

# ESTABLISHING A SCHOOL



**Adventist Education**

**A JOURNEY TO EXCELLENCE**

**OFFICE OF EDUCATION  
Texas Conference**



## TABLE OF CONTENTS

### **100. INTRODUCTION**

102. Purpose

104. Scope

### **200. PRE-PLANNING**

202. Consultation with the Conference Superintendent

204. Needs Assessment

206. Educational Specifications

208. Financial Plan

### **300. SITE LOCATION AND DEVELOPMENT**

302. Location

304. Size Recommendation

306. Safety Factors

308. Handicapped Accessibility

310. Future Expansion

312. Playground Areas

314. Playground Equipment

316. Landscape Design

318. School Sign

320. Flag Pole

### **400. CLASSROOM GUIDELINES**

402. Size

404. Windows

406. Lighting

408. Climate Control

410. Aesthetics

- 412. Acoustics
- 414. Wiring for Technology
- 416. Media Space
- 418. Science Space
- 419. Music/Art Space
- 420. Storage Space
- 422. Sink

**500. OTHER SPACE NEEDS**

- 502. Office
- 504. Teacher Work Area
- 506. Media Center
- 508. Multi-Purpose Room
- 510. Health Space
- 512. Auxiliary Storage Space
- 514. Rest Rooms
- 516. Custodial/Maintenance Area
- 518. Hallways
- 520. Kitchen
- 524. Lockers

**600. MECHANICAL/UTILITIES**

- 602. Codes
- 604. Heating, Air Conditioning and Ventilation
- 606. Electrical
- 608. Plumbing
- 610. Energy Conservation
- 612. Telephone

**700. SAFETY AND SECURITY**

- 702. Occupational Safety and Health Act (OSHA)

- 706. Fire Protection System
- 708. Doors
- 710. Windows
- 712. Safety Inspections
- 714. Security

**800. GENERAL GUIDELINES**

- 802. Insurance
- 804. Building Materials
- 806. Roof
- 810. Entryways
- 812. Schematic Drawings
- 814. Evacuation Routes

**900. SUPPLEMENTAL MATERIALS**  
**(Relevant portions will be supplied as needed)**

- 902. North American Division Working Policy
- 904. Journey to Excellence
- 906. Southwestern Union K-12 Education Code
- 908. Texas Conference Teacher Handbook
- 910. Texas Conference Board of Education Policies
- 912. Texas Conference School Board Manual

- APPENDIX A** Sample Floor Plans – One-Classroom
- APPENDIX B** Sample Floor Plans – Two-Classrooms
- APPENDIX C** Sample Floor Plans – Three-Classrooms



## 100. INTRODUCTION

### 102. Purpose

The purpose of this manual is to provide assistance to churches for starting a new school or for churches/schools considering the need to construct a new building or to do extensive remodeling of an existing building. Following these guidelines should enable a school constituency to plan and implement the construction of a school facility.

### 104. Scope

The guidelines in this manual are specifically designed to aid in the construction of a facility for a school. Initial sample floor plans for small schools are included in the appendix.

Many projects will require the services of a qualified architect. The Texas Conference Association and the Texas Conference Office of Education must be a part of the early planning stages, and all construction projects must have the prior approval of the Texas Conference Association in cooperation with the Texas Conference Office of Education.

## **200. PRE-PLANNING**

### **202. Consultation with the Texas Conference Superintendent**

The Superintendent who will be able to provide much valuable assistance in planning as well as in construction, must be consulted early in any planning process for construction or major remodeling of a school facility.

### **204. Needs Assessment**

The School Board should appoint a committee to conduct a needs assessment to determine if there is a need to remodel or construct a new building. The committee should survey the entire school constituency to study such areas as the condition of the present building, enrollment trends, future growth, available resource people, community financial resources, and constituency interest in building a new school.

### **206. Educational Specifications**

Educational specifications describe in narrative form the desired educational program for a proposed facility. They do not include architectural drawings or specific plans. Neither do they describe an instructional program in detail. They do include brief statements describing the desired educational program and the spaces needed to implement the program. The educational specifications should communicate the desires for a certain educational program to the architect, or in the absence of an architect, to the builder.

