

# LOUISIANA

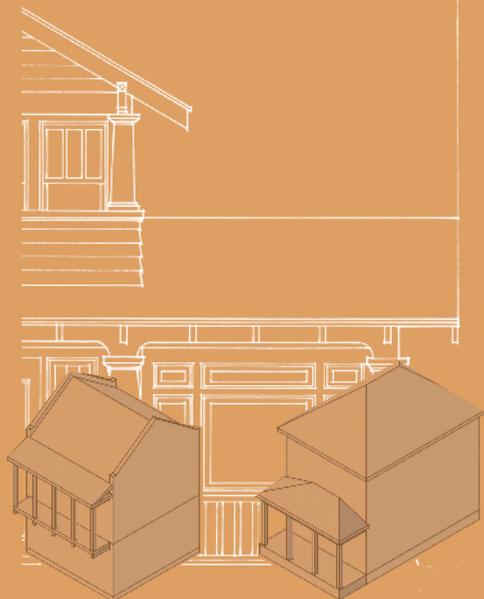
# SPEAKS:

# PATTERN

# BOOK



URBAN DESIGN ASSOCIATES



# LETTER FROM THE GOVERNOR



To the Residents of Louisiana:

As you well know, Hurricanes Katrina and Rita caused unprecedented devastation throughout South Louisiana, destroying more than 123,000 houses, 82,000 rental units and 18,000 businesses. Mother Nature wiped out entire communities. She damaged our entire coast. In many communities, she left behind a blank slate for us to rebuild. We must use this opportunity to rebuild safer, stronger, and smarter.

The Louisiana Speaks Pattern Book will serve as a valuable tool in the rebuilding efforts of our residents and businesses. Because many of our most loved places have been destroyed, we are compelled to rebuild in a time-honored way. This Pattern Book was designed, through the efforts of the Louisiana Recovery Authority, the Center for Planning Excellence, and Urban Design Associates to ensure that this effort is performed well and beautifully.

The Louisiana Speaks Pattern Book follows the tradition of American town building by providing practical tools and resources for small builders, homeowners, and suppliers. In an effort to conserve and restore the sense of place that is specific to each locality, this book provides a kind of 'DNA code' for our communities and our inherited architecture.

Pattern books have been in use since ancient Roman times. The British brought the idea to the American colonies where pattern books remained a common town-building tool through the first half of the 20th century. This Pattern Book serves as a resource, offering general direction for character retention that should be used for both renovation and new construction opportunities.

I urge builders to use this Pattern Book in their efforts, and I want to thank the many agencies, participants, and professionals who contributed to the preparation of this document. The Louisiana Speaks Pattern Book will help to ensure that the buildings and homes we rebuild are not only beautiful, but also safer, stronger, and smarter.

Sincerely,

Handwritten signature of Kathleen Babineaux Blanco in black ink.

Governor Kathleen Babineaux Blanco

## ACKNOWLEDGMENTS

The Louisiana Speaks Pattern Book and its accompanying Tool Kit would not have been possible without the generous support and hard work of the Louisiana Recovery Authority, the LRA Long-Term Community Planning Task Force, the Center for Planning Excellence, and the LRA Support Foundation.

Paid for by private funds donated to the LRA Support Foundation.

### LRA SUPPORT FOUNDATION BOARD MEMBERS:

John Laborde, Chair  
Brenda Birkett  
Ron Forman  
King Milling  
Sean Reilly  
David Voelker

### PREPARED FOR:

Louisiana Recovery Authority and the LRA Support Foundation  
*This document is the intellectual property of the LRA Support Foundation.*

A special thanks to all participants, too many to name, who gave their time, input, and energy to this effort.

PUBLICATION MADE POSSIBLE BY A GRANT FROM

**Fannie Mae  
Foundation**



Baton Rouge



Lafayette



Donaldsonville

**Please Note:** This Pattern Book contains information that will assist urban planners, architects, production house builders, and consumers in making informed, appropriate, and well-conceived choices for both rehabilitation projects and new construction by taking into consideration the local climate, values, historical precedents, and design traditions of a site and its environs. Patterns and styles presented in this book are for illustrative purposes only and are not to be used for construction purposes. A professional architect or engineer should be consulted for any residential reconstruction.

# THE PURPOSE OF THE PATTERN BOOK

In the wake of Hurricanes Katrina and Rita, urgent need exists to rebuild vast numbers of houses and buildings and to do so with a speed not possible using only traditional construction techniques.

The challenge is to make sure that rebuilding is achieved in the best possible way—*Safer, Stronger, and Smarter*—in keeping with the motto of the Louisiana Recovery Authority's Louisiana Speaks program. The Louisiana Speaks Pattern Book has been created to provide both guidance and tools for the builders who will take on that task.

The Pattern Book and its companion publication, the Louisiana Speaks Tool Kit, are part of Louisiana Speaks, a program which has undertaken several complementary initiatives: First was the Parish Recovery Planning process during which citizens developed their vision, goals, strategies, and a list of high priority, high impact projects to jump start their recovery. Second was a series of three demonstration planning charrettes conducted by Duany Plater-Zyberk & Company in three separate locations that have distinctly different urban conditions. A third initiative entails a regional planning program to develop a long-term vision for Louisiana. This Pattern Book and the Tool Kit form the bridge between these initiatives. These two documents present tools and techniques from both the planning charrettes and the regional vision processes in a form that can be used by communities throughout the state for both rehabilitation and new construction.

The Pattern Book contains patterns and techniques for building housing, neighborhoods, and towns at a greatly accelerated pace while remaining true to the values and traditions of the people of Louisiana. These traditions provide guidance for rebuilding in harmony with the state's natural environment and climate in the design and construction of environmentally responsible houses that incorporate many of the traditional architectural features of the region. The Pattern Book also provides guidance on incorporating hazard-resistant design and improved construction techniques into the built landscape. Doing so can prevent or reduce future losses of life and property from floods and winds in the years to come.



# THE PATTERN BOOK PROCESS

The Louisiana Speaks initiatives included the Parish Recovery Planning process, three demonstration charrettes, a regional planning effort, and development of the Louisiana Speaks Pattern Book and Tool Kit. All four initiatives used an open, public process designed to encourage and engage as many citizens as possible in developing ideas and concepts for rebuilding. The content of the Pattern Book reflects the ideas and addresses the concerns of the participants in all of these processes.

In addition, a series of workshops on housing and neighborhood design were conducted as part of the Pattern Book process. The workshops enabled the Pattern Book team—which includes specialists in cultural geography, architectural history, architecture, landscape architecture, green building, and urban planning—to hear firsthand the qualities people value and cherish most about Louisiana.

## WHAT WE HEARD

The most pressing concern of participants is how to rebuild the houses, buildings, and neighborhoods lost during Katrina and Rita—and to build or rebuild smarter, stronger, and safer to ensure that renovated and new structures will be better able to survive future storms.

Equally urgent is ensuring that the form of new construction creates houses and communities that look and feel as though they belong in Louisiana. Participants repeatedly stressed the important aspects of house and community design that contribute to local culture and social relations. Workshop and charrette participants were passionate about the built environment and its close connection to their cultural and social traditions, their image of themselves, the particular region in which they live, and to all aspects of life.

They spoke of Louisiana’s extraordinarily rich architectural heritage where region-specific architecture has developed out of the physical conditions of the land; the efforts to cope with a hot, humid climate; and the diversity of cultures woven into the fabric of Louisiana by the many different ethnic groups who have settled in the state.

The character of the streets and public spaces of traditional neighborhoods and towns throughout Louisiana is another example of regional cultural, geographic, and climatic differences. As we walk through these streets, or remember places that are now gone, it is the graceful porches, the windows that go to the floor, the ornamentation on the frame around the door, and the shape of the cornices at the eave line that tell us where we are—and who we are.

Participants also spoke sadly (and angrily) about how recent development and architectural practices have diluted the uniqueness of places and their character. Sprawl, strip commercial development, standardized buildings reflecting national chains (rather than local identity) and monolithic, single-income, cookie-cutter style subdivisions have all eroded the sense of place. The excessive use of concrete and asphalt in the construction of roads and the damaging incursions made into natural environments have contributed to this erasure of culture.

## THE OPPORTUNITY

Katrina and Rita destroyed over 200,000 homes along with thousands of commercial and public buildings. Some were traditional buildings that contributed to the uniqueness of the region; many were less distinctive, but nevertheless played an essential role in satisfying the housing, commercial, and institutional needs of their communities and the economy of the state.

Evidence suggests that the older, traditional houses, built with an understanding of the impact of the forces of nature, fared better than recent construction. The opportunity now exists to rebuild at all scales of development in ways that take full advantage of these lessons and combines them with new technologies for building smarter, stronger, and safer.

Using pre-Katrina production methods, it would take decades to build replacements for the more than 200,000 homes that were lost. New technologies and resources must be introduced to meet the housing demand. During the first few months of 2006, the number of manufactured and modular houses being shipped on the highways of Louisiana dramatically increased in response to this need. Sadly, most of them look as though they do not belong in Louisiana. The Louisiana Speaks Pattern Book provides the production housing industry with information about the values and forms that are most meaningful to the citizens of Louisiana and translates that information into the patterns, elements, and details presented in this book.



Raising houses in the rebuilding effort



Citizens discussing essential qualities during the Pattern Book workshops

**Participants repeatedly stressed the importance of preserving the local culture and social traditions and the particular aspects of house and community design essential to doing so.**



Katrina Cottage: Emergency housing from the DPZ Demonstration Charrette in St. Bernard Parish

Courtesy of Duany Plater-Zyberk & Company

## OVERVIEW

The Louisiana Speaks Pattern Book is organized in five sections: the Introduction, followed by the Community Patterns, Architectural Patterns, Demonstration Plans, and Landscape Patterns sections. Each section provides essential information for making informed design and site planning decisions for renovations or new house construction.

The **COMMUNITY PATTERNS** section contains descriptions of the diverse regions of Louisiana and the differences in community and architectural patterns based on geography, climate, and culture that should be factored into site planning and design decisions. Illustrations are presented of the different types of urban settlement using terminology from the Transect and Smart Code—essential tools used during the Charrette Process. The section also contains a series of patterns for placing houses on sites.

The **ARCHITECTURAL PATTERNS** section identifies various types of houses and mixed-use buildings and illustrates the way that these types can be constructed using different technologies, including manufactured housing, panelized construction, and Insulating Concrete Forms (ICF) materials. Techniques for preparing safer ground for houses in the design of new communities are provided as are methods for adapting typical house types to meet the appropriate floodplain management rules and regulations (e.g., minimum elevation for occupied floors). Issues of visitability and accessibility are addressed. Architectural patterns for renovating or building traditional Louisiana houses and buildings are presented. Specific architectural vocabularies are illustrated including Louisiana Vernacular (which describes the building types and styles unique to Louisiana), as well as several styles/building types that have been imported and modified for use in Louisiana: Louisiana Victorian, Louisiana Classical, Louisiana Arts & Crafts, and Modern. Green Building Guidelines are also included. This section is followed by the **DEMONSTRATION PLANS** section that contains a sample of house plans which illustrate possible pattern applications.

The **LANDSCAPE PATTERNS** section includes an overview of traditional examples of civic and private landscape designs and ecologically sensitive design techniques. A palette of native plant materials for different conditions is included, along with prototype details for built elements (e.g., fences, walls, and furniture).

The **APPENDIX** contains a Glossary and a Resources list.



Community Patterns



Architectural Patterns



Demonstration Plans



Landscape Patterns

## INTRODUCTION

Purpose of the Pattern Book	1
The Pattern Book Process	2
Overview	3
How to Use the Pattern Book	4

## COMMUNITY PATTERNS

Overview	6
Geography, History, and Cultural Distinctions	8
Transect of South Louisiana and Demonstration Plans	10
Community Character	12
Urban Assembly Kit	14

## ARCHITECTURAL PATTERNS

Overview	16
Residential Building Types	18
Louisiana Architectural Styles	19
Green Building Guidelines	20
Kit of Parts: Floodplain Management Requirements	24
Visitability and Accessibility	25
Alternatives to Conventional Construction	26
The House that Grows	27
Designing Multi-Family Housing and Mixed-Use Buildings	28
Building a Louisiana House	32
Louisiana Vernacular	34
Louisiana Victorian	44
Louisiana Classical	52
Louisiana Arts & Crafts	60
Modern	68

## DEMONSTRATION PLANS

Overview	72
----------	----

## LANDSCAPE PATTERNS

Overview	78
Culture and Ecology	79
Civic Landscape	80
Domestic Landscape	82
Landscape Plans	84
Elements and Details	86
Plant Palette	88

## APPENDIX

Glossary	90
Resources	92



**HISTORICALLY SENSITIVE BUILDING**

**Building in Historically Sensitive Areas**

This Pattern Book is intended to provide basic guidance to help new construction be consistent with, and sensitive to, the existing built landscape of South Louisiana. But some places—New Orleans in particular—already have extensive and detailed guidance on historically sensitive building design. This Pattern Book should be considered as a supplement to pre-existing local regulations and guidance; it does not presume to supersede them. Specific resources for some existing local regulations can be found on the Resources page in the Appendix.



A Louisiana neighborhood corner lot

# HOW TO USE THE PATTERN BOOK

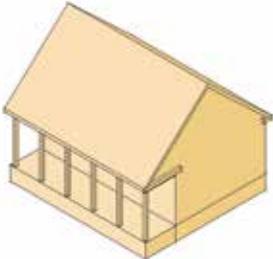
The following sequence of steps will provide for an orderly and thorough application of the design principles and patterns contained in this Pattern Book to both renovation and new development projects.

**STEP 1:**  
**IDENTIFY LOCATION**

Before beginning your project, determine its location, Velocity Zone (per the International Residential Code), climate, soil type, and floodplain elevation. In siting the buildings, consider solar orientation and prevailing wind patterns to take advantage of environmental opportunities for passive heating and cooling.



Step 1: Identify Location



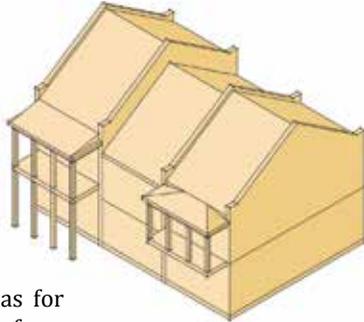
Single-Family House

**STEP 2:**  
**IDENTIFY NEIGHBORHOOD TYPE AND CHARACTER**

Within the Community Patterns section, you'll find a discussion of Neighborhood Patterns that includes an overview of the unique characteristics of each type of traditional neighborhood street, each keyed to the Transect Zone which identifies the range of appropriate building types and architectural character.



Step 2: Identify Neighborhood Type and Character



Rowhouse

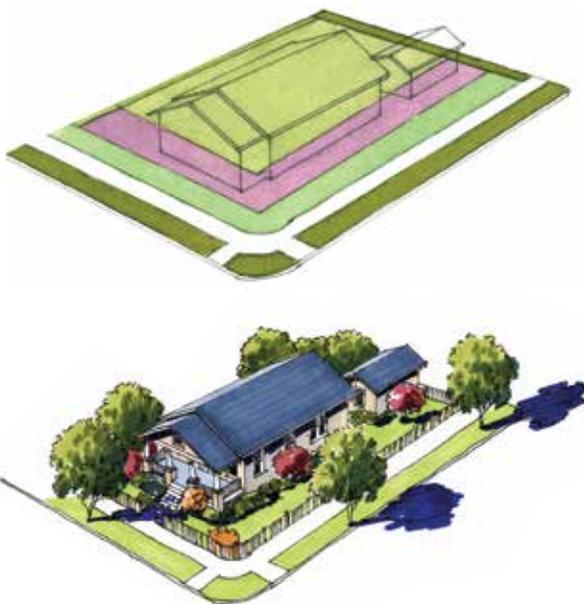
**STEP 3:**  
**IDENTIFY APPROPRIATE BUILDING TYPES**

The rebuilding effort will identify areas for different building and lot types, ranging from small cottages to large and complex mixed-use buildings. Review the potential building types in terms of the building technology which will be used to construct them and factor in the necessary construction hardening techniques and ADA requirements for visitability and accessibility.

Step 3: Identify Appropriate Building Type

**STEP 4:**  
PLACE THE BUILDING  
ON THE SITE

Using the setbacks and build-to lines, locate the building type on the site. Review the potential building types for the site and establish the minimum required floor elevations above grade level for your flood zone. Using the diagrams on page 24, select a method of elevating the building, if required, or of determining alternative means of satisfying the requirements.



Step 4: Place the Building on the Site



Step 5: Identify the Appropriate Architectural Style



**STEP 5:**  
IDENTIFY APPROPRIATE  
ARCHITECTURAL STYLE

Select an architectural style that continues the traditions of the neighborhood and region in which the building will be located and is also a style appropriate for that building type (as defined by the Community Patterns). Make sure that the building type and style are feasible for the selected method of building by reviewing the technologies illustrated on page 26. Then, go to the first page of the appropriate style in the Architectural Patterns section.

Refer to the text, drawings, and photos in that style section for more information about the individual style. The style pages include information about the history and character of that particular style, its massing and composition, roof types, elevations and cross-sections, critical vertical dimensions, facade elements, windows and doors, porches, galleries, materials, and appropriate applications of the style.

**HISTORY & CHARACTER**

This page contains a brief description of the style and its history as well as three elevation possibilities ranging from a modest and simple one-story house to a larger and more ornate two-story house. A gallery of examples is offered to illustrate the range of possibilities.

**MASSING & COMPOSITION**

This page describes the basic massing types and shapes for that style house as found in relevant precedents. Each massing type is shown as a three-dimensional image with a corresponding elevation diagram showing potential additions. The layout of rooms should be designed to fit into the massing types found within the particular style. The roof types are part of this overall massing description.

**WALLS, EAVES, & ROOFS**

This page provides a partial elevation and measured cross-section to set the critical vertical dimensions and elements of the facade. Eave details ranging from simple to ornate describe how roofs should join the wall.

**PORCHES**

Porches are essential elements of the character of most Louisiana neighborhoods. The location and design elements of porches are covered for each style. The massing of the front porch is specific to each house type and distinct within a particular style.

**WINDOWS & DOORS**

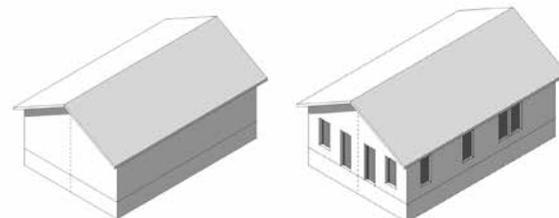
The window and door spacing is related to both the shape and the style of the house. Typical window and door compositions are illustrated as part of the massing illustrations for each style. Typical window and door proportions, trim details, and special window or door elements are illustrated on a separate page within each style section.

**STEP 6:**  
REVIEW THE RESOURCES LIST  
IN THE APPENDIX

For those interested in learning more about Louisiana's and the Gulf Coast's residential architecture, architectural styles in general, the Gulf Coast's history, and other available resources specific to (re)building in South Louisiana, a handy resource list is provided in the Appendix. A more extensive resources list will be provided on the web-based version of this Pattern Book and Tool Kit.

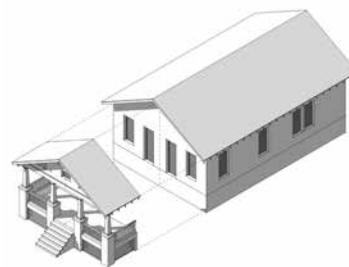


Lake Charles Arts & Crafts



Massing

Composition



Porches



Windows

# COMMUNITY PATTERNS

The Community Patterns presented in this section describe the role that individual buildings can play in creating neighborhoods and towns, in continuing the local traditions of each region, and in fulfilling the goals defined in the planning charrettes and community workshops.

The section begins with the influence of geography, climate, and culture on the physical form of building and communities. The geography of the uplands in North Louisiana is very different from the terraces, lowlands, and marshes of South Louisiana. The form of Louisiana's traditional settlements and towns developed in response to these geographic differences. Overlaid on the state's geographic patterns is an extraordinary diversity of cultures, regionally distributed in ways that mirror the state's early migration and settlement patterns. The illustrations of architecture and urbanism contained in this section of the Pattern Book depict these different characteristics and can be used to guide the selection of appropriate building and urban patterns for specific sites.

In addition to geography and culture, a third criteria for design is the scale of urban settlement. The Transect presented in this section defines six zones, ranging from rural to urban. Within each zone, there are appropriate street designs, building and use types, and architectural elements. The zones are illustrated, first with traditional examples and then with illustrations of prototype environments.

The physical structure of neighborhoods, towns, and cities can be conceived as an "urban assembly kit." The parts of this assembly kit include water systems, utilities and other infrastructure, parks and open space, streets, blocks, lots, and buildings.

All of these urban frameworks provide the setting for individual buildings. Single-family, multi-family, commercial, and mixed-use buildings should be placed on their individual lots in a manner that contributes to the character and quality of the streets and public spaces of the community, as well as in response to requirements for flood protection and accessibility.

## BUILDING GREEN AT THE COMMUNITY SCALE

The first principle for building green communities is to build within existing urban areas, or to build new projects using compact, mixed-use plans in which the activities of daily life can be accomplished with limited use of a car. Projects should be located within walking distance of workplaces, schools, community facilities, retail establishments, and other civic amenities.

### HISTORIC PRESERVATION/ADAPTIVE REUSE

Reusing and rehabilitating damaged structures is, by definition, a green building practice. It saves many more resources compared to what is required for new construction. Through building rehabilitation, society retains the initial energy and resources that were required to make materials such as bricks, mortar, steel, or timber and also establishes a sense of historical and community continuity. Historic buildings are also an important link to tradition and offer important educational opportunities. The National Trust for Historic Preservation estimates that the energy equivalent of one gallon of gasoline is wasted for every eight bricks destroyed and replaced. In addition, construction and demolition debris accounts for 24 percent of America's landfill volume.

### LOCATION AND USE OF EXISTING INFRASTRUCTURE

Another extremely important factor in building and repairing healthy new communities is the choice of location. Wherever possible projects should be located on infill sites with access to existing roads, water, sewers, and other infrastructure. Locating projects in this manner offers the greatest savings, helps conserve land, prevents the spread of stormwater runoff to new watersheds, and reduces travel distances and pollution from vehicular exhaust.

Proper site selection avoids development of inappropriate sites and damage to fragile and/or scarce environmental resources. Development should not be located on wetlands, steep slopes, prime farmland, parkland, or other ecologically sensitive areas.

### DIVERSE, MIXED-INCOME COMMUNITIES

Building diverse, mixed-income communities provides an opportunity for people of all ages, races and income groups to thrive. Neighborhoods should provide a diversity of unit types to accommodate different needs and uses. The integration of affordable and market-rate housing into a medium-density, mixed-income, mixed-use community helps create long-lasting, healthy communities.



St. Martinville



Thibodaux



New Orleans

## GALLERY OF EXAMPLES



Baton Rouge



Lake Charles



Baton Rouge



St. Francisville



Vermilionville

# GEOGRAPHY, HISTORY, AND CULTURAL DISTINCTIONS

Restoration projects and new settlements can draw guidance and inspiration from the combination of geographic, climatic, and cultural factors that contribute to Louisiana’s unique character and sense of place.

## GEOGRAPHY

The physical geography of Louisiana creates three basic regional types: Hills, Terraces, and alluvial Lowlands. Traveling up the Mississippi River from New Orleans, the high ground at Baton Rouge marks the beginning of the Terrace region and distinguishes it from the Lowlands to the south. The Mississippi River floodplain is defined by these visible changes in elevation. The Terrace spans the state, from Texas to Mississippi and is interrupted by the Mississippi River floodplain.

The Lowlands (marsh and alluvial floodplain adjacent to the Mississippi River and its tributaries) are generally 30 to 40 feet lower in elevation than the Terraces. The Lowlands were formed by water which still actively shapes their physical appearance. Whether by flood or hurricane, these areas are geologically dynamic.

The process of flooding creates natural levees parallel to the rivers and bayous. These natural levees created higher land parallel to the waterways on which houses and roads were built. The bayous, cut off from the Mississippi by levee projects, were populated along their lengths in a linear settlement pattern. As you get farther from the rivers and bayous, elevations gradually diminish in a perpendicular line into backswamp areas that are too low and wet for building houses.

Marsh—coastal lowland some 20 to 50 miles wide—is where the land meets the Gulf of Mexico. Composed mostly of low, wet, treeless areas covered in grasses, marsh areas are generally not occupied by permanent structures.

Hurricanes tend to impact these two areas differently. Many lowland sites will be best served by finding ways of developing neighborhoods in places where the ground can be artificially elevated; otherwise, houses will need to be elevated as described in the Architectural Patterns section.

Geographers typically divide Louisiana into two cultural regions: North (Anglo) Louisiana and South (French) Louisiana. The map shows the imaginary line that distinguishes the two areas.

## HISTORY AND CULTURAL DISTINCTIONS

Geographical features define the physical boundary between Louisiana regions, but cultural influences provide equally tangible distinctions. Particularly in South Louisiana, culture and geography are integrally connected to the region’s unique economy and built environment.

The brothers Iberville and Bienville, Frenchmen who arrived in the region in 1699, explored it, built forts, and established the city of New Orleans in 1722. As the French were settling New Orleans, they also imported the rural plantation culture from the Caribbean island of Saint Domingue (now Haiti and the Dominican Republic) to the banks of the Mississippi River. Because the plantation economy relied heavily on slave culture, Haitian and Dominican peo-

“All parts of the state, even where natural conditions were very much alike, did not look the same after early European settlement. This is because people from France settled in some areas and people from the British Isles settled in others. Both built houses, barns, and roads, planted fields, raised cattle, but because of different backgrounds each did these things in its own manner. The differences we can see today, because each group left its own distinctive settlement pattern. Rarely does an individual depart from the way of his group, whether in his religious beliefs or in the kind of house he builds.”

Fred B. Kniffen, *Louisiana: Its Land and People*



Lowlands

Photo courtesy of Suzanne Turner



Prairie

Photo courtesy of Suzanne Turner

ples of African descent strongly influenced the region’s economy and heritage. Sugar cane as a cash crop has had a lasting impact on South Louisiana’s economy. With slavery came cultural distinctions and acclimations that have had a vital impact on both South Louisiana’s architectural legacy and economy.

Although the majority of Louisiana’s early settlers were French-speaking Catholics, Spanish, Portuguese, Dutch, German, and British immigrants arrived variously as colonists and refugees; Africans arrived either directly or via the Caribbean (primarily as slaves); and free people of color settled in the region.

The Acadians, another distinct cultural group that settled in Louisiana, also made a marked and enduring impact. Initially colonists of the French-Canadian colony of L’Acadie, they remained as the “neutral French” after the British captured the colony in 1713 and renamed it Nova Scotia. In 1755, at the start of the Seven Years’ War, the Acadians were forcibly deported, dispersing throughout British North America and beyond. The Seven Years’ War ended in 1763 and Louisiana was split between the Spanish and the British. Many of the Acadian refugees regrouped in Spanish Louisiana, where, in the 1760s, the government settled them on bayous and prairie lands west of New Orleans. The word “Acadian” evolved into the group’s modern name, “Cajun.”

Starting in 1791, Louisiana gained population due to a slave revolt in Saint Domingue that grew into the Haitian Revolution. It lasted 12 violent years, resulting in an influx of Europeans, slaves, and free people of color into New Orleans. Their strong cultural presence continues today. The Caribbean term “Creole” came to this continent with these populations and suggests being native born from foreign parents.

North Louisiana was (and still is) largely Anglo and mostly Protestant. In 1763, the “Florida Parishes”— north of Bayou Manchac and Lakes Maurepas and Pontchartrain—came under British control. This area (and the rest of what is now North Louisiana) was settled overland via the Appalachians from the British colonies and, after the American Revolution, from the United States.

Immediately after the American Revolution, Spain gained control of British Louisiana, and all of Louisiana was ceded to Napoleonic France in 1803. A few months later, Thomas Jefferson negotiated the Louisiana Purchase from France of “all the land drained by the Mississippi River”—the whole of the Mississippi River Valley. A small part of this territory became the state of Louisiana in 1812.

In Louisiana, the various French, Anglo, and African-American groups have, through time, strongly maintained their distinct cultural identities.

## SETTLEMENT PATTERNS

Land surveying methods were a powerful factor that shaped Louisiana’s settlement patterns. The marked differences in community patterns and architecture which can be observed today have their roots in the cultural distinctions of the early settlers.

South Louisiana reflects the long lot (arpent) surveying method used by the French and Spanish. Land was settled along the waterways in long parcels which varied in width. Property lines were placed perpendicular to the river from front lands to backswamp. On the inside of a bend, land diminished quickly making it less desirable. To encourage settlement there, the government granted twice as much land on that side. The method required that landowners build a road along the levee. Houses were set close together, forming a continuous, curving line (particularly along narrow strips); villages constituted little “knots” along the line.

The Anglo-Saxons who settled North Louisiana divided their land by metes and bounds. Boundaries ran independently of a regular survey system, creating an irregular pattern. On large farms, the houses and barns were often built in remote spots. Roads connecting them with village centers were highly irregular and, in this dispersed pattern, individual farmsteads might have miles of forest between them and their neighbors.

The American system of surveying land, commonly associated with the midwest, was prevalent in Louisiana as well. This system of land surveying was based on dividing up square miles of land into regular 40-acre properties.



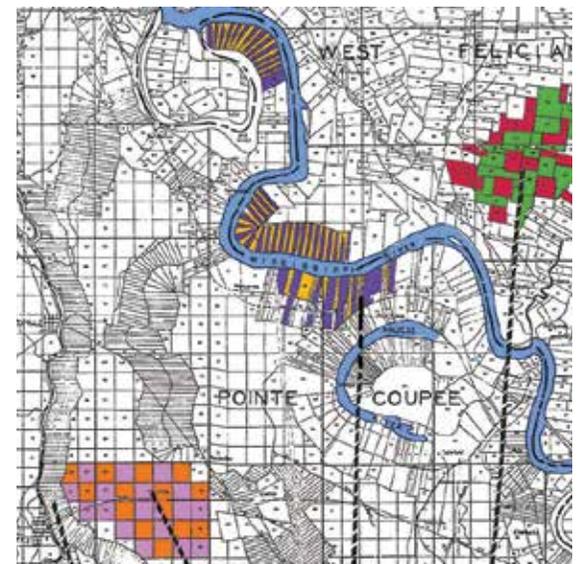
St. Francisville: Terrace



New Iberia



Baton Rouge

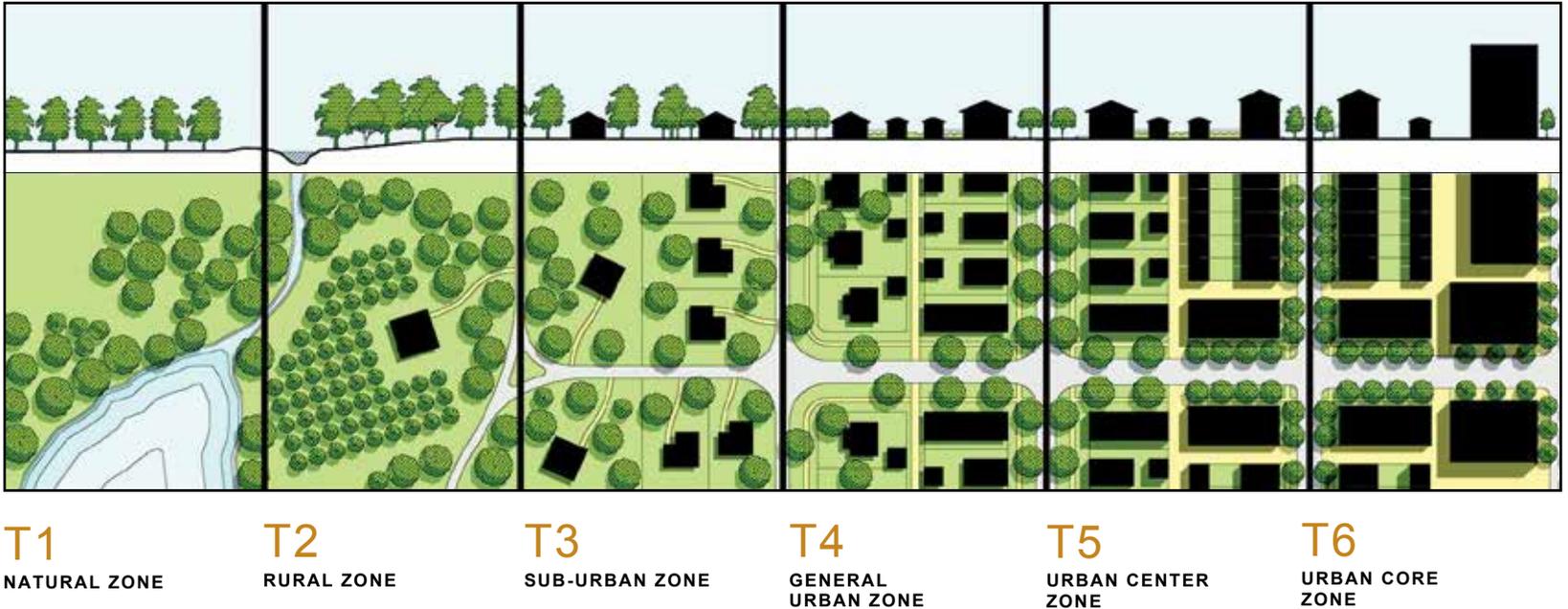


Land Survey Systems



Courtesy of Jay Edwards

# TRANSECT OF SOUTH LOUISIANA AND DEMONSTRATION PLANS



Louisiana’s systems of roads and waterways—which serve the farms, industries, villages, towns, and cities of the state—overlay the patterns of geography and culture discussed previously. The pattern of roads follows the land at higher elevations, which is also where the majority of development has occurred. Much of the state remains rural and agricultural with small settlements. Large towns and cities along major roads include Lake Charles, Lafayette, and Baton Rouge, as well as New Orleans.

**THE TRANSECT** is a tool developed by Duany Plater Zyberk & Company which describes the hierarchy of scale and location of these different settlement types. As the illustration shows, the Transect includes six zones, from the most natural undeveloped areas, to rural landscapes with farmsteads or coastal homesteads, small hamlets and villages, larger towns around historic trading centers, administrative centers, up to the larger urban centers.

Building smarter, safer, and stronger involves finding ways to reduce the sprawl development that threatens the rural landscape and coastal wetlands, and to encourage compact, mixed-use development that reduces people’s dependency on automobiles. Within each of the Transect Zones (T-Zones), infill development and reconstruction should be consistent with the scale of the existing settlement.

## TRANSECT AND DEMONSTRATION PLANS

Three Demonstration Charrettes took place in three different parts of South Louisiana, each part having its own scale and particular issues.

In **VERMILION PARISH**, the charrette developed plans for three communities: Erath, Delcambre, and Abbeville. All three are located in an agricultural landscape of sugar cane, rice, and other crops. Recent development patterns have included incursions into this landscape at a time when the future of agriculture is threatened by world economic forces. The rural landscape is also highly valued by the people of the region for hunting and fishing as well as for its aesthetic value. Therefore, the plans for the three towns called for compact development within areas currently developed. The edges between town and country are well defined. In the case of Erath (which was originally built on low ground), the plan calls for a new neighborhood on high ground with a series of canals and waterways to improve drainage for the existing town. The proposed scale of development fits within the T-3 through T-5 Transect Zones.

The charrette in **ST. BERNARD PARISH** created a plan for approximately 20 urban neighborhoods. The plan calls for large areas of parkland and concentrated areas of development with a mix of building types. These all fall within the scales of Transect Zones T-3 through T-5.

The charrette in **LAKE CHARLES** focused on the downtown and its immediate environs that span Transect Zones T-4 through T-6.



Courtesy of Duany Plater-Zyberk & Company



Photo courtesy of Sandy Sorlein

**T3** SUB-URBAN ZONE SECTION

Abbeville



**T4** GENERAL URBAN ZONE SECTION

Baton Rouge



**T5** URBAN CENTER ZONE SECTION

Covington

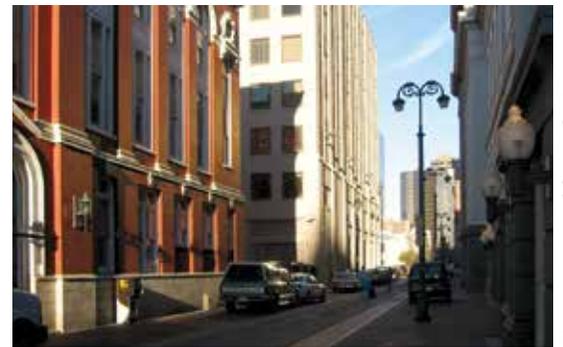


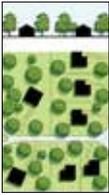
Photo courtesy of Sandy Sorlein

**T6** URBAN CORE ZONE SECTION

New Orleans

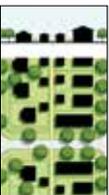
# COMMUNITY CHARACTER

Four different scales of streets and public space illustrate how the elements in the Pattern Book are applied to create appropriate designs for each of the Transect Zones listed. The perspective drawings on this page are idealized images representing the essential qualities of different public spaces and neighborhoods in South Louisiana as described by residents during the public process.



## T3 SUB-URBAN ZONE

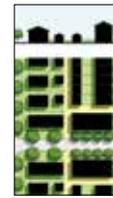
A small-scale neighborhood space in the T-3 (Sub-Urban) Transect Zone includes houses on large lots, set back from a small-scale street. A wide planting verge separates the street from the sidewalk. The individual lots are served from the street with driveways, but the parking and garages are set back behind the front facade line of the houses.



