABA Handrails Advisory 505.4
  requiring child height handrails in addition to adult height handrails. This Advisory is
  mandatory for SAC facilities.
- Bus Drop Off. School buses deliver and pick up children curbside on a sidewalk that leads
  directly into the facility. Curbside drop off should be restricted to the right side so children
  will not exit the vehicle on the street side of the vehicle.
- Parking. The only reserved parking in the patron parking area shall be the minimum number of ABA compliant spaces required. Unless required by Leadership in Energy & Environmental Design (LEED), Installation policies, or other standard, it is strongly recommended that reserved spaces for carpools, energy efficient vehicles, etc. are not to be provided since the spaces close to the door are the preferred spaces for parents with small children who are the patrons of this facility.

Rows of parking spaces shall not be provided in dead-end vehicular circulation paths. The number of parking spaces are as follows.

Wing Addition: 28 spaces minimum
Small: 36 spaces minimum
Medium: 43 spaces minimum
Large: 51 spaces minimum

- **Emergency Access Roads and Fire Lanes:** Emergency vehicle access roads shall meet the requirements of UFC 3-600-01. Fire Lanes shall be painted red and marked accordingly.
- Entry Canopy. An entrance canopy shall be provided. The canopy shall be permanent construction and shall enhance the architectural theme of the facility. The minimum area of this canopy shall be 100 square feet, with a minimum dimension of 8'. Per Army criteria, this area counts as half-scope to the total square footage of the facility. Larger canopies are acceptable. Provide sprinklers if required by NFPA 13.
- Wall Hydrants. Freeze-proof, enclosed wall hydrants, 18" above finished grade, are required on the walls of the building as noted below. They must be of the frost/freeze protective type with removable cut off handles with integral vacuum breakers. A picture is provided below as to the desired type of hydrant. This picture is provided as a guideline only and is not meant to dictate a manufacturer or model. As a minimum, hydrants shall be located as follows:

- One by the kitchen door in all size facilities
- Minimum one (1) on each cardinal elevation





- **Receptacles.** Provide appropriate tamper-proof exterior electrical outlets. Provide a minimum of 3 outlets on each cardinal elevation to include a minimum of 1 in the hardstand area. Mount the outlets at 18" A.F.F. in protective, lockable boxes.
- **Fire Requirements.** Fire alarm audio/visual devices and rapid entry fire fighter entry key lock box shall be provided on the exterior of the building, at the main entrance. Key lock box must be supervised by the fire alarm system.

In addition to the exterior notification appliances required by UFC or Code, provide at least one

- (1) fire alarm visual device on the exterior wall for each playground.
- **Signs.** The facility shall be identified with a sign indicating "School Age Center". This facility shall not be identified as a "Child Development Center" or as a "Youth Center".

# 11. ROOM FINISH SCHEDULE:

ROOM NAME	FLOOR MATERIAL	BASE MATERIAL	WALL MATERIAL	CEILING MATERIAL	CEILING HEIGHT
1. VESTIBULE #1	PT / WOM	PT / RB	EPGB	ACT	9'
1a. VESTIBULE #2	PT / WOM	PT / RB	EPGB	ACT	9'
2. CORRIDORS 1 & 2 & 3	LVT	RB	EPGB	ACT	9'
3. GATHERING / WAITING AREA	LVT	RB	EPGB	ACT	9'/VARIES
4. MAIN ATRIUM	LVT	RB	EPGB	ACT	16'
5. SECONDARY ATRIUM 1	LVT	RB	EPGB	ACT	12'-9'
6. SECONDARY ATRIUM 2	LVT	RB	EPGB	ACT	12'-9'
7. TEACHING / DEMO KITCHEN	LVT	RB	EPGB	ACT	8'
8. CENTRAL COUNTER / RECEPTION	LVT	RB	EPGB	ACT	9'
9. STAFF TOILET / FIRST AID	SV	RB	EPGB	ACT	9'
10. DIRECTOR OFFICE	CPT or LVT	RB	EPGB	ACT	9'
11. TRAINING ROOM / CLOSET	LVT	RB	EPGB	ACT	9'
12. STAFF LOUNGE / CLOSET	LVT	RB	EPGB	ACT	9'
13. CCTV EQUIPMENT RM.	LVT	RB	EPGB	ACT	9'
14. STAFF & PUBLIC TOILET	PT	PT	PT*/EPGB	ACT	9'
15. KITCHEN	QT	QT	CT	VACT	9'
16. DRY FOOD STORAGE	QT	QT	CT	VACT	9'
17. WALK IN COOLER	CONC	PRE-FAB	PRE-FAB	PRE-FAB	9'
18. BOY'S TOILET 1	PT	PT	PT*/EPGB	ACT	9'
19. BOY'S TOILET 2	PT	PT	PT*/EPGB	ACT	9'
20. GIRL'S TOILET 1	PT	PT	PT*/EPGB	ACT	9'
21. GIRL'S TOILET 2	PT	PT	PT*/EPGB	ACT	9'
22. JANITOR CLOSET	QT	QT	EPGB	VACT or PGB	9'
23. SUPPLY STORAGE	LVT	RB	EPGB	ACT	9'
24. LAUNDRY	QT or LVT	QT or RB	EPGB	VACT	9'
25. MULTI- PURPOSE RM.	ATHL	RB	PCMU	E STRU	VARIES
26. MULTI- PURPOSE RM. UNISEX TOILETS (2 total)	PT	PT	PT*/EPGB	ACT	9'
27. MULTI-PURPOSE STOR.	CONC	RB	EPGB	ACT	9'
28. STORAGE & ISSUE	CONC	RB	EPGB	E STRU	VARIES
29. ART & SCIENCE ACTIVITY ROOM	SV	RB	EPGB	ACT	9'
30. PERFORMING ARTS ACTIVITY ROOM	WD	WD	EPGB	ACT	9'
31. ACTIVITY ROOM #1	SV	RB	EPGB	ACT	9'
32. HOMEWORK CENTER	SV	RB	EPGB	ACT	9'

				i	
33. SECURE STORAGE RM.	CPT	RB	EPGB	ACT	9'

ROOM NAME	FLOOR MATERIAL	BASE MATERIAL	WALL MATERIAL	CEILING MATERIAL	CEILING HEIGHT
34. COMPUTER LAB	CPT	RB	EPGB	ACT	9'
35. COMPUTER / HOMEWORK LAB	CPT	RB	EPGB	ACT	9'
36. COMMUNICATION ROOM	CONC	RB	PGB	EXP STRUC	9'
37 ELECTRICAL ROOM	CONC	RB	PGB	EXP STRUC	9'
38. MECHANICAL ROOM	CONC	RB	PGB	EXP STRUC	-
39. COVERED ENTRY	CONC	-	-	-	-
40. ELECTRICAL ROOM #2	CONC	RB	PGB	EXP STRUC	9'
41. ACTIVITY ROOM #2	SV	RB	EPGB	ACT	9'
42. ACTIVITY ROOM #3	SV	RB	EPGB	ACT	9'
43. ACTIVITY ROOM #4	SV	RB	EPGB	ACT	9'
44. STORAGE CANOPY	CONC	-	-	-	-

**Note:** Finishes shown above represent minimum finishes. Other finishes meeting or exceeding the performance of the finishes shown above may be considered.

#### FINISH SCHEDULE LEGEND:

ACT Acoustical Ceiling Tile (2' x2')

ATHL FL Athletic Floor - Gerflor Taraflex Multi-use 6.2 flooring system or approved equal.

CONC Sealed Concrete Floor

CT Ceramic Tile (\* = minimum 4'-0" high AFF)

CPT Carpet Tile (anti-static, 100% solution dyed, min. 60% pre-consumer recycled

content)

EPGB Epoxy Painted Gypsum Board (water-based epoxy paint)

EXP STR Exposed Structure EXTGB Exterior Gyp Board

LVT Luxury Vinyl Tile (thickness must be 20mil or higher with sound reduction attributes,

low VOCs and a min. 30% pre-consumer recycled content)

PCMU Painted Concrete Masonry Units

PGB Painted Gypsum Board

PT Porcelain Tile (\* = minimum 4'-0" high AFF)

QT Quarry Tile (\* = to be used on replacement/repair projects for ease of installation

based on existing sub-floor conditions)

RB Rubber Base (continuous roll)

SV Sheet Vinyl (no wax, no finish needed construction)

VACT Vinyl Faced Acoustical Tile (moisture resistant) on a Suspension System

WD Wood flooring system appropriate for dance (LEED rated, 100% recycled content)

WOM Walk-off Mat carpet tile (LEED rated, 100% recycled content)

