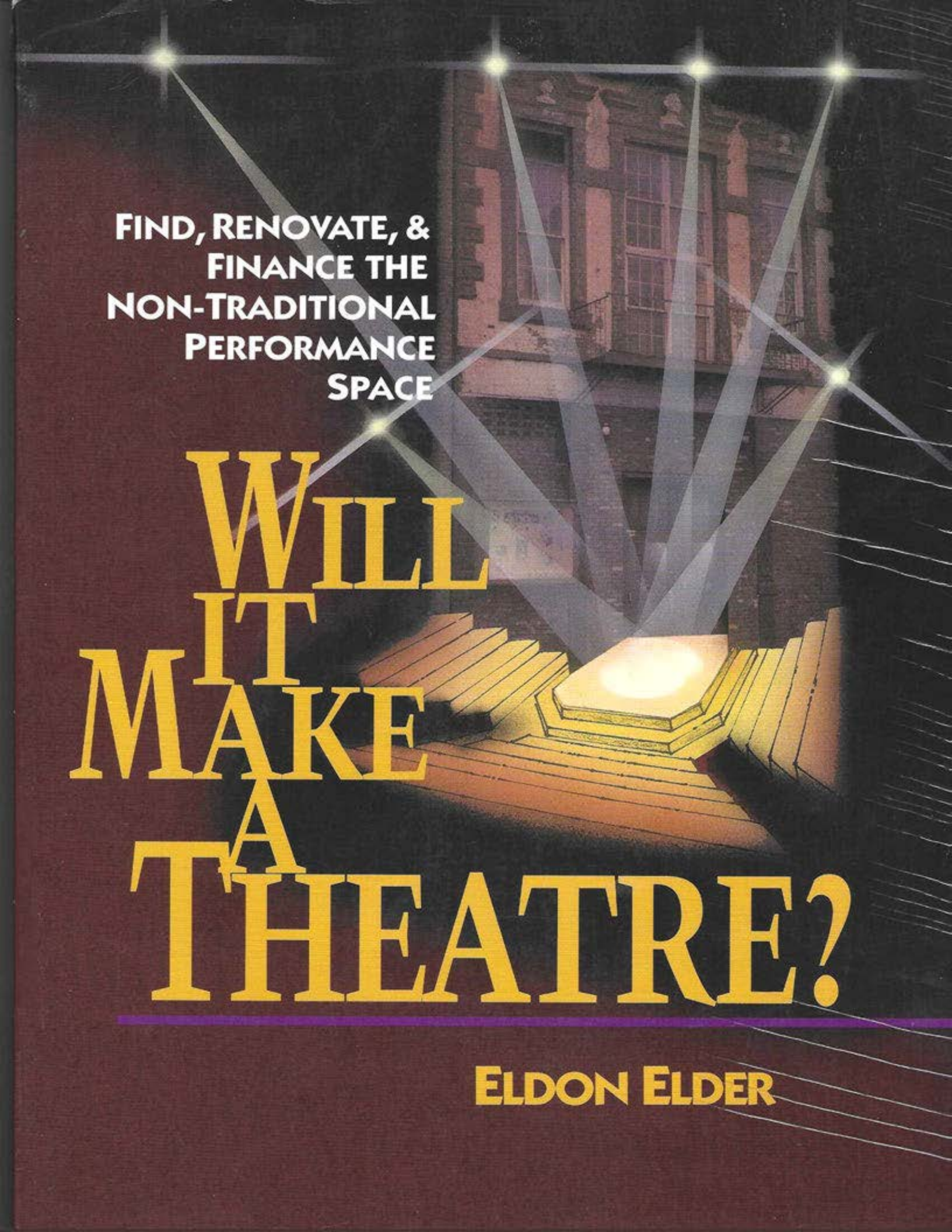

FIND, RENOVATE, & FINANCE THE NON-TRADITIONAL PERFORMANCE SPACE

# WILL IT MAKE A THEATRE?

ELDON ELDER

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**ELDON ELDER**
**MICHELE LARUE,** *Associate Writer*
*Drawings by Eldon Elder*

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Long out of print, this groundbreaking work remains a much-needed reference for the theatre community. It not only provides guidance for turning a non-theatre building into a performance space, but also for renovating an existing structure. In addition, its thorough explanation of the basics of theatre design would also be helpful for those looking to create a new theatre building from the ground up.

*NOTE:* For this special PDF version for AACT members, we have chosen to omit those portions of the original book with financial and financing information that is now outdated. However, we have kept the original page numbering, so any missing pages you find are those we deemed out of date and no longer useful.

The book's author, Eldon Elder, was a prolific scenic designer and educator whose work was seen on Broadway and regionally, His varied work since his professional career began in 1949 included designs for musicals, plays and operas, including Shakespeare in Central Park for producer Joseph Papp.

# CONTENTS

# 1
# DEVELOPING GUIDELINES

Probably no theatre has ever been created according to a strict set of rules, perhaps none will ever be; but there can be no doubt that it is worth the effort to develop a set of guidelines that presents a clear image of what you are looking for in a theatre before you begin the search for an appropriate space. To do this you must first develop an identity, a clear sense of who you are, what kind of theatre you are, how your company is unique, what you want to accomplish in your theatre and how you intend to do it—in short, a purpose and a program.

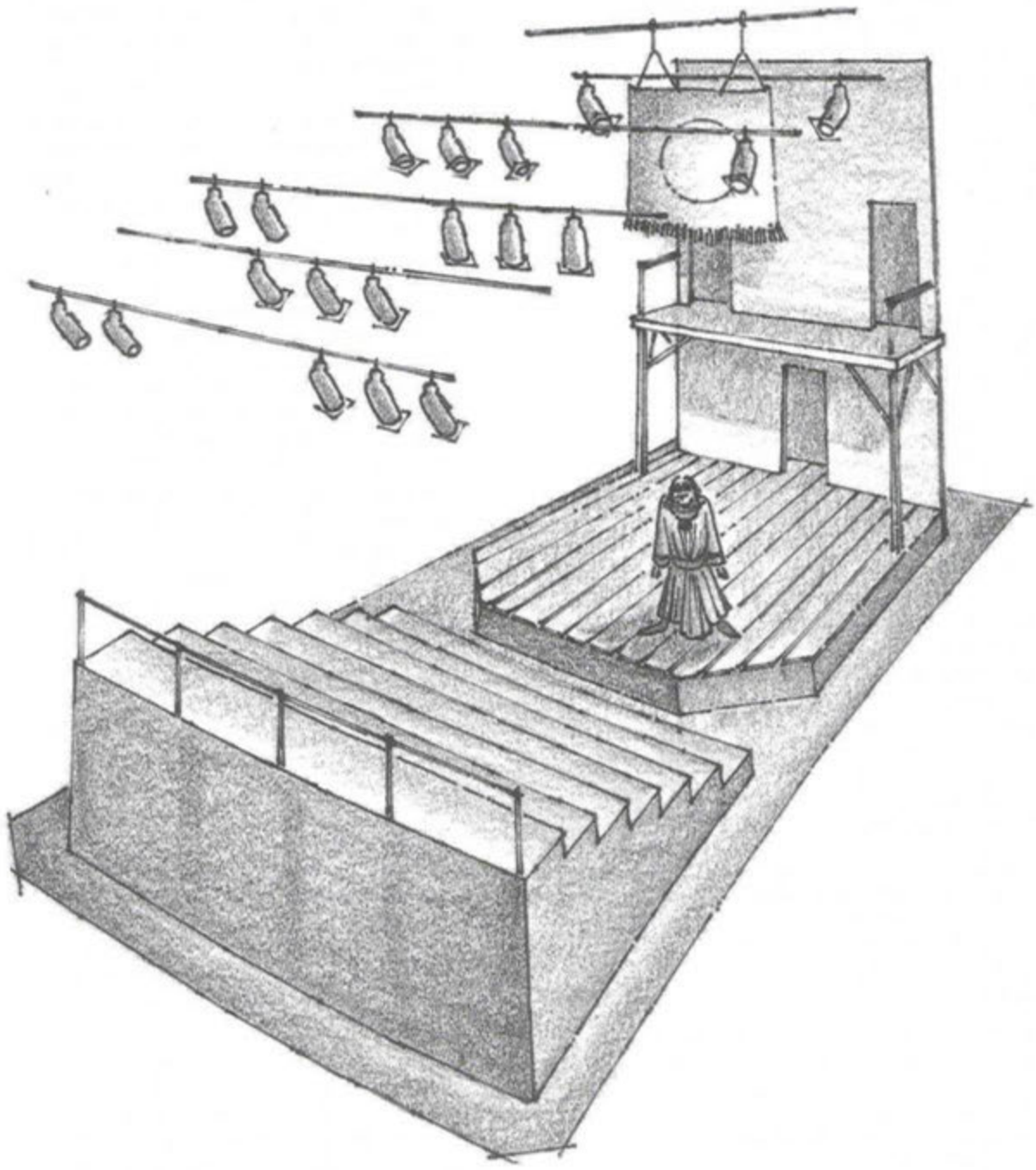
When starting out, it is difficult to think beyond the immediate goal—producing a play or a season of plays. But making some projections with regard to short- and long-term goals can save you from irreparable mistakes in the choice and conversion of space. The days of Judy Garland and Mickey Rooney and "Gee, wouldn't it be fun to put on a play!" are long gone.

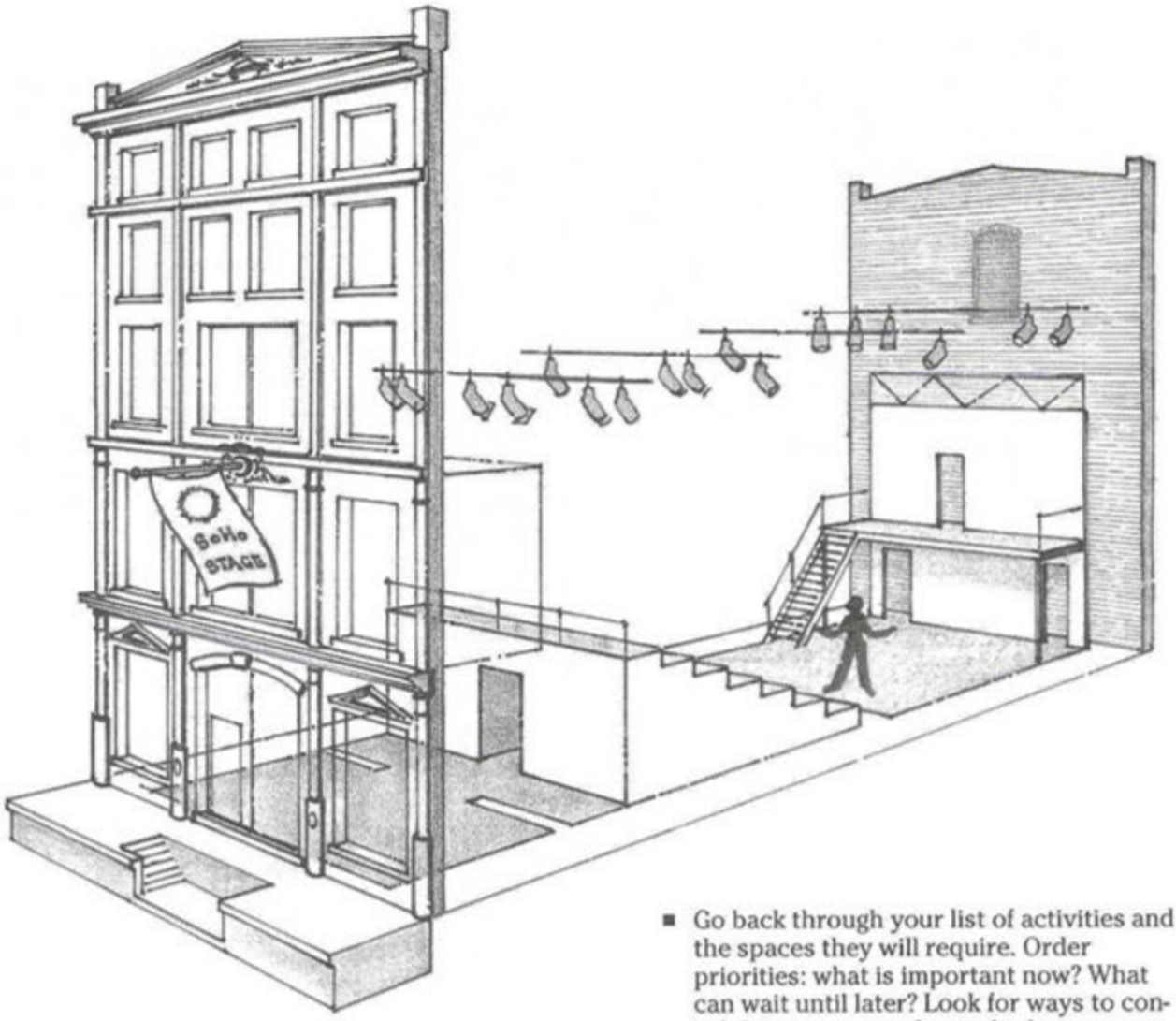
The search for space must be constantly related to available money, materials and muscle power. While pinpointing your artistic space needs, you must always maintain a parallel, hard-nosed consideration of how costs will be met. For the small, not-for-profit theatre, there are three types of potential resources: money, materials, and "sweat" (i.e., free or low-cost labor). Assess your potential to tap all three areas. More imaginative solutions are possible when all three resources are combined.

It is reassuring to know that theatre people love to talk about what they are doing and what they have done. They are generous with help, advice, and tips on dos and don'ts, and can provide a compatriot's comfort when you most need it. Producers, artistic directors, designers, and technicians are exceedingly accessible to anyone who is serious; so talk to them. Networks of service organizations with local agencies have evolved in most cities; turn to them for help and advice. (See Resource Directory.)

## THE PURPOSE AND THE PROGRAM

The most unique quality that any small, not-for-profit theatre offers its audience is its commitment to a particular artistic point of view. Without defining this point of view or purpose, and translating it into space requirements, you cannot intelligently choose a space.






handle scenery, props, and costumes not in use while another production is on stage. The more storage space, the faster you can strike one show and mount another.

- Can you schedule rehearsal times for new productions that will allow you to use your own theatre for rehearsals while another show is playing? How would sharing space with other groups affect your programming and scheduling? (Support space is detailed in chapter 10.)

- Go back through your list of activities and the spaces they will require. Order priorities: what is important now? What can wait until later? Look for ways to consolidate programs. It may look great on paper to do two workshops, three readings, and one full production simultaneously, but some activities may need to be deferred until your organization is firmly established and you can accommodate them all. If necessary, consider a plan that allows you to grow over a period of time, phasing in activities gradually.

- Realistically evaluate your financial situation. How much money do you have on hand? How much do you need? How much can you raise? What is the shortfall?

- The gap between the money you have and the money you need can be at least partially closed by material and labor resources. Check within your company (both staff and board of directors) to determine what people are skilled in designing, building, or electrical and plumbing work. Do you have friends who might contribute professional advice? Obviously, the more donated labor and materials you can get, the further you can stretch the dollars you have.
- Some city, state, and federal agencies offer assistance that can stretch your labor resources. (See chapter 7 and Resource Directory and Agency Chart.)

This list of self-examining questions may look somewhat simplistic and will, to some, seem unnecessary. However, too many beginning producers and artistic directors organize a company and commit themselves to a space without asking and answering these basic questions. As a result, they make expensive, avoidable mistakes. Once you commit to a space and convert it, making further alterations may be difficult and costly, and you may be forced to select and schedule plays around the theatre's limitations.

You will not be able to stick dogmatically and rigidly to every detail of your artistic and building program. Don't expect to. Circumstances will force you to modify it. But, if clearly expressed, it will remain as a guide and a measuring stick throughout the lifespan of your theatre.

# 2 SHAPE AND SIZE

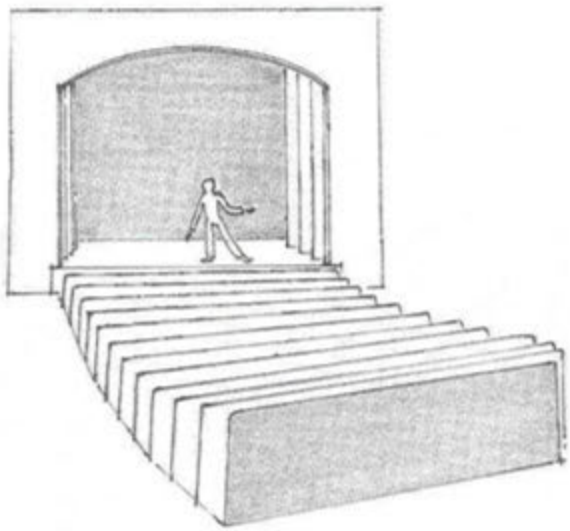
Almost everyone wants an "all-purpose" space in the beginning—a space in which to present *any* kind of theatre. But as the hunt for the all-purpose space goes on and on, it invariably becomes clear that such a space is either not available, not affordable, or, perhaps, not even desirable. Then it becomes necessary to set priorities.

## BASIC THEATRE CONFIGURATIONS

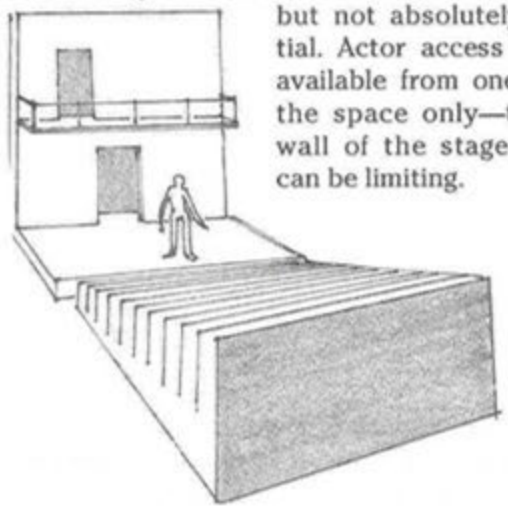
Before looking for space, examine all the possible theatre forms in order to determine the configuration and size that is right for you. The following survey of configurations will help you clarify exactly what kind of theatre best suits your artistic program.

Before you decide on a specific space configuration, visit a variety of small theatres in converted spaces. Study them under performance and nonperformance conditions to see how they function. Take notes on each space based on features discussed in this chapter. Talk to the people who chose these forms. This will direct you toward the right space.

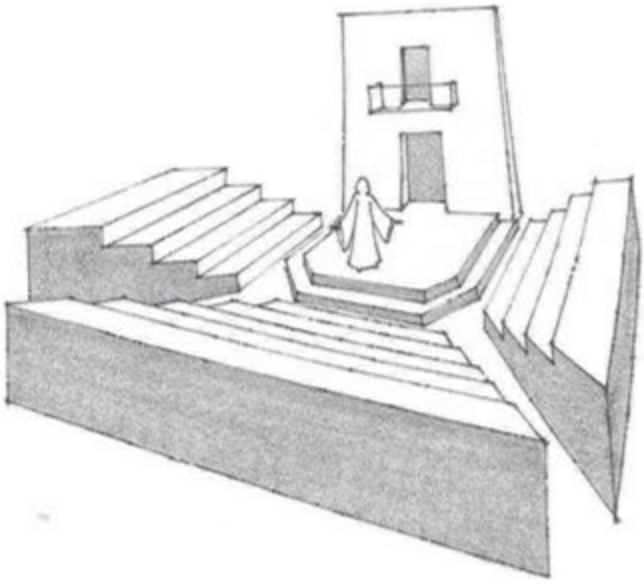
**PROSCENIUM STAGE.** The proscenium arch encloses the performance area, and the audience faces the performance from one side only. A useful form if elaborate scenic effects are part of your plan. More than any other configuration, the proscenium creates actual and esthetic distance. Not practical in small, narrow, low-ceilinged spaces.



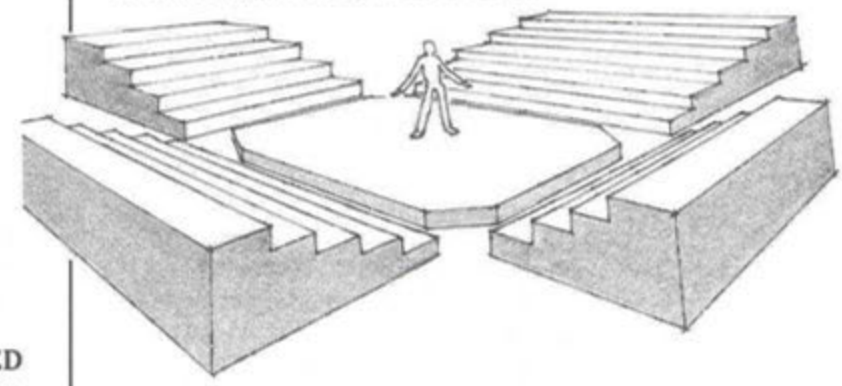
**END STAGE.** Again the audience faces the performance area from one side only, but there is no proscenium arch. The end stage can provide intimacy and contact. Most often found in storefront and brownstone conversions, an end stage works well in long, narrow spaces. Height is desirable, but not absolutely essential. Actor access is often available from one end of the space only—the rear wall of the stage—which can be limiting.



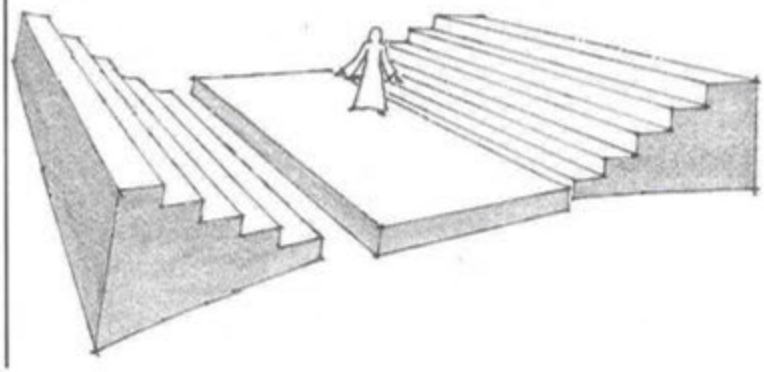
**OPEN OR THRUST STAGE—THREE-SIDED ARENA.** A stage extends into the center of the audience with seating around three sides, which can provide intimacy. Requires a wide building. Can be useful where there are lower ceilings, for working around columns or other structural irregularities. Actor access from all sides is desirable.



**THEATRE-IN-THE-ROUND—FOUR-SIDED ARENA.** The audience completely surrounds the performance space. Not good for large-scale scenery. Can be useful for working around columns. Provides intimacy. Actor access from four sides. A squarish space is needed.



**CENTER STAGE—TWO-SIDED ARENA.** The audience faces the performance area from two opposite sides. Not good for large scale scenery. Can provide intimacy. Audience and actor access from both sides is needed. Works for a rectangular space.



**FLEXIBLE AND MULTIFORM THEATRE.** The ambitious artistic director frequently begins by wanting "total flexibility"—a multiform space that can convert to any configuration. This is difficult, though not impossible, to achieve. Some forms and spaces convert more easily than others: end stage into center stage, or open stage (thrust) into theatre-in-the-round. Be aware that change-overs are not only time-consuming, but can also be expensive. They require a great deal of careful planning.

While the cliché that the "all-purpose theatre" is frequently the "no-purpose theatre" is true, almost all theatres are multipurpose in that they are sometimes used for events and performances other than their primary function. Most theatre configurations can serve more than one type of performance. Without compromising your theatrical vision, it's worthwhile to consider what secondary purposes your theatre space can serve. This should be assessed in the frame of full utilization of the space and possible sources of income through rental.

## SIZE REQUIREMENTS

Small theatres are known for their ingenious use of small spaces, but there are limits as to how small a space can be and still function properly as a theatre. This section will deal with the *minimum* amounts of square footage in the various areas of a theatre. These square footage figures are derived from the building code minimum requirements and from the minimum standards used by consultants and architects. The New York City Building Code, which serves as a guideline for building codes throughout the country, is used as a reference in this book. (For important deviations in other city codes, see chapter 19.) The resulting dimensions are, practically speaking, the *absolute* minimum amount of space needed for an area to function in its intended use.

The areas discussed are broken down into two categories: necessary and optional. *Necessary* areas are those that are considered to be absolutely essential to the running of a theatre, no matter what its size. They include acting area, backstage area, seating and aisles, dressing rooms, technical control area, lobby, box office, administrative office, and rest rooms.

In some small theatres even these necessary areas are sometimes not affordable and spaces must serve multiple functions. Anyone who has worked Off-Off-Broadway can relate tales of the leading lady dressing in the public rest room, or of a bulk mailing to potential subscribers cluttering the lobby. But the functions of these spaces are necessary to the performance, even if spaces may have to serve double or triple duty.

The *optional* areas facilitate the operation of a theatre and include rehearsal space, additional offices, workshops (scenic and costume), lounge area, and storage areas. Like the necessary areas, the optional ones can do double duty: many alternative theatres without rehearsal rooms rehearse on stage; those with rehearsal rooms use them for informal play readings as well. Optional areas can also be housed in a building separate from the performance space, in a part of the city where rents are more affordable. West Hollywood's 99-seat Coast Playhouse supplements its small on-site office with a larger one five blocks away; Manhattan Theatre Club's offices on West 16th Street serve its two performance spaces on West 55th Street.

### NECESSARY AREAS

Operating a small theatre encompasses many different facets of theatre activity, each needing its own specialized area.

#### The Acting Area

Consider the size of the stage in relation to the type of productions you envision within the space. A stage can be as small as 240 sq. ft.: 20' x 12' or 15' x 16', for example.

Below is a sampling of sizes of a few very small New York City stages:

| *Theatre* | *Stage Space* | *Sq. Ft.* |
|---|---|---|
| Writers Theatre | 16' x 12' | 192 |
| York Theatre Co. | 15' x 17' | 255 |
| Pearl Theatre Co. | 20' x 20' | 400 |
| Theatre Off Park | 20' x 22' | 440 |

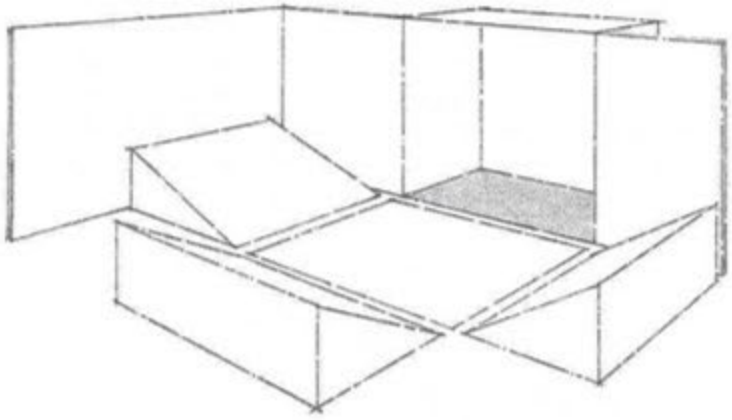
Some productions have been successfully mounted on even less space. For example, *Ain't Misbehavin'* opened at the Manhattan Theatre Club's original home, in the Cabaret, a 6' x 14' stage—84 sq. ft. Truly two planks and a passion!

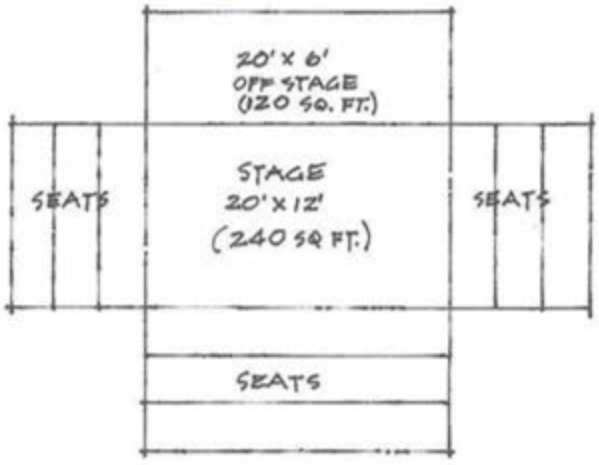
An average sized stage in a small theatre is about 525 sq. ft.: 25' x 21' or 35' x 15'. In New York, the Ensemble Studio Theatre's stage is exactly 25' x 21'. Remember scenery and props will decrease the actual amount of space available to actors. Musicals require a larger space to accommodate movement: 300 sq. ft. may be comfortable for a solo dancer but makes a very tight squeeze for a full company.

A more workable stage size for a small theatre would be around 1,000 sq. ft.: 40' x 25'. Playwright's Horizons' stage is 30' x 35'—1,050 sq. ft. In San Francisco, The Magic Theatre's Southside proscenium stage measures 30' x 40'—1,200 sq. ft., while its Northside three-quarter thrust stage is 700 sq. ft.

## Off-Stage Spaces

In calculating the amount of square footage needed off-stage, try for at least 50% of the stage space. Therefore, if an acting area is 240 sq. ft., 120 sq. ft. will be a rough estimate of the off-stage space needed. Depending on a theatre's configuration, this space may be broken up into small areas or may be one space.






***Minimum stage with off-stage space.***

Estimate the amount of space needed for the following, with relation to anticipated productions:

- the quantity of scenery or props to be stored off-stage
- the number of actors waiting for entrances
- space needed for cross-overs
- the stage manager (if not in the control booth)
- the technicians waiting for a scene change
- space needed for lighting equipment
- musicians and musical instruments when required

All of these should be considered in estimating the total off-stage space required.

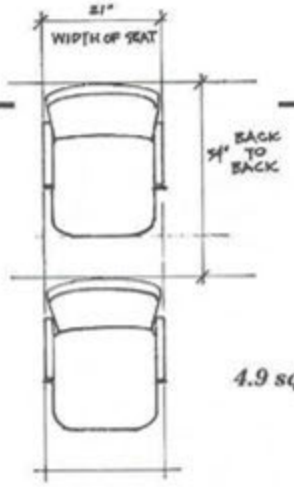
## Seating Area

This area comprises two parts: the seats and the aisles that lead to the seats.

**SEATS.** 18" wide seats with a back-to-back measurement of 31" complies with the Unified Building Code, a standard national code used in many cities, but the resulting seat plan is so tight that it should not even be considered.

A more realistic and comfortable dimension can be obtained by using 21" as the minimum seat width and 34" as the minimum back-to-back measurement. The result is 4.9 sq. ft. minimum per seat (for "rule of thumb" estimates: 5 sq. ft. per seat).

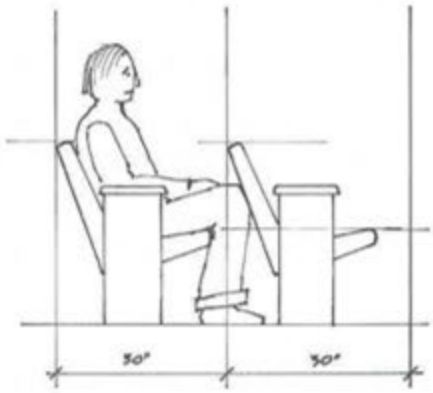

***Spectator squeezed into 18" wide seat.***

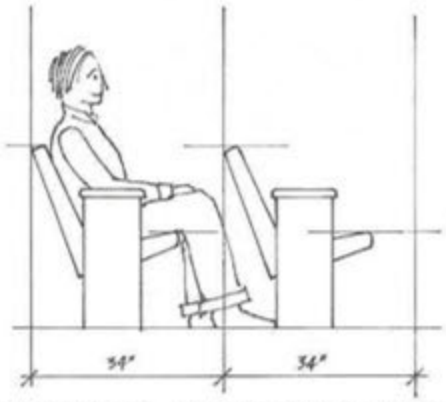



***4.9 sq. ft. per person.***

Square footage requirements can be computed as follows:

*99 seats x 5 sq. ft. = 495 sq. ft.*




***31" back-to-back—minimum building code requirement; 34" back-to-back—minimum allowance for comfort.***

A more generous seating arrangement may be created by using a 22" seat width and a 36" back-to-back measurement, 5.5 sq. ft. per seat:

*99 seats x 5.5 sq. ft. = 544.5 sq. ft.*

**AISLES.** The minimum New York City Building Code requirement for width of an aisle is 36" in most situations. (Similar minimums apply in Chicago, San Francisco, and Los Angeles; in Atlanta and Boston minimums are 42" in most situations.) For a rough estimate of minimum aisle space needed, use 23% of the total seating square footage. Using the example of seating square footage given above, you can compute as follows:

*23% of 495 sq. ft. (99 seats) = 113.8 sq. ft.**

*23% of 1094.5 sq. ft. (199 seats) = 251.7 sq. ft.***

Obviously, to estimate total footage needed within the seating area, simply add the seating square footage and the aisle square footage:

*495 + 113.8 = 608.8 sq. ft. needed for 99 seats**

*1094.5 + 251.7 = 1346.2 sq. ft. for 199 seats***

Bear in mind that these figures are rough estimates only, and are the absolute minimum needed.

**SEATING FOR THE DISABLED.** Accessibility and seating spaces for the disabled are mandated by federal law 504. The New York City Code local law 58, which is typical, requires spaces for three wheelchairs for 75 to 100 seats, and up to nine spaces for 401 to 500 seats. (See chapter 19 for variations in other cities.) A wheelchair occupies the space of one and one-half seats. (See chapter 9 for details.)

* Based on 21" x 34" back-to-back seating

** Based on 22" x 36" back-to-back seating

The Americans with Disabilities Act (ADA) passed in July 1990 is concerned with physical and programmatic accessibility as well as employment practices. In New York City, local law 58 is more stringent than the ADA on physical accessibility, but the spirit of the ADA and programmatic accessibility will affect New York City theatres, as well as those around the country. (For more information about the ADA, contact the Job Accommodation Network's hotline toll-free at 1-800-ADA-WORK.)

## Public Rest Rooms

All building codes have public rest room requirements. The New York City building code, for example, requires only one toilet for 100 persons and one urinal for every 200 persons plus one sink for every 200 persons. Although it is possible to comply with this requirement by providing only one facility, two should be considered the minimum to allow for handling men and women separately. You will need a minimum of 24 sq. ft. per facility, so allow at least 48 sq. ft. total.

Rest rooms for the disabled also must be included. (Space requirements are detailed on p. 21.)

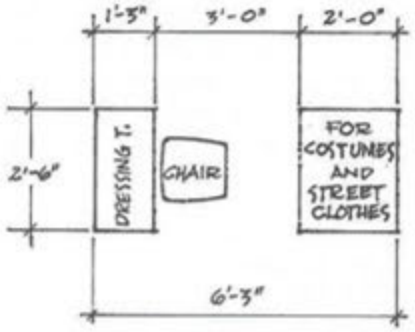
## Actors' Dressing and Lavatory Space

Although actors have changed costumes in public lavatories, dusty offices, and damp cellars, this can hardly be considered a viable solution to dressing room requirements.

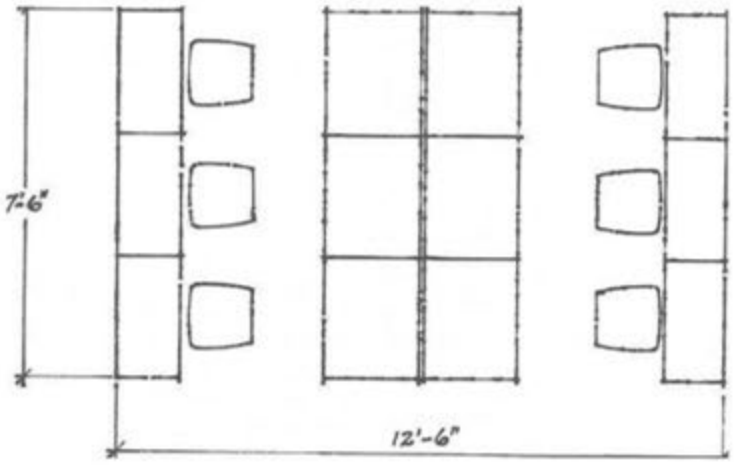
The minimum amount of dressing space needed should be computed at 16 sq. ft. per person. For example, for six persons you will need 96 sq. ft. The type of shows you plan to produce and their cast sizes should serve as a guide to the amount of space required for dressing rooms.

Actors Equity contracts and agreements require that there be, separate from audience facilities, a minimum of one toilet and one washbasin with hot and cold water for all performers, plus one dressing room each for men and women.

Separate from its contractual demands, AEA also publishes renovation guidelines for backstage facilities, known as "Safe and Sanitary." Minimum



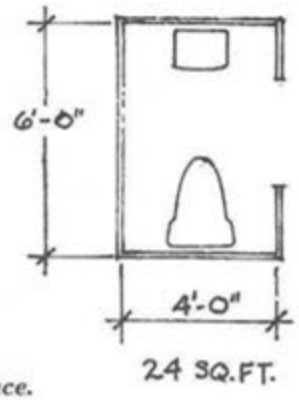

***Minimum dressing space for one person allows for a 1'3" x 2'6" counter space, 1 chair, and 2' x 2'6" for hanging costumes and street clothes. Actors Equity Association recommends 3' minimum hanging space for costumes plus space for street clothes.***



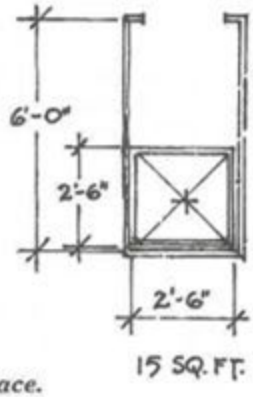

***Dressing space for 6 persons.***

recommendations include one toilet for men and one for women on each floor for every six performers, one washbasin for every four performers, one shower for every eight to ten performers.

And don't forget to provide space for the required Equity cot somewhere in your theatre.




***Minimum lavatory space.***



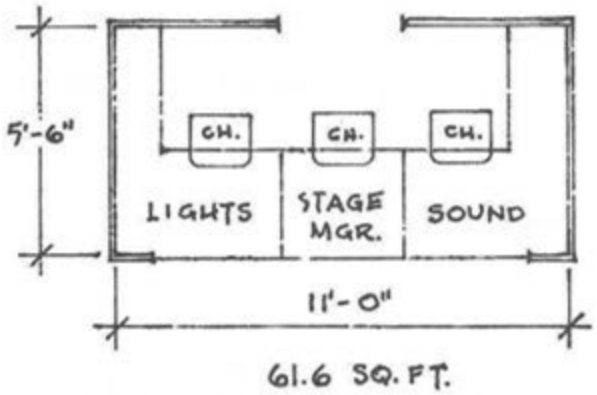

***Minimum shower space.***

## Technical Control Space

Consider the number of people who will use this space at one time: lighting technician, sound technician, and stage manager. Depending on the amount and size of your equipment, this square footage will vary. The minimum space needed is approximately 61.6 sq. ft.

In some small theatres with very limited control room space, the stage manager doubles as the sound technician, reducing the space to two-person capacity—not a recommended compromise if it can be avoided. At the Lyric Stage's tiny original space in Boston, a rectangular hole cut through the dressing room wall accommodated one operator,

standing on a ladder and supported by a telephone lineman's sling. The same dressing room doubled as the office during the day!




***A technical control booth allowing sound technician, stage manager, and lighting technician to share space.***

## Lobby

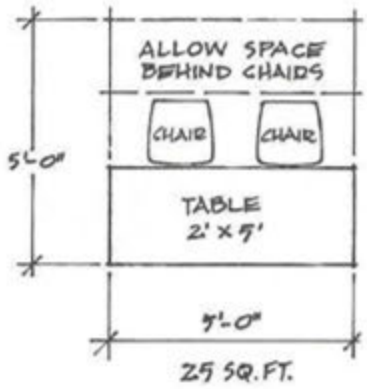
The minimum amount of space needed for one standing person is 1 sq. ft. This minimum figure assumes that not all members of an audience will use the lobby at the same time; 2 sq. ft. per person creates a lobby of a somewhat more realistic size, but it is still far from generous.

If a *safe area* is required (see chapter 16), its minimum is also 2 sq. ft. per person. It is possible for the lobby to double as the safe area if it satisfies the appropriate fire code requirements.

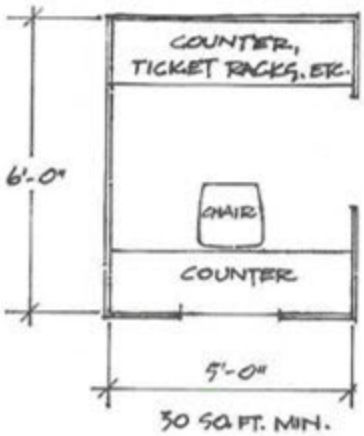
Bear in mind that these square footage estimates are based upon free floor space; if you add furnishings within this area—chairs, tables, lamps, plants—you will need to increase the total square footage proportionately. (See chapter 10 for more about planning lobby space.)

## Box Office

There are two basic approaches to creating a box office space: open and enclosed. If the box office is open—a table or counter set up within the lobby area—you will need to add at least 25 sq. ft. to the total lobby square footage to accommodate one box office person comfortably; if it is enclosed, allow a minimum of 30 sq. ft. (See chapter 10 for box office planning.)



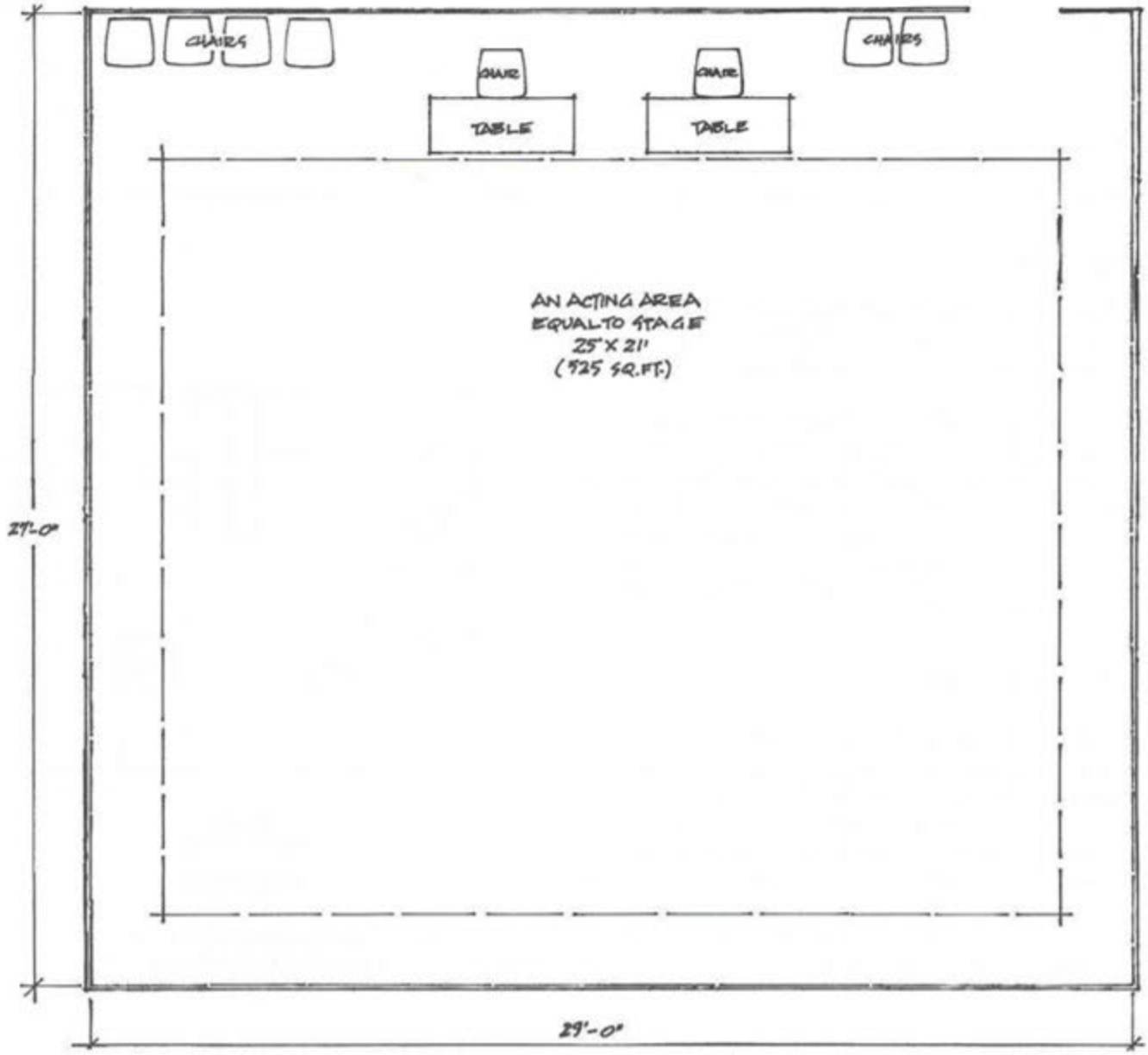

***Open box office allows for a table and 1 or 2 chairs.***




***Enclosed box office allows for 1 person seated or 2 persons standing with 1'3" counter space on 2 sides, but does not include recommended allowance of space for a computer.***

## OPTIONAL AREAS

The functions of these so-called optional spaces must be accommodated. In a very small theatre, however, any given space may have multiple uses.




