

# THE HOUSE BOOK



## THE BETTER WAY TO RESTORE OLDER HOMES IN SPRINGFIELD

Prepared in Cooperation with  
The Springfield Community  
Development Department  
and the  
Springfield Historical Commission

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## The Better Way to Restore Older Homes in Springfield

by

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Washington, D.C.

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## INTRODUCTION

Springfield today is distinguished by a rich variety of residential architecture. Many examples of all the major architectural styles of the 19th century still stand along her streets, physical reminders of the cultural heritage of a city that has played an important role in Western Massachusetts for over three hundred years. We can learn to appreciate this heritage. We can begin to recognize the various architectural styles and how they are connected with the various stages of development of the city - - from the river village of the 17th century through the bustling country town to the business and manufacturing center that we have today. Appreciation of these satisfying links with the past is important - - but it is only part of the story of preservation and restoration.

A city is not just houses and public buildings. Cities are people . . . our most important resource. Springfield has always been a "people place." Justly proud of her name as the "City of Homes", she has reserved over one third of the city's land for housing. Despite the growth of business and manufacturing, large areas of the city have retained their residential character. The neighborhoods laid out over 100 years ago are still there, largely unchanged. The houses in them are not just good examples of architecture; they are homes where people live and raise their families.

The quality of these homes cannot be reproduced today. Some have been neglected for years and are still standing - a testimony of the skills of the carpenter-builders of the last century and the durability of wood as a building material. We still have excellent builders. What we do not have is the time and money to lavish such care on the construction and detailing as has been done in the past. Rising costs of labor and materials make it impossible to reproduce these houses. Many of these fine homes are already gone, destroyed by neglect, fire, or vandalism. Many more will be lost and they cannot be replaced. Families will have to move.

There is an alternative - - an alternative that will preserve both our cultural and human resources. We can save our remaining cultural heritage and continue to provide quality homes for people by renovating and in some cases restoring these older homes. This process has already begun. Springfield has been a leader in urban redevelopment. City agencies have long been concerned with the need to save these resources. The Planning Department and the Redevelopment Authority, in particular, have been actively working to save not only individual homes but whole

neighborhoods. Some areas of the city have been designated historic districts; others have been the focus of concentrated rehabilitation efforts.

Many of you live in areas of the city where people have already begun to fix up their homes. You have seen how this has improved the appearance of the neighborhood. You may have been thinking about getting started on your house and have wondered where to go to get advice and assistance. We hope that this booklet will answer these questions and many more.

To help you find your way through the often confusing terms used in architecture and building, we have begun with a drawing on the next page that illustrates the more common parts of a house. We have used here a fairly typical Springfield version of a two family Victorian house. Additional architectural terms are explained in the glossary on the following page. With this glossary we have included drawings of the common roof types. Roof design is a major clue to identifying the architectural style of your house - - a necessary first step in planning a restoration.

This is followed by a section that combines brief summaries of the major periods in Springfield's history with drawings and descriptions of the major architectural styles of each period. It is unlikely that your house will look exactly like any one of the examples illustrated. Particularly in the Victorian period, the styles overlapped and many of the same architectural details can be found on different types of houses.

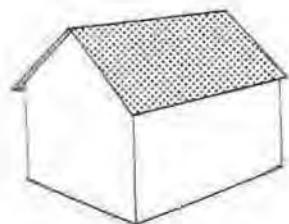
The last half of the booklet is devoted to a section on design guidelines to help you do a better job of restoring your home. There you will find the solutions to some common restoration problems. Wherever possible practical alternatives are presented so that you can choose what is best for your home and your pocketbook. Fixing up a house is a long term investment. However, the better way may turn out to be the one that gives satisfaction for the longest period of time even though the initial expense is greater.

In the back are listed the city departments that are concerned with redevelopment and restoration. Many people stand ready to provide you with advice as well as financial assistance, but in the final analysis, the quality of the environment in your neighborhood depends on what you, the homeowner, can do to improve your property. Begin now to plan and carry out the restoration and renovation of your home.

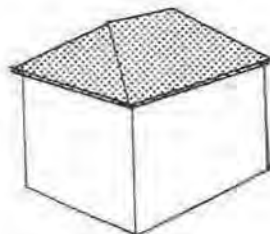
# THE PARTS OF A HOUSE



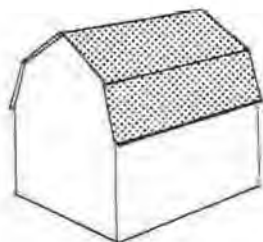
## ROOF TYPES



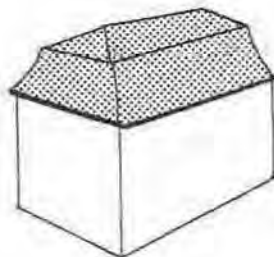
Gable



Hip



Gambrel



Mansard

## ARCHITECTURAL GLOSSARY

**Baluster** . . . A closely spaced support for a railing on a porch or flight of stairs.

**Bay** . . . External divisions of a building marked by window replacement or other vertical elements.

**Bay Window** . . . A projecting bay extending to the ground level that forms an extension to the interior floor space. If curved, also called a bowfront. If the projection extends from an upper story, the proper term is oriel window.

**Bond** . . . The method used to hold thick brick walls together. English bond is an arrangement which alternates one row of bricks placed end out with another row of bricks placed side out. Flemish bond is an arrangement which alternates a brick placed sideward with a brick placed lengthwise within the same row. Common bond uses staggered rows of brick, each row with all bricks side out.

**Bracket** . . . A small projection, usually carved decoration which supports or appears to support a projecting cornice or lintel.

**Clapboards** . . . Narrow, horizontal, overlapping wooden boards that form the outer skin of the wall of many wood frame buildings. These boards are generally 4" - 6" wide.

**Classical Orders** . . . In classical architecture an order consists of a Column or shaft (with or without a base) its Capital, or head, and the horizontal Entablature. These were proportioned and decorated according to certain modes - the most common ones were established by the ancient Greeks - the Doric, Ionic and Corinthian. The Romans later modified these orders slightly. Most of the "classical details found in nineteenth century buildings are modifications of the Roman details.

**Column** . . . A vertical shaft or pillar that supports or appears to support a load. (See Classical Orders)

**Corner Board** . . . A narrow vertical board at the corner of a wood frame building.

**Cornice** . . . Any projecting ornamental molding along the top of a building or wall.

**Dentil** . . . Small square blocks generally used in a row to ornament cornices.

**Dormer** . . . A window with a roof of its own that projects vertically from a sloping roof.

**Entablature** . . . In classical architecture, the horizontal section between the columns and the eaves of the roof. Usually in three parts; the architrave, the frieze and the cornice. (See Classical Orders)

**Facade** . . . The front face or elevation of a building.

**Fascia** . . . A flat vertical board that forms the face along the edge of a flat roof or along the horizontal or "eaves" side of a pitched roof.

**Fenestration** . . . The arrangement of windows.

**Hood** . . . A small roof over a door or window supported by brackets.

**Lights** . . . Openings between the mullions of a window, usually glazed. (See Window Parts)

**Lintel** . . . A horizontal beam over an opening. May be decorative or may carry load of the structure above.

**Molding** . . . A decorative band or strip of material with a profile. Generally used on cornices and as trim around window and door openings.

**Newell** . . . A post supporting one end of a handrail, usually at the top or bottom of a flight of stairs.

**Pediment** . . . The triangular space formed by the two slopes of a gable roof. Also, a triangular cap sometimes used as decoration over a door or a window.

**Pilaster** . . . A flat-faced or half round column which appears as if embedded in the surrounding wall and which projects slightly from it.

**Pitch** . . . The slope of a roof.

**Sill** . . . The lower horizontal part of a door or window frame or the bottom horizontal board on a wall.

**Spindles** . . . A short turned piece of wood quite often used in closely spaced vertical rows overhead on exterior porches. Also known as a baluster.