## T4 GENERAL URBAN ZONE

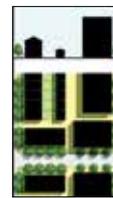
A neighborhood street in the T-4 (General Urban) Transect Zone has a diverse range of house types on small lots. The houses are close to the street with small-scale gardens defined either by low fences or hedges. The individual lots are served by an alley system and there are no driveways from the street.





**T5 URBAN CENTER ZONE**

A mixed-use street in T-5 (the Urban Center) features mixed-use buildings along a commercial street. Sidewalks are broad, used for café tables, display of goods, galleries, or landscaping. On-street parking buffers pedestrians and provides short-term parking for shops.



**T6 URBAN CORE ZONE**

A mixed-use street in T-6 (Urban Core) includes a mix of small-scale, mixed-use buildings and larger mid-rise buildings with shops on the ground floor and residential above. Parking is located mid-block, typically in garages or landscaped parking lots. Sidewalks are wide with ample space for pedestrians.



# URBAN ASSEMBLY KIT

Neighborhoods, towns, and cities are complex systems that consist of many different elements. The most appealing and congenial spaces in towns are those in which there is harmony among all of the elements which create them, including: the scale of the street pavement area, the size of the sidewalk, the placement of buildings and their height, the character of the architecture, the small details that add richness to the space, and the plantings that add shade, texture, and color. Yet each of these elements is designed and maintained by a different person or organization and each is designed according to different criteria.

To illustrate the relationship among these elements, we have used the new neighborhood plan as proposed in the Erath Demonstration Charrette as an example and have drawn the key elements separately.

## EXISTING SITE AND TOWN

The first aerial view illustrates the existing site. It is a single, large parcel running north from Route 14 between two stream beds. The parcel is immediately adjacent to the existing town in an area already experiencing some growth and in which the town is proposing to build new schools.

## FRAMEWORKS

### WATER SYSTEMS: CANALS, LAKES, AND STREET CONNECTIONS

The first step in the planning was to mitigate the flooding in the existing towns and protect new neighborhoods from future flooding. This is accomplished with a series of canals and lakes which are designed to help control the flow of flood water from the north. Following techniques long used by rice farmers in the region, the soil from the excavation is carefully placed on the portion of the site to be developed in order to raise the ground level above the floodplain.

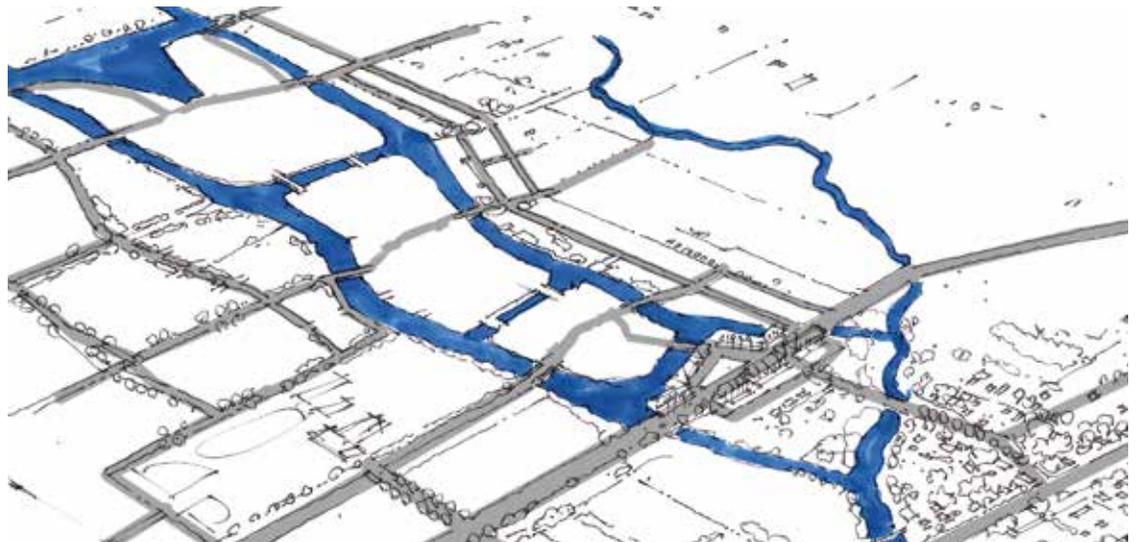
Once the pattern of waterways is in place to create land protected from flooding, it is possible to overlay a network of streets connected to the existing roads in the area.

### NEIGHBORHOODS

Separate neighborhoods, each scaled to about a five-minute walking radius, are created within the framework. Each neighborhood contains a mixture of house types and public amenities (such as parks) and schools.



Existing Site and Town



Canals, Lakes, and Street Connections



Neighborhoods



Streets



Lot Requirements: Setbacks and facade zones at the neighborhood scale

## ELEMENTS OF THE NEW NEIGHBORHOOD

The new neighborhood is a collection of streets, parks, houses, and mixed-use buildings that fit within these frameworks.

### STREETS

Within the plan area, street types include small-scale neighborhood streets, a collection of alleys and service ways, and a perimeter drive around the park. For each of these street types, there is an appropriate cross-section which describes its width, the design of the sidewalks, and the lighting.

### LANDSCAPE: STREETSCAPES AND PUBLIC OPEN SPACE

The street rights-of-way are further developed with street trees in the planting verges, the development of a park, and special treatment along the banks of the canals.

### BLOCKS AND LOTS

The framework of streets defines the blocks for development. The blocks are subdivided into individual parcels for sale to home owners and developers. Different parcel types accommodate different building types.

### LOT REQUIREMENTS

In order to organize the urban space of the neighborhood, the plan establishes setback lines and facade zones for each parcel. These set the location of individual buildings within the plan and create the relationship of the house to the street.

### BUILDINGS

A wide variety of houses and buildings can then be placed on the lots. A diverse collection of styles and types of buildings creates a coherent urban environment. The illustration includes:

- >> Single-family houses on wide lots
- >> Small cottages on small-scale streets
- >> Attached houses
- >> Small apartment houses
- >> Mixed-use buildings on the main square



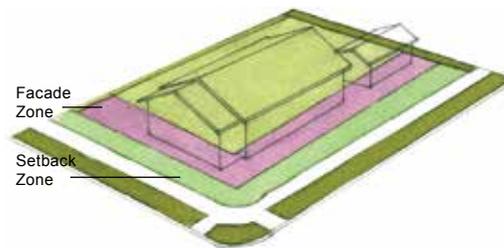
Landscape: Streetscapes and Public Open Space



Buildings placed on lots



Blocks with Lot Types



Lot Requirements: Lot scale



A Louisiana house on its lot

# ARCHITECTURAL PATTERNS

This section of the Pattern Book identifies those patterns among Louisiana house and building types that are important to maintain in the rebuilding process. Individual builders and homeowners, as well as production house builders and developers will find the architectural patterns presented in this section of the Pattern Book useful as they rebuild the fabric of Louisiana's neighborhoods and towns. This Pattern Book includes the design of houses, rowhouses, small apartment buildings, and mixed-use buildings.

The section begins with a description of the essential qualities of traditional houses that respond to the rigors of the tropical climate as a basis for developing Green Building Guidelines. The section includes information that is helpful in meeting FEMA requirements, updated code requirements, and issues of visitability and accessibility, as well as techniques useful in applying the principles contained in the Pattern Book to mass production and manufactured housing methods. The section continues with an overview of traditional building types as they relate to the scale of the urban environment in which they are placed. Descriptions of a range of architectural styles and how they relate to the culture, history, and location within the state are included. Each style is described and illustrated in detail as a guide and an inspiration for those engaged in the rebuilding process.

## THE INFLUENCE OF CLIMATE ON ARCHITECTURE

The unique climate and geography of Louisiana play an important role in the daily life of its residents. The intense heat and humidity, extended summers, short winters, and prevalent gulf breezes provide a backdrop to the lifestyles and traditions of South Louisiana. Over time, builders, designers, and homeowners have developed architecture and landscape patterns that are a direct response to the extreme climate of the region. Vernacular architecture from all regions of South Louisiana share the pursuit of providing relief from the sun and rain while still capturing as many breezes as possible. Generously scaled porches, tall ceilings, full-height windows, shade gardens, porch fans, and wood shutters are all elements that distinguish the traditional architecture of South Louisiana from elsewhere in the country.

Vernacular architecture from all regions of South Louisiana shares a common intention—to provide relief from the sun and rain while still capturing as many breezes as possible. Generously scaled porches, tall ceilings, full-height windows, jalousie windows, shade gardens, porch fans, and wood shutters are all elements that distinguish the traditional architecture of South Louisiana from elsewhere in the country.

## LOUISIANA BUILDING TRADITIONS

The early settlers of Louisiana, arriving by water, brought their cultures, lifestyles, religions, and methods of building with them. In response to the climate, geography, and natural forces, these settlers created a unique architecture. In this Pattern Book, this indigenous style is referred to as Louisiana Vernacular and includes both Acadian-influenced and Creole-influenced house types, as well as Anglicized versions of them.

Later settlers who came from the north brought their methods of building and a collection of architectural styles which were then modified and adapted to the climate and culture of Louisiana. These include the Victorian, Classical, and Arts & Crafts styles which can be seen in a wide variety of building types throughout the state.

These architectural patterns, followed for a very long period of time, have gradually evolved in form, blending traditions in ways that have ultimately created a rich mix of architecture in Louisiana's towns and cities. This continuity was broken with the advent of the industrial era and the radical break with the past called for by Modernist architects, the increasing popularity of mass-produced houses post World War II, and standardized patterns of sprawl. While it's true that the patterns have been broken, they have not been completely eliminated; traditional and modern houses continued to be built that held true to many aspects of their regional heritage and cultural forms.

A leader in this effort was A. Hays Town, an architect who designed a series of remarkable buildings using the methods and forms of traditional Louisiana architecture. The floor plans of his houses are modern with large open kitchens and carefully placed windows and glass walls that open the houses to the outdoors. Yet the architectural language Town employed is an authentic and precise use of traditional proportions and elements. Town gained much of his sensibility for traditional details by working for the Historic American Building Survey as a young man.

These forms continue to be used by builders and architects (traditional and modern alike) who are distilling the essential qualities of traditional buildings and using new materials in ways that carry the traditions forward in new houses. In the wake of Katrina and Rita, urgent need exists to build quickly using mass production techniques, yet in a way that continues to respect the traditions of the region.

## GALLERY OF EXAMPLES



Donaldsonville



Vermilionville



Lafayette



Abbeville



Baton Rouge



New Orleans



Abbeville

# RESIDENTIAL BUILDING TYPES

This Pattern Book defines building types by scale, form, and use. In using the Pattern Book, architects and manufacturers will be working with plan types that differ from the historic ones that generated many of the original building types. However, the character, image, and architectural style of those building types has enduring value, especially in the creation of neighborhoods and communities that are consistent with the character of Louisiana's traditional ones. Single-family houses include the Acadian-influenced and Creole-influenced cottages, shotgun houses, as well as center and side-hall houses. These variations are illustrated within each of the architectural styles presented in this book. Rowhouses also have many variations including mixed-use (with the inclusion of ground-floor retail). Porches and galleries, when added, provide an almost infinite number of possible building forms. The mansion apartment house is a new house type that uses traditional, large, single-family house forms to create a multi-family building that can fit comfortably within the scale of Louisiana neighborhoods.

Each type is appropriate for several, but not all, of the Transect Zones.

The emergency house, developed during the Demonstration Charrettes, uses traditional forms to create a house that can be put in place quickly at low cost, yet can also be the first phase in the development of a larger complex.

The bars on the right refer to the six Transect Zones. The colored area adjacent to each house type indicates the Transect Zones in which that building type is appropriate.

These basic building types can be built using a number of different architectural vocabularies as shown on the opposite page.

T1	T2	T3	T4	T5	T6		
						<p><b>EMERGENCY HOUSING</b></p>	
						<p><b>SINGLE-FAMILY HOUSE</b></p>	
						<p><b>DUPLEX</b></p>	
						<p><b>MANSION APARTMENT</b></p>	
						<p><b>ROWHOUSE</b></p>	
						<p><b>2- TO 4-STORY APARTMENT HOUSE</b></p>	
						<p><b>MIXED-USE BUILDING</b></p>	
T1	T2	T3	T4	T5	T6		

# LOUISIANA ARCHITECTURAL STYLES



**LOUISIANA VERNACULAR**



Abbeville



New Orleans



**LOUISIANA VICTORIAN**



Abbeville



New Orleans



**LOUISIANA CLASSICAL**



Crowley



Crowley



**LOUISIANA ARTS & CRAFTS**



Baton Rouge



Natchitoches

Photo courtesy of Steve Mouzon



**MODERN**



Hammond



Baton Rouge

Photo courtesy of Michael Desime

Photo courtesy of Neil Alexander

# GREEN BUILDING GUIDELINES

Whether the term used is green building, sustainable design, or high performance buildings, all refer to the planning, design, construction, and maintenance of buildings that are energy-efficient, healthy, and environmentally-friendly. Rebuilding Louisiana presents an unprecedented opportunity to incorporate green building strategies and systems early in the design process and at a massive scale. Although traditional and older Louisiana architecture uses climatically-responsive design strategies that enhance human comfort without requiring electricity (e.g., porches, tall ceilings, large windows, and roof overhangs), newer homes have relied almost exclusively on fossil-fuel-dependent mechanical systems for heating and cooling. In the year 2000, Louisiana ranked as the fifth highest per capita consumer of electricity in the country, using 25% more electricity than the national average. Whether the energy source is electricity, gas, oil, wind, or solar, increasing the efficiency of a house reduces energy bills and lessens the impact on the environment. Using 30% less energy translates directly into financial savings. Moreover, the small increase in upfront construction costs attributable to energy efficiency measures will be returned in longer-term savings to the homeowner or renter. Green building strategies are therefore important not only because of their environmental and human benefits, but also in terms of cost savings and affordability.

## ENERGY EFFICIENCY STRATEGIES

Energy-efficient houses provide significant benefits including reduced energy demand, utility costs, and pollution, as well as enhanced human comfort, health, durability, quality, and control. One way to achieve energy efficiency in new construction is to follow the Energy Star Program, a national, voluntary program sponsored by the U.S. Environmental Protection Agency (EPA) to reduce greenhouse gas emissions and protect the environment. Energy Star homes are 15–30% more energy efficient than homes built to national or state energy codes. Program requirements are typically met through a combination of building-envelope upgrades, high-performance windows, controlled air infiltration, upgraded heating and air conditioning systems, and tight duct systems. These features contribute to improved home quality and homeowner comfort, lower energy demand, lower utility bills, and reduced air pollution. The program is clear and easy to use, affordable, and is monitored to ensure high quality and efficient construction.

## SYSTEMS THINKING

A well-designed, energy-efficient building addresses many interrelated elements that control, move, circulate, or retain energy, air, and water to achieve human comfort, functionality, and safety. Decisions made for climate and solar orientation relate to decisions about the location and number of windows. Insulation choices, tightness of the building envelope, and foundation choices all contribute to the size of the heating-ventilation-air conditioning (HVAC) system. Buildings designed with these interrelated elements achieve greater energy efficiency, comfort, safety, and affordability.

## MECHANICAL HEATING, COOLING, AND DEHUMIDIFICATION

To achieve the highest energy efficiency, mechanical units must be sized properly for a given house or building. Under- or oversized systems do not achieve the desired balance of heating, cooling, and dehumidification for human comfort. In Louisiana’s hot and humid climate, a high efficiency, central air-conditioning unit is particularly important to achieve energy reductions and cost savings. Adding an optional, dedicated, whole-house dehumidifier helps to further control indoor humidity and increase comfort. This is an important consideration in Louisiana, where mold is a common problem. Mold spores are invisible to the naked eye, float through outdoor and indoor air, and grow indoors on moist surfaces. Molds typically require a relative humidity greater than 80%, so controlling moisture in the house is the most effective means of preventing mold growth.



Deep overhangs for shade



Operable windows & shutters



Porches provide shade and outdoor living space

Photo courtesy of Steve Oubre

In Louisiana, the purpose of passive solar design is to prevent heat gain in the summer and allow heat gain in the winter. Passive heating and cooling is easy to achieve through early design consideration, with attention paid to the house's orientation in relation to the sun.

**APPLIANCES AND LIGHTING**

Appliances and lighting account for 40% of home energy usage with refrigerators typically being the single biggest energy-consuming home appliance. Energy Star appliances meet specific energy criteria set by the EPA and use an average of 10–15% less energy than non-certified products, thereby reducing energy costs and pollution.

**WATER HEATERS**

Water heating is typically the second largest household energy expense. Greater efficiency can be achieved simply and affordably by using less hot water, setting the heater temperature at 115°F, and wrapping the heater and pipes with insulation. Tankless (on-demand) hot water heaters typically cost less and are more efficient because they do not store hot water if there is no demand. Solar hot water heaters use the sun to heat water or a heat-transfer fluid in collectors, reducing the need for conventional water heating by about two-thirds.

**PASSIVE DESIGN STRATEGIES**

Passive design strategies refer to non-mechanical systems or architectural features that use the sun's natural energy to heat living spaces during the colder seasons, while minimizing heat gain during the warmer seasons. Solar energy is a renewable and non-polluting natural energy source. Passive design features do not generate greenhouse gases, deplete fossil fuels, or rely upon costly, and at times unreliable, energy sources. High ceilings, overhangs, porches, courtyards and galleys, shutters, and natural ventilation are all examples of effective passive design elements and traditional Louisiana architecture. Window placement and the seasonal pathway of the sun are critical considerations in passive solar design. Passive systems should be considered early in the design process, and used in conjunction with a well-built, well-insulated house that has an efficient mechanical heating, cooling, and ventilation system.

**ROOFS**

The roof is the greatest source of potential heat gain in southern Louisiana during the warmest months when the path of the midday sun is directly overhead. A light-colored and reflective roof surface is the most effective design strategy to minimize heat gain. Roof design is also an important factor in mitigating wind hazards: roof anchors are the best protection against hurricane wind forces, and hip roofs are more wind resistant than gabled roofs.

**OVERHANGS**

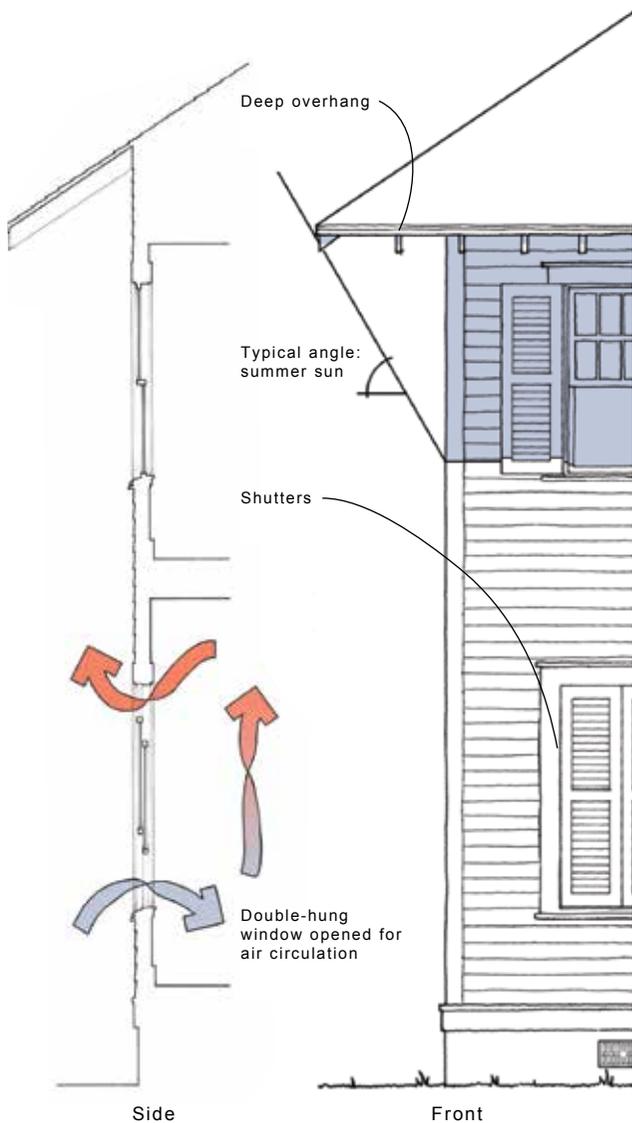
Roof overhangs on the south side of the house can be sized to provide shade in the summer (when the sun is high in the sky), yet allow sunlight and warmth inside the house during the winter (when the sun is at a lower altitude). Overhangs also prevent water from draining directly onto the house and its foundation.

**PORCHES**

Porches provide shading as well as outdoor living space. The south side is the most critical face of the house to shade. Front porches create a transition from the private space of the house to the public space of the street. Screen porches provide breezy outdoor space while keeping out the bugs.

**SHUTTERS**

Operable, exterior shutters are both a traditional and aesthetically pleasing feature of Louisiana houses. Operable exterior shutters keep the hot sun out while allowing cooling breezes to ventilate the house. Shutters also provide an effective window insulation system, enhanced weather protection, and household security.



Correctly proportioned overhangs and shutters provide shade, decreasing heat gain. Double-hung windows allow cooler air to enter through the raised bottom sash, while hot air escapes through the lowered upper sash. High ceilings allow hot air to rise above the occupied areas, increasing human comfort.

**CEILING HEIGHT**

Traditional Louisiana architectural styles often use 12-foot ceilings, which are higher than the typical 8 feet. Higher ceilings of even just 9 or 10 feet provide more space for hot air to rise, thereby increasing human comfort in warm weather. Coupled with large windows, taller ceilings also promote more effective ventilation strategies.

**CEILING FANS**

Ceiling fans increase human comfort by providing air movement that aids the body's evaporative cooling system, rather than actually regulating temperature. Fans also increase ventilation on outdoor porches and help keep away bugs. Fans should be turned off when the room is not occupied.

**WINDOWS**

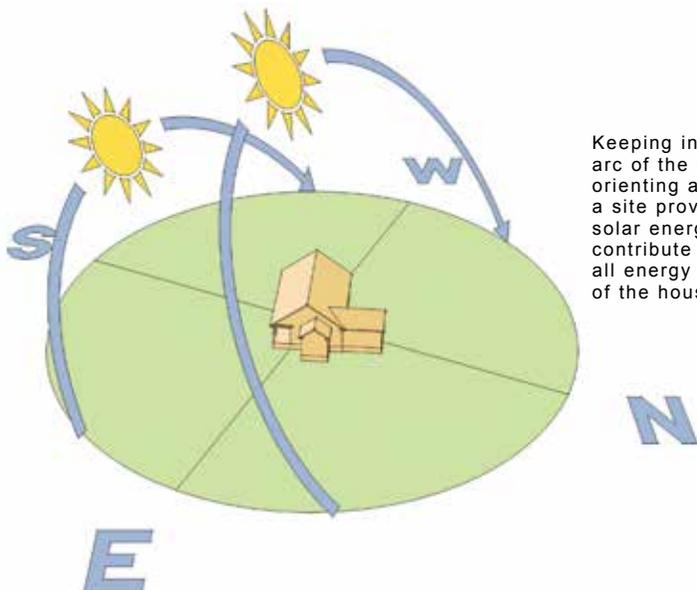
The placement, size, number, and type of windows are important factors in the comfort and energy efficiency of any house. Reduce the size and number of windows on the heat-intensive west side, and use larger windows for greater ventilation and day lighting on the north and east sides. Choose double-pane, insulated, and Low-E coated windows that hinder radiant heat flow through glass layers, and allow in light and air. Double-hung windows are ideal for ventilation; cooler air enters through the raised bottom sash, while hot air escapes through the lowered upper sash. All windows and doors should be sealed, flashed, and properly installed to reduce air and moisture infiltration.

**VEGETATED SHADING**

Shade is a valuable and affordable resource in the hot, humid climate of Louisiana. Planting deciduous trees and shrubs on the west, east, southwest, and southeast sides of the house shades against solar heat gain in the summer and lets in sunlight in the winter. Small shrubs and groundcover can be used to shade pavement around the house, keeping the house and outdoor spaces cooler by reducing reflected heat.

**WALL SECTION**

The design of the wall is one of the most complex components of the building envelope. A well-insulated, properly constructed exterior wall can increase the comfort, efficiency, and health of a house. Traditional wood framing is likely to remain the most common and accessible building system available. Framed houses, 2 x 6 Optimum Value Engineered (OVE) with structural sheathing, generally cost about the same as standard framed houses but have added benefits. OVE reduces framing time, lowers construction costs, conserves resources, and reduces annual energy costs through increased efficiency. OVE also reduces the amount of lumber used in the exterior wall while increasing the amount of insulation.



Keeping in mind the arc of the sun when orienting a house on a site provides passive solar energy and can contribute to the overall energy efficiency of the house.

Energy-efficient houses provide significant benefits including long-term cost savings, improved human comfort and health, enhanced durability, and hazard-resistance.



Doors and full-height porch windows increase ventilation



Porches and vegetation provide shading

## INSULATION

Insulation is a critical element in constructing energy-efficient, comfortable houses. Insulation should exceed the required minimums to save on overall energy costs and make the house more comfortable. Use recycled wet-blown cellulose for better insulation and insect control. Where there are threats of flooding, install closed-celled foam insulation that does not absorb moisture. Cavity insulations without vapor retarders should be selected. Wall assemblies should be designed to dry inwards. Interior vinyl wall coverings and non-permeable paints or finishes should be avoided.

## FOUNDATION SYSTEMS

Foundation systems should be carefully designed according to site characteristics (see FEMA requirement for Floor Zones). The well-built, well-insulated foundation can add greatly to the comfort and energy efficiency of a house. Vented crawlspaces are preferred.

## MATERIALS AND INDOOR AIR QUALITY

Initial decisions in the construction of the house can have a significant impact on maintenance and replacement costs over time. Consider selecting roof materials with extended warranties and using a cementitious fiberboard for siding. Selecting high quality materials and assemblies may add to upfront costs, but will likely provide long-term savings through greater durability, strength, and reduced replacement costs.

Because people spend an average of 65% of their time indoors, indoor air quality is critical to the health of residents, especially more vulnerable groups such as children, seniors, and individuals with existing respiratory problems and compromised immune systems. Toxic materials have associated human health impacts including cancer, allergies, and “sick building syndrome.”

Sources of indoor air pollution include:

- Building materials and furnishings (e.g., insulation, carpets, and cabinetry) that contain phthalates, arsenic, and formaldehyde
- Polyvinyl chloride (commonly called PVC or vinyl) approximately 75% of all PVC manufactured is used in construction materials
- Adhesives that release formaldehyde
- Mold resulting from moisture trapped inside walls
- Cleaning and maintenance products containing toxic chemicals
- Interior paints, primers, and removers that release volatile organic compounds

Materials should be selected with low or zero volatile organic compounds (VOCs), PVC, formaldehyde, arsenic, chromium, and other toxic chemicals. There are many alternative construction materials that can be used in place of vinyl including cast iron piping, fiber-cement board siding, metal roofing, natural linoleum, tile, wood flooring, sustainably harvested wood, fiberglass, and aluminum windows and doors.



Courtyards provide ventilation, outdoor living space, and garden space within urban environments. Galleries often line the interior of the courtyard and provide shade for the building. (Sketch by John Desmond, FAIA)

# FLOODPLAIN MANAGEMENT REQUIREMENTS

Finding ways to build stronger houses that can better withstand future storms and be protected from floods is essential. Below are several techniques which can contribute to building more durable houses.

## INDIVIDUAL HOUSE BELOW REQUIRED ELEVATIONS ABOVE FLOODPLAINS

FEMA and the Army Corps of Engineers have developed Floodplain Elevations. These federally mandated standards set finished floor above mean sea level requirements for all new construction. Visit FEMA at [www.fema.gov](http://www.fema.gov) and local authorities for site-specific requirements.

This Pattern Book includes a 'kit of parts' to satisfy those requirements in a manner derived from local vernacular examples. These options can be used individually or in combination. The strategies were carefully designed so as not to overwhelm the building's scale. Not all building types can be used with the most restrictive conditions.

The basic strategies include:

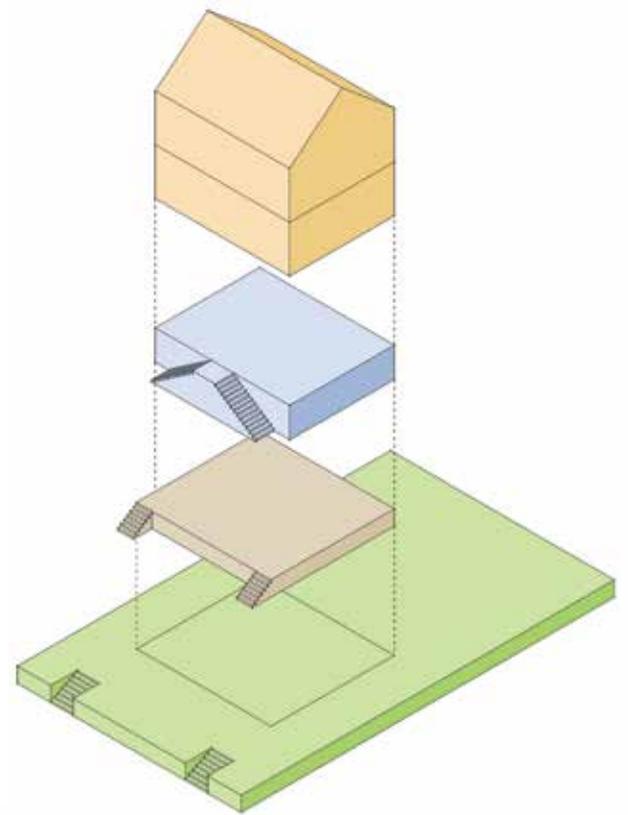
- >> Raising the site with fill
- >> Using a base to raise the floor elevation
- >> Incorporating a sub-story with a grand stair

## SUBMERSIBLE BUILDINGS

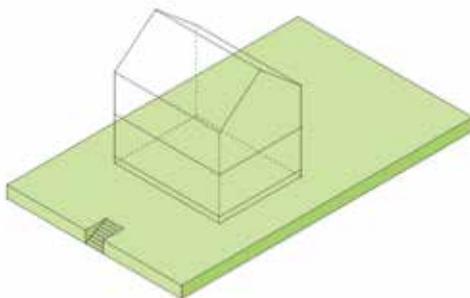
As this Pattern Book goes to press, there are discussions taking place about the feasibility of using construction techniques that would enable a house to be more easily re-used after it was flooded. The major challenge with current houses that are flooded is the penetration of water into dry wall and cavity wall construction which increases the risk of mold developing. By using the Structural Insulated Panels (SIP) system, water would not be able to penetrate the wall. After the water recedes, the interior of the house would be cleaned and then ready for occupancy. As this technique was not yet approved by FEMA as of this writing, it is essential to verify its appropriateness prior to use.

## WIND PROTECTION

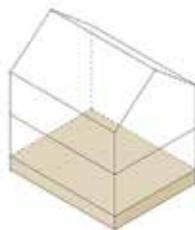
The Louisiana coast has been divided into several Velocity Zones (V-Zones) which start with a 150 mph wind zone at the extreme southeastern coast and decrease in 10 mph increments as you move northward. A chart in the International Residential Code (IRC) identifies the V-Zones. The IRC 2003 Edition, published by the International Code Council (ICC), was adopted by the state legislature under Title 12 in 2005; compliance with the IRC is mandatory throughout the state. Provisions of the IRC supercede any code provisions for the same parameters.



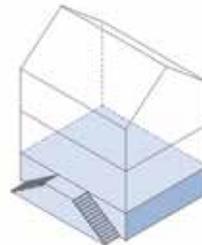
These options can be used individually or in combination.



Raised Site Using Fill



Raised Base



Sub-Story with Grand Stair



St. Francisville



Donaldsonville



Baton Rouge

# VISITABILITY AND ACCESSIBILITY

Thus, the first step in building a house in Louisiana is to identify the V-Zone in which your house site is located. Once you've identified the appropriate V-Zone, all the other components of the code are applied based on that zone designation. It should be noted that Title 12 also references other existing standards for IRC implementation, such as the Standard for Hurricane Resistant Construction (SSTD-10) published by Southern Building Code Congress International (SBCCI, now the ICC) and the Wood Frame Construction Manual by the American Forest and Paper Association. Both standards contain design information for wood frame construction in regions with wind speeds up to 150 mph.

For commercial buildings [which includes both multi-family (more than two family) residential structures and mixed-use buildings], refer to the International Building Code (IBC) which covers the comparable provisions for those building types.

## CONSTRUCTION HARDENING TECHNIQUES

The IRC contains numerous construction hardening techniques for windows and doors and other building components. For example, windows in V-Zones of 120 mph or more must pass a particular ballistics test to be permitted, or openings must be shuttered with appropriate, approved devices.

The IRC also includes mandatory requirements to tie down buildings (again, according to V-Zone). Within specific V-Zones, the structural tie-down requirements have been changed from previous codes. Be sure to research the requirements for the specific V-Zone in question.

As with wind protection, first check the V-Zone in which your house or mixed-use/commercial building will be constructed, then follow the IRC or IBC provisions to ensure that you meet the construction hardening requirements for that zone.

The legislature has indicated that each parish is required to administer the IRC and the IBC. In jurisdictions where there is no specific authority tasked with administering the codes, local professionals have been identified as approval authorities. Contact your parish government offices to obtain a list of these approved professionals.

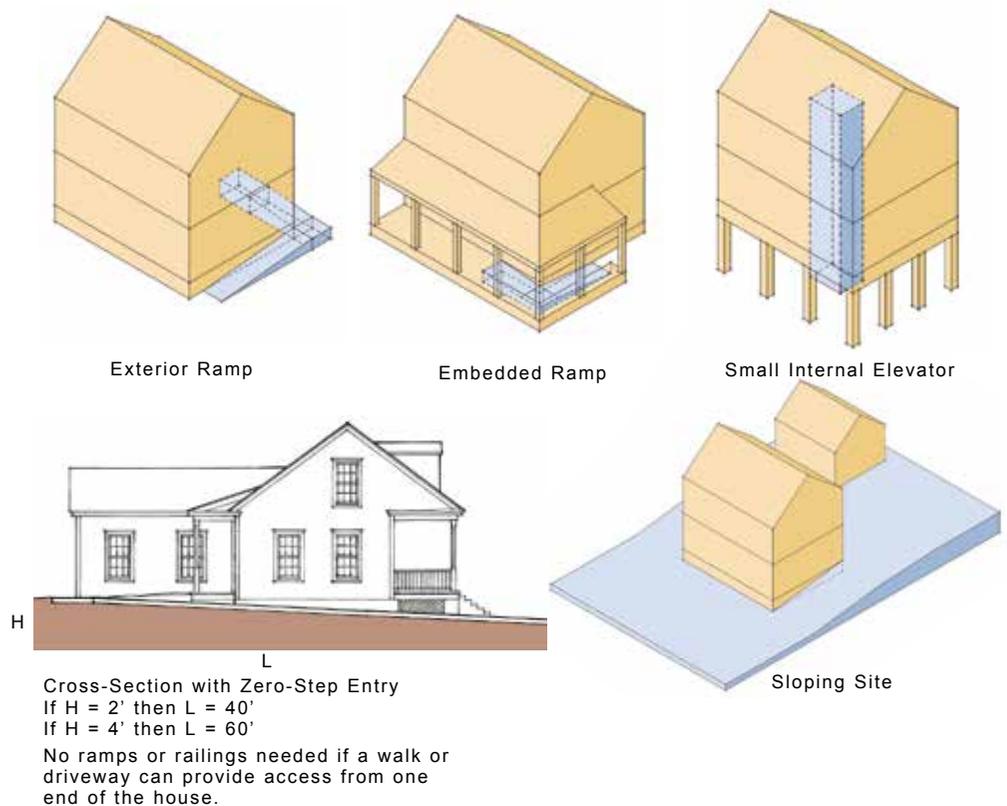
FEMA produced 31 Technical Fact Sheets that provide guidance and recommendations concerning the construction of coastal residential buildings. The Fact Sheets present information aimed at improving the performance of buildings subject to flood and wind forces in coastal environments. Photos and drawings illustrate National Flood Insurance Program (NFIP) regulatory requirements, the proper siting of coastal buildings, and recommended design and construction practices for building components, including structural connections, the building envelope, and utilities.

All fact sheets can be downloaded at: [http://www.fema.gov/rebuild/mat/mat\\_fema499.shtm](http://www.fema.gov/rebuild/mat/mat_fema499.shtm)

Houses, like neighborhoods and public buildings, should be accessible for persons with physical disabilities, especially since many people displaced by Katrina have disabilities or are aged. This requires careful thought when faced with the need to raise the first floor above grade to meet flood plain management requirements. Different conditions call for different solutions.

For sites where the first floor must be 1'-0" to 4'-0" above grade, visitability and accessibility can best be achieved through the use of site grading and one grade level entry. Keeping site grades to 5% or less will reduce or eliminate the need for ramps. On steep sites, it is often possible to provide access without steps at the side or rear from an adjoining driveway or sidewalk. Where ramps are necessary, accessibility codes require that they have an 8.33% maximum grade and railings on both sides. In extreme cases, mechanical means such as small personal elevators, chair lifts, and porch lifts may be necessary as a last resort.

Inside the house, visitability—the most basic level of accessibility—includes circulation on the entry floor and into one bathroom that is accessible by a person in a wheelchair, with doorways offering 32 inches clear passage. When carefully investigated, there is rarely a need to add space to the floor area of a house to provide visitability or accessibility. Visitability costs even less than accessibility, usually adding, at most, about \$200–500 to the total construction cost. It is a feasible strategy for all housing.