***Rehearsal space: acting area surrounded by minimum off-stage area.***

## Lounge/Bar

A lounge or bar area adds a desirable public amenity: 4 sq. ft. per person allows for a minimum amount of comfort, assuming that the majority of the audience uses the space at one time. If you add a bar or concession counter, it will require a minimum of 25 sq. ft. added to the total. For example:

*99 seats x 4 sq. ft. = 396 sq. ft. + 25 sq. ft. = 421 sq. ft. (total lounge)*

Consider designing this area to comply with the "safe area" requirement mentioned above.

## Rehearsal Space

When planning a rehearsal space, the basic square footage requirements should be at least equal to those of the acting area, ideally in the same configuration. If possible, include an additional area for a table and seating for the director and stage manager, and an off-stage waiting area for the actors and their rehearsal props.

## Office Space

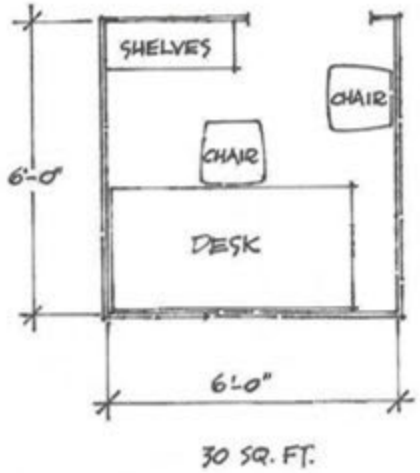
For an office, allow a minimum of 36 sq. ft. per person. If you plan to install filing cabinets and office machinery, additional square footage will be required.

Since the amount of space required for an office area should be directly proportional to the number of people who work within it, consider the total number who use the area at one time—administrators, managers, bookkeepers, secretaries, publicists, fundraisers, volunteers—and multiply that number by 36 sq. ft. (See chapter 10 for more about planning office spaces.)

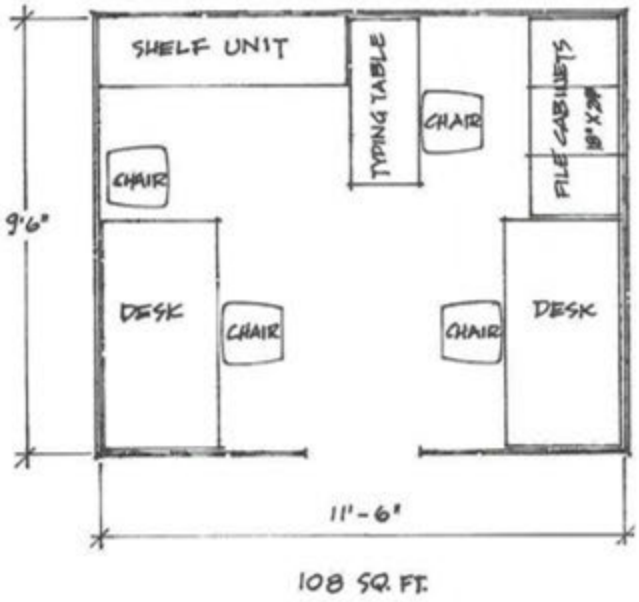
## Workshop Spaces

**SCENERY AND CONSTRUCTION SHOP.** There are two approaches to calculating square footage requirements for scenic construction space.

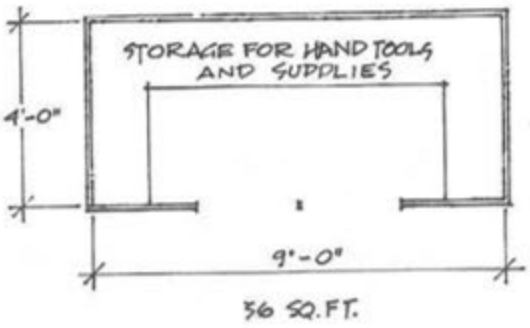
If you plan to build and paint scenery in one of the other spaces already mentioned—stage, lobby, lounge area—or in another space entirely, then you will need only an area in which to store tools, hardware, and painting supplies: 36 sq. ft. should be considered a bare minimum.



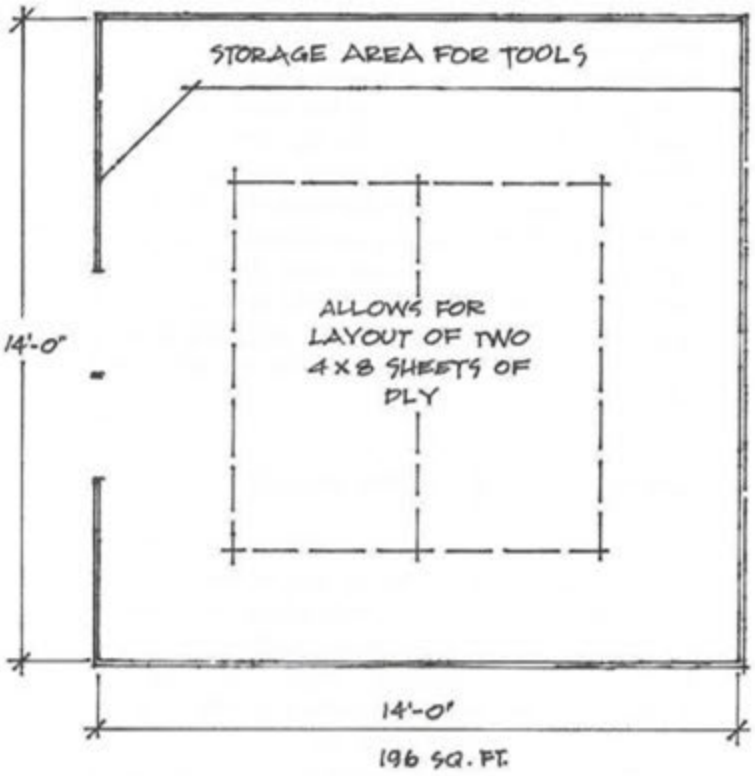

***Office for 1 person allows a 60" x 30" desk, 2 chairs, and a shelf unit.***



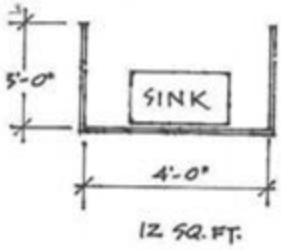

***3-person office with files allows for 2 60" x 30" desks, a typing table, 4 chairs, 3 standard file cabinets, and a 1'6" x 5'6" shelf unit.***

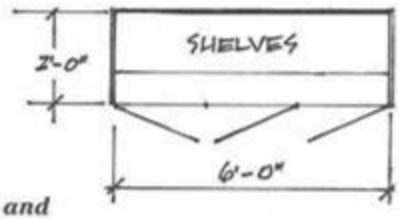



***Minimum storage space, if there is no shop and scenery is built and painted in another space.***




*Minimum construction space assumes additional storage shelves and cabinets above head height.*



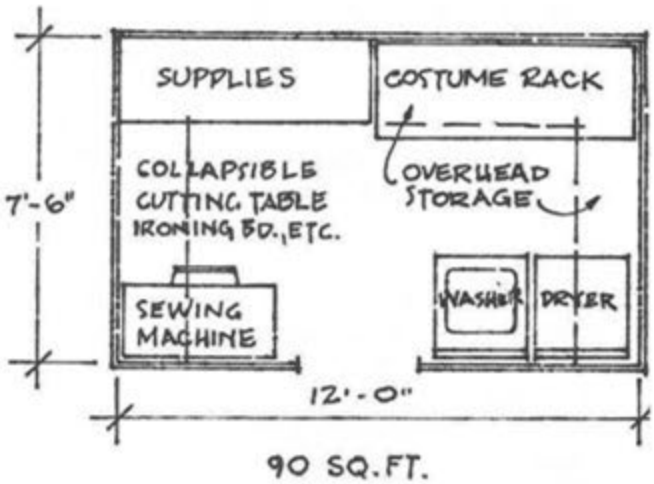




*Minimum slop sink and paint locker.*

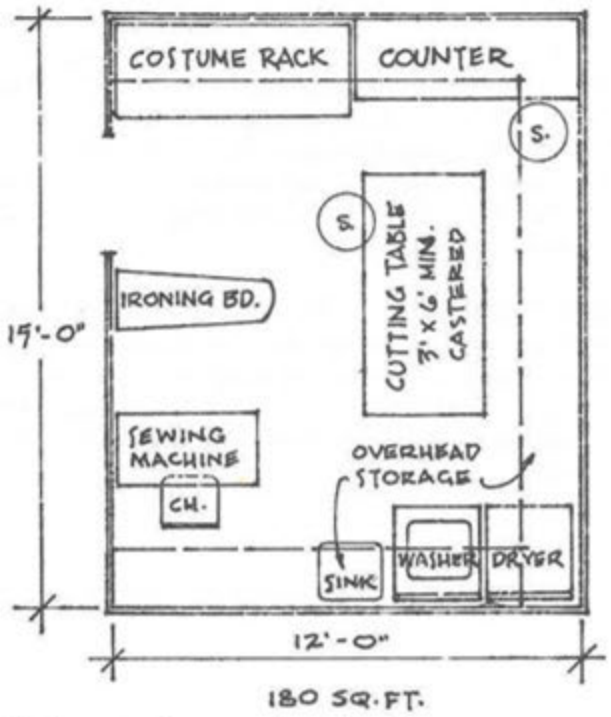
If you plan to build and paint scenery in a separate scene shop area, you will need additional space: 196 sq. ft. gives a minimal shop area.

Two necessary items for this space are a slop sink and a fireproof paint locker or vault. Allow another 12 sq. ft. for each item, bringing your total estimate to 220 sq. ft.

**COSTUME SHOP.** The same two approaches hold for the costume shop as for the scene shop. If you plan to construct costumes in another building, your only requirement will be a storage area for supplies: 60 sq. ft. should be considered the minimum space needed.




*Minimum storage space for supplies assumes that costumes are built in another space, that costume maintenance will be done in the dressing room, and that costume storage will be elsewhere.*




***Minimum costume construction shop assumes costume storage will be elsewhere.***

If you wish to construct costumes, you will need to plan on at least 144 sq. ft., 12' x 12', for a minimal costume shop.

## Storage

Storage spaces are always at a premium. It is hard to determine a minimum square footage estimate, since it will depend on the number and size of the items that require storage. Take into consideration all possible storage needs: *costumes* (including hats, shoes, accessories, pocketbooks, costume props, supplies); *scenery* (platforms, step units, flats, draperies, screens, construction supplies); *properties* (hand props, furniture props, set dressing); *paint supplies* (brushes, buckets, cans, ladders); *lighting* (instruments, cables, spare lamps, replacement parts, tools); also, office supplies, janitorial supplies, scripts, programs, flyers, and those wonderful finds on the street that you know will come in handy "one of these days."

This seemingly endless list will vary from theatre to theatre. For example, rotating repertory companies need space to store full sets of scenery, costumes, and props, whereas companies doing only one show at a time may not need to store as much, since at the end of the run scenery is dismantled and most costumes and props are returned. "Flexible" spaces also need storage space for performing and seating as different configurations use different elements. One final point, to which all small companies readily attest: there is never enough storage space. Get as much as your budget will allow. (See chapter 10 for additional storage options.)

## Estimating Total Square Footage

A rough square footage total can be obtained by adding all the individual areas together.

Theatre A and Theatre B in the chart that follows are representative of two small theatres with different space requirements based on the square footage estimates used in this chapter. Theatre A is a 99-seat theatre with only the very basic minimums. Theatre B is a 199-seat theatre with more ample facilities, but is still far from luxurious.

A comparison of these two examples quickly reveals that Theatre A is very small and not equipped for much scenery building and painting or costume construction. The square footage of Theatre A is comparable to a very small Off-Off-Broadway house used for readings and simple productions; therefore it includes no storage spaces. As there is no additional rehearsal space, the scheduling of production work, rehearsals, and performances cannot overlap unless extra space is rented elsewhere for rehearsal and production work.

Theatre B is somewhat better equipped to do full-scale productions, since there are small scenic and costume shops, a larger stage, and rehearsal space.

Note: Both examples are used only for illustration purposes; actual square footage allotments will vary greatly from theatre to theatre.

| | *Theatre A* | *Theatre B* |
|---|---|---|
| | 99 seats | 199 seats |
| stage (acting area) | 525 sq. ft. (25' x 21') | 1,000 sq. ft (40' x 25') |
| off-stage | 263 (50% of stage) | 600 (generous) |
| seating | 495 (99 x 5' minimum) | 1,094.5 (199 x 5.5') |
| aisles (23% seating) | 113.9 | 251.7 |
| public restrooms | 48 (men and women) | 96 (men and women) |
| handicapped toilet | 13.5 | 13.5 |
| dressing rooms | 96 (6-person) | 160 (10-person) |
| actors' restrooms | 24 | 66 (48 + 18 for 1 shower) |
| technical control | 66 (3-person)* | 66 (3-person)* |
| lobby | 198 (2 sq. ft. per 398 person) | (also a "safe area") |
| box office | 25 (open box office) | 30 (enclosed box office) |
| lounge | — | 821 (w/counter) |
| rehearsal space | — | 1,500 (acting area + dir./ stage manager) |
| office | 108 (3-person) | 216 (6-person) |
| scene shop | 36 (supply storage only; build on stage) | 220 (a scenery building space, slop sink and paint locker) |
| costume shop | 60 (supplies storage only; sew in lobby) | 169 (144 + 25 for washer/ dryer and sink) |
| storage | — | 200 (small storage area) |
| totals | 2,071.4** | 6,901.7** |

* Does not include a space for dimmer racks: 5 ft. x 6 ft. (30 sq. ft.) minimum.

** Note: Square footage figures used above are net and do not include an allowance for corridor or mechanical spaces (such as boiler room or air conditioning equipment space). It is very difficult to estimate these spaces accurately, as their sizes will depend largely on the actual layout of the building. However, a minimum of 12% (a maximum of 30%) of the total net square footage should be added to your total square footage. The larger number will approximate the gross square footage of the space needed.

# 3 WHAT TO LOOK FOR

Not all spaces will make a theatre. The guidelines provided below are not intended to hamper an imaginative and flexible approach to the search for a space, but rather to provide direction about what to look for and what to avoid. The guidelines will aid greatly in the narrowing-down and weeding-out process and could, in the long run, save a great deal of time and expense.

It may be difficult to imagine the proportions of your theatre while standing in a raw space. Remember, when looking at a space, that it will be subdivided. So, before making a commitment, carefully plot on paper the dimensions of the theatre and all the necessary and optional spaces you plan to include. You may want to enlist professional help at this point.

## GENERAL CHARACTERISTICS OF THE POTENTIAL SPACE

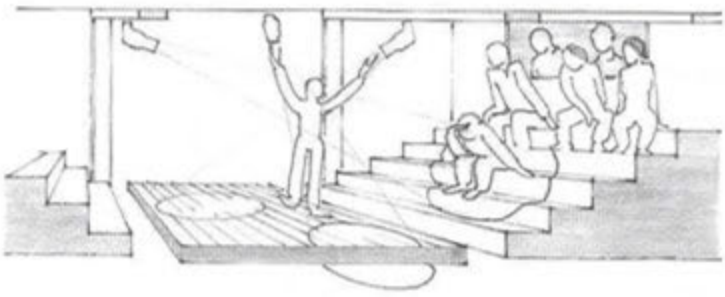
### Height

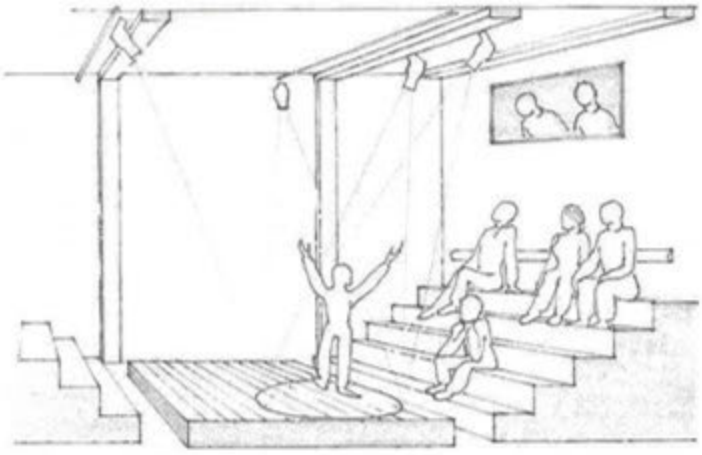
Height is essential. Not only does a high ceiling enable you to rake seating for adequate sightlines, it also permits greater flexibility in handling scenic pieces and lighting. Height above the stage allows flying scenery. Height over the auditorium provides the chance to create a small balcony or install the control booth above the seating. Also, height creates an *illusion* of space that can help compensate for a small or narrow space.

Height can help solve the problem of not being able to afford all the square footage that you really need. With sufficient headroom, spaces can be double-decked: put an office space over the box office, stack costume storage over the dressing rooms and toilets.

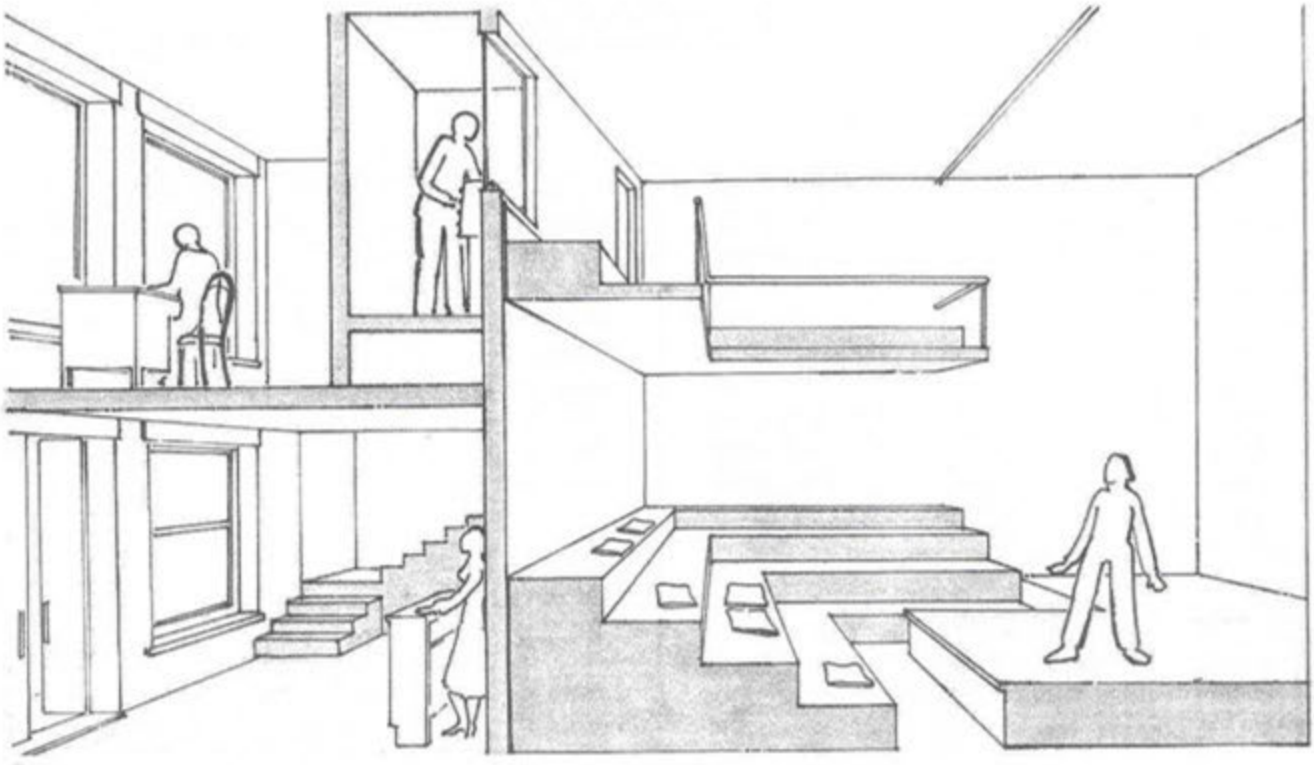
If you have a space that is 25' x 100'—a total of 2,500 sq. ft.—you might gain an extra 1,000 sq. ft. by double-decking everything except the stage and auditorium. That's a lot of extra space for no extra rent. This approach requires materials and labor, so it is not entirely without cost. However, if you amortize the expense over the life of the lease, the cost will be negligible compared to rent for an equal amount of additional square footage. Creative lofting at San Francisco's Magic Theatre yielded extra costume storage and office space at no extra rent.

Chicago's ETA Creative Arts Foundation, which moved into a former window sash factory in 1979, found a unique solution to the problem of low

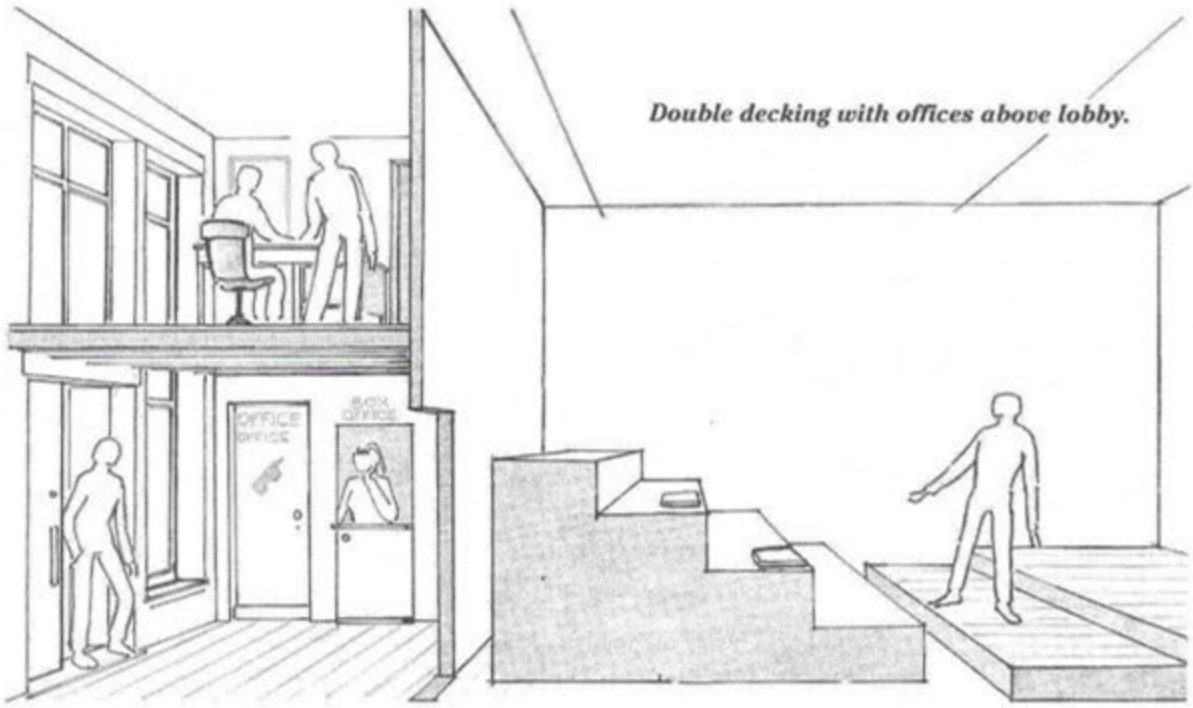




***Sufficient height can solve many small theatre problems.***



***Double decking with office and control booth above lobby, and a small balcony.***




*Double decking with offices above lobby.*

ceilings. Height was gained at the rear of the auditorium by tilting up the roof; at the front, by excavating 5' below grade. The stage is separated from rehearsal/classroom space at the back by folding walls that can be opened to enlarge the stage if needed. A raised platform at rear center of the auditorium straddling the cross aisle serves for the technical operation of the show, including sound and light boards and follow spots, when used. With its thrust stage and semi-circular seating, ETA Square has the look of an intimate Greek amphitheatre.

## Free-Span Without Columns

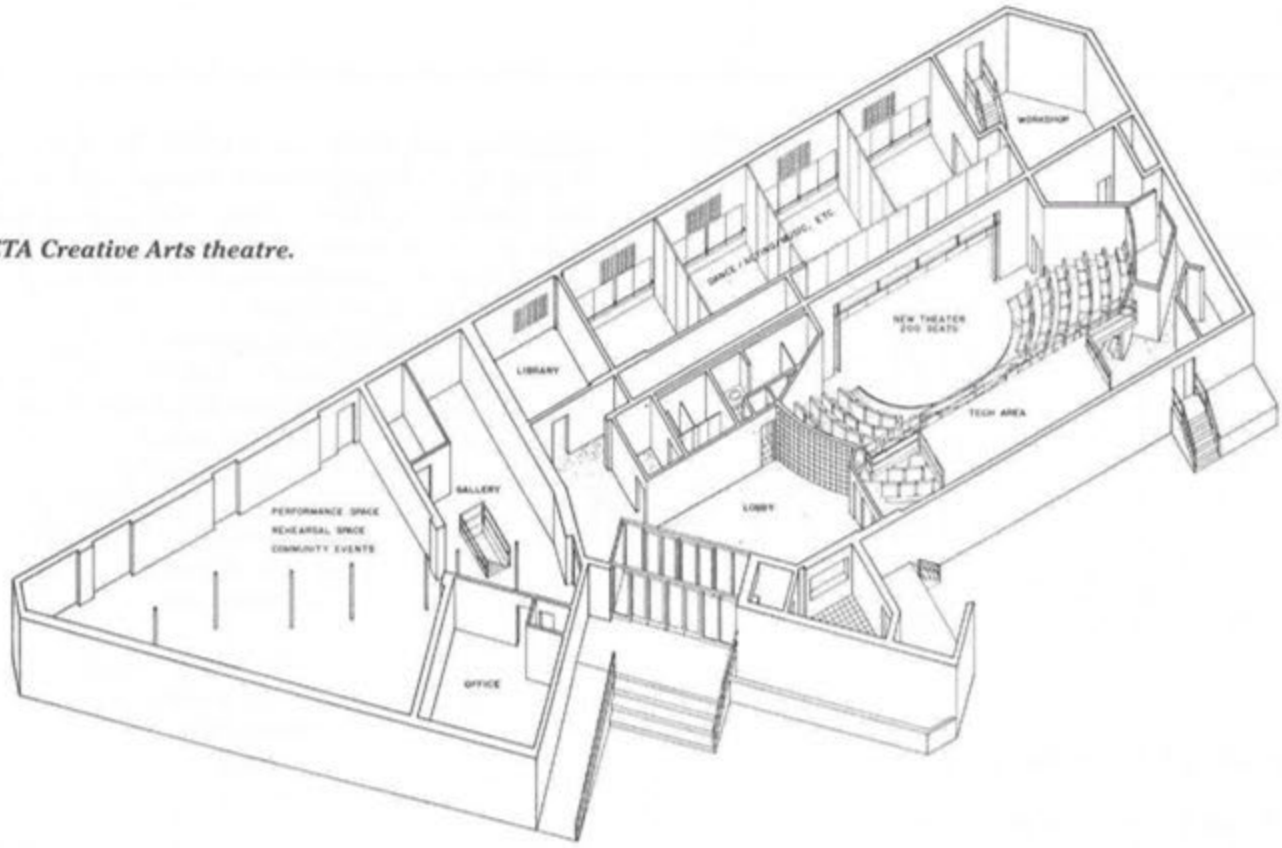
Clear space without columns is very important. If columns do exist in a space under consideration, don't assume they can be removed. Measure the distance between the columns as well as the width of the room to determine how these columns will limit seating and staging configurations.

If a "flexible theatre" is a priority, search for a space without columns. Columns severely limit the possibility of using the space in more than one configuration. Although columns can sometimes be removed and replaced with a structural beam running across the ceiling, you'll need an engineer to let you know if it's possible. Costs begin at about $15,000 per column, but each case is so different that it is dangerous to estimate any costs without a professional.

## Width and Depth

A narrow room, like those frequently found in small storefronts or brownstones, will force you to place all the seats very close to the acting space if you position them along the length. Placing seats in short rows across the width could put some members of the audience too far away.

*ETA Creative Arts theatre.*




ETA CREATIVE ARTS FOUNDATION CHICAGO ARCHITECTURAL ASSISTANCE CENTER

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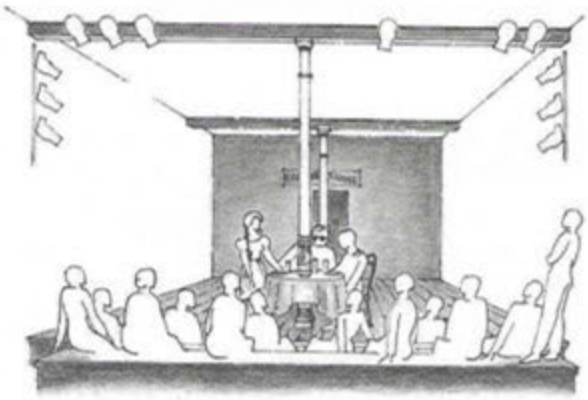
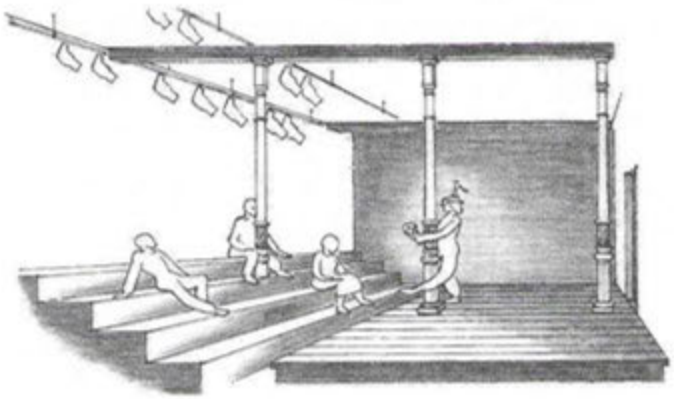
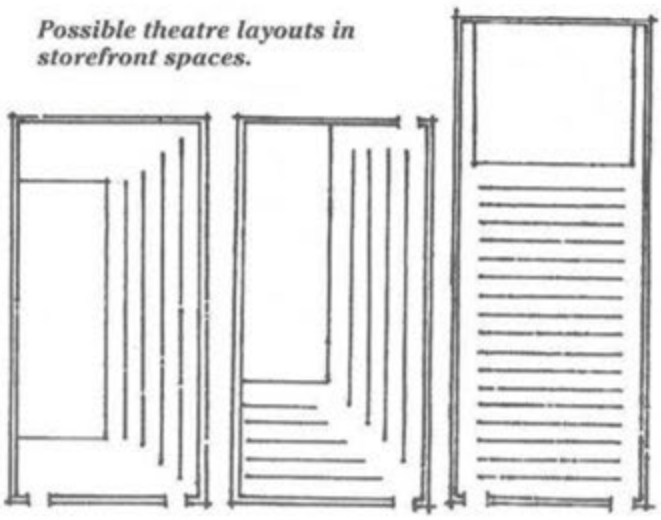




***A row of load-bearing columns down the center of a loft or store space is very common. If the span between columns is 25' or more, it may be possible to design the theatre around them without too much compromise; if the span is much less, they can impose almost insurmountable problems.***

*Possible theatre layouts in storefront spaces.*



### Location Within the Building

**ADVANTAGES OF GROUND-FLOOR SPACE.** Renting ground-floor space is a wise strategy. You gain visibility on the street, and that can be a marketing bonus. Ground floor space almost certainly will be easier to bring up to code. It also provides easier access for loading in building materials, as well as sets, costumes, props, and furniture.

For a theatre of small capacity—74 people in New York City or 100 in Chicago—there is another clear advantage to being on the ground floor: such small theatres are required to have only one means of egress. This one egress must open directly onto the street, however, and not onto a public hallway—a condition difficult, if not impossible, to satisfy above the ground floor. (See chapter 15.) Upper floors may also present access problems for physically disabled patrons.

Often the basement will be included with ground-floor rentals; it is of little benefit to anyone else in the building, especially if access is through the ground-floor space. This adds substantial square footage, usually at a nominal increase in rent.

**RENTING ON TWO ADJACENT FLOORS.** Renting on two adjacent floors instead of all on one floor provides a more compact arrangement and may be less expensive. With access stairs, a second floor can provide a ready-made cross-over for actors and crew. Basement and second-floor spaces are usable for most support functions.

INTAR, on 42nd Street's Theatre Row in Manhattan, broke through the ground floor to the basement to achieve an unusually steep rake in the seating and to create a two-story height over the stage space. The Judith Anderson Theatre (formerly the Lion), in another building on Theatre Row, chose to break through to the second floor to achieve height over the playing area and create a small balcony.

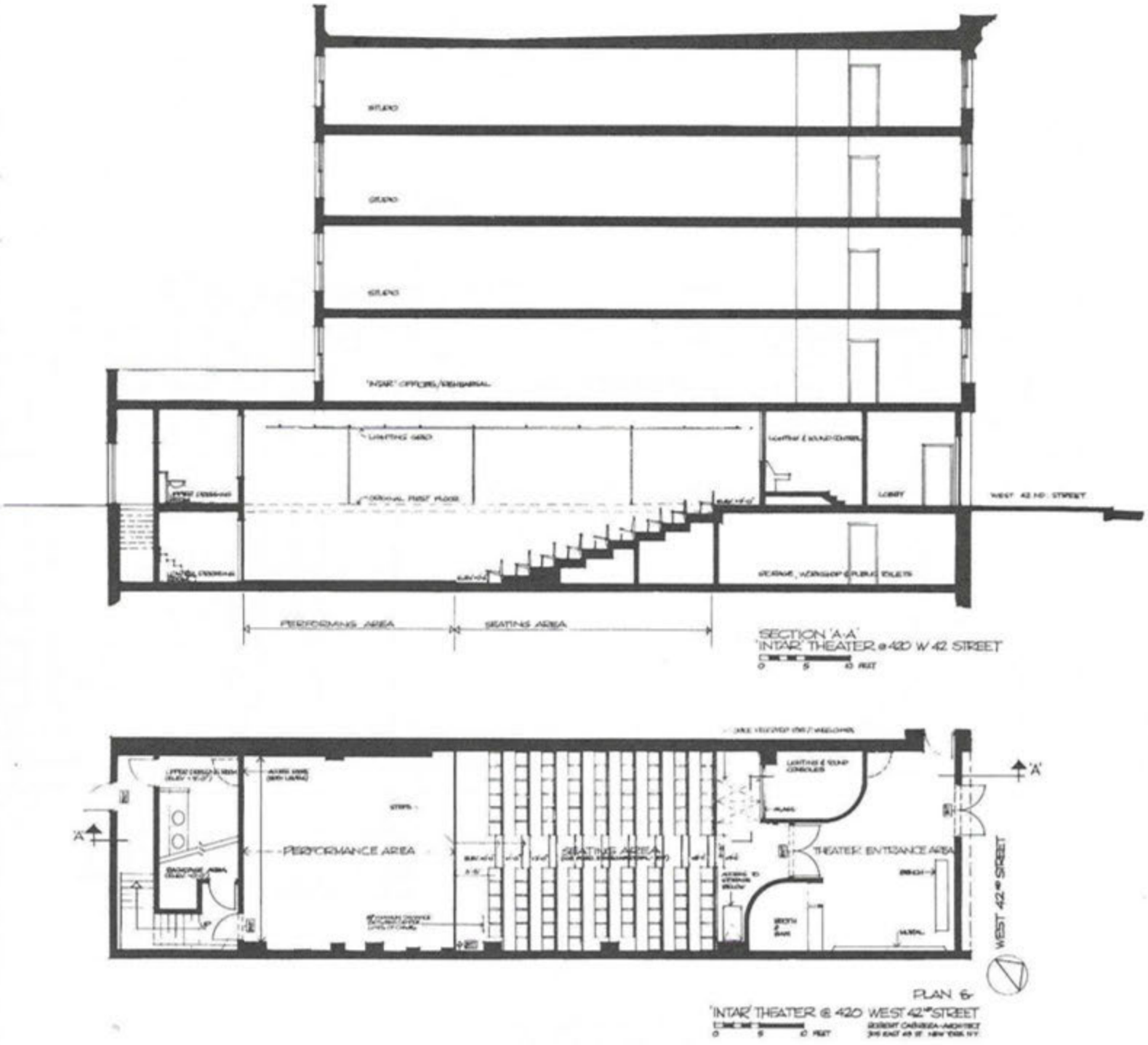
Chicago Dramatists Workshop has developed the basement area under the theatre as office, rehearsal, and play reading space. The area also provides limited storage space.

## TYPES OF BUILDINGS

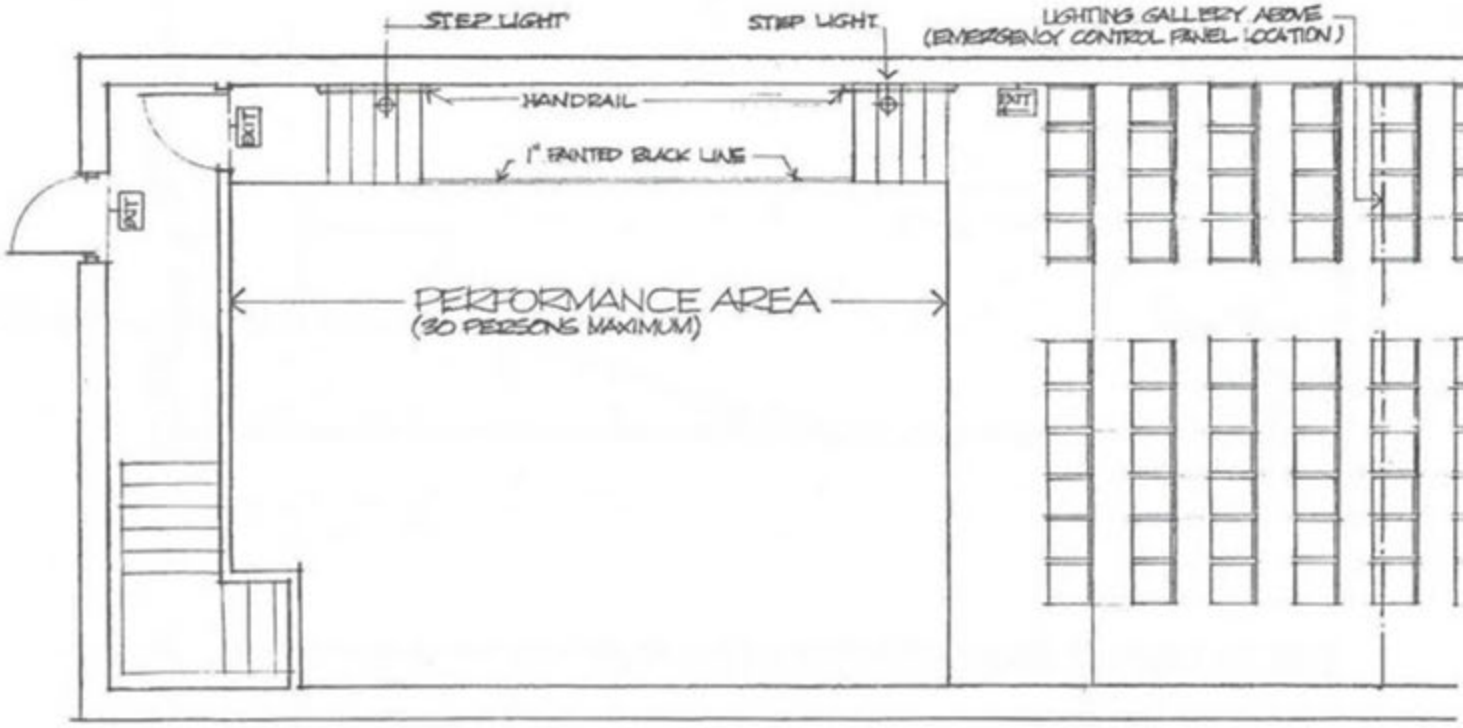
Cities across the country are likely to have the building types described in this section. Some have been built for or used as places of assembly and are therefore easier to bring up to code for theatre use.