**Transom** . . . A horizontal crossbar in a window, over a door, or between a door and window above it. Also refers to a window above a door or other window.

**Window Parts** . . . Sash is the term given to the moving units of a window which are placed in a fixed frame. The sash may consist of one large pane of glass or it may be subdivided into smaller panes by thin members called muntins.



# HISTORY

## THE SHAPING OF A TOWN      Springfield 1636 - 1790

*"We arrived at sundown. . . (having) crossed the ferry a mile below Springfield. On the river, we were presented with a very romantic aspect. The river itself for several miles, both above and below, one fourth of a mile wide, was in full view. Agawam, a considerable tributary on the west . . . joined the Connecticut at a small distance above. The peak of Mt. Tom rose nobly in the northwest at a distance of twelve miles. A little eastward of the Connecticut, the white spire of the Springfield Church embosomed in trees, animated the scene in a manner remarkably picturesque.*

*Springfield is the oldest town in the county of Hampshire, which when it was formed, comprehended the whole of Massachusetts Bay from a line twenty miles east of the Connecticut River to the western limit . . . The town was chiefly built along a single street, lying parallel with the river nearly two miles. The houses are chiefly on the western side (of the street). On the eastern a brook runs almost the whole length . . . From the street a marsh extends about forty or fifty rods to the brow of an elevated pine plain. The waters of this marsh are a collection of living springs . . . for this reason probably the town is not unhealthy . . . The houses of Springfield are more uniformly well built than those of any other inland town in the state except Worcester. An uncommon appearance of neatness prevails everywhere, refreshing to the eye of the traveler. . . ."*

\*Timothy Dwight, *Travels Through New England and New York*. Written in 1794 and published in 1821.

Few people today would recognize Springfield from this description by a late 18th century traveler. Except for the familiar landmarks, Mt. Tom and the river, very little remains of the settlement laid out by William Pynchon in 1636. Even the "well built houses" and the "white spired" church have long since disappeared in the growth and development of over three hundred years.

What does remain is Main Street, the only street in Pynchon's village; the street which has been the central spine of the city to this day. The geography of the Springfield area not only limited the original settlement to this one north-south street, but determined the physical layout as well. It has had an effect on the rate of progress of Springfield through all her stages of development.

Hemmed in on all sides by the river on the west, the wooded bluff beyond the marshes to the east and several hills, Pynchon's village could change very little in the first 150 years. Established as a furtrading post under the jurisdiction of the Connecticut Colony, this frontier settlement prospered in the first few years. Problems soon arose. Famine was an ever present threat and corn had to be purchased from the Indians. Difficulties between Pynchon and the Connecticut General Court over this purchase resulted in his official censure and Springfield reuniting with the Massachusetts Bay Colony in 1641. The fur trade declined as the upper reaches of the Connecticut river were "trapped out" and Pynchon himself returned to England.

With the river as their only transportation link, the village remained isolated on the frontier. Their sense of isolation increased with the new threats of Indian attack and in 1675, Springfield was burned to the ground in an Indian raid. Other towns in the valley had suffered a similar fate and had been abandoned. The people of Springfield decided to rebuild.

Even the 18th century saw little change. Barely self sufficient, with limited farming land in the township, the town grew very slowly. There was little manufacturing; people depended on the local artisans and millers. Roads coming into town were little more than grassy tracks over the old Indian trails, and Springfield still relied on the river for travel even after the Revolutionary War.

In 1790, Springfield with 1574 citizens living in only 283 houses was even smaller than her neighbor across the river, West Springfield. With more fertile land and a better terrain for farming, this community had become quite prosperous. Now this difference between them became very important. The more successful farmers across the river saw little advantage to having a government armory in their town and actually worked to prevent it. Springfield welcomed the Armory and the stage was set for a new and more prosperous era of development.

## TRANSITION

### THE TOWN BECOMES A CITY    Springfield 1790 - 1850

Although Springfield had been the site of an arsenal during the Revolution, the establishment of a manufacturing Armory on the Hill in 1794 was the most significant first step in transforming the town into the city that it became in the next fifty years. The Armory attracted skilled workers from the beginning and continued to have a major effect on population growth through the Civil War.

As the town grew, many changes took place. A settlement grew up around the Armory with housing for the workers. State Street was laid out to connect the Hill with Main Street, the center of town. And here, Court Square was established by a group of far sighted businessmen who saw a need for a central focus to the commercial district. This square has remained the center of the institutional life of the city to this day, with a church, courthouse, and finally the city hall built around it.

Although pigs had been banned from the streets in 1790, cattle and horses roamed freely. No better indicator can be found of the changing status of the town than an ordinance passed in 1820 banning these animals from the streets. With an awakened civic pride, Springfield was rightfully concerned about protecting her newest civic improvement, the first sidewalks on Main Street.

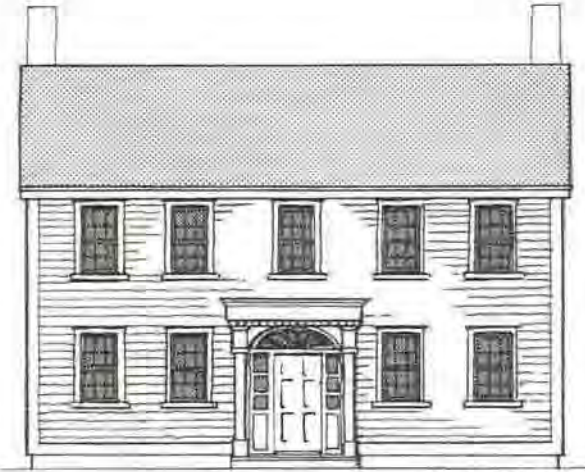
For business and industry to continue to grow, better transportation facilities were needed. Although a bridge had replaced the ferry across the river and Springfield was a stage coach stop on the new turnpikes, the railroad was needed to make Springfield the important manufacturing center of the region. Even the steamboats that plied the river from Hartford carrying passengers and goods were not enough. In 1839, the railroad reached the city from Worcester and within two years crossed the river and connected the city with Albany.

By the 1840's, three distinct neighborhoods had emerged: the central district along the still unpaved Main Street, now bisected by many smaller streets; Armory village with its own shops and churches; and a third district along Mill River where the Armory "watershops" and other water-powered manufacturing took place. Indian Orchard, along with the earlier community of Chicopee were well established by mid-century. Although these areas were still separated by woods, streams and marshes, the basic skeleton of the city of today was in place and waiting for the exciting growth and expansion of the next fifty years.



## RESIDENTIAL ARCHITECTURE

1790 - 1850



Federal Style



Greek Revival Style

With a new awareness of the growing importance of their town and a desire to keep up with the more sophisticated building styles used in the major cities near the coast, Springfield builders in this period turned increasingly to the newest styles in residential architecture, first the Federal and then the Greek Revival Styles.

These styles were basically refinements of the standard houses of the colonial period and built in much the same way. Although some machine-made nails were made and waterpower had replaced manpower at the sawmills, these wood frame houses were still being built as houses had been built for centuries. Despite their more sophisticated exteriors, their heavy timber frames were held together by intricate joints and wooden pegs. These heavy frames literally stood by themselves, without additional support from the exterior sheathing. Many men were needed to raise the timbers and put them together.

The Colonial style house had used a simple rectangular balanced plan with gable ends and a central doorway. Unfortunately, no examples remain in Springfield from this pre-Revolutionary period. However, these Colonial styles would again become popular in the late Victorian period. They will be described and illustrated with the revival styles of the early 20th Century.