# 12. NET AREAS AND TOTAL GROSS BUILDING AREA

ROOM NAME	WING ADDITION 60-75 Capacity	SMALL 105-135 Capacity	MEDIUM 150-180 Capacity	LARGE 195-225 Capacity
1. VESTIBULE #1	55sf	55sf*	57sf *	57sf
1a. VESTIBULE #2	-	-	57sf *	57sf
1b. WAITING AREA	49sf	108sf	-	-
2. CORRIDORS 1 & 2	248sf	684sf*	515sf*	515sf
3. GATHERING AREA	-	-	221sf	221sf
4. MAIN ATRIUM	1,809sf*	2,053sf*	2,292sf*	2,292sf*
5. ATRIUM 1	-	-	1,376sf*	1,376sf*
6. ATRIUM 2	-	-	1,726sf*	1,913sf*
7. TEACHING/ DEMO KITCHEN	149sf*	55sf*	53sf*	53sf*
8. CENTRAL COUNTER RECEPTION	114sf	151sf	140sf	140sf
9. STAFF TOILET/ FIRST AID	88sf	60sf	60sf	60sf
10. DIRECTOR OFFICE	90sf	112sf	197sf	197sf
11. TRAINING ROOM	-	198sf	242sf	242sf
12. STAFF LOUNGE	-	120sf	346sf	346sf
13. CCTV EQUIPMENT ROOM	-	115sf	123sf	123sf
14. STAFF & PUBLIC TOILET	78sf	60sf	60sf	60sf
15. KITCHEN	-	483sf	633sf	633sf
16. DRY FOOD STORAGE	-	42sf	80sf	80sf
17. WALK IN COOLER	-	54sf	69sf	69sf
18. BOY'S TOILET 1	209sf	202sf	283sf	283sf
19. BOY'S TOILET 2	-	-	182sf	182sf
20. GIRL'S TOILET 1	209sf	202sf	283sf	283sf
21. GIRL'S TOILET 2	-	-	182sf	182sf
22. JANITOR	42sf	37sf	60sf	60sf
23. SUPPLY STORAGE	-	-	227sf	227sf
24. LAUNDRY	-	85sf	116sf	116sf
25. MULTI- PURPOSE RM.	2,251sf*	3,452sf*	3,452sf*	3,452sf*
26. MULTI- PURPOSE RM.	136sf	136sf	136sf	136sf
UNISEX TOILETS (2 total)	(total)	(total)	(total)	(total)
27. MULTI-PURPOSE STOR.	-	242sf	242sf	242sf
28. STORAGE & ISSUE	483sf	723sf	723sf	723sf
29. ART & SCIENCE ACTIVITY ROOM	-	706sf*	719*	719*
30. PERFORMING ARTS ACTIVITY RM	-	677sf*	760sf*	760sf*
31. ACTIVITY ROOM #1	696sf*	676sf*	692sf*	692sf*
32. HOMEWORK CENTER	-	-	534sf*	534sf*
33. SECURE STORAGE RM.	63sf	39sf	60sf	60sf
34. COMPUTER LAB	-	-	532sf*	532sf*
35. COMPUTER/HOMEWORK LAB	525sf*	526sf*	-	-
36. COMMUNICATION ROOM	75sf	91sf	87sf	142sf
37 ELECTRICAL ROOM	75sf	83sf	119sf	119sf

38. MECHANICAL ROOM	678sf	508sf	1,123sf	1,123sf
39. COVERED ENTRY 1 & 2		80sf	101sf	85 sf
40. ELECTRICAL ROOM #2	-	-	-	61sf
41. ACTIVITY ROOM #2	-	-	-	734sf*
42. ACTIVITY ROOM #3	-	-	-	675sf*
43. ACTIVITY ROOM #4	-	-	-	675sf*
44. STORAGE CANOPY	-	-	47sf	47sf
TOTAL PROGRAMED SPACES	8,343sf	13,352sf	18,899sf	21,280sf
TOTAL GROSS FACTOR	537sf	577sf	1,585sf	1,647sf
(Includes interior and exterior wall				
thicknesses)				
TOTAL BUILDING GROSS	8,880sf	13,929sf	20,484sf	22,927sf

**NOTE:** Program Spaces that have a mandatory minimum size are identified by an asterisk (\*). All other spaces may be adjusted but the overall building gross square footage, including exterior canopies, cannot exceed the total building gross areas shown above. In calculating gross square footage, exterior canopy or cover shall be counted as half scope.

#### 13. TOILET FIXTURE & GRAB BAR SCHEDULE

DESCRIPTION:	SAC (6-10)	ADULT:	
Water Closet (Toilet) - ABA	12" min – 17" max AFF to seat	17" min -19" max AFF to seat	
	floor mounted		
ABA dimension centerline of WC to wall	15" min – 18" max AFF	16" min -18" max AFF	
Water Closet (Toilet) - Non-ABA	14" min – 15" max AFF to rim	Typical Industry Standard	
, ,	floor mounted	,	
Layatanı (Handaink) ADA	31" max AFF to the rim w/	34" max AFF	
Lavatory (Handsink) - ABA	0	34 max AFF	
Wall-mounted	24" min knee space		
Lavatory (Handsink) - Non ABA	27" AFF to rim	Typical Industry Standard	
Wall-mounted			
Urinal - ABA	13" max AFF to rim	17" max AFF to rim	
Urinal - Non-ABA	Typical Industry Standard	Typical Industry Standard	
	27" max AFF to rim	< 36" max AFF to spout	
Electric Water Cooler - ABA	29"-34" to spout	38"-43" to spout	
	Min one of each req'd;	Min one of each req'd;	
	If >2, 50% of each req'd	If >2, 50% of each req'd	
Grab Bars in ABA stalls & rooms	25" min – 27" max AFF to top	33" min - 36" max AFF to top	
Grab bars req'd on rear & adjacent wall			

#### NOTES:

- 1. ABA requirements based upon ABA Accessibility Standard for Department of Defense Facilities, adopted Oct, 2008.
- 2. ABA requires only one plumbing fixture of each type in every toilet room to comply with ABA. All other fixtures comply with Army Standards.
- 3. All requirements are stated for new construction. For remodeling or other than new construction uses, standards may be different.

#### 14. TOILET ACCESSORY SCHEDULE

FIXTURE TYPE	ADULT TOILETS	ADULT LAVATORIES (Hand sinks)	CHILD TOILETS	CHILD LAVATORI ES (Hand sinks)	KITCHEN HAND SINKS	STAFF TOILET / FIRST AID
Mirror+		X		X	Х	X
Paper Towel Dispenser*		Х		X	Х	X
Trash Receptacle (user provided)		Х		Х	Х	Х
Soap Dispenser*		Х		Х	Х	Х
ABA Exposed Piping Covering	Х	Х		Х	Х	Х
Coat Hook	Х					Х
Toilet Tissue Dispenser*	Х		Х			X
ABA Grab Bars	Х		X at Child ABA height = 25" AFF			X at Child ABA height = 25" AFF

<sup>\*</sup> Soap, toilet paper and paper towel dispensers – coordinate with the installation and provide in accordance with the service contract. Store bought soap in pump bottles to be used in child activity rooms.

<sup>\*</sup> Mirrors in most areas must be a tempered safety glass mirror, with stainless steel surround, including clear film applied to mirrored surface to retain glass pieces, if somehow the tempered mirror is cracked accidentally. If multiple mirrors need to be placed side by side, they shall be butt jointed.

#### 15. HARDWARE SETS

- Office Lockset (F82B) key lock from outside to lock/unlock outside handle, always open from the inside with turn button to lock outside handle, turn button releases automatically:
  - Offices
  - Staff/First Aid Toilet with occupancy indicator as shown below
  - Staff Lounge
  - Training Room
- Classroom Lockset: (F84) key lock from outside to lock/unlock outside handle, always open from the inside:
  - Kitchen Entry
  - Staff Lounge Storage
  - Training Room Storage
- Storage Lockset (F86) key lock from outside, always open from the inside:
  - Staff/Public Toilets with occupancy indicator as shown below
  - Multi-Purpose Room Toilets with occupancy indicator as shown below
  - Storage Rooms
  - Supply Storage
  - Multi-Purpose Room Storage
  - Storage & Issue Area, including cage area
  - Security Storage Room
  - Dry Food Storage
  - Janitor
  - Laundry
  - Communication Room
  - CCTV Equipment Room
  - Mechanical and Electrical Rooms (unless DPW wants something else).
- Intruder Classroom (F110) key lock from outside or inside lever locks/unlocks outside lever, always open from the inside:
  - Activity Room Entries
  - Homework Center
  - Computer Lab

#### Notes:

- All exterior doors shall be provided with hardware on the exterior side that allows for re- entry. All exterior exit doors shall have flush type panic hardware. Front entry doors are as defined in the vestibule or entry space.
- Interior Multi-purpose room doors shall have panic hardware in accordance with NFPA 101.



\*Example of occupancy indicator only.

# 16. LIGHTING LEVELS

From "Caring for our Children", recommended lighting levels are:

- Reading, painting, and other close work areas: 50 to 100 foot-candles on the work surface
- Work and play areas: 30 to 50 foot-candles lux on the surface;
- Stairs, walkways, landings, driveways, entrances: at least 20 foot-candles on the surface;

#### B. INDIVIDUAL SPACE REQUIREMENTS

#### 1. SPACE: Vestibule #1

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: This space serves to minimize air transfer by use of exterior and interior doors. Entry must have direct visual contact with the reception desk for access control.
- OCCUPANTS: Staff, children, parents and visitors
- FLOOR and BASE: Salient characteristics include resistance to slipping, durable, and hard surface resistant to scrapes and stains and easy to clean. A base material appropriate to the flooring material used is required.
- WALLS: Wall surface shall have the ability to absorb pushpins and to withstand tape peeling.
- DOORS/FRAME: A minimum of 2 sets of double 3 foot by 7 foot doors at exterior wall and
  the interior wall with flush panic hardware. Doors shall be aluminum with full tempered glass
  and have laminated glass to meet AFTP requirements. Doors shall be provided with selfclosing devices. Discussion regarding additional facility physical deterrents is encouraged.

#### SPECIAL HARDWARE AND ELECTRICAL REQUIREMENTS:

- Provide buzzer type access system at entry including following features:
  - Buzzer that sounds at reception desk
  - Intercom system for communication between reception desk and Vestibule.
  - Electronic lock system.
- Features of electronic lock system shall include:
  - · Control of access into facility at reception desk
  - Manual override of electronic lock by key from the outside
  - Manual override to allow the doors to unlocked from the interior.
  - "Tell-Tale" light to indicate if doors are locked or unlocked
- Ensure the locking mechanism does not negate the use of the panic hardware during emergency evacuations. The fire department shall be provided with a key to the manual override system.
- **AUTOMATIC DOOR OPERATORS:** Provide ABA compliant automatic door operators at outer and inner doors for handicapped accessibility. The automatic door operators at inner door shall be interlocked with Buzzer Access System controls.