Interior Stair Lift



Interior Chair Lift

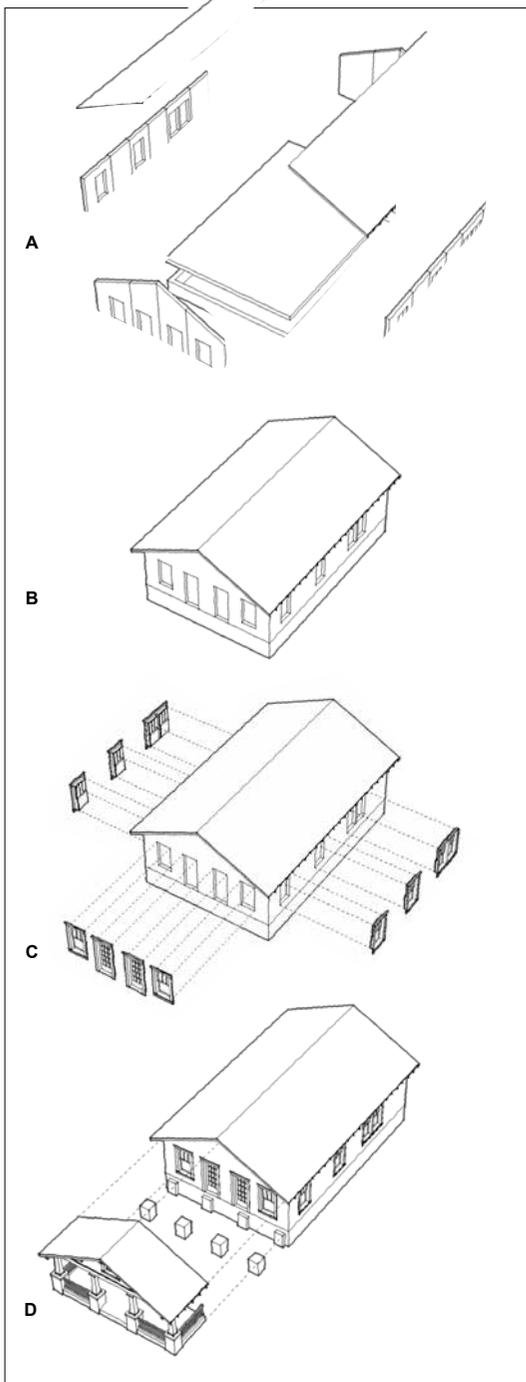


Elevator

# ALTERNATIVES TO CONVENTIONAL CONSTRUCTION

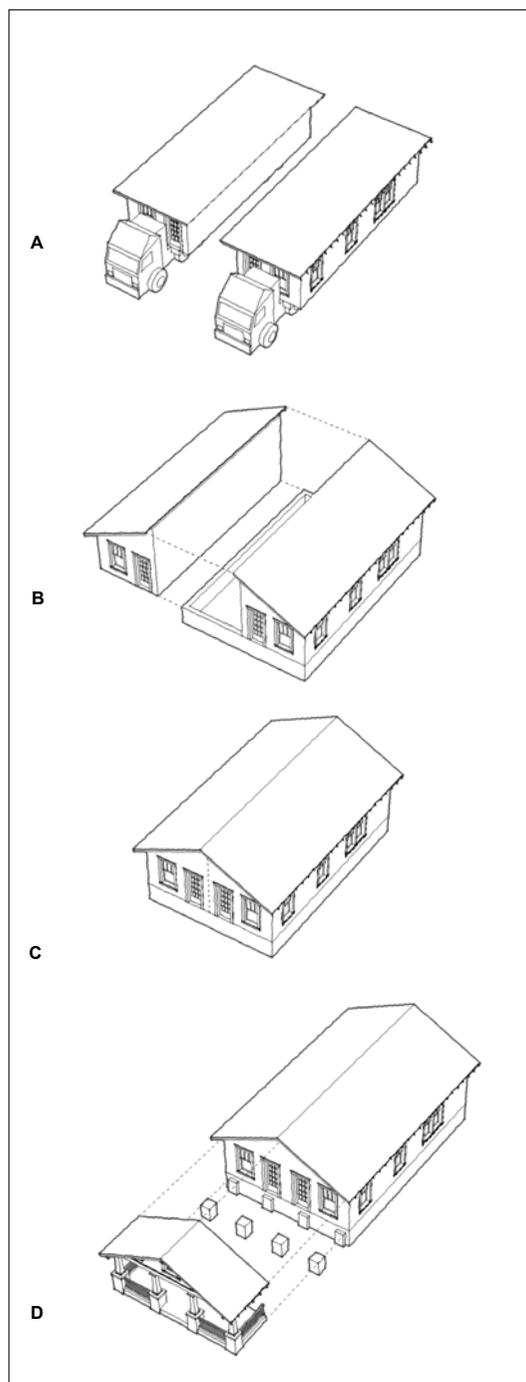
Timely replacement of the more than 200,000 homes that were lost in the wake of Hurricanes Katrina and Rita will require a variety of production methods. Conventional construction techniques alone cannot keep pace with the enormous need for housing because they require on-site skilled labor, efficient delivery of materials to the construction site, a prepared site, and consistent weather. Alternative methods—such as panelized housing, manufactured housing and ICF materials—make it possible to mass produce components in controlled environments in locations where an appropriate workforce is already in place.

**Alternative 1:**  
Panelized



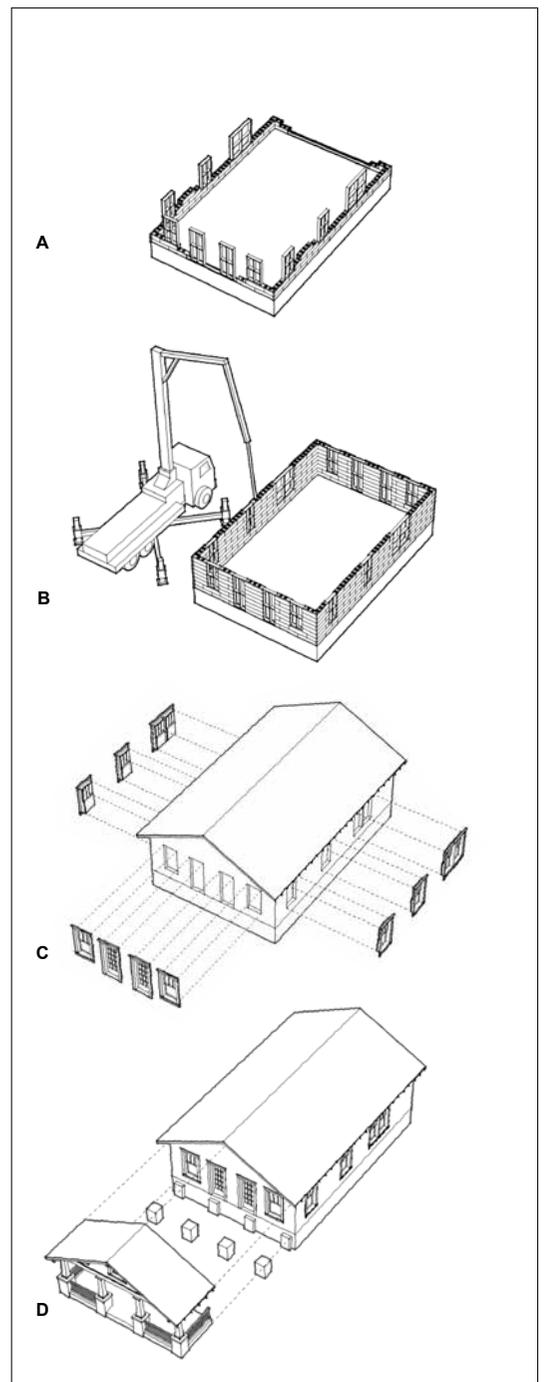
- A Panels Arrive
- B Panels Assembled and Finishes Applied
- C Windows and Doors Installed
- D Porches Constructed

**Alternative 2:**  
Manufactured



- A Pre-Constructed House Shipped to Site
- B House Assembled
- C House Sealed
- D Porches Constructed

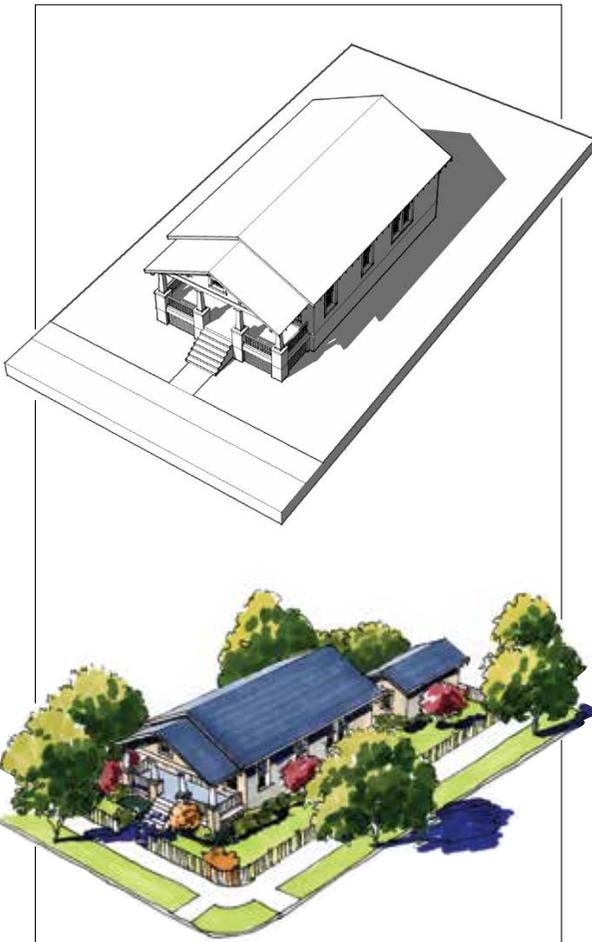
**Alternative 3:**  
Insulating Concrete Forms (ICF)



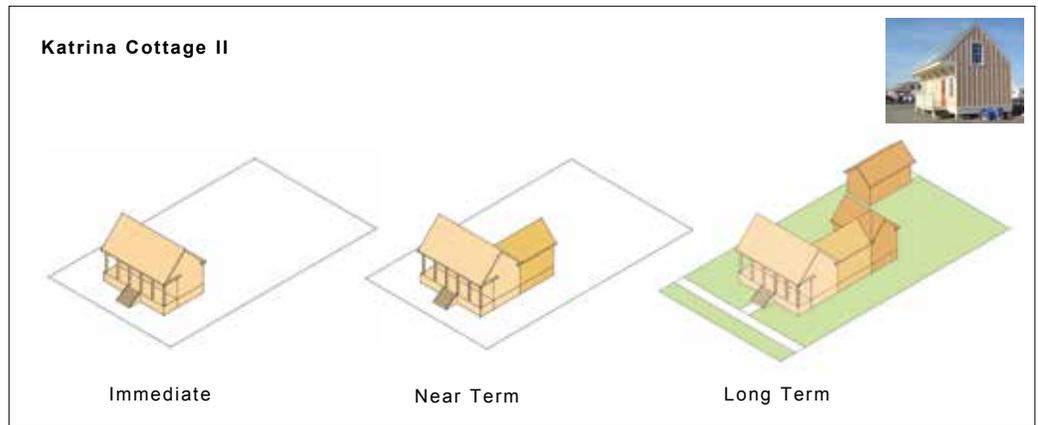
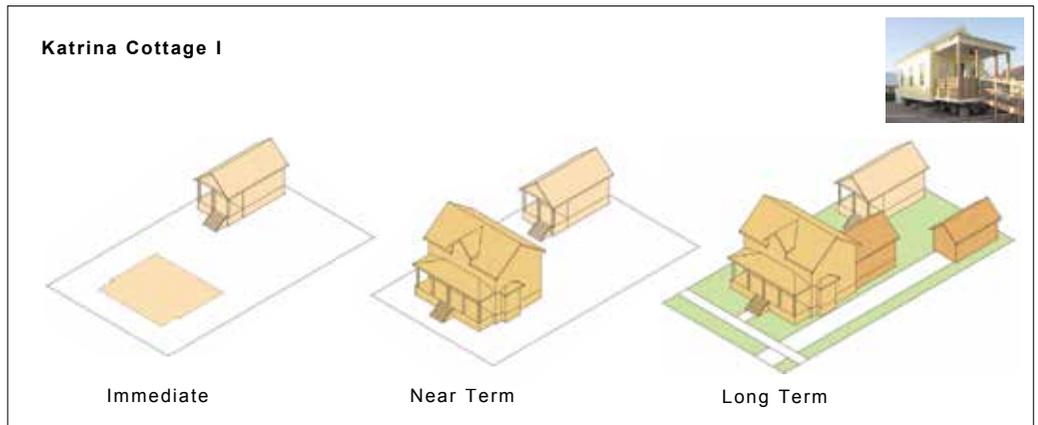
- A Forms Assembled
- B Concrete Poured
- C Windows and Doors Installed
- D Porches Constructed

# THE HOUSE THAT GROWS

Two prototypes for manufactured emergency housing were developed in the course of the charrettes on the Gulf Coast: the small 308 square foot Katrina Cottage I, proposed as an alternative to a trailer, and the 770 square foot Katrina Cottage II, both of which were designed to be a first step in the reconstruction of a family's home. The smaller one is a module that was stick-built off-site, while the larger one used a waterproof SIP panel system. Louisiana has a tradition of houses that have grown incrementally over time. In some established traditional neighborhoods, there are houses that began as simple modest structures that were added to with a collection of wings and subsidiary structures. In some cases, the main body of the house was added later. The diagrams illustrate how both of the Katrina Cottages can be placed on the site to create either a family compound or a large house with many wings.



Timely replacement of the more than 200,000 homes that were lost in the wake of Hurricanes Katrina and Rita will require a variety of production methods. These three alternatives, as well as conventional construction, can be used to produce the house illustrated here.



**Katrina Cottage I**  
Marianne Cusato, Architect

**Katrina Cottage II**  
Andrés Duany, Steve Oubre, Susan Henderson, Eric Moser, Steve Mouzon, Matthew Lambert, Diane Dorney, Architects and Designers

# DESIGNING MULTI-FAMILY HOUSING AND MIXED-USE BUILDINGS

The goal of building smarter, safer, and stronger calls for creating more compact, walkable neighborhoods and towns, thereby reducing sprawl. Except in New Orleans, the majority of residential buildings are houses with only a small number of rowhouses, apartment houses, and mixed-use buildings in the centers of towns. Therefore, a need exists to develop multi-family and mixed-use buildings that will continue the scale of the traditional towns, but with a new arrangement of spaces. These include some for which there are direct precedents, including rowhouses of two, three, and four stories and townhouse/commercial buildings with one or two floors of apartments atop ground-floor retail, often with galleries. Other types on these style pages include small apartment houses that resemble single-family houses; larger buildings with a form similar to the large mansions of Louisiana towns; and mid-rise, mixed-use buildings based on those found in the urban core of towns and medium-sized cities. These building types can be articulated in a number of different architectural vocabularies depending on scale: Louisiana Vernacular, Louisiana Victorian, and Louisiana Arts & Crafts for the smaller-scale buildings; Louisiana Classical or Modern at the larger scale.

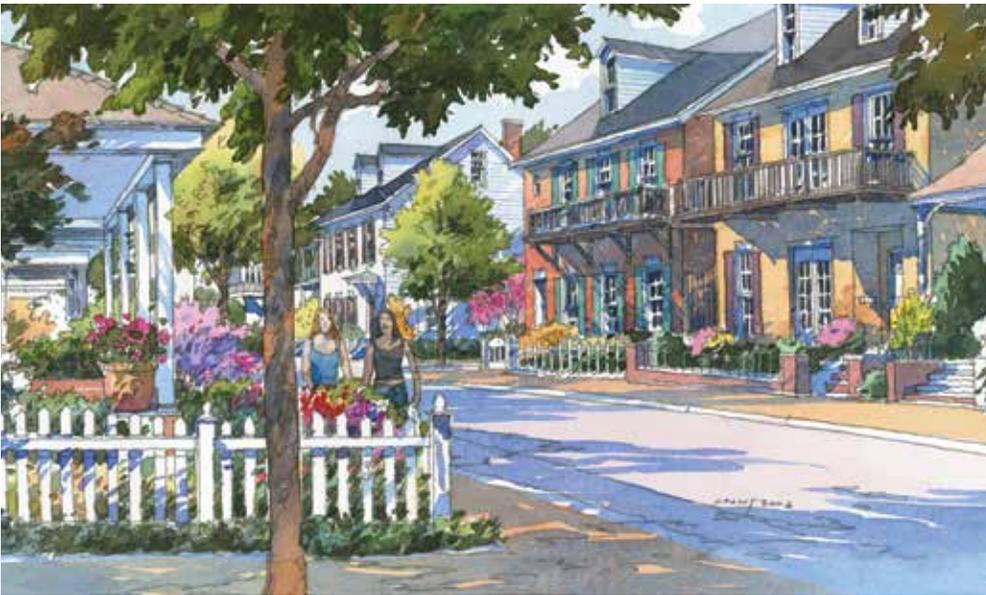
## ESSENTIAL ELEMENTS

Multi-family buildings are treated as either “big houses” within single-family detached neighborhoods or as attached, narrow houses in more urban settings. Traditional apartment buildings are found in the most urban (T5 & T6) settings.

Mixed-use buildings are typically two to three stories in height with a ground floor composed of individual shopfronts.

Mixed-use buildings often feature galleries over the taller ground floor; these galleries provide shade and rain protection for pedestrians.

The pattern of mixed-use buildings along a street creates continuous frontage with variation in narrow widths at the ground level.



**MANSION APARTMENT BUILDINGS**

- >> Small apartment buildings that are two- to three-and-one-half stories can be configured to resemble the large, single-family houses. Since many traditional neighborhoods have a mix of small and large houses, this approach can fulfill the goal of compact development without losing the character and scale of the neighborhood. Possibilities include one or two units per floor (which results in a single volume) and three to four units per floor (which can be articulated as two separate houses attached with a common stair).
- >> The buildings should be placed on their sites as guided by the setbacks of adjacent buildings and as is appropriate for the specific transect zones.
- >> Appropriate architectural styles include Louisiana Vernacular, Louisiana Victorian, Louisiana Classical, and Louisiana Arts & Crafts.



New Orleans



Beauregard



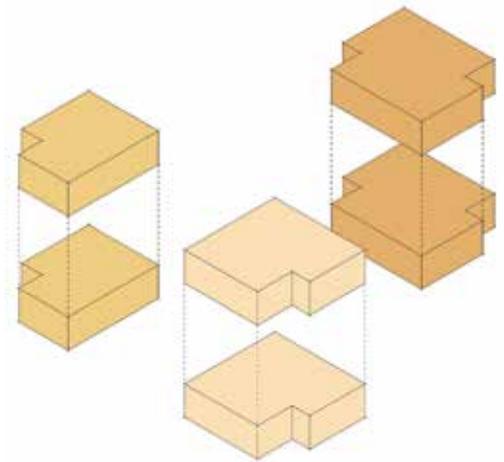
Example of 6-Unit Mansion Apartment Building

Photo courtesy of Steve Mouzon

**UNIT PLAN**



**MASSING**



Apartment units expressed as separate entities

**SITE PLAN**



Massing of Mansion Apartment

**SITE AXONOMETRIC DRAWING**



**ROWHOUSES AND SMALL-SCALE MIXED-USE BUILDINGS**

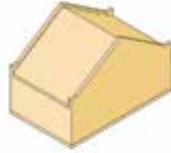
- >> The Creole-influenced style of rowhouses provides a wide range of building and use combinations. The narrow front, side-gabled forms can be used as individual buildings on narrow lots, in continuous rows of individual units, as a combined building with apartments served by corridors, and as apartments over ground-floor retail uses.
- >> For ground-floor residential uses, the buildings should be set back from the sidewalk to provide a small front garden. For retail and public-use ground floors, the facade should be at the property line or to a widened sidewalk.
- >> Great richness can be provided by adding porches and galleries to the upper floors. For all residential buildings, cantilevered balconies provide facade variation. For mixed-use buildings, the galleries and porches provide shade for the ground-floor uses as well as the outdoor spaces for the upper-level apartments.
- >> Appropriate architectural styles include Louisiana Vernacular, Louisiana Victorian, and Modern.



Photo courtesy of Steve Mouzon

New Orleans

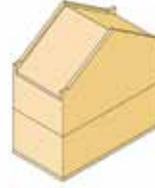
**ROWHOUSE MASSING >>**



1-story Rowhouse



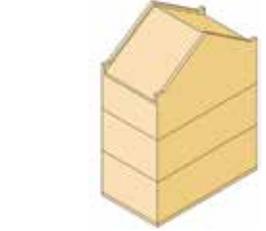
New Orleans



2-story Rowhouse



New Orleans



3-story Rowhouse

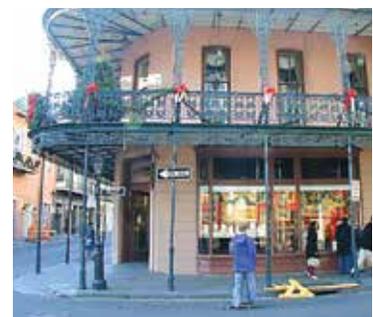
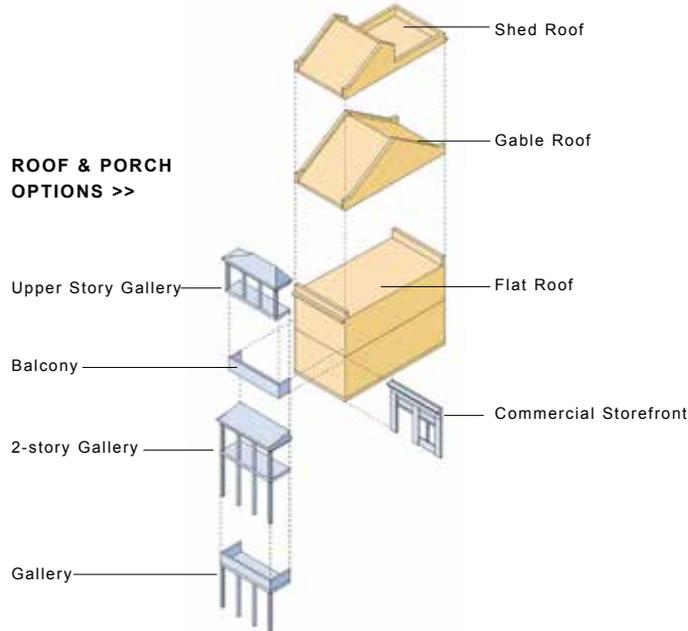


New Orleans

Photo courtesy of Steve Mouzon

Photo courtesy of Steve Mouzon

**ROOF & PORCH OPTIONS >>**



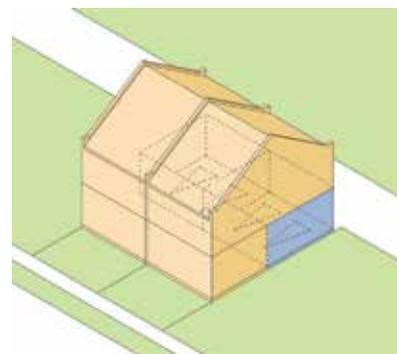
New Orleans

Photo courtesy of Steve Mouzon

**PARKING OPTIONS >>**



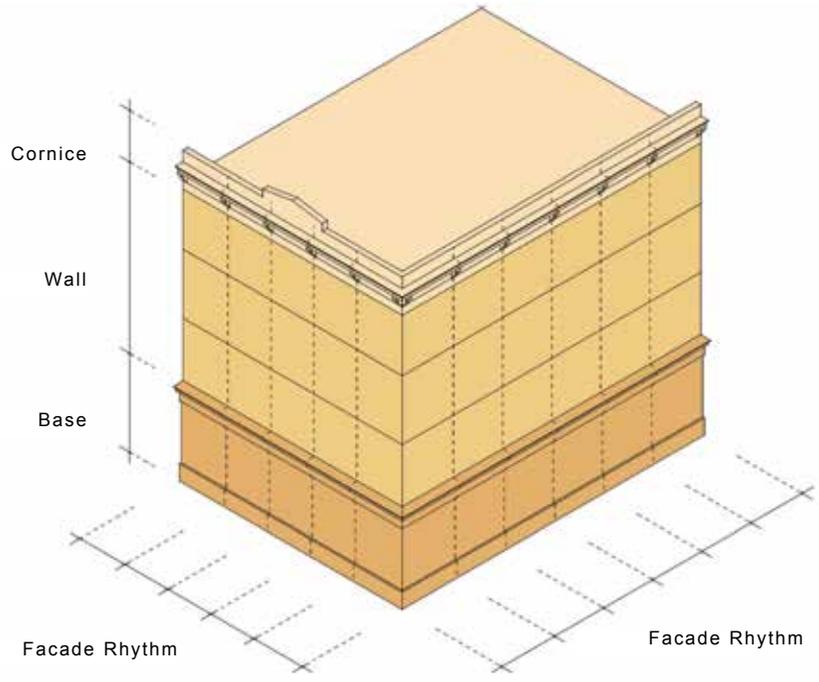
Attached and Detached Garages



Tuck-Under Parking

**LARGE APARTMENT HOUSES AND MIXED-USE BUILDINGS**

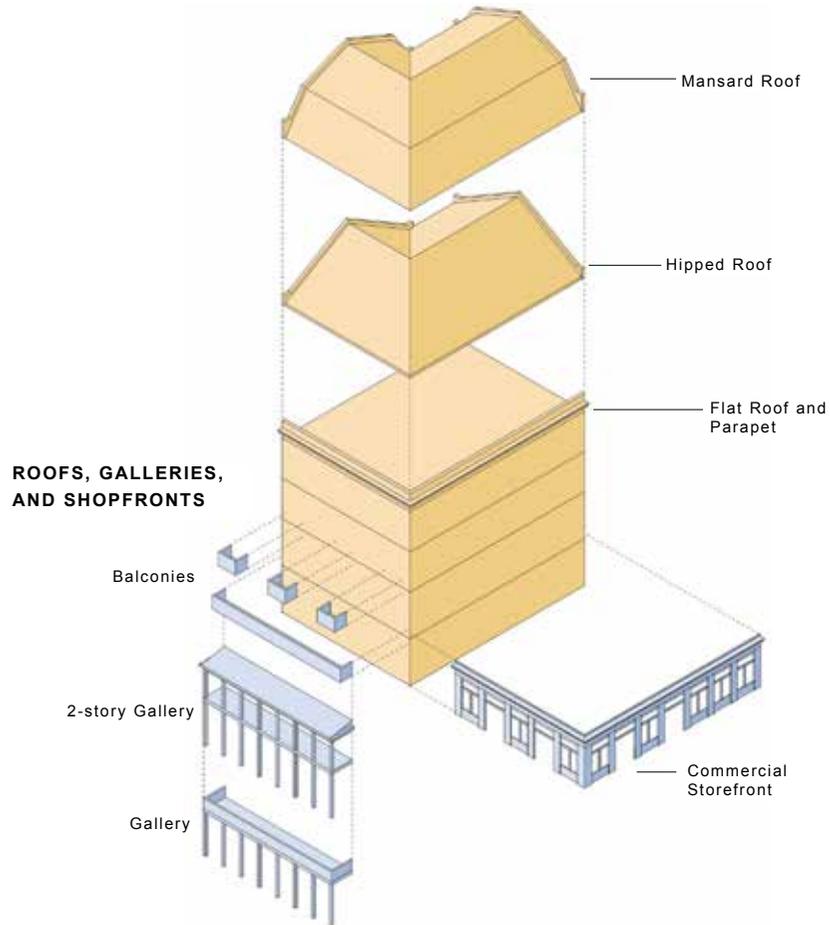
- >> Large-scale buildings, generally in the most urban locations, should be articulated in order to create an effective urban space and to relate to smaller-scale buildings in the adjacent neighborhoods. This includes a base of one or two stories and an articulated element that could be either a parapet expression or roof form. Ground-floor shopfronts and entrances to lobbies should be more transparent than upper floors.
- >> Buildings should be placed on their sites to create a continuous active street frontage. Buildings with ground-floor residential uses should be set back to provide a landscaped front yard. Ground-floor retail and public uses should open directly to the sidewalk.
- >> Appropriate architectural styles include Louisiana Classical, Louisiana Victorian, and Modern.



New Orleans



New Orleans



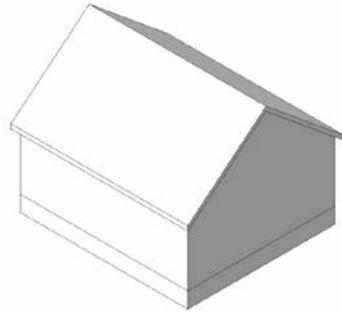
# DESIGNING A LOUISIANA HOUSE

Most traditional houses are distinguished by a **MAIN BODY** that is always the most important form. Additional space is created through secondary additions to this Main Body. The first step in designing a house is to determine the Main Body Massing Type. This will guide the development of a new house plan or the modifications to an existing house.

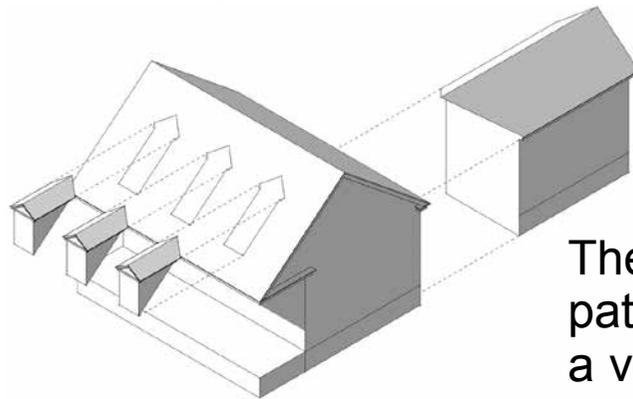
In general, additions are treated as **WINGS**. Side wings can be either one or one-and-one-half stories, set back from the front facade of the Main Body. Two-story additions can be added to two-story Main Bodies, but should be set back from the front facade and limited in width to a maximum of one-third the width of the Main Body. Side wings and rear wings can be added in many combinations.

Once the massing and the floor-to-floor heights are determined, various **DOOR AND WINDOW COMPOSITIONS** can be explored. Most styles have very definite patterns used to produce balanced or picturesque compositions with a harmonious and pleasing image. Window proportions, location, and spacing are all important and were well understood by early house builders.

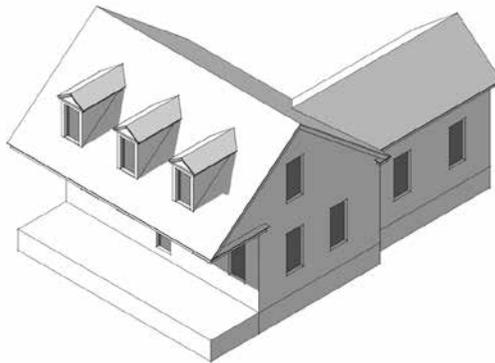
**PORCHES** are important elements of Louisiana houses and find expression in almost every architectural style or vocabulary. Setting the appropriate column types, porch cornices, railing, and balustrades is key to establishing the character of the house. The Pattern Book offers options found within a particular style, complete with sample profiles that illustrate the correct dimensions and components.



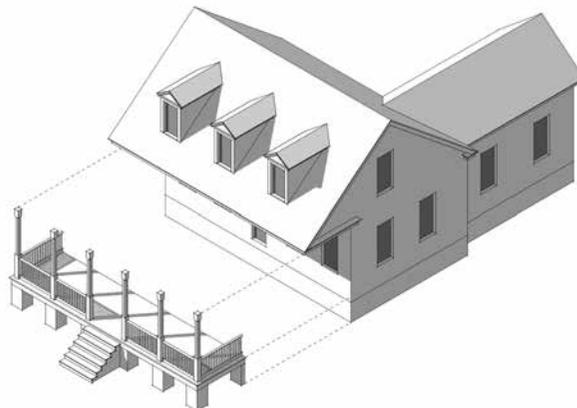
Main Body



Wings



Window and Door Composition



Porch

The traditional architectural patterns were followed for a very long period of time and have gradually evolved in form, blending traditions in ways that have ultimately created a rich mix of architecture in Louisiana's towns and cities.



Photo courtesy of Jay Edwards

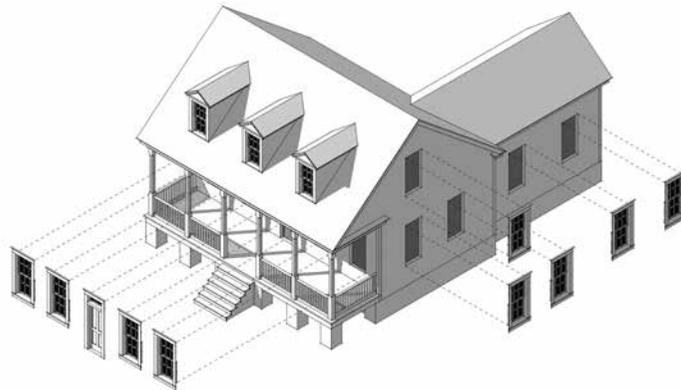


Photo courtesy of Jay Edwards

Lake Charles (historic)

While **WINDOWS AND DOORS** are available today from a wide range of manufacturers and come in almost any shape and size, correctly proportioned and detailed windows and doors are critical in reinforcing the style of the house. This Pattern Book illustrates standard window and door types used for each architectural style and special windows and doors used as accents.

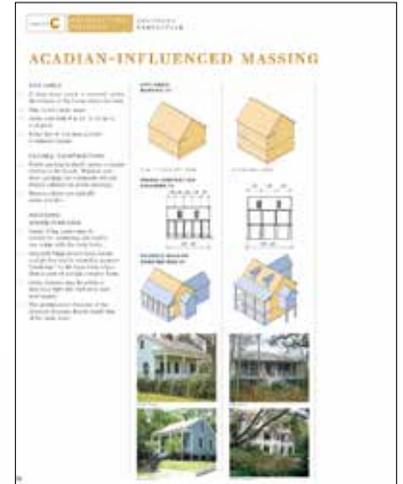
The **FINAL ASSEMBLY** of the various components should produce a house of recognized character and quality, no matter what the size. A series of illustrated possibilities within each style section demonstrates the effective application of the Pattern Book guidelines.



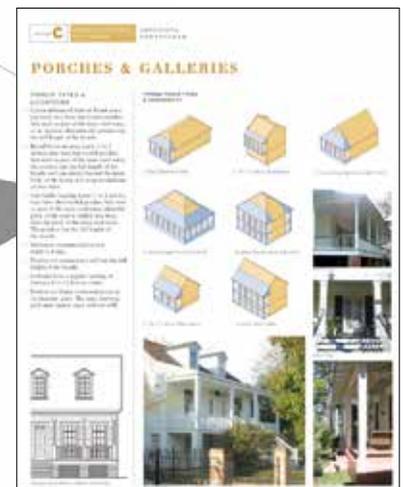
Windows and Doors



Final Assembly



Acadian-Influenced Massing & Composition page



Porches & Galleries page



Baton Rouge



History & Character page



Windows & Doors page

# LOUISIANA VERNACULAR

The early settlers of Louisiana, arriving by water, brought with them their culture, lifestyle, religions, and methods of building and developed a unique architecture in response to the climate and geography. In general, the houses have the first floor raised above the ground, steeply pitched roofs, tall windows which touch the floor, or French doors, and relatively simple forms that can have added wings and elements.

In this Pattern Book, we call this indigenous style Louisiana Vernacular. Within that general category, there are many variations including Acadian-influenced, Creole-influenced, and Anglicized versions of each. These can be classified by plan type as documented by many scholars including Jay Edwards, Lloyd Vogt, and others. This Pattern Book classifies them by massing, roof form, and the arrangement of elements such as windows and porches.

**CREOLE-INFLUENCED** building types include cottages, shotguns, camel-backs, large palatial houses, and townhouses, many of which include galleries and accommodate a mix of uses. There are a variety of roof forms including hips, double hips, and gables. Porches are either added or within a double pitch.

**ACADIAN-INFLUENCED** houses are always side gabled. Most often seen in rural settings, these houses are simple, but beautifully proportioned and carefully built. Building types include cottages, large houses, small buildings, and churches. Steeply pitched gable roofs with porches cut into the volume of the house are the most dominant visual elements.

**ANGLICIZED VERSIONS** of these building types are more symmetrical, have center or side halls, and have a close relationship between windows and doors.

Illustrations include recently built examples as well as historic ones to illustrate the enduring nature of these traditions.