### Federal Style:

The first refinement on the Colonial style was called the Federal style after the new form of federal government. Originally developed in England and known there as the Adam style, this house style repeats the rectangular floor plan and the balanced facade of the Colonial period house. The doorway is the focus of this style with slim columns and/or pilasters supporting a pediment or a small flat roof. The door itself is flanked by narrow strips of window divided into small panes. The best clue to this style, in addition to the lightness of the columns, is the use of semi-elliptical windows over the door or in the gable ends. These demi-lune fanlights are the hallmark of the Federal or Adam style. A notable example of this style is the Alexander house on State Street.

### Greek Revival:

Greek Revival has been called the first true American architectural style. It reflected the admiration that the new country had for the democratic ideals of Greece. In this style builders were reproducing Greek temple forms in wood. These Greek Revival cottages were popular in Springfield and a few remain in the South End. In this style, the gable end, representing the temple front, faces the street. The gable end is the pediment, the wide board that runs across the gable represents the classic Greek entablature and the vertical corner boards were the columns of the "temple". Clapboards were usually used for siding, although occasionally smooth wooden siding was used to more closely produce the effect of "temple" walls. These houses were always

painted white or in very light colors to look like marble.

These houses often have small porches at the entrance supported by the heavier round columns of the Classic Greek orders reproduced in wood. Between the roof and the columns, wide boards, separated by mouldings, again represent the elements of Greek architecture. Here also, a strip of narrow windows were often placed along either side and across the transom at the top of the door.

## THE SHAPE OF THE CITY

### Springfield 1850 - 1900's

Becoming known throughout New England as a place where careers could be made in business, industry or the professions, Springfield made remarkable progress in the next half century, and officially became a city with incorporation in 1852. In the war boom economy created by the Civil War, people streamed into Springfield to find work. The growth rate of the population exceeded all the major cities of Massachusetts in these war years. The principal employer was still the arms industry both at the Armory and in the private sector.

Much to the surprise of her citizens, the expected retrenchment at the end of the war did not take place. With rapid diversification of business and industry, Springfield continued to boom. To accommodate the rapidly expanding population, housing was needed on a greater scale than ever before. New streets were laid out where pastures had been. The city first grew to the North End near the railroad depot, and then later into the McKnight district and Forest Park where whole neighborhoods were created by builder/developers like the McKnight Brothers.

Public improvements, such as new paved streets, schools, hospitals a city water supply and new sewage facilities, were now in place. The rapidly expanding community contained all the elements of a successful city; well defined and differentiated neighborhoods, central organizing elements like the river and the Armory, important architectural landmarks in Court and Armory Squares and the new library on State Street. Excellent examples of public as well as residential architecture were built in this period. By the 1890's, Mattoon Street with its town houses, Forest Park Heights, Calhoun Park and the McKnight district had been completed and the city had evolved into the coherent whole that we have today. Homes, business and industry now all had their place in the geography of Springfield.



## VICTORIAN ARCHITECTURE 1850 - 1900's



Italianate Bracket Style



French Empire (Mansard) Style

A revolution in house building occurred just as Springfield was becoming a city -- the invention of the "balloon frame" type of construction. Machine made nails of all sizes were plentiful and lumber dimensions were standardized, making this new way of building possible. Thin, studded walls with minimum bracing were not free standing, but depended on the outside sheathing material to help hold the house together and support the roof. With just a few men, houses could be framed in a short time. Although not well received in the beginning, in fact it was named from the idea that these "balloon" frames would blow away in the wind, this new method of construction allowed homes to be mass produced for the first time quickly and cheaply. Architects as well as builders were no longer limited to the simple floor plans and box-like house of the earlier periods. All the great variety of styles which are generally called Victorian evolved in the next fifty years.

Another change was important to the development of the styles of this period, the beginning of America's "love affair with the machine". Newer and better machines were available to saw wood in patterns and turn out the mass produced millwork and decorations that were characteristic of the Victorian period. The Centennial Exposition held in Philadelphia in 1876 is credited with sparking the new popularity of ornate design in housefronts as well as interiors and in furniture. Each builder was able to use these easily produced wood parts in many different ways. With a few basic floor plans, he could produce the astonishing variety of housefronts that are so typical of the Victorian streetscape.

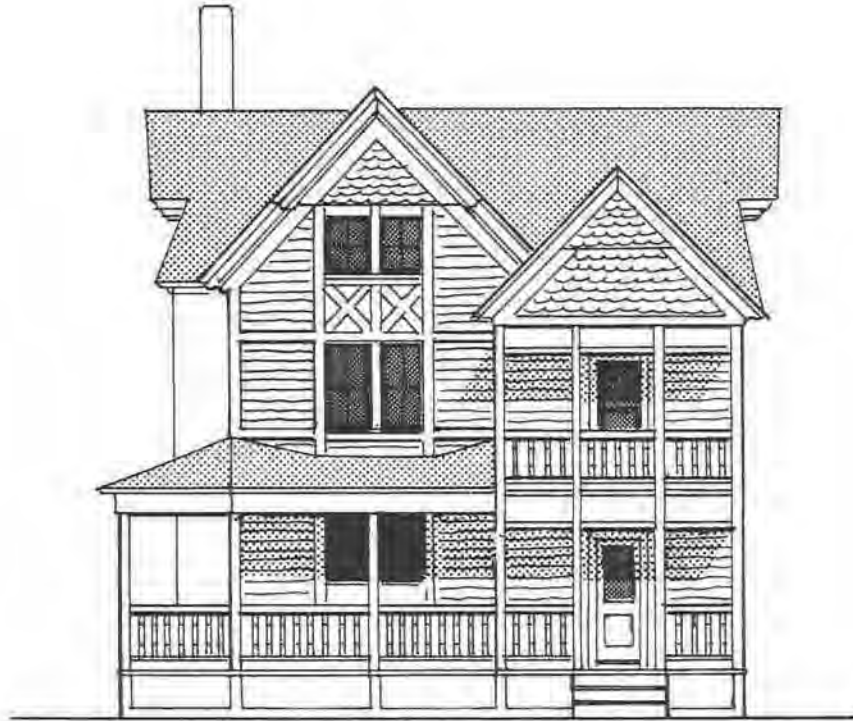
### Italianate Bracket Style

Although some examples of the Carpenter Gothic Revival style that have peaked gables and scrollwork were built, the first style that really became popular in Springfield in the early Victorian period was the Italianate Bracket style. Designed to resemble an Italian villa, this local favorite can be distinguished by the use of elaborate brackets that help support the door and window hoods as well as the typical wide cornices of this type of house. However, brackets of this kind were also used on later Victorian styles (see below), so don't identify your house just from this feature. The true Italianate style has a box-like shape with either a flat or gable roof. Clapboarding was commonly used for siding and bay windows were not unusual. Examine the drawings to see the differences between this and the later styles.

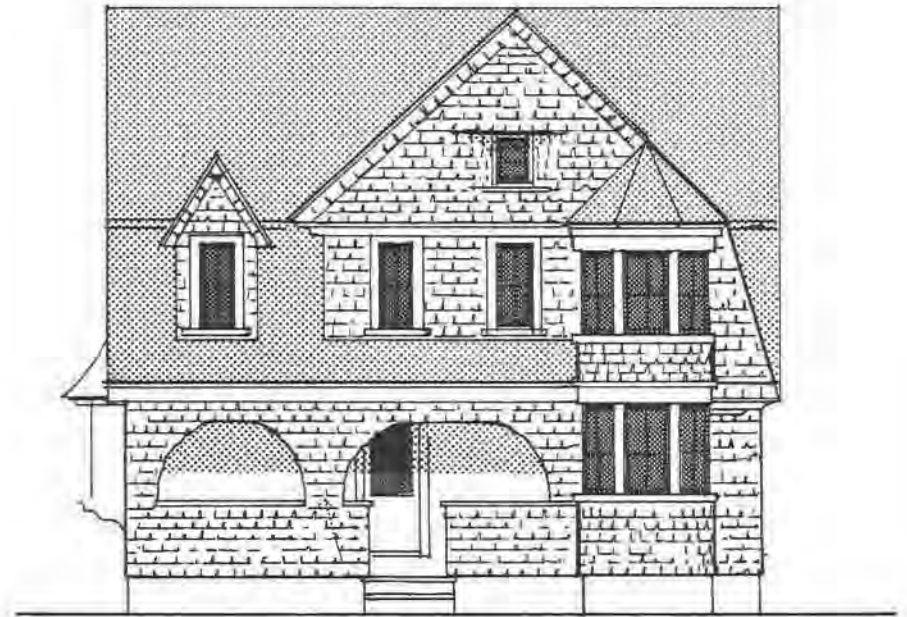
### French Empire (Mansard) Style

This formal style had a brief popularity in Springfield and is readily identified by the steep, double pitched mansard roof. Usually slate covered, these roofs are very steep to accommodate full length window dormers which allows for living space on the third floor. Either joined together in row houses or detached, these townhouses present a tall narrow facade to the street.