#### 1A. SPACE: Vestibule #2

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: This space serves to minimize air transfer by use of exterior and interior doors.

- OCCUPANTS: Staff and Children
- FLOOR and BASE: Salient characteristics include resistance to slipping, durable, and hard surface resistant to scrapes and stains and easy to clean. A base material appropriate to the flooring material used is required.
- **DOORS/FRAME:** A minimum of double 3 foot by 7 foot doors at exterior wall with flush panic hardware. Doors shall be constructed from hollow metal with half-height tempered glass and have laminated glass to meet AFTP requirements.
- **FIRE PROTECTION:** A smoke detector is required in the Entry Vestibule #2.

### 2. SPACE: Corridors 1 & 2 & 3 (Small Facilities Only)

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: Main circulation including emergency egress.
- WALLS: Walls shall be smoke partitions as required by NFPA 101. Wall material shall have the ability to absorb pushpins. Wall surface shall be able to withstand tape peeling and shall be durable.
- **PLUMBING:** Provide water for two ABA compliant electric water coolers where shown on Standard Design floorplans for Corridor 2 one (1) lower water cooler child height and one (1) higher water cooler mounted adult height. See Section 13. Toilet Fixture & Grab Bar Schedule under General Requirements for mounting height requirements.
- **LOCKER REQUIREMENTS:** See Child Lockers in Section 4 (Architectural) of General Requirements above for further details (see also associated option for colder climates).
  - CORRIDOR 2: Install 30 lockable, half-height child lockers as shown on plans.
  - **CORRIDOR 3:** Install 105 lockable, double tiered with sloped top, half-height child lockers as shown on the floor plan.

# 3. SPACE: Gathering/Waiting Area (Medium & Large only; Waiting Area for Small Facilities)

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Comfortable or soft and "homey" location for a parent waiting to talk a member of the staff or the program director and can also be used as a gathering place for children. This space is located within the Main Atrium.
- OCCUPANTS: Parents, staff, and children
- CEILING: Materials shall be designed to baffle or absorb excessive sound generated

within this area.

• **ARCHITECTURAL FEATURES:** An open space with radius corners and seating area flanked by 34" high cabinets and countertop with optional planters on top. The exterior of the space shall have clear, unbreakable, and lockable display cases. Provide electrical outlets in the cabinetry on the inside of the space. Cabinetry to meet the same requirements as Central Counter/Reception and comply with General Cabinetry in Section 4 (Architectural) of General Requirements above.



#### 4. SPACE: Main Atrium

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** The Main Atrium is a multi-functional recreational area that is surrounded on all sides by an 8' circulation space. This area is to be bright, open, with plenty of natural light that does not have an institutional, school-like feel. The circulation space is an extension of the activity area to provide for cabinets, displays, intimate seating areas, etc.
- OCCUPANTS: Children and Staff
- FLOOR and BASE: Activity areas and circulation spaces of Atriums are to be differentiated by floor patterns, borders, and/or colors. (See floor plan for the location of the patterns). The circulation path must be designated by a unique and obvious floor pattern, different from the center portion of the atrium. This circulation path must be 8' wide to allow for placing of shelves and other items along the wall while still maintaining the mandatory minimum circulation width of 6'. Utilizing the differentiating floor tiles provides a visual reminder to staff not to encroach upon the circulation space.
- CEILING: Ceilings shall be at the 16 foot level above the Activity and Gathering areas with high continuous natural light wells above the circulation space on both sides of the Main Atrium. This space shall not be designed with a shed roof style due to the requirement to have natural lighting, clerestory lighting on both sides of the Main Atrium and it is mandatory the ceiling system shall be designed completely closed from ceiling located building equipment due to the food activity in this area. The ceiling height along the Multipurpose Room is lowered to 12 foot to facilitate the mechanical chase. (See building

Cross Sections in the standard drawings)

- CLERESTORY WINDOWS: Clerestory windows with security laminated glass shall provide natural light in this space. Natural lighting is mandatory for this space and skylights will not be an acceptable means to achieve the natural lighting requirement. Tinted or clear glass is the only acceptable glazing material for the clerestory windows. Windowsills shall be angled to reduce dust collection.
- **ACOUSTICAL:** Materials shall be designed to baffle or absorb excessive sound generated within this area.
- SPECIAL LIGHTING: Natural Lighting and Zoned Artificial Lighting.
- **PLUMBING:** Provide water for two ABA compliant electric water coolers where shown on the Standard Design floorplans one (1) lower water cooler at child height and one (1) higher water cooler mounted at adult height. See Section 13. Toilet Fixture & Grab Bar Schedule under General Requirements for mounting height requirements.
- **ELECTRICAL:** Provide minimum of 6 flush mounted duplex floor outlets with covers evenly spaced throughout the Main Atrium space (at least 10' apart), 4' in from each side of the activity space (12' in from the walls). Install Intercom connection.
- WING ADDITION LOCKERS REQUIREMENTS: See Child Lockers in Section 4 (Architectural) of General Requirements above for further details (see also associated option for colder climates). Install 45 lockable, half-height child lockers as shown on plans, double stacked except where provided at vision panels.

### SPACE: Atrium 1 (Medium & Large Facilities, Near Demonstration Kitchen)

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Atrium 1 is a multi-functional leisure, educational and social area that is surrounded on 3 sides by an 8' circulation space. These areas are to be bright and open, that do not have an institutional, school-like feel. This atrium shall be adjacent to the Teaching/Demo Kitchen and serves as an eating area for children.
- **FLOOR and BASE:** Activity areas and circulation spaces of Atriums are to be differentiated by floor patterns and/or colors. Utilizing the differentiating floor tiles provides a visual reminder to staff not to encroach upon the circulation space.
- CEILING: This ceiling is bi level see the building section.
- DOORS/FRAME:
  - Interior Doors: Reference adjacent space requirements.
  - Exterior Doors: Provide one (1) pair 3 foot by 7 foot Hollow metal doors with half-height glass panels conforming to AFTP standards.
- ACOUSTICAL: Materials shall be designed to baffle or absorb excessive sound generated

within this area.

- **ELECTRICAL:** Provide minimum of 4 flush mounted duplex floor outlets with covers evenly spaced throughout the Secondary Atrium #1 space (at least 20' apart), 4' in from each side of the activity space (12' in from the walls). Install Intercom connection.
- LOCKER REQUIREMENTS: See Child Lockers in Section 4 (Architectural) of General Requirements above for further details (see also associated option for colder climates). Lockable, half-height child lockers, double stacked except where provided at vision panels, are permissible in this area.
- **SPECIAL LIGHTING:** Zoned Lighting with local switch control.

#### 6. SPACE: Atrium 2 (Medium & Large Facilities)

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Atrium 2 is a multi-functional leisure, educational and social area that is surrounded on all sides by an 8' circulation space. This space contains a locker area; see requirements below and the floor plan. These areas are to be bright and open, that do not have an institutional, school-like feel.
- FLOOR and BASE: Activity areas and circulation spaces of the Atrium are to be differentiated by floor patterns, boarders, and color (see Floor Plan). Utilizing the differentiating floor tiles provides a visual reminder to staff not to encroach upon the circulation space.
- CEILING: Ceiling is to be bi-level, see building sections in the standard drawings.

#### DOORS/FRAME:

- Interior Doors: A minimum of 1 set of double 3 foot by 7 foot doors at exterior wall and the interior wall. They shall be constructed from Hollow metal with full tempered glass and have laminated glass to meet AFTP requirements at exterior.
- Exterior Doors: Install one (1) pair 3x7 foot hollow metal door and frame with half lite glass panel and conforming to ATFP Standards.
- **ACOUSTICAL:** Materials shall be designed to baffle or absorb excessive sound generated within this area.
- **PLUMBING:** Provide water for one (1) child height ABA compliant electric water cooler where shown on the Standard Design floorplans. See Section 13. Toilet Fixture & Grab Bar Schedule under General Requirements for mounting height requirements.
- **ELECTRICAL:** Provide minimum of 4 flush mounted duplex floor outlets with covers evenly spaced throughout the Secondary Atrium #2 space (at least 20' apart), 4' in from each side of the activity space (12' in from the walls). Install Intercom connection.
- **SPECIAL LIGHTING:** Zoned Lighting with local switch control.

• LOCKER REQUIREMENTS: See Child Lockers in Section 4 (Architectural) of General Requirements above for further details (see also associated option for colder climates). Provide 195 half-height child lockers in large size and 150 lockers in medium, double stacked except where provided at vision panels.

#### 7. SPACE: Teaching/Demo Kitchen

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Serves as an essential element of the facility. Food for snack/meal time will be appropriately arranged for self-service. Primary feature is counter space where children learn, prepare, and sample foods as part of life skill building. Counter will have various levels for different ages to allow all children to participate. This area's relationship to the main kitchen is essential.
- **DOORS/FRAME:** Salient characteristics include ease of cleaning, maintenance and repair. Provide one (1) 3 foot by 7 foot solid core wood door, metal frame, and half vision lite between Teaching/Demo Kitchen and Kitchen. Metal frame to be painted and wood doors to be stained. Door shall have half vision-lite with locking mechanism.
- CABINETRY: Salient features include ease of cleaning, hard/smooth, ease of maintenance, and easily repaired. Countertop and cabinet construction shall comply with General Cabinetry in Section 3 (Architectural) of General Requirements above. Provide split level counter to encourage use by children of diverse ages. Cabinets will be child size with stainless steel sinks., Provide space for a small under-the-counter commercial refrigerator and electrical outlets for appliances such as mixer, toaster and microwave. Child counter heights shall be 27" and adult counter height is 34".
- PLUMBING: Provide hot and cold water for sinks. Floor drain is required, and it shall have self- priming trap or designed to prevent sewer gases from entering the occupied space by a proven and maintenance free design. The drain shall be located near the twocompartment sink.
- **ELECTRICAL:** Provide appropriate receptacles both above and under the counter per code and as noted in Cabinetry above.