The administrator, teacher(s), and Superintendent of Schools should be closely involved in developing the educational specifications. They are best qualified to describe the activities that may take place in the classroom.

### **208. Financial Plan**

A sound financial plan is a necessity for planning and erecting a new school facility. It should include funding sources and methods for fund raising, a time schedule for raising the funds, and a proposed schedule for construction. It may include provisions for borrowing funds within denominational guidelines. Schools do not generate adequate funds to pay back a substantial loan, and loans must be secured by church constituencies. No construction should begin until all financial and building plans have been approved and secured as specified by the Texas Conference Association.



## **300. SITE LOCATION AND DEVELOPMENT**

### **302. Location**

The school should be located in a healthy and safe environment in as pleasant surroundings as possible. Disturbing noises and unpleasant odors should be taken into consideration. Traffic patterns may be detrimental in some locations.

When more than one church is a member of the school constituency, it is usually better to select a site as centrally located as possible, but not adjacent to any of the constituent churches. In a one-church constituency, the school is often located close to the church.

In the interest of protecting a viable market base for Seventh-day Adventist schools, elementary schools must not be located any closer than 30 minutes driving time from another K-8 elementary school. Secondary schools (Grades 9-12 or K-12) must not be located any closer than 45 minutes (60 minutes – better if 11<sup>th</sup> and 12<sup>th</sup> grades are offered) driving time from another school offering secondary grades.

### **304. Size Recommendation**

It is recommended that the site for a small school should contain a minimum of three to five acres. Future enrollment should be taken into consideration in selecting a site. If a school is planning to grow to a 12 grade school, a minimum of 10 acres is required.

When selecting a new site for a school, the following factors should be taken into consideration: location, accessibility, shape, topography, cost, soil condition, sub-surface conditions, expansion, cost development, utilities, maintenance, safety factors, possibility of flooding, changing community demographics, zoning issues, building permit challenges, neighbors, and landscaping.

### **306. Safety Factors**

Since most students will be transported to school, it is essential to plan for safe walking, driving, and parking areas. Special attention should be given to loading and unloading areas. One-way traffic is advised where possible. Appropriate provisions should be made for people with specific physical needs. Observation windows between the classroom(s) and the hall or foyer are critical.

Special care should be given to safety factors in planning and providing for playground and recreation areas. Both grassy and hard surface areas are needed for a variety of physical activities. Soft-wells to a minimum depth of 14" are required under all play equipment.

Exterior lighting should be planned to give adequate lighting for persons attending evening functions. Good exterior lighting is also a factor in preventing vandalism.

Depending on the location of the school, a fence surrounding the site may be necessary for student safety and for protection against vandalism.

**308. Handicapped Accessibility**

Planning committees should make sure that all site and building plans and construction comply with local, state, and federal regulations where applicable.

**310. Future Expansion**

The site should be large enough to allow for future buildings, and school buildings should be planned to allow expansion on at least one or two sides of a building. Utility lines should be located and sized to allow for future expansion.

**312. Playground Areas**

A playground area of sufficient size to meet the physical activity needs of the students enrolled should be provided, keeping in mind the needs created by any future enrollment increase. It should include both grassy and hard-surface areas. The area should be well-drained, and located on the back side of the building, if possible. Playground areas should be planned and developed as an integral part of the site plan.

**314. Playground Equipment**

Playground equipment should be suitable for the size and age level of the students. It should be made of quality materials and be sturdy and safe in all aspects. Soft-wells must be provided under each piece of equipment. Fourteen inches of soft material (such as sawdust, sand, or pea gravel) is recommended. Special attention should be given to the needs of smaller students for suitable play equipment. Local or state codes may require special areas, equipment, and fencing for kindergarten students.