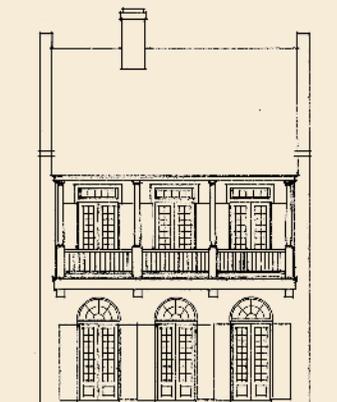
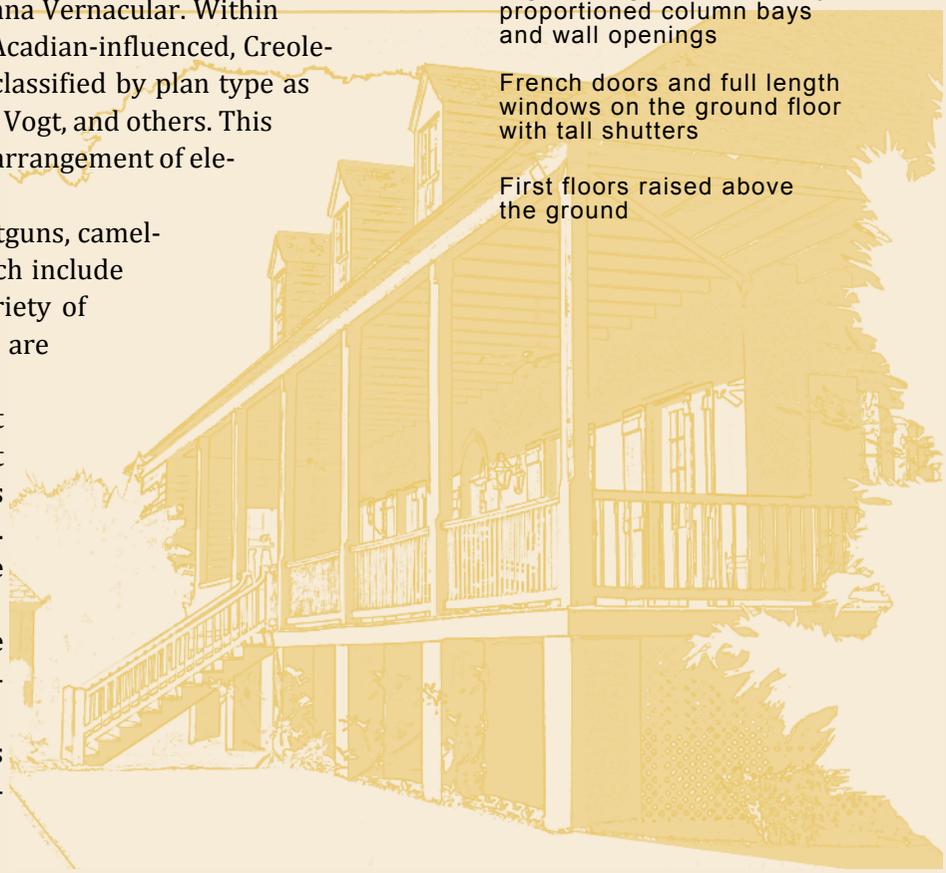
## ESSENTIAL ELEMENTS

Deep one- and two-story porches

High ceilings with vertically proportioned column bays and wall openings

French doors and full length windows on the ground floor with tall shutters

First floors raised above the ground



# GALLERY OF EXAMPLES

## CREOLE-INFLUENCED STYLE



Lafayette



St. Francisville



Lafayette



New Orleans



New Orleans



Baton Rouge



Baton Rouge

## ACADIAN-INFLUENCED STYLE



Vermilionville

Photo courtesy of Steve Oubre



Baton Rouge



Thibodaux



New Iberia



Baton Rouge

# CREOLE-INFLUENCED MASSING & COMPOSITION

## NARROW FRONT

- >> One-story mass
- >> Hip roof with 10 in 12 roof pitch
- >> Ridge line of roof runs perpendicular to entrance facade
- >> Includes shotgun and double-shotgun massing types

## ROWHOUSE

- >> One- to one-and-one-half-story mass
- >> One to two sides of the house are party walls
- >> Gable roof with 10 in 12 roof pitch
- >> Ridge line of roof runs parallel to entrance facade

## BROAD FRONT

- >> One- to two-story mass
- >> Hip roof with a constant 10 in 12 roof pitch or a double pitch roof of 9 in 12 over the main body and 6 in 12 over the recessed porch
- >> Ridge line of roof runs parallel to entrance facade

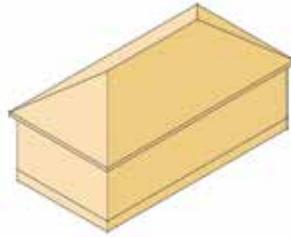
## FACADE COMPOSITION

- >> Informal relationship among the elements enables the window spacing, dormer placement, and porch bays to each have their own spacing and dimensions
- >> Entrance doors are typically under porches

## MASSING COMBINATIONS

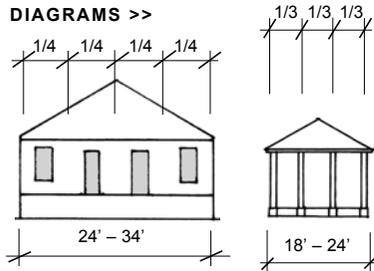
- >> Larger living spaces may be created by combining side and/or rear wings with the main body.
- >> Attached wings should have similar roof pitches and be treated as separate "additions" to the basic form rather than as part of a single complex form.
- >> Gable dormers may be added to introduce light into half-story and attic spaces.
- >> The architectural character of the attached elements should match that of the main body.

### NARROW FRONT MASSING

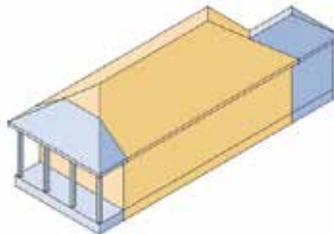


1-story Narrow Front

### FACADE COMPOSITION DIAGRAMS >>



### POSSIBLE MASSING COMBINATIONS >>

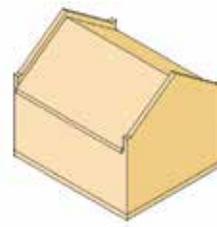


Baton Rouge

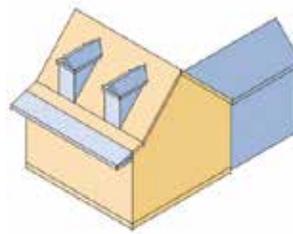


Lake Charles

### ROWHOUSE MASSING



1- to 1½-story Rowhouse

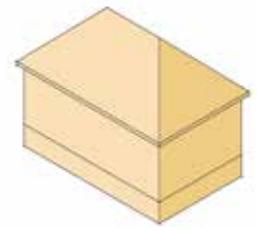


Lafayette

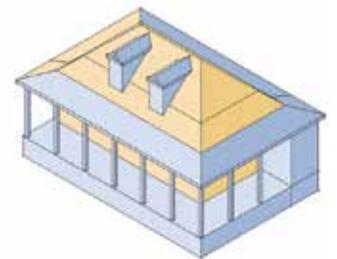
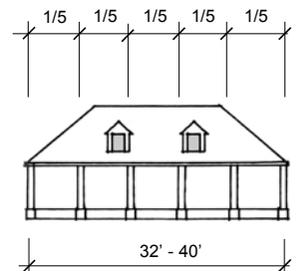


New Orleans

### BROAD FRONT MASSING



1- to 2-story Broad Front

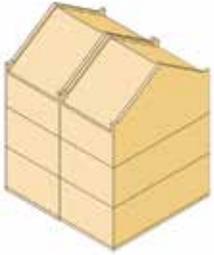


Baton Rouge

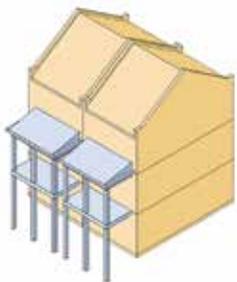
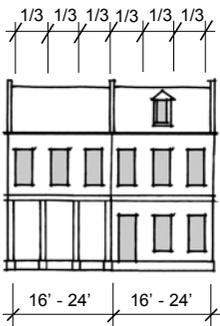


Hammond

**MULTI-FAMILY ROWHOUSE MASSING**



3-story Multi-family Rowhouse



Lafayette



New Orleans

The essential architectural elements of Louisiana Vernacular buildings include deep one- and two-story porches, high ceilings with vertically proportioned column bays and wall openings, French doors and full-length windows on the ground floor with tall shutters, and first floors raised above the ground.



**GREEN BUILDING**

**Energy Efficiency**

An easy way to achieve energy efficiency in new home construction is to follow the Energy Star Program, a national, voluntary program sponsored by the U.S. Environmental Protection Agency. Energy Star homes are approximately 15–30% more energy efficient than standard national and state energy code requirements. Saving 30% on energy use also translates directly to lower energy bills.



Baton Rouge



Baton Rouge



Abbeville

# ACADIAN-INFLUENCED MASSING & COMPOSITION

## SIDE GABLE

- >> A deep front porch is recessed within the volume of the house under one roof
- >> One- to two-story mass
- >> Gable roof with 8 in 12 to 12 in 12 roof pitch
- >> Ridge line of roof runs parallel to entrance facade

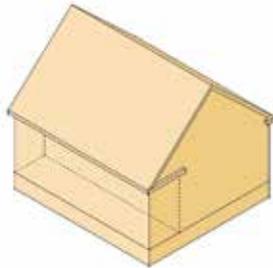
## FACADE COMPOSITION

- >> Porch openings typically create a regular rhythm in the facade. Window and door openings are commonly but not always centered on porch openings
- >> Entrance doors are typically under porches

## MASSING COMBINATIONS

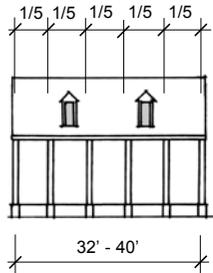
- >> Larger living spaces may be created by combining side and/or rear wings with the main body
- >> Attached wings should have similar roof pitches and be treated as separate "additions" to the basic form rather than as part of a single complex form
- >> Gable dormers may be added to introduce light into half-story and attic spaces
- >> Architectural character of the attached elements should match that of the main body

## SIDE GABLE MASSING >>

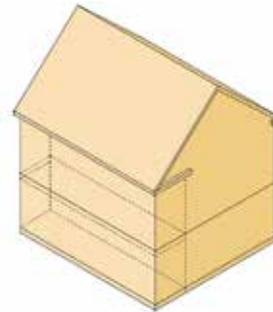
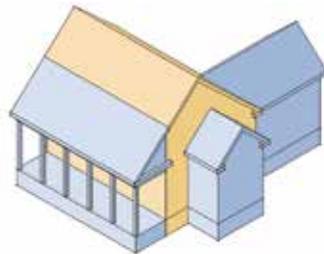


1- to 1 1/2-story Side Gable

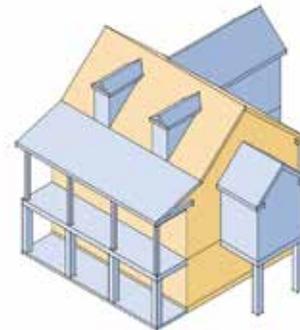
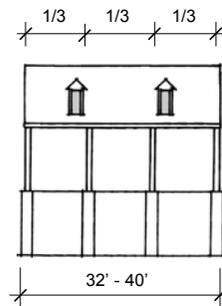
## FACADE COMPOSITION DIAGRAMS >>



## POSSIBLE MASSING COMBINATIONS >>



2-story Side Gable



Baton Rouge



Mandeville



Vermilionville



Baton Rouge

# WALLS, EAVES & ROOFS

## WALLS

- >> The first floor of an Acadian-influenced house is typically set up to four feet above the finished grade for a one-story house and up to two foot above finished grade for a two-story house.
- >> For one-story houses, the minimum recommended floor-to-ceiling height is 10 feet.
- >> For two-story houses, the minimum recommended floor-to-ceiling height is 10 feet for the first floor and 9 feet for the second floor.
- >> Typical opening head heights are 8 feet.
- >> Cladding materials: smooth-finish wood or fiber-cement lap siding with 6-inch exposure, brick, light colored sand-finish stucco

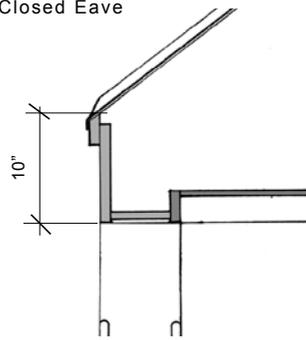
## EAVES

- >> Simple unadorned eaves are characteristic of the Acadian-influenced style. They can have exposed rafter ends that are shaped. A frieze board is used below the rafters.
- >> They can also be flush to the wall or beam at the porch, or slightly projecting with a boxed soffit.
- >> Simple, classically proportioned and detailed eaves are also common.

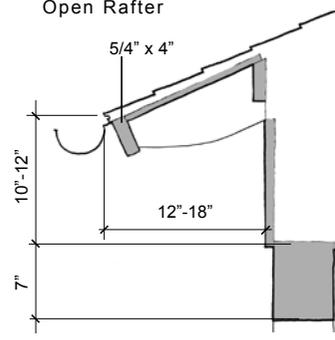
## ROOFS

- >> Typically laminated asphalt or composition shingle, wood shingle, 5V crimp or standing seam metal panels.

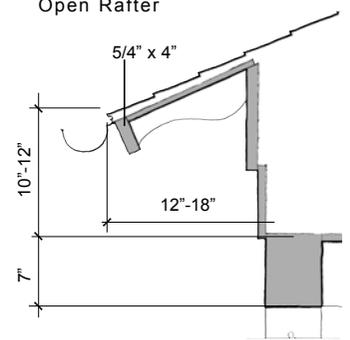
**SIMPLE**  
Closed Eave



**ORNATE**  
Open Rafter



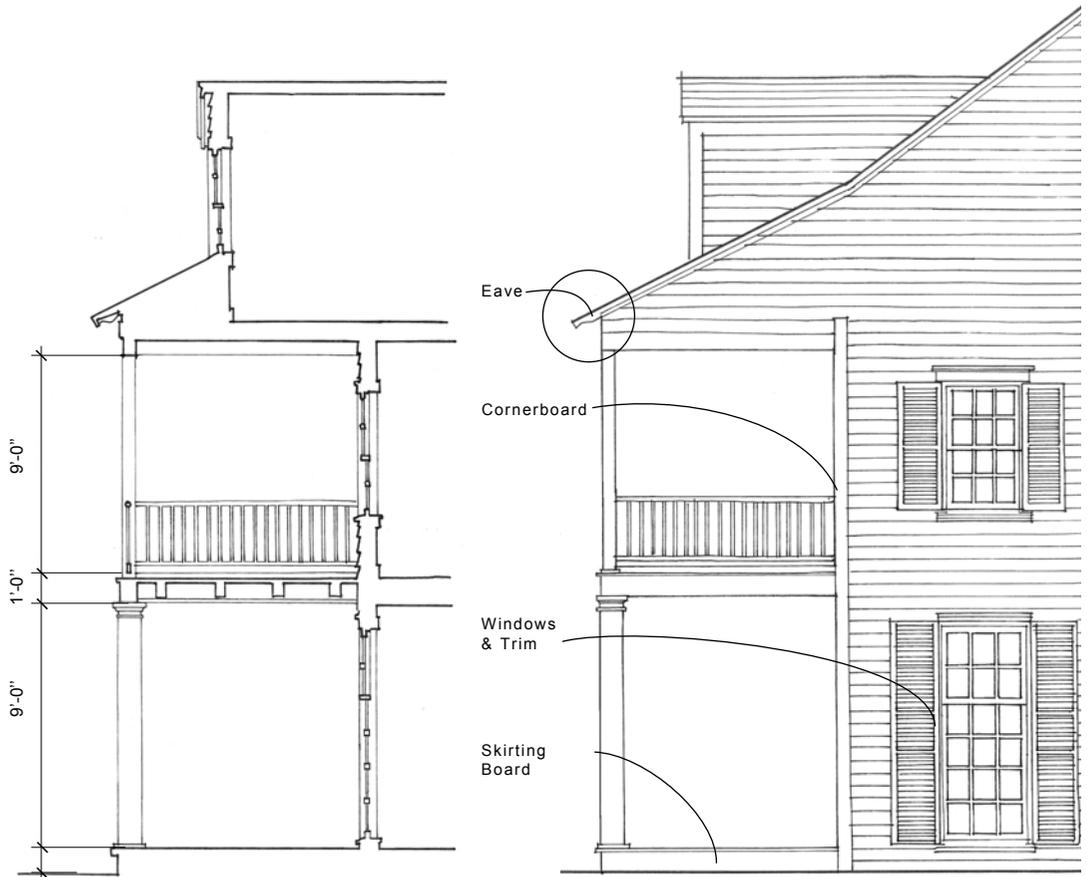
**ORNATE**  
Open Rafter



Simple closed eave



Common open rafter eave



## GREEN BUILDING

### Vernacular Design

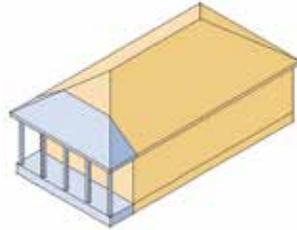
Many Louisiana homes reflect an architectural response to the subtropical climate. For example, traditional houses have large windows built to the floor, which allow natural daylighting and air circulation.

# PORCHES & GALLERIES

## PORCH TYPES & LOCATIONS

- >> Creole-influenced Narrow Front massing types may have hip-roofed porches that read as part of the main roof mass, or as separate elements; the porches run the full length of the facade.
- >> Broad Front massing types, 1 to 2 stories, may have hip-roofed porches that read as part of the main roof mass; the porches run the full length of the facade and can extend beyond the main body of the house and wrap around one or two sides.
- >> Side Gable massing types, 1 to 2 stories, may have shed-roofed porches that read as part of the main roof mass; often the pitch of the roof is slightly less steep than the pitch of the main roof mass. The porches run the full length of the facade.
- >> Minimum recommended porch depth is 8 feet
- >> Porches are symmetrical and run the full length of the facade
- >> Columns have a regular spacing of between 8 to 12 feet on center
- >> Porches are frame construction set up on masonry piers. The space between piers may remain open without infill.

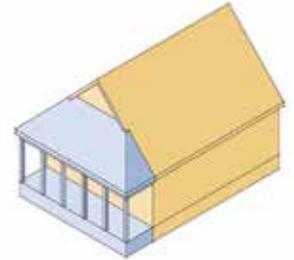
## TYPICAL PORCH TYPES & LOCATIONS >>



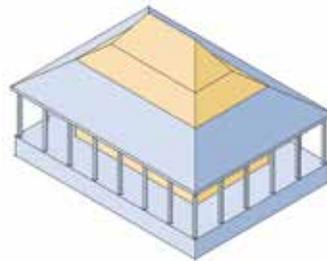
1-story Narrow Front



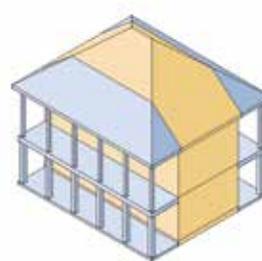
1- to 1 1/2-story Townhouse



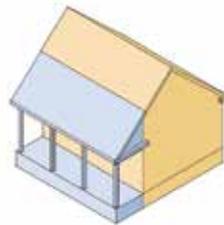
1- to 2-story Narrow Gable Front



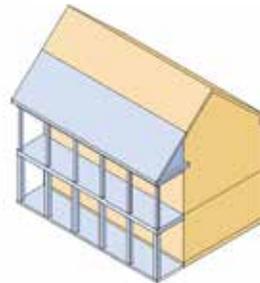
1-story Broad Front Hip Roof



2-story Broad Front Hip Roof



1- to 1 1/2-story Side Gable



2-story Side Gable



Baton Rouge



Baton Rouge



Baton Rouge



Single-story Porch Partial Elevation



Donaldsonville

**PORCH ROOFS & EAVES**

- >> Shed, gable, or hipped roofs
- >> Typical porch roof slope varies from 4 in 12 to 10 in 12
- >> Eaves can be either open rafters, simple classically proportioned and detailed entablature, or flush with the porch beam (see eaves on page 39).

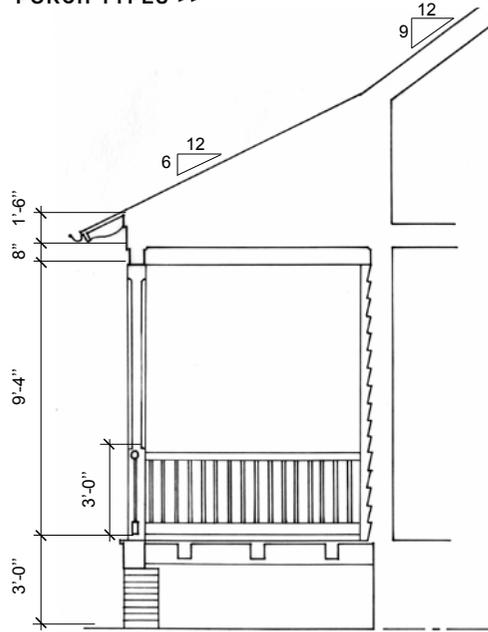
**COLUMNS**

- >> For one-story porches and the second floor of two-story porches, slender round or square Tuscan columns and chamfered or plain rectangular posts without trim, turned, decorative posts
- >> Brick piers or massive stucco columns are typical for the lower story of two-story porches
- >> In some instances, columns may span the height of two-story porches; these include a range from plain rectangular posts to columns with classical detailing
- >> Wood, fiberglass, or composite material; brick or block with stucco

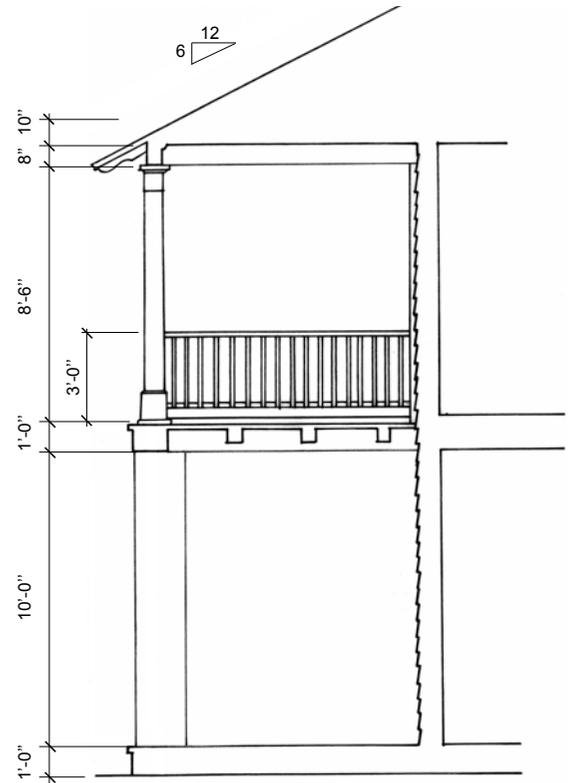
**RAILINGS**

- >> Square balusters spaced no more than 4 inches on center with intermediate posts for railings over 9 feet in length
- >> Milled wood top and bottom rails with turned or square balusters

**PORCH TYPES >>**

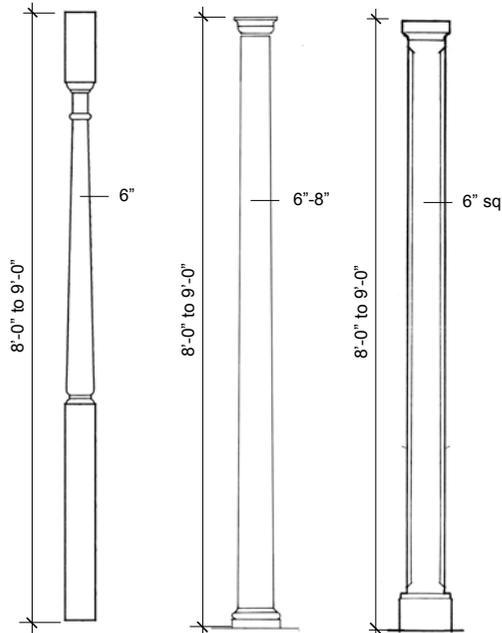


One-story Porch Section

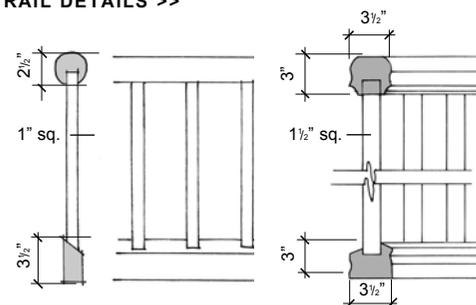


Two-story Porch Section

**COLUMN TYPES >>**



**RAIL DETAILS >>**



Baton Rouge



New Iberia

**GREEN BUILDING**

**Porches**  
 Porches provide shading as well as outdoor living space. The south side is the best location for shading purposes. Porches are also commonly located on street fronts; as semi-public social gathering spaces, porches enhance community interactions and safety with more “eyes on the street.”

# WINDOWS & DOORS

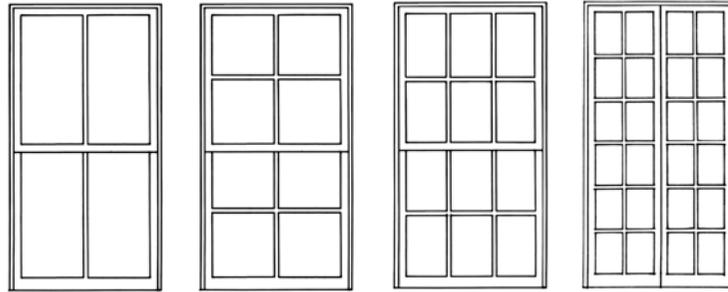
## STANDARD WINDOWS

- >> Standard windows are typically double hung or casement and vertical in proportion
- >> Common muntin patterns are 2 over 2, 4 over 4, or 6 over 6
- >> Range of sizes:
  - Width: 2'-8" to 3'-8"
  - Height: 4'-4" to 6'-0"
- >> Materials: Painted wood, solid cellular PVC or clad wood, or vinyl with brick veneer only; true divided light or simulated divided light (SDL) sash with traditional exterior muntin profile (7/8 inch wide)

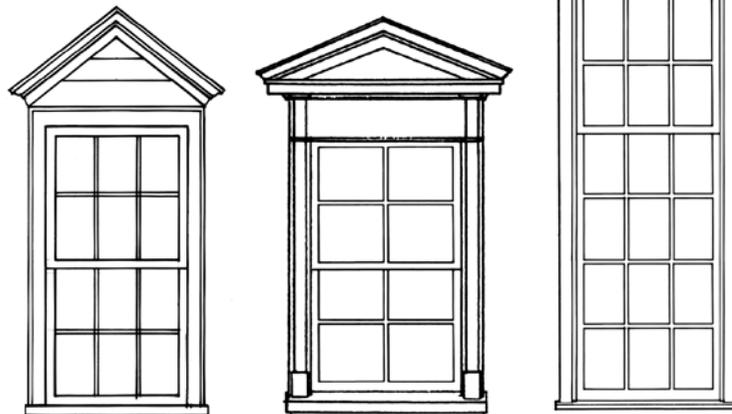
## WINDOW ASSEMBLIES & ACCENT WINDOWS

- >> Dormer windows are multi-paned in the 6 over 6 pattern
- >> Special windows are typically small accent windows with 6 panes or in a 4 over 4 muntin pattern. A single leaf shutter is often used.

### STANDARD WINDOWS >>

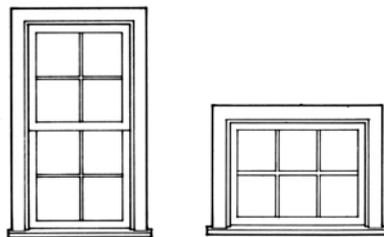


### WINDOW ASSEMBLIES >>



Dormer Windows

Floor-to-Ceiling Window



Accent Windows



Plaquemine



Baton Rouge

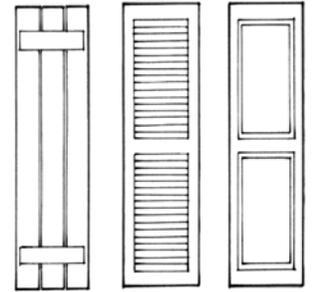


Lafayette



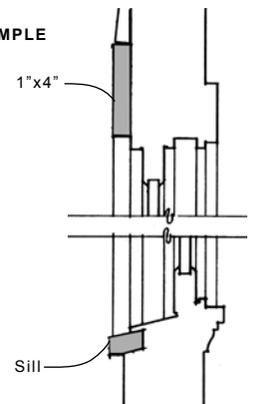
Vermilionville

### SHUTTERS >>

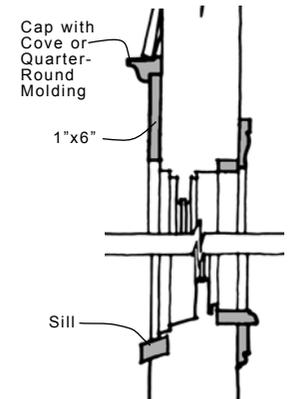


### TYPICAL TRIM EXAMPLES >>

#### SIMPLE



#### ORNATE



**DOORS**

- >> Multi-pane doors are often used in lieu of windows on the first floor under the porch
- >> Entry doors are typically 4-, or 6-paneled and include either a transom or a transom and side lights
- >> Materials: Wood, fiberglass, or steel with traditional stile-and-rail proportions and raised panel profiles, painted or stained

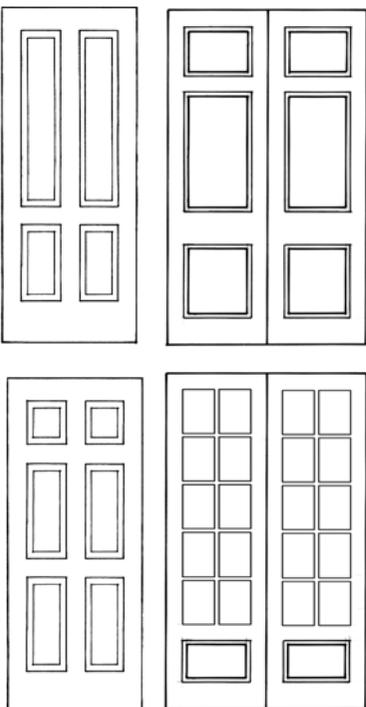
**TRIM**

- >> Typical 4-inch-wide trim with back band
- >> Classical door surrounds are sometimes used at the front door
- >> Stone or wood lintels are common elements clad in brick or stucco

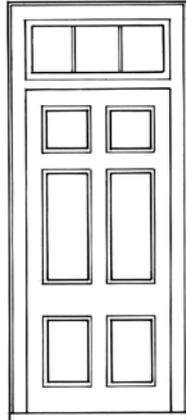
**SHUTTERS**

- >> Shutters can be louvered, raised panel, or batten
- >> Wood or composite, sized to match window sash or door frame and mounted with hardware so that they are operable

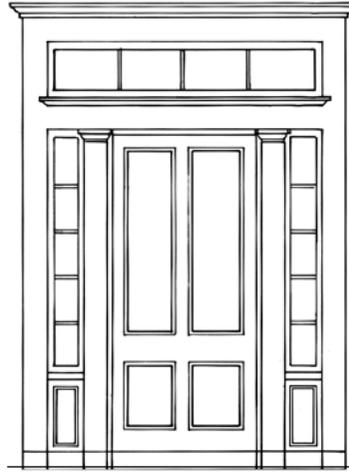
**DOOR TYPES**



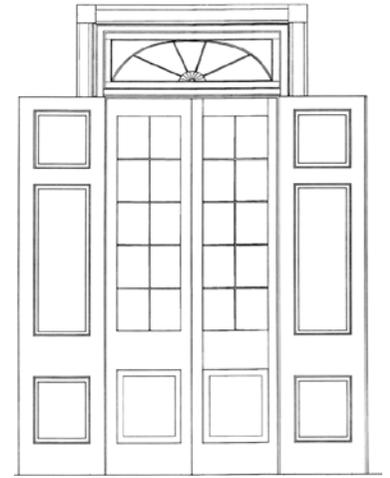
**DOOR ASSEMBLIES >>**



**COMMON**  
Single Door with Transom



**ORNATE**  
Single Door with Transom and Side Lights



**ORNATE**  
Double Door with Transom and Shutters



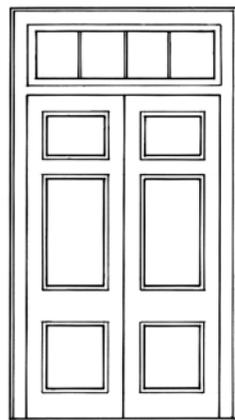
Baton Rouge



New Orleans



New Orleans



**COMMON**  
Double Door with Transom

# LOUISIANA VICTORIAN

The Victorian style was a national style that achieved widespread popularity in the United States between 1860–1900. Named for the last decades of the reign of Queen Victoria in England, the style was readily accessible to many home builders as a result of pattern books that provided drawings of these early house designs, making it easier for the builders of both country estates and modest dwellings to adopt the style. Cottages in the Victorian and Carpenter Gothic styles were abundant in early rail-served coastal resorts.

Dramatic changes in construction techniques (e.g., mass production) and railroad shipping (which allowed construction materials to move more easily around the country at low cost) contributed to the broad appeal and proliferation of these styles. The evolution in construction techniques also allowed for greater expression in both the massing and details of Victorian style houses.

Traditional houses in the Victorian style were often complex in form creating picturesque compositions. Heavily detailed porches, elaborate woodwork, textures created by scalloped, diamond, and fishscale shingles, as well as stained glass and beveled glass windows and doors are frequent elements of Victorian-era houses. Although exotic Victorian houses incorporating Eastlake, Queen Anne, and Italianate details grew in popularity throughout the country, primarily folk-based Victorian houses flourished in this region. The Louisiana Victorian style is based on simple, elegant forms that have been adapted for smaller houses. The massing is simple and the ornamentation is typically restrained and limited to the porch, railing, and cornice of the building.

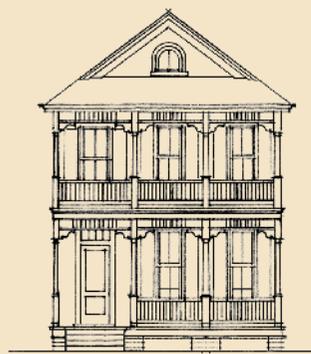
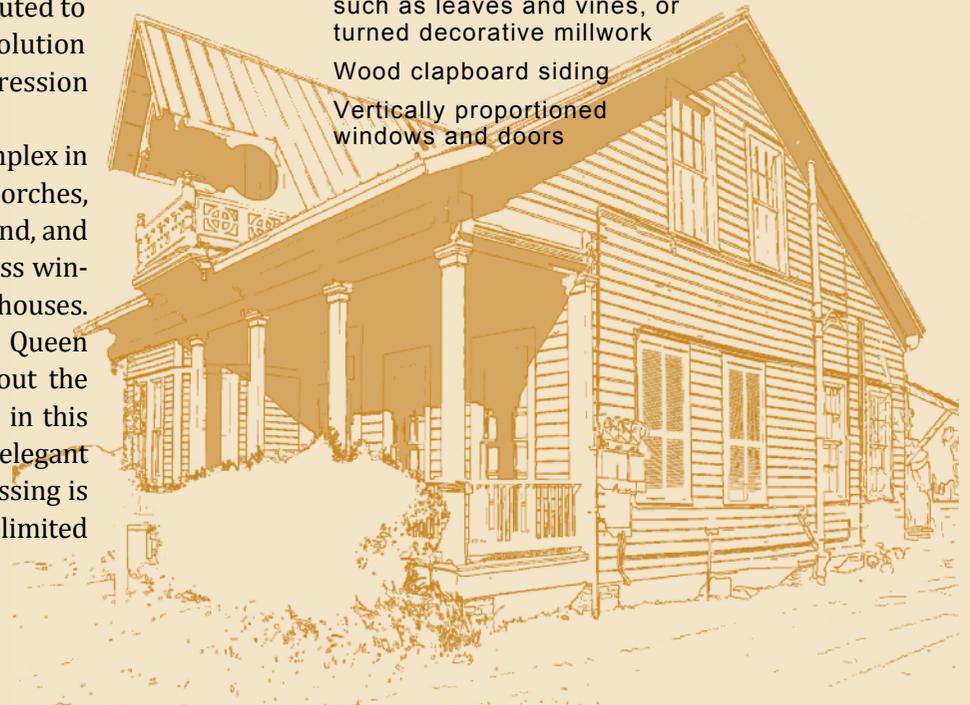
## ESSENTIAL ELEMENTS

Prominent porch elements

Cut wood ornament, influenced by natural forms such as leaves and vines, or turned decorative millwork

Wood clapboard siding

Vertically proportioned windows and doors



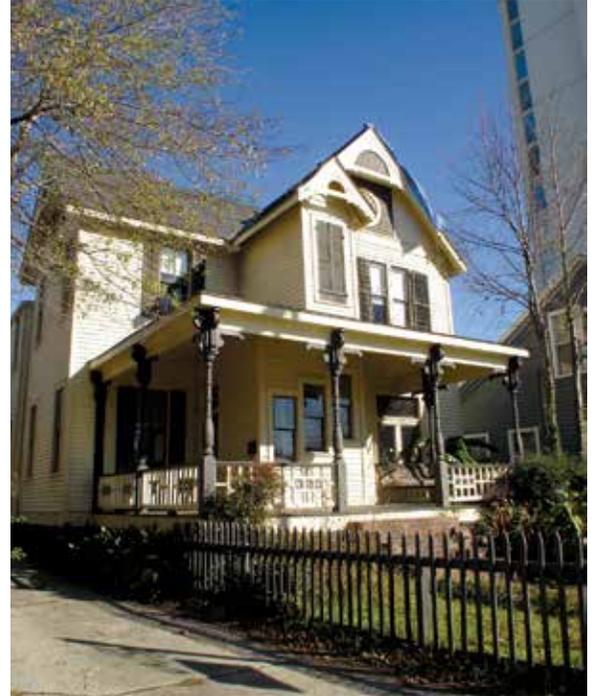
# GALLERY OF EXAMPLES



St. Francisville



New Orleans



Baton Rouge—Spanishtown



Breaux Bridge



Hammond



Arabi



St. Francisville



Abbeville



Baton Rouge—Spanishtown

# MASSING & COMPOSITION

## VICTORIAN MASSING

### NARROW FRONT

- >> Rectangular volume with a roof pitch ranging from 5 to 8 in 12 for the main body
- >> Roofs are either hipped or gabled.
- >> Porches are typically inset within the roof form or added on the front as a full front porch.
- >> This massing type includes shotguns and double shotguns.

