

2.A BUILDING SYSTEMS & INFRASTRUCTURE

LIGHTING

- All lighting shall be designed and installed in accordance with BUSD's lighting standards.
- The design of all lighting systems should be easy for maintenance crews to access and repair.
- Natural lighting shall be maximized in building design, especially in all spaces used by students.
- Rooms without windows and direct natural light and ventilation shall not be used for any student functions. Special programmatic needs, such as for performance spaces, theaters, and photography dark rooms, should be exempt.
- Window design and shading methods should allow for privacy while also allowing natural light into rooms.
- Windows shall have shading systems that reduce glare and solar heat gain effects throughout the day.
- Windows shall have roll-down shades and should reflect solar radiation.
- Windows and light fixtures that minimize glare shall be utilized.
- Windows shall be glazed to support thermal regulation.
- South, east, and southeast facing windows and facades should employ additional methods to protect against over heating internal spaces.
- Windows shall be sufficiently sealed and weatherproofed.
- Lighting controls and fixtures that allow for light level adjustments in instructional spaces should be used.
 - All lights should have controls in the same room which include dimmer functionality.
- The Coalition for High Performance Schools' guidelines for Lighting Quality

shall be followed regarding:

- Providing high quality daylighting in classrooms to enhance student performance. (EQ1.1)
- Providing a visual connection to the outdoors. (EQ1.2)
- Providing high quality and flexible classroom lighting. (EQ1.3)
- Lighting systems and their configuration should contribute to a building's overall energy efficiency.
- Lighting systems shall employ various methods of reducing energy consumption and increasing the usable life of equipment, including:
 - Connecting all campus lighting to a central control system
 - Installing motion and occupancy sensors connected to lighting in every room (classrooms, hallways, auditoriums, offices, etc.)
 - Occupancy sensors in restrooms shall not record people or violate personal privacy.
- All interior lighting systems shall adhere to the applicable requirements in Title V of California's Education Code:
 - Division 1, Chapter 13, Subchapter 1, Article 4, § 14030 - L (lighting)

HVAC/CLIMATE CONTROL

- The design of all HVAC systems should be easy for maintenance crews to access and repair.
- The Coalition for High Performance Schools' guidelines for Indoor Air Quality and Thermal Comfort shall be followed regarding:
 - Establishing minimum HVAC standards and construction practices for indoor air quality. (EQ2.0A)
 - Providing a thermally comfortable

3.B KINDERGARTEN CLASSROOMS

ROOM PURPOSE

Primary learning spaces for kindergarten and pre-kindergarten grade levels. Rooms designed to accommodate the specific needs of 4 to 6 year old children.

- Classrooms should provide space for large and small group instruction
- Individual and small group projects
- Large and small group play
- Wet and dry work areas
- Individual and small group work at computer workstations
- Faculty collaboration meetings

SPACE SPECIFICATIONS: QUANTIFIABLE

CLASSROOM

- Floor area must be a minimum of 1,350 sq ft, including restrooms, storage and teacher preparation space.
- Provide 2 exits from the classroom: one for primary egress, and the second to access an adjacent outside play area.

RESTROOM

- Restrooms for pre-kindergarten, transitional kindergarten, and kindergarten students shall be located within the classroom, or immediately adjacent to the school's kindergarten/CDC complex. If located within the kindergarten/CDC complex there shall be at least 3 toilets and 3 sinks, appropriately scaled for the students.
- If student restrooms are contained within kindergarten/CDC complex, a minimum of 1 restroom with 3 toilets for every 2 classrooms shall be provided.
- Student accessible plumbing features shall have approximately 24" counter height.

SPACE SPECIFICATIONS: CONCEPTUAL

- Design the classroom space to enable effective teacher supervision of the full room and both exits from any location.
- Classrooms should feature flexible zones to support various classroom activity types.
- When possible, make individual rooms or room groups independently securable so site administrators may open up the needed spaces, while keeping the rest of the campus secure.

SPACE SPECIFICATIONS

- Situate Pre-K and Kindergarten classrooms adjacent to a parent drop-off area, preferably also near staff spaces such as the main school office and the staff wellness room.
- Provide a window panel for viewing visitors without opening the door.
- Provide space for the entire class to sit down together as a group.
- Pre-K and Kindergarten classrooms require a variety of permanent storage, including:
 - Open Shelving
 - Deep shelving for storing oversized papers, posters, and other teaching items
 - Large storage areas for hands-on manipulative learning products
 - Cupboards
 - Coat racks
 - Outdoor play equipment storage
 - Cubbies for storing student backpacks and papers (located outside of the main teaching area)
 - Countertops, not accessible by children, for storing teacher equipment. They should be provided both inside and outside the main teaching area.