Install Intercom connection.

• **KITCHEN PASS-THRU WINDOWS:** Provide two (2) 3' wide single vertical sash-style aluminum, exterior type pass-through windows for the openings between the kitchen and demo kitchen. No track on the bottom/counter. These windows are provided to restrict the passage of smoke only, and there is no requirement that these be fire-rated or connected to the fire alarm system. No roll up curtains, fire shutters, horizontal sliding or hinged windows will be allowed.

# 8. SPACE: Central Counter/Reception

The following criteria is in addition to the General Requirements provided above.

- FUNCTIONAL DESCRIPTION: The main access control point with direct visual contact
  with the entry and Gathering/Waiting area. This area will view/observe the flow of children,
  parents, and visitors. Patrons will sign in/out. Payments are received at the desk.
  Reception area serves as the master location for the intercom system, front entry
  buzzer/magnetic lock release, and duress alarm. The desk provides direct line of sight of
  the Staff Toilet/First Aid. Area shall accommodate computers, printers, fax machine,
  copier, etc.
- DOORS/FRAME: Provide one (1) ABA-compliant counter height swing gate that opens 180 degrees with a finish matching the Reception Counter (see Cabinetry requirements below).
- CABINETRY Salient characteristics include easy cleaning, maintain and repair. Cabinets shall be durable and be able to withstand impacts from carts, strollers, book bags, etc., without showing damage. Countertop and cabinet construction shall comply with General Cabinetry in Section 4 (Architectural) of General Requirements above. Counter tops shall be provided at two levels, 30" and 42" above the floor. Work surfaces behind counter tops shall be at standard working height and shall allow for mobile pedestals to be placed under the work surface. Do not provide built-in pedestals or drawers other than pencil drawers noted below. For safety, all edges, vertical and horizontal, shall be eased or rounded. No sharp edges may be provided. Two (2) equally spaced grommets with covers shall be provided in each of the raised counter areas. Grommets with covers are to be provided in the lower counter area directly below the grommets in the upper counter. In addition, provide one (1) grommet with cover in the lower counter on the side where there is no upper counter. Area between upper and lower work surfaces shall be closed. Coordinate location of grommets with electrical, data, phone, etc. outlets.
- **ELECTRICAL:** A minimum of 3 quad outlets shall be provided in the small, 5 quads outlets in the medium and large. In addition, a duplex outlet shall be provided in each area with the raised counter for convenience. A minimum of 3 data outlets and 3 voice outlets shall be provided in the small, and 5 in the medium and large. These electrical and data outlets shall be located evenly spaced along the reception counter and are in addition to the wall outlets required by code. If outlets are provided on the wall opposite of the reception desk, in the public area, these outlets shall be tamper resistant, safety electrical outlets mounted standard height. Location of data and electrical outlets to be coordinated with grommets for functionality.

#### SPECIAL REQUIREMENTS:

- Reception desk shall be delineated through the use of special lighting and architectural features, such as furr-downs, etc. Furr down shall be no less than 7' above the floor and shall follow the profile of the reception desk.
- An intercom system shall be provided with the buzzer to allow communication with the entry vestibule.
- A duress alarm must be provided provide conduit, cabling, electrical, and directly connect into the MP/Police station with a silent activation button discreetly located under the lower countertop. Ensure any other buttons, such as the button to open the door, are not located near the duress button to avoid false alarms.
- Locate the manual emergency HVAC system shut-off button, with a non-locking protective cover, on the wall behind the Reception desk.
- Ensure that there is an emergency light provided over the reception desk to provide

lighting during electrical outages.

#### 9. SPACE: Staff Toilet / First Aid

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Toilet for staff and sick children. Space also functions as a first aid station to provide care for sick or injured children.
- **FLOOR and BASE:** Salient characteristics include slip resistance, easy to clean, and seamless finish resistant to bacterial growth.
- HVAC: Local exhaust vent providing minimum 150 cubic feet per minute above toilet.
- **DOOR:** Provide 3 foot by 7 foot stained solid core wood door, with no vision panel.
- **PLUMBING:** Provide one (1) child height ABA compliant water closet, and one (1) ABA compliant lavatory. The water closet rim shall be at 15" AFF and the lavatory shall be mounted with rim height at maximum 34" AFF. Install floor drain with self-priming trap or designed to prevent sewer gases from entering the occupied space by a proven and maintenance-free design.
- **ELECTRICAL:** Install a minimum of one (1) GFI Outlet near the lavatory at 48" AFF.
- **SPECIAL REQUIREMENTS:** Provide child height ABA grab bars mounted between 25" 27" AFF to the TOP of the bars.

#### 10. SPACE: Director's Office

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Office for the Director. Space must be located in close proximity to the central counter/reception desk and must be accessible from the Gathering/Waiting area.
- **OCCUPANTS:** One to two staff member(s), plus visitors.
- **FLOOR and BASE**: Salient characteristics include sound absorbing qualities and warm soft texture. A base material appropriate to the flooring material used is required.
- **INTERIOR VISION WINDOWS:** Provide a minimum of one (1) 3' by 4' window with tempered glazing and metal, wood, or aluminum frames.
- **ELECTRICAL:** Data outlets and electrical outlets on each wall. Install Intercom system. A CCTV monitor will also be located in the Director's office.

## 11. SPACE: Training Room

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: To facilitate training/distance learning by direct care staff.
- **OCCUPANTS:** Program Assistants and Trainer(s). The Trainers will work in this space. Several workstations will be set up for others to come and train.
- **CABINETRY:** The Building Construction Contractor is not required to provide cabinets for computer workstations.
- **CLOSET:** Construct one closet as shown on the floor plans with solid core door with half-height glass, etc. as described above and a minimum of four (4) 18" deep adjustable shelves with heavy duty standards and brackets. Shelving shall be able to support 100 pounds per lineal foot.

#### SPECIAL ELECTRICAL:

- Minimum of 6 data outlets and 6 quad electrical outlets evenly spaced throughout the room; provide intercom and cable TV outlet.
- Provide lighting with dimming (continuous, flicker-free dimming from 100% to 10%) or a multilevel switching scheme (with one inboard lamp switched separately from outboard lamps to provide distinct, evenly distributed lighting levels.)

### 12. SPACE: Staff Lounge

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Staff break area with individual lockable storage area for staff to secure belongings within lounge. Lounge will be adjacent to Staff Training.
- OCCUPANTS: Staff
- **CABINETRY:** A 36" wide space shall be provided adjacent to counter for a refrigerator. Countertop and cabinet construction shall comply with General Cabinetry in Section 4 (Architectural) of General Requirements above. Provide the following:
  - A minimum 8 foot wide base and wall cabinets with 1 stainless steel sink. Sink shall be a minimum 21" W x 15-3/4" D, ABA compliant sink with a goose neck faucet. Counters will be 34" high.
- **CLOSET:** Construct one closet as shown on the floor plans with solid core door with half glass, etc. as described above and four (4) 18" deep adjustable shelves.
- **ELECTRICAL:** Provide above counter receptacles for coffeemaker, appliances and microwave in addition to receptacles required by the code. Provide outlet for refrigerator. Provide intercom, 2 data ports and hook-up for Cable TV. A minimum of 4 voice/data ports (1 per wall) shall be provided.

- **PLUMBING:** Provide hot and cold water for sink. Provide water line for icemaker in refrigerator refrigerator by others.
- LOCKER REQUIREMENTS: Half-height, "z-locker", lockable wall lockers, with sloped tops secured to the wall, with a minimum size of 15" x 15", shall be provided in this area (total of 16 lockers in the small SAC, 20 lockers in the medium SAC, and 24 lockers in the large SAC). Each locker unit shall be 72" H. Lockers shall be sealed to the adjacent walls and floor. Z- lockers shall be lockable with individual padlocks, not with combination, keypad or keyed locks.
- **SPECIAL REQUIREMENTS**: Soap and paper towel dispensers to be coordinated with the installation and provided in accordance with the service contract.

### 13. SPACE: CCTV Equipment Room

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL AREA: CCTV video monitoring system to deter and reduce the risk of child abuse and protect staff from unwarranted allegations of abuse. Room to accommodate Video Surveillance System (CCTV) System Equipment Rack (SER) for camera system throughout the facility.
- ADJACENCIES: Shall be directly accessible from the corridor.
- OCCUPANTS: Staff.
- **DOORS/FRAME:** Doors shall be a minimum of half-height glass.
- HVAC: Supply cool, conditioned air to space for general comfort and to protect the heat generating equipment. Ideal operating temperature of CCTV Room is 68-72 degrees F. Equipment must be shut down if ambient room temperature exceeds 78 degrees F for more than 1 (one) hour, or if equipment is reporting alarms (amber or red indicator lights on the server) due to overheating. Coordinate with Department of Public Works when temperatures are not within the above standard.
- **ADDITIONAL REQUIREMENTS:** The Building Construction Contractor provides the conduit, boxes cabling and power to every camera location indicated on the standard plan. Refer to Section 8. Security and Monitoring Closed Circuit Television (CCTV) of General Requirements above for additional information.
- **SPECIAL ELECTRICAL:** Receptacles for CCTV equipment; including one (1) 30 amp receptacle.

#### 14. SPACE: Staff & Public Toilet

The following criteria is in addition to the General Requirements provided above.

