

Church Facilities “Rules of Thumb”

SPACE AND DIMENSION RECOMMENDATIONS

“*Rules of Thumb*” is intended to provide general guidelines for estimation of property, building space and other needs prerequisite to actual planning. It is not a substitute for actual planning and design. A “Rules of Thumb” is useful only in making approximations and should not be used dogmatically. Understanding the variables affecting their values is essential in their application to specific situations. This document is based on requirements and recommendations for Georgia Baptist Churches in general and may or may not apply in any given situation. To discuss your particular needs call the **Church Architecture Department** of LifeWay Church Resources in Nashville at (615) 251- 2466 or **Sunday School/Small Group Ministries** of the Georgia Baptist Convention at 1 (800) 746.4422 ext. 287.

SITE PLANNING

Facilities for worship, education, fellowship, administration and parking:

- 1 acre per 100 – 125 in attendance on site at one time.
- Outdoor recreation: 2 to 4 additional acres.

Note: These requirements are based on usable acres. Zoning regulations, storm water retention requirements, utility easements, irregular property shape, steep slopes and low-lying areas may reduce usable acreage.

PARKING

One space needs to be provided for every 2 to 2.5 people in attendance on site at one time.

Parking ground coverage:

100 – 110 spaces per acre used for parking only. This assumes efficient layout with parking on both sides of driving lanes and allowing for some landscaping and general access.

Note: 90 degree parking on both sides of two-way driving lanes is generally the most efficient layout for parking.

Parking space dimensions:

Standard: 9 feet by 18 feet

Handicapped: 8 feet by 18 feet, with 5-foot access aisle

Van accessible: 8 feet by 18 feet, with 8-foot access aisle (Access aisle can be shared by two parking spaces.)

Handicapped parking requirements vary. Check local requirements.

The following requirements from the Americans with Disabilities Act (ADA) may be used as guidelines.

Total Parking in Lot	Required Minimum Number of Accessible Spaces	Total Parking in Lot	Required Minimum Number of Accessible Spaces
1 to 25	1	201 to 300	7
26 to 50	2	301 to 400	8
51 to 75	3	401 to 500	9
76 to 100	4	501 to 1000	2% of total
101 to 150	5	1001 and over	20 plus 1 for each 100 over 1000
151 to 200	6		

Note: One in every eight accessible spaces, but not less than one must be van accessible.

Guest Parking: 1 space for every 15 regular and handicap parking spaces.

WORSHIP CENTER

General Building Size

Up to 300 capacity 15 – 17 square feet per person

Above 300 capacity 12 – 18 square feet per person

Note: Rectangular buildings with straight row seating require less space per person than buildings with radial seating. In some instances ten square feet per person is adequate in straight-row seating for buildings with capacity over 500.

Pulpit Platform

Front to back depth:

- 7 feet minimum; larger buildings require 10 feet or more.

Height (based on flat floor in seating area):

- Fewer than eleven rows of congregational seating: 2 feet maximum.
- Up to eighteen rows of congregational seating: 3 feet maximum.

Distance from platform to front pew: 7 feet minimum; larger buildings require 8 feet or more

Note: With a Lord's Supper table platform of 4 feet, 10 to 12 will be required.

Choir Area

Choir capacity: 10% to 12% of congregational capacity
 Choir rows: 3 feet minimum depth
 Back and front rows: 3 feet, 2 inches minimum depth
 Seating: Movable chairs at 24 inches width per person
 Surfaces: Acoustically reflective floor, walls and ceiling surfaces recommended
 Floor covering: Hardwood, stone or vinyl; carpet not recommended under piano or in choir area

Congregational Seating

Local building codes and National Life Safety Code adopted by the locality should be consulted for minimum requirements.

Row spacing: 34 inches minimum, 36 inches or more recommended
 Row lengths and seating: Average space per person, 21 inches width; 13 or 14 persons maximum on each row. Note: Most building codes are based on 18 inches per person.

Handicapped seating: Requirements vary by locality. The following requirements from the ADA may be used as guidelines for worship centers with fixed seating:

Capacity of Seating in Assembly Areas	Number of Required Wheelchair Locations
4 to 25	1
26 to 50	2
51 to 300	4
301 to 500	6
Over 500	6, plus 1 additional space for each total seating capacity increase of 100

- Aisle widths (check local codes): Center or main aisle, 4 feet minimum; 6 feet recommended.
- Side aisles, 2 feet, 6 inches minimum; some codes require 3 feet, 8 inches.