### Loft Buildings, Warehouses, and Manufacturing Buildings

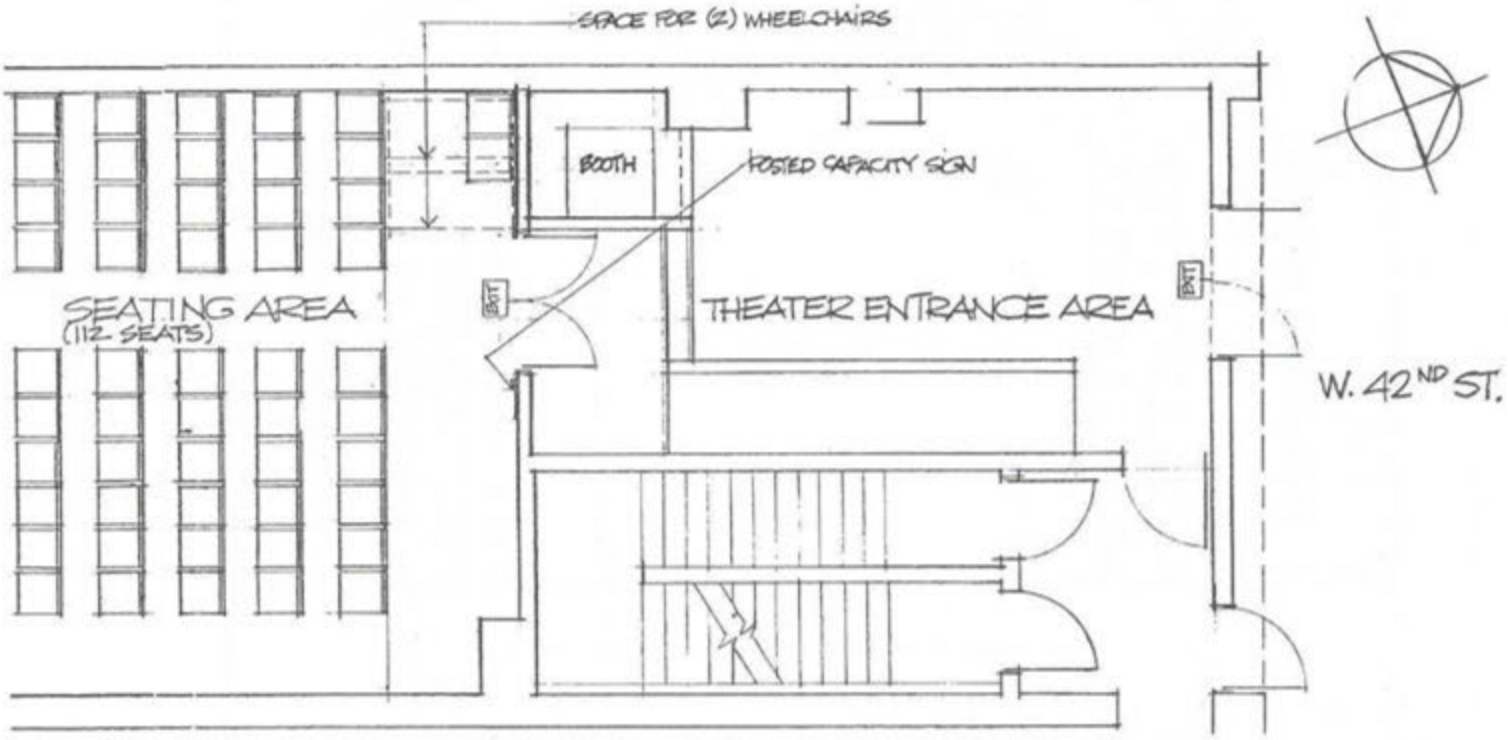
Loft buildings, warehouses, or manufacturing buildings offer some good bets for conversion to theatre space. These vary in size from small, dumpy three-story buildings with brick facades, to cast iron structures, to large, heavy masonry buildings such as Theatre Artaud, a former metal-working factory with 11,250 sq. ft. of audience/performance space in San Francisco's Mission District. These manufacturing-type buildings are solidly built, constructed to house manufacturing companies using heavy machinery; they can withstand and have taken a lot of abuse. However, such




*INTAR Theatre plan and section.*



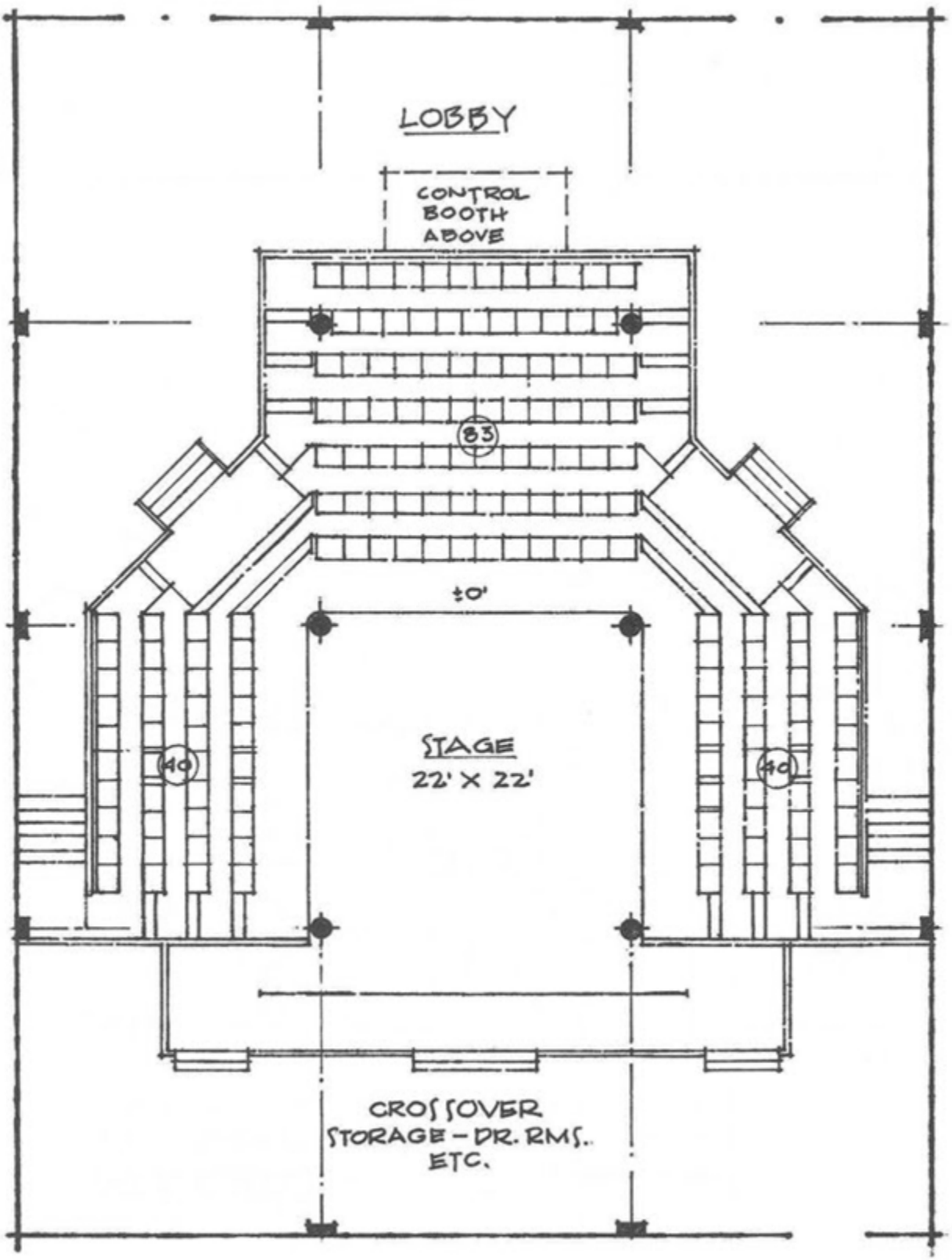

*The Lion Theatre, renamed the Judith Anderson Theatre, is a 22'-wide brick building converted from residential and business space.*



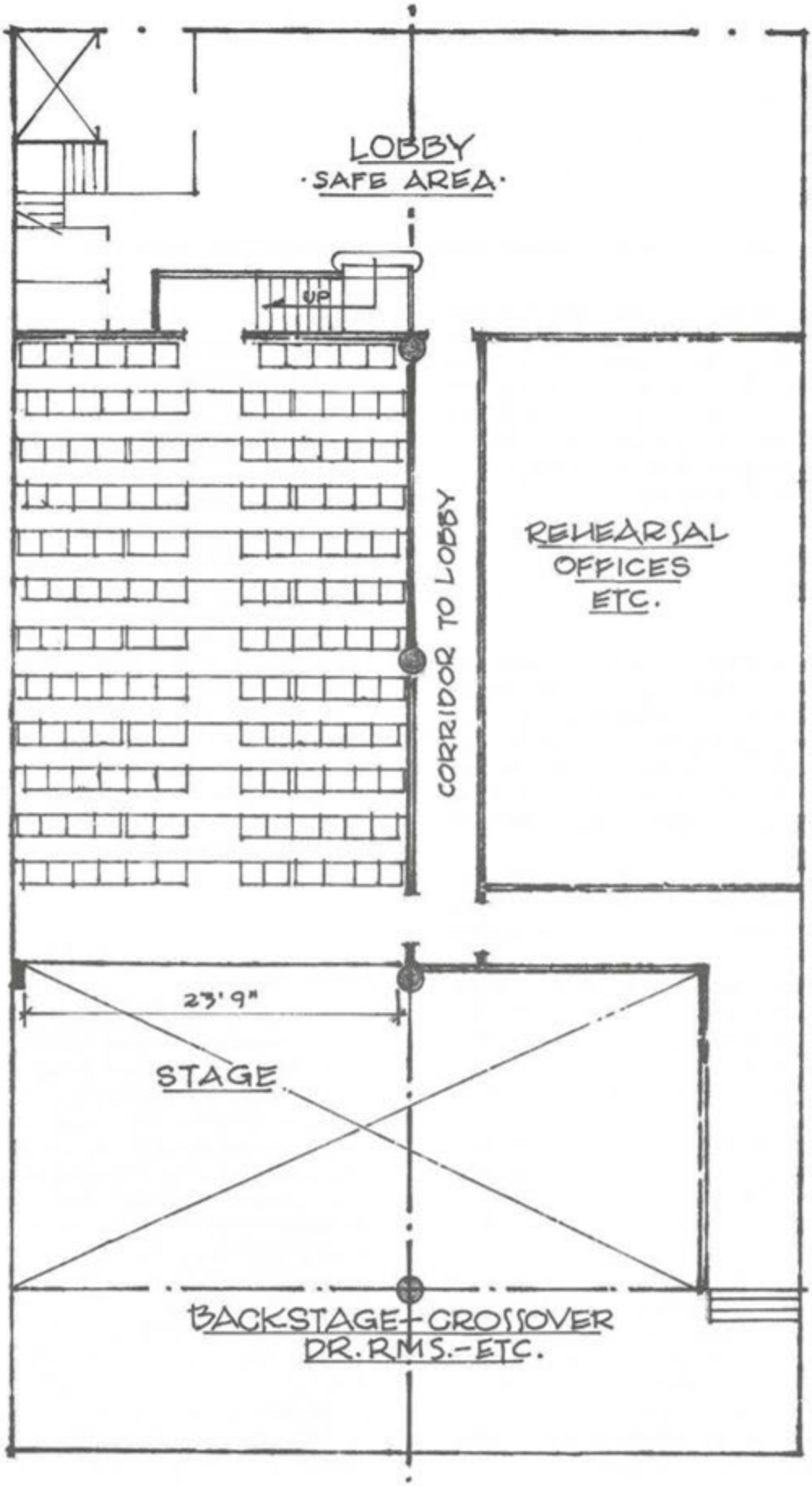

'PLACE OF ASSEMBLY' SEATING PLAN for
'LION' THEATER @ 422 WEST 42ND STREET

0 5 10 FEET

ROBERT CABRERA - ARCHITECT
305 EAST 63 ST. NEW YORK N.Y.




*Lofts, warehouses, manufacturing buildings with columns. Possible plan solutions, not ideal.*


LOBBY
·SAFE AREA·
UP
CORRIDOR TO LOBBY
REHEARSAL
OFFICES
ETC.
23'9"
STAGE
BACKSTAGE-CROSSOVER
DR. RMS.-ETC.

buildings often contain columns close together, limiting their potential for theatre use. When looking at these buildings check carefully for the span between columns: 25' between columns presents some problems; a span of less than 25' is almost impossible to work around because of lack of column-free acting space, adequate clear space for seating, and sightline problems.

## Storefronts

Storefront theatres are especially popular in Chicago and Los Angeles. Many such commercial spaces were built without columns, which makes them very suitable for theatre conversion. In older cities, ground-floor commercial spaces were built with high ceilings. Unfortunately, this is not true in Los Angeles, where storefront ceilings tend to be very low.

Spaces used as stores usually have direct access from the sidewalk and generally include the basement—two more reasons to consider this type of space.

One potential drawback: storefronts usually have large glass windows for display. You may find an imaginative use for them; if not, be prepared to spend some money to replace the glass with a masonry wall. There should be no structural problem in doing this.

New York City's Pearl Theatre Company is an excellent example of a storefront conversion. A one-story, 20'-wide building, its high 20' ceiling allows for lofting. The plate glass windows have been replaced with masonry walls.

In Burbank, California, the Victory Theatre created performance spaces in two adjacent 11'-high storefront buildings. The smaller, 19'-wide, houses a 48-seat theatre and shop; the larger, 24'-wide, holds a 99-seat theatre with shop access. There are two independent lobbies and three dressing rooms. Plate glass windows in both buildings have been retained for display.

## Banks

Some small theatres are housed in former banks. The famous Bouwerie Lane Theatre in New York, built as the German Exchange Bank in 1874 and converted to a theatre in the early 1960s, houses the Jean Cocteau Repertory Theatre. Other groups have used old banks as impressive lobby space for their theatres: Actors Theatre of Louisville and the Los Angeles Theatre Center are good examples of this strategy. Banks are traditionally built to last. They will handle live loads (see building code requirements, chapter 15), and most are fireproof construction. Banks usually have good ceiling height, plus a wider-than-usual free span between columns.

If you are fortunate enough to locate a bank space still intact, you will have quite a find. However, budget for the cost of dismantling heavy marble counters and removing vaults. The cost could be substantial, and the work cannot be handled without professional assistance.

## Movie Theatres

Old movie theatres are an obvious building type to consider. The space will already have a box office, lobby, lounge, rest rooms, and a control booth—in short, almost all the optional spaces for a theatre, as well as the necessary ones. It might even have seats. Don't count on an adequate ready-made stage, however. This will probably have to be carved out of audience space; but since there doubtless will be more seats than you want, turning seating space into stage space will serve a dual purpose. There will not be dressing rooms or backstage support spaces either, although former movie/vaudeville houses that are converted into theatres often have minimal stage and support space. Another benefit of movie houses is that they are already classified as places of assembly.

Unfortunately, there are few small movie houses on the market in most cities, and the grand

ones from the 1920s are white elephants, too big and too costly to renovate for a single non-profit tenant. However, a group of theatres might form a joint venture, perhaps with assistance from a developer, to remodel a large movie palace into several smaller theatre spaces. Chicago's Organic Theater Company successfully converted a neighborhood movie house into a 400-seat theatre, utilizing the entire space, while Minneapolis's Cricket Theatre reduced a 1,100-seat silent movie house to a 216-seat end stage with extended apron. And on a mini-scale, Paramount Pictures's Boston screening room is now a 60-seat legitimate house, home of the Boston Triangle Theatre Company.

Seven Stages, in Atlanta's Little Five Points District, converted a 600-seat, 1920s movie house into a 250-seat end stage and a flexible black box. The building's single story, including mezzanine, measures 6,500 sq. ft.

The company's first phase renovation included transforming former dressing rooms into the black box; installing a new HVAC system, noise isolation wall, and mainstage platforms; and generally upgrading and refurbishing performer, audience, and administrative areas. The auditorium's 20' floor-to-ceiling height enabled Seven Stages to double-deck new dressing rooms between the two performance spaces. Seating in both theatres is on risers, and the former projection booth has been extended to create a mainstage lighting booth and two staff offices.

Using 50% volunteer labor, phase one—completed in 1988—cost $51,000. Phase two's additional internal improvements, budgeted at $20,000, were completed in 1990.

## Churches

Most churches were built with large halls for suppers or Sunday School meetings. While you may not be able to rent out a whole church property, some congregations, feeling the economic pinch of dwindling membership, lease out the parish hall in a variety of temporary or permanent arrangements.

Churches are traditionally conservative, so you'll need to convince them that you're responsible and that your productions won't conflict with or disrupt church activities. For insurance reasons, most churches will consider renting only to incorporated theatre companies—and, for tax reasons, only to nonprofits.

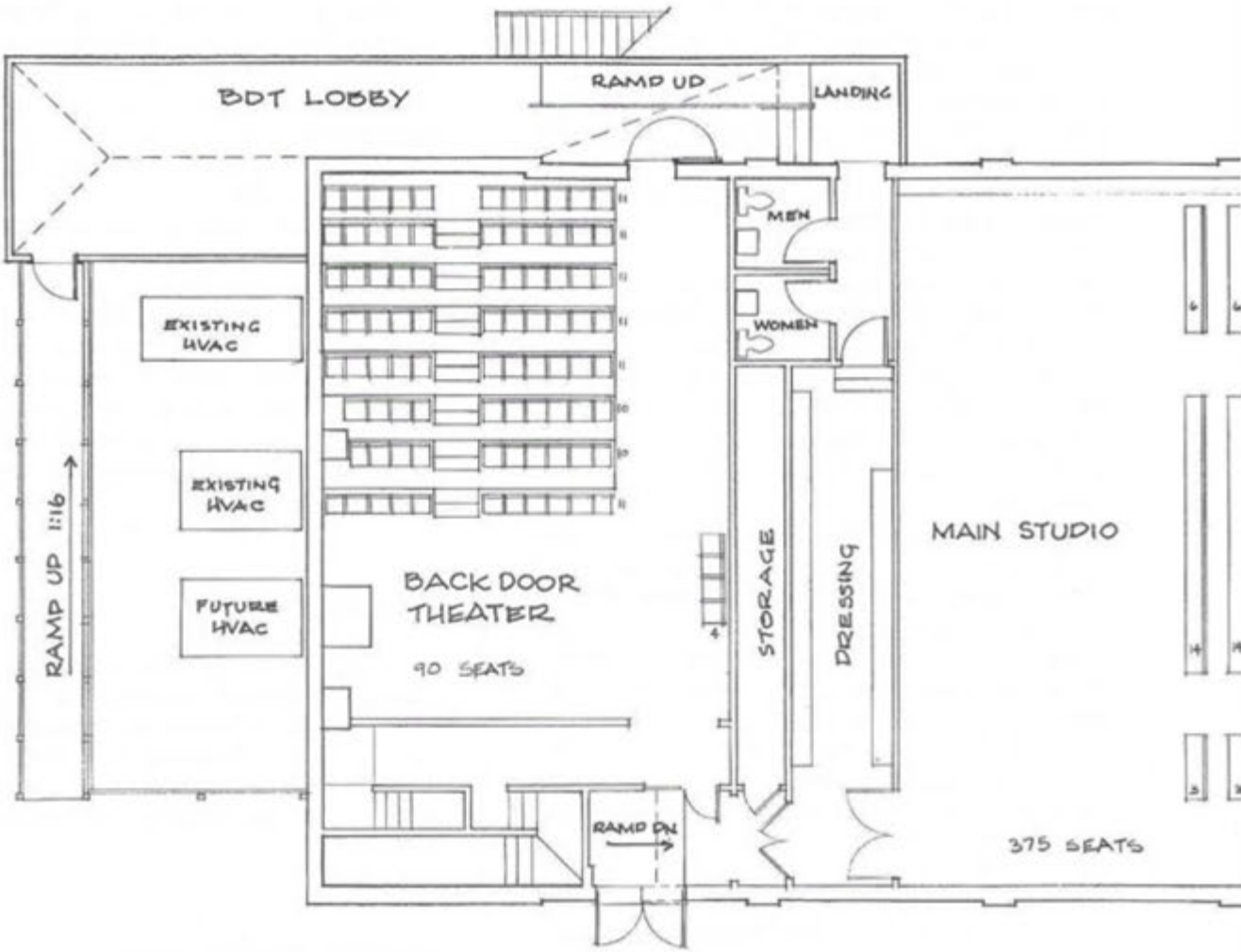
Former and existing church buildings convert easily to theatres because they are usually column free, high ceilinged, classified as places of assembly, and fireproof. In New York City, St. Clements, the Apple Corps, and the West Side Arts Theatre—which installed a floor to create two theatres—have put church space to theatrical use. In Charlotte, North Carolina, the Afro-American Cultural Center created a 180-seat, 3/4-round theatre in a two-story church.

## Schools

School buildings offer many of the same advantages as churches, especially if they already have a small auditorium or gymnasium. In Atlanta, the Center for Puppetry Arts, Horizon Theatre, Nexus, and Arts Exchange all adapted existing spaces in former public schools to their own special needs.

## Housing Developments and Community Centers

Many housing developments constructed, owned, and operated by city governments include community rooms. In Chicago, two Jane Addams Hull House Centers lease performance and support space to the Bailiwick Repertory and Chicago Theatre Company. The Leventhal-Sidman Jewish Community Center, in Newton, MA, boasts its own resident company, the Jewish Theatre of New England.

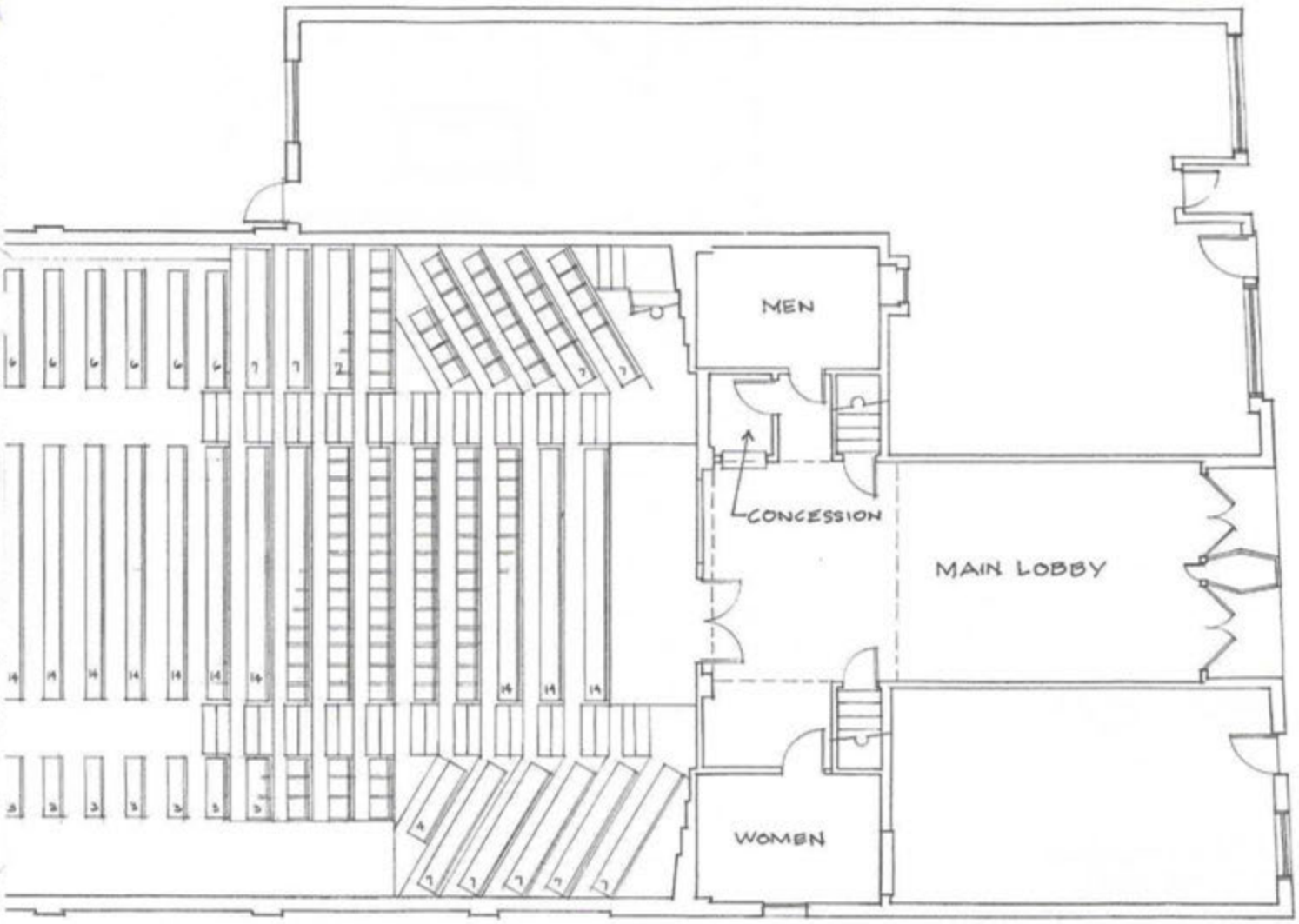



1 / A6 SEATING PLAN

SCALE: 1/8" = 1'-0"

THIS REPRESENTS MAX. SEATING AS SPECIFIED BY OWNER.

***Seven Stages, Atlanta, a converted movie theatre.***
***Architect: Gardner Spencer Smith & Associates. Joe Gardner, Principal-in-Charge; Tanya Richard, Project Designer***
***Consulting Architect: (Schematic Programming & Design) Hoss Viscardi and Company***
***Structural Engineer: Case Engineering***




SEVEN STAGES

ATLANTA, GEORGIA

North Elevation
Scale: 1/8"=1'-0"

0 4 8

*Charlestown Working Theatre, facade and plan.*

## OFFBEAT PLACES TO CONSIDER

All of the following spaces and building types have been converted by small theatre groups and should not be overlooked in your search.

### Supermarkets and Department Stores

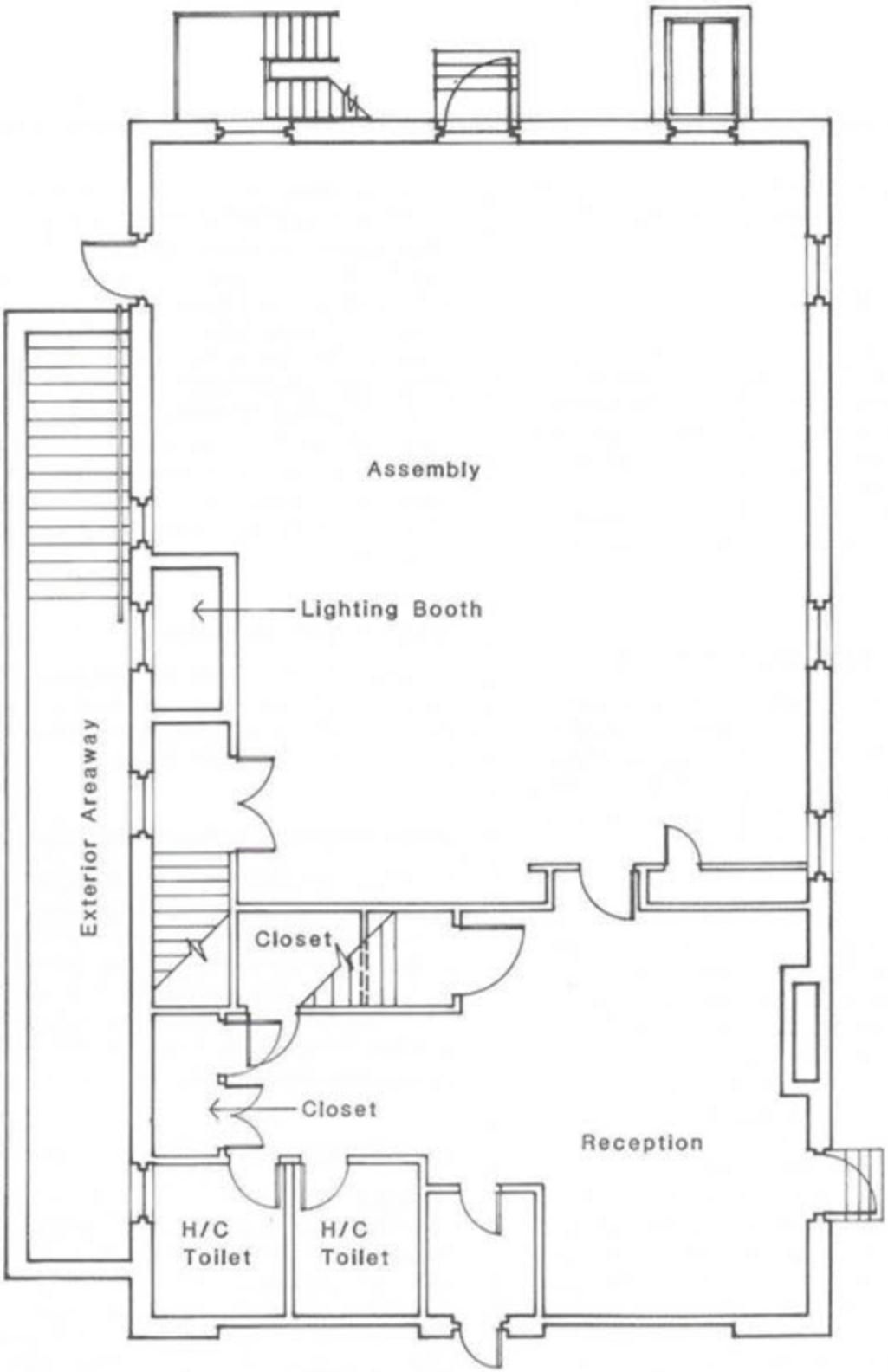
Former supermarkets offer large, open spaces with better-than-average ceiling height. They are usually in or near residential areas. Like other stores, they usually include basement space. Boston Baked Theatre renovated raw space in a department store basement to create a 185-seat cabaret. In New Jersey, New Brunswick's George Street Playhouse got its start in a converted A&P.

### Mortuaries

Despite constant assertions that theatre is dead or dying, it is very much alive in San Francisco in two former mortuaries. There, on a single block in the Mission District, Intersection for the Arts and the Julian Theatre have turned former mortuary chapels into small performance spaces.

### Pubs, Bars, Nightclubs, Restaurants, Ballrooms, and Art Galleries

Pubs, ballrooms, and galleries are particularly adaptable to cabaret theatre. These venues are already classified as places of assembly. Consequently, they are often fireproof and already have the secondary exits required by code. They usually




## First Floor Plan

Scale: 1/8" = 1'-0"

0 4 8

include lobby, lounge, and bar areas, as well as public rest rooms and ample air conditioning.

### Garages and Stables

Garages are usually sturdy, high ceilinged, column free, and wired for heavy electrical use. An excellent conversion is the Studio Theatre in Washington, DC. (See Profile, p. 144.) In Chicago, the Briar Street Theatre turned a 1910 stable into a 398-seat flexible space. (See Profile, p. 119.) Norfolk, Virginia's Old Dominion University converted a 1914 cavalry stable into a 100-seat experimental theatre.

### City and Federal Surplus Properties

Some cities have surplus property for sale or rent. While usually found in marginal neighborhoods, suitable surplus property may sometimes be found in interesting areas ripe for theatre development. Here are just a few of the available building types from which to choose:

### Firehouses

The Puerto Rican Traveling Theatre transformed an old West Side firehouse into one of New York City's most handsome medium-sized Off-Broadway theatres. The Latino Chicago Theatre Company and Boston's Charlestown Working Theatre successfully converted Victorian firehouses into flexible theatre spaces.

The Charlestown Working Theatre (CWT) has been created in a red brick, 1882 Victorian firehouse with a landmarked exterior. It has the distinction of being the only small theatre company in Boston that actually owns its building. The company rescued the firehouse from the wrecker's ball and finally cajoled the city into selling it to the company for one dollar. On a $200,000 operating budget, the programming has served the blue-collar Irish community very well, and now draws an audience from all parts of Boston.

Using chairs on movable risers that are normally set in a three-sided thrust configuration, the auditorium can accommodate up to 150. There is a handsome lobby complete with original pressed tin ceiling but, alas, no longer a brass pole for that very special "entrance." Work on the theatre has been phased. (See chapter 5.) Small grants and a lot of sweat equity have brought restoration and conversion to this level. However, with a total waiver on real estate tax due to not-for-profit status, no rent and no mortgage, CWT has a lot of financial plusses. There are even gardens surrounding the firehouse theatre for intermission strolling, tended by local volunteers.

### Wharves and Warehouses

In San Francisco, the old Fort Mason complex of warehouses and piers has been turned into a cultural center that includes six theatres with support spaces. (See Profile, p. 60.)

### Military/National Guard Armories

Black Spectrum Theatre converted an abandoned Naval Officers Club in Queens, New York, into a 425-seat performance space with a modular stage and movable seats, a cabaret lounge, office, and technical support areas. The surrounding 50,000 acres—all former Naval property—are now the Roy Wilkins Park, a well-chosen site for the community-minded Black Spectrum.

### Courthouses, Police Stations, and Jails

In Los Angeles, the Bilingual Foundation of the Arts converted a 1930s cement-walled jail into a 99-seat thrust theatre. The 17'-high performance area was once the judge's chamber; the sound booth, formerly the prison line-up area.

City surplus buildings usually have major flaws: they have been neglected for years, so the roof leaks, a wall is cracked, the heating plant is deficient, or a section of the floor is collapsing. Still,

if you find the right building at the right price, and have the resources and muscle power to put it into shape, it could be worth the investment.

## Landmark Buildings

Landmark-designated buildings are another, if rare, source of potential theatre space.

While there are restrictions placed on what can be done to a building once it has been designated as a landmark, there are often benefits in the form of tax relief or funding for rehabilitation. The New York Shakespeare Festival, for example, received $125,000 from the New York State Preservation Trust when it initially converted the former Astor Library into a seven-theatre complex.

It is important that any landmark building under consideration possess a designation that allows for "adaptive reuse," a kind of preservation that permits alterations to the interior as long as the exterior of the building is not changed. Many cities have advocacy organizations concerned with protecting and preserving such buildings. Suggestions from an organization like The New York Landmarks Conservancy, for example, could lead to a suitable space.

## Commercial Developments

Enlightened—and pragmatic—urban developers include entertainment components in their buildings, their goal being to keep the neighborhood active around the clock, or sometimes to obtain zoning concessions. Several theatre companies have used this to their own advantage.

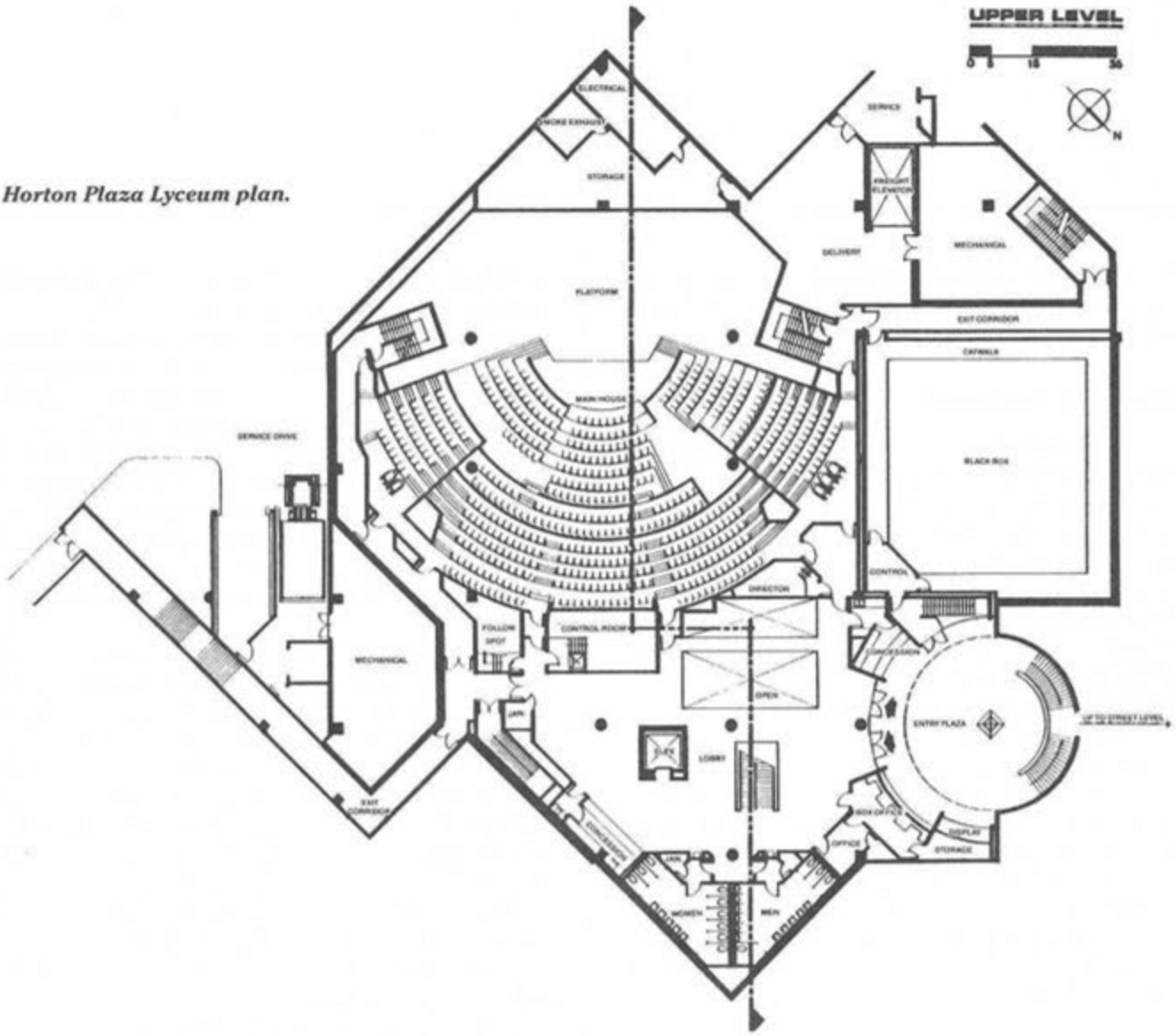
StageWest in Springfield, Massachusetts, talked itself into 39,468 sq. ft. of the downtown Columbus Center. In the early 1980s, when city planners couldn't find a tenant for the complex's proposed cinema, a real estate developer—and StageWest board member—suggested substituting StageWest. Reconfigured, the theatre facilities cost $3 million (paid for by the city) and include a 450-seat proscenium/modified thrust and a 99-seat black box. The theatre now occupies the space rent-free, and the city charges patrons a modest parking fee to help defray costs.

In California, the San Diego Repertory Theatre applied to become prime tenant of the Horton Plaza Lyceum Theatre when it opened in 1986. A detailed agreement was worked out with the city, which made the 560-seat Lyceum and the 220-seat Lyceum Space available to a variety of local performing arts groups under the Rep's management. The city awarded the Rep a free seven-year lease and a four-year managerial contract requiring that the building present a minimum of 250 performances yearly.

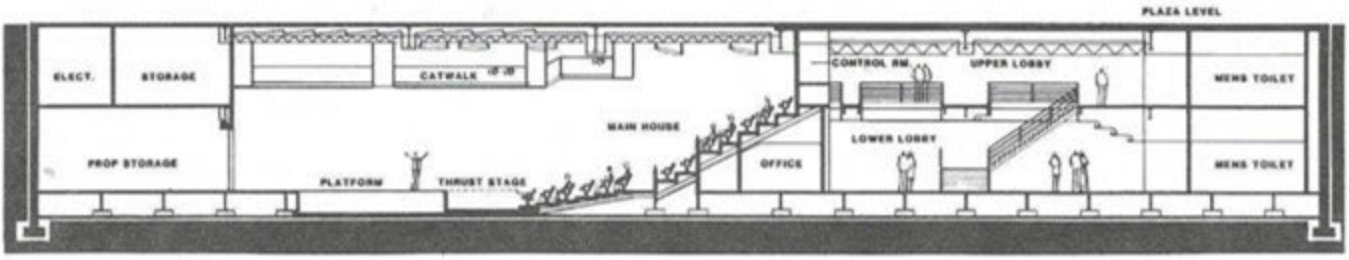
Underground space, because it does not attract prime rental rates, is the one developers often choose to offer to theatre tenants. Below-grade facilities, though, carry special problems and hidden costs: poor visibility from the street, insufficient natural light, lack of height in the theatre, and high HVAC expenses are some possible drawbacks. For example, the Vineyard Theatre, located in the basement of a new multi-use commercial building in New York City had to pay the developer an unexpected $25,000 (and that at bargain prices) to excavate an additional 2', in order to obtain an 18' height from deck to grid.

The Huntington Theatre Company, resident at Boston University and housed in the old Boston Repertory Theatre, exemplifies the spacious facilities some companies have obtained by becoming affiliated with universities. This handsome theatre, which opened in 1925, is a traditional proscenium house with orchestra pit, traps, an elevator stage, and 855 comfortable seats in the orchestra, mezzanine, and balcony. The large stage has an excellent fly loft. But, like most theatres of its vintage, it was built with very limited support space —certainly inadequate for a modern repertory company and theatre school. Boston University bought the theatre in 1953 and systematically acquired the adjacent buildings, making space for two large rehearsal rooms—one fitted with stage lighting and sound equipment, plus removable seating/risers to create a black box performance space—a large scene shop (basketball hoops at

*Horton Plaza Lyceum plan.*




*Horton Plaza Lyceum section.*



each end), an ample paint shop, a costume shop, dye room, wig room, costume maintenance space, green room, masses of dressing rooms, and spacious administrative offices. In short, the company is blessed with space!

As per the lease agreement, no money changes hands—not even on paper. Rent is basically in-kind: the company gets the facilties in exchange for its professional training services (some staff members are also on the Boston University faculty). The company's use is limited to some extent by the school's own production schedule. With a five-play season of new scripts and conservative standards, Huntington is programming to meet the taste of Boston audiences, who they say have "an intellectual curiousity and a concern for language." Huntington also believes the visual production is very important in Boston and mounts its plays well on an annual operating budget approaching $4 million. The well-equipped plant helps make this happen.

# 4 How to Find It

The search for the right space is a tough task, requiring time, patience, and perseverance. Channels of communication are not centralized, so a variety of methods must be tapped. As the hunt begins, there are some general strategies you should pursue and a lot of information you should have on hand. Theatre service organizations in major cities throughout the country can provide leads to spaces and guidelines for their assessment.

Factors such as zoning, urban renewal efforts, property values, rent levels, and Equity requirements can make some areas of a city more suitable or less expensive for theatre use than others. This chapter highlights these factors and then reviews strategies for finding appropriate space, including use of classified ads, real estate agents, and organizations that handle specific types of spaces.

## WHERE TO LOOK

When seeking nontraditional theatre space, keep an open mind about neighborhoods. At the same time, be aware of the problems that could arise from locating in an area with complications: one that is not zoned for theatre use, for instance, or one that is slated for redevelopment.

### Zoning Districts

Zoning shapes a city. Developed to encourage certain activities in specified areas and to prevent incompatible activities, or uses, from intruding on one another, zoning is a basic and very important fact of life in any city. However compatible or unobtrusive you feel your theatre will be, the person next door may not share your enthusiasm. For this reason, zoning laws were adopted as a dispassionate document for determining what activities can locate where.

Under New York City's zoning laws, for example, certain activities are grouped into categories called "use groups." Theatre is a Use Group 8 activity and, as such, is permitted by right only in certain zoning districts. Whenever possible, locate in an allowed zoning district. Should you wish to locate in a district not zoned for theatre use, a variance will be required. (See chapter 14.)