### GABLE L

- >> Rectangular volume with hipped or gabled roof from which a front-facing gabled wing extends
- >> Roof pitches range from 8 in 12 to 12 in 12.
- >> Front porches are typically two- or three-bay, hipped porches that fill the void in the L-shaped plan.
- >> On corner houses, the porches often wrap one corner and tie into a side wing.

### BROAD FRONT

- >> Two-story, side-gabled rectangular volume with roof pitches ranging from 6 in 12 to 10 in 12
- >> One-story shed or hipped porches placed symmetrically on the front facade are typical.
- >> Gables and dormers are often used to articulate the front facade.

## MASSING COMBINATIONS

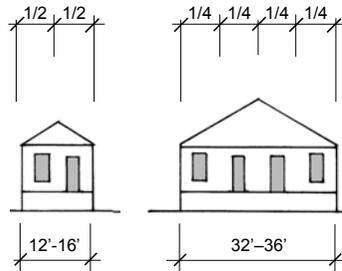
- >> Complex forms and larger living spaces may be created by combining side wings and/or rear wings with the main body.
- >> Gabled dormers may be added to introduce light into half-story and attic spaces.
- >> The character of the attached parts should match that of the main body.

### NARROW FRONT MASSING

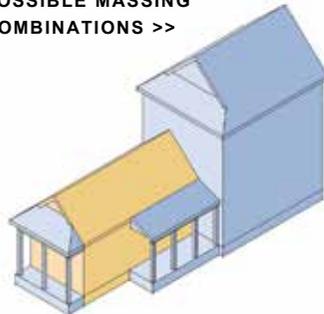


1- to 2-story Narrow Front

### FACADE COMPOSITION DIAGRAMS >>



### POSSIBLE MASSING COMBINATIONS >>

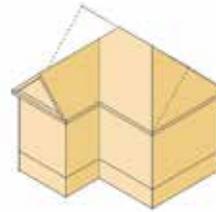


Baton Rouge

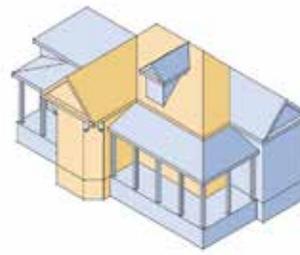


Old Turnerville

### GABLE L MASSING



1- to 2-story Gable L

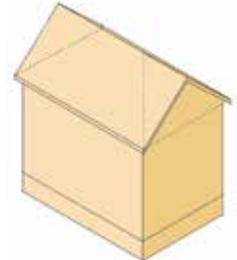


Abbeville

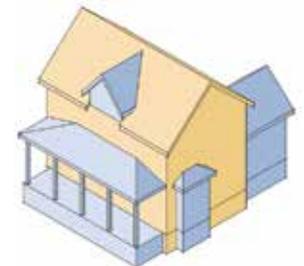
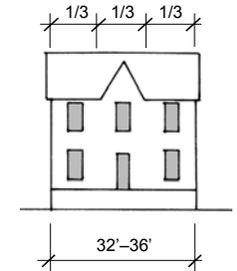


Abbeville

### BROAD FRONT MASSING



1- to 2-story Broad Front



St. Francisville



Hammond

# WALLS, EAVES & ROOFS

## FACADE COMPOSITION

- >> Victorian facade composition is characterized by a balanced placement of doors and windows.
- >> Individual double-hung windows are the most common type.
- >> Paired or bay windows are often used in the forward gable of the Gable L massing type.
- >> Bay windows may be one or two stories tall.

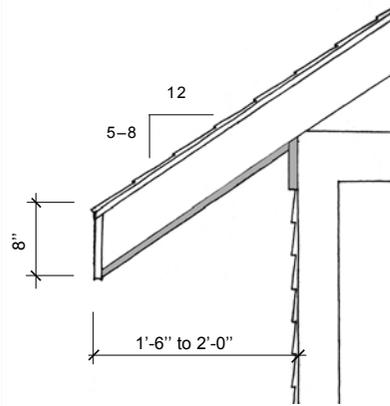
## WALLS

- >> First floor is typically set up to four feet above the finished grade.
- >> For one-story houses, the minimum recommended floor-to-ceiling height is 10 feet.
- >> For two-story houses, the minimum recommended floor-to-ceiling height is 10 feet for the first floor and 9 to 10 feet for the second floor.
- >> Window head heights should be 8 feet above the floor for first-floor windows and 7 to 8 feet for second-floor windows.
- >> Skirting boards are typically 8 inches wide.
- >> Foundation vents are centered under windows when used.

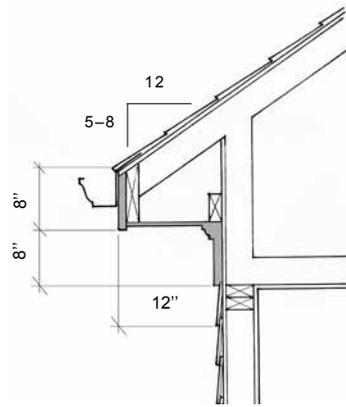
## BOXED EAVE

- >> A 12- to 16-inch frieze board either touching or at least 8 inches above the window head trim
- >> Eave returns should have metal flashing back to the wall at a maximum slope of 2 in 12.
- >> The rake features an overhang with a simple decorative vergeboard with a sloped soffit.

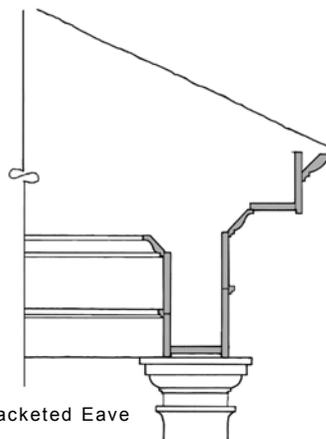
## TYPICAL EAVE DETAILS >>



Boxed Eave—Sloped



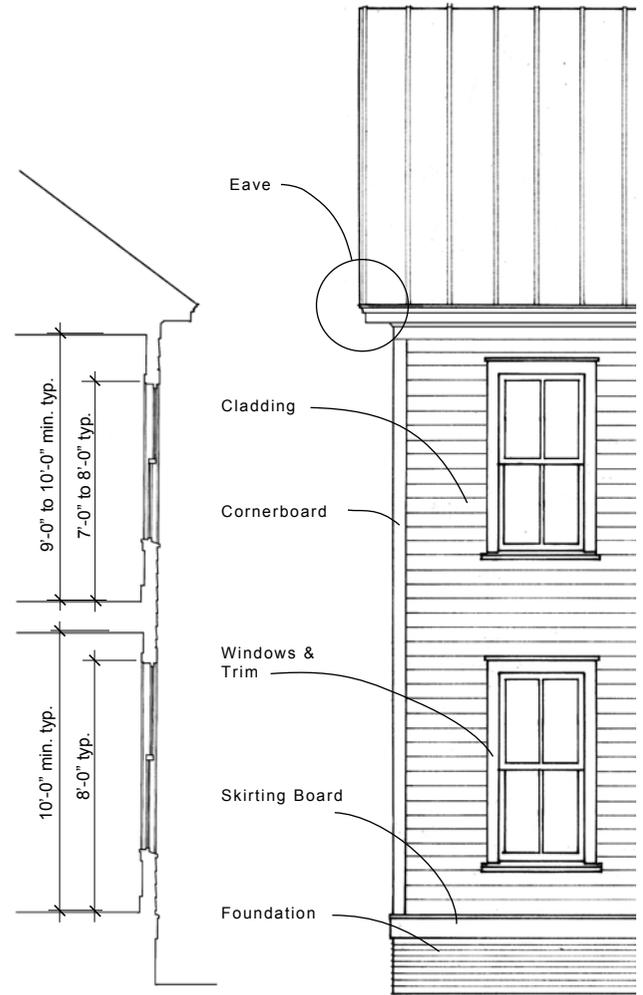
Boxed Eave



Bracketed Eave



Examples of the gable end condition of decorative boxed eaves



## GREEN BUILDING

### Insulation

Insulation is a critical element in constructing energy-efficient, comfortable houses. Insulation should exceed the required minimums to save on overall energy costs and make the house more comfortable. Using 2 x 6 framing increases wall r-values from r13 to r19. Roofs should be rated to r38.

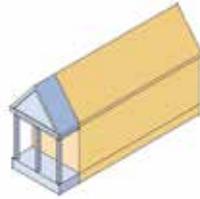


# PORCHES

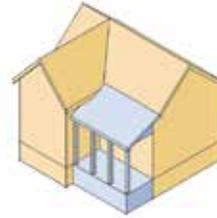
## PORCH TYPES & LOCATIONS

- >> Narrow Front massing types may have hip or gable roofed porches that read as part of the main roof mass, or as separate elements; the porches run the full length of the facade, and can wrap to one side of the house. Shallow hip-roofed porches are sometimes supported by large decorative brackets rather than columns.
- >> Gable-L massing types may have shed or hip-roofed porches that typically fill the void in the L-shaped plan. Porches that typically fill the void may wrap to the side of the house; porches may be 1- or 2-stories.
- >> Broad Front massing types typically have shallow, hip-roofed porches or take on the Acadian-influenced massing type (see Louisiana Vernacular) or Victorian details. Porches are typically 1-story and run the full length of the facade.
- >> Minimum recommended porch depth is 8 feet.

## TYPICAL PORCH TYPES & LOCATIONS >>



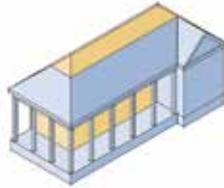
1-story Narrow Front



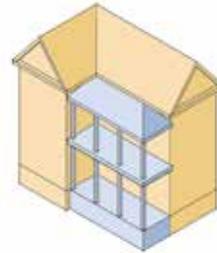
1-story Gable L



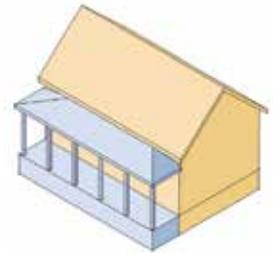
2-story Broad Front



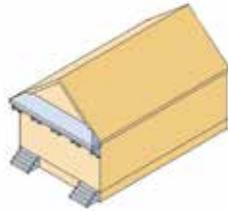
1-story Narrow Front



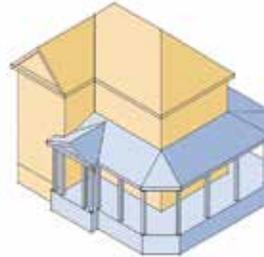
2-story Gable L



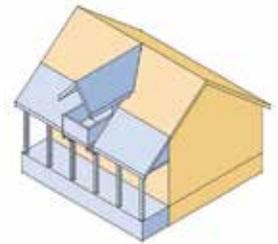
1-story Broad Front



1-story Narrow Front



2-story Gable L



1 1/2-story Broad Front



One-story, hipped porch partial elevation



New Iberia



New Orleans



Arabi

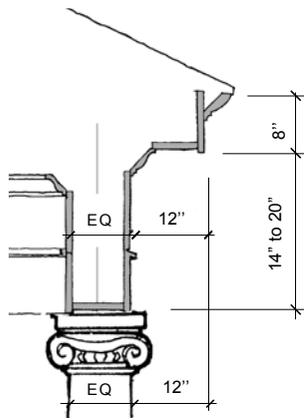
**PORCH ROOFS & EAVES**

- >> One or two stories tall with flat, shed, or shallow hipped roofs
- >> Full porches may be integrated under the house's main roof.
- >> Shed or hipped porches have a 3 in 12 to 4 in 12 pitch.
- >> Entablatures are typically classically proportioned and detailed, or decorative with carving and spindle work.

**COLUMNS, BRACKETS & RAILINGS**

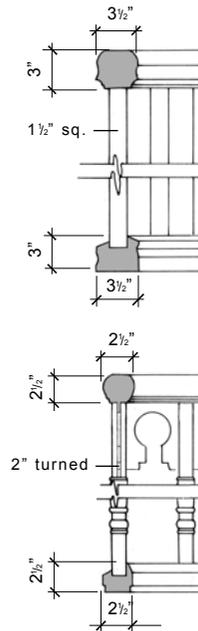
- >> Eight-inch-square posts, 8- to 10-inch-diameter Doric and Ionic columns, chamfered square posts, & turned ornamental posts
- >> First-floor columns are 9- to 10-foot tall.
- >> Second-floor columns are 8- to 9-foot tall.
- >> Brackets range from simple designs cut from boards, to more elaborate turned wood or jigsaw-cut openwork.
- >> Brackets are a minimum of 2 inches thick.
- >> Archway bracketing can be used to form portals over key entry locations.
- >> Turned or square balusters are spaced no more than 4 inches apart.
- >> Porch bays should be vertically proportioned.
- >> Flat-cut ornamental balusters are also used with square columns.
- >> Square pattern lattice is used as infill between piers at the foundation.

**PORCH EAVE DETAIL >>**

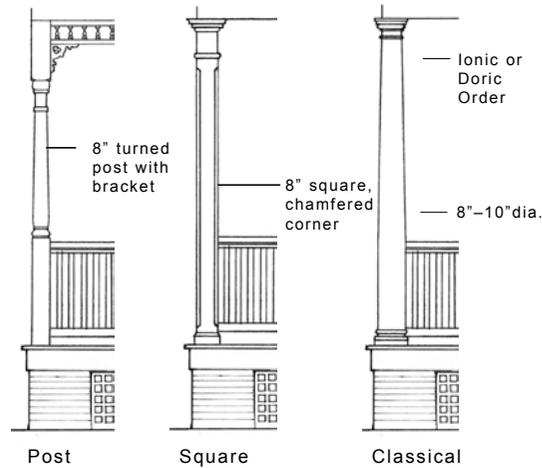


Typical Porch Entablature

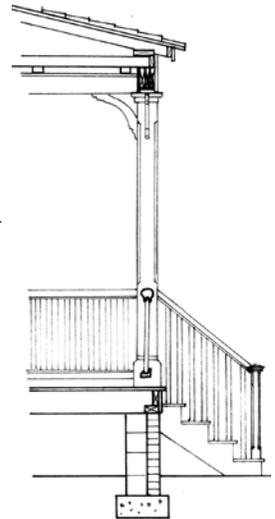
**RAIL DETAILS >>**



**PORCH COLUMN TYPES >>**



**TYPICAL PORCH SECTION >>**



**GREEN BUILDING**

**Recycled and Locally Sourced Materials**

Building materials are heavy and expensive to transport. Specifying local resources, including native landscaping materials, reduces transportation energy costs and contributes to the local economy. For example, there is an abundant forestry and wood products industry in Louisiana that provides renewable resources. Also, many commonly used products are now available with recycled content (including metals, concrete, drywall, carpet, and insulation).

# WINDOWS & DOORS

## WINDOWS

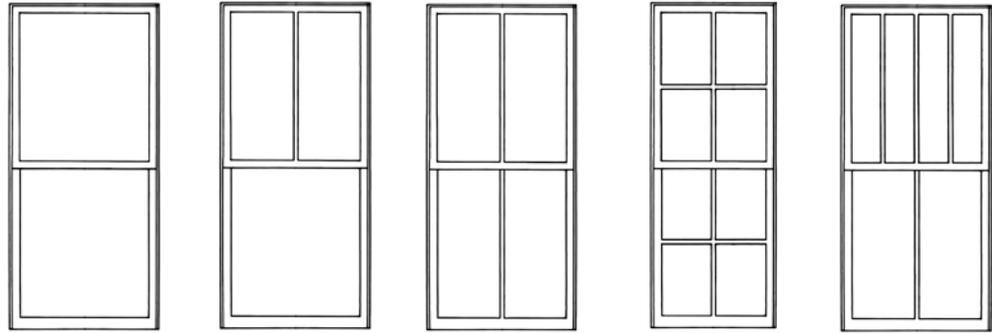
- >> Standard windows are double hung.
- >> Common muntin patterns are vertical in proportion and have a 1 over 1, 2 over 1, 2 over 2, 4 over 4, or 4 over 1 pattern.
- >> Panes are always taller than they are wide.
- >> Some houses may have windows with rounded upper sashes.
- >> Standard windows are double hung.
- >> Range of sizes:  
Width: 2'-8" to 3'-8"  
Height: 4'-4" to 6'-0"
- >> Materials: Painted wood, solid cellular PVC or clad wood, or vinyl with brick veneer only; true divided light or simulated divided light (SDL) sash with traditional exterior muntin profile (7/8" wide)

## WINDOW ASSEMBLIES & ACCENT WINDOWS

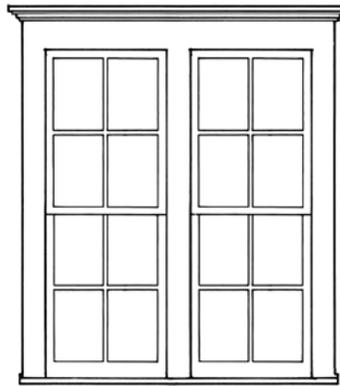
- >> Louisiana Victorian houses feature round-top windows, dormers, and box and angled bay windows.
- >> Bay windows must project a minimum of 8 inches from the main structure.
- >> Bay windows typically have a continuous base to the ground; two-story bays are common.



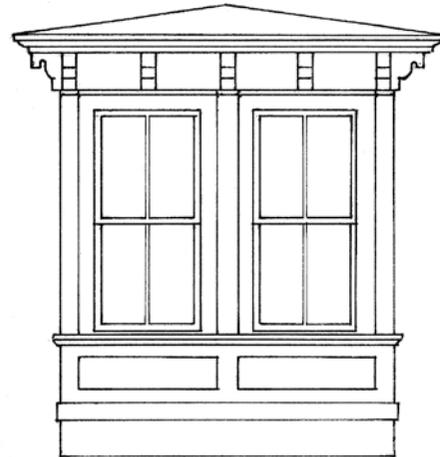
## STANDARD WINDOWS >>



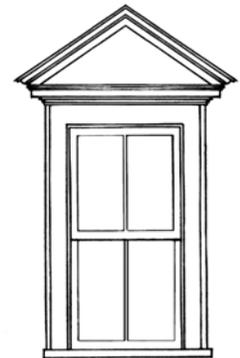
## WINDOW ASSEMBLIES >>



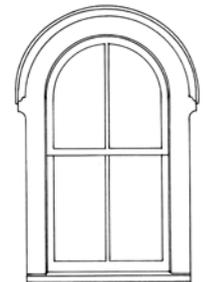
**SIMPLE**  
Window Pair



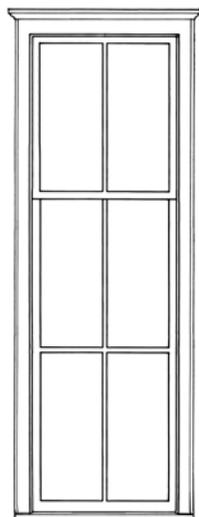
**ORNATE**  
Box Bay Window



Dormer Window



Accent Window



Floor-to-Ceiling  
Windows



**DOORS**

- >> The maximum width of a pair of double doors is 5 feet for doors at least 8 feet tall, and 4 feet for shorter pairs of double doors.

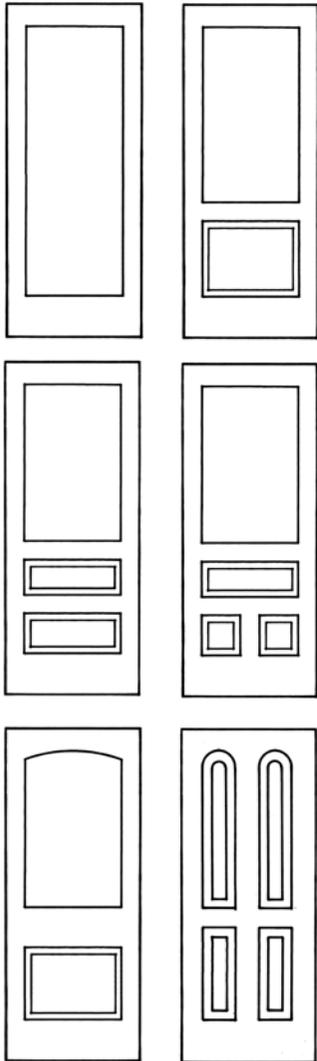
**TRIM**

- >> Six-inch trim with a simple backband profile
- >> Carries a decorative crown and cap above; windows may feature an ornate hood

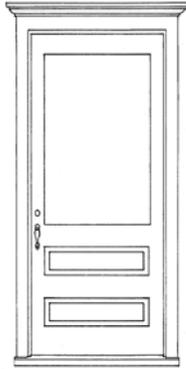
**SHUTTERS**

- >> Shutters can be louvered, raised panel, or flat panel.
- >> Wood or composite, sized to match window sash and mounted with hardware so that they are operable

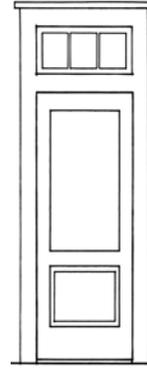
**DOOR TYPES**



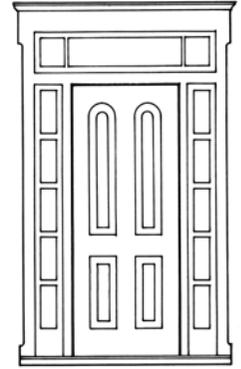
**DOOR ASSEMBLIES >>**



**COMMON**



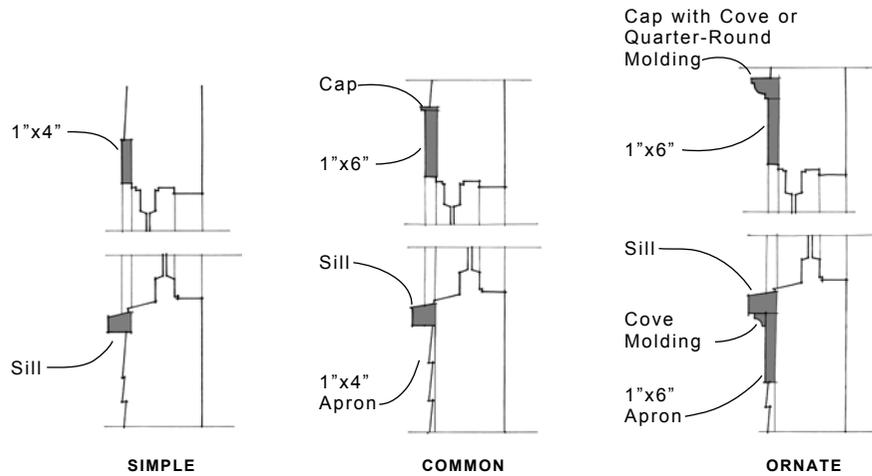
**COMMON**



**ORNATE**



**TYPICAL TRIM EXAMPLES >>**



# LOUISIANA CLASSICAL

Although the Louisiana Classical style includes influences from the earlier Greek Revival style, it is primarily based on Classical and Colonial Revival style houses from the early 20th century. The houses reflect the renewed national interest in Classicism which occurred in the late 19th century as well as the influence of the architecture created for the 1893 World's Columbian Exposition in Chicago. Significant examples of houses from this period can be found throughout South Louisiana.

The Classical Revival style is inspired by the work of such notable architects as Robert Mills and Benjamin Latrobe. Many houses from the period were constructed using pattern books such as Asher Benjamin's *American Builder's Companion*. Palladian compositions, documented in many English pattern books, were also a principal reference for many of the houses built during this period.

In the first half of the 20th century, the Colonial Revival style emerged in the United States as a recognized "American-born" architectural style. Colonial Revival style houses were derived from Anglo east coast colonial precedents which also incorporated eclectic interpretations of classical details on simple massing types.

Louisiana Classical style houses have a simple dominant main body (which can be one or two stories) to which side wings, rear wings, and pavilions might be added. Illustrations include both historic examples and ones built recently to illustrate the continuing use of this building tradition.

## ESSENTIAL ELEMENTS

Simple volumes with side wings and porches added to make more complex shapes

Symmetrical composition of doors and windows

Simplified versions of Classical details and columns, often with robust and exotic Classical orders such as Ionic and Corinthian used in the porch element

Multi-pane windows that are more broad in proportion, usually with 6 over 6 or 9 over 9 pane patterns



# GALLERY OF EXAMPLES



Abbeville



Baton Rouge



Crowley



Lake Charles



Baton Rouge—Magnolia Mound



New Iberia



Hammond



New Iberia



New Iberia

# MASSING & COMPOSITION

## CLASSICAL MASSING

### BROAD FRONT

- >> Hipped or side-gabled rectangular volume with roof pitches ranging from 6 to 8 in 12
- >> One-story shed or hipped porches are often located centrally on the front facade.
- >> One-story side wings often occur.
- >> Although porches are most often one-third or one-fifth the length of the main body, they may also be three-fifths or the entire length of the front facade.

### NARROW FRONT

- >> Hipped or front-gabled box with roof pitches ranging from 6 to 8 in 12
- >> Three-bay compositions are common.
- >> Full front porches and one-story side wings are common to this massing type.
- >> Includes shotgun and double-shotgun massing types

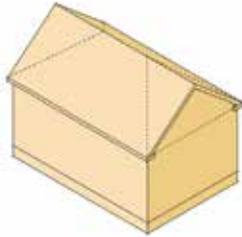
### FACADE COMPOSITION

- >> Characterized by a symmetrical and balanced placement of doors and windows
- >> Entrance doors are typically located in the center of the composition.
- >> Typically windows align vertically from floor to floor.

### MASSING COMBINATIONS

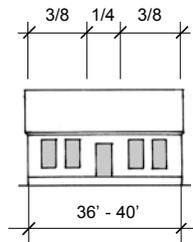
- >> Complex forms and larger living spaces may be created by combining side and/or rear wings with the main body.
- >> Gabled or hipped dormers may be added to introduce light into half-story and attic spaces.
- >> The architectural character of the attached parts should match that of the main body.

### BROAD FRONT MASSING



1- to 1½-story Broad Front

### FACADE COMPOSITION DIAGRAMS >>



### POSSIBLE MASSING COMBINATIONS >>

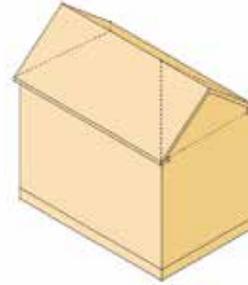


New Iberia

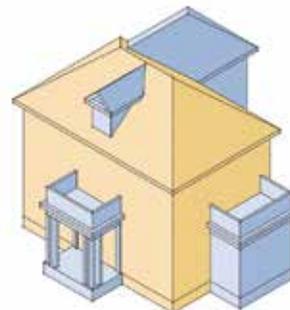
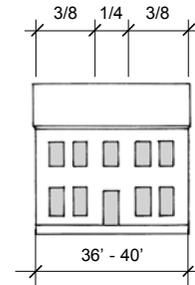


Crowley

### BROAD FRONT MASSING



2-story Broad Front

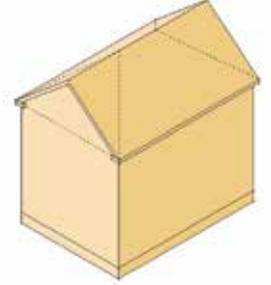


Baton Rouge

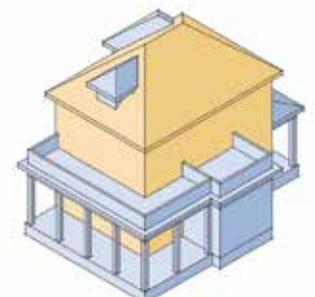
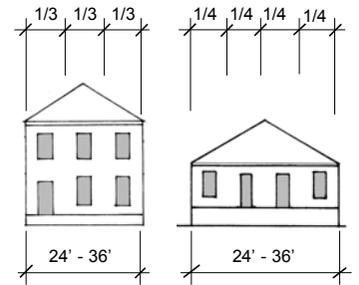


Baton Rouge

### NARROW FRONT MASSING



1- to 2-story Narrow Front



New Orleans



Lake Charles

# WALLS, EAVES & ROOFS

## WALLS

- >> The first floor of the main body is typically set up to 4 feet above the finished grade.
- >> Recommended minimum floor-to-ceiling height on the first floor is 10 feet. For two-story houses, the second-story floor-to-ceiling height is typically 8 to 9 feet tall.
- >> The Louisiana Classical style is characterized by the vertical proportion of the window and door elements and well-detailed Classical eaves and cornices.
- >> Cladding materials: Smooth-finish wood or fiber-cement lap siding with 4- to 8- inch exposure, brick
- >> Corner boards are typically 6 inches wide at a minimum.
- >> Typical base detail has an 8- to 10-inch wide skirting board.

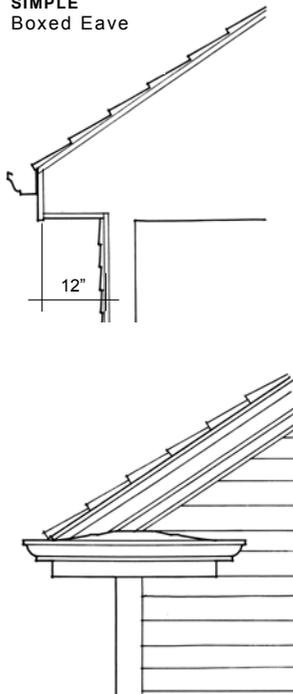
## EAVES

- >> Boxed eaves are typical, with classically proportioned and detailed moldings.
- >> Frieze boards are typically 10 inches wide or wider.
- >> Boxed eaves often return on the gable end.

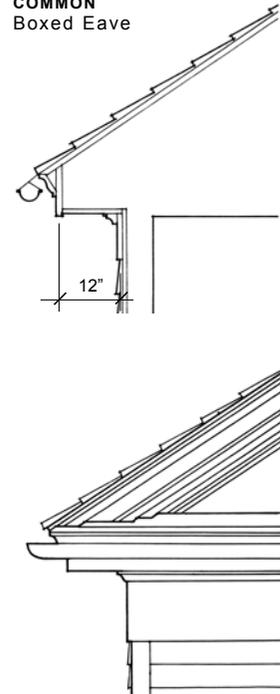
## ROOFS

- >> Typically laminated asphalt or composition shingle, occasionally clay tile with flat or barrel profile, or 5-V crimp metal panels

**SIMPLE**  
Boxed Eave



**COMMON**  
Boxed Eave



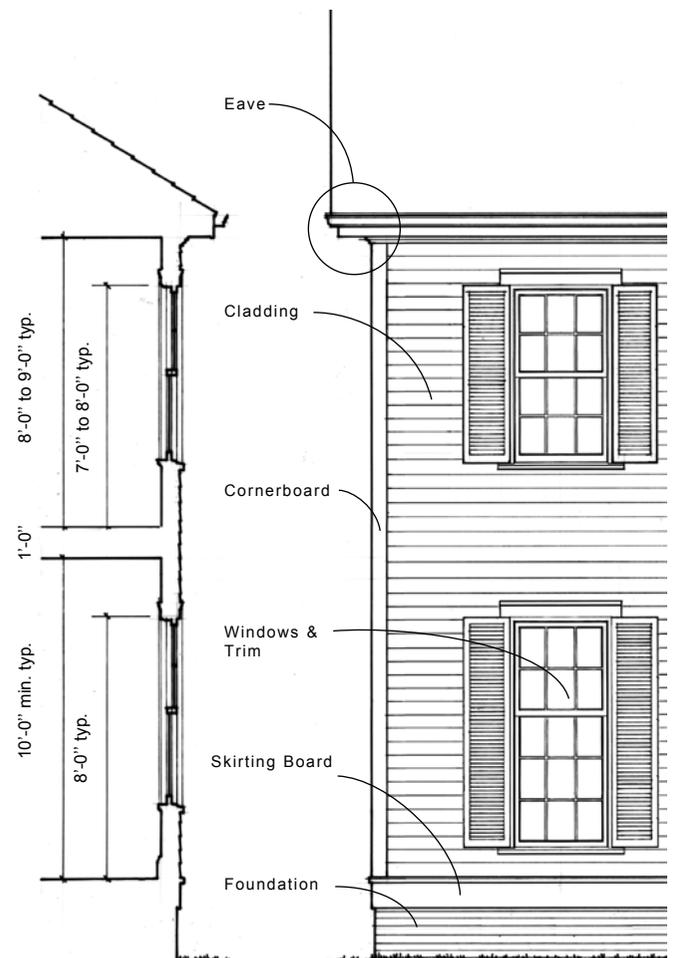
Common Boxed Eave



Baton Rouge



Ornate Boxed Eave



## GREEN BUILDING

### Overhangs

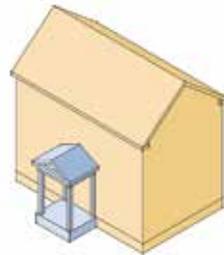
Roof overhangs on the south side of a house can be sized to provide shade in the summer when the sun is high in the sky, and direct sunlight and warmth in the winter when the sun is at a lower altitude. Overhangs also prevent water from draining directly onto the house and its foundation.

# PORCHES

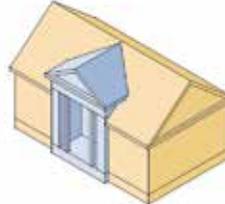
## PORCH TYPES & LOCATIONS

- >> Broad Front massing types may have aedicules, porticoes, or porches. Porticoes typically have decorative gabled roofs, or shallow roofs concealed by a railing. Porch roofs are typically gabled or hipped; three-bay and full-length porches are common. Occasionally porches resemble the Acadian-influenced massing type and continue the roof line of the house. Two-story porches are common on larger houses, and may have grand, two-story columns.
- >> Narrow Front massing types typically have gabled or hipped roof porches or porticoes. Often the porch roof is an extension of the house roof. Full-length porches are common. Two-story porches are common on larger houses, and may have grand 2-story columns.
- >> Porches are generally centered in the facade composition.
- >> The minimum recommended porch depth is 8 feet.

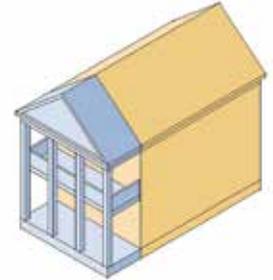
## TYPICAL PORCH TYPES & LOCATIONS >>



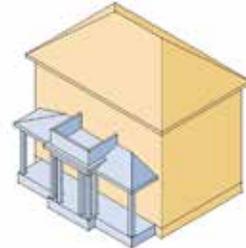
2-story Broad Front



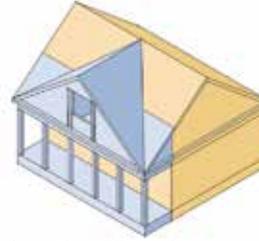
1-story Broad Front



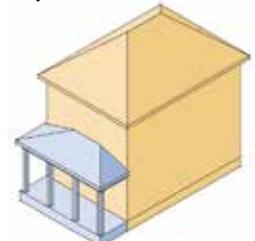
2-story Narrow Front



2-story Broad Front



1-story Broad Front



2-story Narrow Front



One-story, Hipped Porch Partial Elevation



Crowley

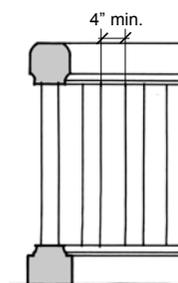


New Orleans



Thibodaux

## RAIL DETAILS >>



New Orleans

**PORCH ROOFS & EAVES**

- >> Flat, shed, gabled, or hipped roofs
- >> Shed or hipped porches typically have a 2 to 4 in 12 pitch.
- >> Classically proportioned temple-front porch roofs typically have a 5 in 12 to 7 in 12 roof pitch.
- >> Porch eaves are often of the same type as the main house, but are typically more ornamented.

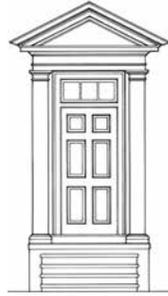
**COLUMNS**

- >> Single-story porches have 9- to 10-foot-tall columns, 10 to 12 inches in diameter.
- >> 2-story porches have 9- to 10-foot-tall columns, 10 to 12 inches in diameter on the first floor, and 8- to 9-foot columns on the second floor. Two-story grand order columns are much larger in dimension, and should be proportioned to the full height of the house.
- >> Greek Doric, Roman Doric, Ionic, and Corinthian columns are all common.

**RAILINGS**

- >> Balusters have a square or turned cross section, and should be spaced no more than 4 inches apart.