**316. Landscape Design**

A great deal of attention should be given to the landscape design. Landscaping should be designed to minimize the need for regular upkeep. All plantings should be considered from the standpoint of the maintenance they require as well as their adaptation to soil, exposure, proximity to play areas, etc. Existing trees and shrubs should be integrated into the plan. Plantings can provide protection against wind, sound, and dust, as well as provide coolness and shade. Site development should make provisions for outdoor education. Automatic sprinkler systems are recommended to provide regular watering during hot months. Since landscape design can add so much to the beauty of the school, adequate funds for it should be provided in the original plans.

**318. School Sign**

An appropriate and descriptive school sign which identifies the school as a Seventh-day Adventist institution is a vital part of a landscape design.

**320. Flag Pole**

A flag pole designed for flying the United States and Texas state flags should be located near the front entrance to the school.

## **400. CLASSROOM GUIDELINES**

### **402. Size**

The basic classroom should contain a minimum of 1000 square feet of floor space exclusive of classroom cabinetry. The size needs to accommodate a full class of students and provide adequate space for storage, technology, and various instructional activities. Classrooms of inadequate size limit the potential of maximizing class enrollment.

### **404. Windows**

Windows need to be designed to provide adequate natural light and be energy efficient. Provision should be made for covering windows to darken the classroom and provide for glare free classroom projection and video viewing. Safety glass in accordance with local building codes must be used throughout the building.

### **406. Lighting**

Adequate lighting for optimal learning must be a part of the school design (**check information from the state**).

### **408. Climate Control**

Individual room controls are more satisfactory than centrally-located controls in a multi-room facility. Regardless of outside temperature, the interior temperature should always be comfortable, and the relative humidity level should be satisfactory. Research has indicated a connection between learning efficiency and temperature and humidity levels.

### **410. Aesthetics**

The classroom should provide an attractive and welcoming environment with careful and planned attention to the overall aesthetics of the school. Paint and floor coverings must be of durable quality materials that are pleasing to the eye and easy to maintain.

The location of bulletin boards and white boards should be carefully planned and placed to optimize the learning environment and add to the attractiveness of the room.

#### **412. Acoustics**

Proper placement of acoustical material contributes greatly to sound conditions. Carpeting is highly efficient as an acoustical material. Acoustic control involves not only the individual room, but also reduction of sound transmission from outside the classroom. Particular attention should be devoted to large multi-purpose rooms and gymnasiums.

#### **414. Wiring for Technology**

Provision for present and future use of technology services and equipment must be included in school planning. It is relatively inexpensive to provide ample conduits and outlets during construction. Wiring should include provisions for computers, telephones, video projection, satellite equipment, and future technology. Wireless internet may be a desirable option. Conduits installed for future use should be at least two inches inside diameter.

#### **416. Media Space**

Space should be provided for audio-visual equipment and material as well as technology equipment and services. In schools with more than one classroom, a separate room may be provided for media services. (See Section 506.) Adequate adjustable shelving is very important, and it must be at proper height levels for all age levels of students. Shelving units must be securely anchored to the wall to provide safety and stability.

#### **418. Science Space**

Each individual classroom should include an area for science. Space for storing equipment and materials should be included in this area with provision for laboratory experiments and demonstrations. Chemicals and other potentially hazardous materials should be stored in an appropriate locked facility.

#### **419. Music/Art Space**

Space should be provided in the building design for art and music instruction and activities.

#### **420. Storage Space**

Storage should include space for instructional materials, physical education and play equipment, art and music supplies, student's personal belongings and lunches, and seasonal materials. Some of the storage space should include locking provisions. Some storage space is also needed outside of the classroom for

bulky materials, extra textbooks, and janitor and maintenance materials.

**422. Sink**

Each classroom should include an adequately-sized sink with a drinking fountain.

## **500. OTHER SPACE NEEDS**

### **502. Office**

Each teacher needs a private office, large enough to accommodate a desk and chair, filing cabinet, shelves, and storage cabinets. Each office should have a window to the classroom and a private entrance/exit door. Acoustical and visual privacy is important to the design.

### **504. Teacher Work Area**

A teacher work area is a separate, enclosed space used for instructional tasks which cannot be done in the classroom. It needs to be large enough for several individuals to use at the same time. This room may also be used for additional storage of classroom materials. It should include perimeter shelving, cupboards, ample counter space, at least one sink, and work tables. It should be well lighted, have sufficient electrical outlets, be properly ventilated, and be easily accessible from the classroom(s).