4.C MULTIPURPOSE ROOMS

ACTIVITIES/SPACE USE PLAN

Multi-purpose rooms should provide space for:

- Large gatherings
- Physical Education activities
- Student dining, including breakfast, lunch, and afterschool meal service
- School performances and assemblies
- Community events and gatherings
- Emergency shelter

SPACE SPECIFICATIONS

- Multipurpose rooms shall be situated to adjacent or near to the school kitchen, performing arts rooms, and PE offices.
- Elementary school multipurpose rooms should have the capacity to comfortably accommodate the entire student body for assemblies.
- Multipurpose rooms shall be easily accessible from the parking lots, and delivery/service vehicle entry points.
- Ceiling height shall be sufficient to effectively use the space for physical education activities and to allow lighting fixtures and HVAC units to be mounted at least 20' from the ground.
- Acoustic wall panels and ceiling systems to shall be used as necessary to absorb and dampen noise.
- Easily accessible, secure storage for furniture items and PE equipment, located at ground level, shall be provided.
- Easily accessible, secure storage for meal service equipment, including steam tables, salad bars shall be provided.
 - All food service shall be stored outside of the multipurpose
- Waste collection areas should be of a size to accommodate 3-4 large receptacles, as schools may participate in multiple sorting programs.
- Multipurpose rooms and adjoining

restrooms should be accessible and securable independently from the rest of the campus.

- There shall be multiple entrances to the multipurpose room, one of which grants access to and from an adjacent outdoor seating/eating area. Egresses shall have double doors.
- The height of stage platforms shall be a maximum of 3.5'.
- Sites with a set of stairs as the primary means of stage access should have either a lift or backstage ramps as a secondary access route to stage level. Ramps also facilitate for the movement of heavy equipment and furniture.
- There shall be easily accessible, secure storage backstage for stage equipment, props and costumes, and emergency supplies.
- There should be backstage circulation leading to rooms suitable for changing and use as green rooms.
- For space specifications pertaining to meal service areas, Refer to Section 2.C Kitchen and Food Preparation.

INFRASTRUCTURE/UTILITY REQUIREMENTS

- Refer to Section 2.A for lighting specifications.
- Refer to Section 2.A for general HVAC/climate control specifications.
- Refer to Section 2.A for general communications and information technology specifications, and see below for specific requirements for Elementary School level classrooms.
- There shall be sufficient Wi-Fi bandwidth to support software and equipment.
- Technology infrastructure shall be installed in a manner which does not complicate maintenance of the room.
- Cabling should be contained within

SCHOOLYARDS (CONTINUED)

imperious paving, and diversify paving materials.

INFRASTRUCTURE/UTILITY REQUIREMENTS

- Shading furniture and rain protection shall be dispersed throughout social interaction areas on campus.
- Waste collection areas shall be located near social interaction areas and adjacent to buildings and circulation paths.
- Waste collection areas should be securable and of a size to accommodate 3-4 large receptacles, as schools may participate in multiple sorting programs.
- All lighting systems should comply with Coalition for High Performance Schools' guidelines for light pollution reduction regarding:
 - Design site lighting and select lighting styles and technologies that have minimal impact off-site and minimal contribution to sky glow. (SS5.1).
- Comply with the East Bay Municipal Utilities District (EBMUD) guidelines and the Coalition for High Performance Schools guidelines for Outdoor Water Systems and Outdoor Surfaces/Spaces regarding:
 - Reducing or eliminating the use of potable water for landscape irrigation. (WE1.1)
 - Reducing or eliminating the use of potable water for irrigating recreational areas. (WE1.2)
 - Managing storm water runoff to limit disruption and pollution of natural waterways. (SS3)
 - Designing the project to maintain natural storm water flows by promoting infiltration, using alternative surfaces (e.g. green roofs or permeable paving materials) and

sustainable design strategies. (SS3.2)

- Optimizing landscape design to reduce the heat island effect by providing shade, using light-colored paving, and open-grid pavement systems. (SS4.1 / SS4.11 / SS4.1.2)
- Consider implementing the principles of environmentally friendly landscaping for the Oakland region, as established by the Bay Friendly Landscape Guidelines.
- Include measures to protect landscaped areas from general foot traffic and student activities.
- Solar panels, or other sources of on-site renewable generation may be provided.
- Refer to Section 2.A for general communications and information technology specifications.
- Refer to Section 2.A for details on landscaping.
- Hose bibs shall be provided for custodial staff use.

FURNITURE AND FURNISHINGS

- Seating in these areas shall be appropriately-sized for elementary school students.
- Age-appropriate outdoor seating options should be provided.

MISCELLANEOUS DESIGN ELEMENTS

- All outdoor spaces should be well-lit, and have high visibility for safety, and for shared use in the evenings.
- Exterior masonry walls should be covered with anti-graffiti sealant for maintenance purposes.