## QUEEN ANNE STYLES



Stick Style



Shingle Style



### Queen Anne Styles

This is the style that most people think of when they call a house "Victorian." Most of the houses built after the Civil War in Springfield have the typical rambling informal floor plans, the irregular roof lines and the porches that are characteristic of the Queen Anne styles. Wall surfaces are richly decorated. Often several kinds of shingles as well as clapboards are used on the same house. Elaborately turned newell posts, porch columns and balusters are common details.

### Stick Style

In this common local variation of the Queen Anne style, the framing members of the house are defined on the outside by narrow boards. These trim boards divide the wall surface into geometric shapes that are covered with shingle or clapboard. The supporting members of porches are also "sticklike" which contributes to the name of the style.

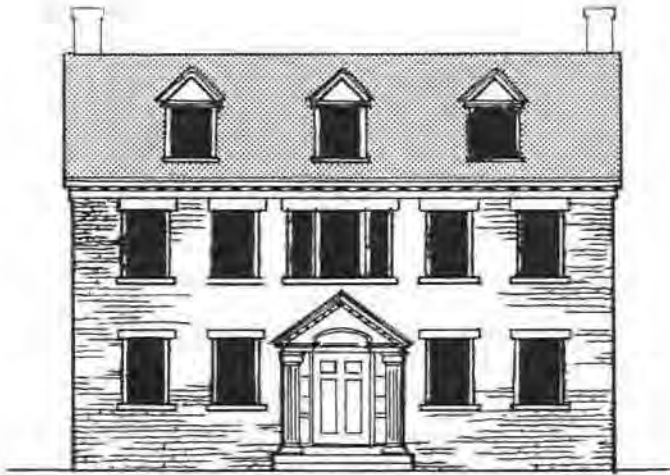
### Shingle Style

This variation of the Queen Anne style is characterized as the name suggests by the use of shingles. The wall surfaces are entirely covered in cut shingles that continue around curved surfaces and corners. Unlike all the previous styles described, no corner boards are used. Recessed porches and windows, and round towers may also be features of this style. Many of the local versions of the shingle style house have gambrel roofs.

## REVIVAL STYLES

### Colonial and Georgian

By the turn of the century, at the end of the Victorian period, older architectural styles were once again having a renewed popularity. The more formal designs of the Colonial and Georgian period were among the first of these revivals. A symmetrically balanced front facade and a hip or gable roof with dormers are characteristic of these styles. Quite often the three part Palladian windows of the 18th century Georgian style house are used over the central doorway. These styles have remained popular through to the present day with individual builders as well as suburban developers. In addition to the gabled roofed version illustrated here, the house used to demonstrate restoration mistakes on page 17 is another example of Colonial Revival with a hip roof.



Colonial Revival Style

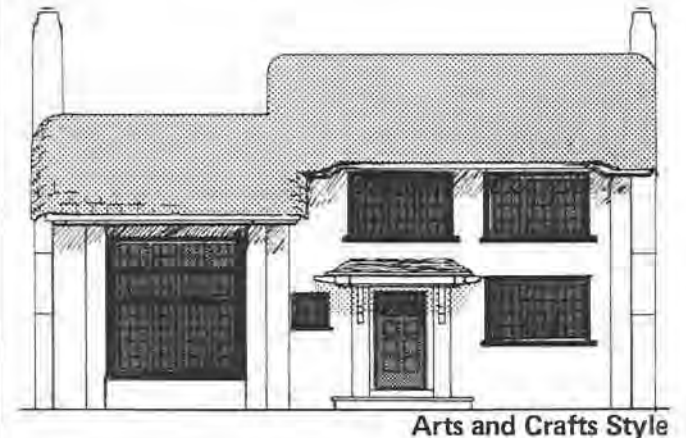
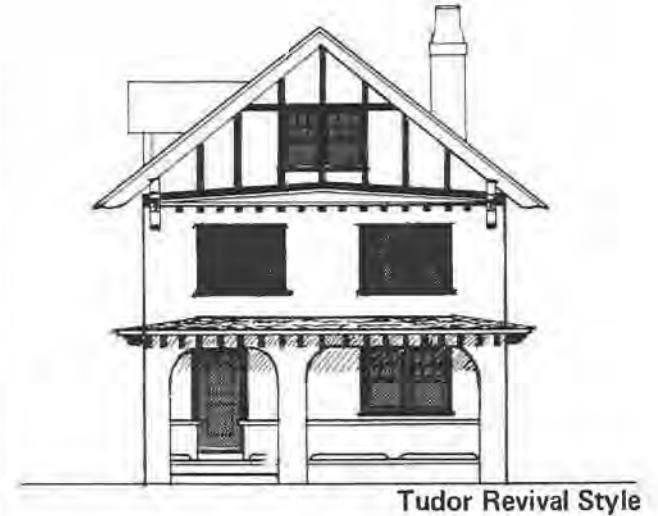
### **Tudor and Arts and Crafts**

A renewed interest in medieval architecture brought about the Tudor Revival and the Arts and Crafts styles. Tudor Revivals can be readily identified by their resemblance to the English medieval country house. They appear to have exposed framing timbers, stained in dark tones, that contrast with the light colored stuccoed walls.

Arts and Crafts style houses also use stuccoed walls. The local (vernacular) version of this style can be distinguished by the use of horizontal bands of three or four small paned windows and a downward curve to the edge of the roof. This roof design was an attempt to resemble the thatched roofs of the early English cottage.

### **Mission Style (not illustrated)**

Mission styles also had a revival in the early 1900's. Built to resemble the Spanish missions of the American Southwest, they have tile roofs, supported by exposed timbers and again, stuccoed walls.







## THE BETTER WAY TO RESTORATION

The better way to restore older homes is based on three simple rules - - the three "R's" of restoration.

**REPAIR** — Repair the original material, if possible

**REPLACE** — Replace, only if necessary and match the original material

**RESTORE** — Restore the original surface by repainting or cleaning



## RESTORATION

What is restoration, anyway? "Historic" restoration is returning a house to its original condition, both inside and outside, a process usually reserved for houses connected with historic events or important people in history. Unless George Washington slept in your house, you will be hardly concerned with this type of restoration. Here and in the following pages only practical exterior restoration will be considered. Our aim is to show you how to preserve the outside of your house and in the process save as much of its architectural character as possible.

We don't want to encourage you to save your house simply because it is old. Our aim is not to recreate the houses of a hundred years ago. After all, a true restoration would mean a return to an era that had no electricity or indoor plumbing. Although many of us like to visit a "house museum" of this kind, very few people would like to live in one. However, it is possible to have the best of both worlds, today's and yesterday's. We can have houses with both liveable modern interiors and well restored exteriors.

How can this be done? Now that you have discovered what kind of house you have from the styles described and illustrated in the previous section, you can begin to plan the restoration of your home. You can consider repairing or replacing the architectural features that make your house unique. In the long run, choosing the right doorway or windows, even the right colors to paint your house will make it more attractive and increase its value.