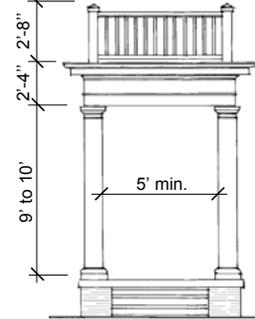
**PORCH TYPES >>**



Aedicule



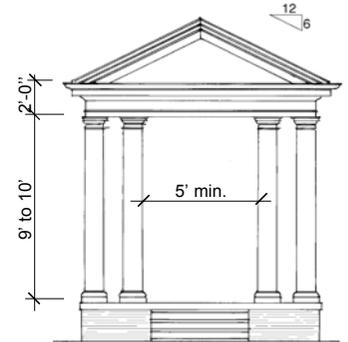
Aedicule



Portico with Railing



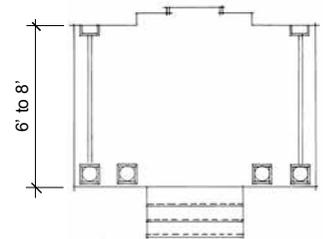
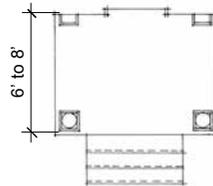
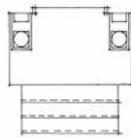
Portico with Railing



Pediment Porch



Pediment Porch



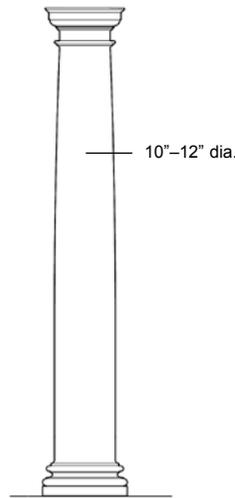
**COLUMN TYPES >>**



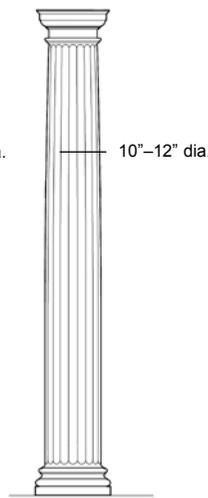
New Orleans



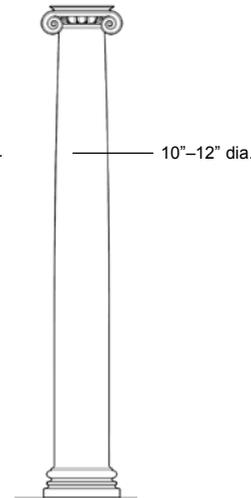
Lake Charles



Doric

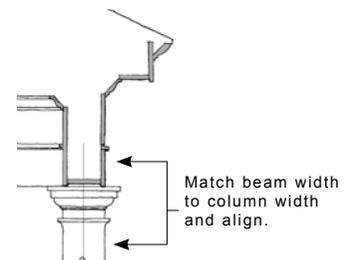
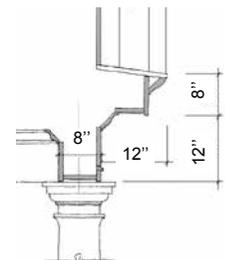


Doric Fluted



Ionic

**EAVE SECTIONS**



# WINDOWS & DOORS

## STANDARD WINDOWS

- >> Windows are typically double hung and vertical in proportion.
- >> Basic window muntin patterns include 6 over 1, 6 over 6, 9 over 1, 9 over 9, 12 over 12, and 9 over 6.
- >> First-floor windows are typically taller than second-floor windows.
- >> Range of sizes:  
Width: 2'-8" to 3'-8"  
Height: 4'-4" to 6'-0"
- >> Stone or brick jack arch lintels are typical.
- >> Materials: Painted wood or solid cellular PVC, or clad wood or vinyl with brick veneer only; true divided light or simulated divided light (SDL) sash with traditional exterior muntin profile (7/8" wide)

## WINDOW ASSEMBLIES & ACCENT WINDOWS

- >> Palladian arched accent windows in gabled ends, dormers with gable or hipped roof, and the triple window with broad center sash (a hallmark of the Louisiana Classical style house)

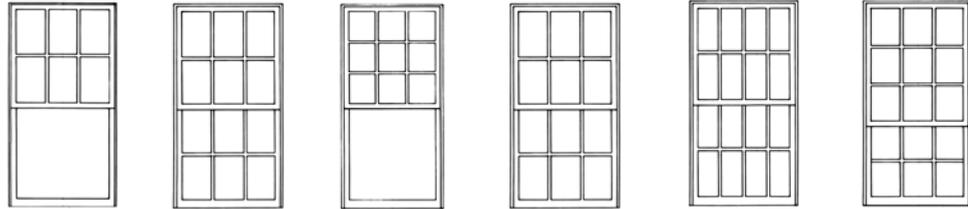


### GREEN BUILDING

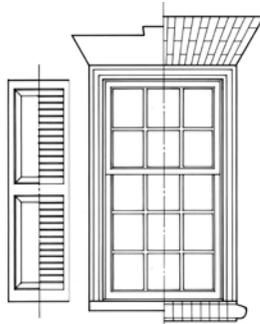
#### Shutters

Exterior shutters are an effective passive solar feature as well as a traditional and aesthetically pleasing design element of the Louisiana home. Operable shutters keep the hot sun out, while allowing breezes to ventilate and cool the house.

## STANDARD WINDOWS >>



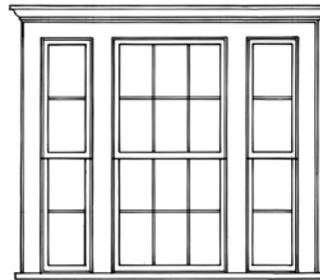
## WINDOW ASSEMBLIES >>



SIMPLE Window



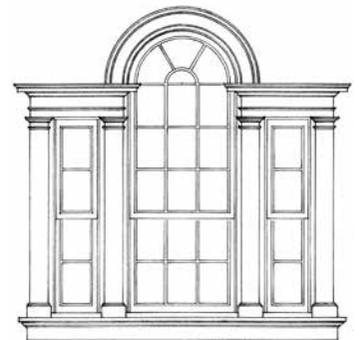
Baton Rouge



COMMON Triple Window



New Orleans



ORNATE Palladian Window



New Orleans

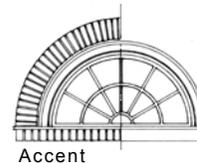
## SPECIAL WINDOWS >>



Dormer



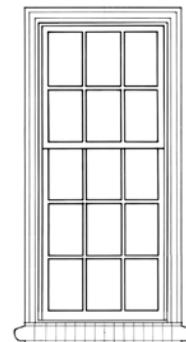
Crowley



Accent



Lake Charles



Floor-to-Ceiling Window



New Orleans

**DOORS**

- >> Wood, fiberglass, or steel with traditional stile and rail proportions, panel profiles, and glazing patterns as illustrated below

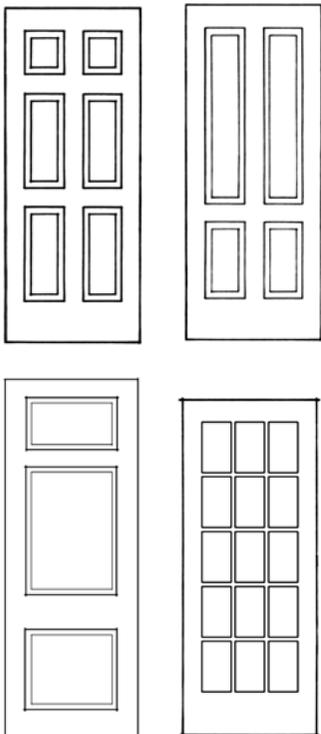
**TRIM**

- >> Wood, composite, cellular PVC, or polyurethane millwork in configurations illustrated below

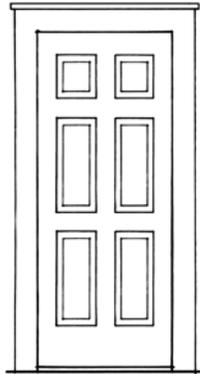
**SHUTTERS**

- >> Shutters can be louvered, raised panel, or flat panel
- >> Wood or composite, sized to match window sash and mounted with hardware so that they are operable

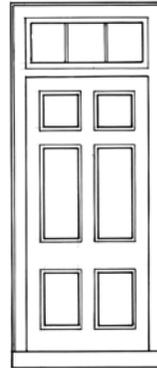
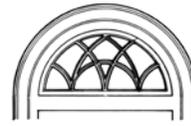
**DOOR TYPES**



**DOOR ASSEMBLIES >>**



**SIMPLE**  
Door



**COMMON**  
Door with Transom



**ORNATE**  
Door with Transom  
and Sidelights



Baton Rouge

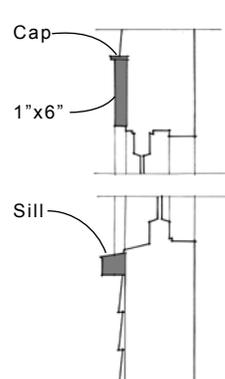


Baton Rouge

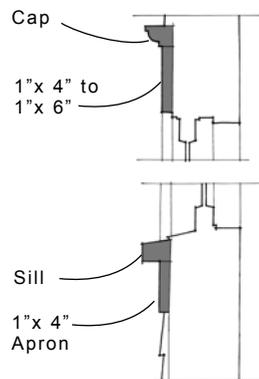


Baton Rouge

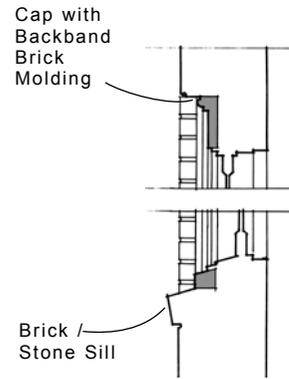
**TYPICAL TRIM EXAMPLES >>**



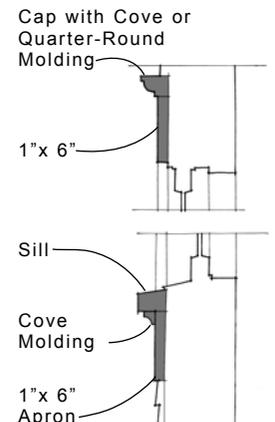
**SIMPLE**  
Wood



**COMMON**  
Wood



**ORNATE**  
Brick



**ORNATE**  
Wood

# LOUISIANA ARTS & CRAFTS

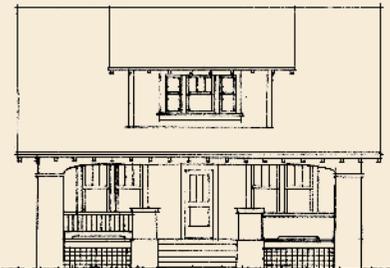
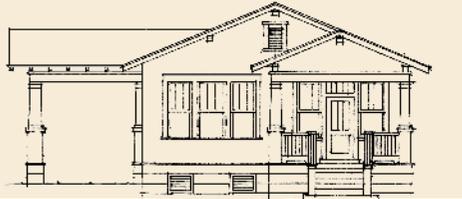
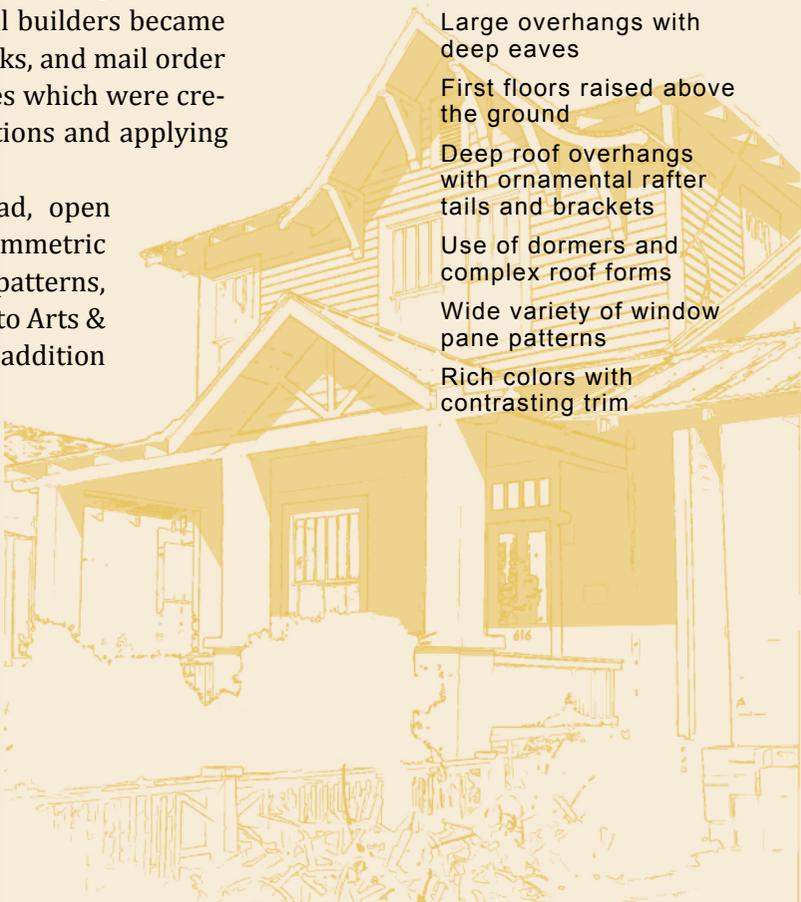
The Arts & Crafts movement, which began in England in the late 19th century, espoused a simple decorative expression of structural elements and the use of natural materials which builders found suitable for both estate and cottage homes.

Known as the Craftsman style in the United States, it enjoyed widespread use throughout the country in the early twentieth century. Many local builders became familiar with it through the publication of pattern books, plan books, and mail order catalogs. Louisiana is home to many small Craftsman-style cottages which were created by adapting the elements of the style to local building traditions and applying them to local building types such as shotgun houses and cottages.

The Louisiana Arts & Crafts style is characterized by broad, open porches, roofs with deep overhangs and exposed rafter tails, asymmetric compositions, grouped windows with a variety of upper muntin patterns, expressive trim, and ornamental brackets. One trait that is unique to Arts & Crafts houses in this region is the use of a more vertical column in addition to the shorter and wider columns used in other regions.

## ESSENTIAL ELEMENTS

- Deep one- and two-story porches
- Large overhangs with deep eaves
- First floors raised above the ground
- Deep roof overhangs with ornamental rafter tails and brackets
- Use of dormers and complex roof forms
- Wide variety of window pane patterns
- Rich colors with contrasting trim



# GALLERY OF EXAMPLES



Baton Rouge



New Orleans



Baton Rouge—Spanishtown



Lake Charles



New Orleans



Baton Rouge—Spanishtown



Baton Rouge—Spanishtown



Baton Rouge—Spanishtown



Lake Charles

Photo courtesy of Jay Edwards

# MASSING & COMPOSITION

## ARTS & CRAFTS MASSING

### NARROW FRONT

- >> One- to two-story mass
- >> Hip or gable roof with 5 in 12 to 8 in 12 roof pitch
- >> Ridge line of roof runs perpendicular to entrance facade
- >> Includes shotgun & double shotgun

### SIDE GABLE

- >> One- to one-and-one-half-story mass
- >> Gable roof with 4 in 12 to 8 in 12 roof pitch
- >> Ridge line of roof runs parallel to entrance facade
- >> Occasionally occurs as two-story mass

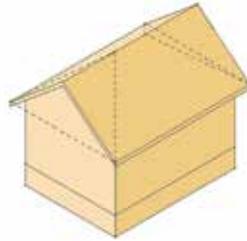
### FACADE COMPOSITION

- >> Asymmetrical yet balanced placement of doors and windows
- >> Windows are often grouped in pairs and multiples to create larger openings.
- >> Entrance doors are typically under porches.

### MASSING COMBINATIONS

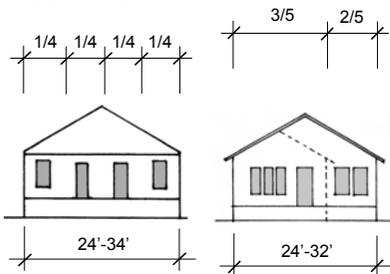
- >> Larger living space forms may be created by combining side and/or rear wings with the main body.
- >> Gabled, hipped, or shed dormers may be added to introduce light into half-story and attic spaces.
- >> The architectural character of the attached elements should match that of the main body.

### NARROW FRONT MASSING

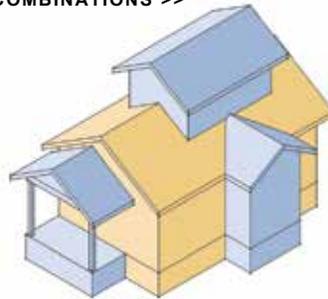


1- to 1½-story Narrow Front

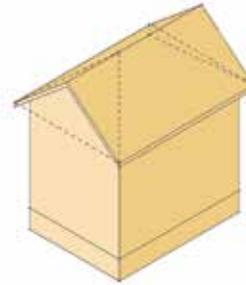
### FACADE COMPOSITION DIAGRAMS >>



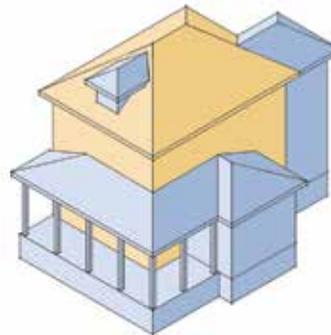
### POSSIBLE MASSING COMBINATIONS >>



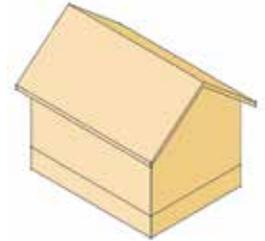
### NARROW FRONT MASSING



2-story Narrow Front



### SIDE GABLE MASSING



1- to 1½-Story Side Gable

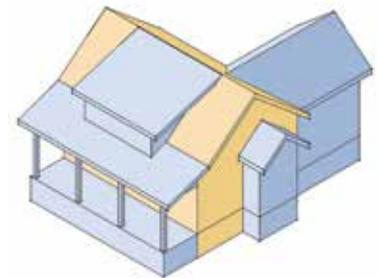
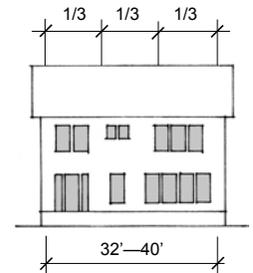


Photo courtesy of Jay Edwards

# WALLS, EAVES & ROOFS

## WALLS

- >> Typical floor-to-ceiling heights are 9 feet for the first floor and 8 feet for the second floor.
- >> Cladding materials: Smooth-finish wood or fiber-cement lap siding with 4- to 8- inch exposure, random-width cut wood or fiber-cement shingles, light sand-finish stucco
- >> Siding and shingle cladding is mitered at corners or has 4- to 6-inch corner board trim.
- >> Typical base detail has 8- to 10-inch-wide skirting boards.
- >> Foundation walls and piers are typically brick, stucco, or stone veneer; foundation wall vents are centered under windows.

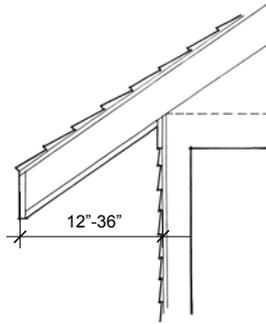
## EAVES

- >> Exposed 2 x 8-inch rafter tails cut plumb, 16 to 24 inches on center is by far the most common eave type
- >> Hipped roofs may feature a boxed eave with a continuous fascia and outriggers 24 to 48 inches on center.

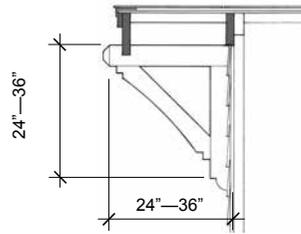
## ROOFS

- >> Typically laminated asphalt or composition shingle, occasionally clay tile with flat profile, or 5-V crimp metal panels

### SIMPLE

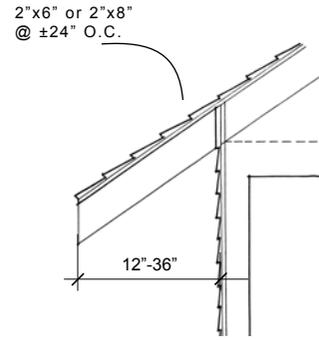


Closed Eave

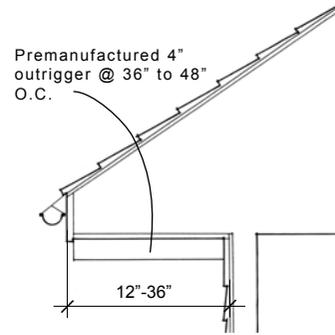


COMMON Gable End Bracket

### COMMON

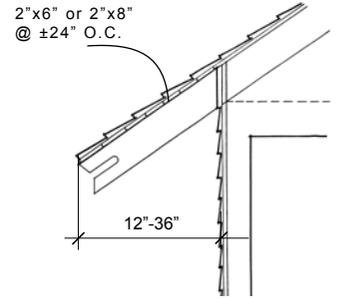


Exposed Rafter Tail

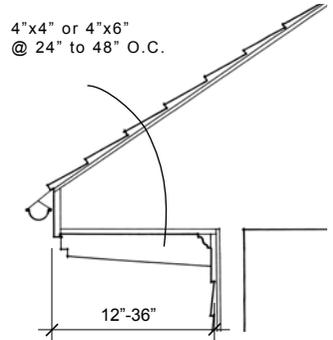


Boxed Eave with Outriggers

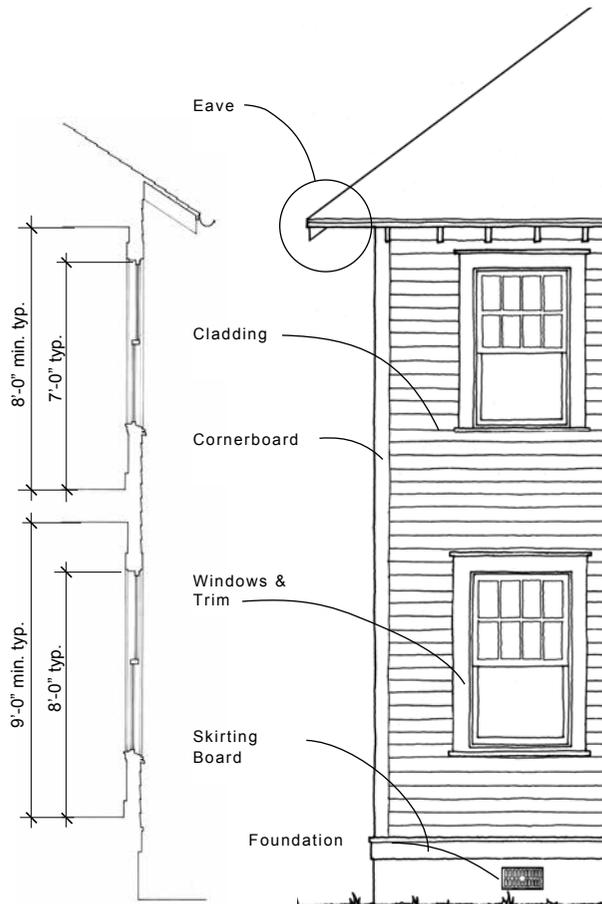
### ORNATE



Shaped Rafter Tail



Boxed Eave with Shaped Outriggers



Typical gable end condition



Boxed eave with shaped outriggers in hipped-roof condition



Brick foundation piers

Photo courtesy of Jay Edwards



## GREEN BUILDING

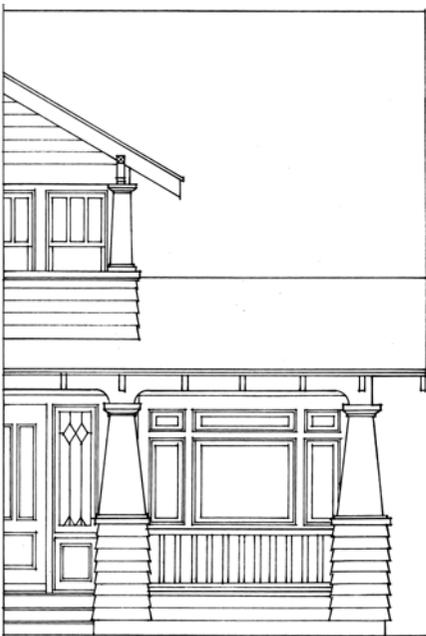
### Ceiling Height

Ceilings higher than the typical 8 feet allow hot air to rise above occupants, thus cooling and increasing human comfort zones. Coupled with larger windows, higher ceilings increase ventilation and circulation. Many older homes have 12-foot ceilings for maximum benefit, but 9- or 10-foot ceilings also enhance comfort.

# PORCHES

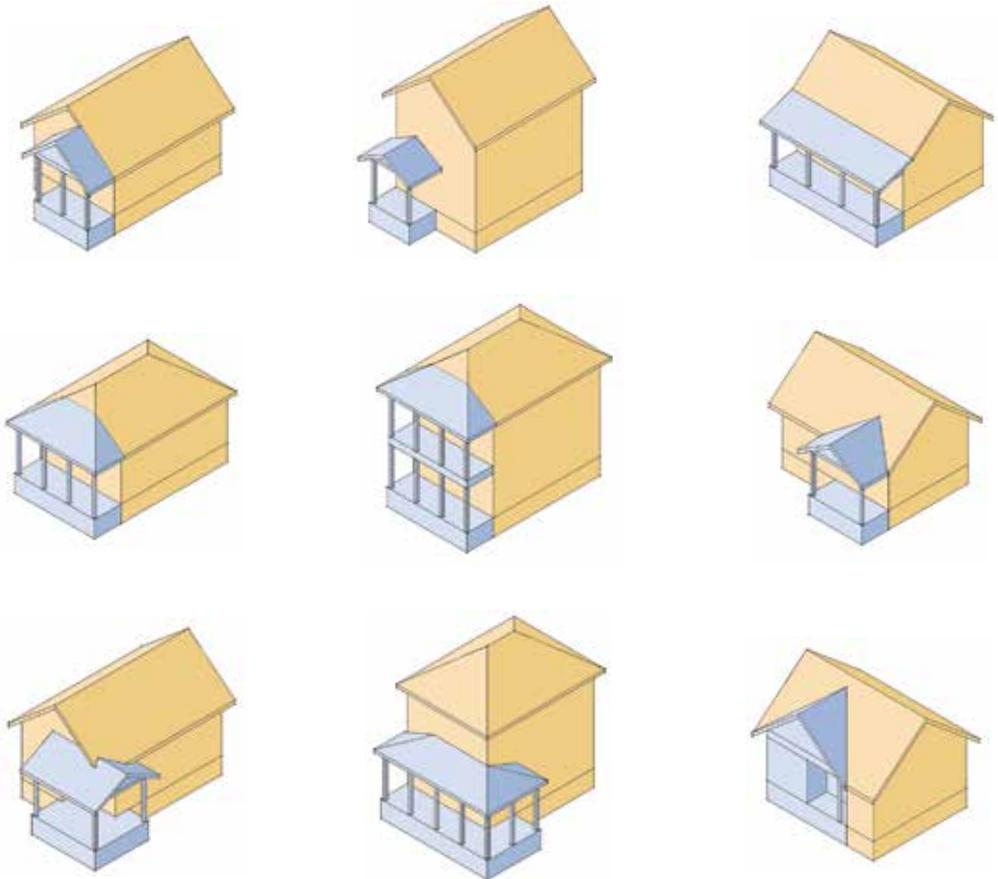
## PORCH TYPES & LOCATIONS

- >> Narrow Front massing types, 1- to 1 1/2-stories, may have gable or hip-roofed porches that read as part of the main roof mass, or as separate elements; the porches can run the full length of the facade, or part of it and be symmetrically or asymmetrically placed.
- >> Two-story Narrow Front massing types may have 1- or 2-story porches; porch roof forms typically match main house roof forms; 2-story porches run the full-length of facade and read as part of the main roof mass; single-bay 1-story porches are typically placed asymmetrically on the facade; full-length 1-story porches can wrap past the front facade.
- >> Side Gable massing types may have gable, hip, or shed-roofed porches; often, the porch roof reads as part of the main house roof mass, having the same or shallower roof pitch; gable roof. Porches do not typically run the full length of the facade and can cover a projecting porch, or mark a recessed porch.
- >> Minimum recommended porch depth is 8 feet.
- >> Solid porch walls should be faced in siding, brick, or stucco, if appropriate, and should read as part of a continuous foundation or base treatment.



One-story, engaged porch partial elevation

## TYPICAL PORCH TYPES & LOCATIONS >>



1-story Narrow Front

2-story Narrow Front

1-story Side Gable



Example of one-story narrow front massing

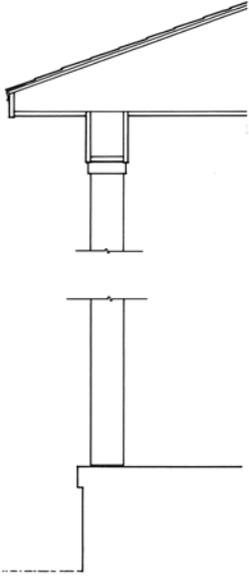


Example of one-story engaged porch

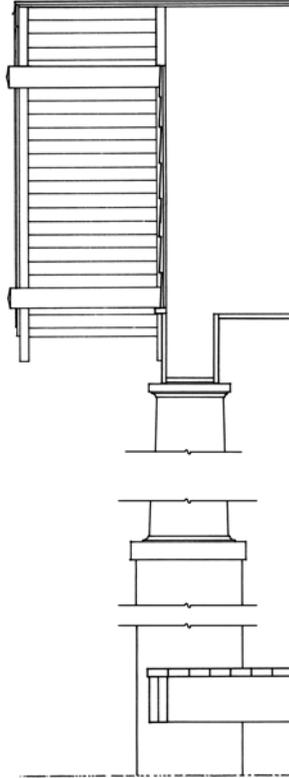


Entry porch on a two-story massing

**PORCH SECTIONS >>**

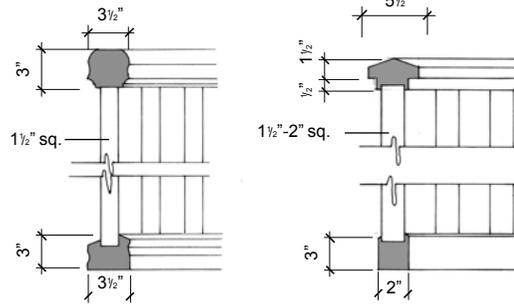


**SIMPLE**  
Hipped Roof



**COMMON**  
Gabled Porch

**RAIL DETAILS >>**



**GREEN BUILDING**

**Roof Detail**

Roofs are the greatest source of potential heat gain to homes, especially during summer months when the path of the midday sun is directly overhead. A light-colored, reflective roof surface is the most effective design strategy to minimize heat gain.

**PORCH ROOFS & EAVES**

- >> Shed, gabled, or hipped roofs
- >> Gable-end porches are typically designed with expressive structural elements or brackets.
- >> Typical porch slopes range from 4 in 12 to 6 in 12.
- >> Deep eaves often repeating the same rafter or eave treatment as the main house

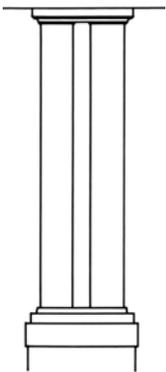
**COLUMNS**

- >> Post, tapered box, paneled box, or stucco pier
- >> Slender columns and posts, often paired
- >> Columns and posts may be full-height, or partial-height and set on square piers or solid porch walls.
- >> Wood, fiberglass, or composite material with traditional proportions and details

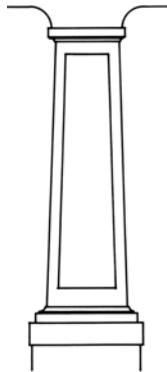
**RAILINGS**

- >> Wood top and bottom rails with square balusters
- >> Solid rails clad in siding, shingles, stucco, or brick veneer

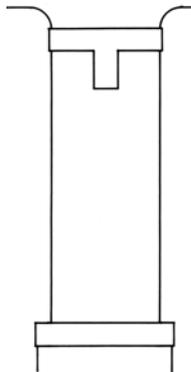
**COLUMN TYPES >>**



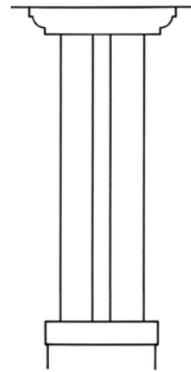
Half-Height Double Post on Pier



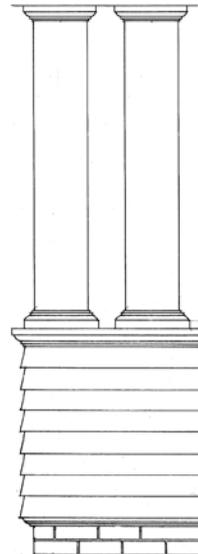
Half-Height Tapered, Paneled Box Column on Pier



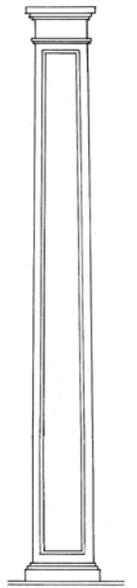
Stucco Pier



Half-Height Double Post on Pier



Half-Height Double Box Column on Solid Rail



Full-Height Paneled Box Column with Entasis



# WINDOWS & DOORS

## STANDARD WINDOWS

- >> Standard windows are typically double hung and vertical in proportion.
- >> Common muntin patterns are 3 over 1, 4 over 1, 6 over 1, or 9 over 1.
- >> Ornate muntin patterns are occasionally used.
- >> First-floor windows are typically taller than second-floor windows.
- >> Range of sizes:  
Width: 2'-8" to 3'-8"  
Height: 4'-4" to 6'-0"
- >> Materials: Painted wood or solid cellular PVC, or clad wood or vinyl with brick veneer only; true divided light or simulated divided light (SDL) sash with traditional exterior muntin profile (7/8" wide)

## WINDOW ASSEMBLIES & ACCENT WINDOWS

- >> Paired or triple windows, box bay windows supported on wood brackets, and dormers are typical.
- >> Windows are often ganged together in large gabled or shed dormers.
- >> Small accent windows are used in gables and small dormers.

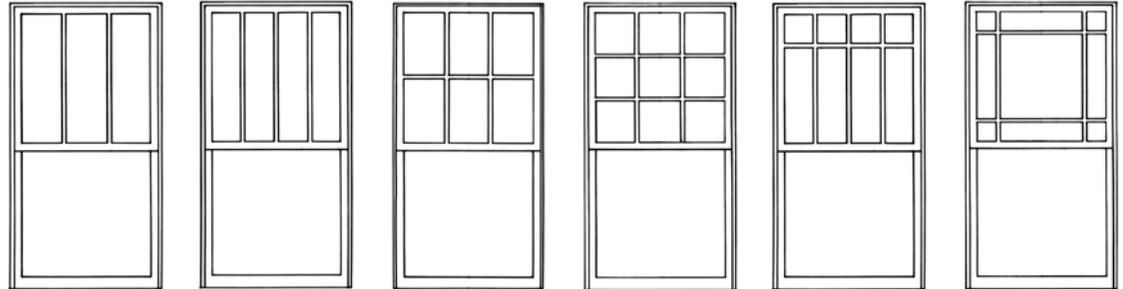


### GREEN BUILDING

#### Windows

The type, placement, size, and number of windows are important determinants of energy efficiency and comfort. Larger windows are best on the north and east sides for greater ventilation and day lighting. The size and number of windows should be reduced on the heat-intensive west side. Double-pane, insulated, and Low-E coated windows also mitigate radiant heat gain.