### **506. Media Center**

The design of the media center will depend on the size of the school, its philosophy, and its instructional program. The media center may be in the classroom or in a separate room. It is not necessary that all instructional materials be kept in the media center. If not, the location of the holdings should be indicated in the catalog.

A variety of equipment and learning aids is required for a media center. Tables, chairs, and other furniture suitable for different age groups must be provided. Ample adjustable shelving space is a must. Shelving units must be securely anchored to the wall to provide safety and stability. Portable shelving or carts make it easier to take materials to a classroom. Display or bulletin boards are needed.

The impact of new technology calls for diligent planning for the media center in a small school. Computers that are equipped with appropriate library software are recommended.

### **508. Multi-Purpose Room**

Some small elementary schools do not include a gymnasium due to financial considerations. If a gymnasium is not possible and a multipurpose room is available, this room may be utilized to allow students to use it for physical education or recreation in inclement weather. With tables and chairs, it can be used for the

lunchroom. This room could be used to supplement instructional space for such curriculum areas as science, music, and art.

**510. Health Space**

An appropriate space easily supervised by the teacher should be provided where a student who becomes ill can lie down. A lockable storage area is necessary for first aid supplies.

**512. Auxiliary Storage Space**

The planning committee should ensure that more than adequate storage space is included in the original design. Special storage conditions are required for items such as chemicals, paint, and other combustible materials.

**514. Rest Rooms**

Provision must be made in the rest rooms *for* individuals with special physical needs. The entrance should be designed so that stalls and urinals are not visible from the open door.

The following items are needed in the restrooms: a minimum of two toilets, urinals to meet the various height levels in the boys' rest room, sinks, soap dispensers, waste containers, a separate container labeled for personal product disposal, shelf, hand-drying facilities, mirrors (appropriate height level for elementary students), thermostat for temperature control, a good ventilating fan, and a floor drain. Floors should be of a material such as ceramic tile that can handle regular cleaning.

**516. Custodial/Maintenance Area**

A separate room should house custodial and maintenance equipment and supplies. The room should be large enough to provide some working space and contain a service sink with hot and cold water, shelves, cabinets for storage, and racks/hangers for custodial equipment. If combustible materials or chemicals are to be stored in this area, the room should be fireproofed according to state and local codes.

**518. Hallways**

Hallways should be at least eight feet in width. If lockers are to be installed, the depth of the lockers should be added to the recommended hall width. The hallway is usually the best location for a refrigerated drinking fountain.



**520. Kitchen**

A kitchen can add great flexibility to a school's instructional program and services and should be given serious consideration. If it cannot be completed in the original plan, at least the space should be provided and provision made for plumbing and electrical services. The kitchen may be included in a multi-purpose room or a gymnasium.

The kitchen should be equipped with a properly-vented stove, refrigerator, microwave, ample cabinets, counter space with a double sink, and a dishwasher. Commercial grade equipment may be the best investment.

**524. Lockers**

Lockers provide storage for students' books, lunches, coats, and other personal belongings.

## **600. MECHANICAL/UTILITIES**

### **602. Codes**

It is imperative that all mechanical and utility services be designed and installed in compliance with local, state, and national codes. Only licensed contractors or personnel are to install these services.

### **604. Heating, Air Conditioning and Ventilation**

Heating, air conditioning, and ventilating systems should yield sufficient capability to meet the requirements within the building during the period of occupancy, and under extremes in local weather conditions without sustained operation beyond the rated capacity of the system. An adequate system provides a temperature of 70 degrees in the classrooms measured 60 inches above the floor and provides fresh air at a minimum rate of 10 cubic feet per minute (CFM) per person in classroom areas. Various areas of the school may call for special heating and ventilation provisions. Provision should be made for possible future building expansion.

### **606. Electrical**

Main service panels should be installed to prevent access by unauthorized persons. All branch panels should be flush type and lockable.