On the facing page we have used a typical two family house from the late Victorian period to illustrate some of the problems in fixing up an older house. We have split this local version of another type of Georgian Revival style down the middle to show you how a house can be diminished rather than improved by this kind of insensitive "modernizing." On the left side many of the more common mistakes are drawn and described, while on the right side the house appears much as it did when it was built around 1900.

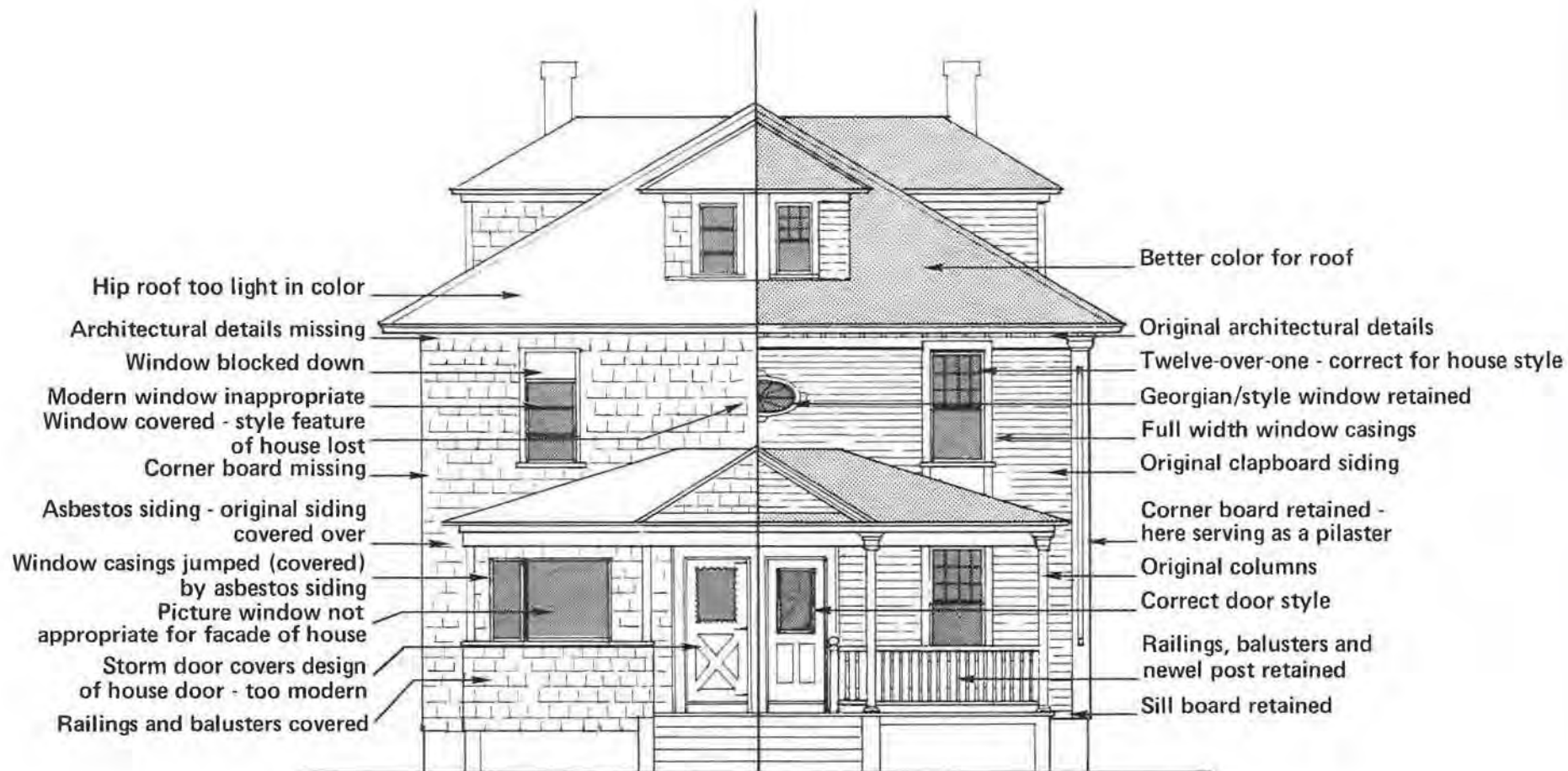
The contrast graphically demonstrates how important it is to consider saving the architectural features that give your house its distinctive character. Notice how the removal or alteration of some of these features has made a drastic change in the appearance. Removing trim boards, altering window shapes and styles and covering over other architectural features has given the left half of the house an uninteresting box-like appearance.

The outside of your house may have been altered over the years in some of the ways shown or you may be lucky enough to have most of its original features intact. In either case fixing up an older home can be an exciting challenge. Although the problems are different, most of them can be solved. Usually there is more than one way to do the job. From siding through shutters, we will guide you through the pitfalls and problems of exterior restoration. Wherever possible, alternative solutions will be discussed for your consideration. Whether the work is done by a contractor or becomes a do-it-yourself project, what you can learn from these pages will help you plan and carry out the restoration of your home. Keep in mind, there is no best way, only better ways to a good restoration.

# COMMON PROBLEMS

NO

YES





## SIDING

The condition of the siding is the first major consideration in restoring your house. There are quite a few decisions to be made - these include cost, maintenance and design. Not only will fixing up the siding be a major part of the cost of fixing up your house, but you will have to live with the choices you make for some time. To help you with this important part of your restoration, we will identify the common problems and make suggestions for you to consider.

### Materials:

Most of the homes in Springfield are wood frame construction covered with wood clapboards or shingles. This has been a popular and readily available material throughout her building history. Wood is an exceedingly durable material. Well maintained wood frame houses have lasted over 200 years. Tests have shown, that unless decay factors are present, the strength and stiffness of wood remains substantially unchanged for at least 100 years. You have only to look around Springfield to find houses this old that are still standing even if they have not been well maintained. Brick and stucco have also been used as siding materials, although they are less common. A safe guideline to follow is simply that the original siding used on your house, whether it was wood shingle, clapboard, stucco or brick, was part of the original style and design and probably will continue to make the best appearance.

### Wood Siding:

**COMMON PROBLEMS** -- include deteriorating paint surfaces with some repair needed; the walls may already be covered with some inappropriate material such as asphalt or asbestos shingles, or new siding may be needed because of extensive decay problems.

If the paint surface is only mildly deteriorated, scrape or sand and repaint. If only a small number of shingles or clapboards need repair, repair or replace the few that need it. If shingles or clapboards are loose, renail and patch minor cracks. Replace all decayed wood siding. Consider the new opaque stains which give good coverage on shingles or older clapboards.

Your house may already be covered with asbestos or asphalt siding. Consider removing it to expose the original siding. Patch the nail holes and follow the steps above. Not only will your house look better with the original siding but you may be lucky enough to find some interesting architectural details underneath. It is also possible that the original window and door casings were covered by these artificial sidings. Uncovering these features will do a great deal towards improving the appearance of your house.

If your house has been repainted several times without being scraped down, thick layers of paint will have built up which are cracking, blistering or flaking off. If this is the case, all the layers must be removed, scraped down to the wood, the wood primed and repainted with good quality exterior house paint.

You may find extensive decay underneath all the layers of paint. If most of the wood is still in good shape, consider replacing the damaged portion. In extreme cases, the siding may need to be replaced. New wood shingles or wood clapboards are the better choice. However, new wood sidings are expensive today and you may be considering aluminum or vinyl siding for a variety of reasons.

#### Synthetic Siding:

Before you decide on siding of this type, you should be aware of some of the problems. This is where many major restoration mistakes are made. You are going to be making decisions that are based on cost, appearance and utility as well as safety. The initial investment is large and you will have to live with the results for a long time.