Boston has made plans to transform its historic theatre district into the Midtown/Cultural District. By the early 1980s the district had become so run

*Map of the Boston Midtown/Cultural District.*

**Vacant Buildings to be Renovated**

| | | |
|---|---|---|
| A. | Saxon (Majestic) | for 799 seat proscenium theater |
| B. | Publix (Gaiety) | for visual arts center's international film cinema |
| C. | Pilgrim Theater | for Asian arts center (now adult films) |
| D. | Essex Theater | for 199 seat dance theater and for 199 seat experimental theater |
| E. | Paramount Theater | for dance club/cabaret |
| F. | Modern Theater | for 400 seat concert hall |
| G. | Liberty Tree Halls | for studio/rehearsal space |
| H. | Former Chauncy St. Power Station | for studio/rehearsal space |
| I. | Steinert Hall | reuse potential unknown |

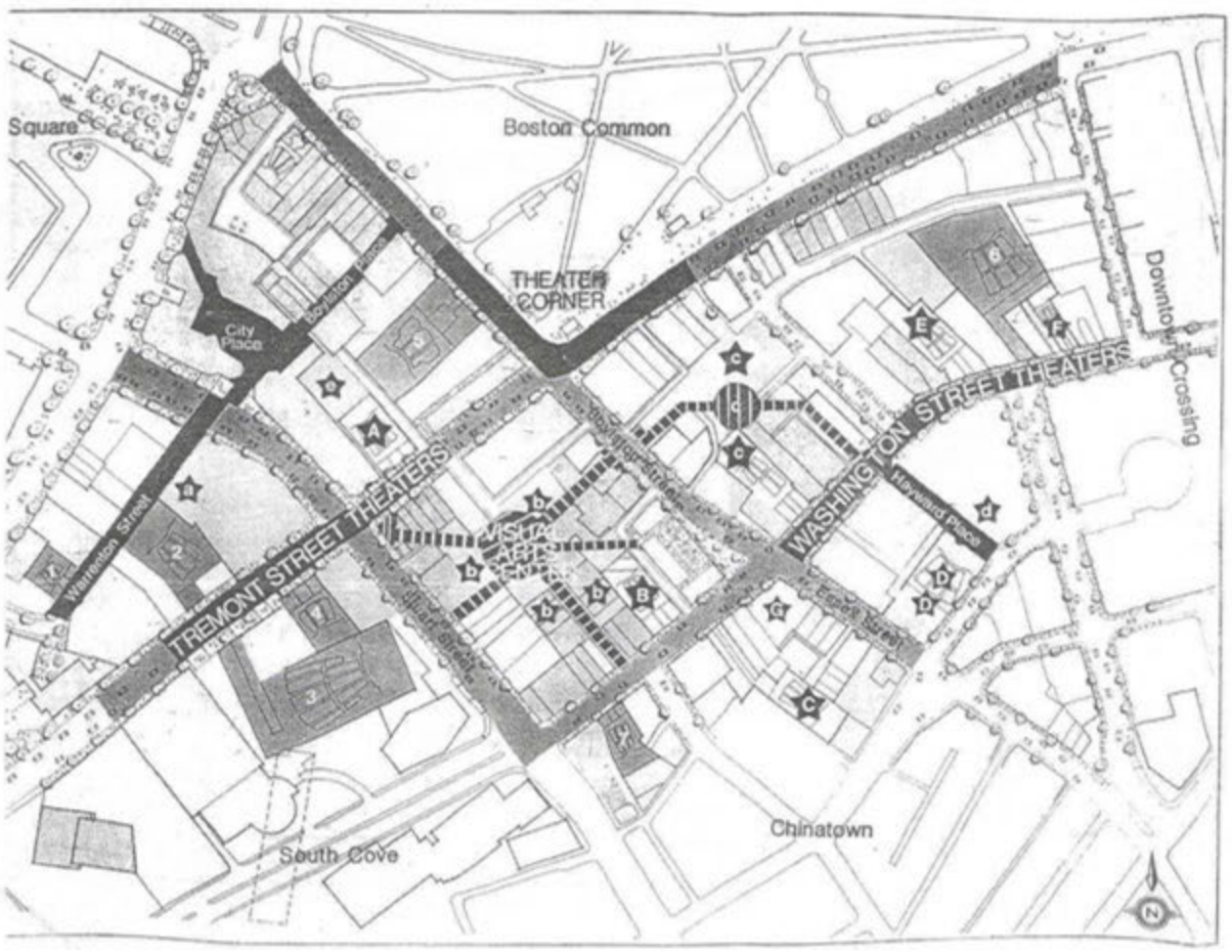
**Existing Active Theaters**

| | | |
|---|---|---|
| 1. | Charles Playhouse | 400 seats, 200 seats, 150 seats |
| 2. | Shubert Theater | 1,600 seats |
| 3. | Wang Center | 4,000 seats |
| 4. | Wilbur Theater | 1,200 seats |
| 5. | Colonial Theater | 1,650 seats |
| 6. | Opera House | 2,300 seats |
| 7. | Cinema | Chinese movie |

**New Facilities to be Constructed as part of Mixed-use Developments**

| | | |
|---|---|---|
| a. | Parcel C-4 | for 199 seat experimental theater |
| b. | Hinge Block parcels | for several visual arts exhibits spaces and one 199 seat experimental theater<br>new Y.M.C.U. facilities |
| c. | Parcel 30 | for 499 seat dance theater and for 399 seat flexible space theater |
| d. | Hayward Place Site | for 200 seat concert hall |
| e. | Former Gary Theater Site | for shop/storage space |

**Active Theaters**
**Inactive Theaters**
**"Theater Alleys"**
**"Theater Boulevards"**



down that it was known locally as the "Combat Zone," a haven for crime, drugs, and porn shows. If restoration is carried out as planned, there will be nine new nonprofit theatres in the Midtown/Cultural District, plus one small commercial theatre. Also included are the restored Majestic Theatre and other privately financed venues. Nonperformance spaces, like rehearsal studios and offices for arts groups, will be complemented by other types of private development. Tradition and the stock of existing old theatres made it logical to place these proposed new venues in the old, though run-down, theatre district now relabeled the Midtown/Cultural District.

So, before setting out to look for a space, familiarize yourself with the zoning regulations outlined in this book and consult zoning maps available at the maps and publications office of your local city government. (See Agency Chart.) Double-check this information before signing a lease. Don't rely on the word of landlords or rental agents. Their primary interest is in renting the space; it is the tenant's responsibility to see that "use" conforms with zoning laws.

### Urban Renewal Areas

Locating in an area slated for heavy redevelopment could affect your theatre in several ways. First, urban renewal projects invariably cause rents in the area to skyrocket. Try to protect yourself with a long-term lease. Second, redevelopment plans may call for the demolition of your building in two or three years' time—information that the landlord may be reluctant to disclose during lease negotiations. A demolition clause allows your lease to be terminated regardless of the term left if the building is to be razed.

On a more positive note, urban renewal projects may provide special opportunities for groups seeking theatre space because they often include components designated for nonprofit entertainment use. (See chapter 3.) If possible, get into a project in its early design stages, when overall plans can be more easily drawn or redrawn to suit your needs.

To determine whether a space is in an urban renewal area, or the likelihood of its demolition or redevelopment, consult the community board or neighborhood organization for the district. (See chapter 6.)

### Property Values and Rents

Central locations are expensive and much in demand. Recently gentrified neighborhoods—such as SoHo in New York, Chicago's North Side, and Midtown Atlanta—likewise are expensive.

Neighborhoods adjacent to recently gentrified locales are likely to offer the most affordable options. However, the accessibility of these locations to audiences and critics must be weighed against the rental rates they offer.

### Areas with Equity Contract Restrictions

In New York City, the area bounded by Fifth and Ninth Avenues between 34th and 56th Streets, as well as the area between Fifth Avenue and the Hudson River from 56th Street to 72nd Street, is restricted by the Actors' Equity Association. Without its explicit permission, Equity prohibits use of contracts other than the Broadway Production contract within this area.

## GATHERING INFORMATION

To find a space, you'll need to be persistent and resourceful—and have good feet. There are several ways to discover leads.

### Newspapers

A review of the classified ads (lofts, offices, stores, commercial space, miscellaneous) will orient you toward the prevailing rental rates in various neighborhoods and will put you on the trail of brokers who handle the kinds of properties that interest you.

Newspapers contain only a partial listing of what's really available. The majority of spaces are rented by managing agents who may advertise just one space that's representative of the properties they handle.

## Real Estate Agents

Although very large management companies handle properties all over a city, smaller agents or brokers usually deal with a certain geographic locale or with a specific type of commercial space. To discover which rental agents handle specific areas, respond to classified ads. If you answer an ad and the space has already been rented, ask the agent if similar spaces are available. Be as precise as possible about your requirements—desired neighborhood, square footage, price, and special features, such as ground floor, a separate entrance, high ceilings. Take the time to look at spaces that may not exactly fit your requirements. Actually standing in the space may stimulate you to visualize how it could be altered to fit your needs. A real estate professional might be a sensible addition to your board of directors.

**COMMISSIONS AND FEES.** A commission may be charged when a space is leased. If you are dealing directly with a landlord, or with a management company hired by a landlord, there should not be a fee. If, however, you are dealing with a real estate agent hired by the management company, there may be a fee. Usually, for commercial space, this is paid by the landlord.

Before using an agent's services, be sure to check on whether or not a fee will be charged. Fees are sometimes as high as 10% of a year's rent. The amount is often a function of the strength or weakness of the real estate market.

If you are negotiating a sublease, or have answered an ad placed by the tenant, be aware that the previous tenant may want a "fixture fee" for improvements made to the space, alterations which may be of no use to you. While it is illegal for a tenant to demand a fixture fee, the practice is common. It may be possible to circumvent this payment by working directly with the managing agent, whose name usually appears on the building facade or in the lobby.

## Walk the Streets

Another way to find space is simply to walk the streets where you want to locate. Often spaces for rent are not listed in any paper or with any agent. Instead, signs are hung out or placed in windows with a number to call. When asked how they went about looking for a space, most theatre groups say that at one point or another in their space search, they simply got out and walked or bicycled the streets.

If you see a vacant space that interests you, there is no harm in inquiring about its availability even if there's no "for rent" sign. The agent's name should be on the building.

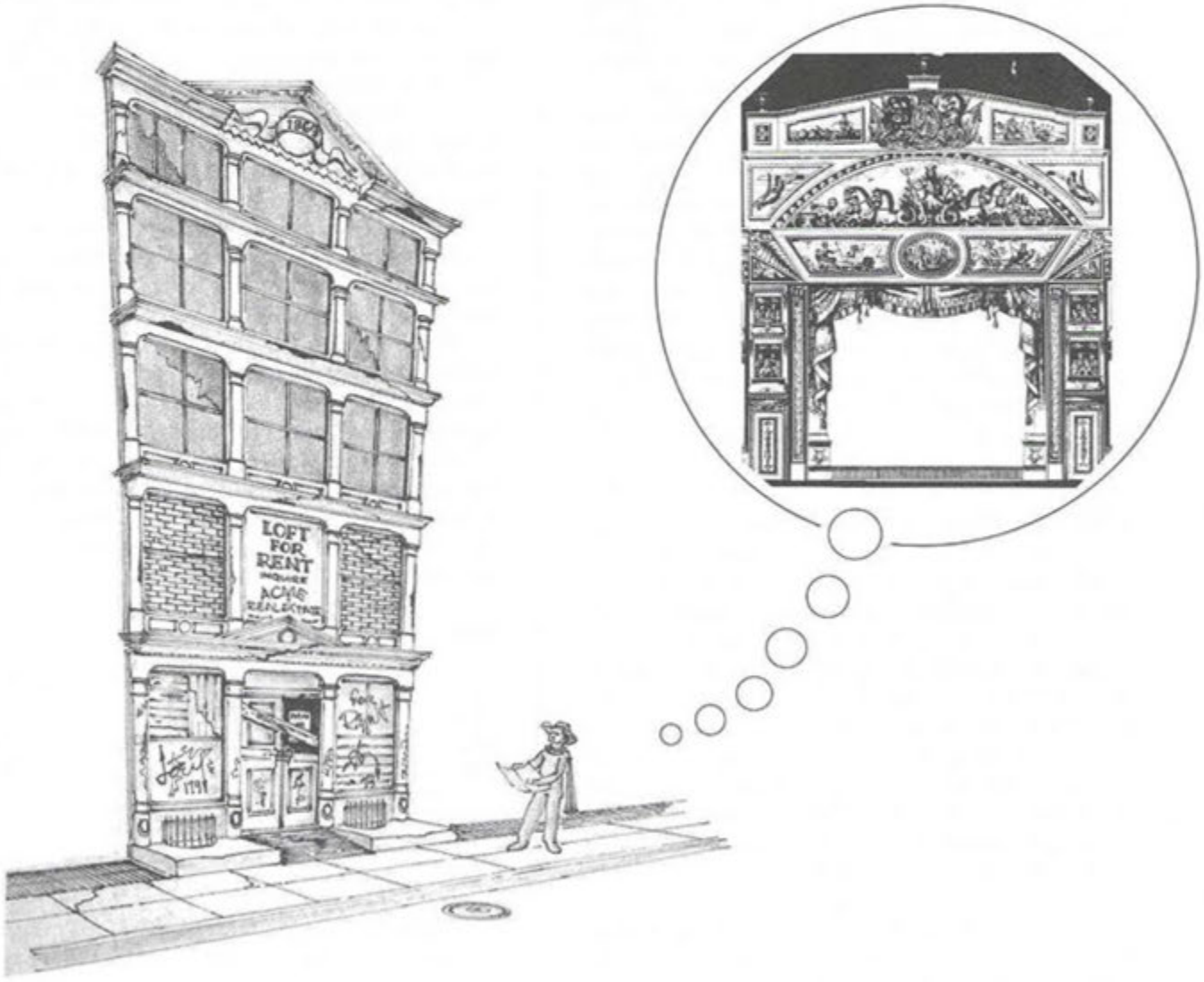
When Boston's Lyric Stage Company found itself desperately needing more space, and with just two years to go on its lease, its founders acquired topographical maps showing every building and lot number in every city district they were considering. Slowly the list was narrowed, and finally they found their new home in the Young Women's Christian Association, a 1920s Deco building on Copley Square (See Profile, p. 105.)

## Talk to Everyone You Know

Theatre people seem perpetually on the lookout for space. Even the groups that already have spaces keep searching. What they have seen that is not right for them may be right for you. So ask around.

## Space Referral Banks

In response to the increasing difficulty arts groups and small businesses have faced in trying to locate space, many government agencies, as well as some service organizations, have created centralized space information banks. One example is New York City's Office of Economic Development, which




***Walk the streets.***

maintains a computerized listing called The Space Bank. Another is A.R.T./New York's real estate project, which maintains up-to-date information on potential theatre spaces in the metropolitan area, as well as data on real estate trends. (See Resource Directory.)

## Surplus Buildings

Federal surplus property can be located through the regional offices of the General Services Administration. Call or write the regional office for your state—listed in the "United States Government Offices" section of the telephone directory. Cities periodically publish surplus property auction lists. In New York City, for example, information can be obtained from the Department of General Services and the Division of Real Property. For information on local government agencies that handle the dispersement of surplus property in various cities, see the Agency Chart.

## Landmark Buildings

City agencies charged with protecting landmark buildings (like the New York Landmarks Commission and the Commission on Chicago Landmarks) and nonprofit advocacy organizations (like the New York Landmarks Conservancy and the Los Angeles Historic Theatre Foundation) may provide leads on landmark buildings, as well as funds to help renovate them.

On the national level, contact the National Trust for Historic Preservation in Washington to obtain addresses and telephone numbers for its regional offices:

*National Trust for Historic Preservation*
*1785 Massachusetts Avenue, NW*
*Washington, DC 20030*
*(202) 673-4000*

# 5
# EVALUATING A SPACE

Leasing or buying a space is a major commitment. Take all the time necessary to make certain this is the right space, carefully inspecting the building's exterior, interior, and surrounding neighborhood. Take everything into account.

Cost will play a major role in your decision—not only the initial expense of leasing or buying the space, but also the cost of conversion, renovation, and repairs, plus the expenses involved in bringing the space up to code.

Be aware of potential problems that might not be readily apparent—heat in the winter (if you happen to be looking at the space in the summer), intrusive noises in the evening (if you are checking the space in the daytime). Find out who the other tenants are and if their use of the building would interfere with your activities in any way. Who would share entrances and exits and for what purposes? Spend time in the space during the day and at night.

The guidelines below, and the checklist at the end of the chapter, should lead you through a knowledgeable evaluation to the right choice.

## THE NEIGHBORHOOD

Make notes of your first impression of a building and the surrounding area. Your initial impressions of the neighborhood are likely to be shared by your audience. Since you are looking for low-cost real estate, you doubtless will be looking at buildings in marginal neighborhoods. Take a look at other buildings on the street. What shape are they in? If some are being renovated, it's a good indication that the neighborhood is on the upswing. If, on the other hand, there are deserted or burned-out buildings, or signs of neglect, be wary.

Take a moment to imagine your audience and actors walking through the same streets, from a parking lot, bus stop, or train station. Are there restaurants or pubs nearby? Galleries or shops in which to browse? Any trees along the way? Visit at night. Do you feel safe? Is there some street life? Are there adequate streetlights?

What else about the street is of note? Is the garbage collected regularly? Are there businesses that might cause disturbances, such as clubs or discos?

## TRANSPORTATION AND ACCESSIBILITY

How easy will it be for the audience to reach the theatre? Is the area well serviced by buses and a subway or metro system?

Check the parking situation. Is there a parking lot nearby? Is on-street parking permitted during performance hours? Check posted signs to determine parking limitations. Even though, in some densely populated cities, only a small proportion of the audience comes by car, parking remains an important consideration. Most cities now mandate parking space for patrons as part of a "theatre complex." Chicago and Los Angeles, for example, require one parking space for every ten seats. Remember, too, that company members will have vehicles to park.

## NOISE

A critical problem to evaluate is noise: either from adjacent tenants or from ambient exterior sources.

**INTERNAL.** Noise transmission most often occurs between floors. Find out who lives or works upstairs. Are they likely to make intrusive noise during performance hours?

Chicago's Baliwick Repertory, in a Hull House Community Center, coordinates its performances with the center's recreational program to avoid competing with shouts from the second-floor gym.

If there are other tenants sharing the floor you hope to occupy, check the partitions that separate the spaces. Send someone into the neighboring space with a radio or a set of drums while you listen on your side of the wall. If your neighbor has a loud stereo, you may have a problem. Remember also that while you may not hear adjacent tenants who make very little noise, they may very well hear you. Can you build, hammer, and saw during all-night tech sessions, or rehearse with shouts, loud music, or sound effects?

**EXTERNAL.** Noise factors from outside are harder to judge; at the same time they are usually not quite so troublesome. If there is a subway line nearby, there may be rumblings and vibrations created by the trains, as at the Public Theater in New York City. Often, heavy truck traffic will transmit vibrations as well as a low level of noise. These intrusions are a nuisance but probably acceptable. However, a bar or a disco next door or across the street can create havoc with a performance.

One Off-Off-Broadway producer recommends taking a sleeping bag and "living" in a space around the clock for a couple of days to check out the noise before signing a lease.

One final cautionary word: don't locate next door to a firehouse!

## INSPECTION OF THE BUILDING

Initial impressions can be notoriously deceptive: nowhere is this truer than when looking at old buildings. They appear romantic, intriguing, full of "possibilities." While your emotional response on first encounter with a building is important, ultimately the condition behind the facade should carry more weight. So take a closer look at the condition of any building, applying common sense and the guidelines that follow. Before you reach a final decision, consult an architect or engineer.

The building conditions discussed below assume even greater importance if you plan to buy the space, but they should not be overlooked if you plan to rent.

### What to Look for in the Building Exterior

**SETTLING.** See if the building is *plumb* horizontally and vertically. Old buildings tend to settle and get out of line—it is the degree to which they have settled that you should check. Look at the rows of windows and the lintels above the doors and windows; they will give a good indication of just how much the building is out of plumb.

**MASONRY.** Examine the masonry for signs of cracking and opening up. Also look for loose stones and sagging corners. If the building is brick, check to see if it needs repointing.

**CORNICES.** The condition of cornices is best ascertained from the roof. Note any cracks, crumbling, or missing pieces.

**ROOF.** It is very important to check the roof itself for damage. Walk around. Take note of the condition of any skylights, vents, chimneys, or water tower. Look for signs of leakage. Examine the ceiling directly under the roof for any signs of *spawling* (crumbling, rotten plaster) due to leakage, especially around electrical fixtures, molding, or chimneys.

**FIRE ESCAPES.** If there are fire escapes, check their condition by walking on them and taking note of any corrosion and any weak or missing sections.

**STOOPS, ENTRANCES, AND DOORS.** Exterior doors must conform to the building code, and they must open out. Check the alignment of the doors with the door frame for sagging. Test the condition of any steps leading to the doors, and the stoop, for signs of crumbling or missing sections. Consider if it will be possible to load scenery and props in and out through existing doors in their present size and location, and if they will accommodate the disabled.

**BACK OF BUILDING.** Examining the back of a building may be difficult in some cities. But it is important to check for the same problems or flaws listed above.

## What to Look for in the Building Interior

The basement is a good place to identify the construction, since basements are often unfinished. Even in a finished basement, the owner will probably allow you to pull down a small piece of plaster for a good look at the construction. Wood construction is the least fireproof, exposed steel is better, and steel enclosed in masonry is the best.

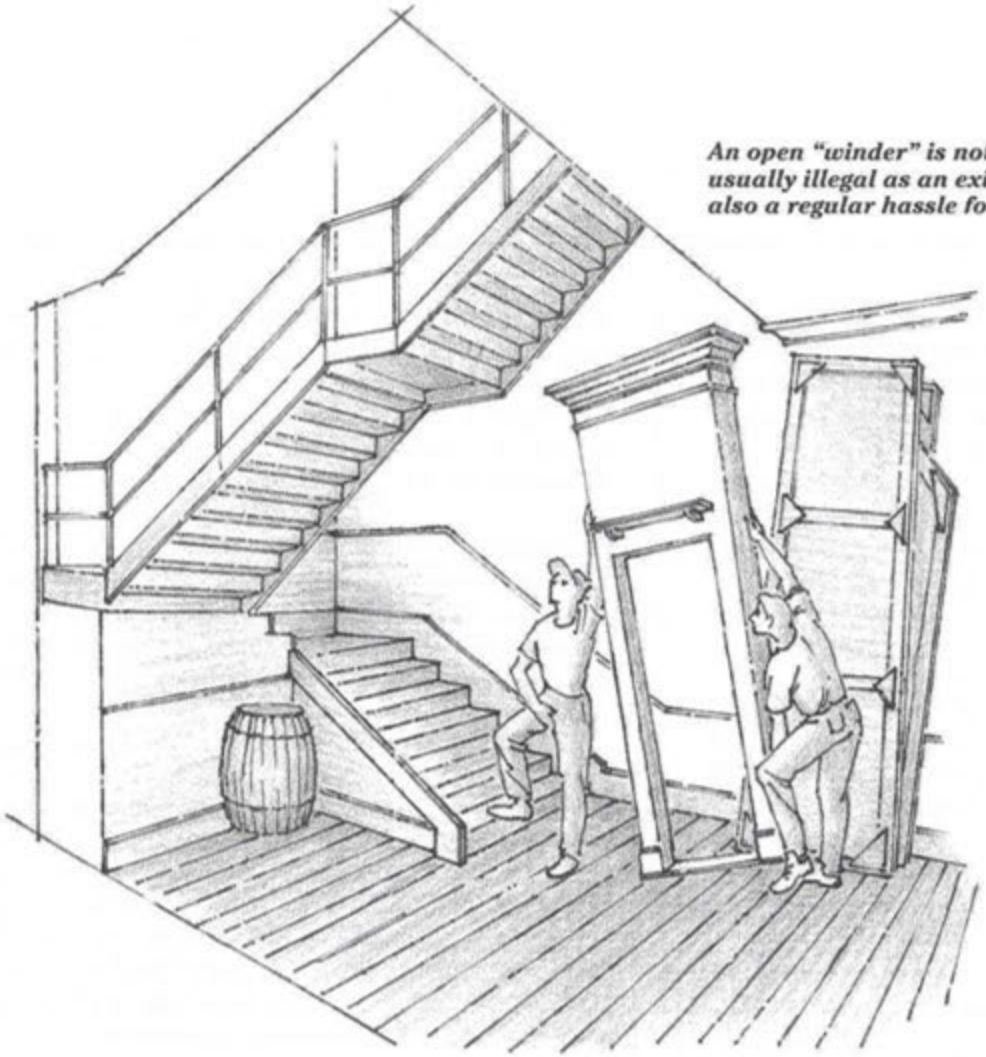
The basement is a good place to check for the presence of asbestos. It is now illegal and must be removed, which will be costly since removal must be handled by certified professionals.

**FLOORS.** Check for any slanting, sagging, or warping of wooden floors; look for unevenness and cracks in concrete ones. Find out what materials are used in the construction of the floor, and if possible, get a look at the beam supports underneath to check for sagging or for dry rot if they are wooden.

Building codes specify *live load* requirements for theatres. Take note of the live load (see chapter 19) of the floor. In a commercial building this information should be posted; if it is not, ask the owner for the previous certificate of occupancy, or if all else fails, check at the plan room in the department of buildings. (See Agency Chart.)

**STAIRS AND CORRIDORS.** If the space you are considering is above the ground floor, take a good look at the stairs and corridors. Are they open or enclosed? What materials are used in their construction, wood or steel? Check for loose or broken steps, for sagging sections. Are the handrails intact? Any "winders" (stairs that make turns)? They're usually illegal. Check the width of the stairs and corridors—3'8" is the minimum New York City code requirement for *means of egress*. Also, if the stairs will be used as a means of egress, there are *fire rating* requirements (see chapter 15 for definitions), so check the construction of the walls surrounding the stairs and corridors. How difficult will it be to load in scenery and props on the stairs and through the corridors?

**ELEVATORS.** If there is an elevator, ride in it. If it is a loft building freight elevator, try operating it yourself. Check the load capacity, usually posted inside the elevator. Will its size accommodate scenery and materials as well as people? If shared, are there any restrictions on its use or a limit on



***An open "winder" is not only dangerous and usually illegal as an exit for the audience, but also a regular hassle for technicians and crews.***

hours of operation? Ask the other tenants if it breaks down frequently.

At New York City's Interart Theatre, in a building where the passenger elevator holds only four, audience members must use the freight elevator to reach the auditorium.

**WALLS AND CEILINGS.** Take note of the materials used in wall and ceiling construction. Are the walls fire-retardant? If Sheetrock, how many layers? Are studs of steel or wood? Check for signs of dampness and leakage. If there are indications of leaking, try to determine the origin: is it through the roof or through exterior masonry, or is it localized around plumbing, windows, or vents?

**COLUMNS AND LOAD-BEARING WALLS.** Determine which walls and columns are load bearing and essential to the structural support. Load-bearing walls and columns cannot be removed without the substitution of costly support beams.

**WINDOWS AND SASHES.** Check for alignment. Look for rotten frames and broken windowpanes that must be replaced. Try opening and closing all the windows.

**BASEMENT.** Look for a water level line; a "ring around the bathtub" could indicate basement flooding. Check the condition of the boiler.

**HEATING, VENTILATION, AIR CONDITIONING.** If possible, ask for each of these systems to be "fired up" so that you can check the operational efficiency and the noise level. If the building is occupied, check with the current tenants regarding the efficiency of these systems. Remember, HVAC systems must be available for use on a 24-hour basis, seven days a week.

**ELECTRICAL POWER.** Make note of the type (AC or DC), the amount of current (amperage), and the voltage supplied to the space. Usually each floor will have a fuse box or circuit breaker panel with the amperage marked. If not, take a look in the basement near the main service box for the building: 4-wire, 3- phase, 300-400 amp, 120-volt AC service should be considered the minimum a small theatre will need for stage lighting. Anything less will severely limit your stage lighting options and your creativity. Additional power will be necessary to service the support spaces.

If the amount of current available is inadequate, the local power company will run any additional amount of current needed in from the street free of charge, but a licensed electrician will have to install the proper circuit breakers and cable necessary to handle and distribute this additional load.

While you are at the box or panel, note the age and condition of the wiring: Old cloth-covered? Cracking rubber-covered? Or, with luck, new? Check the general condition of outlets and sockets, and note any exposed wires. Also check to see if the space has its own meter or if the meter is shared with another space. Ask if the building is grounded (now an electrical code requirement).

**PLUMBING.** To find out how well the plumbing works, turn on all the faucets and flush all the toilets. Check for plumbing leaks by examining the surrounding plaster. Make a note of the number and location of sinks, hot and cold taps, toilets, and drains. Compare these with your basic requirements. Relocating or adding plumbing and fixtures can be very expensive.

**FIRE PREVENTION AND EMERGENCY SYSTEMS.** Check the means employed for fire prevention within the space, such as a sprinkler system and fire extinguishers. Make a note of the location and condition of the system, and determine when it was last inspected. Ask to have the system tested. Note the date on the tags of any fire extinguishers. This provides a good indication of the last time the space was inspected. Inquire about smoke detectors and about the fire alarm system and how it works.

Check for an emergency light system. Ask to see it tested. Note the location of the lights. Do they illuminate all of the necessary spaces?

**SECURITY.** Check all the possible means of entry that could be used by unauthorized persons. While on the roof, note any doors, skylights, or trapdoors and the means of locking them. If there are fire escapes, note their accessibility to the windows.

How many exits are there in the space, and where do they lead? Are there any shared corridors? If the theatre will occupy the ground floor, note the location of the windows with relation to the sidewalks, passageways, and courtyards. Are they lockable? Any exterior entrances to the basement? If the theatre is on the ground floor, make sure that access to the floors above is not through the theatre space. In general, how easy will it be to secure this space from unauthorized entry?

**ENERGY EFFICIENCY.** Check doors, windows, HVAC systems, boiler and other equipment for energy efficiency. (See chapter 13.)

Depending on the locale, additional factors may require scrutiny. In Los Angeles and San Francisco, the building's ability to withstand seismic disturbances will require special investigation. In Los Angeles, the condition of the cooling system is important. In Chicago, the "windy city," tight construction and an efficient heating system are major concerns.

## CAN IT BE BROUGHT UP TO CODE?

Usually, a potential space will not meet all building code requirements for theatres. It is quite possible to convert, renovate, and open a theatre in a space that is not up to code. But sooner or later as your visibility rises, you will be required by fire

and building inspectors to eliminate the violations or face being shut down. Therefore, be sure the space you choose can be brought up to code, and if it is necessary to "phase" the repairs, do the ones that insure public safety first. Given the potential expenses and legal problems involved, it's wise to consult with an architect, contractor, or theatre designer on what will be required to bring a space up to code and how much it will cost.

Do not settle for a space that cannot be brought up to code—a space with an egress violation that is structurally impossible to correct; a space on a high floor of a nonfireproof loft building; or a space which, because of the industry above it, requires installation of an expensive 2-hour fire-rated ceiling. All of these are real problems currently existing in Off-Off-Broadway theatres.

Any space that needs major structural, electrical, or plumbing repairs; egress construction; or major exterior repair work should be avoided, no matter how cheap the rent.

The Charlestown Working Theatre of Boston has judiciously phased its renovations of a landmarked Victorian firehouse. First, with a small Community Development Block Grant, the exterior was stabilized. Next came the lobby work, repairs to the second-floor rehearsal room and administration office, plus installation of replacement windows that replicate the originals and conform to landmark specifications. Phase three, still ongoing, includes development of adequate dressing rooms with showers, a costume and prop shop, a scene shop and storage area in the basement, and the installation of a second staircase.

## IS IT WORTH THE RENT?

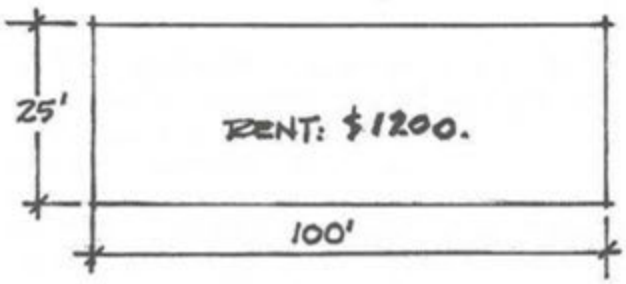
To assess how much you will get for the rent being charged, compute the dollar-per-square-foot cost.

### Dollar-per-Square-Foot Value

Measure the length and width of the space, and multiply them to determine the square footage. Then divide the total yearly rent by the total number of square feet to obtain a dollar-per-square-foot figure.

*L. x W. = total sq. ft.*

*Annual rent ÷ total sq. ft. = $/sq. ft.*




This will give you the net square footage or usable footage of the space. Landlords, however, charge rent on a gross square footage basis wherein they use external measuremnts from exterior wall to exterior wall. Gross square footage charges the tenant for corridors, stairways, restrooms, and other common spaces.

For example, an average storefront in most cities is approximately 25' x 100', giving a total of 2,500 gross sq. ft. per floor. If the monthly rent per floor is $1,200, then the annual rent is $14,400, so:

*12 months x $1,200 = $14,400*

*14,400 ÷ 2,500 = $5.76/sq. ft.*

This would be a good price in New York City, where, in 1991, $15 was an average high rent, $12 an average medium rent, and $10 an average low rent for unfinished space, in other than the midtown and downtown financial office areas.

### Trade-Offs

By using the dollar-per-square-foot formula, it is easy to compare the value of several spaces to see which one offers the best deal—all things being

equal. But nothing ever is equal. Finding a space will be a matter of "trade-offs": a good location and a high rent versus a not-quite-so-good location and a cheaper rent, for example. The trade-offs you make in selecting a space could affect your original goals, and to some extent dictate the kinds of productions you present. Some trade-offs made by existing companies are detailed below.

**AMERICAN REPERTORY THEATRE.** Since 1979, American Repertory Theatre (ART) has been housed in Harvard's Loeb Drama Center, Cambridge, Massachusetts. ART performs in the 566-seat theatre 40 weeks each year, getting it and its support spaces free in return for in-kind services such as teaching and producing student shows. ART has invested over $350,000 for capital improvements, most for lighting equipment and office space. Originally built for student use in 1960, the theatre is multiform: proscenium, three-sided thrust, and arena.

**INTERART THEATRE AND ENSEMBLE STUDIO THEATRE.** Both theatres are housed in a city-owned building in New York City's Clinton Urban Renewal area. The rent is low: less than $1.50 per square foot for Interart. But the companies are on a month-to-month, 30-day notice basis—as they have been for the past 17 years! An uneasy status and a gamble, since they are responsible for all improvements to their spaces. The city is obligated to maintain the public spaces—to take care of electrical repairs and elevator breakdowns—but it is very slow to act. The boiler keeps breaking down, so the theatres and staff offices are often cold.

Interart hopes to buy the building in partnership with the Clinton Preservation Local Development Corporation, which would then sell the building back to Interart outright. Interart would be required to, in turn, lease to all other current non-profit tenants, including the Ensemble Studio Theatre.

## COSTS OF RENOVATION AND CONVERSION

The realities of renovation or conversion cost must be faced early, before a final decision on space is made. Precise figures are difficult to determine in advance. Nonetheless, an estimate must be made before commencing work, and a capital budget must be developed. Here are three methods for figuring costs and arriving at a budget.

### "Ballpark" per Square Foot Estimate

Commercial renovation costs are traditionally determined on a square foot basis. This shorthand method, most frequently employed by architects and engineers, is used for estimating a complete job—new plumbing, electrical wiring, heating, ventilating, and new exterior and interior finishes. Estimates could range from a low of $30 per sq. ft. to a high of $125 per sq. ft. for an adequate job. A 2,500-sq. ft. space could cost as little as $75,000 (primarily cosmetic) or as much as $312,000, depending on the design and the quality of the materials and labor involved.

When using this method to estimate the cost of a theatre renovation, make a separate budget for stage equipment. These budget figures should be developed with the help of a theatre consultant.

### Master Plan Renovation or Conversion Study

A more accurate method for arriving at a cost estimate would be to engage a theatre consultant and an architect to develop a schematic design proposal. This study would include schematic drawings; description of the spaces, including square footage; and a capital budget developed by a professional estimator. Specialist theatre equipment would be listed and described as a separate budget item. This method is clearly the "Cadillac" approach to determining the cost estimate. It is probably also the most accurate, and for larger theatres, the right way to go. Sometimes it's possible to tap

arts agencies to partially underwrite the costs of such feasibility studies.

### Do-It-Yourself Estimate

Your capital budget will break down into three major items: 1) materials, 2) equipment, and 3) paid labor and fees. In all probability, a great deal in labor costs can be saved by doing much of the work yourself. Labor can amount to 50% or more of the estimated costs. Make a complete list of everything that will have to be done. Next make a list of all the required materials and equipment. Determine what labor you can do yourself or with the help of friends; then make a list of all the labor that must be paid for.

**THE BUDGET.** It is important to make a complete budget—even if some equipment will not be purchased immediately, if the work will be done in phases, or if some services will be rendered by your own staff or by volunteer labor. This budget will provide the complete picture.

**MATERIALS.** Start getting comparative prices over the phone for materials. Lumberyard prices can vary as much as 50%. Do some of the groundwork in estimating the cost of materials even before you find a space. If, for instance, you want risers for seating, figure out how much lumber it will take to build them based on the number of seats.

Also, estimate the cost of a running wall. Walls are normally made up of 4' x 8' Sheetrock and 2" x 4" lumber or metal framing. Estimate the cost of a wall 8' high and 16' long; use this figure as a measuring stick for walls.

Paint is another item that can be estimated once you know the approximate square footage you intend to buy or lease.

**EQUIPMENT.** Make a budget for stage and auditorium equipment: stage and house lighting systems; sound and communication systems; projection equipment, if any; stage masking and rigging systems; special dressing room and shop equipment; seating. Repeat the process of comparative pricing.

For example, if you plan to use traditional fixed seating or a type of movable seats, begin investigating what they cost. Also look for sources of used seating—a movie theatre going out of business or commercial theatre undergoing renovation.

Now make a list of other equipment that will be necessary in the other areas of the theatre such as the offices, rehearsal room, lobby, and box office. Start pricing this equipment.

**PROFESSIONAL ASSISTANCE AND LABOR.** Make a budget for anticipated professional fees and paid labor. For instance, architects', consultants', and general contractors' fees may vary widely. Comparative pricing can be done prior to finding your space.

Heeding the advice of those who have been through the budgeting process, you can count on the truth of one unhappy axiom—everything *always* costs more than anticipated.

## EVALUATION

Once you have examined several buildings with a critical eye for structural defects and shortcomings, sit down with the on-site notes you have made and compare the structures, listing them in order of desirability.

Be aware of all the problems of a space before making a commitment. Walk into a potential space with your eyes wide open.

The evaluation checklist on page 235 can be reproduced on standard 8 1/2" x 11" sheets for use on each site. Fill it out, and keep a checklist for each space under consideration. Take along a clipboard, some graph paper to make rough floor plans, and a tape measure.

# 6
# NEGOTIATING FOR A SPACE

## BUYING OR RENTING

Most small theatre companies rent space when they start out. They can neither assume the expense nor the responsibility that comes with space ownership. With a rental, the landlord assumes many of the responsibilities for the facility, although the specifics are a matter to be negotiated in the lease.

However, an increasing number of small theatre companies are now seriously considering the option of buying space. They find it's the only way to control their artistic and financial future. In owning a building, a theatre group must be prepared to deal with the very real financial responsibilities that come with ownership: paying for operational and architectural expenses for both the interior and exterior; meeting the cost of fuel, gas, water, electricity; collecting rent from other tenants; and making mortgage payments. Some producers feel that the time consumed in owning and maintaining a building impedes the creative work.

The real estate market fluctuates greatly, dependent upon a large variety of factors; however, finding the right space at the right price is never easy.

### Real Estate Taxes

Although a nonprofit theatre has tax-exempt status under federal law, it may not be exempt from paying local real estate taxes. If a theatre rents a portion of a building from a commercial landlord, its share of real estate taxes will be passed on to it by the landlord as part of the rent.

Even if a landlord has tax-exempt status (usually limited to religious, charitable, or educational organizations), a theatre tenant is not necessarily exempt from real estate taxes. A church, for example, may be required to pay real estate taxes on that part of the building it rents to a theatre since the theatre is not part of the religious mission. In New York City, tax advantages to a theatre company that owns its space are possible, but they are by no means automatic or easy to obtain. Theatres may find that their schools are not exempt from real estate taxes. For example, in Los Angeles and San Francisco, although nonprofits are generally exempt from paying real estate taxes, a theatre that teaches for a fee will find its classrooms are not exempt. In Chicago, buildings owned by nonprofits are not exempt from real estate taxes, but they are taxed at a lower rate than commercial businesses.

In Boston, 100% exemption for nonprofits is possible. Check with a local accountant, lawyer, or tax authority.

## COMMERCIAL LEASES

Commercial leases are less stringently regulated than residential leases. As in any bartering situation, each party will try to get the best possible deal.

Any lease should clearly spell out the responsibilities of all parties. If either the tenant or the landlord makes concessions, promises of repairs, or changes in the standard lease, put them in writing. Avoid verbal agreements or "gentlemen's handshakes," since they are not enforceable contracts.

### Background Research

Before entering into lease negotiations, both parties need to do some background checking. As a prospective tenant, you may be asked to provide the landlord with financial statements and character references.

Unfortunately, landlords perceive small theatres to be poor tenant risks. You may need to "prove yourself." Bring a board member, lawyer, or theatre consultant to meet with your landlord prior to lease negotiations. Assemble a packet of financial audits, annual reports, press materials, and past rent history. Impressing the landlord favorably makes lease negotiations go a lot more smoothly.

Just as a landlord checks potential tenants, you should investigate your prospective landlord and the representations made about the space. The information you glean may help at the bargaining table. The following is a list of items to check:

**ZONING.** Check with the buildings department to be sure that the space is in an area zoned for a theatre use. If not, a zoning variance must be obtained; most landlords are unwilling to go through this costly and lengthy procedure.

**SQUARE FOOTAGE.** Accurately measure the space to compute the dollar-per-square-foot value. (See chapter 5.) Often the square footage figures quoted by agents or brokers are only estimates. Remember, when a broker states the number of square feet, this calculation is from outside the walls (gross square footage). This estimate makes no deduction for columns, staircases, corridors, lavatories, mechanical or other space. These usually amount to a loss factor of about 20-25% of the space. The space remaining is the net square footage. Rent is paid on gross square footage, not net or usable square footage.

**UNPAID TAXES.** If the building's taxes are in arrears, the city may take over a building for tax default. Although the city will not evict you, if the building is subsequently sold at a public auction, the new owner has no obligation to retain the theatre as a tenant. Ask the owner to give you proof—specifically, the receipted bill for the payment of real estate taxes—or consult the "in rem" listing at the tax collection department to see if a court notice has been issued for nonpayment of taxes. You will need the block and lot number of the property to look up this information.

**OUTSTANDING VIOLATIONS.** Check with the buildings department to determine if there are any violations on the building. If there are, this will hold up your certificate of occupancy application. (See chapter 15.) Violations should be discussed during lease negotiations. The theatre should make it the owner's obligation to correct existing violations at the owner's expense. Also, add a clause covering any nontenant-created violations that occur during the term of the lease.

**REPAIRS AND IMPROVEMENTS.** Bring your notes listing all necessary repairs and improvements and your estimates of their cost to the bargaining table. It will be easier to negotiate for repairs and improvements if all parties have a clear idea of the dollar costs. Renovations and improvements needed to convert the space into a

theatre are a point of negotiation. A landlord will occasionally pay for structural changes—strengthening the floor or ceiling, repairing the stairways, adding toilets or sinks, or running additional power to the space. More often, the theatre must pay for all improvements. Try to get a concession in the rent for the first 6 to 12 months, to offset part of these "front-end" expenditures.

**PREVIOUS UTILITY BILLS.** Find out how much the previous tenant paid in the past 12 months for heat, electricity, and any other utilities. This will give you a rough estimate of the minimum utility costs.

**EXTENDED VACANCY.** If the space has been empty for a long time, the landlord probably will be anxious to rent and may be receptive to concessions in the lease.

**THE LANDLORD.** Talk with other tenants in the building or to the previous occupant to find out if the landlord is responsive, trustworthy, and accessible.