Switches should be provided at the entrance to all spaces in the building, placed on the knob side of the door entrance. Every instructional area should be provided with numerous duplex receptacles. Other spaces may also call for extra outlets. Gymnasiums or multi-purpose rooms should be wired for the use of audio-visual equipment.

The electrical system should be designed to provide for future building expansion such as two-inch conduits to all instructional areas. Ground Fault Interrupter (GFI) outlets should be placed in the vicinity of all sinks and water areas in accordance with state and local building codes.

### **608. Plumbing**

Where possible, plumbing and sewer connections should be made with city services. Private wells (not recommended and, if used, must comply with local and state regulations) or septic tank systems must comply with state and/or local county code regulations.

**610. Energy Conservation**

School buildings should be designed with energy-efficient materials. Entry doors, insulation, natural lighting, variable exhaust systems, efficient heating systems, dual pane windows, and accurate programmable thermostats are some of the "built-in" items that are capable of conserving energy.

**612. Telephone**

The school facility should provide a telephone system with access to areas such as the office, classroom(s), kitchen, media center, workroom, and gymnasium or multi-purpose room. Provision should be made on the main telephone for a teacher to be able to talk privately.

If an answering machine is used to answer the school phone during the school day, it must have a provision to reach a responsible school employee or volunteer who can quickly access the school teacher or administrator in cases of emergency.

## **700. SAFETY AND SECURITY**

### **702. Occupational Safety and Health Act (OSHA)**

All schools must comply with the provisions of OSHA, both federal and state (if enacted), such as upholding the safety and health standards established, and the record-keeping requirements. The school must provide a safe and healthful place to work and must be free from recognized hazards that are causing, or are likely to cause, death or serious physical harm.

### **706. Fire Protection System**

A fire protection system which meets all applicable codes must be installed.

### **708. Doors**

Each classroom must have at least two exits. Doors should be wide enough to move equipment easily and should be placed to prevent traffic congestion. All doors are to be constructed of sturdy material and have an appropriate fire rating. Exit doors to the outside are to be equipped with appropriate crash hardware in accordance with local building code.

### **710. Windows**

The number and size of windows may be determined by lighting, heating, air-conditioning, and ventilation specifications. They should be as energy efficient as possible and use safety-rated glass. Properly-designed windows may serve as additional exits in case of emergency.

### **712. Safety Inspections**

Consultation with fire and health inspection officials as building plans are being developed is required to minimize health and safety risks regarding fire safety, asbestos, water, radon levels, food preparation areas, and hazardous materials.

### **714. Security**

A good design plan provides for good school security. External security provides protection for the school plant and grounds. Internal security measures provide for the safety of students and teacher(s). A system providing supervision of school entrances during school hours should be included. Such a system may include locked doors, video monitoring, check-in procedures, and optimal placement of school personnel.

## **800. GENERAL GUIDELINES**

### **802. Insurance**

An insurance policy to cover the school during construction must be secured before construction begins. The School Board must verify that all construction workers are covered by insurance, either through their own company or by the school. Volunteer workers must also be insured. Schools should consult with the conference treasury department for insurance information and applications.

### **804. Building Materials**

All construction materials should be of good quality, energy efficient where applicable, and code compliant. Good quality exterior materials help to protect the interior. Quality materials reduce future maintenance costs. Exterior and interior finishes should be as maintenance free as possible.

### **806. Roof**

Avoid building designs with a flat roof. Experience has shown that flat roofs invariably have leaking problems. A quality roof is a sound investment.

### **810. Entryways**

Entryways with two sets of doors assist in energy conservation and comfort. A covered entryway provides welcome protection for loading and unloading during inclement weather. Entryways can add to the attractiveness of the school, avoid direct entrance to a classroom, and provide display space.

### **812. Schematic Drawings**

When the school facility is completed as built, blueprints and schematic drawings are to be organized and kept in a safe place (with a copy sent to the conference property management office) where they will be available for future use in repair and expansion projects and in locating all utility lines and services for repair or updating.

### **814. Evacuation Routes**

All rooms must post evacuation route(s) to the nearest outside exit.