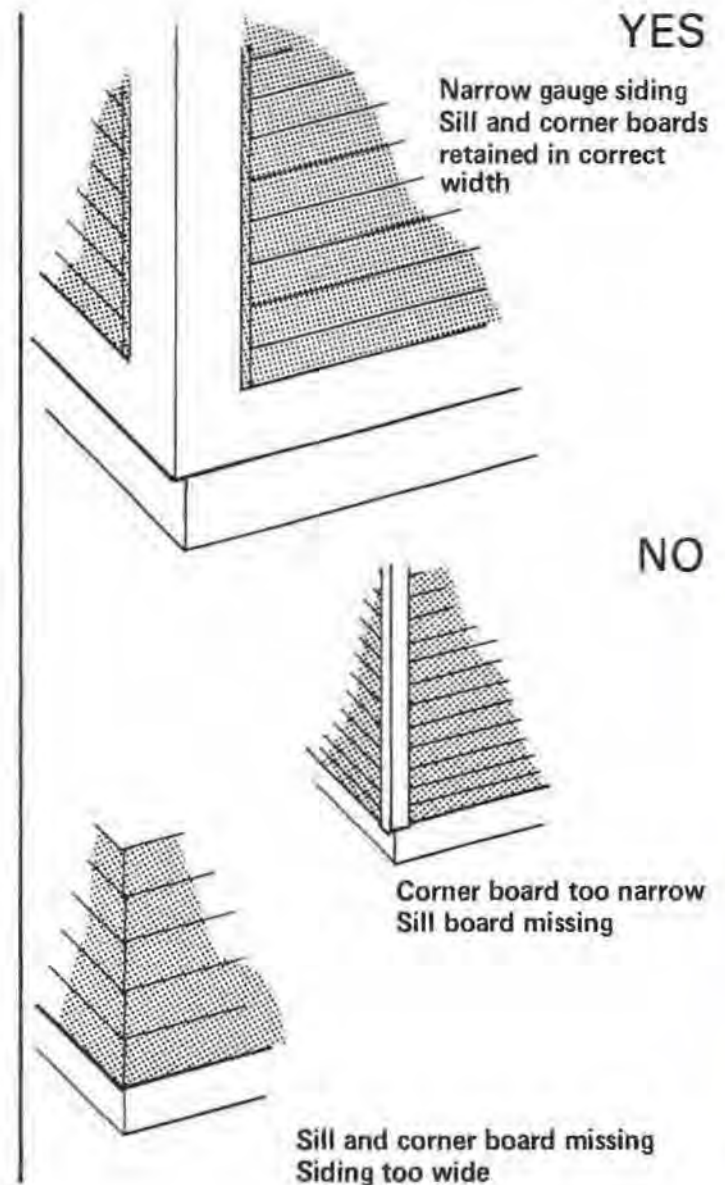
The apparent popularity of synthetics is based on several claims - that they are maintenance free and help insulate your house. However, like any painted surface they will eventually need repainting. They also can be dented or scratched. They contribute very little as insulation and there are better ways to insulate. See the following section on energy savings for other ways to save on your heating bill.

Improperly applied siding can also affect the appearance of your home. The better way to apply both wood clapboard and aluminum or vinyl siding is given below as well as illustrated on these pages.

1. Always use narrow gauge siding (4")
2. Always run the clapboard horizontally.
3. Don't cover up (jump) the window and door casings.
4. Avoid narrow trim boards. Keep the original boards or replace with a wide substitute.
5. Save all the special architectural features such as brackets, scrollwork, railings, pediments, etc.

There are also some other problems connected with the use of artificial sidings. All houses have water vapor that must escape through the walls or the roof. Wood sidings allow this to happen. Vinyl and aluminum trap moisture in the walls unless special precautions are taken. Bathrooms, laundries and kitchens should be vented to the outside and small moisture vents should be installed at intervals in the artificial siding to help reduce this problem.

If these precautions are not taken, moisture buildup in the walls will create decay problems. Siding and even framing timbers can be affected. Rot that is already present will increase. A common error is to cover over already decaying wood with synthetic siding. This may look better temporarily but in the long run will create some major repair problems. The better way is to replace all the visibly decayed wood with new plywood sheathing before applying the siding. This gives you a chance to inspect the timbers underneath at the same time. Sills, in





particular, may need sections replaced.

There is also some reason to believe that there are special fire hazards in the use of vinyl or aluminum siding. This is a growing concern with preservationists and some fire departments as well. Aluminum sidings seem to contain and "heat up" a fire. The more intense heat not only makes the fire harder but makes it burn more rapidly. Vinyl may produce toxic fumes when burned. Studies are still going on with both these problems but you should be aware of the possibilities.

#### **Brick:**

Brick is the best maintenance bargain. Over the lifetime of the house it will need fewer and less expensive repairs.

COMMON PROBLEMS - - include crumbling mortar, broken brick, settling cracks in the walls and dirty or painted brick.

Cracks can be filled and crumbling mortar repointed. Match the width and rake (groove) of the original joints. Avoid repointing with lighter colored mortar than the original. This is rarely appropriate and detracts from the overall appearance. New brickwork should be matched as closely as possible to the color, texture, size and bond (the pattern) of the original.

Brick walls should be cleaned with water or steam. Never sandblast. Sandblasting exposes the more porous brick underneath which will deteriorate rapidly. Unless the building appears watertight, be sure to have the joints repointed before cleaning to avoid getting water in the walls.

There are some new products on the market that can remove old paint or bad stains. Consult an expert. Cleaning brick is not a do-it-yourself job. Ask for a small area to be tested and be satisfied with the results before proceeding with the whole job. Consider repainting. Painted or whitewashed brick was not uncommon in older homes.

These repairs and cleaning will last a long time. Do not consider covering good brick walls with other sidings. This is a needless expense. If you follow these guidelines, your house will have an attractive, "good as new" appearance which will last a long time.

## SAVING ENERGY

The saving of energy should be a part of your restoration planning. Now is the time to properly insulate in attic spaces and in the walls.

The greatest heat loss is through your roof. Fortunately the attic is usually accessible in older homes. Install six inches of insulation under the roof or in the attic floor. Recaulk around all doors and windows. Add weather stripping to all outside doors. Consider storm doors and windows. Some additional saving can be made by insulating the walls, usually a job for a professional in already finished houses. There is some financial assistance available for homeowners for the major insulation jobs. Consult the aid sources in the appendix.

A word of caution on storm windows and doors. Both doors and windows should match the color of the existing window sash and door behind them. There are some factory applied finishes that may be right for your house, or you can buy an unfinished aluminum door or window, prime it with zinc chromate and paint it yourself. Be careful with the design of the storm doors. They should be simple in design and hide as little of the original door as possible.



# ENTRYWAYS AND PORCHES

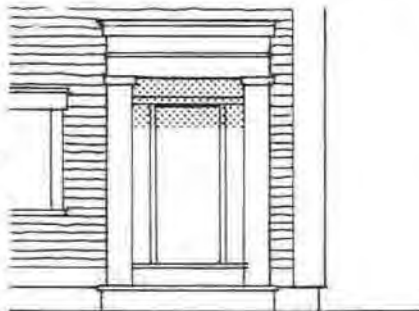
Original Entryways

Acceptable Simplified Version

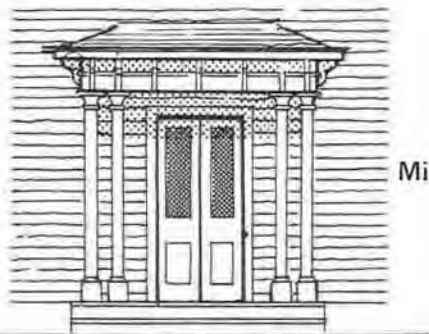
Not Acceptable



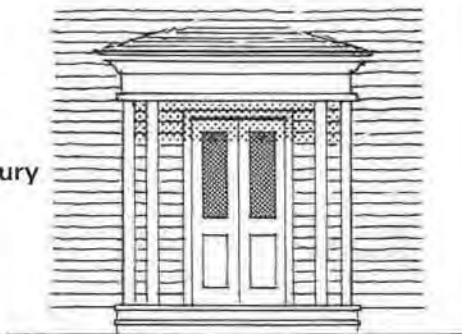
Before 1850



Modern doorway does not reproduce the weight and form of the original. Modern door and "wrought iron" columns inappropriate for the style of the house.