Note: A center aisle less than 6 feet wide is tight for weddings and funerals.

Vestibule/Lobby

Serving worship center only: 1 ½ to 2 ½ square feet per seat in worship center
 Fellowship lobby serving worship center and education space: 15% to 25% of the worship center area

Balcony

Capacity: Less than 50% of main floor seating
 Riser depth: 3 feet 6 inches for first row
 3 feet 2 inches for back row
 3 feet for other rows
 Cross aisles: 4 feet minimum
 Other aisles: Same as aisle width on main floor
 Stairwells: Two to outside exits minimum. (One may be sufficient for less than 50-seat balcony capacity). Additional stairs may be desired based on design.
 Balcony locations: 45 feet minimum, platform to balcony;

35 feet minimum, between side balconies

Provide clear sight line from rear balcony row (seated) to main floor Lord's Supper table and decision areas.

Steeple Height

This should equal to distance between roof ridge and ground level.

Baptistry

Inside pool dimensions: 3 feet by 6 feet minimum, plus internal steps; larger sizes are recommended.

Water depth: Between 3 feet 3 inches and 3 feet 6 inches

Baptistry floor (above last choir row): 6 inches minimum, 18 inches to 36 inches is desirable.

Viewing area: should be wide enough for those seated on the ends of front row to see.

EDUCATION FACILITIES

General Building Size: (education, fellowship, administration, music, and media library, with some multi- purpose space).

- First unit building: 30 to 40 square feet per person
- Small churches: 40 to 45 square feet per person
- Large churches with extensive programs: 45 to 55 square feet per person

Preschool

Space per child: 35 square feet recommended

Room size: 292 square feet minimum; 665 square feet maximum; no walls less than 12 ft.

Windowsills: 18 to 24 inches from floor

Room capacity:	<u>Ages</u>	<u>Capacity (MSSA)</u>
	Birth to One Year	7
	Two Year	9
	Three to Five Year	12

Children

Space per child: 25 square feet recommended

Room size: 325 square feet minimum; 650 square feet maximum

Windowsills: 18 to 30 inches from floor

Room capacity:	<u>Ages</u>	<u>Capacity (MSSA)</u>
	Grades 1 to 6	10

Youth

Space per person: 18 square feet recommended

Multi-Purpose space: 22 square feet recommended

Room size: 144 square feet minimum; 270 square feet maximum

Room capacity:	<u>Ages</u>	<u>Capacity (MSSA)</u>
	Grades 7 to 12	8

Adults

Space per person: 18 square feet recommended

Multi-Purpose space: 22 square feet recommended

Room size: 270 square feet minimum; 450 square feet maximum

Room capacity:	<u>Ages</u>	<u>Capacity (MSSA)</u>
	All Adults	12

Weekday Education/Child Care

Space per child: 35 square feet, or as required by codes.

Play yard: 75 square feet per child enrolled minimum, or as required by codes. Rooms usually require grade/ground level location, often with direct access to exits. Check codes. Check state and local codes for detailed requirements.

CHURCH RECREATION BUILDING

Overall Building Size

Gymnasium:

-with Junior High School basketball court, restrooms, central desk and storage only:

Building: 50 feet x 96 feet, 4800 square feet minimum
64 feet x 110 feet, 7404 square feet recommended

-with High School basketball court, restrooms, central desk and storage only:

Building: 58 feet x 106 feet, 6148 square feet minimum
72 feet x 120 feet, 8640 square feet recommended

-with activities rooms, lounges, multi-purpose rooms, craft rooms, restrooms, dressing rooms, central desk, exercise rooms, storage, etc: 10,000 to 20,000 square feet

Note: The recreation building can be reduced in square footage and in height and still accommodate a broad recreational program for all age groups if space is not provided for basketball and volleyball.

General Requirements

Basketball Court:

Clear ceiling height, 20 feet minimum, 25 feet recommended

Side and end lanes, 3 feet minimum, 10 feet recommended

High School court: 50 feet by 84 feet

Room size: 70 feet by 104 feet recommended, (7280 square feet) plus 3 feet for each additional row of spectator seating

Junior High School court: 42 feet by 74 feet (For most churches this not recommended)

Room size: 62 feet by 94 feet recommended, (5828 square feet) plus 3 feet for each additional row of spectator seating

Handball/Racquetball Court: 20 feet by 40 feet, 20 feet ceiling height

Game Rooms: 24 feet by 30 feet to 40 feet by 60 feet or more

Group Meeting Rooms: 18 square feet per person

Storage:

- Needs direct access from the gymnasium, with doublewide doors for roll-in table/chair carts.
- Separate storage spaces for recreational equipment, crafts supplies, kitchen pantry and janitorial supplies and equipment.
- Need Restrooms for gymnasium area in addition to minimum number in preceding chart.
- Showers, if desired, with dressing space and lockers.