- **FUNCTIONAL DESCRIPTION:** Toilet area for staff, visitors and parents. This room must be separate from those used by children. In addition, this room shall comply with adult ABA requirements.
- OCCUPANTS: Staff and visitors
- **WALLS:** Salient characteristics include must be easy to clean and maintain and must be durable. On all walls, a minimum 48" tall wainscot is required that is impervious to water and be able to withstand daily sanitizing.
- **HVAC:** Local exhaust fan, providing minimum 150 cubic feet per minute, shall be provided directly over the toilet. Exhaust fan shall be switched with the light.
- **PLUMBING:** Provide one (1) ABA compliant water closet and one (1) ABA compliant lavatory. Provide hot and cold water for sink. A floor drain is required in this area that must have self-priming trap, or designed to prevent sewer gases from entering the occupied space by a proven and maintenance- free design.
- **SPECIAL REQUIREMENTS:** Room to be provided with wall mounted fold-down diaper changing station.

Adult height ABA grab bars shall be provided – mounted 34" maximum to TOP of bars.

#### 15. SPACE: Kitchen

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Commercial grade facility designed for use by staff to meet the food service needs of school-age children in accordance with the United States Department of Agriculture and Preventive Medicine Regulations.
- ADJACENCIES: Directly accessible from the corridor. Direct access to exterior.
- OCCUPANTS: Kitchen Staff
- **FLOOR and BASE:** Salient characteristics include resistance to slipping, durable, and hard surface resistant to scrapes and stains and easy to clean. Quarry tile shall be raised pattern guarry tile with grease and acid resistant epoxy grout.
- WALLS: Walls of all areas where food establishment operations are conducted shall be constructed to be light colored, durable, easily cleanable, non-absorbent and smooth. Mortar, and epoxy grout joint materials shall be waterproof, grease-proof, and erosion resistant. Water-resistant gypsum wallboard protected by a cement backerboard or green board shall be used to sheath stud walls. Wall finish shall be full-height ceramic wall tile. Tile color shall be white or off-white with matching grout. All outside corners of interior walls shall be protected stainless steel corner protective guards extending at least 72" above the finished floor.
- **CEILING:** Ceilings shall be aluminum acoustical ceiling grid, 2' by 2' and supporting vinyl

faced acoustical lay-in panels to meet TB Med 530 Tri-service Food Code requirements.

- KITCHEN PASS-THRU WINDOWS: Provide two (2) 3' wide single vertical sash style
  aluminum, exterior type pass through windows for the openings between the kitchen and
  demo kitchen. No track on the bottom/counter. Although the windows are within a smokepartition wall, it does not need to be fire rated. These windows are provided to restrict the
  passage of smoke only, and there is no requirement that these be connected to the fire alarm
  system. No roll up curtains, fire shutters, horizontal sliding or hinged windows will be
  allowed.
- **DOORS/FRAME:** Hold-open devices of any kind (wedges, door stops, magnetic hold-open devices, etc.), shall not be used on any kitchen doors. Exterior door shall be minimum 40" wide. Doors shall be provided with self-closing devices.
- CABINETRY: Salient features include ease of cleaning, maintenance and repair with hard and smooth surface. Countertops shall be stainless steel. Cabinet construction shall comply with General Cabinetry in Section 4 (Architectural) of General Requirements above. Provide the following:
  - Provide base cabinets with sinks and wall hung cabinets above as shown on the Standard Design floorplans. Countertop shall be flush with Teaching/Demo Kitchen adult counter height.
- AIR CURTAIN: Provide one (1) air curtain to control flying insects mounted on the inside wall above the exterior kitchen door. Air curtain shall be directed to blow pests away from building entrance. Air velocity, measured 3' above the floor, shall be at least 1,600 fpm.
- **HVAC:** Two (2) ventilation exhaust hoods are required. One (1) condensation hood over the dishwashing machine, and one (1) over the cooking equipment. Ensure adequate make up air is provided.
- PLUMBING: Hot and cold water must be provided for 3 compartment ware washing sink, 2 compartment food preparation sink, 2 each hand washing sinks, cart washing area, dishwasher, convection steamers, 2 booster heaters (one booster heater may be integral to the dishwashing machine), garbage grinder, and garbage disposal. Water must be provided for a commercial icemaker. Floor drains with self-priming trap, to include floor sinks, must be provided.

A grease trap (interceptor) may not be required in a SAC facility as no grease is produced in the food prep and cooking operations. If required by the garrison or local municipality, size grease trap as small as possible. Grease traps will not be located inside this facility without the written approval of the MEDCEN/MEDDAC Commander. Grease traps must be located underground and shall not be located within the fenced area.

ELECTRICAL: In addition to electrical requirements for kitchen equipment, electrical
outlet and data port to be provided to accommodate a staff work space with computer in
kitchen for placing food orders on-line. Install fluorescent lighting fixtures that will allow an
accurate assessment of food coloration. Intercom device and telephone required as
described in the General Requirements above. System shall be hands free and audible
throughout entire space.

- FIRE PROTECTION: Provide wet chemical fire suppression system and fire extinguisher for the commercial cooking equipment in accordance with UFC 3-600-01. The manual activation device for the wet chemical fire suppression system shall be on the path of egress and spaced a minimum of 10' and a maximum of 20' from the protected hood exhaust system. Smoke detectors shall NOT be provided for the kitchen. (NOTE: If the kitchen dry storage room is fully enclosed a smoke detector will be required.)
- **SPECIAL REQUIREMENTS:** Where shelving is provided, a red tile line must be provided in accordance with Storage Height Limitation Line requirements in section 6 of the General Information above.

An acceptable option is to replace the Steamer and the Convection Oven with two (2) Combo- Ovens (which functions as both a steamer and a convection oven).

Electric range is preferable to a gas fueled range.

### 16. SPACE: Dry Food Storage

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Storage for dry food goods. Located within and directly accessed from the Kitchen.
- OCCUPANTS: Kitchen Staff
- FLOOR/BASE/WALLS/CEILING: All construction and finishes shall be the same as the Kitchen.
- **DOORS/FRAME:** Provide one (1) 3 foot by 7 foot solid core wood door with half vision-lite and metal frame with lockset hardware and self-closing device.
- **FIRE PROTECTION:** Provide smoke detector in this room. When the kitchen dry storage room is not enclosed, a smoke detector will not be required.
- **SPECIAL REQUIREMENTS:** On all walls where shelving is provided, a red tile line must be provided in accordance with Storage Height Limitation Line requirements in Section 7 of the General Requirements above.

#### 17. SPACE: Walk-in Cooler

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Cold storage for food goods. The cooler is a prefabricated unit that may be built in or free standing.
- OCCUPANTS: Kitchen Staff

- **FLOOR:** Pre-fabricated as recommended by the manufacturer with concrete sub-floor below.
- WALLS: Pre-fabricated as recommended by the manufacturer.
- DOORS/FRAME: Pre-fabricated as recommended by the manufacturer.
- **SPECIAL REQUIREMENTS:** Provide a sprinkler head inside the Cooler and located to avoid being directly over the shelving.

Route mechanical condensate lines to not interfere with the location and use of shelving.

### 18. SPACE: Boy's Toilet 1

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: Toilet area for children. Signage to say "Boys".
- OCCUPANTS: School age boys.
- **DOORS/FRAME:** No doors in this area. Provide airport style entry to block visibility into room but allow staff to monitor activity by listening.
- HVAC: Local exhaust vent above water closets.
- **TOILET PARTITIONS:** Partitions shall be braced to walls and/or ceiling as required. Provide wall and floor braced urinal screens.
- **PLUMBING:** Floor-mounted toilets are required with rim at 14"-15", including the ABA toilet for this age group. Lavatories to be wall-mounted. Counter mounted lavatories are not permitted. One (1) lavatory to be mounted at ABA height (27" for this age group) and remaining lavatories to be mounted at 27" above finished floor to the rim. A floor drain is required in this area that must have self-priming trap, or designed to prevent sewer gases from entering the occupied space by a proven and maintenance-free design. Two (2) child height urinals are required in the toilet room with one (1) ABA urinal with the rim mounted at 13" from the finished floor. Faucets shall be pre- mixed, single push control that meets ABA requirements. Water shall run for a minimum of at least 15-20 seconds.

### 19. SPACE: Boy's Toilet 2 (Medium & Large Facilities)

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: Toilet area for children. Signage to say "Boys".
- OCCUPANTS: School age boys.

- **DOORS/FRAME:** No doors in this area. Provide airport style entry to block visibility into room but allow staff to monitor by listening.
- **ACOUSTICAL:** Materials shall be designed to baffle or absorb excessive sound generated within this area.
- HVAC: Local exhaust vent above water closets.
- **TOILET PARTITIONS:** Partitions shall be braced to walls and/or ceiling as required. Provide wall and floor braced urinal screens.
- **PLUMBING:** Floor-mounted toilets are required with rim at 14"-15", including the ABA toilet for this age group. Lavatories to be wall-mounted. Counter mounted lavatories are not permitted. One (1) lavatory to be mounted at ABA height (27" for this age group). Remaining lavatories to be mounted at 27" above finished floor to the rim. A floor drain is required in this area that must have self-priming trap, or designed to prevent sewer gases from entering the occupied space by a proven and maintenance-free design. One (1) child height urinal is required in the toilet room with the rim mounted at 13" from the finished floor. Faucets shall be pre- mixed single push control that meets ABA requirements. Water shall run for a minimum of at least 15- 20 seconds.

#### 20. SPACE: Girl's Toilet 1

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: Toilet area for children. Signage to say "Girls".
- OCCUPANTS: School age girls.
- **DOORS/FRAME:** No doors in this area. Provide airport style entry to block visibility into room but allow staff to monitor by listening.
- HVAC: Local exhaust vent above toilet.
- **PLUMBING:** Floor-mounted toilets are required with rim at 14"-15", including the ABA toilet for this age group. Lavatories to be wall-mounted. Counter mounted lavatories are not permitted. One (1) lavatory to be mounted at ABA height (27" for this age group). Remaining lavatories to be mounted at 27" above finished floor to the rim. A floor drain with self-priming trap is required in this area that must be self-priming, or designed to prevent sewer gases from entering the occupied space by a proven and maintenance-free design. Faucets shall be pre- mixed single push control that meets ABA requirements. Water shall run for a minimum of at least 15-20 seconds.