Once you and the landlord have researched all these potential hazards, you are ready to enter formal lease negotiations.

## Lease Negotiations

There are points of negotiation that are common to all commercial leases; in addition, there are special clauses that must be negotiated by theatres because of the special nature of the business. An attorney with real estate experience is of invaluable help.

The following apply to standard commercial lease negotiations:

**LENGTH OF LEASE.** A long lease will allow time to recoup any investments made on improvements or conversion. It also allows the theatre company to accurately budget its rent obligations. Do not consider less than a five-year lease. Each time the lease expires, the landlord has the right to raise the rent; usually there are no legal restrictions on the percentage of the increase, as in some residential leases.

**RENEWAL OPTIONS.** The right to renew the lease, after the initial lease term, should be negotiated at the outset. Establish the amount of rent for each renewal period if the option is exercised.

**PASS-ALONG AND ESCALATION CHARGES.** The landlord may request a clause to cover any increase in operating costs that occur during the lease term. This is in addition to the base rent. A *pass-along* (your portion of actual cost increase in operating expenses and real estate taxes) over the base year is very common. Make sure you do not pay more than your share. Escalations may be tied to the consumer price index or the Porter's Wage Index, or may be a set percentage increase.

**OPERATIONAL COSTS.** Heating, electricity, air conditioning, and any other costs involved with the actual operation of the building will need to be negotiated. Consider the times of day and night that the theatre will need heat and air conditioning. Many commercial buildings shut down operations at the end of a working day, so there may be extra costs to receive these services at night and on weekends.

**NET LEASES.** One way to possibly lower the rent is to negotiate a *net* lease. In such leases the tenant is responsible for the facility and its maintenance, as well as the real estate taxes. This gives the theatre freedom to make any necessary interior alterations and improvements. You will need to negotiate the responsibility for the structural systems: internal wiring, heating and air conditioning, plumbing, and the boiler.

If you are negotiating a net lease, insist that the landlord obtain a *nondisturbance agreement* from the mortgager. This is a written guarantee that, in the event of a foreclosure on the property, the theatre will be permitted to remain in the space for the duration of the lease.

Many lease arrangements are possible. For example, the Eureka Theatre in San Francisco negotiated a ten-year net lease making the landlord responsible only for the roof and exterior of the building. The Triangle Theatre of Boston signed a lease with an innovative rent scale: $100/month when dark, $300/week during rehearsals, $350/week during performances. When the theatre is dark, Triangle acts as rental agent for the space.

**ASSIGNMENT AND SUBLEASING.** *Assignment* gives the tenant the right to turn over the entire lease and premises to another party in the event that the tenant is unable to finish out the lease. *Subleasing* is a short-term renting of the space by the tenant, who remains responsible for the space.

Landlords sometimes resist such clauses and the best you may get is an agreement that "consent will not be unreasonably denied." The landlord may also ask for the right to examine all sublet agreements prior to approval. Try to arrange a subleasing agreement without approval. This will give you the flexibility to handle the unexpected opportunity, such as another company needing rehearsal space or a hit show in search of a home.

Note: If there is a sublease, the landlord may request a portion of the income. Avoid such a clause.

**INSURANCE.** Most landlords require that their tenants carry a specific quantity of liability insurance and name the landlord as additionally insured. This can be expensive. Ask about the fire insurance on the building to determine if the contents are insured. Most landlords only carry structural fire insurance and each tenant is responsible for insuring personal property and fixtures.

**OPTION TO BUY.** Try to include an option to meet any purchase offer on the building.

The following points apply specifically to theatrical leases:

**DEFINITION OF USES.** Theatrical *use* implies use of a space for shows, rehearsals, and all that goes into mounting a show; if the space is to accommodate other uses—offices for instance—specify this in the lease. Negotiate for the unexpected classes, lectures, and film showings—anything that may expand your theatre artistically or financially.

**The right to advertise.** An agreement must be made concerning use of exterior signs and banners: their location on the building or the street.

**Other tenants.** Negotiate a clause stating that adjacent spaces—above, below, or on either side of the theatre—may not be rented to any tenant whose activities interfere with the operation of the theatre (noise from machinery, for example). Also, negotiate a clause to exclude future tenants whose use of a space within the building would cause the operation of the theatre to become illegal, such as a high-hazard occupancy group like a fireworks factory.

**Warranty of production content.** The landlord may request protection or indemnification against productions that violate the law in any way.

## SPACE PURCHASE

Purchasing a space is a *major* financial and psychological commitment. Because this decision will have long-term effects on almost every aspect of your operation, it should not be made lightly. Keep in mind that it's almost impossible for a small theatre company to buy a space without a strong and committed board of directors to raise the down payment and closing costs, and possibly guarantee the mortgage.

**DOWN PAYMENT.** Typically, the down payment will be 10% of the purchase price, but it can be as high as 20%. You'll need this money at the closing.

**MORTGAGE.** Obtaining a mortgage will not be easy. Most commercial banks are reluctant to make loans to small theatre companies. They see them as bad credit risks, and know it will make for poor public relations if they are forced to foreclose on a small theatre.

The bank will require you to submit a wide range of financial data, from budgets to grant letters to financial statements. The bank is concerned with your ability to repay the loan (debt service) and will, most likely, want one of your board members to personally guarantee the loan.

**APPLICATION FEE.** Every time you apply for a mortgage, there is an application fee. So shop around and talk to an officer, but don't submit an application until you're sure it's likely to be accepted.

**POINTS.** At the closing you will be required to give *points* to the bank. A point is 1% of the total mortgage. The number of points required depends on the bank and the interest rate of the loan. For example, one bank may offer a mortgage at 10% with 2 points, another a rate of 9.5% with 3 points. Basically, you're making a trade-off between more cash up front versus a higher debt.

**RATE.** You will have to chose between a *fixed rate* that stays the same over the term or an *adjustable* or *variable rate* mortgage. You will probably need someone with financial savvy to help you decide which type is more advantageous in the prevailing fiscal climate.

**TERM.** The term of the mortgage involves a simple trade-off: the longer the term, the more money you'll ultimately pay; the shorter the term, the higher your monthly payments.

**BROKER'S FEE.** Generally the seller is responsible for this fee. However, it is not unusual for the buyer to chip in to close the deal.

**LAWYER'S FEE.** Any theatre group about to obtain a space, whether buying or renting, should consult a real estate lawyer. You'll need a lawyer to check the deed, draw up the contract of sale, and confirm that all documents are in order.

**TITLE SEARCH.** Usually the bank does the title search, but you'll have to pick up the cost of verifying that the property has no encumbrances. Sometimes the buyer hires a title search company to do this work.

## LEGAL ASSISTANCE

A lawyer on your board of directors may be able to give aid and advice. Or check with local theatre service organizations (see Resource Directory), or with Volunteer Lawyers for the Arts, Volunteer Consulting Group, or Business Volunteers for the Arts (see chapter 7). It's really important to have a real estate lawyer, not just any lawyer.

## NEIGHBORHOOD ASSISTANCE

Every city has a network of neighborhood advocates whose mandate is to serve the best interests of their local districts. These advocates may be elected legislators, like Chicago's aldermen or the members of the city council in Boston, Los Angeles, and San Francisco. Or they may be advisory bodies like New York City's community boards or Atlanta's neighborhood planning units. In some cities—Chicago, for example—there are influential community groups (merchant and block associations) with no official government status. In varying degrees, these advocates all carry clout at City Hall, and it's worth the effort to get them on your side. (See Resource Directory for more detailed information.) Contact the group representing the district in which you have found a space as soon as possible, especially if a zoning variance is required. (See chapter 14.)

Even if you do not need a zoning change, community groups can help you negotiate the red tape

of city agencies and can provide sound advice about procedure. Frequently, they can help leverage community development (CD) funds and in some cases may actually control disbursement of such money. Your council member or community board member may even be able to help you find a space—as happened in New York City with the Interart Theatre.

Neighborhood advocates will want to be convinced that your proposed theatre is in the best interests of the whole community before they endorse your project. They are likely to ask the following questions:

- Is theatre use viable? Is the theatre financially stable?
- What would a theatre mean for the existing neighborhood? How would it fit in with or complement existing uses? Would it enhance the community?
- What additional demands would a theatre make on the existing services in the community (e.g., sanitation, police)? Would it generate excessive noise, traffic, and parking problems? What are its hours of use? Are they compatible with neighbors' uses?

Think through these questions prior to appearing before your community board or alderperson. Bring as much evidence as you can to prove your theatre will benefit the community. (For information about community boards and zoning, see chapter 14.)

PART THREE

# DESIGN AND PLANNING STRATEGIES

# INTRODUCTION

This section surveys design possibilities, suggesting strategies for stage space, audience spaces, and support spaces, along with ways to save money and get the most for the least in services and materials. It shows how to "stretch" space when square footage is at a premium. Design ideas included here have little relevance to planning large, conventional theatres; they are targeted to small, nontraditional theatre spaces.

Uniqueness of design is one of the most attractive qualities of a small theatre. The nontraditional environment and ambiance draw an audience; the uniqueness of the space becomes a vivid and graphic expression of the company's esthetic.

Design of the space components of any theatre should follow a coherent program. Commence by considering the stage space, proceed to the design of the audience space in its relationship to the stage, then move to planning the necessary support spaces.

A successful theatre design must give equal attention to these three basic areas. No theatre that shortchanges stage, audience or support spaces can function with maximum efficiency. Special emphasis in this section is placed on rehearsal rooms and shops—the unseen work areas where theatre magic is fabricated. These are too often considered unimportant by managers, boards, and architects, especially when capital funding falls short of projected goals.

## THE THEATRE CONSULTANT AND THE ARCHITECT

The right architect and theatre consultant will make design, planning, and renovation a much easier, less painful process. Their knowledge, experience, and imagination should add a substantial creative contribution. However, some small groups feel they can't afford specialists or are uncertain how to make the best use of such expertise. Learning what to expect from an architect or theatre consultant will help you make informed decisions about how to work with these professionals.

An architect together with the theatre consultant will design the space; he or she will coordinate all the work of consultants and contractors, and be responsible for getting bids and for holding to estimated costs, as well as for quality of construction. An architect's expertise also will be needed to handle zoning variance procedures and to present drawings to the community board. A licensed architect's or contractor's stamp and signature will be necessary when filing plans with the buildings department.

Only a handful of architects have had extensive experience in designing theatres; most have not. Therefore, a theatre consultant can be invaluable in interpreting your wish list for the architect. The theatre consultant can provide expertise in planning the stage and seating layout, stage sound and lighting systems, backstage and support spaces like shops, rehearsal spaces, and dressing rooms. The theatre consultant can also advise on specialized theatre equipment and obtain cost estimates.

The working dynamics of the architect/consultant/client collaboration will be unique since creating a theatre is a very personal exercise. In the past, it was general practice for the consultant to be a subcontractor to the architect. Today, the consultant is under contract directly to the client and hired in the initial stage of the project. In the theatre, form must follow function; therefore, it is advisable for the theatre consultant working in tandem with the architect to have first crack at schematically laying out the stage, seating, and ancillary spaces.

The following are some suggestions for making the best use of outside expertise in planning and carrying out your renovation:

- Make certain consultants' ideas are compatible with your concept.
- Check references of architects and consultants with other theatres that have used their services.
- Get these specialists in on the ground floor of the planning process.
- Seek their expert evaluation of any building you are seriously considering, with the architect paying particular attention to the

problem areas outlined in chapter 5. Have the theatre consultant focus on the space's potential as a theatre and the suitability to the type of productions you plan to mount.

- Enlist the help of the architect and consultant in preparing the cost estimate for the renovation.
- Let the architect advise on details of the lease, but be sure to have a real estate lawyer handle all of the lease negotiations. An architect should draw up preliminary drawings for submission to the buildings department. Try to get feedback from the buildings department before drafting final plans.
- Review energy efficiency requirements with the theatre consultant and architect. Consider engaging the services of an energy auditor.
- A theatre generalist sympathetic to your goals is your best consultant. If specialists are needed, the consultant can provide referrals.
- Recruit an architect and a consultant for your board of directors, and hope they will offer pro bono services.
- Try to obtain inexpensive architectural advice and assistance if you can't secure pro bono services; nonprofit architecture firms may offer reduced rates. Even less expensive are students and apprentice architects. But be wary; you often get what you pay (or don't pay) for.
- When hiring consultants, arrange for a flat fee without regard to hours. If consultants are engaged before the space has been selected and work commences, contract these services on an hourly rate, and arrange to make these payments applicable to the overall project fee, if possible.

A final note: one person should be given the authority and responsibility to deal with the architect and consultant. It should not be done by committee.

Whether you plan your theatre with or without the assistance of a consultant or architect, the ideas presented here are meant to trigger your imagination. This section does not present a blueprint for your space, instead, it attempts to present a wide range of possibilities.

# 8
# THE STAGE SPACE

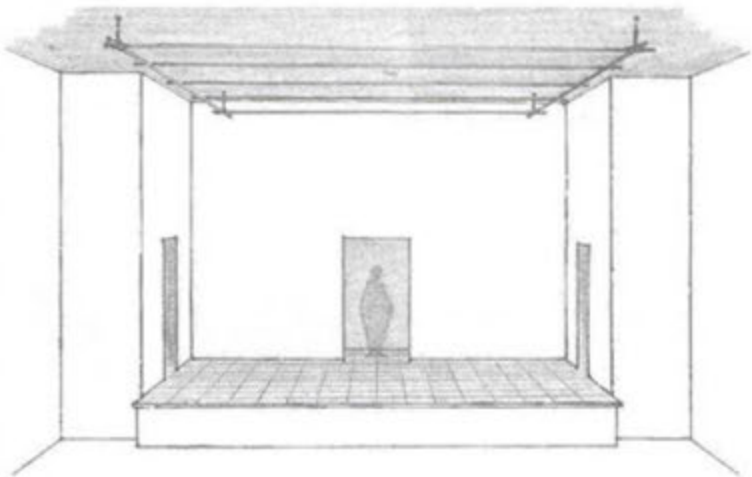
The first line to establish in any theatre is a "magic line"—a real or imaginary demarcation that joins the actors to the audience or, in some productions or theatres, intentionally separates and alienates them. All other lines will follow naturally, radiating from this first line. If this is the right line, it will be the start of a successful building. All the other lines separating and joining the stage and audience spaces and the support spaces, down to the location of the last dressing room mirror, are probably going to be right.

In small theatres, flexibility in stage size can be obtained cheaply because muscle power rather than machine power makes the space changes. This is the reverse of conventional thinking about flexibility in larger theatres where sophisticated equipment is employed to change configurations. As the small theatre company grows in size, operating budget, and scope of artistic programming, there will come a time when this concept of cheap flexibility may no longer be feasible.

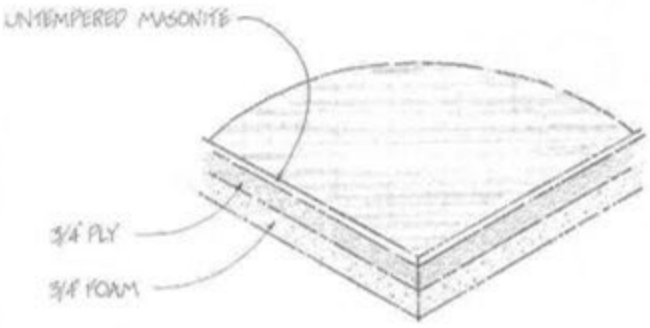
The stage space, regardless of size or shape, has these basic components to consider: the floor, the walls, the means of access, and the overhead and rigging.

## STAGE FLOOR

Performing directly on the existing floor of the building would seem an inexpensive and flexible way to create a stage, but it is seldom, if ever, feasible. In most old buildings, even if the floor is



***The Stage Space. Floor, overhead and rigging, walls and access.***




***AMAS portable floor.***

made of wood, it will be too rough, uneven, and/or inflexible. Floors of concrete, marble, or steel are too hard, too dangerous and unacceptable to Actors' Equity. So it is both desirable and necessary to lay an acceptable stage deck over the existing floor of the building.

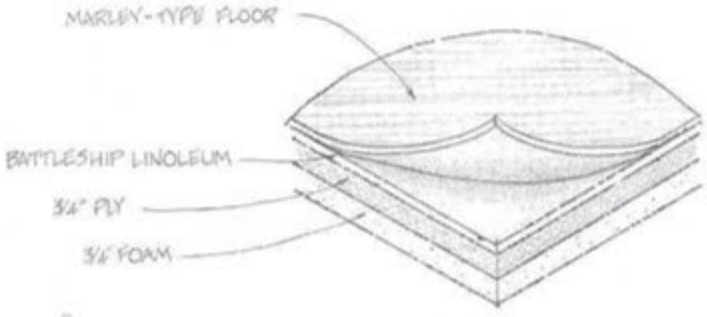
## Temporary and Portable Solutions

The AMAS Repertory Theatre in New York developed an inexpensive portable floor: a 3/4" foam base with 3/4" plywood on top, finished with an untempered Masonite surface. It is constructed in 4' x 8" sections with the Masonite overlapping each plywood section by half to prevent seams from rising in the event the wood warps.

A variant on this floor was developed as a temporary outdoor dance floor: the base of 3/4" foam was covered, first with used battleship linoleum, and then with a top layer of Marley-type floor.

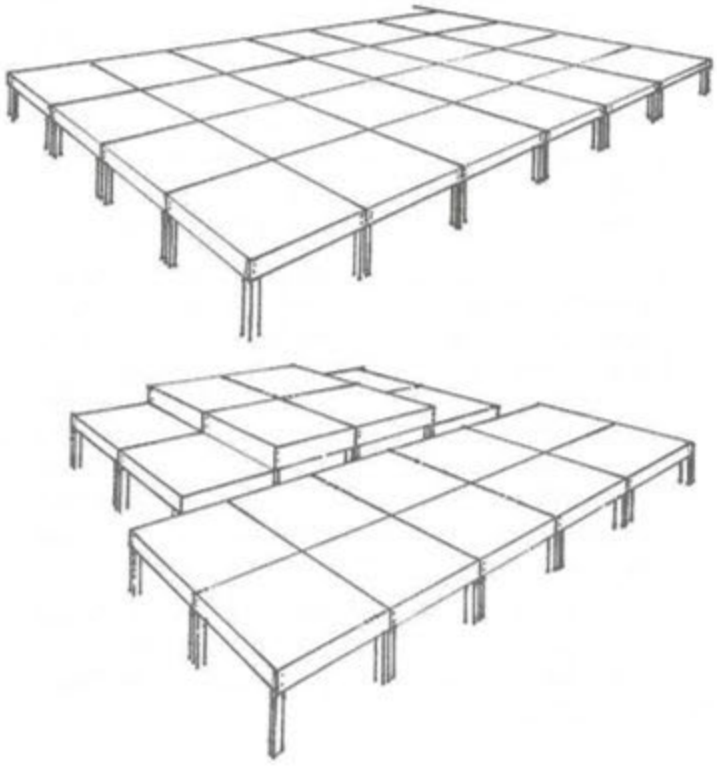
Both of these decks were laid directly over existing concrete floors. They were inexpensive, easy to make, resilient, and portable, but neither would be acceptable as a permanent floor.

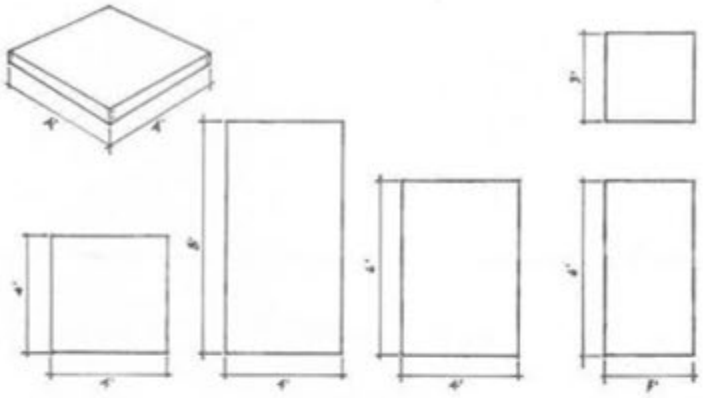
***Temporary outdoor floor.***




**TEMPORARY RAISED STAGE FLOORS.** A raised stage clearly provides improved sightlines. If a simple modular platform system is devised, almost total flexibility in size, configuration and placement within the space can be achieved. Start with a simple system of 4' x 8' sections of 3/4"

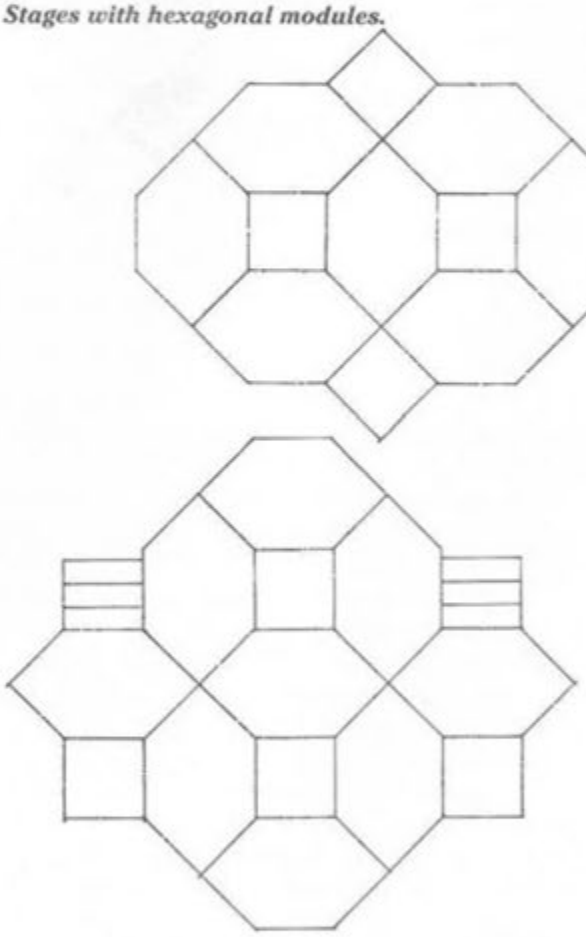
***Temporary raised platform.***





*Types of modules.*

*Stages with hexagonal modules.*



plywood platform tops "legged up" on 1" x 6" stock, and clamped or bolted together. A linoleum or Marley-type floor (particle board or Homosote are cheap, but not durable) can be laid over the platform for a better surface. Fire-retardant wood and other materials should be used throughout.

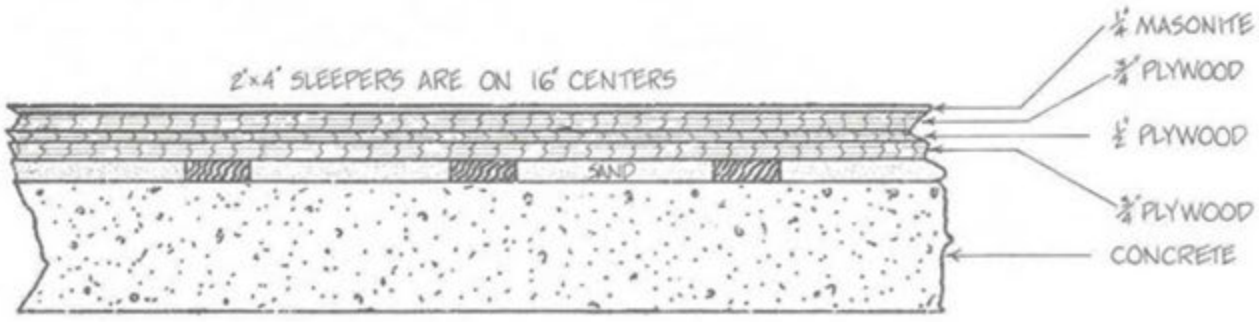
Vary the module to suit your space and design needs: 4' x 4', 3' x 6', 4' x 6'.

Special hexagonal and triangular units, in addition to squares and rectangles, can create even more varied, flexible, and dynamic playing areas.

## Permanent Floors

A permanent stage deck should never be laid directly on concrete; instead, it should be laid on wooden sleepers. These sleepers should be 1" x 3" or heavier timbers crisscrossed on 16" centers and attached to the wood floor or concrete slab. Crisscrossing two layers of 3/4" plywood creates the least expensive and best floor. Hardply is preferable for the top layer. Marley-type floor, 1/4" Masonite, or rolled linoleum laid over the plywood also can make a good surface. Clean (sterilized) sand, fiberglass insulation, carpet padding, or Homosote between sleepers will help deaden noise.

*Floor section.*

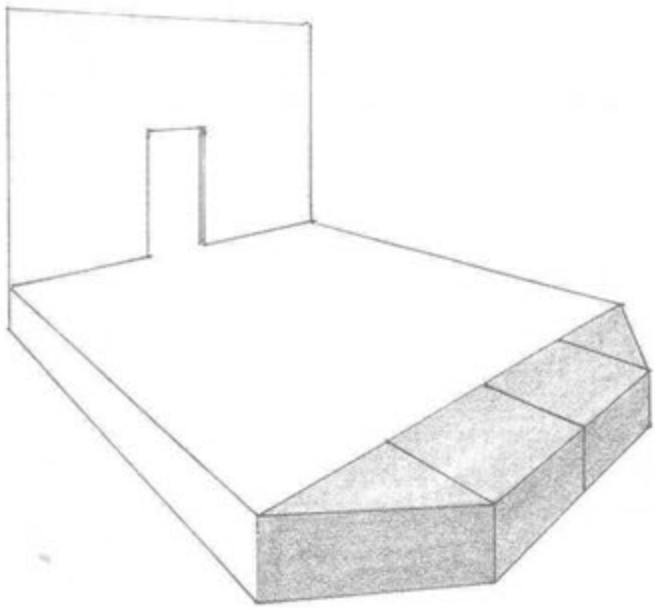


Stage floors must withstand heavy abuse and frequent repainting. They should be thought of as expendable, not sacred, and should be replaced whenever wear and tear require.

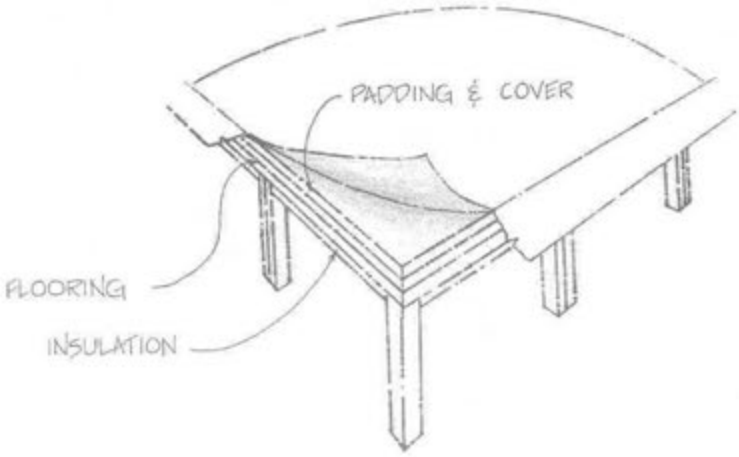
Resilience is an important factor, especially if the stage floor is used for dancing. Equity rules—which prohibit any dancing on marble or concrete floors in either rehearsal or performance, or on wood or any other substance laid directly over concrete—state: "An air space of at least 1-5/8 inches shall be provided between concrete, marble or similar surface." Equity also issues guidelines for constructing an approved dance or "sprung" floor. This very resilient floor is not practical, however, for theatre production. It has too much spring for the actor and could crack or give way under the weight of heavy stage scenery. Peter Brook made sand and earth floors fashionable. It is not known how actors feel about such "floors."

**PERMANENT RAISED STAGES.** Permanent stage floors, such as an end stage or a proscenium

***Permanent raised stage.***



***Floor padding.***




stage, require stronger structural support—steel rather than wood might be considered.

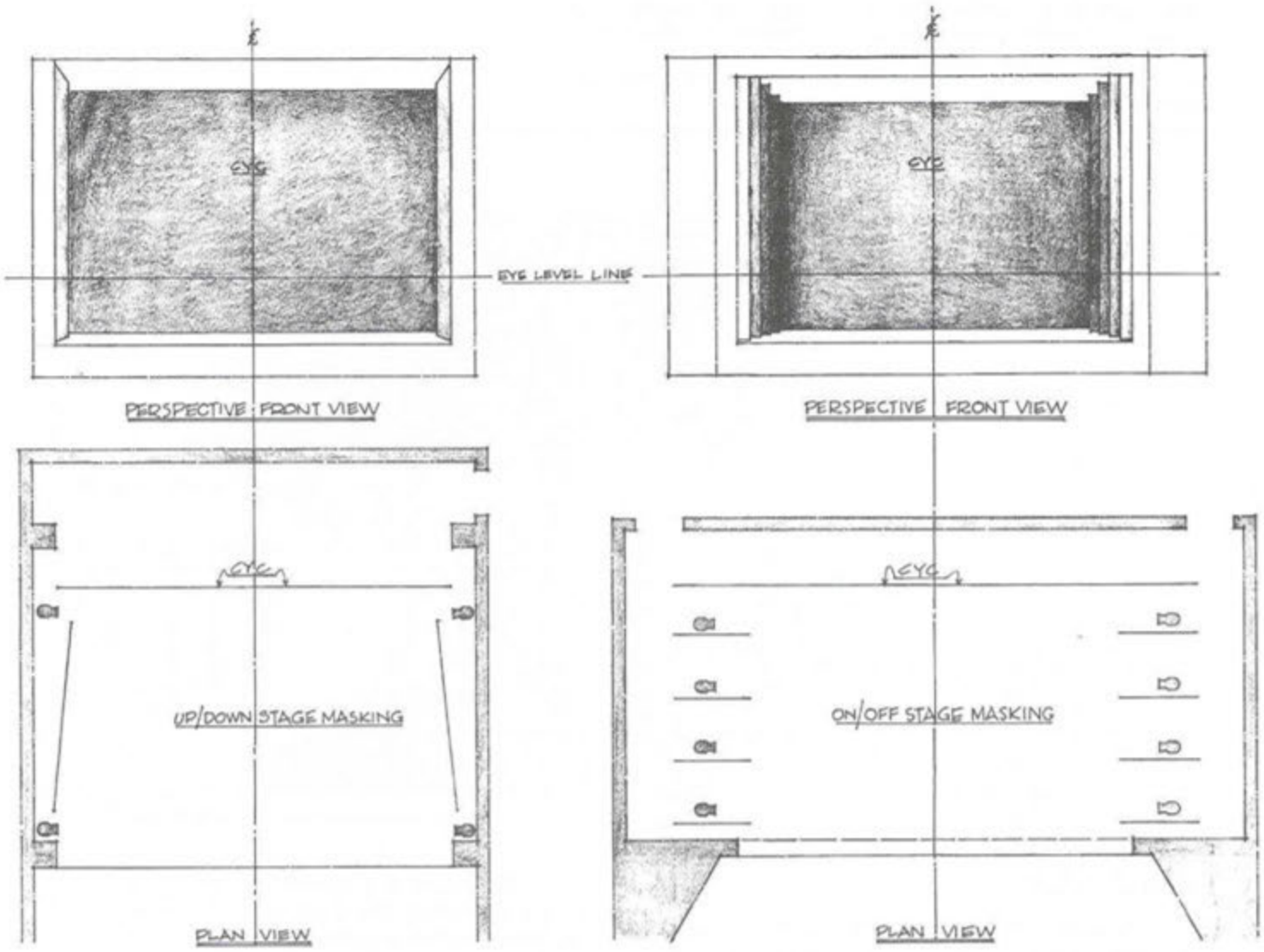
With a permanent stage, flexibility of shape can be achieved by removing modular sections and/or adding specially shaped pieces at the leading edge.

Reverberation—that exasperating, hollow thud from beneath the platform—can be reduced by lining the underside of platforms with ozite underpad, fiberglass insulation, or Homosote. Glue this insulation directly to the underside of the platform top before assembly—prior to attaching the top to the frame. In addition, the frame itself can be wrapped in foam rubber, fiberglass, or even covered in Homosote. For further noise suppression, Ozite, rubber, or neoprene padding cut to size can be applied to the bottom of each platform leg.

Once the permanent stage frame is in place, cover two crisscrossed layers of 3/4" plywood with Masonite, Marley-type floor, or rolled linoleum. Homosote or rug padding covered with painted canvas or carpet can, of course, be used on top of platforms to reduce surface noise. To face the sides of the platform, use Masonite, 1/4" plywood, velour, duvetyne, or a material that enhances the current stage setting.

New York City's old code requires all stage floors to have a live load value of 100 pounds per

***Side masking running up and down stage is the most space efficient.***
***However, side masking running on and off stage, though it requires greater wing space, provides better access and better lighting positions. Cross-over space behind the setting should be approximately 3' minimum. Admittedly, it is often less. Some theatres solve the cross-over problem by placing cross-overs behind the stage house, through the basement, or above the stage.***




square foot; the new code requires 150 pounds per square foot. (See chapter 19 for live load requirements in other city codes.)

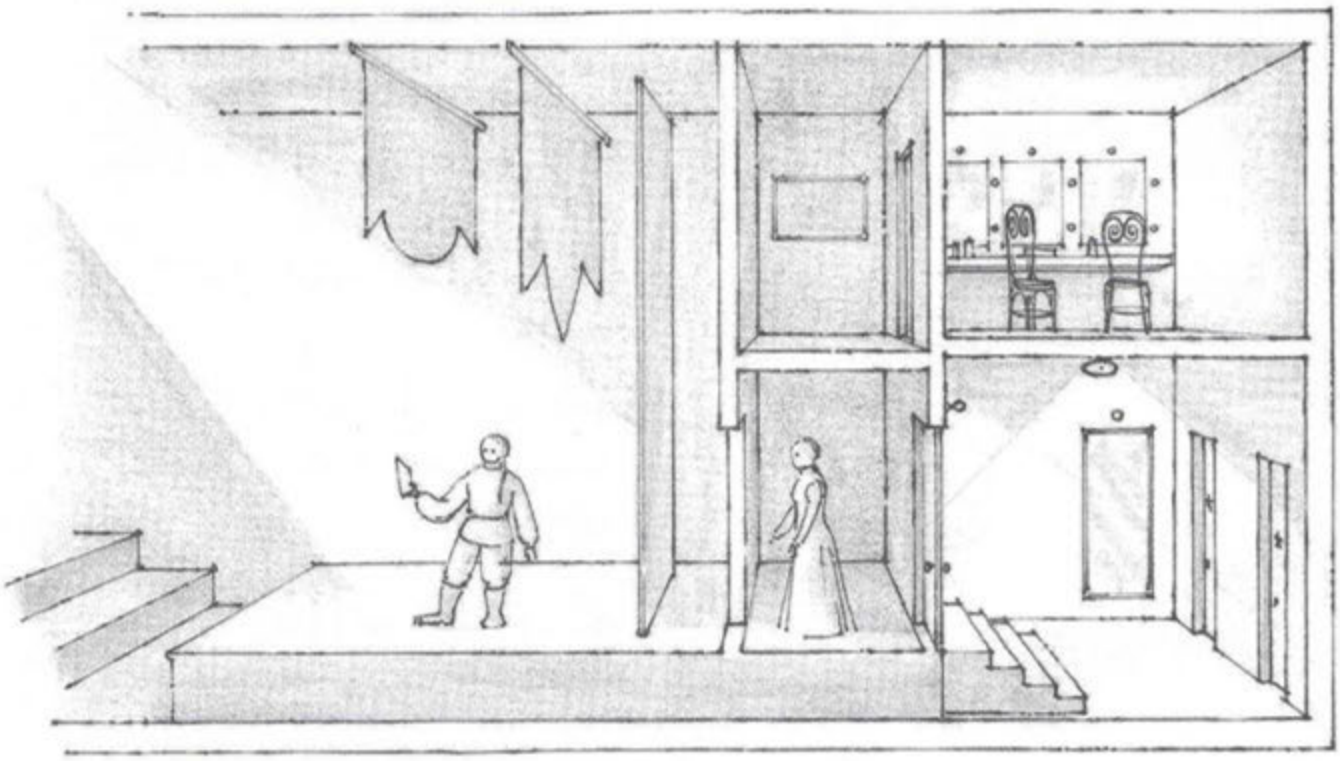
Although a technical director or stage carpenter can build this, it's probably worth the expense to have a general contractor construct the permanent deck. Have the work bid as part of the overall contract.

## STAGE WALLS

It is usually preferable for stage walls to be "negative space." They should remain neutral and "unseen" until there is an artistic reason for using them. For this reason, stage walls are often painted matte black. However, gray or even white can create a neutral or negative background, if properly handled. Bare brick walls also provide neutrality, a design strategy adopted by many small theatre companies that feel exposed structural brick walls provide the right informal environment for their productions.

Often, the stage walls will be the exterior walls of the building. If not, the wall between stage and backstage support areas must form a sound barrier. Brick, cinderblock, or soundproof materials should be used. If the wall is of Sheetrock, put two layers of 5/8" Sheetrock on each side and fill the space between studs with fiberglass insulation to achieve better soundproofing. Most codes will require this wall to have a 2-hour fire rating.

***Establish a corridor or sound and light barrier between the stage and the backstage and support spaces. Actual doors are often not practical for small stages; open exits are frequently best. Though hanging curtains or backdrops can reduce light and noise transmission from off-stage, it may be necessary to create a sound/light lock behind these exits***



## STAGE SIZE

The minimum stage sizes listed in chapter 2 are just that—absolute, bare-bones minimums. It is difficult to conceive of a stage that is too large—except, perhaps, the Lincoln Center's Vivian Beaumont Theater, which was initially planned to accommodate rotating repertory but became a very expensive staff parking lot for a while, until new management found ways to use the space more creatively.

Except in arena configurations, stage space must be provided for scenery, stage masking, machinery, lighting positions, and cross-overs, in addition to storage for show props and live scenery.

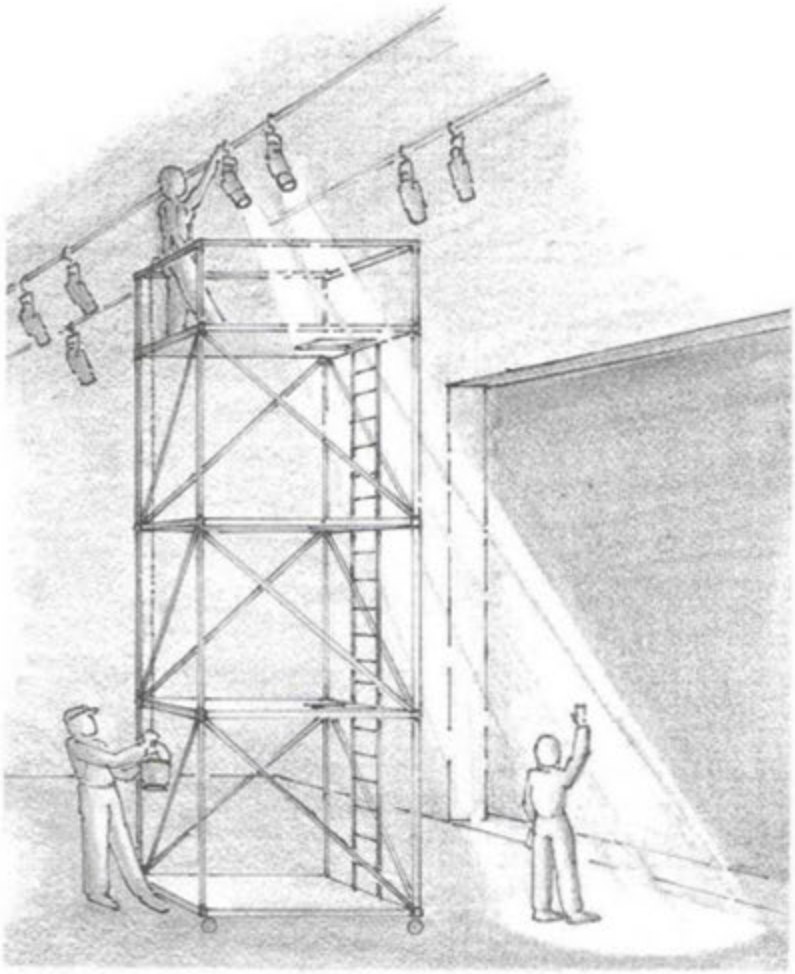
If either side wall of the stage must accommodate a counterweight or hemp and sandbag system to handle flown scenery, it will require approximately 2'6" of depth plus space for the operator—a minimum of 5' to 6' of additional wing space.

Substituting a motor-driven winch system above or behind the stage can solve this space problem, but it is expensive.

## ACCESS TO THE STAGE

Building codes stipulate the number of exits required from the stage. In New York City, for example, the code requires at least two means of egress from the stage that are "remote from each other." This safety regulation applies to actors' access to the stage and it has nothing to do with the number of exits a set may require; nor does it have much relationship to the number of exits necessary to make the stage functional. It should be noted, however, that many small end stages without proscenium or curtain have satisfied the building department with one exit from the stage.

In the thrust or arena configuration, where audience and stage share the same volume of space



***A rolling scaffold, genie tower, or A-frame ladder is useful for grids of 30' or less.***

and the stage is not enclosed, access to stage is usually not a problem.

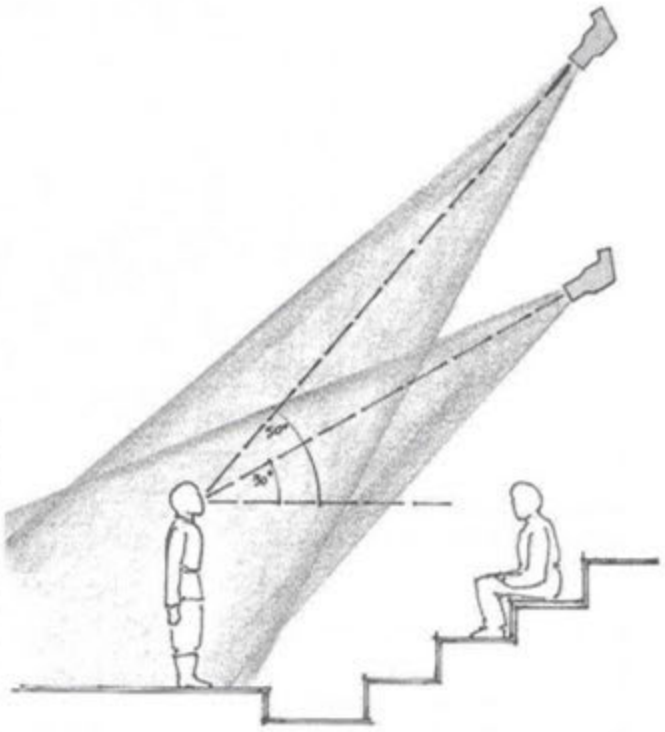
To function well, both proscenium and end-stage theatres need a passage giving access to the stage from front-of-house without going through the auditorium. (This could be through the basement.) In a proscenium theatre, there also should be a door leading directly from the auditorium to the stage. A second door at this location will provide a better sound and light lock. In fact all doors leading to the stage should operate without noise and function as light and sound barriers. Easy access to the stage from catwalks and other front-of-house lighting positions as well as from the control booth is also desirable.