Mid-Century



Portico removed - leaves the door bare and out of scale with the house.



After 1850



All architectural detail lost by enclosing entryway. Modern door and windows out of scale with house.

## ENTRYWAYS AND PORCHES

Entryways or porches are common features of many of the architectural styles found in Springfield. Since they present many of the same type of restoration problems to the homeowner, they will be considered together here.

**COMMON PROBLEMS** -- The wooden parts of a porch or entryway are constantly exposed to the weather and often need repair. Over the years these features on older homes may have been replaced or removed. Also, screening or enclosing porches is not unusual today. For reasons of economy, savings in fuel, or a need for more living space, you may be considering the idea. Consult the section on energy savings for better ways to save on your fuel bill.

### ENCLOSING PORCHES:

Many Greek Revival style houses have porches either at the entrance or across one side. The columns that support these porches were originally intended to be viewed from all sides. Their proportions were carefully worked out as part of the original house design. For these reasons, enclosing these porches is rarely successful and should be avoided.

Porches were quite often an integral part of Victorian design. Each one had an unusual and interesting treatment. An amazing variety of newel posts, balusters, spindles and brackets and other architectural details were used. You can still enclose your porch, save on your heating bill or gain some needed space, and keep these important design details. Good and poor examples of porch enclosure are shown. Notice that the better way permits all the detailing to still be visible from the street side.

Enclose the balusters and overhead spindles from behind. Plywood with simple moulding surrounds will make a pleasing appearance from the inside as well. Screens or combination screen and storm windows can be installed between the railing and the header. In this way you can enclose your porch and still preserve the character of your house.

Porches were so popular in the Victorian period, that many houses built much earlier have had porches added on to them. These later porches or entryways are part of the history of your house and should not be removed or replaced with a more appropriate style unless they are badly in need of repair. If your porch is in poor condition and is obviously not original with the house, now is the time to consider replacing it with one more suited to the house style or perhaps removing it altogether.

## ENCLOSING PORCHES

YES



NO





## REPAIR:

Repairing and preserving a porch is always a good idea. If you have an original porch or entryway similar to those illustrated, consider saving this important architectural feature. Removing or "modernizing" a porch usually puts the whole house facade out of balance. The original entryway or porch was designed to be in proportion to the total design of the house. If your entryway has already been changed like some of the examples shown, consider restoring it.

If repairs cannot be made successfully, a simplified replacement can be fabricated from stock materials that reproduce the size, weight and form of the original parts. Porch columns often need replacement on the porches of older homes. The built-up round wooden columns of the Greek Revival styles can often be purchased new or at a lumber yard. If you cannot find a replacement column, consider using simple 4" by 4" posts, beveled at the corners with a simple base and head made from stock lumber.

The balusters, spindles and railings of the later Victorian porches can also be replaced this way. If only one or two balusters or spindles are missing, you may be able to find similar ones in the millwork catalogues at the lumber yard. If many need replacement, one inch stock or dowelling may be an acceptable substitute. Railings are much easier to replace. Several stock patterns are made today. Avoid using 2" by 4"s for railings; they have an unfinished appearance and are more suitable for frame construction.

The entryways of the Italianate bracket style were quite often not a true porch, but a door hood: a small roof supported by elaborate brackets. Replacement brackets for the entryway or for those under the roof cornices can be sawn from extra stock to generally match the appearance of the original.



# WINDOWS

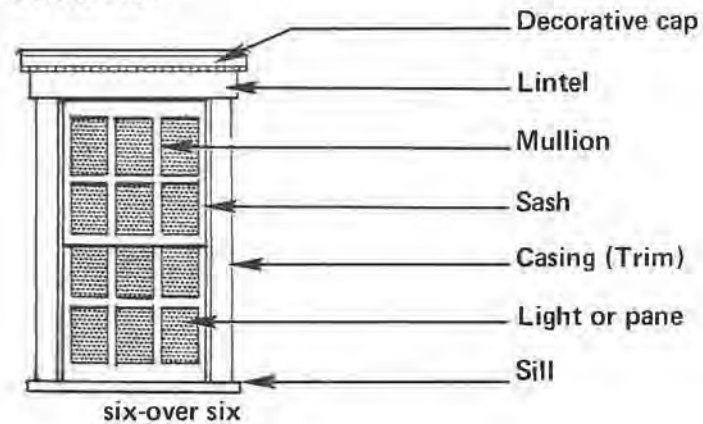
The elements surrounding the window - the sill, lintel and cap are important architectural features. Without these features, your home could look bare and uninteresting. Some years ago, many homes in Springfield were covered with asphalt or asbestos siding. In the process, window casings were "jumped" or covered and in some cases removed. If this has happened to your house, consider replacement with plain boards and stock mouldings.

Window styles vary with the architectural style of your home. Before 1850, windows in Federal and Greek Revival houses were double-hung, six-over-six (six panes on top and bottom). After 1850, in the Victorian period two-over-two or one-over-one were the rule. Twelve-over-one was also used in the later Colonial Revivals. A general guideline to follow is that a replacement window should look like the original.

Generally these older windows were taller than windows made today. If your windows need replacement, consider a made-to-order size rather than making the opening smaller to fit a modern stock window. The difference in cost between the labor and materials to "block down" the opening and the additional expense of a custom made window should not be too great. Modern window styles should not be used on the street side of your home. Try to reserve picture windows, awning or casement styles for the rear.

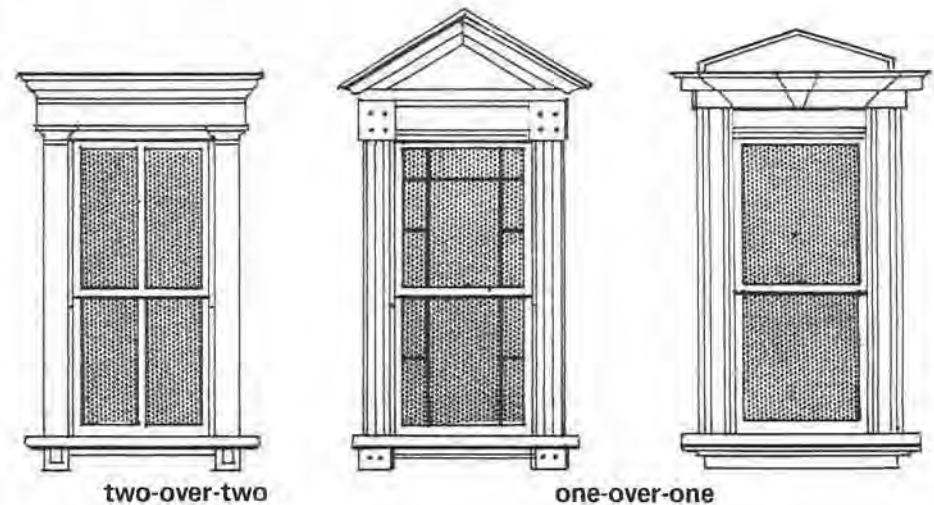
Storm windows seem to be a necessity today. The frames of these windows should be painted to match the inner window frame.