# 21. SPACE: Girl's Toilet 2 (Medium & Large Facilities)

The following criteria is in addition to the General Requirements provided above.

- **FUNCTIONAL DESCRIPTION:** Toilet area for children. Signage to say "Girls".
- OCCUPANTS: School age girls.
- **DOORS/FRAME:** No doors in this area. Provide airport style entry to block visibility into room but allow staff to monitor by listening.
- HVAC: Local exhaust vent above toilet.
- **PLUMBING:** Floor-mounted toilets are required with rim at 14"-15", including the ABA toilet for this age group. Lavatories to be wall-mounted. Counter mounted lavatories are not permitted. One (1) lavatory to be mounted at ABA height (27" for this age group). Remaining lavatories to be mounted at 27" above finished floor to the rim. A floor drain with self-priming trap is required in this area that must be self-priming or designed to prevent sewer gases from entering the occupied space by a proven and maintenance-free design. Faucets shall be pre- mixed single push control that meets ABA requirements. Water shall run for a minimum of at least 15-20 seconds.

#### 22. SPACE: Janitor Closet

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Space to store janitor's equipment and cleaning supplies. Shelves are required within the Janitor's Closet in order to store janitorial and all cleaning products in a secure, locked janitor's closet away from areas where children's activities take place. SDS to be provided for all hazardous materials and approved by the local Preventive Medicine and Safety authority.
- ADJACENCIES: Directly accessible from the corridor.
- **WALLS:** Walls shall be able to withstand moving of mop buckets and other janitorial supplies, and shall be able to resist damage due to moisture.
- **CEILING:** Aluminum Acoustical Ceiling Grid with the size not exceeding 2' by 2' and supporting vinyl faced acoustical ceiling panels or painted gyp bd.
- **DOORS/FRAME:** The 2015 edition of NFPA 101 no longer requires the door to this space to open 180 degrees into the corridor; a standard door swing of +/- 90 degrees is acceptable. Per the general requirements above, door shall be provided with self-closing device.
- HVAC: Local exhaust fan, providing minimum 150 cubic feet per minute, shall be provided.
- **PLUMBING:** A janitor floor sink (mop basin) is required. Floor drain with self-priming trap is required in this area. Provide faucet with hose connection and vacuum breaker.
- ELECTRICAL: A minimum of 1 (one) GFI electrical outlet is required.

Lighting shall be manually controlled by a switch within the room.

- **FIRE PROTECTION:** Provide smoke detector in this room.
- SPECIAL REQUIREMENTS: Adjustable 12" deep shelves with heavy duty standards and brackets will be provided on at least one wall. Shelves shall be able to support 100 pounds per lineal foot.

Dimensions of the room must accommodate the 5' ABA turning circle. Adjustable shelves may encroach on this circle since they can be removed if necessary. Nothing else may encroach on the 5' circle.

Provide a wall-mounted rack, over the mop sink, for hanging mops.

### 23. SPACE: Supply Storage

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: General storage for office supplies or chairs and tables.
- OCCUPANTS: Staff
- **CABINETRY:** Provide a minimum of 4 adjustable shelves (2 -12" deep and 2 18" deep) with heavy duty standards and brackets on two walls. Shelving shall be able to support 100 pounds per lineal foot.
- **ELECTRICAL:** A minimum of one (1) duplex outlet shall be installed in this room near the door.

# 24. SPACE: Laundry

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Area to launder and fold clothes and linens. Space for one (1) heavy-duty residential grade washer and dryer for laundering sports uniforms and other items associated with the operation of a SAC (props and clothes for drama, etc.) and an area to fold clothes. Vent dryer to the exterior. Machines to be provided by others.
- OCCUPANTS: Staff
- **WALLS:** Walls shall be able to withstand the warm humid environment and being bumped by laundry carts.
- **FLOOR and BASE:** Flooring shall be quarry tile or other hard, durable, non-porous, non-slip surface. Alternatives to quarry tile must be submitted for approval prior to completion of design documents. An epoxy grout shall be used and shall be sealed or treated to avoid stains.

- **CEILING:** Ceiling panels must be vinyl surfaced, moisture resistant, and easy to clean.
- **DOORS/FRAME:** Frame, door, and hardware to have a 45 minute fire rating in accordance with NFPA 80. Both door and frame shall have proper label indicating rating.
- CABINETRY: Salient features include ease of cleaning, maintenance and repair with hard and smooth surface. Countertop and cabinet construction shall comply with General Cabinetry in Section 3 (Architectural) of General Requirements above. Provide the following:
  - Minimum 6' wide base and wall cabinets with one (1) SS hand sink. Countertop shall be 34" high.
  - Install wall storage cabinets above the washer and dryer.
- **ELECTRICAL:** Provide proper outlets for the number of washers and dryers provided.
- **PLUMBING:** Provide laundry tub, hand sink and clothes washer. Provide hot and cold water connections for these fixtures as well as a floor drain with self-priming trap, and gas connection (if applicable) for clothes dryer. Install wastewater piping as required. Install a floor drain with self-priming trap.
- FIRE RATING PROTECTION: Must be a 1-hour fire rated enclosure. All penetrations of the fire rated enclosure shall be fire caulked with red caulking IAW NFPA requirements. If the washer plumbing connection box is recessed within a rated wall assembly, the box must be 1 hour rated. If the walls required to be 1 hour rated do not extend to, and are not sealed to the bottom of the roof deck, then the ceiling must meet the same fire ratings as the walls. Smoke detector shall be provided in this area.
- **SPECIAL REQUIREMENTS:** Dryer vents shall be individually and directly vented to the outside. A non-inline booster fan will be provided for each dryer vent in accordance with the latest version of the International Mechanical Code (IMC).

Install Intercom connection.

### 25. SPACE: Multi-Purpose Room

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Will dual function as an area for skill building clinics, fitness activities and team events or as two activity rooms when needed. The Army Sport and Fitness Programming element will be emphasized. Space will be large enough to accommodate basketball, volleyball, sports clinics and non-competitive physical activities.
- OCCUPANTS: School age children and Program Assistants.
- FLOOR and BASE: Salient characteristics include slip resistance, abrasion resistance, minimal seams, easy to clean, maintain and repair. Floor must be suitable for serving food and beverages and acceptable for multiple activities, which include basketball, volleyball and in-line skating. Install flush receptacles for insertion of volleyball stanchions with covers when not in use. Receptacles must be coordinated with CYS regarding the diameter of

volleyball stanchions to be provided.

- WALLS: Structural wall with hard, durable and easily cleaned surface. Walls separating
  this room from the remaining building shall have a one hour rating and extend to the bottom
  of the roof deck.
- **CEILING:** Exposed structure. Unobstructed clear height of 20 foot, from the finish floor, shall be maintained for this room
- **INTERIOR VISION PANELS**: Provide two (2) 3' wide by 4' high windows with appropriate glazing and metal frames in wall between Atrium and Multi-Purpose Room. These windows shall meet NFPA 80 requirements for 3/4 hour rating. (Wire glass shall not be allowed)
- CLERESTORY WINDOWS: Install clerestory windows with security laminated glass to
  provide natural light in the Multi-Purpose Room. Natural lighting is mandatory for this space
  and shall be supplemented by artificial lighting. Provide adequate overhang to avoid direct
  sunlight penetrating into this space through south facing windows, and/or install glass
  blocks or insulated translucent light transmitting panels for glazing. Since direct sunlight is
  not encouraged for this space, clear glazing may not be utilized on east or west facing
  windows.

#### DOORS/FRAME:

- Interior Doors: Provide two (2) pairs of 3 foot wide by 7 foot tall wood doors with a half vision-lite, and metal frames in the wall between Atrium and Multi-Purpose Room. Other interior doors shall be as described in the appropriate room requirements. Install one (1) pair of 4 foot wide by 7 foot tall doors with half glass vision-lites for entry into the Storage and Issue Room. All interior doors and frames located in the one hour fire rated wall shall be 45 minute fire rated.
- Exterior Doors: Provide two (2) pairs of 3 foot by 7 insulated hollow metal exterior doors, with self-closers, and half glass vision-lites in metal frames.
- **ACOUSTICAL:** Provide impact resistant acoustical treatment on walls to baffle or absorb excessive sound generated within this area. The maximum Reverberation Time (RT60) shall be 1.5 seconds. The Noise Criteria within the space shall be 35. The wall separating the Multi- Purpose Room from the rest of the facility shall have a minimum STC of 50.
- HVAC: Dedicated HVAC unit for this space.
- SPECIAL LIGHTING: HID fixtures are not required. Lighting selected shall be identified as suitable for the intended use and lighting design shall meet IESNA recommendations for Basketball Sports-Lighting, Class III (Class of Play). Fixtures with 80% direct and 20% indirect lighting are preferred. Protect luminaries with wire cages and/or provide appropriate shatterproof enclosed luminaries. Switching for lighting control shall provide different lighting options to take into account natural lighting and different activities (such as volleyball, etc.)

#### SPECIAL REQUIREMENTS:

Electrically operated drop divider curtain to divide the room in half. Top part of curtain
to be an open weave to allow for ventilation, lighting, visibility, etc. The curtain shall be
raised and lowered with an electric winch. The curtain shall be operated with a spring

loaded momentary key switch which requires the person operating it to maintain a constant pressure on the switch until it is raised or lowered to its proper position. The switch shall be located to full view of the curtain to the operator. Curtain shall be sized to maintain 6' clear opening between the ends of the curtain and the adjacent wall.