In addition to the doors for personnel, there should be an access door to the stage large enough to handle scenic pieces. Its size will vary greatly

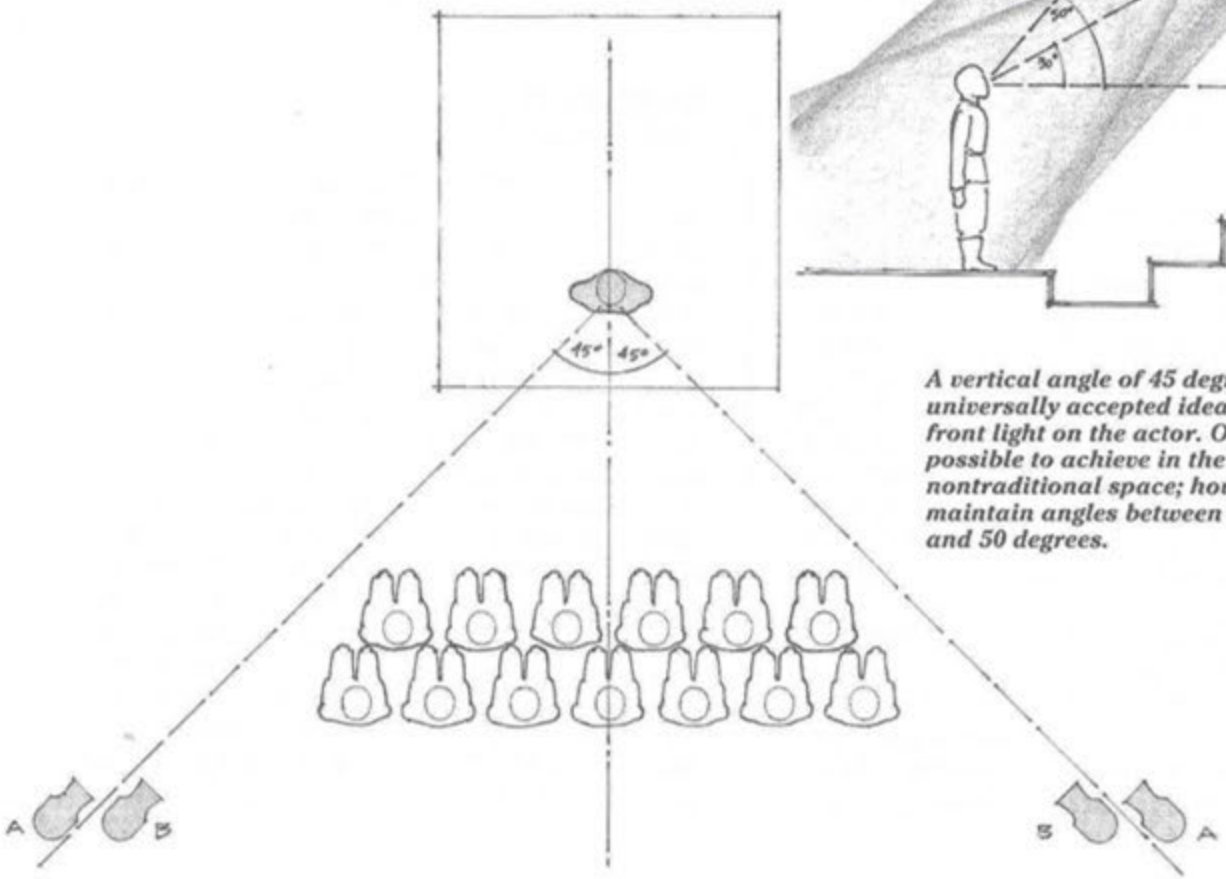
## OVERHEAD AND RIGGING

A good rule of thumb for any stage house over 30' in height is to install a counterweight or motorized winch rigging system, no matter how simple it may be. If your stage house is less than 30' high (usually the case in converted spaces), hanging scenery and lighting equipment can be handled from the floor with reasonable efficiency and safety. (A 20' A-frame ladder with full extension reaches 33' high. Large pneumatic "genie towers" rise to great heights; but the most practical for small stage use is the model that extends to 29', allowing a maximum working height of 36'. Scaffolds can go to great heights, but their size and instability on the floor make them impractical for small stage use.) Remember, too, that A-frame ladders, genie towers, and scaffolds require a level floor—no steeply raked stages, steps, or narrow platforms, please. This means you should do rigging and hang electrics before scenery load-in

**FIXED GRID SYSTEM.** When using a fixed pipe grid system, plan it to cover a large enough area of the ceiling for all overhead lighting positions. It may be advantageous to design a grid for the entire ceiling if the space is planned as a two-, three-, or four-sided arena, or as a flexible theatre space. In any configuration, the grid size should be larger than the playing area to provide both good overhead lighting angles and positions for front lighting the actor's face.

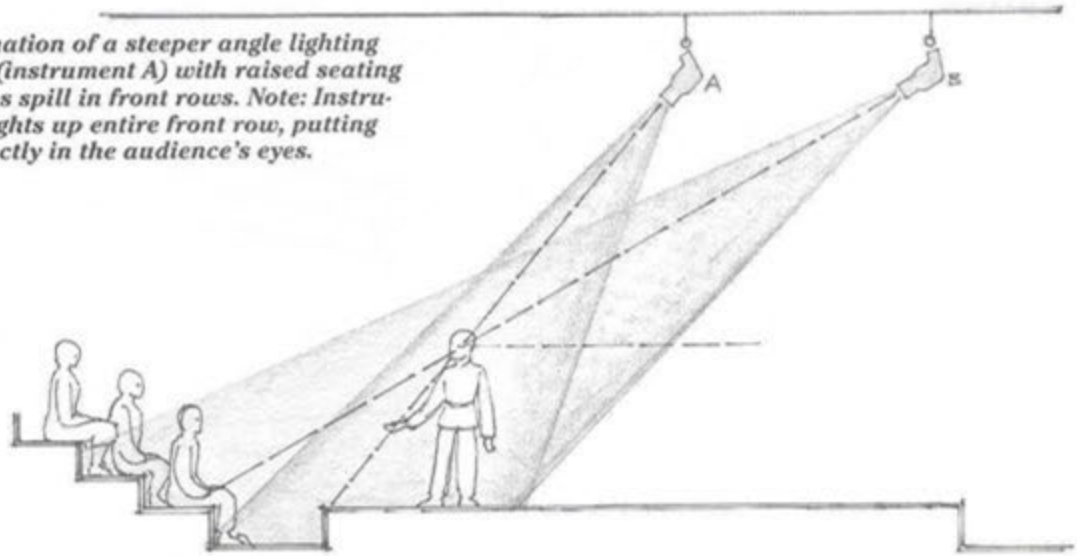


***Front-lighting an actor or area is generally accomplished by using a minimum of two instruments, one from either side at approximately 45 degrees; four instruments, however, will allow two different set-ups of color to light each area.***

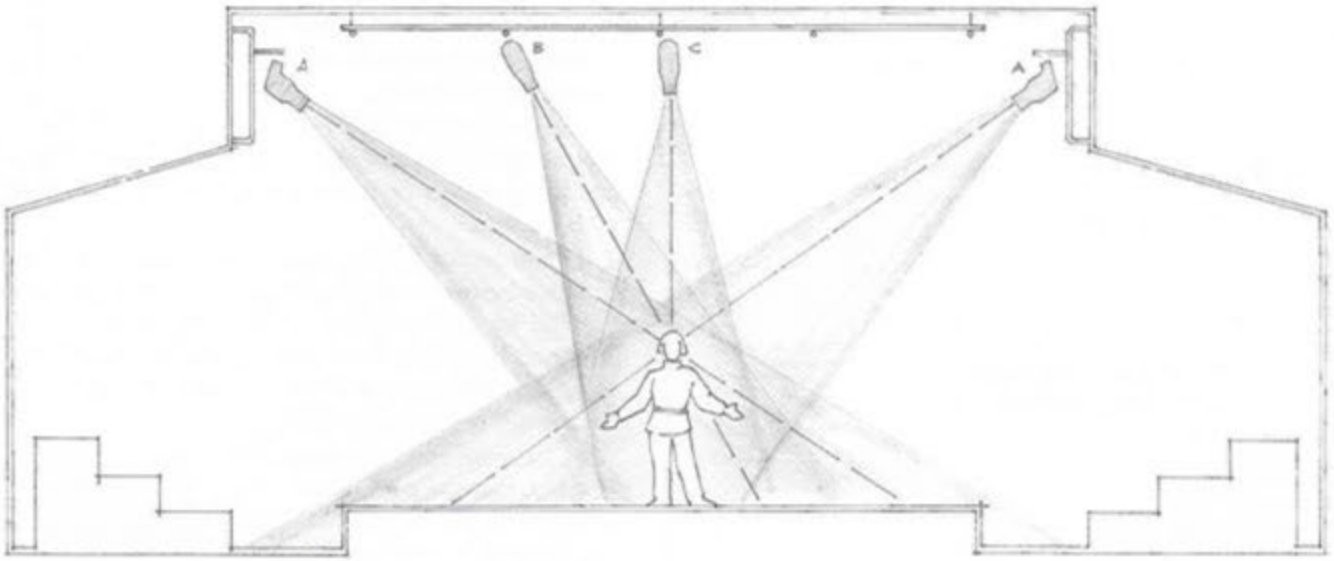



***A vertical angle of 45 degrees is the universally accepted ideal angle for front light on the actor. Often this is not possible to achieve in the converted, nontraditional space; however, try to maintain angles between 30 degrees and 50 degrees.***

Design the grid so that side, back, and down lighting positions are provided. When planning the grid, keep in mind its relationship to the seats. For example, in an open stage configuration, lighting instruments must be hung so as not to shine into the eyes of the audience or to illuminate their bodies.

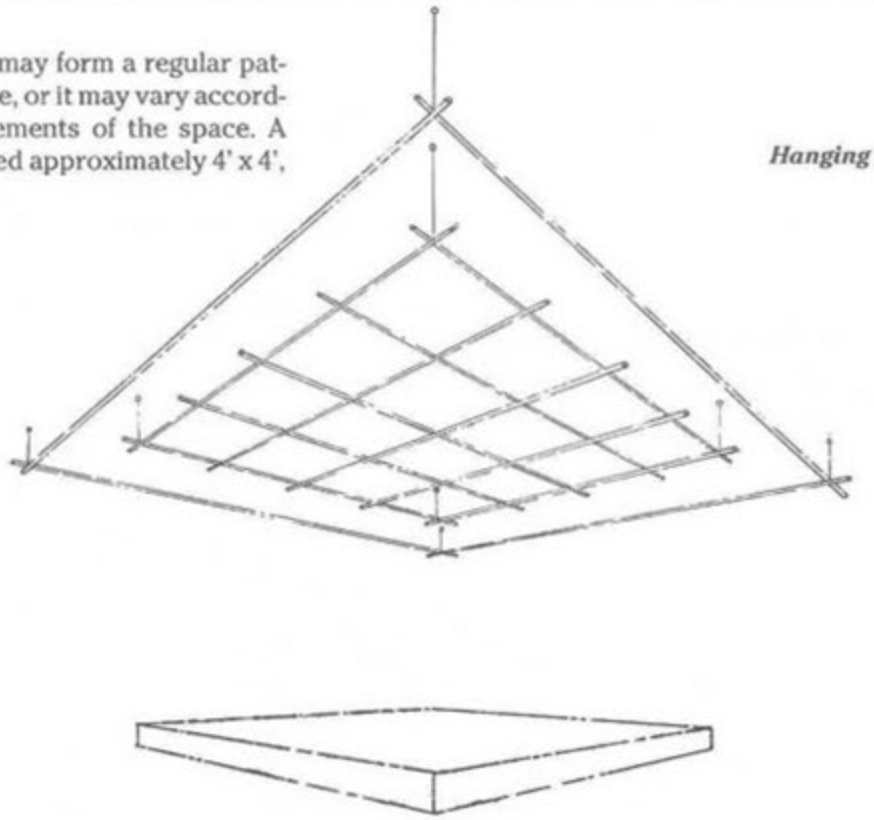



***A combination of a steeper angle lighting position (instrument A) with raised seating minimizes spill in front rows. Note: Instrument B lights up entire front row, putting light directly in the audience's eyes.***



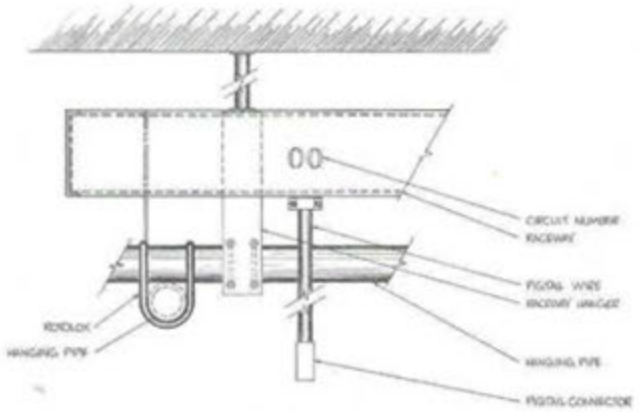

***(A) Side, (B) Back, (C) Down lighting positions.***

The layout of the grid may form a regular pattern using a uniform module, or it may vary according to the specific requirements of the space. A cross pattern of pipe, spaced approximately 4' x 4', is standard for a normal ceiling height and an average stage size; 3' x 3' will work for a small, low-ceilinged space.



*Hanging grid.*

*Detail for a permanent raceway system.*




Use standard 1-1/2" schedule 40 pipe for easy mounting of instruments. Distribute cable and outlets in raceways or in neatly tied bundles of cable with outlets.

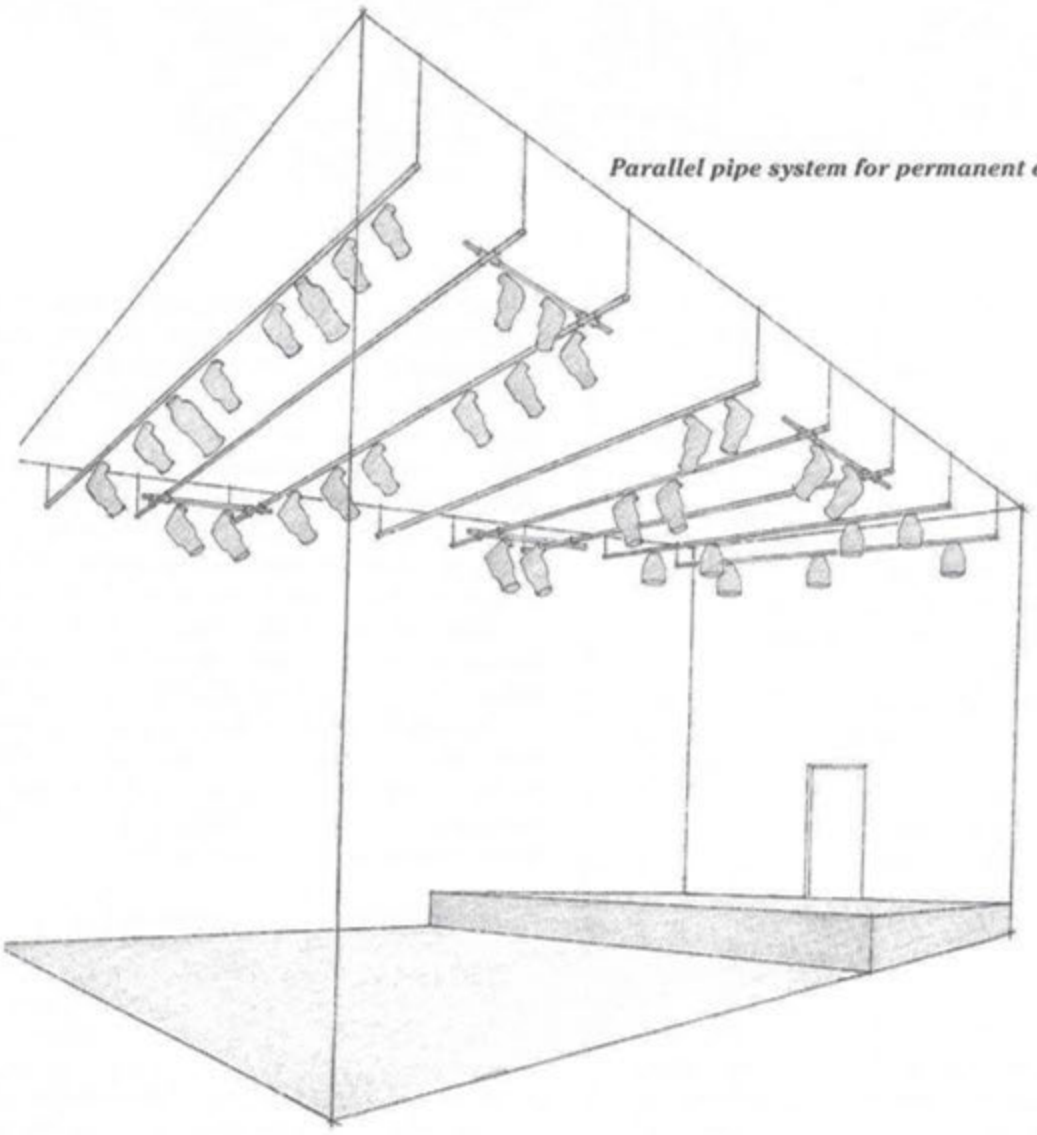
If the ceiling height allows, suspend the grid 18" or more below the ceiling to permit easy mounting as well as overhanging for lighting instruments. Suspend the pipes from the ceiling on steel cable or pipe. If using cable, pipe stiffeners can be added to prevent pipes from twisting.

Clamping the pipe intersections together with Rotolok clamps or Cheeseboro adjustable swivel clamps will also provide stability and prevent twisting. Rotoloks, U-bolts, or C-clamps also can be used to secure additional, temporary lengths of pipe to

the grid system to handle special equipment for a specific production.

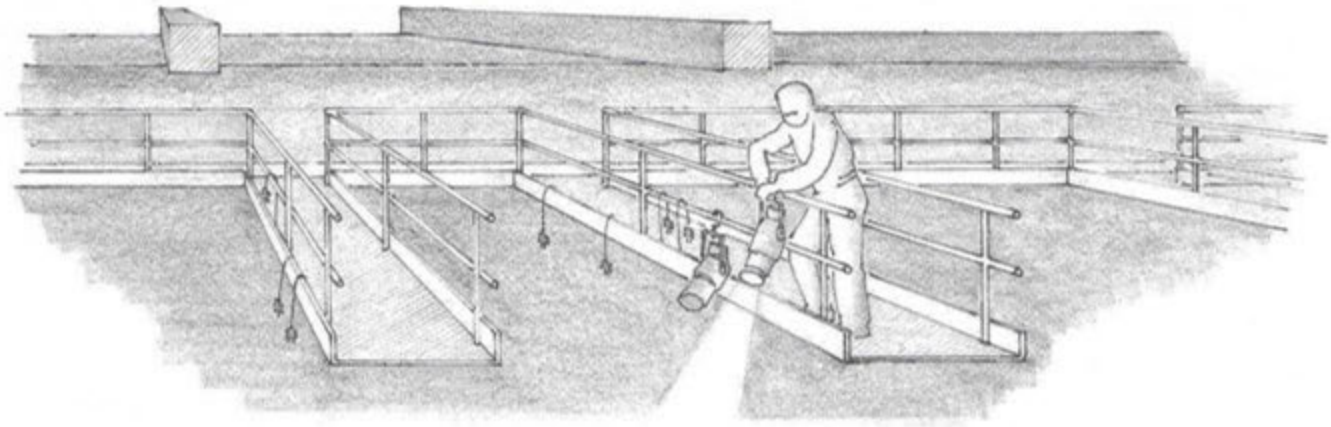
Remember, the weight of the grid will put additional stress on the ceiling; lighting instruments, cable, and scenery pieces will add more weight. A structural engineer can ascertain whether the ceiling will support this additional weight, and, if necessary, advise an alternate method of suspension or reinforcing the roof.

**PARALLEL SYSTEM OF PIPES.** If the theatre configuration is permanent and one directional, like an end stage, use a permanent system of individual pipes hung parallel to the leading edge of the playing area. Clamp on shorter intersecting pipes for special hanging positions. Vary spacing between pipes to provide for more pipes over the stage or playing area. (See Studio Theatre Profile, p. 144.)



***Parallel pipe system for permanent end stage.***

*A system of catwalks.*



A proscenium stage without a gridiron or fly loft can utilize the same type of parallel pipe system over the stage and auditorium.

**TENSION-WIRE GRID.** The tension-wire grid consists of a substructure grid of steel members supporting a walkable floor surface composed of woven aircraft cable arranged on approximately 2" centers. This mesh becomes a work surface for technicians. Stage lighting instruments can be positioned anywhere above the mesh and focused through it without appreciable light loss or distortion. Most often the tension-wire grid is located directly above the stage, although it could extend over the audience, as well. This system is expensive, but it could pay for itself through time and labor savings during production change-over periods. Obviously, this system requires sufficient height to allow headroom clearance for the technicians working on the grid. The tension grid would usually be 20' to 30' above the stage floor.

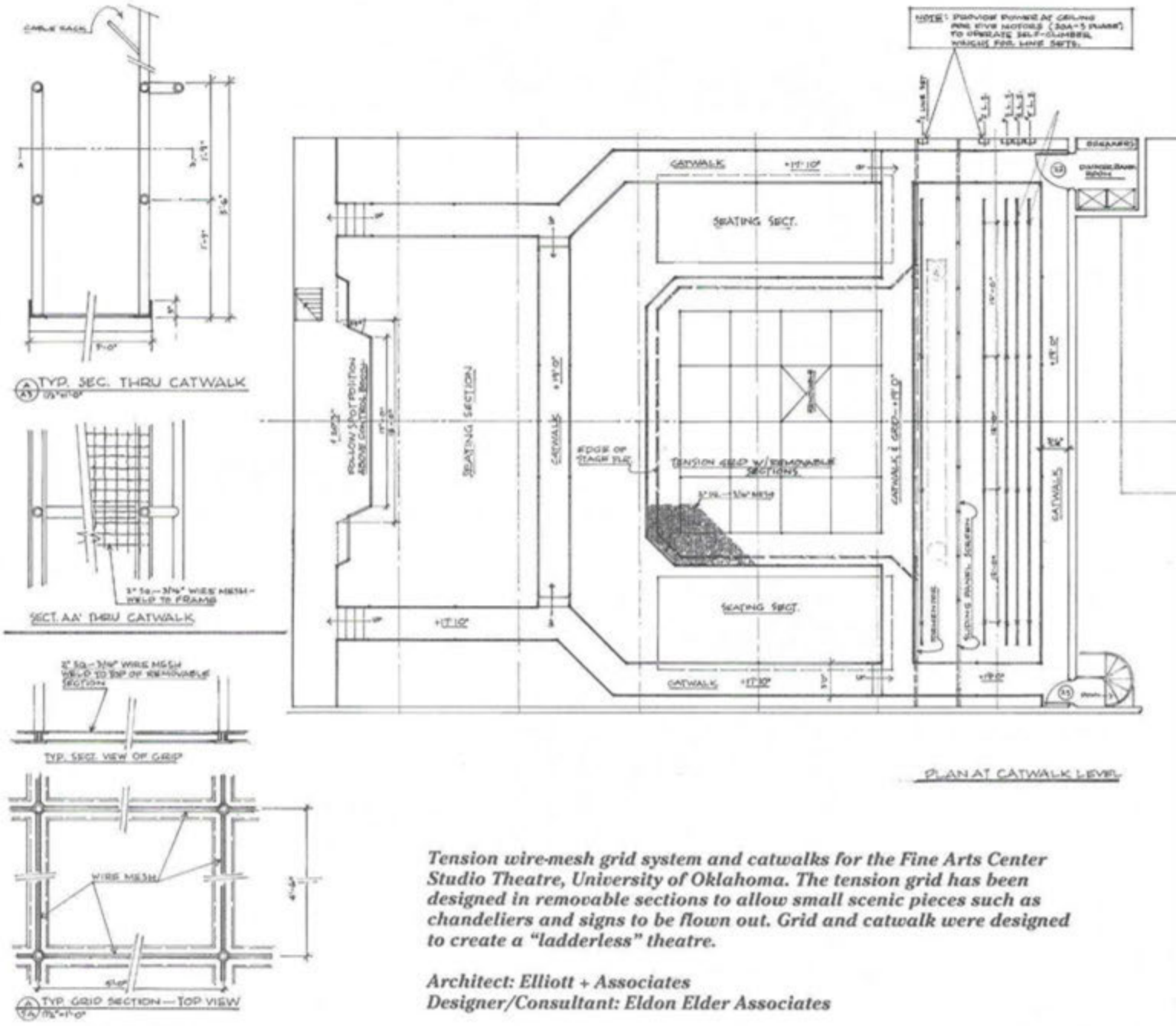
**CATWALKS.** Catwalks provide another system for easy mounting and focusing of stage lights and are preferable to a pipe grid accessed from the stage floor. In designing catwalks, allow sufficient headroom above the catwalk for a person to stand upright—7' is desirable. Also provide catwalks with nonskid floors. The catwalks must have rails; plan to make them of standard 1-1/2" schedule 40 pipe so they can serve as hanging positions for lights. Raceways mounted overhead, with outlets distributed as needed along the catwalks, are safe and easy to use. Neatly bundled cables afford a cheaper, portable solution. Consider the catwalk as a possible followspot or projector position.

Easy access from catwalks to the control booth, as well as to the stage, can save time and labor when focusing and lighting a production.

To make them as unobtrusive as possible, paint the catwalks a flat, dark color—preferably black. Or, if you prefer, make the catwalks a design feature of your theatre, painting them a bold color to contrast with the theatre ceiling.

## Rigging Systems for Flown Scenery

For a proscenium stage with a loft high enough to fly scenery and lighting, a rigging system must be part of the design. An increasing number of companies are building or converting spaces that allow for traditional fly lofts, although they remain the exception for most small theatres. The rigging



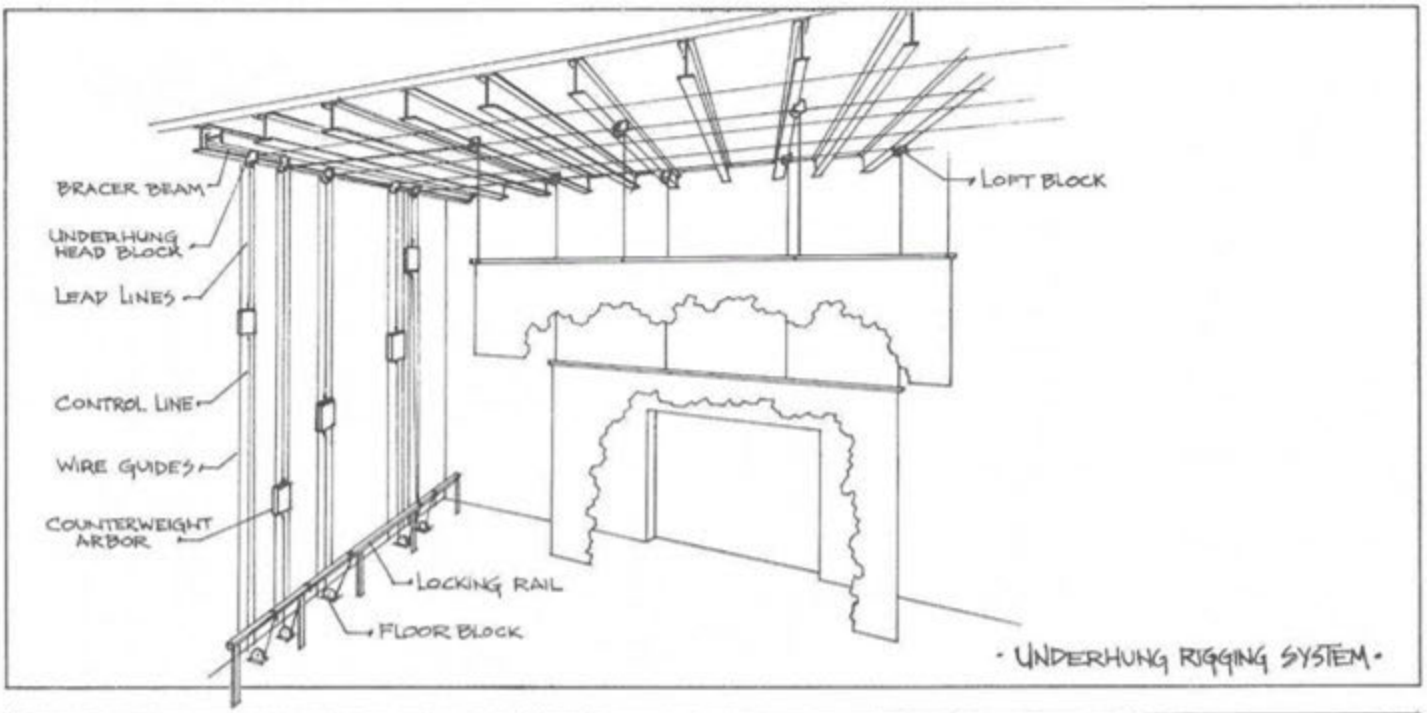

***Tension wire-mesh grid system and catwalks for the Fine Arts Center Studio Theatre, University of Oklahoma. The tension grid has been designed in removable sections to allow small scenic pieces such as chandeliers and signs to be flown out. Grid and catwalk were designed to create a "ladderless" theatre.***

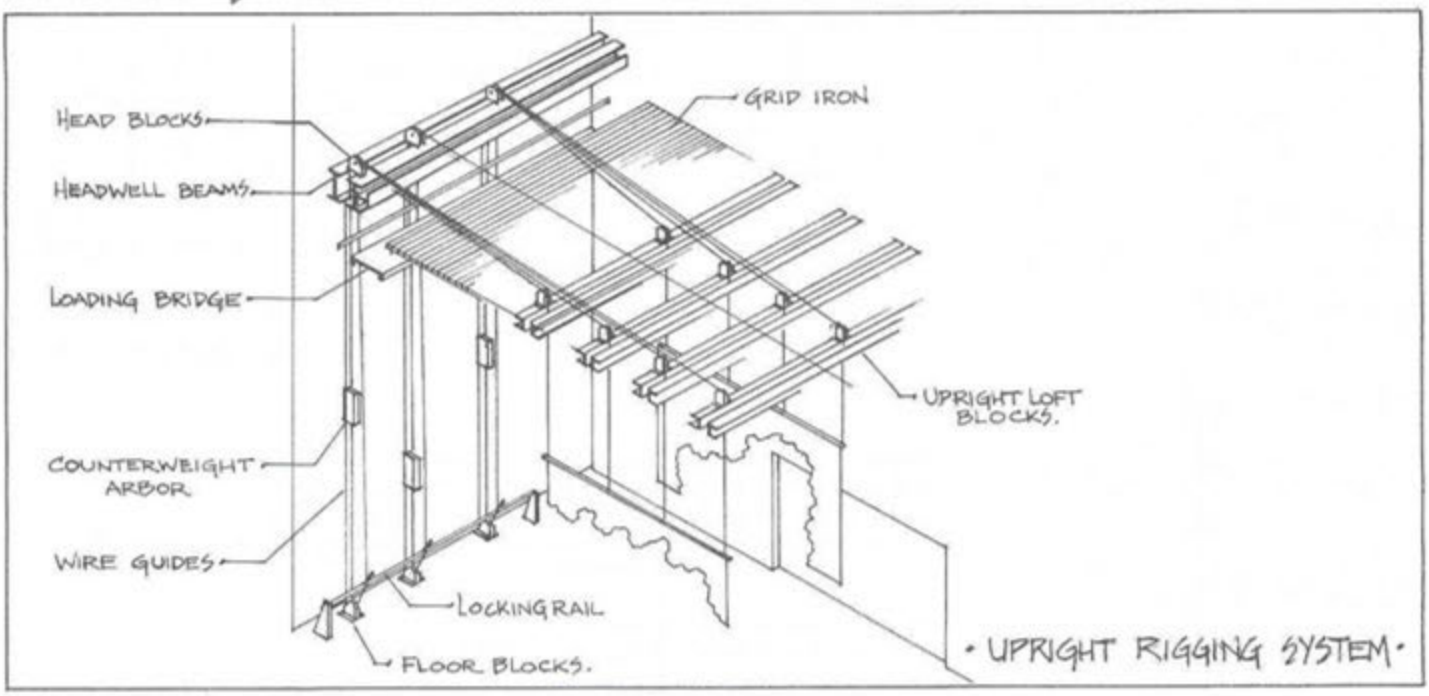
***Architect: Elliott + Associates***
***Designer/Consultant: Eldon Elder Associates***

can be a simple, manually operated hemp line set; a counterweight system of steel cable line sets; a single spot line system either manually or winch operated; or a combination of the above.

**COUNTERWEIGHT SYSTEMS.** There are two standard counterweight systems: 1) the upright rigging system, and 2) the underhung system.

*Upright counterweight* rigging places the loft blocks and headblocks above the steel beams and gridiron. The system is serviced from above. Enough headroom is needed for technicians to stand, work, and move about on the grid—approximately 7' clearance. Obviously, this system can be as high as your stage house allows. The accepted minimum ratio of grid height to proscenium opening is 2-1/2 to 1 (50' high gridiron for a 20' high proscenium arch.) But the San Francisco Opera House gridiron is 120' high with a 28'-high proscenium, so there is no iron-clad ratio.




Very few nonprofit theatres have stages with enough height to install the upright system with gridiron, overhead rigging, and counterweights capable of flying full-height drops and scenic pieces. Boston's Huntington Theatre Company and Brandeis Repertory Theatre, both using large university facilities, are the exception, not the rule. The new Goodman Theatre in Chicago also will have a full loft in the renovated Harris/Selwyn theatre complex.

*Underhung counterweight* systems can conserve headroom. Underhung rigging places the loft blocks and head blocks on the underside of the steel beams. No space is required above the beams, so sheaves are often fastened directly to the structural steel I-beams above the stage house. This means that servicing or repairing the underhung system must be done from below, and this limits the system to the 30'-high rule of thumb. However, pipes can be lowered for easier loading. And pipes with lights and small scenic pieces may be flown out; full-height scenery and drops cannot.

# 9
# THE AUDIENCE SPACE

Seeing, hearing, comfort and safety are the primary considerations in designing the audience space. These are achieved through the successful combination of good sightlines, seating, acoustics and lighting.

## SIGHTLINES

Uninterrupted viewing is usually achieved by a combination of horizontal and vertical sightlines. The rake of the floor, the staggering of the seats, and the height of the stage all affect the ability of the audience to see. The design of these elements should combine to create an uninterrupted view of the entire performance area.

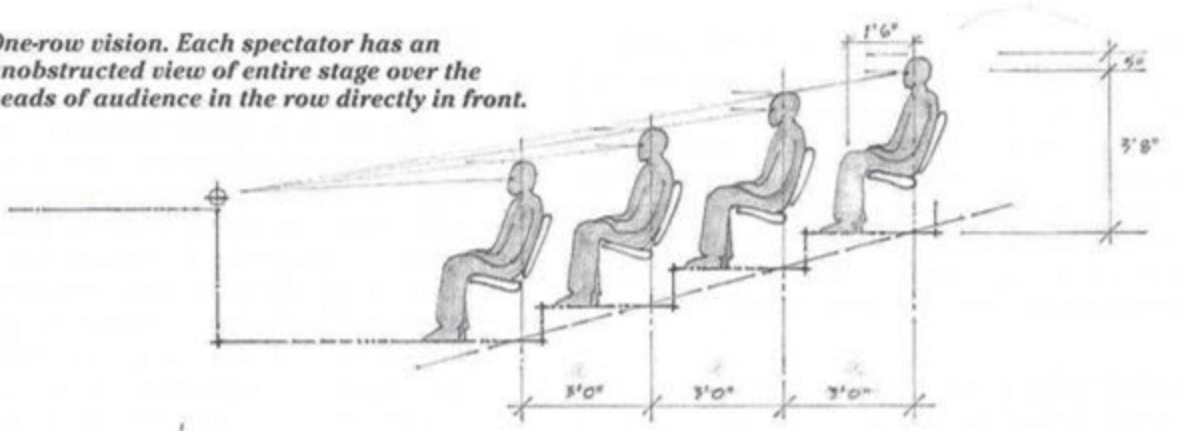
**VERTICAL SIGHTLINES.** Elevating the rows of seats by sloping the auditorium floor or by using stepped risers will establish vertical sightlines. Theoretically, one-row vision requires sufficient elevation of each row for every member of the audience to see over the heads of the row directly in front. This is frequently impractical and other means, such as staggering the seating, must also be employed.

**HORIZONTAL SIGHTLINES.** Good horizontal viewing is usually accomplished by staggering the seating so that each member of the audience is looking directly at the stage area between the heads of the two persons in the row in front, and over the head of the person two rows in front. This plan is especially applicable to conventional proscenium or permanent end stage configurations.

**SMALL THEATRE SIGHTLINE PROBLEMS.** There are special problems in achieving good viewing for small spaces, especially for arena or thrust stage configurations. Many small theatres in converted spaces lay the stage floor directly on the floor of the building, rather than using a raised platform. To solve sightline problems in this setting, use a steeply raked system of risers. The lower the stage floor, the steeper the rake of the seating.

Creating good sightlines for three-sided, thrust, or four-sided arena stages is more complex than in a proscenium or end-stage theatre. These configurations rely more on vertical sightline solutions; staggering the seats with two-row vision is less effective. Actors may block one another from different parts of the audience, and the line of vision is no longer directly to the front, as in proscenium,

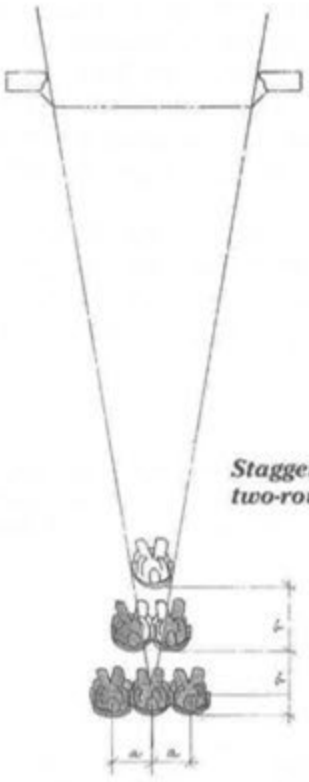
*One-row vision. Each spectator has an unobstructed view of entire stage over the heads of audience in the row directly in front.*



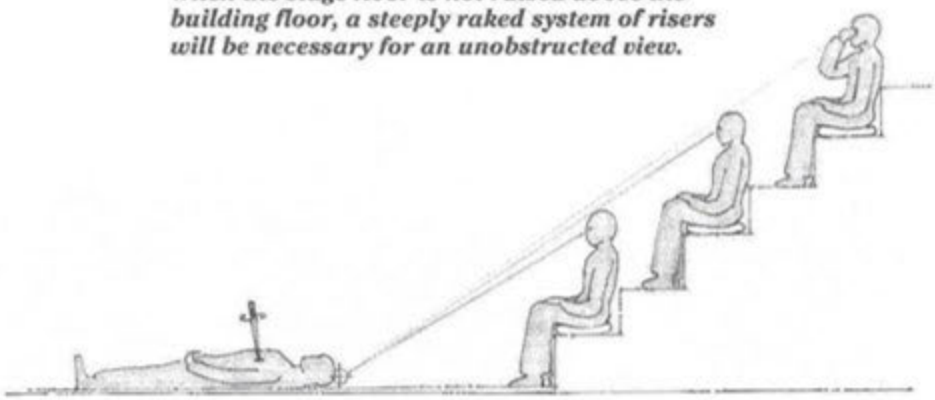

but at a constantly changing angle. Steeply stepped risers are required for uninterrupted vision.

Too many rows of seats in an arena increase sightline problems and decrease intimacy. About seven rows is considered a maximum, except perhaps, at the narrow end. Fortunately, only three to five rows are required for a small, intimate arena theatre, minimizing sightline problems.

*Staggered seating to provide two-row vision.*



*When the stage floor is not raised above the building floor, a steeply raked system of risers will be necessary for an unobstructed view.*



**CURVED ROWS AND STAGGERED SEATING.** In a narrow auditorium such as a storefront, end-stage theatre, the seats can be in straight rows. If the auditorium is wide, it will be necessary to curve the rows to orient all spectators to the stage. Curving the rows makes staggering the seats easier, however. Conventional theatre seats are manufactured in varying widths to assist in achieving staggered seating while maintaining straight aisles.

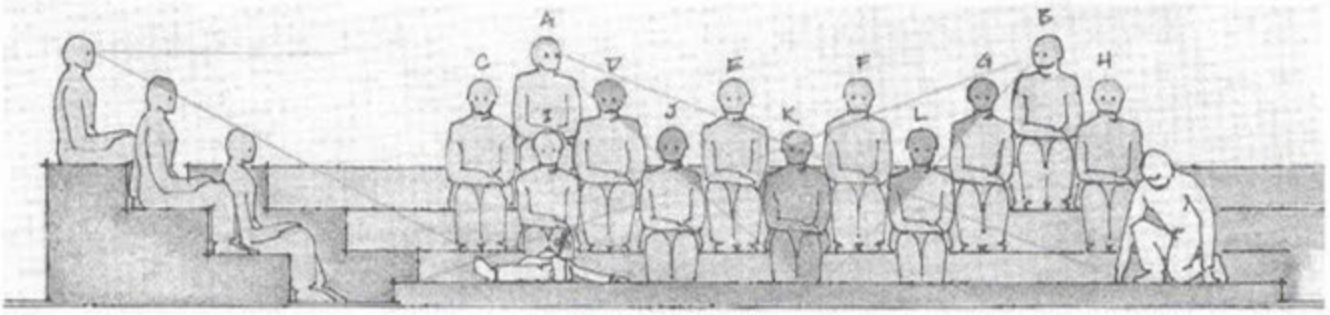
**CONTINENTAL SEATING.** Occasionally, continental seating may be desirable. It is useful only in a wide auditorium. The standard number of seats allowed in a row between two aisles is 14. Continental seating—based on the concept that every row is a cross-aisle—allows an increase in the number of seats in a row. But it also requires an increase in the back-to-back space between rows. In most codes, 36" is the minimum back-to-back allowance for continental seating, with an increase in this measurement proportionate to the number of additional seats over 14 in the row.