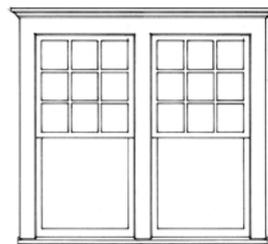
## STANDARD WINDOWS >>



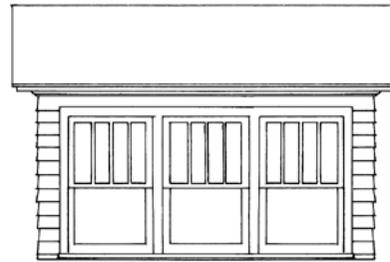
SIMPLE

ORNATE

## WINDOW ASSEMBLIES >>



SIMPLE  
Double Window

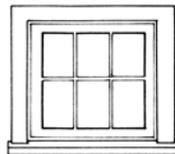


COMMON  
Dormer

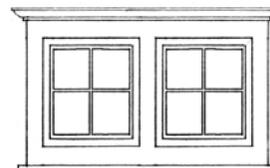


ORNATE  
Box Bay with Triple Window

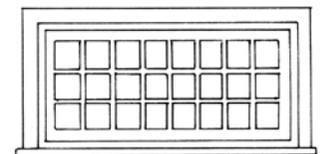
## ACCENT WINDOWS >>



SIMPLE



COMMON



ORNATE



**DOORS**

- >> Wood, fiberglass, or steel with traditional stile and rail proportions, panel profiles, and glazing patterns as illustrated below

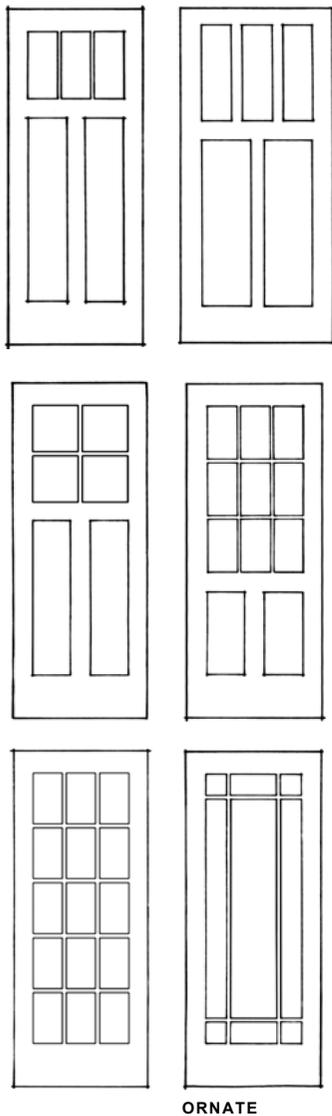
**TRIM**

- >> Wood, composite, cellular PVC, or polyurethane millwork

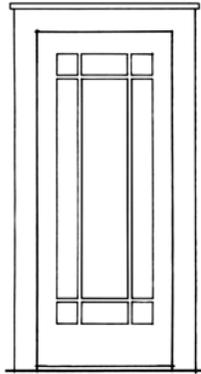
**SHUTTERS**

- >> Shutters can be louvered, raised panel, or flat panel.
- >> Wood or composite, sized to match window sash and mounted with hardware so that they are operable

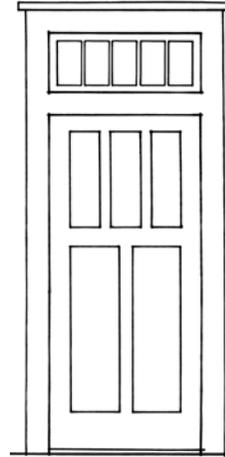
**DOOR TYPES**



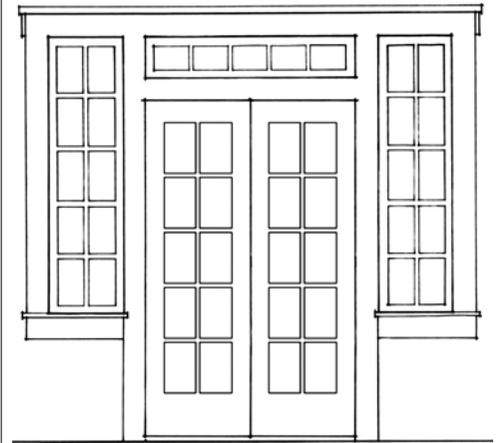
**DOOR ASSEMBLIES >>**



**SIMPLE**  
Single Door



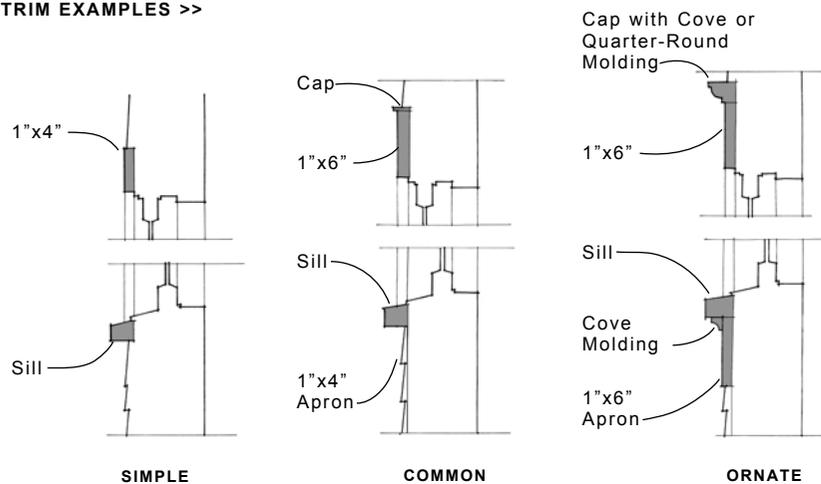
**COMMON**  
Single Door with Transom



**ORNATE**  
Double Door with Transom and Sidelights



**TYPICAL TRIM EXAMPLES >>**



# MODERN

In the 20th century, many advocates of the Modern movement called for a break with the past and for the invention of new forms that would create the vision of a new world. Those architects tended to rely on international models rather than local ones. Much of this architecture, therefore, represents a break with the threads of tradition. At the same time, there were some who recognized the importance of regional identity and found new ways of interpreting certain aspects of traditional forms. Among them, Hays Town, John Desmond, and Lloyd Vogt combined a keen interest in Louisiana architectural history with a modern architectural practice. In the 21st century, a growing number of architects are working in this direction.

Respecting the role of innovation, this style section takes a slightly different approach than the pages for the traditional styles presented previously in the Pattern Book. While the traditional style sections provide patterns based on conventions, the Modern style section sets three basic performance criteria for innovative designers. The first is to provide buildings that contribute to the character and quality of the public space. Elements such as porches, galleries, windows, and clearly defined entrances facing the street are essential components of achieving this goal. The second is to follow the principles of green design which include shading devices, passive solar design, the use of overhangs, galleries, and porches, as well as providing proper orientation to the sun. The third is to use forms that resonate with the traditions of the region. However different the materials or shapes may be, they should convey the image of a Louisiana building, and be seen as innovative ways of carrying forward the much-loved traditions.

Therefore, these Modern style pages provide examples from Louisiana and elsewhere to illustrate ways in which architects are achieving this complex mix of innovation and respect for context. Refer to the Gallery of Elements and Details on pages 70 and 71 for ways in which these performance criteria have been applied to specific design details of Modern-style buildings. This section also differs from previous ones in that it will be used primarily by architects, while the traditional pages can be used by home builders and their staff. Modern architecture is widely used in more urban mixed-use buildings.

## ESSENTIAL ELEMENTS

- Open floor plans
- Continuous flow of space between indoors and outdoors
- Innovation in building technology and architectural form
- Simple forms without figural ornamentation



# PERFORMANCE CRITERIA

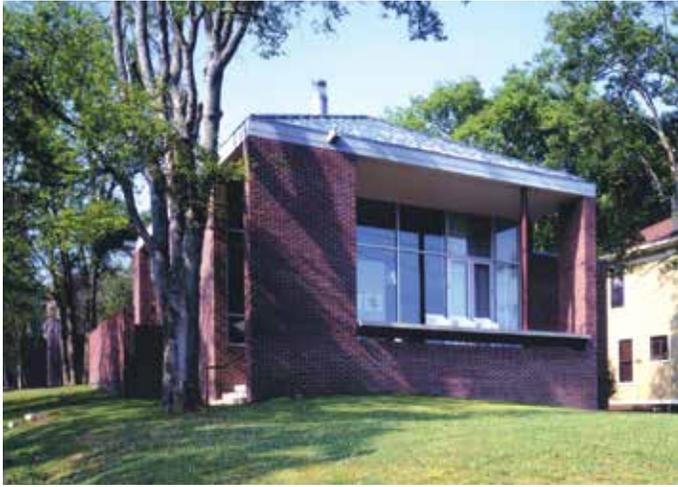


Photo courtesy of Michael Lewis



Photo courtesy of Plus One

**URBANISM** Buildings address the street and contribute to the creation of congenial public spaces.



Photo courtesy of Neil Alexander



Photo courtesy of Lake|Flato



Photo courtesy of Neil Alexander

**GREEN DESIGN** Buildings respond to climate.

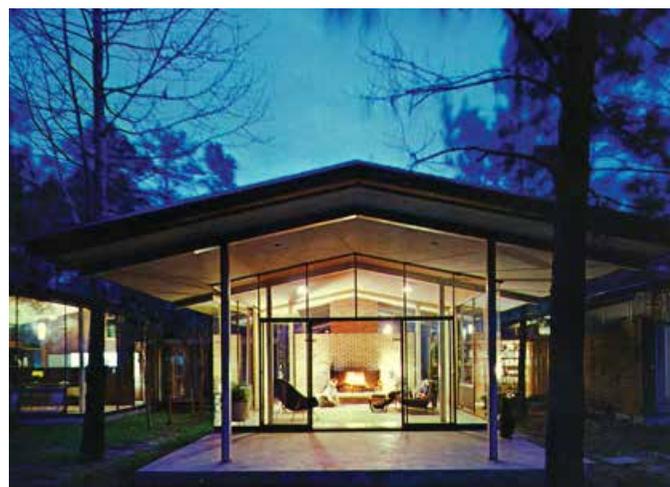


Photo courtesy of Michael Desmond



Photo courtesy of Neil Alexander

**CULTURE AND CHARACTER** Buildings express traditions of the region.

# GALLERY OF ELEMENTS AND DETAILS

## WALLS



Photo courtesy of Plus One



Photo courtesy of Plus One



Photo courtesy of Plus One



Photo courtesy of Neil Alexander

## ROOFS



Photo courtesy of Lake|Flato



Photo courtesy of Neil Alexander



Photo courtesy of Hester + Hardaway



Photo courtesy of Plus One

## VERANDAHS



Photo courtesy of Tim Hursley



Photo courtesy of Tim Hursley



Photo courtesy of Michael Lewis

WINDOWS



Photo courtesy of Plus One



Photo courtesy of Hester + Hardaway



Photo courtesy of Michael Desmond



Photo courtesy of Neil Alexander



DOORS



Photo courtesy of Michael Lewis



Photo courtesy of Plus One



Photo courtesy of Plus One

PREFIN. STEEL RAILING  
W/ 2 1/2" SQ. CORNER POSTS

1/4" SLUPE HIP ROOF

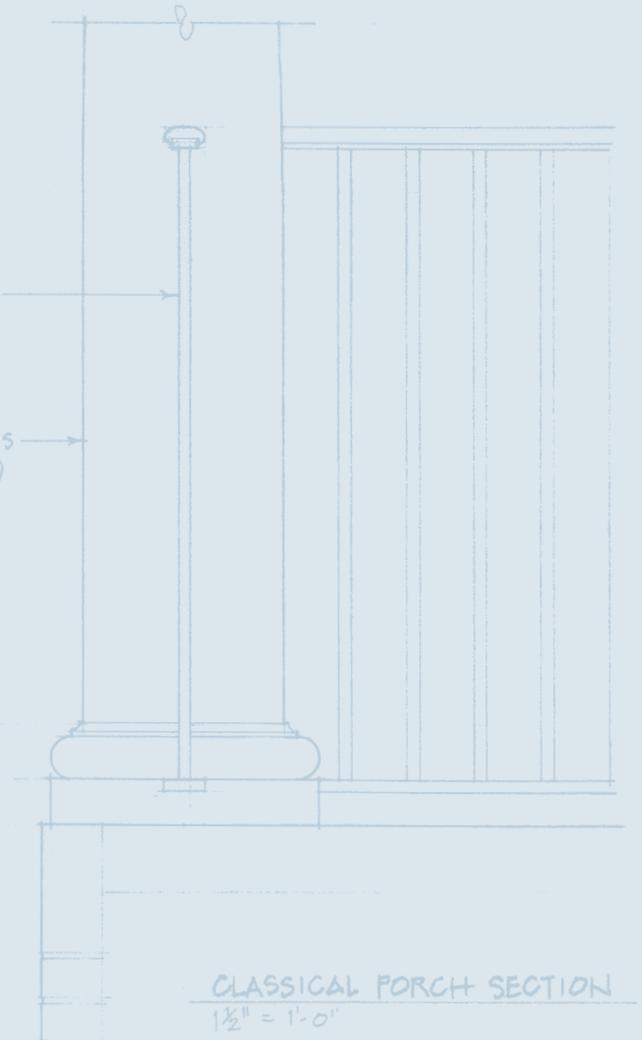
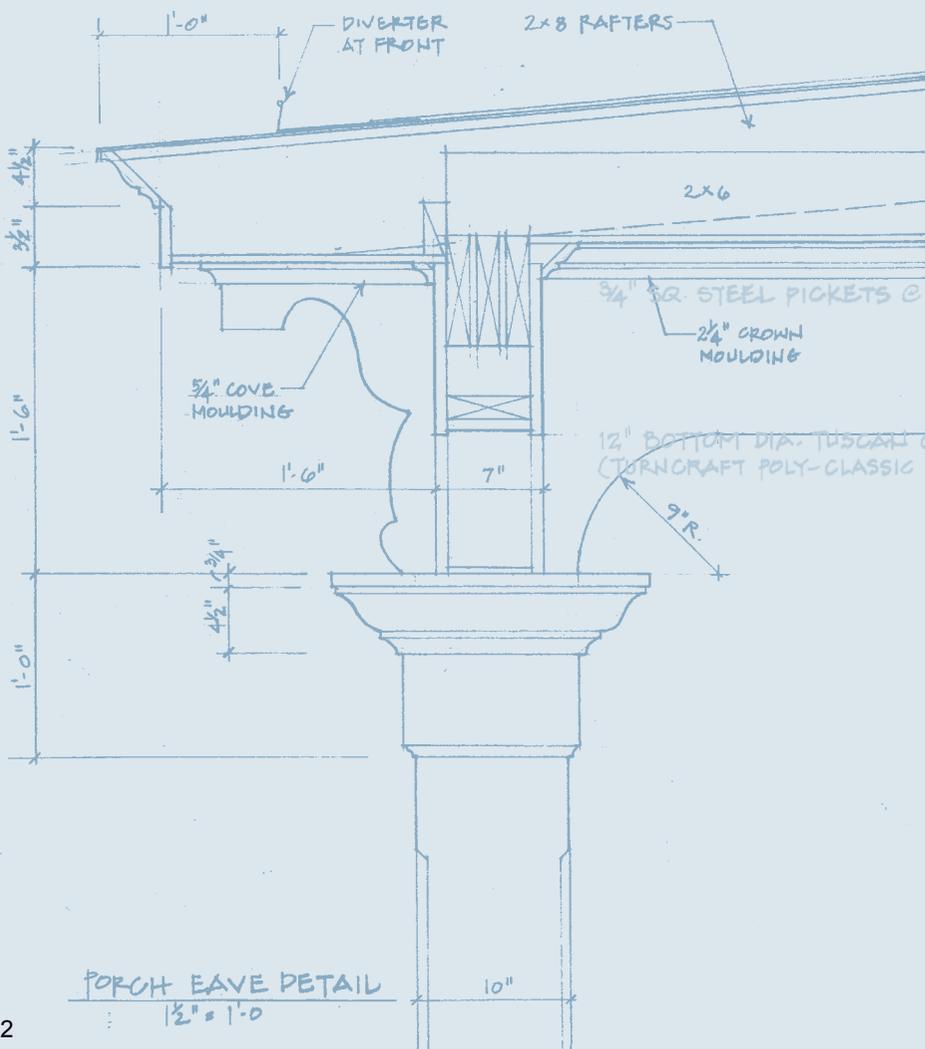
COMPOSITE TRIM BOARDS  
AND MOULDINGS

# DEMONSTRATION PLANS

The patterns presented in this book are intended for use by builders, developers, and producers of manufactured housing, as well as individual home owners as they renovate and rebuild their own houses. The biggest challenge will be to communicate the values and character of Louisiana architecture to a national homebuilding industry.

To demonstrate the use of the Pattern Book, a workshop was conducted using standard plans provided by various builders. Each plan was then transformed by using the patterns in the book for a particular style. It is recommended that the green design guidelines be followed to ensure an energy-efficient house. These are illustrated in the demonstration plans by showing the standard plan and elevation (as given) alongside the modified plan and transformed elevation for that house design. The patterns in this book have been modified to meet current construction practices and include patterns with a wide range of costs.

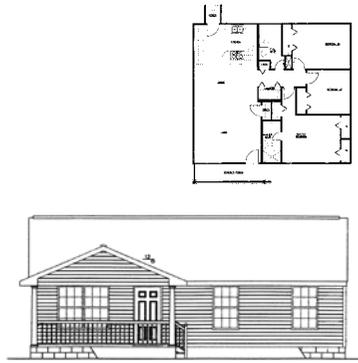
On the following pages, we present a collection of houses, some manufactured, some using conventional wood frame, and some using the SIP panel method. These houses have been designed by various architects and are illustrative of the patterns presented in this book.



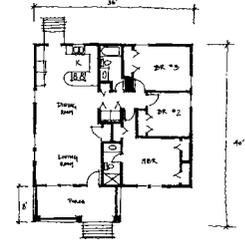
**DEMONSTRATION 1:**

**HABITAT HOUSE**

This simple, one-story cottage was modified by expanding the porch and then simply using the appropriate windows and trim elements from the Arts & Crafts section of this Pattern Book.



**Original Plan and Elevation**



**Transformed Plan and Elevation**

**DEMONSTRATION 2:**

**BUILDER PRODUCTION HOUSE**

This ranch style house is a standard model currently being used in Florida by a developer interested in building in Louisiana. The plans were provided to the LRA by Aercon, LLC. It was modified in plan by adjusting the garage location and the arrangement of living spaces. A porch was added. Instead of the Spanish style of the Florida model, the architectural elements from the Louisiana Vernacular section of this Pattern Book were used.



**Original Plan and Elevation**

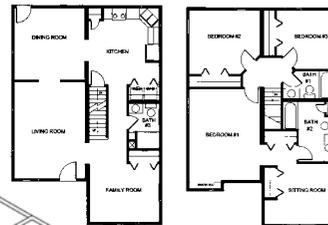


**Transformed Plan and Elevation**

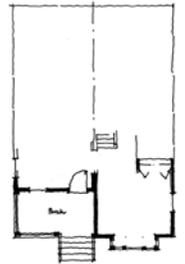
**DEMONSTRATION 3:**

**MODULAR HOUSE**

This two-story house, provided to the LRA by Integrity Building Systems, is built with four modules. Within the constraints of the manufacturer, this house was modified by adding a porch and using architectural elements from the Louisiana Victorian section of this Pattern Book.



**Original Plan and Elevation**



**Transformed Plan and Elevation**

**DEMONSTRATION 4:**

**ROWHOUSE**

These three-story, park-under rowhouses are typical models used by one of the nation's largest home builders. The only modification in plan was to rearrange the stairs on the ground level. Galleries and balconies were added. Elements from both the Louisiana Vernacular and Louisiana Classical sections of this Pattern Book were used to create two distinct elevations.



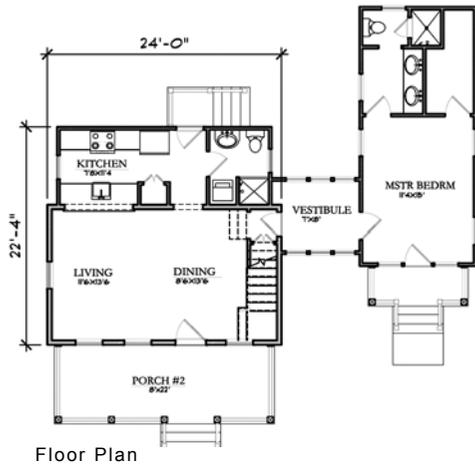
**Original Plan and Elevation**



**Transformed Plan and Elevation**



Second Floor

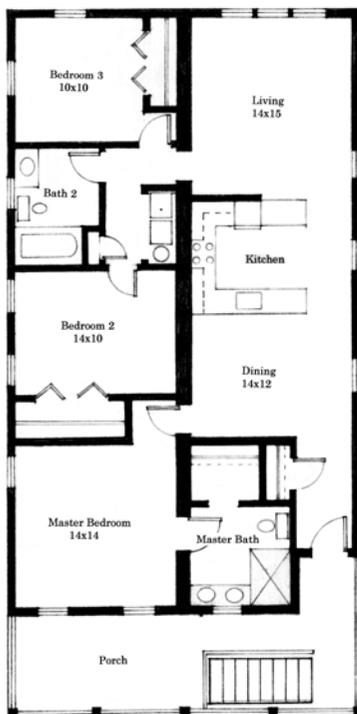


Floor Plan



Front Elevation

**Single Family Detached House**  
 2025 sf  
 3 bedrooms  
 2 bathrooms  
 Architect: Eric Moser  
 info@moserdesigngroup.com



Floor Plan



Arts & Crafts Elevation



Victorian Elevation

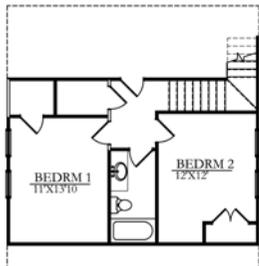


Louisiana Vernacular Elevation

**Modular Single Family Detached House**  
 1400 sf  
 3 bedrooms  
 2 bathrooms  
 Architect: Stephanie Eugster  
 seugster@houston.rr.com



First Floor



Second Floor



Second Floor Addition



Side Elevation



Front Elevation

**Single Family Detached House**  
 2560 sf  
 3 bedrooms  
 2.5 bathrooms  
 Architect: Eric Moser  
 info@moserdesigngroup.com



Side Elevation

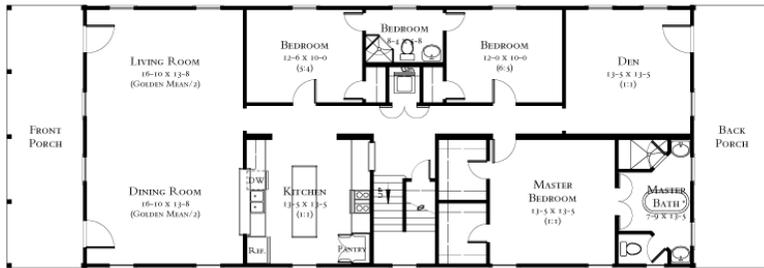
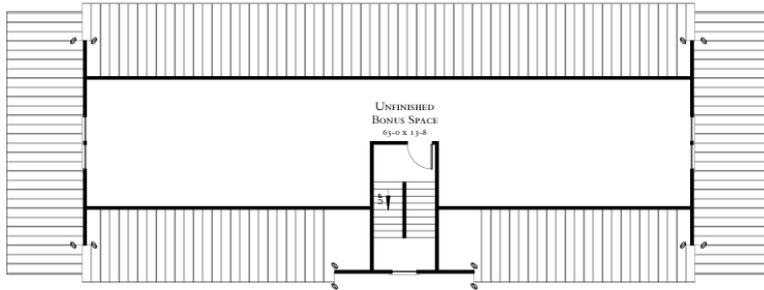


Floor Plan



Front Elevation

**Single Family Detached House**  
 512 sf  
 2 bedrooms  
 1 bathroom  
 Architect: Marianne Cusato  
 mcusato@aol.com

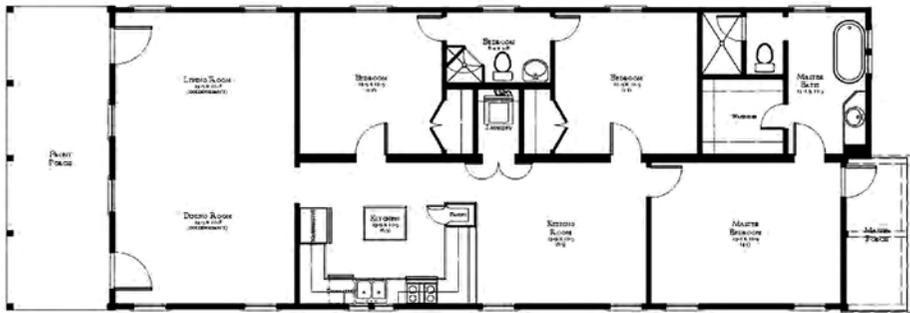


Floor Plan



Front Elevation

**Single Family Detached House**  
 1836 sf (987 sf bonus)  
 3 bedrooms  
 2 bathrooms  
 Architect: Steve Mouzon  
[www.mouzon.com](http://www.mouzon.com)

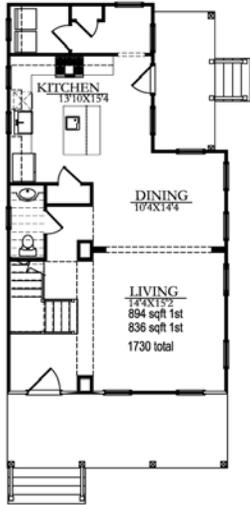
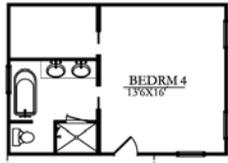


Floor Plan

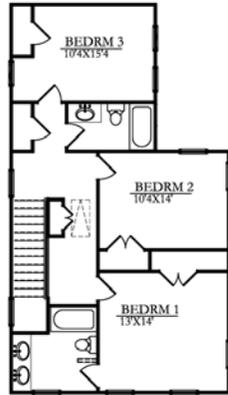


Front Elevation

**Single Family Detached House**  
 1432 sf  
 3 bedrooms  
 2 bathrooms  
 Architect: Steve Mouzon  
[www.mouzon.com](http://www.mouzon.com)



Floor Plan First Floor

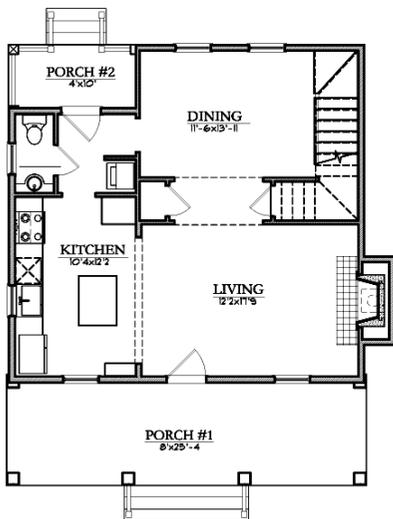


Floor Plan Second Floor

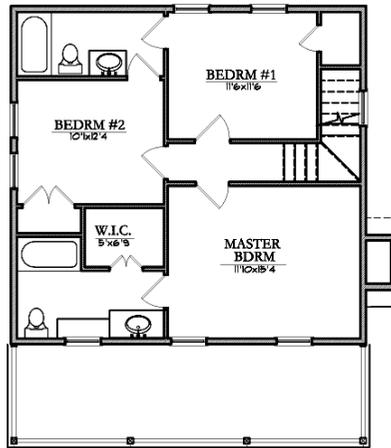


Sidewalk Elevation

**Single Family Detached House**  
 1730 sf (390 sf additional bedroom 4)  
 3 bedrooms  
 2.5 bathrooms  
 Architect: Eric Moser  
 info@moserdesigngroup.com



Floor Plan First Floor



Floor Plan Second Floor



Sidewalk Elevation

**Single Family Detached House**  
 1356 sf  
 3 bedrooms  
 2.5 bathrooms  
 Architect: Eric Moser  
 info@moserdesigngroup.com

# LANDSCAPE PATTERNS

There is good reason native Americans and the earliest European explorers of the north American continent found Louisiana and stayed here. It had many of the qualities of paradise—abundant food, fertile soil, waterways for transportation, timber for building. It still has perhaps the richest soil on earth, and the land has always been an important part of the economy, culture, and way of life. The subtropical climate and high humidity are ideal for growing cash crops and lush gardens. In fact, the landscape of South Louisiana is so fecund and diverse that generations of people have managed to subsist almost entirely from its produce, with a degree of self-sufficiency unparalleled in America.

As mentioned in the Community Patterns section, the earliest French system of land survey divided the land along the waterways such that each landowner had access to the natural resources needed for survival: a watercourse for transportation, the fertile agricultural soil formed by annual inundation and deposition, and the backswamp, source of timber for building and fuel, and rich hunting grounds. The very beginnings of the state were dependent upon an understanding of the natural systems and how they interrelated. This fertility and abundance of resources provided a major source of economic prosperity. The discovery of oil and gas meant that resources beneath the land’s surface were added to the list of reasons why the land was so important to the state. And despite changes in land use, the patterns of the landscape and its basis as the source of the state’s economy persist.

In considering landscape patterns for recovery these traditional relationships between people and the land are important to keep in mind. Several principles are central:

- >> A tradition of land stewardship and sustainable practice typified early agriculture. Recovery landscape practices must return to these roots.
- >> The landscape has always been viewed as multi-purpose, for beauty and for sustenance. That should be an ethic that informs the landscapes of recovery.
- >> The natural landscape had protective structures that have been degraded by human settlement. These can and should be replaced by design—wetlands, oak cheniers, etc.
- >> Life in the southern portions of Louisiana has always been lived as much in the landscape as inside houses. Boundaries between house and garden, shelter and landscape should be as seamless as possible.

## CIVIC LANDSCAPE ELEMENTS

Central location near waterway or community institution (church, courthouse)

Monument to history or culture

Flexible open space that accommodates a variety of celebrations

Shade trees and places to sit

## PRIVATE LANDSCAPE ELEMENTS

Outdoor rooms with spatial definition as extension of indoor space with a portion devoted to living/dining including room to cook, eat, and entertain

Celebration of seasonal change with plantings that feature flowers, fruit, foliage color, and texture

Shade and full sun areas

Opportunity for personal expression, experimentation, and “dabbling”



This drawing of the front garden of a New Orleans raised cottage shows a layout of long narrow beds planted uniformly. This formality is difficult to maintain in the semi-tropical climate of South Louisiana.



This drawing of a New Orleans side garden from the 19th century shows the use of street trees with ornamental tree guards and a fenced yard full of flowering shrubs and small trees.

# CULTURE AND ECOLOGY

## WHY PATTERNS MATTER

The view of South Louisiana from the air is green and wet, with sinuous lines of water coursing through the landscape. Visitors are astounded by the green, the scale of the ancient tree canopies and their shade, the extent of the wetlands, and the range of vegetation and wildlife that the landscape supports.

Despite incredible natural diversity, this landscape possesses a visual unity that makes it cohesive, that gives it the distinctive quality that those who live here recognize as home. It is these patterns, the repetition of certain elements and their arrangements in ways that have been repeated from generation to generation, that create the feel of the place that is so highly valued. The patterns occur at every scale, from the shape of communities to the design of individual home gardens. These qualities are the ones that residents of Louisiana want so dearly to recover and maintain in the rebuilding effort.

The rivers and its distributaries are the skeleton for the patterns. The long narrow lots of the French arpent survey system still line the water courses in the countryside. Alongside these rivers or bayous are winding roads lined with trees, typically live oaks. Sloping away from the road are house sites, often with outbuildings behind, surrounded by long and narrow fields of either sugar cane or other crops. Within this framework, the houses may have changed over time, the vehicles certainly have changed, but the larger picture has remained fairly constant for nearly two centuries.

Further to the west, approaching Texas, instead of arpent lots one finds either flooded fields of rice or crayfish, or green pastures. These prairie lands have been cattle lands since the earliest settlements in this region.

Because these patterns were based upon sound principles of environmental fit and resource conservation, they are critical to the rebuilding effort. As the landscape of Louisiana takes on the look of health and renewal, residents will be able to return to places that feel like home and know that recovery is happening for the long haul. For the larger community, a renewed landscape will show that Louisiana's environment is moving toward a healthier future.

Nature and culture are perhaps nowhere as entwined as in Louisiana. And because of the character of its early settlers—indigenous people, French, Spanish, African, and others—that connection has persisted into the present. European settlers selected landscapes that were similar to those of their homelands. The landscape still bears the mark of the cultures that created its initial shape (see previous discussion in the Community Patterns section).

These cultures have valued continuity and heritage and resisted change. Although there are obvious downsides to this conservatism, the landscapes have been the beneficiary. They remain distinctive in America, based on the patterns of the 18th and early 19th centuries. Within that framework, landscapes have evolved to meet the changing conditions of contemporary life. The larger patterns have given the landscape a sense of identity and visual unity that allows for a broad range of personal expression on individual properties.

Pressures from urbanization and the development of sensitive ecological zones, which accelerated during the past half-century, have destroyed much of the natural diversity of the region and upset its ecological balance. Agriculture and aquaculture have always been important to the state's economy and are basic to the cultural milieu of those who continue to settle the region (Vietnamese, Hispanic, Middle European). A return to the small-scale sustainable practices of these traditional enterprises can contribute to the restoration of the state's economy, ecology, and connection to the landscape.



Photos courtesy of Suzanne Turner



### GREEN BUILDING

#### Low-Impact Design Considerations

Follow the site's lead. Study its natural assets and systems (vegetation, drainage, topography) and feature them in the design; protect them during construction.

Utilize cultural patterns of "design with climate." Add recommended tree species as windbreaks, add deciduous trees on the west side of the home for passive solar protection, and encourage cross-ventilation in outdoor living spaces.

# CIVIC LANDSCAPE

The civic spaces within the study region of Louisiana are as varied as its communities. These civic spaces range from the formal Jackson Square of the Vieux Carré to a simple space centered on an ancient live oak and are the places where communities gather in celebration. Because people are drawn to the wetlands and waterways for recreation (boating, hunting, fishing, and trapping), many towns and villages may not have a specific square or designated civic space. In some locales, the community center is the Catholic church grounds (St. Martinville); in others, it may be the cemetery where preparations for All Saints' Day bring the community together. Some towns have traditional courthouse squares with historical monuments and tree-shaded paths. In places built along a river or bayou, the riverfront or levee is a promenade and park. In a fishing village, the dock where the blessing of the fleet takes place may be the equivalent of civic space.

## PARKS

The state's larger cities have urban parks, some dating from the 19th century, others from the depression-era work of the WPA, when federal relief programs provided American cities with public parks or their renewal (e.g., City Park in both New Orleans and Baton Rouge). Park systems in smaller communities are more recent and typically provide picnic areas, baseball diamonds, and sometimes tennis courts and/or a swimming pool.

## PLAZAS & SQUARES

Although Louisiana's European roots informed many of the region's cultural patterns, the concept of the plaza—an open, ceremonial public space—was not a typical element in town planning for most settlements except the earliest cities. Jackson Square, (originally Plaza d'Armes built in 1722 as a military parade ground and a forecourt for the cathedral) was not planted with trees until 1808. It was not until 1856 that it took its present form, with the addition of the monument and paths for promenading; today it is perhaps the paramount classical European square of America. Similar plazas were drawn in plans for Baton Rouge, but never built. Covington's early plan developed with a series of "ox lots," or open grazing spaces, that give the first part of the town a very distinctive pattern.

## STREETS

Primary considerations in the layout of streets have always been shade for pedestrians and provision for adequate drainage. Commercial streets were traditionally lined with galleries that extended from the storefronts and lined the streets. Streets have always been provided with regularly planted shade trees. Street trees of the 19th century are illustrated in early urban plans of the region and appear in the earliest photographs of southern Louisiana cities and towns. Trees were provided with wooden or iron tree guards to protect them from vehicles and animals; clearly, the trees were valued public amenities. Recent suburban streets lack consistent tree plantings and drainage is provided by underground storm systems.

## LEVEES

Levees were important places for communities because they were the locations for landings where passengers and goods were loaded and unloaded. In many cases, there was more traffic on the water than on roads since roads were often impassable due to inclement weather and mud. Ferry landings remain working landmarks along the Mississippi River between New Orleans and New Roads. Along bayous, the batture (back side) of levees is used for family vegetable plots because the soil is so rich. In other places, the batture is used for grazing cattle and horses. The linear character of the levees makes them natural sites for horseback riding and bicycle paths. Bonfires at Christmas time and fireworks at other holiday seasons take advantage of the levees' height to bring communities together for celebration.

## CANALS & WATERWAYS

Canals and waterways extend into many settlements as a seamless connection to the surrounding bayous and bodies of water. Many local communities are centered around the various forms of fishing or farming for crawfish and shrimp. This waterway system creates another interconnected network much like the streets of a town. Some canals are clearly "backyard" channels with no real commerce or active use while others provide a social environment and address.



Photo courtesy of John Welch

Central bandstand/pavilion gives this town square a sense of identity and harmony.



Monuments, whether historic or recent, give a space meaning and a sense of civic ownership.



Photo courtesy of John Welch

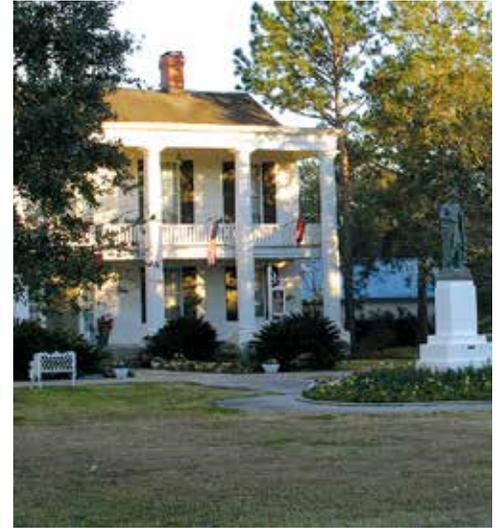
Churches (above) also play an important role in civic landscapes of South Louisiana. Churchyards are often used as recreational areas. In St. Martinville, (below) an ancient oak, purported to be the setting for Longfellow's poem "Evangeline," has become an important community gathering spot.



Awnings, signage, and plantings create a comfortable pedestrian-scale environment on this commercial street.



Open space in front of a civic building, eg., a courthouse, becomes the town center.



Antebellum plantations have become museum homes and have also become sites for fairs and community events.



Trees are important elements in most civic spaces of South Louisiana.

Photo courtesy of John Welch



These trees provide shade and scale to the sidewalk and the street.



The unity of materials and color in this urban square creates a sense of visual harmony.

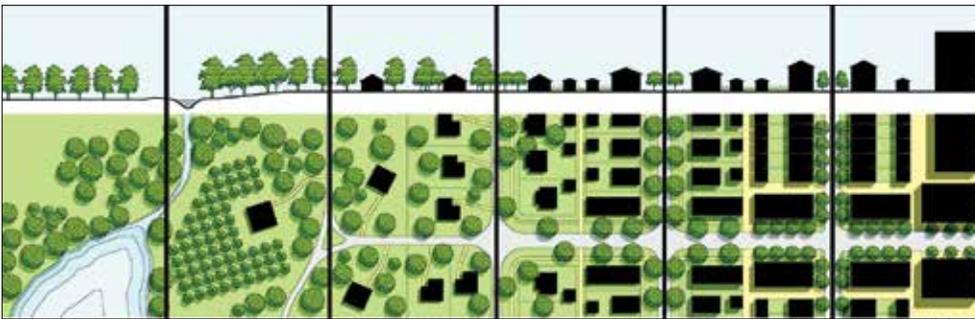


Planting in individual yards, and in the "neutral ground" between sidewalk and street create a streetscape with landscape character.

# DOMESTIC LANDSCAPE

The residential gardens of Louisiana are highly personal, almost idiosyncratic, and so the patterns should be seen as the “bare bones” or starting point from which a garden can grow, shaped according to the personal taste of the resident. What characterizes most Louisiana gardens, large and small, is that they are outdoor rooms, with areas of full sun so that flowers can be grown for seasonal bloom and with larger areas of dappled shade. The structure of these rooms is created either by plantings of evergreen shrubs as hedges or by fences or walls with shade trees or arbors as canopy. Plants typical of Louisiana gardens are a blend of natives from the indigenous forests or coastal plains, and a group of mostly Asian exotics that were imported to America in the early 19th century. These non-natives —azaleas, camellias, crape myrtles, Japanese yews, Japanese magnolias, sago palms—have become such a part of the look of the southern part of the state, that they are almost thought of as natives.