- Provide a 5' high mirror that covers approximately 50% the length of one half of the room, so when the hanging divider curtain is lowered, the mirror will be on one side but not the other. Mirror shall be a tempered safety glass mirror, with stainless steel surround, including clear film applied to mirrored surface to retain glass pieces, if somehow the tempered mirror is cracked accidentally.
- Provide wall padding (mats) around room perimeter. Mats shall serve as protection for children, acoustical attenuation, and reduce maintenance to the walls.
- Provide protective mesh covers for all external fixtures, including, but not limited to emergency lights, strobe lights, fire alarms and pull stations. Recess all receptacles with protective mesh covers. Install tamper-proof (keyed) light switches to prevent multipurpose room lights from being turned off by children.
- Intercom device and telephone required as described in the General Requirements above.

### 26. SPACE: Multi-Purpose Room Unisex Toilets (2)

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: Toilet area for children and families.
- **OCCUPANTS:** One child or parent in each.
- **WALLS:** On all walls, a minimum 48" tall wainscot is required that is impervious to water and be able to withstand daily sanitizing.
- **HVAC:** Local exhaust vent above toilet.
- PLUMBING: Floor-mounted toilets are required with rim at 14"-15" (child ABA height).
  Lavatories to be wall-mounted at 27" above the floor to the rim. Counter mounted lavatories
  are not permitted. Provide urinals mounted at 13" AFF to the rim. A floor drain is required
  in this area that must be self-priming trap or designed to prevent sewer gases from entering
  the occupied space by a proven and maintenance-free design. Faucets shall be pre-mixed
  single push control that meets ABA requirements. Water shall run for a minimum of at least
  15-20 seconds.
- **SPECIAL FEATURES:** Each room to be provided with a wall mounted fold-down diaper changing station.

# 27. SPACE: Multi-Purpose Room Storage

• The following criteria is in addition to the General Requirements provided above.

- **FUNCTIONAL DESCRIPTION:** Storage room adjacent to the multi-purpose room used to store playground equipment.
- OCCUPANTS: Staff
- **CEILING:** Exposed Structure
- **DOORS/FRAME:** Hollow metal door with a half vision lite and metal frame shall be ¾ hour fire rated.
- **CABINETRY:** Provide a minimum of four (4) adjustable shelves (2 -12" deep and 2 18" deep) with heavy duty standards and brackets on two walls. Shelving shall be able to support 100 pounds per lineal foot.
- **ELECTRICAL:** A minimum of one (1) duplex outlet shall be installed in the space.

### 28. SPACE: Storage & Issue

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: Space for storage of program material.
- OCCUPANTS: Staff
- **CEILING:** Exposed Structure

#### DOORS/FRAME:

- Interior Door: Install one (1) pair of 4 foot wide by 8 foot high hollow metal doors with half vision-lites and hollow metal frame in wall between Multi-Purpose Room and Storage and Issue.
- Exterior Doors: Provide one (1) 3 foot wide by 7 foot tall insulated hollow metal door with half vision-lite in hollow metal frame leading from the cage area to the exterior. Install one
  - (1) pair of 4 foot wide by 8 foot tall hollow metal doors and frame with half vision lites leading directly to the exterior.
- **SPECIAL FEATURE:** Cage for equipment for outdoor activities (Min. 13' x 7'), made up of heavy-duty galvanized chain link wire fabric system, which shall extend from the floor to approximately 10' high. Cage shall have a door or gate into the Storage and Issue Room. No shelving by Building Construction Contractor in this room.
- **SPECIAL ELECTRICAL:** Provide minimum one (1) electrical outlet and data port. Install Intercom connection.

# 29. SPACE: Arts & Science Activity Room

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: A group area for arts, crafts, science and hobbies.
- OCCUPANTS: School age children and Program Assistants.
- **INTERIOR VISION PANELS:** Provide a minimum of (2) 3' by 4' windows with tempered glazing and metal or aluminum frames in the common wall with the Main Atrium.
- CABINETRY: Salient features include ease of cleaning, maintenance and repair with hard and smooth surface. Countertop and cabinet construction shall comply with General Cabinetry in Section 3 (Architectural) of General Requirements above. Provide the following:
  - Minimum 15' base cabinets with sinks and wall hung cabinets above. Base and wall
    cabinets will be provided with lockable doors, all keyed alike. Countertop shall be 30"
    high.
- **PLUMBING:** A 2-basin stainless steel sink with goose neck faucet and plaster trap installed in the cabinet. One (1) sink basin to be 6" deep and one (1) to be 12" deep. Install a floor drain with self-priming trap near the cabinets. Floor drain is required to be self-priming trap or designed to prevent sewer gases from entering the occupied space by a proven and maintenance-free design.
- **ELECTRICAL:** Install 2 Data Ports. Provide wall mounted duplex outlets 4' on center mounted 18" AFF, with not less than one (1) duplex outlet mounted on walls less than 5' long. Install two (2) outlets above the base cabinet backsplash. Install Intercom connection.

# 30. SPACE: Performing Arts Activity Room

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** A group training area in the performing arts. Activities will include performing arts, drama, and skill building.
- **OCCUPANTS:** School age children and Program Assistants.
- **INTERIOR VISION PANELS:** Provide a minimum of (2) 3' by 4' windows with tempered glazing and metal or aluminum frames in the common wall with the Main Atrium.
- **ELECTRICAL:** Install cable TV and 2 Data Ports. Install wall mounted duplex outlets 4' on center mounted 18" AFF except no outlets at the mirror location, with not less than one (1) duplex outlet mounted on walls less than 5' long. Install Intercom connection.
- **SPECIAL REQUIREMENTS:** Provide for a 5' high mirror to run 75-100% of one of the long walls.

# 31. SPACE: Activity Room 1

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** A multiple use area for functions such as group meetings, clubs and skill building classes, etc.
- OCCUPANTS: School age children and Program Assistants.
- **INTERIOR VISION PANELS:** Provide a minimum of two (2) 3' by 4' windows with tempered glazing and metal or aluminum frames.
- **ELECTRICAL:** Install 2 Data Ports. Provide wall mounted duplex outlets 4' on center mounted 18" AFF, with not less than one (1) duplex outlet mounted on walls less than 5' long. Intercom device and telephone required as described in the General Requirements above.

### 32. SPACE: Homework Center (Medium & Large Facilities)

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** This area serves as an integral part of the Mentoring, Intervention and Education Support Service component of the Army. It will provide a flexible environment conducive to learning that does not replicate a rigid "Classroom" atmosphere. Area will be used for tutoring and mentoring services as well as a quiet area for reading.
- OCCUPANTS: School age children and Program Assistants.
- **FLOOR and BASE:** Salient characteristics include sound absorbing qualities, anti-static and warm soft texture. A base material appropriate to the flooring material used is required.
- **INTERIOR VISION PANELS:** Provide a minimum of two (2) 3' by 4' windows with tempered glazing and metal or aluminum frames in the common wall with Secondary Atrium 2.
- **ELECTRICAL:** Install 6 Data Ports and electrical outlets at every 8 foot. Install Intercom connection.

# 33. SPACE: Secure Storage Room

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: Room adjacent to Computer Homework Lab
- OCCUPANTS: Program Assistants

- **SPECIAL CONSIDERATIONS:** No shelving by Building Construction Contractor in this room. The Secure Storage Room in the medium facility will be used to house communication equipment.
- **ELECTRICAL:** One (1) electrical outlet on the end wall.

### 34. SPACE: Computer Lab (Medium and Large Facilities)

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: This area serves an integral part of the mentoring, Intervention and Education Support Services and the Life Skills, Citizenship and Leadership components of the Army Core Service Areas. It will provide a flexible environment conducive to learning that does not replicate a rigid classroom atmosphere. The area will be used for homework, tutoring, mentoring, and web based learning activities as well as a quiet area for reading. Area will accommodate 15 computer stations, plus one (1) staff station.
- OCCUPANTS: School age children and Program Assistants.
- FLOOR and BASE: Salient characteristics include sound absorbing qualities and warm soft texture. A base material appropriate to the flooring material used is required. Flooring must be anti-static.
- **INTERIOR VISION PANELS:** Provide a minimum of five (5) 3' by 4' windows with tempered glazing and metal or aluminum frames. Two (2) vision panels will face the Atrium and three (3) will face the Central Reception Counter.
- HVAC: Provide HVAC zoning flexible for this space due to heat generating equipment.
- **ELECTRICAL:** Install receptacles every 4-5' apart, Data to support 16 computers, and one (1) Telephone Outlet. Intercom device and telephone required as described in the General Requirements above.

# 35. SPACE: Computer Homework Lab (Small Facilities only)

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: This area serves an integral part of the mentoring, Intervention and Education Support Services and the Life Skills, Citizenship and Leadership components of the Army Core Service Areas. It will provide a flexible environment conducive to learning that does not replicate a rigid classroom atmosphere. The area will be used for homework, tutoring, mentoring, and web based learning activities as well as for reading. Area will accommodate 7 computer stations plus one (1) staff station.
- OCCUPANTS: School age children and Program Assistants.

- **FLOOR and BASE:** Salient characteristics include sound absorbing qualities and warm soft texture. Flooring must be anti-static.
- **INTERIOR VISION PANELS:** Provide a minimum of five (5) 3' by 4' windows with tempered glazing and metal or aluminum frames. Two (2) vision panels will face the Atrium and three (3) will face the Central Reception Counter.
- **HVAC:** Provide HVAC zoning flexible for this space due to heat generating equipment.
- **ELECTRICAL:** Install receptacles every 4-5' apart, ten (10) Data Ports, Telephone Outlet. Intercom device and telephone required as described in the General Requirements above.