## SEATS AND SEATING LAYOUT

In addition to solving sightline problems, there are esthetic and stylistic decisions to be made with regard to seating. Give serious thought to the seating layout in the earliest stages of planning: Will a permanent layout serve, or will flexible seating best suit your type of theatre and production style? If you chose flexibility in seating, do you want to achieve this with fixed seats on movable risers, or with seats that are themselves movable? Will a middle-of-the-road plan with some fixed seating sections and some movable sections give the right amount of flexibility? (See Studio Theatre Profile for an example of modified flexibility, p. 144) Make a firm, if somewhat arbitrary, decision about these options. (See seat and row spacing, pp 164 and 175)

**MOVABLE PLATFORM MODULES FOR SEATING.** For greater flexibility in a space with a level floor, consider stepped seating risers in modules. The risers should be constructed of flame-retardant

***If sightlines providing two-row vision are used for an arena or thrust stage, A may see X between C and D and over I, but will have difficulty seeing Y past D and J. B can see Y, but will have great difficulty seeing X!***



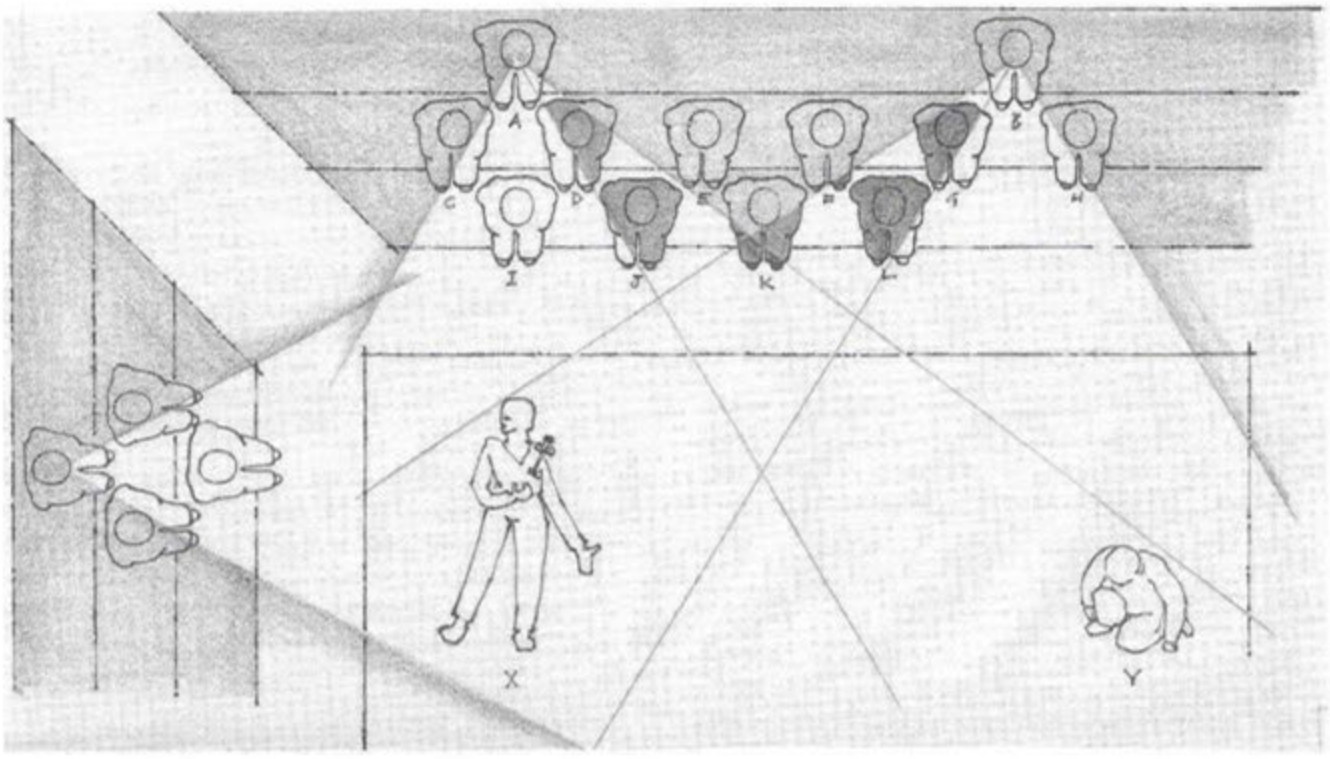
wood or of steel. Clamp or bolt riser units together. For greatest mobility and flexibility, mount small units on castered bases.

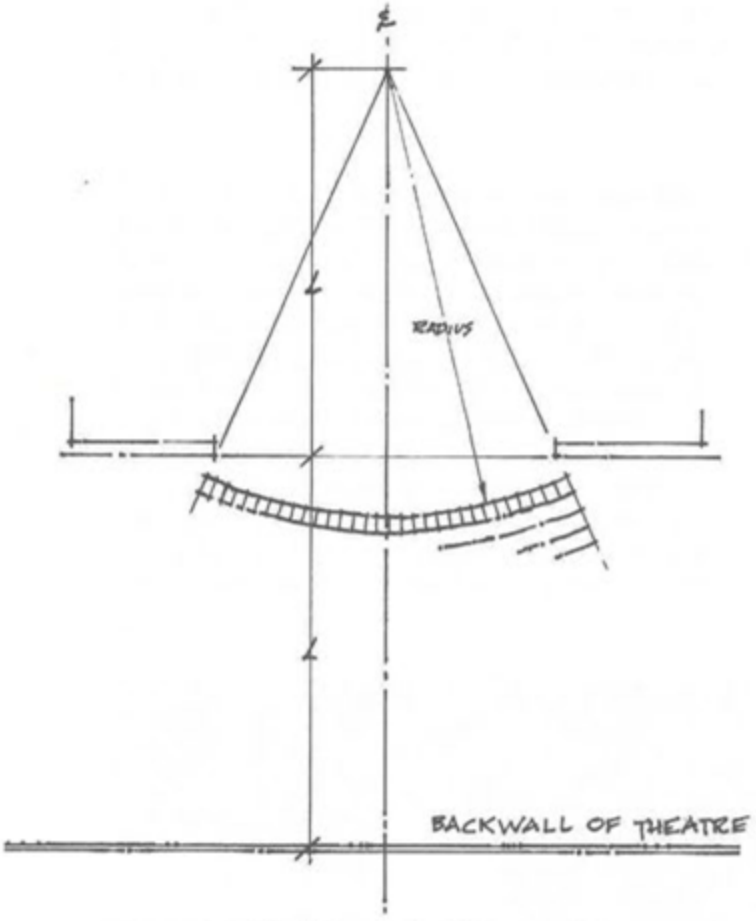
A practical width for the riser top is 3'. This will create a platform wide enough for flip-up seats, as well as for the non-flip, stack-type seat. Tops may be fire-retardant plywood or metal, which can be carpeted for greater sound absorption and a classier look.

Guardrails for audience safety are necessary but must not obstruct audience view. In most codes, the seating risers must have a live load rating of 60 lbs. per sq. ft.

**TEMPORARY SEATING.** Temporary scaffolding of the type used on construction sites has also been rigged to create flexible and unique seating. Padded and carpeted risers without seats can also provide an inexpensive solution to seating. This might be a scheme best suited for a young audience. The lack of a backrest can be tiring, and the audience's attention span can become limited.

**COMMERCIAL MODULAR PLATFORMS.** There are many commercially fabricated platform modules on the market. However, they are predictably more expensive than homemade platforms. Audience safety as well as audience comfort is of utmost concern—one reason you may want to investigate commercially made risers. There are at least a half-dozen major manufacturers. Their products vary widely in weight, mobility, and price. An architect, theatre consultant, or technical director can help you make a comparative analysis. Guardrails and other safety features should be part of a commercially planned platform package.






***One system for determining the curve for rows of seats.***

Note: Open voids under wooden risers won't pass muster with fire inspectors—they usually will require that the spaces be enclosed in Sheetrock. Nor, alas, is it legal to use this space for storage.

**FIXED VS. MOVABLE SEATS.** There are two approaches to seating your audience with chairs: *fixed* and *movable.*

Fixed seats—attached to the floor or risers—keep orderly rows, do not require continual straightening before each performance, and keep aisles and exits open in compliance with the codes. Fixed seats eliminate any noise of chairs scraping on uncovered surfaces and insure that sightlines are fixed. Fixed seats also keep the seat count constant and subscribers happily in the same location for the entire season. Most companies opt for fixed seating.

Movable seats, however, make it possible to reconfigure the basic shape and location of seating blocks and their relationship to the acting areas. They enable the space to be cleared quickly for other uses during nonperformance time. If movable seats are used, keep in mind that the New York City building code bases exit requirements on square footage rather than on actual number of seats. (See chapter 15.)

Whether fixed or movable seats are used, consider the following features when choosing seats:

- Seat width—discussed in detail in chapter 2.
- Seat backs—audience is able to sit for longer periods of time if backs are supported.
- Arm rests—an extra perhaps, but a plus in audience comfort.
- Padding—for seats and/or backs.
- Material—should be easy to clean, durable and stain repellent.
- Plastic and metal seats—may be easy to clean but are very uncomfortable.
- Acoustics—should be considered in decisions on padding and fabric selection.
- Color—should help create an appealing but unobtrusive environment. Should not distract the eye from the stage. Darker colors will absorb light when seats are empty and will not show dirt as quickly.

**TYPES OF SEATS.** Good seats are not necessarily expensive seats. Frequently, used theatre seats are available, or there are innovative do-it-yourself alternatives.

Brief descriptions of seats appropriate for a small theatre follow:

**Theatre seats.** Permanently installed rows of seats, the traditional seating approach. If ordered new, there are many design options:

arms, seat width, color, fabric, back slope, spring seats. Reconditioned theatre seats also may be purchased from seating companies. Allow ample lead time, especially for reconditioned seats, which can sometimes take months for delivery. Seats also may be retrieved from renovations of old theatres or television studios. The Shubert Organization's Property Maintenance Department frequently has used seats to give away. And in New York, the Department of Cultural Affairs's "Materials for the Arts" sometimes has used seats available free of charge. (See Resource Directory.)

**Stackable and/or folding chairs.** Plastic, wood, or metal, with or without upholstery. Can be placed on risers. For storage, they can be placed on rolling frames. Office furniture manufacturers make comfortable stacking or folding chairs that are inexpensive and work as theatre seats. Check out Playwrights Horizons in New York City.

**Stadium seats.** Molded plastic, with or without backs. Must be assembled in rows and attached to metal frames or boards. Can be dismantled by the row.

**Pull-out seating sections.** Available in folding chair or bleacher seat design. Self-contained unit of risers and chairs permanently mounted on metal frames. Whole unit can either collapse into a wall or create storage on wheels. Useful when audience seating space must serve more than one function.

**Cushions placed on seating platforms.** A cheap and simple solution to nonpermanent seating. Cushions can be cut from foam rubber and covered in durable, washable fabric such as heavy canvas.

**Park benches and church pews.** A nontraditional seating solution. Can be bolted directly to platforms to meet the requirements of fixed seating. Lines can be painted and numbers added to backs to indicate individual seating designations; cushions can be added for comfort.

**Rented seats.** As needed per show or for a season. An expensive approach, but one that solves maintenance problems. Most types of commercial seating listed above are available from chair rental companies.

## Seating the Disabled

Provisions for seating the handicapped should be part of your plan. The Federal Rehabilitation Act of 1973 includes a provision, Section 504, to prevent discrimination against the disabled. This has led to state and local laws regarding handicapped accessibility. For example, in New York, local law 58, passed in 1987, amended the New York City building code to require that both new construction and rehab buildings be made accessible to all people, regardless of disabilities; and in 1988 the state of Illinois published an accessibility code that overrides local guidelines.

Seating positions for wheelchair patrons must be accessible by either ramps or elevators. Ramps cannot have a slope greater than 1 to 12. Steps are not allowed in this line of travel from the main entry to the handicapped seating. There should be at least one primary entrance accessible to wheelchairs. The minimum width for this entrance door and corridor is usually 36". These rules will vary slightly from code to code. Between 1 percent and 2 percent of total seating capacity is the usual required allocation for the disabled.

The Americans with Disabilities Act (ADA), passed in July 1990, concerns physical and programmatic accessibility, as well as employment practices. The aspects of physical access are less stringent than those of New York City's local law 58—in New York, the more stringent requirements prevail. If there are more lenient regulations in other cities, then the requirements of the ADA should be followed.

The following table, giving the ratio of required handicapped viewing positions to the capacity of

the house in New York City will vary slightly in other locales, but this provides a reasonable standard:

| *Capacity of Assembly Place* | *Number of Viewing Positions* |
|---|---|
| 51 to 74 | Minimum of 3 |
| 75 to 100 | Minimum of 4 |
| 101 to 150 | Minimum of 5 |
| 151 to 200 | Minimum of 6 |
| 201 to 300 | Minimum of 7 |
| 301 to 400 | Minimum of 8 |
| 401 to 500 | Minimum of 9 |
| 501 to 1000 | 2% total number of seats |

Remember, a wheelchair requires the space of one-and-one-half seats. When not being occupied by wheelchair patrons, these spaces need not be left empty; plan removable seats to fill them. (Details on access for the disabled are included in the "New Code" section, p. 164 and in chapters 15 and 19.)

For additional information on architectural specifications, consult the American National Standards Institute (ANSI) standard A117.1-1986 and section 504 of the Federal Rehabilitation Act of 1973.

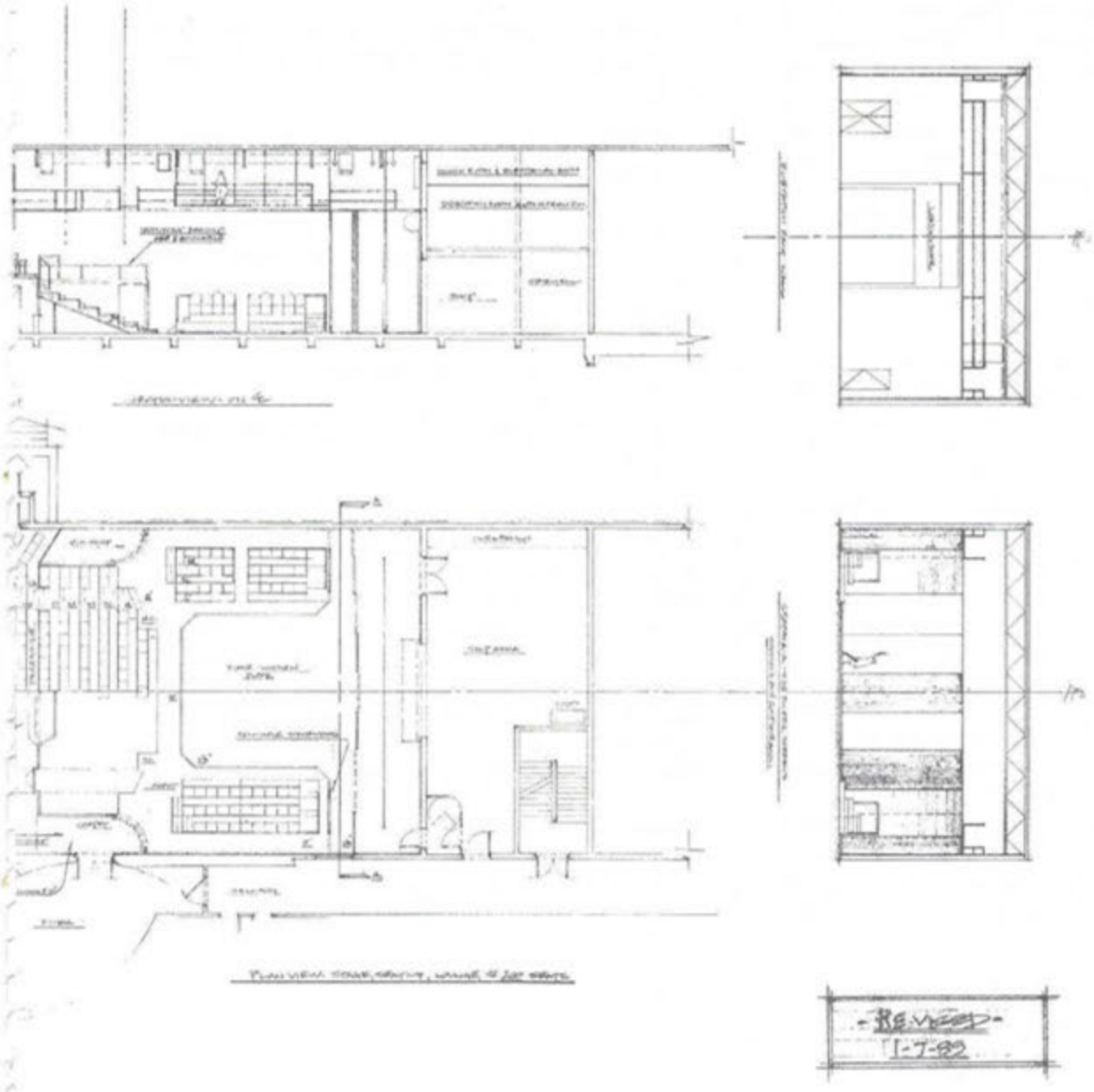
For local information on making your theatre accessible, contact your mayor's office for the handicapped or a comparable authority.

## ACOUSTICS

Acoustical problems are usually minimal in small theatres. They often can be solved simply by adding sound absorptive materials on those surfaces that are reverberant, such as walls, ceilings, floors, seats, and platforms.

Sit in the space during performance time and listen. Is it noisy? If there is too much ambient noise, it may pay to hire an acoustician. The noise rating number (NR number) should be 25. Also, turn on the HVAC systems to see if they are quiet enough to run during a performance. Twenty decibels is the hearing threshold.

An occupied theatre seat is more absorbent




***Studio Theatre, University of Oklahoma. The thrust stage interfaces with a steeply raked bank of risers with fixed seating. On either side of the thrust, the seating consists of two removable sections designed to expand the stage size for dance or classical drama or to provide a space for musicians.***

than an empty one, so consider the best type of padding and covering on the chair to minimize this difference when the theatre is not filled to capacity.

Carpeting of aisles and seating platforms will reduce reverberation. In addition to tiles or other acoustic materials for walls and ceiling, consider covering the wall with carpet, draperies, or wall hangings to add absorbency to these surfaces. Carpeted panels can also be constructed and hung to allow tuning of acoustics.

Make sure all doors near or within the seating area close silently, fit well, and are constructed of soundproof materials.

It is possible to overdo sound insulation, and in a small space there is danger of deadening the sound *too* much. If there is no reverberation at all, the sound quality becomes unrealistic, and it becomes difficult to hear the actors.

For a space with acoustical problems, consult an acoustical specialist. Usually it is money well spent to have an acoustician check out the space and make recommendations.

The Double Image Theatre in New York City wanted to locate in basement space under the Promenade Theatre on upper Broadway. But the noise from the Promenade carried through the floor and even through structural steel columns, making the space impossible to use. The cost of soundproofing was estimated at approximately $400,000!

One general note: Any materials used within the seating area must be noncombustible or flame-retardant and comply with the local building code and fire prevention code requirements. (See chapters 16, 17 and 18.)

## LIGHTING

Within the seating space there are three types of lighting: house lights, work lights, and emergency lights.

**HOUSE LIGHTS.** Sufficient visibility should be provided to allow audience members to gain safe and easy access to seats and to read the program. Incandescent light is preferable. Although fluorescent is more energy efficient, it is unattractive, unflattering, and difficult to dim. Place house lights on a dimmer-controlled circuit separate from stage lighting controls. Place aisle and exit lights on a separate non-dim circuit.

If the seating sections are flexible, the house lights and aisle lights must have the flexibility to be repositioned, too.

**WORK LIGHTS.** These lights will be necessary during nonperformance times to illuminate the house and stage for rehearsals, maintenance, and show preparation. Work lights should provide maximum visibility, but not require a great deal of electricity and should be controlled by on/off switches. Fluorescents can be used here. Put house work lights and stage work lights on separate circuits since there are times when they will not be used simultaneously.

**EMERGENCY LIGHTS.** The codes require places of public assembly to have emergency lights. These requirements are covered in detail by the electrical code and are discussed in chapters 16 and 19.

# 10
# THE SUPPORT SPACES

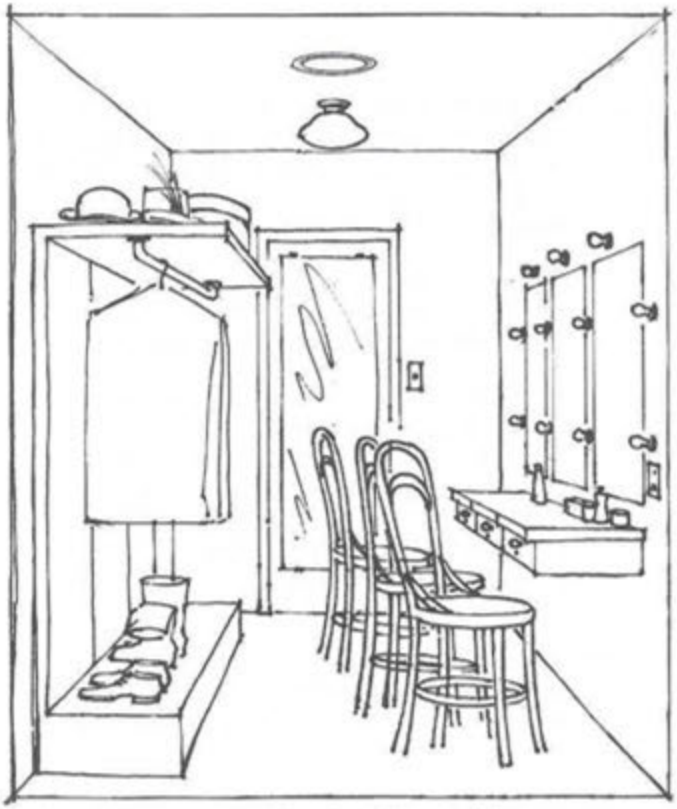
Well-planned, efficient support spaces will save time, money and tempers. And it goes without saying they will contribute to a better product: the show.

## TECHNICAL CONTROL BOOTH

In small theatres the technical control booth has often been an afterthought, consuming "valuable" space in the seating, lobby, or backstage area. Plan the control area as an integral part of the front-of-house, stage, and seating configuration. When planning the technical control booth, keep in mind the following:

- Provide a good view of the acting area. Install a window of double-thick, sound-insulating glass.
- Plan sections of the window to slide open and/or lift out to give technicians direct contact with stage and seating areas.
- Provide for the installation of a monitor speaker to enable technicians to hear as well as see the show when the window needs to be closed.
- Consider supplying an intercom system with outlets located at the stage manager's desk and stations located backstage, in the lobby, and, for technical and lighting rehearsals, in the center of the seating area.
- Soundproofing the booth will allow the stage manager and technicians to communicate without disturbing the audience.
- If possible, isolate the sound technician completely from other control booth noise —stage manager cueing and the like. The sound technician should not only be able to hear amplified sound from the stage, but also, through the operable window, live sound from the stage and auditorium: exactly what the audience hears.
- Consider providing an additional open space, centrally located within the audience space, with outlets for the sound control equipment.
- Run separate power supplies for sound and lighting control systems, especially if solid state dimmers will be used. The simplest way to do this is to provide separate breaker boxes for sound and lighting.

- If cable runs for lighting are in a direct line to the booth, their installation will be easier and less expensive.
- Provide adequate outlets and disconnect boxes to service all equipment. Allow for additional equipment needs.
- Consider the amount of equipment that will be used both now and in the future—allow for expansion.
- Consider the location and size of the booth for use as a possible front projection and/or followspot position.
- A direct access route from the booth to backstage, other than through the seating area, is useful during performances.



***Dressing room. Use the checklist at right to determine that at least minimum space, efficiency, and comfort requirements are achieved.***

- Doors to the booth should close quietly. They should be large enough to move control equipment in and out of the space.
- Provide adequate counter or tabletop space for stage manager, sound mixer, and lighting console. Provide comfortable chairs or stools for the staff, who will spend many hours in the booth.
- Provide both general overhead lights and lights for running the show in the booth. They should be on separate circuits, and all should be dimmable.
- Provide ventilation, heating, cooling and humidity control *separate* from the audience HVAC system.
- In a flexible theatre, position the booth in an elevated location so that the stage areas can be seen when using any theatre configuration. Provide a space for dimmer racks and a patch panel, if required. If possible, locate near the main power supply.

## DRESSING ROOMS

Minimum dressing room sizes are discussed in chapter 2, but don't settle for minimums, if possible. The dressing room becomes the actors' second home. When planning the dressing room areas, take the following into account:

- If possible, locate dressing rooms on the same level as the stage, avoiding stairs.
- Provide good, shadowless light for each makeup mirror— incandescent light only—with separate on/off switch for each mirror. In addition, provide general illumination for the dressing room area. This light may be fluorescent to reduce heat and conserve energy, although it distorts colors.
- Provide convenient wall outlets beside mirrors for hair dryers and electric shavers. Allow one per actor.
- Provide at least one full-length mirror for each dressing area.

- Allow adequate hanging space for both costumes and street clothes. Equity recommends a minimum of 3' per actor for costumes, plus additional hanging space for street clothes.
- Although stage managers usually collect and lock up valuables, provide lockable drawers and/or small lockers for actors' makeup and personal items.
- Provide ventilation, heating, and cooling that is zoned with separate controls from the main HVAC system. An independent water heater could also save energy.
- Locate toilets within easy access of dressing rooms. (Toilet, wash basin and shower requirements are outlined in chapter 2.)
- Dressing rooms should be sprinklered.

To stretch space, consider portable dressing table/rack units that can either fold up into compact storage or roll out of the way.

The units could be complete with makeup counter, drawer, mirror, lights, and costume rack that rolls on casters; or they could be designed to collapse. If cleverly designed, the units, when spread out backstage, could form self-contained dressing areas by the addition of folding or stacking chairs. By stacking these dressing room units away when the theatre is dark, the space can be freed for scenery construction, costume construction, or other non-performance-related activities.

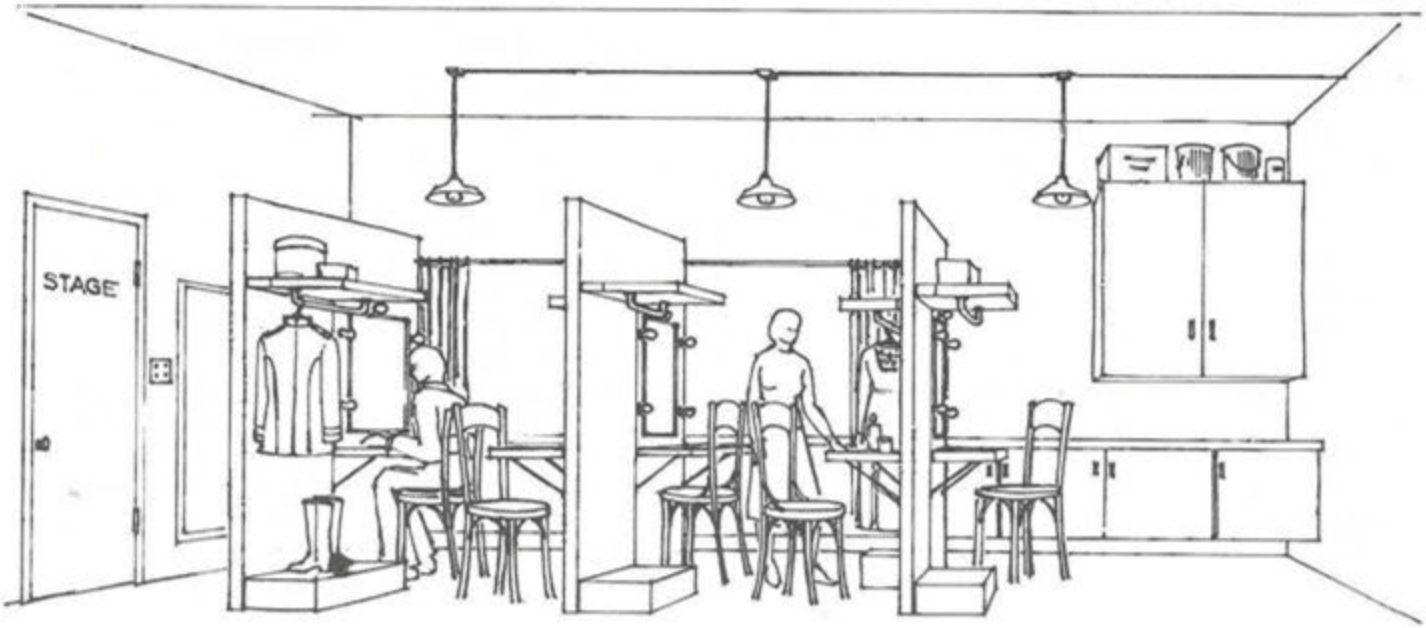
The Wisdom Bridge Theatre in Chicago, unable to carve out space for permanent dressing rooms, made good use of this scheme by moving two portable dressing rooms to different on-stage positions to accommodate the set for each production.

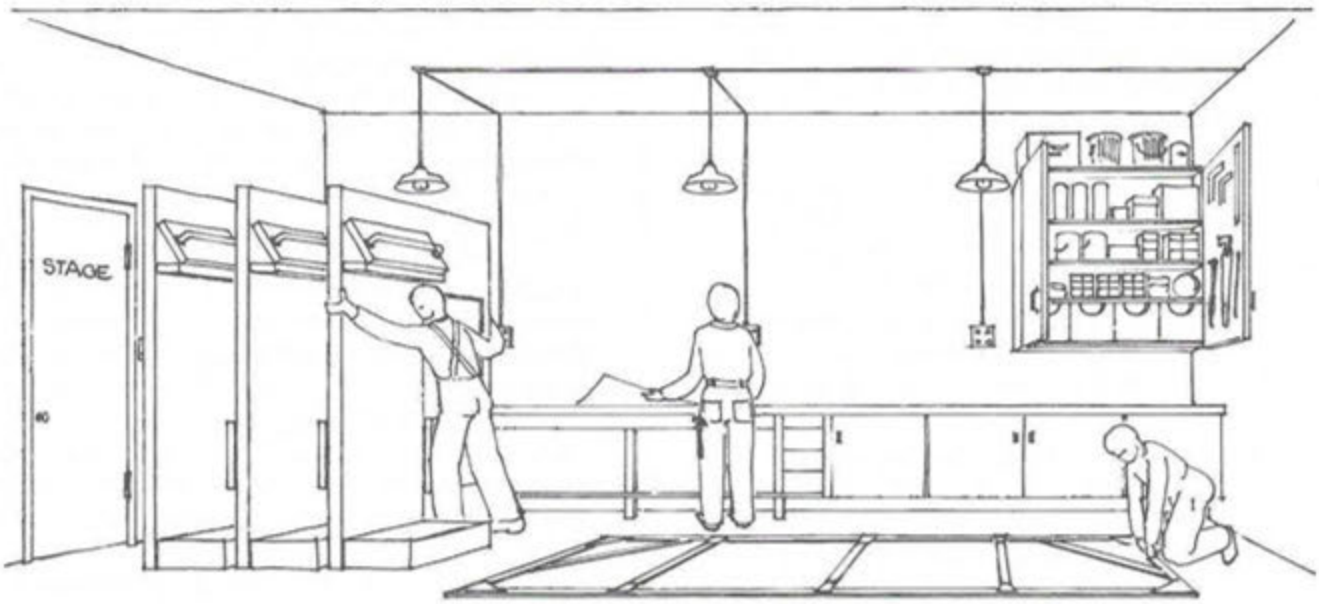
Any portable dressing room should be made of noncombustible material. The electrical code makes no provision for wiring a portable dressing room, but the same cables and connectors used for portable lighting equipment should provide adequate electrical power and safety to these units.

Flexible dressing rooms that can change to accommodate the casts of various shows are important since the male/female ratio of each production is likely to be different.

A green room or actors' lounge also should be included in your plans, if space is available. Don't

***Portable dressing rooms set up.***






***With dressing room units stacked, the multi-use space can become a shop or rehearsal space, or be used for other activities that do not conflict with the performance schedule.***

forget to consult your Actors' Equity contract for "safe and sanitary" codes, as well as provisions for including an "Equity cot."

## SHOP

Most small theatre companies are forced to build and paint scenery, make props, and construct costumes in spaces that must serve other functions. In such situations, provide adequate cabinets or lock-up storage rooms for tools, equipment, and supplies. (Minimum sizes are discussed in chapter 2.)

Plan your renovation so that these storage units are near the appropriate work areas. If this is not practical, use rolling storage cabinets, power tools, and worktables.

Sharing is another possible solution to the shop space problem. In New York City, for example, Playwrights Horizons set up Scenic Central, a non-profit scene painting and construction shop with rental storage space. (See Resource Directory, p.224)

### Scenic and Paint Shop Checklist

If you are fortunate enough to have shop spaces, consider the following for the scene construction and paint areas:

- Highest possible ceilings with a minimum of 16' between any columns.
- Adequate, glareless light, with protected lamps. These can be fluorescent in the scene shop; incandescent lights are preferable for the paint area.
- Separate HVAC controls for energy conservation. If HVAC ducts and vents can follow the perimeter of the shop, the center space, where scenic units are assembled, will be free of obstructions.
- Workbenches and worktables. If

workbenches line the perimeter of the shop, have at least one free-standing worktable on casters. A framing table is recommended if space permits.

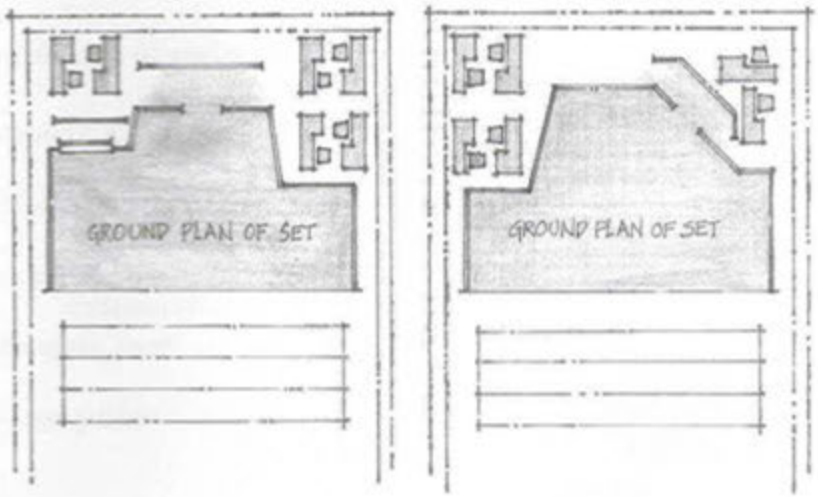
- Slop sink with hot and cold water and a large drain. A deep janitor-type sink is best.
- Hot plate or gas burners. Locate these in the paint area.
- Adequate electrical outlets. Plan for both present and future equipment needs. Plan distribution to accommodate placement of equipment.
- Compressed air for pneumatic tools and paint sprayers. The savings in labor will quickly pay for the initial installation cost.
- Sprinklers and a good ventilation and exhaust system.
- A fireproof vault or metal locker for paints, dyes, and chemicals to satisfy fire department regulations. It should be well ventilated and lockable.
- A good, level work deck. Wood is preferable to concrete.
- Access. Loading doors from street to shop should be sufficient to handle materials; doors from shop to stage must accommodate completed scenic pieces. In addition to loading doors, there should be regular-sized "people" doors to conserve energy.
- Space to store finished scenic pieces waiting to be painted or moved on stage.
- Wall telephones. They are out of the way and easier to handle than desk phones. Also a cordless phone and, possibly, a pager for the technical director.
- Lockers for work clothes and personal gear.
- Provisions for shop safety: medical cabinets—kept stocked—and equipment for personnel safety such as glasses, goggles, gloves, masks and aprons. For shop safety guidelines, check with OSHA or the life safety code.

## Prop Shop

The prop shop requires all the above and can function in the same space if necessary. However, a separate space for fabricating props will keep them clear of sawdust and scene paint. Prop shops require less ceiling height and fewer power tools than scenic and paint shops.

## Electric Shop

This space is needed for storing parts and supplies and for making repairs to sound and lighting equipment. It may be small but needs to be kept dust free; locate this space away from the scene shop. Provide good locks!



### Costume Shop Checklist

Consider the following requirements for the costume shop if you are lucky enough to have adequate costume shop space. (Minimal sizes are discussed in chapter 2.)

- Even, glareless light plus localized work area lights and outlets for power equipment. Plan electrical outlets for present and future needs.
- Cutting tables. Allow space for 3' x 6', or 4' x 8' tables with cork tops—either the collapsible kind or the type equipped with casters that lock.
- A deep sink with hot and cold water.
- Washer/dryer space, electrical outlets and plumbing. Locate adjacent to the sink.
- Hot plate. Place it near the sink and dye vats.
- Fabric and supplies storage. This should be a clean, lockable space adjacent to the work area.
- Curtained area with full-length mirror for fittings.
- Racks for costumes in progress. These could collapse to save space or be castered to roll to dressing rooms.
- Adequate space for sewing machines and ironing boards. Folding boards would save space.
- Dress forms and space to store them.
- Wall telephones.
- Good heating, cooling, and ventilation with zone controls. The dye room and costume painting area should be separate from the costume construction area; they absolutely must have their own ventilation and exhaust systems.

## STORAGE

There is never enough storage space, especially when building materials, costumes and props are scavenged and recycled, when plays are brought back into the repertory, and when labor comes cheaper than the cost of materials.

"Lofting," or creating storage lofts above other facilities and spaces, is a common way to stretch backstage support spaces. Often lofts can be created above dressing rooms, since they only require regular 8' ceilings.

Look for other wasted spaces or underutilized areas in your plan—over offices, under the control booth, in lobby benches—and devise storage systems to maximize their usefulness. Atlanta's Horizon Theatre built two levels of decking, complete with stairs, backstage for prop and scenery storage.

Several Off-Broadway and regional theatres with inadequate costume and storage space have given their theatrical costumes and period clothing to the TDF Costume Collection in New York City as a credit against future rentals. The Costume Collection also has a workroom available to theatres that do not have space or facilities to work on costumes. Two other organizations that might be approached for similar trade-offs are Atlanta's Production Values Inc. and San Francisco's Costume Bank. (See Resource Directory.)

## REHEARSAL SPACE

### Basic Requirements

Some basic requirements to consider in planning a rehearsal space:

- Wooden floor. Consider AEA recommendations. (See chapter 8.)
- Even, glareless light. This could be fluorescent to save energy.
- Good heat, ventilation and cooling with zoned controls. Good acoustics.
- Sound isolation from shops, stage and front-of-house.
- Easy access to toilets, drinking water and public telephones.

- Rehearsal room equipment: table with lights for director and stage manager; telephone (should be equipped with a light signal instead of a bell); chairs for actors; lockers, mirrors, and notice board.

For shape and size requirements, see chapter 2.

## Multiple Usage

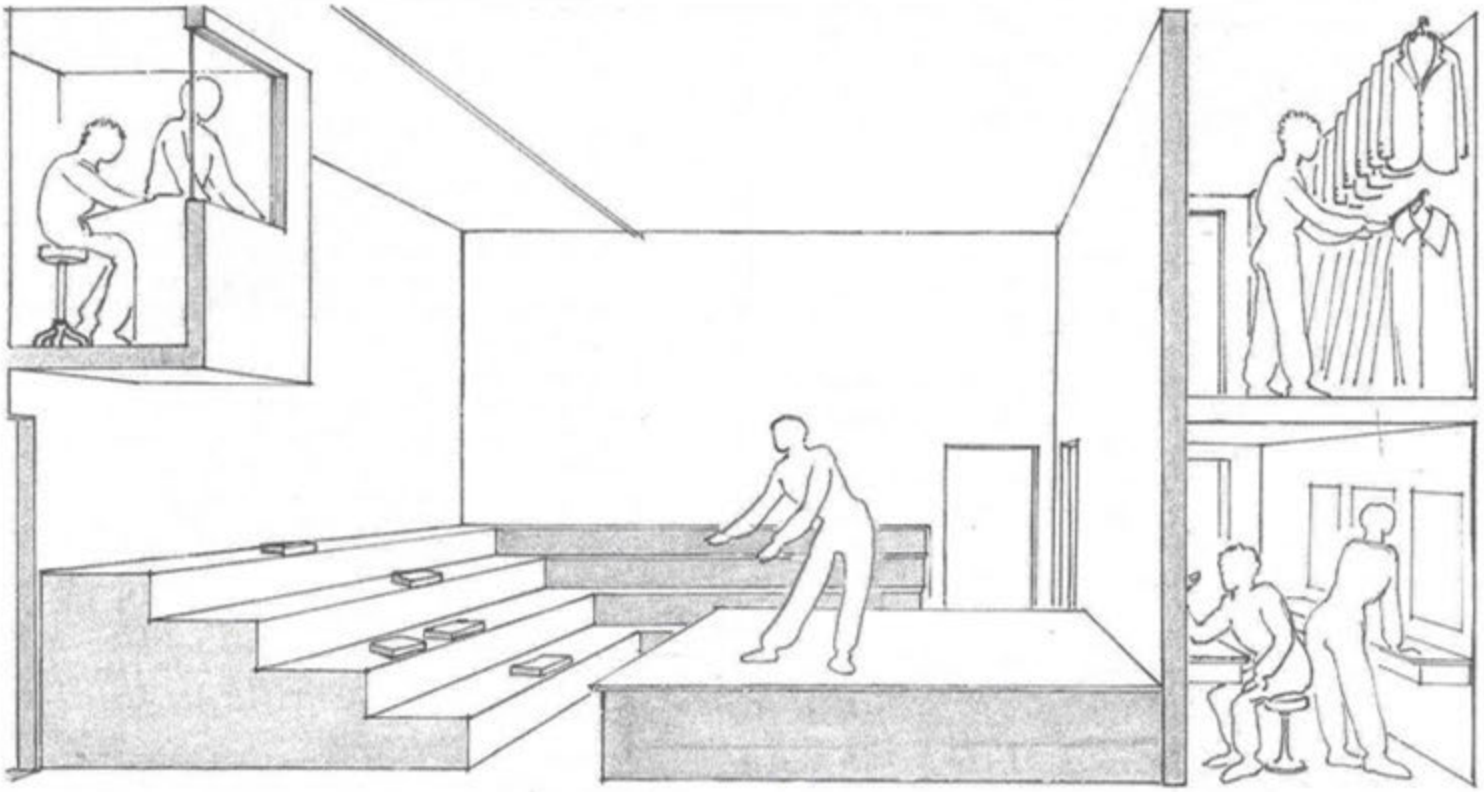
If you are fortunate enough to have a separate rehearsal space, consider designing it for multiple usage:

- As a second stage.
- For readings.
- For classes.
- For public receptions and parties.
- As a rental space for any of the above.
- As a lounge or lobby.
- As a costume shop, prop shop, or scene shop.

Full utilization of this space is largely a matter of good scheduling plus speed and efficiency of conversion once the theatre is in operation. If you list the projected multiple uses of the space before making the renovation, the following can be incorporated:

- Type and number of electrical outlets needed for shop, lounge, performance lighting equipment, or other uses.

***Double-decking with costume storage above dressing room and control booth over aisle.***



- Lighting for rehearsal and workspace, lighting equipment for readings or second stage usage, and lighting control to accommodate multiple uses.
- Necessary storage space.
- The best floor to serve all functions.
- Attractive but durable decor to make it a pleasant place for work and for public events.

### Shared Rehearsal Space

Consider the possibility of shared rehearsal space with a theatre or theatres nearby. New York's Interart and Ensemble Studio theatres, located in the same building, share rehearsal space, as do Chicago's Victory Gardens and Body Politic (see Profile, p. 56). The number of spaces needed will depend on the production schedule. A theatre with multiple performance spaces and a heavy production schedule cannot make the best use of its stages without designated rehearsal spaces; and a repertory theatre cannot continue repertory programming if it has only one rehearsal space.

## BOX OFFICE

Since ticket pick-ups and voucher redemptions are made right before curtain time, the box office or ticket counter must be designed for easy, rapid handling of this crowd.

Much of the rest of the time, the box office is little more than a telephone extension, monitored by an answering machine or a staff person with other duties who provides play information and telephone seat reservation services. A counter/table set-up in the lobby prior to performances may be preferable to a conventional box office for small theatres.