ADDITIONAL FACILITIES

Administrative

Pastor's Study: 250 to 325 square feet recommended

Staff Offices: 150 to 200 square feet recommended

Other office space based on church needs; offices for support staff, workroom(s), reception area, storage, restrooms, lounge, and kitchenette.

Music

- Rehearsal Room: 15 to 20 square feet per person. Capacity at least 10 percent more than worship center choir area.
- Robing Rooms: 4 to 6 square feet per person
- Music Library: 1 to 2 square feet per choir member
- Orchestra Rehearsal Room: 25 square feet per person
- Handbell Rehearsal Room: 20 feet by 30 feet desirable (allows for a five-octave set of handbells with twelve ringers, 32 feet of tables).
- Individual Practice Rooms: 10 to 15 persons at 10 square feet per person
- Voice and Piano Practice Rooms: 8 feet by 10 feet minimum

Fellowship Hall

Dining capacity: 1/3 to 1/2 educational building capacity recommended. Some rural and newer churches may require greater capacity.

Space required for table seating:

12 square feet per person recommended

10 square feet per person minimum

15 square feet per person using round tables

Stage requires additional space
Institutional Kitchen: 1/4 to 1/3 size of dining area

Restrooms

Minimum number of fixtures must comply with local codes. The following chart contains recommended guidelines:

Building Capacity	Women		Men		
	WC	L	WC	U	L
Up to 50	2	1	1	1	1
51-100	3	1	2	1	1
101-200	4	2	2	2	2
201-400	5	2	3	2	2
401-650	7	3	4	3	3
651-900	10	4	5	5	4
901-1200	12	5	6	6	5

- Preschool rooms should have direct access to a restroom (which can be shared by two preschool rooms).
- Where space permits, for the convenience of parents, churches are encouraged to provide a diaper-changing table in at least one restroom for each sex.
- Handicapped access must comply with codes, usually requiring at least one fixture of each type to be accessible to wheelchairs in each public restroom.

OTHER BUILDING ISSUES

Mechanical Equipment Rooms

Space requirements vary with region and equipment type. Consider equipment and airflow noise in the worship center. Zone equipment so various program areas can be heated and cooled independently.

Custodial Closets

Provide one closet for each approximate 15,000 square feet of building. No building area should be farther than 200 feet from a closet with a sink. Provide a minimum of one closet for each major building area and each building area. Preferred locations: between restrooms, near heavy traffic areas, near elevators. DO NOT combine custodial closets with utility rooms housing telephone switchgear, elevator equipment, electric panels, HVAC equipment, etc.

Provisions For Handicapped Persons

- Requirements vary. Many codes are based on standards developed by the American National Standards Institute, the North Carolina Building Code, or the Americans with Disabilities Act. Considerations include:
- Extra wide parking spaces (see Parking)
- Building entry: No steps: provide ramp if steps are needed
- Clearances: 36 inches minimum door width; 5 feet minimum hallway width for two wheelchairs;
- 5 feet 6 inches minimum hallway width to allow for two persons on crutches; restroom dimensions to allow minimum foot turning radius for wheelchair; Slope of walks: Not more than 1 foot in 20 feet; Slope of ramps: Not more than 1 inch in 12 inches: Handrails at ramp; grab bars in toilet stalls: Wheelchair spaces in the worship center & elevators.

FINANCES

Maximum Debt

2 to 2 ½ times annual income of previous year. Recommend no more than 25 to 30 percent of annual income go to debt retirement.

Building Project Budget: (Percent of Construction Cost)

Architect and other fees	6 to 12 percent
Furnishings	8 to 15 percent
Landscaping	5 to 7 percent
Contingency	5 to 10 percent
Construction loan financing	varies
Financing closing costs	varies

Note: Construction costs will usually be only 70 to 80 percent of total building project budget.

Capital Fund Raising:

Results depend on commitment to the project, the quality of church's fellowship, the church's giving potential and the need for the project. Average fund raising results (for building program and/or debt retirement): One to three times (on occasions more) previous year's budget income, paid over a three-year period. Receipts of 80 to 100 percent of amount pledged.