### 36. SPACE: Communication Room(s)

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** A dedicated room for telecommunications and IT related equipment/switches.
- OCCUPANTS: Maintenance personnel No Staff or Children.
- **FLOOR and BASE**: Room is not accessible to staff or patrons therefore an economical utilitarian finish is suitable.
- **CEILING:** Exposed Structure
- **HVAC:** Supply cool, conditioned air to space for heat generating equipment.
- **ELECTRICAL:** Wall telephone outlet.
- **SPECIAL REQUIREMENTS:** Comply with most recent version of Technical Guide for Installation Information Infrastructure Architecture (I3A).

#### 37. SPACE: Electrical Room

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Area that will house all electrical and power equipment. This room should not be located near the outdoor activity area.
- OCCUPANTS: Maintenance personnel only– no Staff or Children.
- **FLOOR and BASE:** Room is not accessible to staff or patrons, so an economical utilitarian finish is suitable.
- CEILING: Exposed Structure.
- **DOORS/FRAME:** Door shall open from the exterior of the building only. Door may be flush

type (no glass).

- **HVAC:** Ventilation and heat only in this space.
- **ELECTRICAL:** Wall telephone outlet.

#### 38. SPACE: Mechanical Room

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Area that will house all HVAC/plumbing equipment. This room should not be located near the children's play area.
- OCCUPANTS: Maintenance personnel only– no CDC Staff or Children.
- **FLOOR and BASE**: Room is not accessible to staff or patrons therefore an economical utilitarian finish is suitable.
- WALL: Walls of Mechanical Room shall be smoke partitions.
- **CEILING:** Exposed Structure
- **DOORS/FRAME:** Doors shall open from the exterior of the building only. Doors may be flush type (no glass).
- **PLUMBING:** Provide floor drains as needed. Floor drains are required to have self-priming trap, or designed to prevent sewer gases from entering the occupied space by a proven and maintenance-free design.
- **HVAC**: Ventilation and heat only in this space.
- **ELECTRICAL:** Wall telephone outlet, data ports.

### 39. SPACE: Covered Entry

- The following criteria is in addition to the General Requirements provided above.
- FUNCTIONAL DESCRIPTION: Area that provide shelter at entrance doors.
- OCCUPANTS: Children, Staff and parents.
- FLOOR: Concrete Slab.
- ELECTRICAL: Exterior wall outlet and lights.

# 40. SPACE: Electrical Room 2 (Large Facility)

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** Area that will house electrical and power equipment.
- **OCCUPANTS:** Maintenance personnel only– no Staff or Children.
- **FLOOR and BASE:** Room is not accessible to staff or patrons, so an economical utilitarian finish is suitable.
- **CEILING:** Exposed Structure
- **DOORS/FRAME:** Door opens into the interior of the building. Door must be half glass wood door with door closer.
- HVAC: Ventilation and heat only in this space.
- **ELECTRICAL:** Wall Telephone Outlet.

### 41. SPACE: Activity Room 2 (Large Facility)

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** A multiple use area for functions such as group meetings, clubs and skill building classes, etc.
- OCCUPANTS: School age children and Program Assistants.

**ELECTRICAL:** Install 2 Data Ports. Provide wall mounted duplex outlets 8'on center mounted 18" AFF, with not less than one (1) duplex outlet mounted on walls less than 5' long. Intercom device and telephone required as described in the General Requirements above.

### 42. SPACE: Activity Room 3 (Large Facility)

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** A multiple use area for functions such as group meetings, clubs and skill building classes, etc.
- OCCUPANTS: School age children and Program Assistants.
- **INTERIOR VISION PANELS:** Provide a minimum of two (2) 3' by 4' windows with tempered glazing and metal or aluminum frames.
- ELECTRICAL: Install cable TV and two (2) Data Ports. Provide wall mounted duplex

outlets 8' on center mounted 18" AFF, with not less than one (1) duplex outlet mounted on walls less than 5' long. Install Intercom connection.

• **SPECIAL REQUIREMENTS:** Provide for a 5' high mirror to run 75-100% of one of the long walls. No outlets at the mirror location.

### 43. SPACE: Activity Room 4 (Large Facility)

- The following criteria is in addition to the General Requirements provided above.
- **FUNCTIONAL DESCRIPTION:** A multiple use area for functions such as group meetings, clubs and skill building classes, etc.
- OCCUPANTS: School age children and Program Assistants.
- **INTERIOR VISION PANELS:** Provide a minimum of two (2) 3' by 4' windows with tempered glazing and metal or aluminum frames.
- **ELECTRICAL:** Install two (2) data ports. Provide wall mounted duplex outlets 8' on center mounted 18" AFF, with not less than one duplex outlet mounted on walls less than 5' long. Intercom device and telephone required as described in the General Requirements above.

### 44. SPACE: Playground/Outdoor Activity Areas

 GENERAL REQUIREMENTS: Outdoor activity areas serve as extensions of activity room spaces and must be provided to support programming. Playground installation must be in accordance with the current versions of Consumer Products Safety Commission (CPSC) Handbook for Public Playground Safety, all applicable American Society for Testing and Materials (ASTM) standards, and ABA requirements as adopted by DoD.

Shade in the outdoor play areas is a requirement.

- AREA. Minimum area of playgrounds shall be as follows:
  - Wing Addition 47,606 square feet
  - Small 47,606 square feet
  - Medium 52,106 square feet
  - Large 52,106 square feet
- **TECHNICAL REQUIREMENTS**: 6-10 SAC Outdoor Activity Area shall include the following as a minimum: (See Standard Design Site Plan for Location and Adjacencies)
  - **Hard Stand Area.** Hard stand surface area (50' by 50') adjacent to the Multi- Purpose Room of either concrete or asphalt construction.
  - Composite Play Structure. Due to a change in requirements since the Army Standard
    was prepared, an age appropriate composite play structure sized for 15-30 children
    with poured-in-place surfacing in the use zone is required. Poured-in-place shall be of
    adequate thickness and construction to meet ASTM requirements for the fall heights of

the play structure.

- **Swings.** 2 bays of 2 belt seats each, with an 8 foot high cross bar. The use zone shall be poured-in-place surfacing. Kick-out mats are recommended on top of the poured-in-place surfacing to reduce wear on the surfacing under the swings. An additional tire swing is permitted. All swings shall be light colored to reduce the likelihood of burns.
- **Shade Structure.** Provide minimum of one (1) shade structure, minimum 20' x 20' over a concrete or asphalt pad of similar size.
- **Open Field.** Open grass field area sized for youth soccer. The field shall be 70 yards long by 50 yards wide. In addition, a minimum of 10 yards of out of bounds area shall be provided on all sides. Field shall be fenced. Rocks larger than 3/4" in any dimension shall be removed. Field shall be grassed with weeds removed.
- Quiet / Imagination Area. An area located away from noisy areas that includes a minimum of 3 boulders or child sized benches for seating and natural landscaping.
- Natural Components. At a minimum, 3 planting boxes, 3-4 musical instruments, 2
  paint panels and 4 child height picnic tables shall all be considered as part of the
  project.
- SAFETY SURFACING & EQUIPMENT. A playground safety surface shall be provided throughout all use zones and under all play equipment. The safety surface will be unitary or poured in place material and shall be light in color to lessen the possibility of injury due to extremely hot surfaces. Rubber matting at foot contact point underneath the swings is strongly recommended to extend the life of the safety surfacing material.
- **FENCING:** Fencing shall encompass all outdoor activity spaces. All fencing must be vinyl coated chain-link security type minimum 4' high at the perimeter. The guide wire at the bottom, and the wire fasteners used to secure the fence fabric to the poles, top rail, etc., shall also be vinyl coated. Fencing will have gates between the play areas and one in the perimeter fence of each area. Bolt threads, nuts, and ends of wire fasteners shall face away from the playgrounds. Where fence fabric bolt threads and nuts are required to face a playground (generally between play areas), bolts will be trimmed to two (2) exposed threads and sharp edges will be dressed with a file. Additionally, all wire fasteners used to secure the fence fabric to piping (poles, etc.), where the cut ends face an outdoor activity area, will be flush cut to reduce the introduction of cutting edges on the ends of the wires, and will be pointed downward. A top rail is required on the fence.

All gates shall open a minimum of 90 degrees in both directions (180 degrees total). Provide a minimum of one (1) gate within the perimeter fencing of each playground area. Fencing shall be installed so that there are no gaps, greater than 3" in height, under the fence that would allow animals to enter the playground. Fencing must comply with the current version of ASTM F2049.

- PLANTS. Poisonous or potentially harmful plants are prohibited in any part of a youth facility that is accessible to children. All plants not known to be nontoxic should be identified and checked by name with the "Peterson Field Guide – Venomous Animals and Poisonous Plants".
- ARTIFICIAL TURF. No artificial turf may be used without a lead-free certification from the manufacturer as acceptable to IMCOM G9 CYS. Crumb rubber fill is prohibited.
- FIRE DEVICES. Fire alarm audio and visual devices shall be provided for each outdoor

activity area.

- **INTERCOM.** Each outdoor activity area must be provided with a weather-proof intercom
- **TRIP HAZARDS.** There shall be no tripping hazards in the outdoor activity areas. Mechanical and electrical equipment, as well as manholes, clean-outs, or other plumbing access may NOT be located within the fenced playground area.
- APPROVALS. Outdoor activity area design must be reviewed by garrison CYS staff and approved by IMCOM G9 CYS. Playground installation must be in accordance with the CPSC and all applicable ASTM standards. The Building Construction Contractor shall provide written documentation that playground meets those standards and has been inspected by a Certified Playground Safety Inspector (CPSI) prior to turning over to the Government. IMCOM G9 CYS will perform a pre-occupancy, CPSI inspection prior to acceptance by the Garrison. Documentation of installation and inspection shall be maintained by the garrison CYS staff.
- **DRINKING FOUNTAINS.** Due to maintenance concerns, exterior drinking fountains or EWC will NOT be provided in the playgrounds.





The rendering above of a Large SAC is provided for information only. The intent of the rendering is only to provide a general 3D perspective of the building.