### Traditional Box Office

If a traditional box office seems best, here are some design considerations to ponder:

- Be sure to provide adequate space for box office personnel, ticket racks, telephone, and either a safe, a locked cabinet, or a money drawer. If the box office will serve more than one performance space, allow for extra personnel, additional telephones, and ticket racks. If an expansion to include multiple performance spaces is contemplated in the future, provide box office space for this expansion during the planning period. (See chapter 2 for minimum sizes.)
- Provide space for eventual computerization, even if it's not part of your initial plan. This necessitates not only counter space for terminals and printer, but also dedicated outlets and shelf space for floppy disks and computer manuals.
- Consider locating the manager's office or another office adjacent to the lobby so that, with a connecting window or a Dutch door, it can double as a box office during daytime hours.
- Try to place the ticket window or counter adjacent to, but out of, the main traffic flow from street entrance to auditorium entrance.
- Make sure the box office is heated, ventilated, and adequately lighted. Ventilation and humidity control will become extremely important with computer-generated heat. The box office HVAC should have its own controls, zoned separately from the rest of the space. (See chapter 13.) Light the ticket counter well.
- Provide a conspicuous place to post a calendar of performance times and dates, as well as a seating chart positioned so box office personnel can point to seat locations.
- Plan the telephones with both bell and light signals if there is any chance that the sound from a bell signal will penetrate the performance space.
- Provide a security system. Consider a bulletproof window.

### Ticket Counter/Table

An open counter removes the impersonal separation provided by a traditional box office, which could be desirable. But it also allows the possibility

of flooding or crowding, making it difficult for box office personnel to function efficiently. An open counter increases the chances of theft, as well.

However, if an open-style ticket counter will serve best, consider these design solutions:

- A portable ticket rack that can be relocated for use during the nonperformance hours and/or locked up when not in use.
- A lockable telephone on a jack located behind the counter.
- A portable strong box.
- An alarm system to summon help in an emergency.
- Storage space for this portable counter. Consider a collapsible unit: some theatres just use a simple folding table.

Some theatres with limited space turn the ticket counter into a food service counter at intermission time. A sink will be needed if this is done. A portable ticket counter also might serve double duty as a concessions/drink counter. When the performance starts, the booth or counter is converted.

### Shared Box Office Facilities

Most theatre companies that share a building also share a box office. Two Chicago examples include Victory Gardens/Body Politic (see Profile, p. 56) and the Theatre Building, which houses three theatres under one roof.

New York City's Ticket Central serves the 42nd Street Theatre Row and other subscribing companies. The shared box office service is available from 1 to 6 pm at Ticket Central. From 6 pm to show time, each theatre's box office is staffed with its own personnel and handles its own ticket transactions. Ticket Central provides these services:

- Phone reservations: Ticket Central takes all advance phone reservations up to a limit set by each subscribing theatre.
- Advance sale and credit card transactions.
- Mailing list development: Ticket Central gets addresses from persons making reservations.
- Information about ticket prices, productions, and theatre locations.
- Ticket stock: Ticket Central purchases the tickets for subscribing theatres.

## LOBBY AND LOUNGE

Multiple uses for the lobby and lounge have been discussed elsewhere. (Minimum sizes are listed in chapter 2). Keep the following in mind when planning this area:

- Plan the lobby to be accessible to all front-of-house spaces: rest rooms, public telephones, lounge, offices, and of course, box office.
- The lobby must have easy access to the auditorium that not only meets code requirements, but is designed in such a way that noise and light cannot leak in to disturb or disrupt a performance or rehearsal. Light and sound lock doors are desirable.
- Consider use of the lobby as a "safe area" if required by the building code. (See chapter 15.)
- Adequate general illumination is necessary for safety and for reading programs. Additional specific lighting sources can add interest and accent.
- If there is a bar or counter for concessions and drinks in the lobby or lounge, plan to make it lockable.
- If the concession stand is a temporary booth/counter/table, set up for intermission only and plan a lockable storage space.
- If possible, plan a sink and refrigeration accessible to concession counter or bar.
- Plan for an ample number of electrical outlets in the lobby/lounge for concessions and other multiple uses.
- Plan lobby space for energy efficiency. (See chapter 13.)

PART FOUR

# MAKING IT LEGAL:

## AN INTERPRETATION OF REGULATIONS AND CODES

# INTRODUCTION

The chapters that follow interpret New York City's zoning resolutions (chapter 14); its building, electrical, and fire prevention codes (chapters 15-17); and their application procedures (chapter 18). These chapters provide models for understanding codes in most cities. Chapter 19 outlines the similarities and differences among the codes in five other major theatre centers—Atlanta, Boston, Chicago, Los Angeles, and San Francisco—dealing exclusively with the sections of these codes that apply to small theatre spaces. While codes differ from place to place, the basic rules and principles are similar.

The Appendices at the end of this section list government agencies and contact information for the six cities. These organizations can provide additional information needed on zoning, codes, permits, and services.

## IMPLICATIONS OF ZONING AND THE CODES

Code requirements are often onerous, but they should not be ignored in the hope that an inspector won't show up. Throughout the country there have been serious theatre and nightclub fires, primarily due to the owners' disregard for code requirements and the illegal use of spaces. As a result, building and fire departments in many cities have cracked down heavily on their requirements for places of public assembly, and they issue violations more frequently for illegal and nonconforming uses of space. Depending upon the seriousness of the violation, you may get a verbal warning, or you may receive written notification with a specified amount of time in which to comply. Or you could be threatened with an immediate shutdown of operations.

The main concern of an inspector is public safety. Correcting hazardous violations should, in any event, be your first concern too. If you can show that your theatre is safe and that you are attempting to keep it up to code, chances are good that you will not be overly bothered by inspectors.

## ROUTINE ON-SITE INSPECTIONS

The fire department, department of buildings, and the bureau of gas and electricity all have the authority to make routine, on-site inspections. Past

practice, however, indicates that small theatres are most likely to be visited routinely by the fire department, with only an occasional electrical inspection.

The fire department does routine inspections of all buildings within its geographical jurisdiction. Even such establishment places as Carnegie Hall and Avery Fisher Hall are visited regularly. It is conceivable that you could operate for a year without being visited, or you could receive a visit the day after you open, or—worse—the day *before* you open. Inspections usually occur in the evening while the space is operating.

The inspector will check to see that there are no violations of public assembly space or fire prevention regulations, such as using combustible materials where not permitted, having more seats than allowed or obstructing aisles or exits. Be prepared to present a complete set of all the records, drawings and permits as well as the fire inspection log. The importance of this cannot be stressed enough. (For an inspection checklist, see chapter 17.)

If temporary changes have been made for a particular production, explain that they are *temporary,* and the space will be changed back to what was originally approved. The inspector may let the matter pass. But if he returns six months later and finds these same "temporary changes," a lengthier explanation will be required.

It is best to handle inspectors in a friendly way, developing a relationship that lets the inspector know that every effort is being made to comply and that the safety of the public is of mutual concern. Keeping a fire inspection log (see chapter 17) and presenting it to the inspector along with all the records, requisite statements, and permits will prove your good intentions.

If you are visited by an inspector, *don't panic.* Nothing catastrophic is likely to happen. Walk the inspector through the space and answer questions, but don't volunteer information that's not requested. If a violation is found, ask what is wrong, why, and how it can be remedied. Depending on the inspector, you may get either some very good advice or just a quote from the applicable code book.

One Off-Off-Broadway theatre manager regularly receives an 8" x 10" glossy and bio of the fire inspector's nephew. The inspector is perennially distressed that the theatre does not call his nephew to audition, but there have been no written violations either.

# 14
# ZONING

The zoning laws and codes affecting small theatres are complicated. Don't expect to grasp all the details at once. Most architects and other trained professionals refer to the law and codes again and again for specifics. Keep in mind that all requirements do not apply to every theatre situation.

## USE GROUPS AND ZONING DISTRICTS

Zoning creates sets of regulations that separate different activities that go on in a city, so that they do not conflict with one another. Under the city of New York zoning resolution, which is primarily enforced by the department of buildings, these activities are divided into categories called *use groups.* Theatre falls into Use Group 8.

New York City is broken into zoning districts where the various use groups are permitted. There are three basic zoning districts: *residential (R), commercial (C),* and *manufacturing (M).* These basic districts exist in most cities.

### Numerical Designations

**DENSITY.** Each of these districts is further broken down by a numerical designation that generally indicates *density,* or how much of that activity can take place. For instance, a residential district may be designated R1—single family detached houses—or R8—high-rise apartment buildings; and a commercial district may be designated C1—small retail and service shops—or C8—heavy commercial services, like warehouses.

Use Group 8, which includes theatre activities, is permitted by right in zones designated C2, C4, C6, C8, M1 (excluding M1-5B), M2, and M3. Should a theatre company wish to locate in one of these zones, the use cannot be contested and no zoning variance is required. Generally, a zoning category can be upgraded—that is, a commercial use can go into a manufacturing zone—but it is more difficult to justify downgrading a category—putting a commercial use into a residential zone.

**RESTRICTIONS AND REQUIREMENTS.** To make matters even more complicated, each subcategory (C2, C4, etc.) also carries another numerical designation (C2-1, C4-5), which indicates other restrictions, such as maximum allowable floor area (the total floor area of a building permitted on a zoning lot) and building size, and requirements such as parking spaces and the amount of open

must file for a zoning variance. This can be a long process, and there are no guarantees that you will receive it. The following is the procedure for getting a variance in New York City. The procedure is similar in most cities.

## Appearing Before the Community Board

The first step takes place at the local level. It requires contacting the community board in your district and explaining who you are, what you are doing, and that you would like to get on the agenda for the next meeting of the board. You will then be given the date and the place of the meeting and placed on the agenda under "new business."

When you appear at the meeting, you will be asked to explain who you are and to present your intentions, your artistic directions, your past experience in the theatre, and your financial viability. If you have drawings of what you plan to do to your space, present them at this time.

The matter will be disposed to committee for consideration and, no doubt, you will be asked to come to a committee meeting and to talk again in more detail.

Next, a public hearing will be scheduled and notice posted in the community that the issue will be open to public debate. Any interested community people can attend and voice objections to or support of your plan. The community board, taking public opinion into account, will move on the request by voting either favorably or unfavorably. (See chapter 6 for more information on community boards.)

## Filing with the Department of Buildings

The next step is one of formality. You file plans with the department of buildings for the issuance of a new certificate of occupancy. Since your theatre is not a legal use you will be "officially rejected." You must be officially rejected in order to appeal for a zoning variance before the city's board of standards and appeals.

## Board of Standards and Appeals Hearing

The appeals process is a legal hearing. You need to be represented by either the architect who submitted the plans, or a lawyer, or both. The board of standards and appeals will consider such things as the alteration of the character of the neighborhood, impaired use of adjacent property, and the effect of your use on public welfare.

If the community board has favorably advised the board of standards and appeals regarding your zoning variance, it is likely that it will pass.

You may further be required to appear before other city agencies before a variance is granted if your project involves city money—either through direct funding or tax abatement.

area on a zoning lot. Parking requirements will vary with the district and the use. In some cases they may be waived by a modification granted by the board of standards and appeals, and reviewed by the department of buildings.

For information on restrictions and requirements for specific numerical designations, call the department of city planning. (See Agency Chart.)

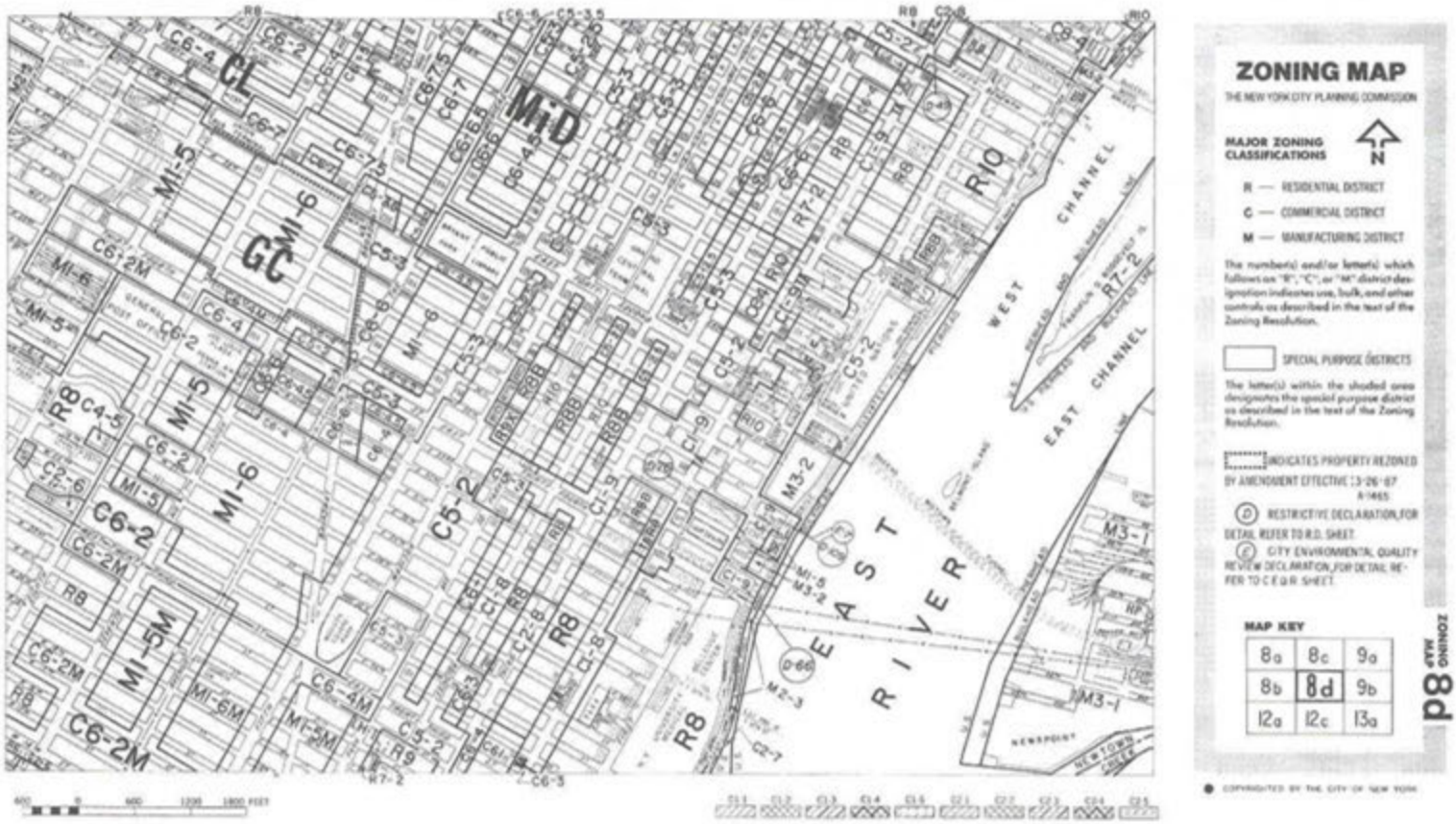
### Zoning Maps

When looking for a space, check the zoning maps of the areas in which you are interested to see where the C2, C4, C6, C8, M1, M2, and M3 districts are located. Once you have found a space, check the location again to make doubly certain that it is in one of these zoning districts. Zoning maps are available from the department of city planning. If the information on the map is not clear, call the department of city planning, zoning information. (See Agency Chart.)

## GETTING A ZONING VARIANCE

If, despite all efforts, the space you finally choose is in a nontheatre zone, then by law, you

***Zoning Map 8D, New York City. The Midtown Redevelopment (MiD) and Garment District (GC) theatre areas are marked.***



# 15 THE BUILDING CODE

Building codes are written to insure the safety of all structures and people who inhabit them. They establish requirements for such things as material, construction, number of exits, emergency lighting, ventilation, and plumbing.

The Building Code of the City of New York is one of the most comprehensive building codes in the country. Entirely rewritten in 1968, it has been amended regularly since then. It serves well in providing examples of the kinds of requirements that must be met in constructing or converting spaces for use as small theatres in urban communities.

Each of the other five cities highlighted in this book uses either an adaptation of a nationally approved code like the Building Officials and Code Administrators' (BOCA) code, or one of its own making. Each city adopts its own building code so you must inquire from the department of buildings in your city as to what code is in use. You should also recognize that the building, fire and electrical codes as discussed here present an overview of current code requirements in layperson's terms. As the codes are, for the most part, virtually unintelligible, it is advisable to consult with someone conversant with your current local codes.

The building code is law and, like most other laws, is subject to interpretation by those who administer it. Precisely how it will be interpreted cannot be known until plans are presented to the department of buildings for approval. The simpler the ideas for a space, the less difficulty there should be in obtaining approval.

## DEFINITIONS

Familiarity with the following terms will be helpful in understanding building code requirements.

**Access stairs.** Stairs between two floors that do not meet requirements for an exit.

**Assessed value.** The value of the building as determined by the city for purposes of taxation. It does not necessarily reflect what the building may sell for on the open market.

**Certificate of Occupancy (C of O).** The document, issued by the department of buildings, which authorizes use of a certain space for specified activities by a certain number of people.

**Corridor.** An enclosed public passageway providing access from rooms or spaces to an exit.

**Dead load.** The weight of all permanent materials, equipment, and construction supported by a building, including its own weight.

**Exit.** A means of egress from the interior of a building to an open exterior space that is provided by the use of the following, either singly or in combination: exterior door openings, stairs or ramps, exit passageways, horizontal exits, interior or exterior stairs, or fire escapes. Does not include access stairs, aisles, corridors or corridor doors.

**Exit passageway.** A horizontal extension of stairs or ramps, a passage leading from a yard or court to an open exterior space.

**Fire-resistance rating.** A rating, given in hours, which indicates the amount of time a wall, floor, or ceiling must remain intact under conditions of fire. Following are ratings mentioned in this text, with definitions applied to wall construction.

| | |
|---|---|
| 1 hour | 5/8" Sheetrock, both sides of wall on wooden studs |
| 2 hour | Two 5/8" layers of Sheetrock, both sides of wall on steel or aluminum studs |
| 3 hour | 6" masonry wall with plaster both sides, or 8" masonry wall without plaster |

(The principal concern a theatre has with fire ratings is to be certain that the means of egress from the space conform to the ratings required for theatre use.)

**Fire-retardant.** Materials that have been pressure-impregnated with chemicals so as to reduce combustibility.

**First story.** The first story above grade. However, if the building has a full basement

**Flameproof.** Materials that have been externally treated with chemicals in order to reduce combustibility.

**Flame-spread rating.** The degree of flame resistance of materials used for interior finish or decorative purposes; determined by the rate of flame spread in the standard tunnel test.

**Grade.** The finished surface of the ground, either paved or unpaved.

**Live load.** The weight of all occupants, materials, and equipment that are likely to be moved or relocated in a building, and that must be supported by the building in addition to the dead load. Live load is rated in pounds per sq. ft.

**Load-bearing walls and columns.** Walls and columns which support the wall and floor construction above.

**Noncombustible material.** A material that will not ignite when heated to a temperature of 1,200 degrees Fahrenheit.

**Means of egress.** The path of an exit. This can be a door; a door and a stairwell; or a door, a stairwell and a passageway.

**Occupancy.** The type of activity for which a building or space is used and/or the number of persons using a space. In a theatre space, this includes audience, actors and employees.

**Place of Assembly permit.** Permit required by and obtained from the department of buildings if you have more than the normally permitted number of persons using a space.

**Safe area.** An interior or exterior space that serves as a means of egress by providing a transitional area from an assembly place, and that also serves as a normal means of entry to the assembly place.

**Unit width of egress.** Usually 22": unit for stairs and enclosed passageways refers to how many people the stair or passage can accom-

# 16
# THE ELECTRICAL CODE

The Electrical Code of New York City is one of the country's most stringent. At present, many cities use it as a model for their own electrical codes.

Licensed electricians and electrical engineers use this code as a reference for all electrical work, and it does cover everything from plug types to transmitting stations! Much of the code deals very technically with electrical installations and equipment, and will not be discussed here. This chapter discusses only the sections of the electrical code that deal directly with theatres, and describes briefly what is required to keep a system up to code standards.

Article 26 of the electrical code is the section that specifically addresses theatre. No matter how small a theatre may be, it will be required to meet the electrical code's specifications.

## STAGE LIGHTING EQUIPMENT AND INSTALLATION

The Electrical Code divides all electrical equipment, wiring, and installations into two principal categories: *permanent* and *portable*.

*Permanent,* also called *stationary,* refers to anything attached to the wall and not intended for repositioning. In a theatre this would refer to all internal (in-house) wiring, including fuse boxes, outlets, disconnect boxes, and patch panels.

For permanent theatre installations, all wiring must be run in conduit, electrical metallic tubing or surface metal raceways, both on stage and in the house (over the seating area), as per article 26. In addition, all wiring must comply with many other specifications listed throughout the electrical code. If you are planning a permanent installation, it is necessary to hire a licensed electrician, since the code has many technical specifications for permanent wiring. Only a licensed electrician can file the specifications of changes and "sign off" when the job is done.

*Portable* is defined by the code as any electrical equipment that is capable of being readily moved due to its use. In a theatre this refers to lighting instruments, all rented equipment and cable, and any installations that must remain flexible. (All of the stage lighting equipment and boards used in Broadway houses are considered to be portable by code standards.)

### Portable Switchboards

Portable control boards ("switchboards" in electrical code terminology) must plug into an outlet specifically designed for this purpose, with enclosed fuses capable of handling the total amount of power used by the board, and an externally operated switch. This outlet is commonly referred to as a "disconnect box" since it is capable of switching off or disconnecting all the power going to the board. This box should be mounted near, but not in, the dimmer room in order to provide easy access to it in case of an emergency.

### Portable Cable

Portable cable or any nonpermanent wiring has many specifications for theatrical use. The cable must be flexible, which means that the outer covering should be rubber or thermoplastic, and the insulation for each conductor wire should be rubber or thermoplastic. The cable must be rated for hard usage and for use in damp places. The gauge (size) of the conductors cannot be smaller than #18, which means zip cord is not permitted (#14 and #12 cable are most commonly used in theatres).

The plug connectors used on portable cables cannot cause mechanical strain on the connections. (Pin plug or twist lock connectors are most commonly used in theatres and will meet this specification.) And, of course, the receiving half of the connection must be attached to the live end of the cable.

If cable is purchased or rented from a theatrical supply house, then all these specifications will be met. But if you plan to make up your own cables, read the code and double-check with an electrician before you purchase the supplies.

The code does not mention the running of cable, but theatrical electricians who have had experience with inspectors agree that neatness counts. This means tying or taping the cable every three to five feet along the pipe on which it runs. This will also relieve strain on the plug connections. If an inspector sees sloppily run cable, you may be required to redo it or install metallic tubing or raceways through which the cable must run.

### Portable Strips, Plugging Boxes, and Arc Lamps

Portable strips, portable plugging boxes, and portable arc lamps are all mentioned in article 26 of the code. The requirements for all of these will be taken care of for you if you either rent or purchase this equipment.

## DRESSING ROOMS

The code requires that conduit, electrical metallic tubing or surface metal raceways be used as the wiring method in dressing rooms, which is the same requirement applied to permanent installations.

The code further specifies that the lamps in a dressing room be protected by guards sealed or locked in place. These are usually metal or plastic baskets specially made to cover the light bulb and help to prevent contact with flammable materials.

## HOUSE LIGHTS AND WORK LIGHTS

House lights and work lights are not specifically dealt with in the electrical code section on theatres. Depending upon the situation, they could be classified as portable or permanent, and should be wired accordingly.

## EMERGENCY LIGHTING

Emergency lighting, which is also a building code requirement for public assembly spaces, is dealt with in more specific terms in the electrical code's article 31. Emergency lighting includes the exit lights and any additional lights necessary to properly illuminate, in an emergency situation, any portion of the theatre to which the public has access during the performance. Although not re-

quired by the code, it is a good idea to include the areas used by the actors and technicians.

### Alternate Power Supply

Emergency lighting systems must have an alternate power supply in the event of an electrical power failure under such circumstances as a blackout or fire. There are two basic ways in which to provide this alternate power supply:

- Generator-powered system, supplied by a source other than the main electrical power supply.
- Battery-powered system. Many small theatres find this the most practical solution.

### General Provisions

All emergency lighting systems must comply with the following:

- Wiring for emergency illumination must be entirely independent of all other wiring.
- The system must be capable of automatically switching to the alternate power supply (generator or batteries) in the event of electrical power failure.
- Emergency lights cannot be controlled by any stage lighting controls (including dimmer boards).
- The only switch or manual cut-off allowed in the emergency lighting system is at the main service. The switch must be accessible only to authorized persons and should be located in the lobby or another convenient place at the front of the building.
- The emergency lighting system must be tested frequently to assure it is in proper operating condition. Electrical and fire inspectors on routine inspection may ask that the system be tested.

There are many emergency lighting systems on the market. If purchasing or installing one, it is a good idea to seek expert advice to make certain that the system will comply with the code in your situation.

## GROUNDING

The electrical code requires that all buildings—commercial and residential—have grounded wiring. The requirement is retroactive, so it applies to both old and new structures. As the old wiring of so many buildings is not grounded, this requirement is not being strictly enforced as yet. Grounding, in its simplest form, means the addition of a third wire (ground) where previously two wires were acceptable. Inspectors can, however, require that a two-wire system be grounded if they deem it necessary—usually where safety is involved.

Grounding is required if any rewiring is done or if new wiring is added to the old, ungrounded system. Fortunately, grounded cable and its corresponding electrical hardware are not appreciably more expensive than their two-wire counterparts.

# 17
# THE FIRE PREVENTION CODE

The fire prevention code is probably the easiest with which to comply. Its requirements are based mainly on common sense and are designed for the safety of the public. Although there are variations from city to city, the New York code is representative, with the notable exception of Chicago's code, which is one of the most stringent in the country, due to the Great Chicago Fire of 1871 and the Iroquois Theatre fire in 1903.

The New York City fire prevention code has a number of regulations specifically designed for theatres and does enforce these regulations by means of routine inspections. It is only a matter of time before the fire department will make an inspection, as it does patrol its districts systematically and is aware of newcomers. You must pass an inspection by the fire department in order to receive your license.

There are some regulations in the fire prevention code that the New York building code also covers; these will not be mentioned again in this chapter.

## INSPECTION CHECKLIST

Fire department inspectors have two different sets of checklists. The one they use depends upon the size of the theatre being inspected. The following items make up the checklist that applies to theatres with 299 or fewer seats. Each checklist item is followed here by a brief explanation and some suggestions from the fire department for meeting safety standards.

**GOOD HOUSEKEEPING.** All rubbish and debris should be disposed of, especially around the stage, backstage, and seating areas. Any storage areas should be maintained in an orderly fashion. It is strongly suggested that all paints and flammable liquids be kept in a closed, but ventilated, metal cabinet. Also, it is suggested that electrical cables be run overhead, and not on the floor, especially where there is heavy traffic and a chance that the cable may be worn through.

**PORTABLE EXTINGUISHERS.** Portable 2 1/2-gallon water-type extinguishers should be placed 75' apart for every 2,500 sq. ft. and should be mounted on hooks or shelves at least 2', but not more than 4 1/2', off the floor. The extinguishers must be tagged with the last date of inspection. It is also advisable to place a $CO_2$ extinguisher where the control boards are located, in case of electrical fire.

**SPRINKLER HEADS IN EACH DRESSING ROOM.** Theatres often wait until they are inspected by the fire department before going to the expense of installing sprinklers. If your space was built under the old code, which does not require sprinklers, it is possible that you may not have to install a sprinkler system, providing extinguishers are located within this area. However, the inspector may insist on the installation of sprinklers, nevertheless. If your conversion is under the new code, sprinklers will be required.

**SMOKING.** Smoking is prohibited inside of any theatre in New York City. Plainly visible "No Smoking" signs must be posted. No person may smoke in areas that are so posted.

(Exception: Smoking on stage may be permitted only when it is a necessary and rehearsed part of a performance and only by a regular performing member of the cast.)

**LOCKED OR BLOCKED EXITS.** Any exits to be used in an emergency must be left unlocked during all public performances and access to them must remain clear and unobstructed.

**THEATRE LOG BOOK.** Every theatre must keep an fire inspection log. This is the responsibility of the theatre "fireguard," a manager on hand at every performance to conduct an inspection and insure audience safety. Reproduced on the following pages are the instructions for keeping a log book as issued by the fire department, a blank log book form, and a page from a log book used by one small theatre.

**FLAMEPROOFING AFFIDAVIT FOR SHOW SCENERY AND HOUSE DRAPERIES.** For each new production, you are required to have a sworn affidavit stating that all the materials used in construction of the scenery are flameproofed. This affidavit should be filed with the fire commissioner, and a copy should be kept on file at the theatre so that you may show it to the inspectors. Reproduced below are the latest regulations from the fire department governing flameproofing, and examples of the standard affidavit used.

Flameproofing done by the fabric manufacturer should last the life of the fabric. Flameproofing sprayed on will last for one year and should be repeated annually; however, acceptance by the fire department may be renewed for up to three years. (See F.P. Directive 1-78 Rev.)

## PERMITS

The fire department requires a number of special permits for the use of open flame, flash paper, flash pots and the like on stage. While the fees vary, several hundred dollars will be required to cover the cost of these permits and additional special inspection charges. All permits must be kept on file and shown to the fire inspector upon request.

# 18
# APPLICATION PROCEDURES

## PRELIMINARY PROCEDURES

Before committing yourself to a space, complete the following steps. The procedures outlined here apply to New York City, but nearly identical procedures are in effect throughout the country.

### Check Zoning Map

1. Go to the maps and publications room at the department of city planning and check the zoning map of the district in which the potential theatre is located. Double-check the zoning designation, making sure that theatre is permitted.

2. Check with the zoning information desk of the department of city planning regarding the subdesignations, to find out what restrictions or requirements are placed on this location.

### Check Certificate of Occupancy (C of O)

1. Look on the existing C of O, which should be on file with the building's manager, to check the building's classification.

2. If the C of O is not available, take the exact address and go to the index room at the department of buildings where C of Os are on file.

3. If a C of O does not exist, you will be given a block and lot number on the building's folder, which will allow you to look up the building classification listed on the last altered building application for the building.

4. Even if a C of O exists, look up the building's last legal use, the live load rating of the floor, and whether any outstanding violations on the building exist.

5. Double-check all information, using the checklist provided at the end of chapter 15, to make sure that theatre is permitted in the building and that all the necessary requirements for theatre use are met.

Do not take an agent's, building manager's, or owner's word on any of these matters.

## APPLICATION PROCEDURES FOR PERMITS AND LICENSES

The process of filing plans and applications for the various permits and licenses a theatre needs to operate legally can take anywhere from two months to half a year!

A lot of this time can be saved by hiring an architectural firm that does its own expediting with the department of buildings. It will organize the filing of applications, keep track of their progress, and insure that they do not become mired in departmental red tape.

Occasionally, architects don't do their own expediting; in such cases you may want to hire a professional expediter, recommended by the architect.

If you do your own expediting (not recommended), be prepared for a great deal of phone calling, paperwork and follow-through. The application procedures outlined in this section involve a considerable amount of red tape; patience and perseverance will be necessary.

### Altered Building Application

This form, obtained from the department of buildings, must be filed even if no alterations or renovations are to be done, in order to indicate a change of use so that a new C of O may be issued.

The filing fee is a minimum of $55. If renovation work is planned, the fee will be based on the cost of the renovation but may not exceed 30% of the total.

Written permission from the building's owner must be obtained for renovation work, and plans must be filed showing the proposed alteration. Two sets of these plans must be filed by a licensed architect or engineer, who will stamp them to verify their accuracy.

The plans for renovation filed with this application will be reviewed by a plan examiner to see if all the building code requirements are met. The architect who has stamped and filed these plans will be notified if the examiner has any objections. If either you or the architect feel the examiner's interpretation of the code with regard to your plan is not accurate, a review may be requested. The chief engineer of the department of buildings will then evaluate the appeal and determine the validity of the interpretation. If a decision is made in the examiner's favor, then appropriate changes must be made and the plans refiled.

Once the plans are approved, a work permit will be issued. Construction work can be done only by a licensed general contractor, or by you—if you state that you will be acting as your own general contractor. You will be required to sign an affidavit stating this, as well as stating that you will obtain proper liability coverage for anyone working on the construction.

As the end of the construction approaches, arrangements must be made for final inspection by a construction inspector from the department of buildings. The inspector will check that the construction conforms to the plans submitted with the altered building application. If any changes have been made, they must be in compliance with the code, and a new set of plans indicating all these changes must be submitted before final approval is given by the inspector.

Once final approval is given, a new certificate of occupancy will be issued by the department of buildings.

### Plans for the Department of Buildings

It is possible to save money by drawing up the required plans for the altered building application yourself. However, a licensed architect or engineer will be needed to review, stamp, and file the plans. The cost for this service will be considerably less than if professionals had done all the drawings. This can, however, be "penny wise and pound foolish." A licensed architect is always recommended.

The drawings must indicate the existing structure and any proposed changes being made, including the materials to be used in construction. They must be accurate and drawn to scale. The plans must include the following information: designated

stage area, designated audience area with a seating arrangement, designated exits and aisles, and location of exit lights and emergency lights. Also include plans for the rest of the space, including the location and size of the dressing rooms, lobby, offices, rest rooms, shops, and storage areas. It is important that the drawings be accurate.

For further information, consult sections 27-157, 27-158, and 27- 159 of the New York City building code.

## Certificate of Occupancy Application

Although a C of O will not be issued by the department of buildings until all renovations, plumbing, and electrical work have been inspected and approved, you should file for a new C of O immediately upon filing plans, to set the procedure in motion. You will need the building owner's authorization to file.

If your space is located in a building of three stories or fewer, a new C of O will need to be obtained for the entire building. If your space is located in a building of four or more stories and the amount of space occupied is less than 20% of the entire building, then you will need a C of O for the space you actually occupy; however, if you occupy 20% or more of the building, then you will need a new C of O for the entire building.

## Application for Permit for a Place of Assembly

Although this permit, commonly known as a "PA license," will not be issued until after the new C of O is issued, you should initiate the filing procedure with the department of buildings at the same time the altered building application is filed. You will need to file this permit only if your proposed occupancy exceeds 74.

A separate set of plans must be filed with this application, indicating seating plans, any alternate seating plans, and the location of the exit signs.

The fire department receives notification when this application is submitted and then schedules an inspection. This must be made before the permit is approved. If you apply for a cabaret license as well, you must also pass a more stringent fire department inspection before receiving that license.

The place of assembly permit must be renewed annually. The filing fee is $55.

## Applications for Sign Permits

This application, obtained from the department of buildings, covers any exterior signs. A licensed rigger files this application, stating that the rigger is either doing the work or supervising it. Plans must be submitted showing the size and location of the sign, the materials used in its construction, and the means of supporting and anchoring the sign.

If the sign is to be illuminated, an additional application from a licensed electrician will have to be filed with the department of gas and electricity, stating that the electrician is either doing the wiring or is supervising the work. A schematic plan of the wiring must also be filed.

The fees for sign permits are based on the installation costs and on the square footage of the sign.

## Permits for Awnings and Canopies

Applications for awning or cloth canopy permits must be filed with the bureau of highways, department of transportation, because they extend over the sidewalk.

Marquees and solid canopies are considered permanent construction and therefore part of the building. The building code is very restrictive about their construction and erection.

The stringent requirements regarding the construction and materials used in the manufacture of awnings necessitate the filing of a notarized letter from the manufacturer stating that the awning conforms to these requirements. Make sure the application for this permit has been approved prior to purchasing or setting up the awning. This way you will be guaranteed that the manufacturer complies with the requirements.

This application also will apply to any signs, banners, or pennants that project from the wall.

Once obtained, permits must be renewed annually.

### Application for Inspection and Certification of Electrical Work

To be in strict compliance with the electrical code, a licensed electrician must file an application for a certificate of electrical inspection with the bureau of gas and electricity for any electrical work —installation, alteration, or repairs. The licensed electrician will describe in detail the work to be done and submit wiring diagrams in duplicate. The application must be filed before work begins.

If the electrician is filing an application for work that is to be done by an unlicensed contractor, this must be stated on the application.

There are filing fees involved: an initial filing fee of $5, payable upon application, and an additional fee based upon the type and amount of work. (See rates listed on the application.) This additional filing fee must be paid before a certificate of electrical inspection is validated by an inspector. After the work is completed, an inspector will come by, check the work, and issue an inspection certificate, which you will be required to keep on file.

If the electrical work being done is to correct a written violation, the procedure is the same, but the filing fees are doubled.

### Permits to Install or Alter Plumbing

If any plumbing work needs to be done, a licensed plumber must apply for a permit and file schematic plans. The application must state that the plumber is either executing or supervising the work. This application should be filed at the department of buildings before work begins. A plumbing inspector must approve the work before the department of buildings issues a final approval.

Fees will be based upon the same schedule that applies to the altered building application, except where the alterations are under $1,000 and involve neither structural changes nor a change in occupancy. In the latter case the fee is $11 for the first $500 and $22 for costs over $500 but under $1,000.

### Requirements for the Handicapped

When the cost of any alterations made within a 12-month period immediately following the filing of a building application exceeds 50% of the replacement cost of the building, then the entire building must provide for those with physical disabilities. Also, if there is a change in the occupancy classification of the building, then the entire building must be made to comply. If there is a change in the use of a space in the building, only this space must be brought into compliance. However, if the cost of any alteration is less than 50% of the replacement cost, the handicapped accessibility need only be in the areas altered.

## VIOLATIONS

If you are inspected by any of the departments and violations are found, they must be presented to you in writing. Generally, you are given anywhere from 24 hours to 30 days in which to comply; only if a gross violation has occurred will you be threatened with immediate shutdown. To comply, you must hire the appropriate licensed professional to remove the violation within the specified period of time. If the inspector returns to check on the violation, you must have proof in writing that you have hired a licensed professional to do the work. It is possible to hire the licensed professional only to file and sign the proper applications for inspection and to supervise the work, with your theatre providing the actual labor.

If the inspector identifies a violation verbally, then you are not required by law to correct it; but it is wise to do so, since you may be issued a written violation the next time around.

If you need help or advice in correcting a violation, or dealing with an agency, contact your local theatre service organization for assistance.

# APPENDIX: EVALUATION CHECKLIST

## SPECIFICS

**Date of visit:** _____

**Weather:** sunny rainy hot cold damp dry snowy

**Building address:** _____

**Building orientation:** N S E W NE NW SE SW

**Contact:** _____

owner agent other_____ **Phone:** _____

**Rent per month:** _____ **Annual rent:** _____

**Total square footage:** _____ **Cost per sq. ft.:** _____

**Dimensions:**

| | height | width | depth | total sq. ft. |
|---|---|---|---|---|
| 1st fl. | | | | |
| 2nd fl. | | | | |
| 3rd fl. | | | | |

**Neighborhood:** residential commercial manufacturing

**Building type:** brownstone storefront loft
other _____

**Building age:** _____

**Previous use:** _____

**Neighbors:** business residence occupied vacant

right _____

left _____

above _____

below _____

**Building's zoning designation:** _____

## NEIGHBORHOOD

**Nearest subway stops:** _____

**Nearest bus stops:** _____

**On-the-street parking:** _____

restrictions: _____

**Nearest parking lot:** _____

hours:_____ fee: _____

**Street and sidewalks:** potholes cracks crumbling irregular good

**Street lights:** well-lit adequate poor

**Garbage collection:** regular irregular none

**Nearest restaurants and pubs:** _____

_____

hours: _____

**Nearby shops, hardware stores, etc. :** _____

_____

**Special factors:** Urban Renewal landmark building

Equity contract restrictions _____

city-owned federal-owned other: _____

**General impression:** _____

_____

_____

_____

## EXTERIOR CONDITIONS

**Facing:** board brick brownstone clapboard other _____
general condition: _____
**Steps:** stone wood concrete other _____
general condition: _____
**Doors:** wood steel metal glass other _____
frames: wood steel dimensions: _____
general condition: _____
**Backyard:** dirt concrete other _____
dimensions: _____
general condition: _____

**Roof access:** ladder stairs trap door
**Roof:** new old holes leaks cracks bubbles
general condition: _____
**Roof parapet:** wood molding gutter drainpipe other _____
general condition: _____
**Fire escapes:** yes no
general condition: _____
**Repairs needed:** _____
**General impression:** _____
_____
_____

## INTERIOR CONDITIONS

**Floors:** wood concrete linoleum tile other _____
live weight load: _____ lbs. per sq. ft.
general condition: _____
**Stairs:** wood marble concrete metal stone
open enclosed width: _____
general condition: _____
**Corridors:** wall construction: _____
width: _____ general condition: _____
**Elevators:** yes no passenger freight manual automatic
dimensions: _____ capacity ___ lbs.
**Walls and ceilings:** brick plaster sheet rock concrete block drywall other _____
general condition: _____
**Columns:** yes no measurements between: _____

**Windows:** number: _____ dimensions: _____
frames: wood steel aluminum
glass: broken cracked missing panes
general condition: _____
**Basement:** finished unfinished material: _____
beams: wood steel concrete & steel
floor: dirt wood tile lineoleum other _____
general condition: dry damp water marked
**repairs needed:** _____
**general impression:** _____
_____
_____
_____
_____
_____

## MECHANICAL SYSTEMS

**Heating:** steam hot water forced air unit ventilating
oil electricity
age: _____ general condition: _____
**Air conditioning:** throughout roof units none
general condition: _____
**Electrical:** A/C D/C
service: to floor: ___phase ___wire ___amps ___volts
to buildings: ___phase ___wire ___amps ___volts
circuit breaker panel fuse box location: _____
number and location of outlets: _____
_____
additional service required: yes no
general condition of wiring: _____

**Plumbing:** clear patched broken
number and location of bathrooms: _____
number and location of sinks: _____
hot water heater: adequate inadequate inoperable
capacity: _____ gallons
general condition: _____
**Security:** doors: locks gates bars
windows: locks gates bars
number of exits: _____ alarm system: yes no
**Emergency systems:** sprinklered extinguishers fire alarm
emergency lighting
**Repairs needed:** _____
**General impression:** _____
_____
_____

**WILL IT MAKE A THEATRE** has become a classic in the field, a comprehensive, practical guide for groups wanting to develop their own performance space. Eldon Elder, working in association with the Alliance of Resident Theatres/ New York (A.R.T./NY), has fully revised and updated this book, and the new edition is ideal for emerging and growing companies, technical theatre personnel, students of theatre design and architects. In it you will find proven-successful techniques for renovation, restoration, and improvement.

**WILL IT MAKE A THEATRE** can help you

- create a performance facility in a building designed for another purpose
- upgrade a current space and determine priorities for renovations
- understand building and fire code applications
- share space with organizations.

**WILL IT MAKE A THEATRE** includes chapters detailing planning, fundraising, tax laws, and energy conservation. It also features extensive checklists, sample contracts, architectural drawings, contact resources, as well as examples of successful projects that illustrate how to achieve your goals.

**ELDON ELDER**, founder and president of Eldon Elder Associates, has designed and consulted on theatres throughout the United States and overseas. His credits include the Delacorte Theater in Central Park, home of the New York Shakespeare Festival; Theater II for the Seattle Repertory Theatre; and Badjao Amphitheatre in Manila, Philippine Islands. Mr. Elder has also designed settings, lighting, and/or costumes for over 200 Broadway, Off-Broadway, opera and regional theatre productions in the United States, London and Berlin. He served as Professor of Stage Design at Brooklyn College from 1956 to 1975 and has been visiting professor at numerous universities since then. Mr. Elder has received grants from both the Ford and Guggenheim foundations for his innovative work in theatre design.

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