Before 1850

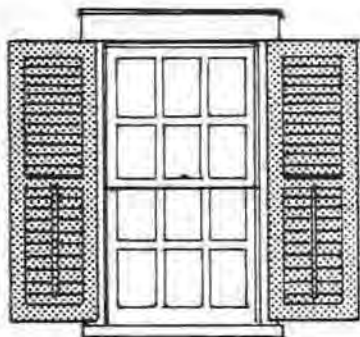


The Parts of a Window

After 1850

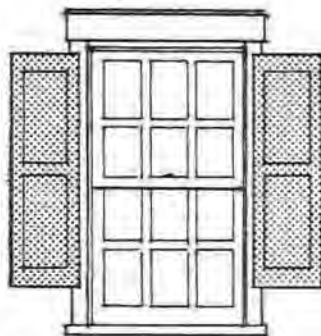


YES



Shutters correct size - appear to be able to cover the window

NO



Shutters too short and narrow

## SHUTTERS

Should you use shutters on your house? The style of your house will help you determine the answer to this question. They were used on Federal and Greek Revival style homes, but were rarely used in the Victorian period. After 1900, many homes have been built to resemble earlier styles. Shutters may be appropriate for these "revivals".

Shutters were originally used as storm windows are today; to insulate the house in cold weather by covering the window. Although we no longer use them for this purpose, shutters should appear to work by being the right size for the window. Each shutter should measure the full length of the window and half its width.

Wood is always the best material for shutters and slatted, painted shutters are the most appropriate type. If vinyl coated wood or metal shutters are used, they should resemble the slatted type.

## DOORS

Door styles are also important. Appropriate examples for each type of house are illustrated with the various architectural styles in the first section. If your door needs replacement, it may be possible to get an authentic door from a wrecking company. Some modern stock doors can be used on older homes. The panelled type is best. Avoid contemporary doors with small windows. A plain solid door is the better solution if you cannot find a suitable replacement.

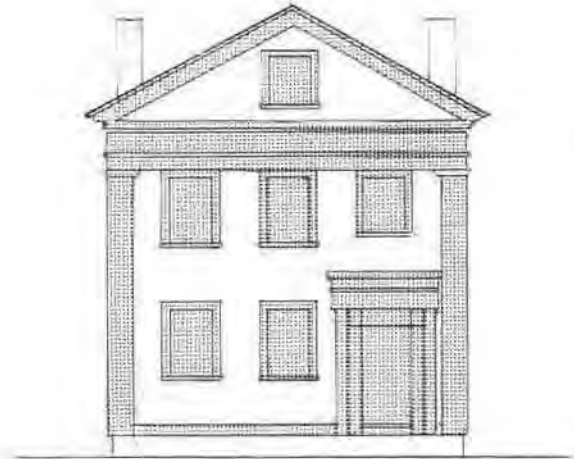
If you are lucky enough to have the original doors in good condition, you may not need storm doors at all. Since older doors were solid and very heavy, they are good insulators and only need weather stripping. If storm or screen doors are absolutely necessary, they should resemble the inner door for placement of the panels or solid areas and be painted to match the inner door. The simplest storm door will probably be the best for your house.

## COLOR CHART FOR OLDER HOMES

<i>Style</i>	<i>Wall Color</i>	<i>Trim Color</i>	<i>Door Color</i>
<b>Federal</b>	pale yellow off white soft beige pale green medium gray medium blue	lighter yellow same white buff pale yellow/white medium blue	black natural
<b>Greek Revival</b>	white buff pale yellow green-gray blue gray pale gray	olive green gray-blue green-black buff white black	dark green medium blue black
<b>Early Victorian</b>	buff light gray yellow ochre green-gray blue-gray medium blue medium brown	darker buff black chocolate brown red dark gray dark green dark brown	oak, varnished
<b>Late Victorian</b>	medium red deep blue medium gray dark ochre tan slate	dark brown golden yellow dark gray/green/black medium or dark brown red or green red or olive green	



## CHOOSING A COLOR



Choosing a color to paint your house can be difficult. If you are like most people, you have favorite colors - - but find it hard to visualize how a color will look on your house from a small sample on a color chart.

There are some general guidelines for choosing colors for older homes. Before 1850, white and light colors were popular. After 1850, in the Victorian period, white was rarely used. Instead, earth colors, the colors of objects in nature, were common, often with a darker color for the trim. After about 1880, in the late Victorian period, the colors used were deeper and as many as three colors would be used to bring out the architectural details.

In the chart on page 27, you can probably find one of your favorite colors that is appropriate for your house style. Follow across to find suggested colors for trim and doors. Remember, these are only some of the possible color combinations. You also may want to consult color charts put out by paint companies.

There are really only two basic choices to be made. A house can have lighter walls and darker trim or the walls can be the darker color and the trim the lighter. The wall color should be chosen first. Note how these simple changes make a big difference in the appearance. You may not have to make this decision if your house was built before 1850 when most houses had lighter colored walls.

The next thing to consider is the roof, a part often overlooked when choosing colors to paint a house. A neutral gray is usually the best color for a roof. Most colors blend well with gray and you won't be restricted in your choices of color for the house itself. If new roofing is part of your remodeling, now is the time to make a change to one of the neutral gray tones for the shingles. If however your roof is in good shape and will not be replaced, you will have to take its present color into consideration.

Be kind to your neighbors when you choose colors for your house. "Way out" colors, particularly pinks or the brighter blue-greens are more suited to a tropical climate. They will not go well with your neighbor's color scheme or the New England climate. Although you may be choosing a color in spring or summer when the trees are in leaf consider how your color scheme will look in the middle of winter when the trees are bare. Reserve the brighter colors for the door color. Even if a stained wooden door is appropriate for your house, several coats of paint may look better, particularly if there have been any repairs or patching.

## YARDS AND PLANTINGS

When you have finished restoring the outside of your home is the time to turn your attention to your yard. One of the common problems of older homes is that the foundation shrubs have become too large for the house. Practically speaking, large shrubs close to the house interfere with air circulation which can lead to decay and may be scraping against the walls of the house.

Probably in the process of fixing up your house, these shrubs have been in the way and have been damaged. Pruning them back may help but unless pruning has been kept up on a regular basis, it is practically impossible to shape up a really large shrub by pruning. They usually will just look like they have been chopped off. Now is the time to consider some new foundation planting; local nurseries will be glad to advise you.

Strictly speaking, houses built before 1850, the Federal and Greek revival styles, did not use foundation planting. It was only in the Victorian period when foundations were higher above the ground that the idea of "hiding" them with plantings came about. However, simple foundation plantings seem to enhance houses of any style. Hedges set along property lines and simple fences will also add to the appearance of your house and yard.

### Fencing

Many people like to have fenced yards for privacy and protection. Picket fences are good with the earlier styles. Modern versions of "wrought iron" are always appropriate to the Victorian style. Check a local fencing contractor, he will be happy to advise you. Try to avoid the use of chainlink fencing. This is more suitable for schoolyards or industrial parking lots. If you feel it is absolutely necessary, reserve its use for back yards where it is not visible from the street.

### Window Boxes

Where yard space is limited, a simple effective way to add color or greenery to a house is with a window box. Be sure they are made of durable material such as redwood. If the plants are left in pots, the weight in the box will be considerably reduced and the plants can be easily changed.

### Groundcovers

In small frontyards, grass has always been a popular groundcover. However it needs to be mowed and fertilized regularly. With less maintenance, particularly in small front yards, other low growing ground cover plants may work well. Myrtle, pachysandra and ivy are popular. Once started, they need little care and seem to thrive on neglect.



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You may wish to consult them for additional information.

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You may also wish to consult the following excellent sources of preservation information: (Write to them for their reading lists.)

Preservation Bookshop  
National Trust for Historic Preservation  
740 - 748 Jackson Place, N.W.  
Washington, D.C. 20006

United States Department of the Interior  
National Park Service  
Office of Archaeology and Historic Preservation  
Washington, D.C. 20240

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