The public or street side of the home landscape tends to conform to the neighborhood norms; the private spaces are where personal expression reigns with spaces for pleasure and places for work often intermingled. Paved spaces—courtyards, patios, and terraces—are used as outdoor living and dining rooms. Water features, such as swimming pools, fountains, or ponds, are often included.



**T1** NATURAL ZONE      **T2** RURAL ZONE      **T3** SUB-URBAN ZONE      **T4** GENERAL URBAN ZONE      **T5** URBAN CENTER ZONE      **T6** URBAN CORE ZONE

This deep front yard with lawn (top right) and an ornamental tree is enclosed by a picket fence. This front garden in a sub-urban zone (bottom) features naturalistic patterns and a combination of lawn, shade trees, and curvilinear planting beds.



## T2 RURAL

The patterns for rural residential landscapes are consistent across the region, although the degree to which drainage is an issue varies. The typical residence is located near enough to the road to be convenient for mail and other deliveries and for the house to be seen, with a front yard deep enough to have a substantial front lawn. There is often a fairly deep ditch running along the front of the property. Unless the land is a very old home site, the front yard is typically open in character, perhaps with a pecan or other deciduous tree in the front yard, and a few shrubs as foundation planting. Seasonal bulbs and perennials, like amaryllis, surprise lilies, St. Joseph’s lilies, and crinum—passed lovingly from one generation to the next—are often planted in rings around trees, in lines along the drive, or naturalized in the front lawn. Driveways may be paved, gravel, or compacted soil. There may be an attached garage or carport. There may also be detached sheds to the side of the house and behind where small tractors, mowers, four-wheelers, tools, animal feed, and other things are housed.

Backyards are fenced when there are dogs in the family unless there is a kennel for hunting dogs located near the storage shed. Spaces for family meals, drying clothes, processing food from hunting trips, and other seasonal activities are also found in the back yard, with little or no formal arrangement. The back yard may simply extend into the pasture or fields surrounding the house. The same is true for side yards. The house essentially floats within a much larger land holding that may include acreage for agriculture, cattle pasture, or mown hay.

## T3 SUB-URBAN ZONE

Neighborhoods in the T-3 Sub-Urban Zone are typically based upon a curving pattern of street layout rather than the urban grid. Streets have a more irregular landscape, some have public sidewalks, but many do not. Lots are larger (up to 1/4-acre), with generous front and back yards. Planting is naturalistic, and building setbacks are relatively deep. Front yards are predominantly lawn, with one or more shade trees. Foundation plantings intended to hide the concrete slabs grow quickly, and often also obscure much of the front facade of the house.

Backyards are multi-purpose areas used for family entertaining, swimming pools, gardening, animal pens, boat storage, and other hobby-related activities. Specialty gardens, e.g., water gardens, tropical gardens, woodland gardens, and other themed plantings, can be accommodated. Side yards are used for circulation and storage, and for tree plantings to aid in passive energy conservation. Drainage for the entire lot is typically handled by underground drainage structures connected to a storm drainage system.

#### T4 GENERAL URBAN ZONE

These early urban suburb or planned neighborhoods are laid out on a grid; some are served by rear alleys or lanes leading to garages and utility areas. Streets have sidewalks, often tree-lined to create a tunnel of shade. Setbacks may be deep enough for small front yards or gardens, or they may be just deep enough to accommodate a porch. Plantings of blooming shrubs form borders along a property's edges. Foundation planting is not common and detracts from the lines and proportions of the architecture. Simplicity and restraint are hallmarks of these yards, typically dating from the 1920s, 30s, and 40s.

The back yards are not as deep as today's suburban lots, but large enough to accommodate a patio, planting borders, a small swimming pool, a doghouse, a tool shed or workroom, or other small outbuilding. Plantings are concentrated on the perimeter of the space, with the center forming the "room" for activity. Lawn or ground cover (when there is too much shade for grass) covers the unpaved portions. Side yards remain narrow, but may be generous enough for a small stroll garden, a greenhouse, or a potting shed, depending on solar orientation.



In this early suburb, (above) T-4 lots are narrow, and the streets and sidewalk are lower than the house; the house is reached by a series of steps set into the slope. This back garden (left) combines ornamental plantings with sculpture, adding interest and vitality.

#### T5-T6 URBAN CENTER AND CORE

These are typically narrow lots, with homes raised a few feet above grade, a shallow front yard, a public sidewalk, a front walkway leading to the front steps and a generous front porch or stoop. The front yard may be shaded by a large tree or an ornamental deciduous tree like a crape myrtle. These yards are often horticultural showplaces, featuring lots of seasonal color, or, in the case of a yard in full shade, plantings of evergreen materials in various foliage textures and shades of green. Foundation plantings are not necessary in these compact spaces, and block the flow of air beneath the house. Drainage can be handled in swales along side property lines sloping to the street, lined with gravel or designed as French drains (with a perforated pipe in the bottom of the swale).

The back yards are either walled courtyards (drained by runnels carved in the stone or formed of brick and leading to a drain), patios, or small gardens with an area of paving for a table and chairs. A barbeque and boiling area may be added if space allows. A fountain may be a focal point. Shade is provided by either a back porch, a large tree, or an arbor. A few fruit trees, particularly citrus trees, are often mixed with other shrubs and small trees if there is sufficient sun. Side yards are generally very narrow and used as alleys for service and utilities.



#### GREEN BUILDING

##### Low-Impact Design Considerations

Maintain and enhance vegetative cover using native plants to maximize groundwater percolation.

Utilize existing topography (minimize cut and fill).

Use surfaces that allow water infiltration, decreasing runoff and encouraging replenishment of groundwater.

Minimize pavement, gutters, drain inlets, underground piping, and other engineering infrastructure to achieve a low-tech engineering approach and reduce runoff and construction costs.

Retain runoff on-site in rain gardens, cisterns, and water features.

Use open, vegetated swales (bioswales) or French drains (gravel-filled trenches).

Minimize driveway length and width.

Add plantings that provide food for humans and wildlife.

# LANDSCAPE PLANS

Typical house lots within Louisiana neighborhoods range from small, detached houses on narrow lots, to larger lots found in the more rural or suburban settings. Gardens and landscape elements are treated differently in each type and often vary depending on the urban character of the community.

## NARROW LOTS WITH REAR ACCESS

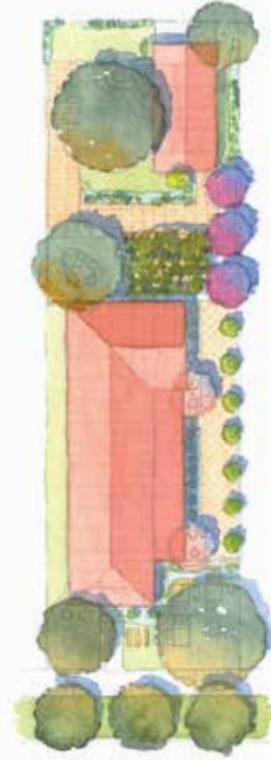
These lots are typically found in the most urban neighborhoods and are served by alleys. Often there is a narrow side yard that may be fronted by a gallery. This area will often be paved with small areas for planting beds, small trees, and tropical flowers. This side garden offers a way to the rear garden from the street.

Front yards are typically very shallow, often with low fencing to create a private zone. Galleries are raised and the front yard is planted with shade trees, hedges, various ground covers, and often exotic flowers for display to the neighborhood. The small backyards become more private terraces with shade trees and places for relaxing and entertaining.

## ATTACHED HOUSE LOTS WITH REAR ACCESS

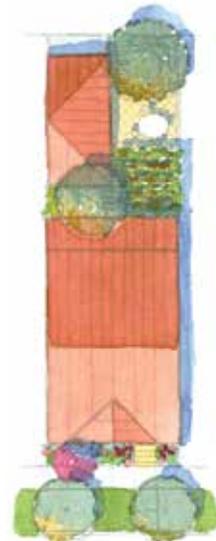
These lots are also found in the most urban neighborhoods and are served by alleys. There are many different types and usually, attached houses are built as two-unit buildings. Within main commercial and mixed-use districts, more continuous attached house forms may be found in the form of rowhouses or units above a ground floor shop. These houses typically front directly on to a broad sidewalk. Second-story balconies or galleries provide places for container gardens and flower boxes. Some attached houses will have small, shaded, and densely planted private terraces in the back of the house.

**NARROW LOTS WITH REAR ACCESS >>**



Small front gardens offer views for the neighborhood; low fences create semi-privacy (left). In a shallow, tight front yard (right), a rich display of foliage offers views from the porch and sidewalk alike.

**ROWHOUSE LOT >>**



Upstairs balconies, however small (left) provide important connection to the street and sidewalk below. An upstairs gallery (right) provides important shade for the pedestrians below, and for the entrance to the residence.



**COURTYARD LOTS WITH REAR ACCESS**

These lots are ideal for creating great public and private yard spaces in the Louisiana climate. The house wraps around a courtyard in the middle of the lot with a minimum front and back yard. This is the heart of the private space and has direct access from several rooms within the house. The courtyards are typically paved with brick or stone and have a series of container plants as well as garden areas. The courts are shaded by the house and by tree plantings to provide a cooler retreat from the heat. Front yards are typically very shallow, often with low fencing to create a private zone. Galleries are raised and the front yard is planted with shade trees, hedges, various ground covers, and tropicals.

**HOUSE LOTS WITH FRONT DRIVEWAY ACCESS**

These lots are also found in rural and suburban neighborhoods as well as urban. There are many different types and they usually feature generous front yards and rear yards. The best neighborhood lots of this type feature separate garages towards the rear of the lot with narrow drive lanes often divided by lawn. Backyard gardens are developed between the house and the outbuildings to create a compound. A formal walkway extends to the sidewalk at the street edge. The front yards are planted with hedges, shade trees, and flowers. The front gallery is often raised above the street level 2 to 4 feet to create a transition to the sidewalk and the civic realm. Front yards can also be shallow with denser planting to create a sense of privacy.

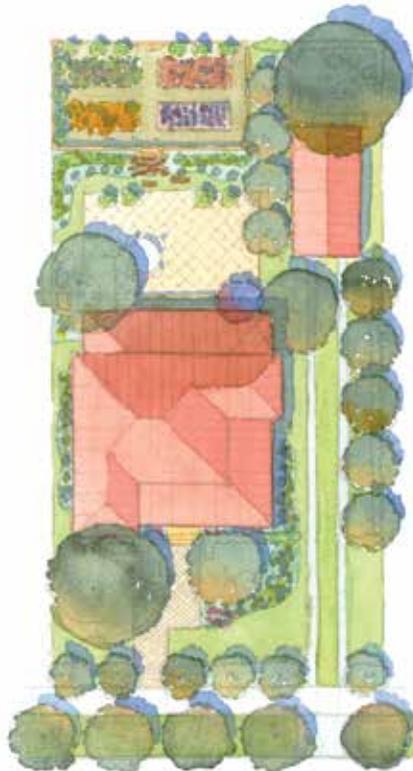
**COURTYARD LOT >>**



Front garden plantings include a traditional palette of evergreen shrubs, ground cover, and live oak (left). Courtyards (right) provide opportunity for a mixture of vines on trellises and arbors, container plantings, and protected tropicals.



**FRONT-LOADED LOT >>**



Front gardens create a continuous landscape edge along the street broken only by narrow driveways. A boulevard median with mature shade trees gives the neighborhood an established, parklike character.

# ELEMENTS AND DETAILS

## FENCES

Initially, fences were important for keeping horses and cattle from entering ornamental yards in urban neighborhoods. Today, they are more ornamental than anything else, but signal the edge of the private realm. The smaller the property, the more necessary the fence. Fences in the urban core separate small private yards from the public realm. A long tradition of iron fences exists in the region. Wooden picket fences were also used in urban contexts and were predominant in the countryside.

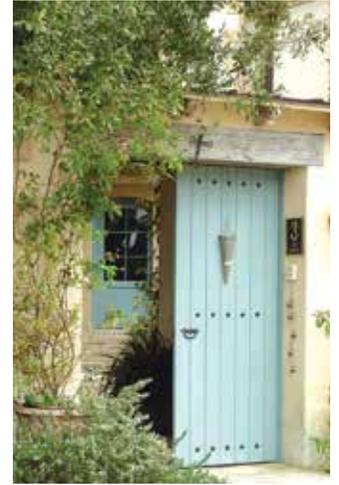
## WALLS

Masonry walls were an essential element in the early towns and cities of colonial Louisiana. They were used to extend the architectural walls to surround the entire property and to enclose the outdoor spaces used for recreation, work, gardens, and animal and carriage storage. Typically, the interiors of these spaces were paved with either brick, flagstone, or brick bats and oyster shells in order to keep feet dry. These first courtyard walls were very tall (10–14 feet) to keep intruders out. In the early suburbs, lower walls of brick or stucco were used to contain back yards and as a backdrop for shrub borders both within and without the wall. Often, a pierced brick treatment at the top of these walls provided cross-circulation and relief on hot summer days.

## MATERIALS

Materials traditionally used in the landscape consist of a combination of elements available nearby, and materials brought into the region early in its history that worked well, have persisted, and seem now to feel local. There is no local stone, except for gravel, in the state; therefore, stone for wall construction is not a traditional approach. Wood was abundant and was the predominant material for fencing except for high style residences and urban properties. Brick and major wall material was made from clay from the numerous local waterways. Exterior walls were either stuccoed or white-washed. Local sand and gravels were used for mortar mixes. Flagstone was brought into New Orleans as ballast during the port's boom years in the 19th century and was used as paving (since it was left in the city as ships were filled with cotton and sugar bound for European markets). So pervasive is its use, it has become accepted as a part of the local palette.

## EXAMPLES >>



Photos courtesy of Suzanne Turner



## WATER

The people of South Louisiana have an ambivalent relationship with water, and always have. Although common lore suggests that all courtyards were furnished with ornamental fountains, in truth, these iron focal points were an addition of the early 20th century. During the 19th century, water was something that there was too much of in courtyards—and it was usually contaminated. The goal was to remove it as quickly as possible. It was not until the late 19th century that the cause of yellow fever was found to be standing water and mosquitoes, but city-dwellers knew that there was something unhealthy about the city in the summer and had been fleeing to the country for decades. Despite their recent origins, fountains have become a generic furnishing for gardens in Louisiana, but water features without some form of aeration are not healthy. Because of the oppressive heat of the summer, the cooling potential of water is attractive to many; however, it is important to bear in mind that half of the heat's discomfort is caused by the very high humidity, making the presence of water not so attractive unless you are in it and it is cool.

## TEXTURES

Textures are an important aspect of landscape design, but particularly in an environment where there is dappled light or shade and the textural differentiations add contrasts and nuances to the landscape. The range of textures in the region's plant palette is very wide because of the coarse, bold leaves of the tropical and semi-tropical plants that thrive in the hot humid days of summer. The materials of the built environment are equally varied. Gravel from river and stream beds provides an infinite range of textures that are used as aggregate for concrete finishing as paving and wall finishes. The shells of oysters and other mollusks provide another textural element that can be used in the landscape to interesting effect.

## EXAMPLES >>



Photo courtesy of Suzanne Turner

# PLANT PALETTE

	Genus	Species	Common Name	Native (N) Hybrid (H) Intro. (I)	Evergreen (E) Deciduous (D)	Major Landform Regions
<b>Large Trees</b> for Shade and Street	Acer	rubrum	Red Maple	N	D	Terrace, Lowlands
	Acer	barbatum	Southern Sugar Maple	N	D	Terrace
	Carya	aquatica	Water Hickory	N	D	Terrace
	Magnolia	grandiflora	Southern Magnolia	N	E	Terrace
	Magnolia	grandiflora 'DD Blanchard'	'DD Blanchard' Magnolia	H	E	Terrace
	Magnolia	grandiflora 'Little Gem'	'Little Gem' Magnolia	H	E	Terrace
	Nyssa	aquatica	Tupelo Gum	N	D	Lowlands
	Nyssa	sylvatica	Black Gum	N	D	Terrace, Lowlands
	Pinus	glabra	Spruce Pine	N	E	Terrace
	Pinus	taeda	Loblolly Pine	N	E	Terrace
	Quercus	falcata	Southern Red Oak	N	D	Terrace
	Quercus	falcata v. pagodifolia	Cherrybark Oak, Swamp Red	N	D	Terrace, Lowlands
	Quercus	michauxii	Swamp Chestnut Oak	N	D	Terrace, Lowlands
	Quercus	nutallii	Nuttall Oak	N	D	Terrace
	Quercus	phellos	Willow Oak	N	D	Lowlands
	Quercus	shumardii	Shumard Red Oak	N	D	Terrace
	Quercus	virginiana	Southern Live Oak	N	E	Terrace, Lowlands
	Sabal	palmetto	Cabbage Palm	N	E	Terrace, Lowlands
	Taxodium	ascendens	Pond Cypress	N	D	Terrace, Lowlands
	Ulmus	alata	Winged Elm	N	D	Terrace
<b>Small Trees</b>	Aesculus	pavia	Red Buckeye	N	D	Terrace
	Cornus	drummondia	Roughleaf Dogwood	N	E	Terrace, Lowlands
	Crataegus	marshallii	Parsley Hawthorn	N	D	Terrace
	Halesia	diptera	Two-winged Silverbell	N	D	Terrace, Lowlands
	Ilex	vomitaria	Native Yaupon	N	E	Terrace, Lowlands
	Lagerstroemia	indica	Crape Myrtle	I	D	Terrace
	Persea	palustris	Swamp Redbay	N	E	Terrace, Lowlands
	Pistacia	chinensis	Pistachio	I	D	Terrace
<b>Shrubs</b>	Camellia	sasanqua	Camellia Sasanqua	I	E	Terrace
	Cyrilla	racemiflora	Titi	N	D	Lowlands
	Ilex	x attenuata 'East Palatka'	'East Palatka' Holly	H	E	Terrace
	Illicium	floridanum	Florida Anise	N	E	Terrace, Lowlands
	Itea	virginica	Sweetspire	N	D	Terrace, Lowlands
	Leucothoe	axillaris	Coast Leucothoe	N	E	Terrace, Lowlands
	Musa	spp.	Banana	I	D	Terrace, Lowlands
	Myrica	cerifera	Southern Wax Myrtle	N	E	Terrace, Lowlands
	Osmanthus	fragrans	Sweet Olive, Tea Olive	I	E	Terrace
	Rosa	spp.	Antique varieties	I	E	Terrace
	Sabal	minor	Dwarf Palmetto	N	E	Terrace, Lowlands
	Viburnum	nudum	Swamp Viburnum	N	E	Terrace, Lowlands
	Vitex	agnus castus	Chaste Tree	I	D	Terrace
	<b>Ground Covers, Ferns, and Perennials</b>	Aspidistra	elatior	Cast Iron Plant	I	E
Cyrtomium		falcatum	Holly Fern	I	E	Terrace
Liriope		muscaria	Liriope	I	E	Terrace
Ophiopogon		japonica	Monkey Grass	I	E	Terrace
Crinum		spp.	Crinum Lily	I	D	Terrace, Lowlands
Ginger		spp.	Ginger	I	D	Terrace, Lowlands
Iris		spp.	Iris	N & I	E	Terrace, Lowlands
Hemerocallis		spp.	Daylily	I	D	Terrace, Lowlands
Lantana		spp.	Lantana	N	E	Terrace
<b>Vines</b>		Campsis	radicans	Trumpet Vine	N	D
	Ficus	pumila	Fig Vine	I	E	Terrace, Lowlands
	Gelsemium	sempervirens	Carolina Jessamine	N	E	Terrace
	Rosa	spp.	Antique varieties	I	E	Terrace
	Trachelospermum	jasminoides	Confederate Jasmine	I	E	Terrace, Lowlands



Live Oaks



Banana Plant



Drake Elm



Pistachio



Rose Bush



Sweet Olive Tree



Southern Magnolia



Buckeye Tree



Rose



Little Gem Magnolia



Live Oak



Live Oak as Street Tree



Crape Myrtle

# GLOSSARY OF TERMS

**Acadian-Creole:** Descriptive term for an architectural style that blends French-Canadian, Spanish Colonial, and Caribbean influences in response to the local climate and inherited building traditions of the early settlers of the Gulf Coast.

**Accessibility:** Accessibility for people with disabilities is defined by building standards and codes that apply to new construction, renovations and additions made to existing buildings and facilities that are covered by non-discrimination laws. Accessibility provisions in the federal Americans with Disabilities Act, the Architectural Barriers Act, and the Rehabilitation Act, apply to public buildings and facilities and to 5% of the dwelling units in any federally funded program. The Fair Housing Act Amendments of 1988 cover all newly constructed multi-family projects and require a much larger percentage of accessible units but not the same level of accessibility required by the other federal laws. It is important to note that no federal accessibility law currently covers 1-, 2- and 3-family housing units, with the exception of a very small number (5%) that are built through federally funded programs. Contrast with "Visitability" which has fewer requirements.

**Apron:** A raised panel below a window sill.

**Arts & Crafts:** Eclectic movement of American domestic architecture in the arts and architecture during the second half of the 19th century and early part of the 20th century, emphasizing craftsmanship in a regional expression.

**Balustrade:** An entire railing system including a top rail, balusters, and often a bottom rail.

**Batten:** A narrow strip of wood applied to cover a joint along the edges of two parallel boards in the same plane.

**Beaded-Profile Panels:** Panels manufactured to resemble traditional bead board.

**Biodiversity:** The tendency in ecosystems, when undisturbed, to have a great variety of species forming a complex web of interactions. Human population pressure and resource consumption tend to reduce biodiversity dangerously; diverse communities are less subject to catastrophic disruption.

**Boxed Eave:** (boxed cornice): A hollow eave enclosed by the roofing, the soffit, and building wall.

**Brickmold:** Window or door trim, typically 2 inches wide.

**Building:** The complete, outfitted, and furnished 'Structure,' operational in every way, and ready for immediate occupancy and use.

**Classical Architecture:** The architecture of Hellenic Greece and imperial Rome.

**Classical Revival:** An architecture movement in the early 19th century based on the use of Roman and Greek forms.

**Colonial Revival:** The use of Georgian and colonial design in the U.S. in the late 19th and early 20th centuries.

**Corner Board:** A board which is used as trim on the external corner of a wood-frame structure.

**Cornice:** An ornamental molding at the meeting of the roof and walls; usually consists of bed molding, soffit, fascia, and crown molding.

**Crown Molding:** Projecting molding forming the top member of a cornice, door, or window frame.

**Dentil:** One of a band of small, square, tooth-like blocks forming part of the characteristic ornamentation of some classical orders.

**Doric Order:** The column and entablature developed by the Dorian Greeks, sturdy in proportion, with a simple cushion capital, a frieze of triglyphs and metopes, and mutules in the cornice.

**Fascia:** Vertical board that terminates a sloped roof at the eave.

**FEMA:** Federal Emergency Management Agency (<http://www.fema.gov>)

**Fenestration:** Any opening, or arrangement of openings, in a building (normally filled with glazing) that admits daylight and any devices in the immediate proximity of the opening that affect light distribution (such as baffles, louvers, draperies, overhangs, light shelves, jambs, sills, and other light-diffusing materials).

**Gable:** The vertical triangular portion of the end of a building having a double-sloping roof, from the level of the cornice or eaves to the ridge of the roof.

**Gable L:** Describes the massing of a house having a hipped roof with a projecting gable form at the front, typically two-thirds the width of the facade.

**Gable Roof:** A roof having a gable at one or both ends.

**Hipped Roof:** A roof which slopes upward from all four sides of a building, requiring a hip rafter at each corner.

**Home Energy Ratings Systems (HERS) Rating:** A HERS rating is an evaluation of the energy efficiency of a house, compared to a computer-simulated reference house (of the identical size and shape as the rated home) that meets minimum requirements of the Model Energy Code (MEC). The HERS rating results in a score between 0 and 100, with the reference house assigned a score of 80. From the 80 point level, each 1 point increase in the HERS score results in a 5 percent reduction in energy usage (compared to the reference house). Therefore, an ENERGY STAR qualified new house, that is required to be at least 30% more energy-efficient than the reference house, must attain a HERS score of at least 86.

**Insulating Concrete Forms (ICFs):** Rigid foam forms that hold concrete in place during curing and remain in place afterwards to serve as thermal insulation for concrete walls. The foam sections are lightweight and result in energy-efficient, durable construction. Visit [www.forms.org](http://www.forms.org) to learn more.

**Invasive Vegetation:** An exotic plant adapted to very similar growing conditions as those found in the region to which it is imported. Because such a species usually has no natural enemies (pests, diseases, or grazers), it flourishes, disrupting the native ecosystem and forcing out native plant species, resulting in habitat loss, water-table modification, and other serious problems.

**Ionic Order:** The classical order of architecture characterized by its capital with large volutes, a fasciated entablature, continuous frieze, usually dentils in the cornice, and by its elegant detailing.

**Jack Arch:** A flat or straight masonry arch.

**Knee Wall:** Short, vertical wall that closes off the low space created by a sloping ceiling and the floor.

**Leaders in Energy and Environmental Design (LEED):** LEED is a building environmental certification program developed and operated by the U.S. Green Building Council.

**Light:** A pane of glass, a window, or a subdivision of a window.

**Lintel:** A horizontal structural member (such as a beam) over an opening which carries the weight of the wall above it.

**Louver:** An assembly of sloping, overlapping blades or slats designed to admit air and/or light and exclude rain and snow.

**Low-E:** Most often used in reference to a coating for high-performance windows, the 'e' stands for emissivity or re-radiated heat flow. The thin metallic oxide coating increases the U-value of the window by reducing heat flow from a warm(er) air space to a cold(er) glazing surface. The best location for the coating is based on whether the primary heat flow you want to control is from the inside out (heating climates) or the outside in (cooling climates).

**Manufactured House:** A Manufactured House or "HUD-code" house complies with the 1976 Federal Manufactured Home Construction and Safety Standards Act. Manufactured houses are constructed on non-removable steel chassis and are generally placed on site in a more temporary manner, anchored to the ground without permanent foundations. Visit [www.mfghome.org](http://www.mfghome.org) to learn more.

**Massing:** The general form or shape of a building.

**Modular House:** Houses composed of multiple, factory-built units, or modules, that are up to 90% finished when shipped from the factory to the house site. Walls, floors, ceilings, stairs, and some interior work are built in a conditioned factory. The modules are individually shipped on flat-bed trailers to the site where they are placed by crane on permanent foundations. Mechanical, electrical, and plumbing are roughed-in at the factory and finished on-site. Visit [www.modular-housing.com](http://www.modular-housing.com) to learn more.

**Mullion and Muntin:** The vertical and horizontal members separating (and often supporting) window, doors, or panels set in series.

**Native Vegetation:** A plant whose presence and survival in a specific region is not due to human intervention. Certain experts argue that plants imported to a region by prehistoric peoples should be considered native. The term for plants that are imported and then adapt to survive without human cultivation is naturalized.

**Natural Cooling:** Use of environmental phenomena to cool buildings, e.g., natural ventilation, evaporative cooling, and radiative cooling.

**Passive Solar Design:** Designing a building's architectural elements to collect, store, and distribute solar resources for heating, cooling, and daylighting.

**Rafter Tails:** A rafter, bracket, or joist which projects beyond the side of a building and supports an overhanging portion of the roof.

**Roof Pitch:** The slope of a roof expressed as a ratio of its vertical rise to its horizontal rise.

**R-value:** Quantitative measure of resistance to heat flow or conductivity, the reciprocal of U-factor. The units for R-value are (ft<sup>2</sup> h °F)/Btu (English) or (m<sup>2</sup> °C)/W (SI or metric). While many in the building community consider R-value to be the primary or paramount indicator of energy efficiency, it only pertains to conduction, one of three modes of heat flow, (the other two being convection and radiation). As an example of the context into which R-value should be placed, 25% to 40% of a typical house's energy use can be attributed to air infiltration.

**Seasonal Energy Efficiency Ratio (SEER):** The Seasonal Energy Efficiency Ratio is the efficiency rating for air conditioning units. The higher the SEER rating, the better the energy efficiency. SEER is the ratio of the amount of BTUs used for cooling in normal annual use to the total amount of electrical power (measured in watts) over the same period.

**Shed Roof:** A roof shape having only one sloping plane.

**Shutter Dog:** A pivoting bar for fixing shutters in the open position against a wall.

**Side Gable:** Describes the massing of a house having the gable end (or roof ridgeline) perpendicular to the street.

**Side Hall:** Narrow residential house type that is one room wide, associated with French settlements and the Mississippi River region.

**Simulated Divided Light:** Refers to a light in a window sash that is visually subdivided by applied muntins and that simulates a true divided sash.

**Site:** The natural location intended for the 'Building,' altered, modified, and prepared to the point where 'Construction' activities for the 'Structure' can be initiated.

**Site Selection and Preparation:** That complete sequence or series of activities and actions that begins with the natural environment and results in some specific geographic location defined in terms of boundaries, and altered and modified to the point where it has become the building 'Site' ready for 'Construction' to begin.

**Skirting Board:** A board set horizontally at the bottom of wall cladding.

**Soffit:** The exposed undersurface of any overhead component of a building, such as a beam, cornice, lintel, or vault.

**Stile-and-rail:** Type of door construction that utilizes a framework of vertical and horizontal members infilled with panels.

**Structural Insulated Panels (SIPs):** High-performance building panels for floors, walls, and roofs in residential and commercial buildings. Each panel is typically made using rigid foam insulation sandwiched between two structural skins of oriented strand board (OSB), though other surface types are available. The result is a building system that is very strong, energy-efficient, and cost-effective. Visit [www.sips.org](http://www.sips.org) to learn more.

**Structure:** The completed building envelope on the 'Site,' externally and internally complete, including all operating systems ready for its interior furnishings.

**Sustainable:** The condition of being able to meet the needs of present generations without compromising those needs for future generations. Achieving a balance among extraction and renewal and environmental inputs and outputs, as to cause no overall net environmental burden or deficit. To be truly sustainable, a human community must not decrease biodiversity, must not consume resources faster than they are renewed, must recycle and reuse virtually all materials, and must rely primarily on resources of its own region.

**Tongue-and-groove:** Method of joining materials, usually wood, where a tongue or projection in one board fits the groove of its neighbor.

**V Zone:** (Velocity Zones): Areas within the floodplain subject to potential high damage from waves.

**Verge:** The edge projecting over the gable of a roof. Also, the area of planting, lawn or pavement between the sidewalk and the curb on a street.

**Vergeboard:** An ornamental board hanging from the rake, or verge, of a gable roof.

**Vernacular Architecture:** A mode of building based on regional forms and materials.

**Victorian Architecture:** Revival and eclectic architecture of Great Britain named after the reign of Queen Victoria (1837–1901); also its American counterpart which reached its zenith in the U.S. during the latter half of the 19th century.

**Visitability:** Unlike the more extensive features legally required by accessibility standards and codes, visitability involves a short list of features recommended for voluntary inclusion in virtually all new homes—single-family detached, row-houses, etc. Visitability features are those most crucial for people to remain in their homes if they develop an impairment, and to visit their neighbors as full members of the community. These features include at least one entrance without any steps on an accessible path at the front, side or back of the home, depending on topography; all interior passage doors providing at least 32 inches of clear passage space; and at least a half bath (preferably a full bath) on the floor served by the zero-step entrance that has minimum space requirements for access by a person who uses a wheelchair. Refer also to "accessibility" which has more extensive requirements.

**Vocabulary:** A collection of related architectural elements, materials, or stylistic conventions used to describe a building or structure.

**Water Course or Water Table:** A board or masonry projection fixed to the foot of a wall to shoot water away from it.

**Wetland:** In stormwater management, a shallow, vegetated, ponded area that serves to improve water quality and provide wildlife habitat.

**Window-to-floor Ratio:** The ratio of total, unobstructed window glass area to total floor area served by the windows, expressed as a percentage. This value can also be further subdivided by solar orientation (such as south-facing window-to-floor ratio).

**Wing:** a subsidiary part of a building extending out from the main portion or body.

**Zero Energy House:** Any house that averages out to net zero energy consumption. A zero energy house can supply more than its needs during peak demand, typically using one or more solar energy strategies, energy storage and/or net metering. In a zero energy house, efficiencies in the building enclosure and HVAC are great enough that plug loads tend to dominate and so these houses must have the added focus of high efficiency appliances and lighting.

# RESOURCES

- American House Styles.  
Baker, John 2002 Norton
- Identifying American Architecture.  
Blumenson, John 1995 Rowman & Littlefield
- The Visual Dictionary of American Domestic Architecture.  
Carley, Rachel 1997 Henry Holt
- A Manual for the Environmental & Climatic Responsive Restoration & Renovation of Older Houses in Louisiana.  
Cazayoux, Edward Jon 2003 Louisiana Department of Natural Resources, Technology Assessment Division, Energy Section
- The Grammar of Architecture.  
Cole, Emily 2002 Bullfinch
- Building Green Without Going in the Red.  
Curtis, Kathleen and Roberta Chase 2004 Citizen's Environmental Coalition
- Louisiana Architecture 1820–1840.  
Daspit, Fred. 2005 The Center for Louisiana Studies, University of Louisiana
- Louisiana's Antebellum Architecture.  
Desmond, John 1970 Claitor's Publishing Division
- Gardens of New Orleans: Exquisite Excess.  
Douglas, Lake and Jeanette Hardy 2001 Chronicle Books
- Louisiana's Remarkable French Vernacular Architecture.  
Edwards, Jay D. 1988 Fred B. Kniffen Cultural Resources Laboratory Monograph Series No. 1, Department of Geography and Anthropology, Louisiana State University
- Louisiana Architecture: A Handbook of Styles.  
Fricker, Jonathan 1998 University of Southwestern Louisiana
- A Creole Lexicon: Architecture, Landscape, People.  
Edwards, Jay and Nicolas Kariouk 2004 Louisiana State University Press
- Raised to the Trade: Creole Building Arts of New Orleans.  
Hankins, Jonn, ed. 2002 New Orleans Museum of Art
- Buildings of Louisiana.  
Kingsley, Karen 2003 Oxford
- Clues to American Architecture.  
Klein, Marilyn W. and Fogle, David P. 1986 Starrhill Press
- Architecture of the Old South.  
Lane, Mills 1993 Abbeville Press
- Architecture of the Old South: Louisiana.  
Lane, Mills 1997 Beehive Press
- The Gardens of Louisiana: Places of Work and Wonder.  
Meck, An. and Suzanne Turner 1997 Louisiana State University Press
- A Field Guide to American Houses.  
McAlester, V. & L. 1984 Random House
- Classic New Orleans.  
Mitchell, William R., Jr. 1993 Martin-St. Martin Publishing Company
- Southern Plants for Landscape Design.  
Oldenwald, Neil and James Turner 2000 Claitor's Publishing Division
- Louisiana Buildings 1720–1940.  
Poesch, Jessie and Barbara SoRelle Bacot, eds. 1997 Louisiana State University Press
- What Style Is It? Poppeliers, John 1977 John Wiley & Sons
- Vestiges of Grandeur: The Plantations of Louisiana's River Road.  
Sexton, Richard 1999 Cronicle Books
- Traditional Details for Rehabilitation and Reconstruction.  
Ramsey, C. & Sleeper, H. 1998 John Wiley & Sons
- A Concise History of American Architecture.  
Roth, Leland 1980 Westview Press
- The New Orleans Garden: Gardening in the Gulf South.  
Seidenberg, Charlotte 1993 University Press of Mississippi
- New Orleans Style: Past & Present.  
Sully, Susan 2004 Rizzoli
- Historic Buildings of the French Quarter.  
Vogt, Lloyd 2002 Pelican Publishing Company
- New Orleans Houses: A House-Watcher's Guide.  
Vogt, Lloyd 1992 Pelican Publishing Company
- American Homes, An Illustrated Encyclopedia of Domestic Architecture.  
Walker, Lester 1996 Black Dog & Leventhal
- The American Vignola.  
Ware, William R. 1994 Dover
- The SmartCode, a product of Duany Plater-Zyberk & Company (DPZ), is available at: <http://www.placemakers.net/info/smartcode.html>
- Prints & Photographs Online Catalog—Historic American Buildings Survey/Historic American Engineering Record (HABS-HAER) Collection: <http://lcweb2.loc.gov/pp/hhquery.html> (search "Louisiana," "houses," and "drawings")
- Home Builder's Guide to Coastal Construction Technical Fact Sheet Series (FEMA 499) available at: [http://www.fema.gov/rebuild/mat/mat\\_fema499.shtm](http://www.fema.gov/rebuild/mat/mat_fema499.shtm)
- Building Your Louisiana Home: Homeowners' Guide to Shaping the Future for Louisiana Living.  
Reichel, Claudette, Ann Berry and Pat Skinner 2005 Louisiana State University AgCenter.  
This guide is a comprehensive planning and analysis tool to assist homeowners in Louisiana to find information on advantageous components of a sustainable house in Louisiana. It outlines a range of low-cost options to higher-end, higher-performance solutions, and basic principles of building science that should be considered when choosing and installing any building system or technology in a hot-humid or mixed-humid climate. Download: <http://www.lsuagcenter.com/NR/rdonlyres/0DF04281-3A2F-45B5-ADDA-B85AAEED74CC/10859/FULL.pdf>
- My House, My Home.  
Louisiana House Home and Landscape Resource Center. LSU AgCenter.  
Whatever its style or age, your home can be more sustainable—able to meet your needs today, tomorrow and years from now—while being kind to the environment and a great investment. Whenever you build, remodel or restore a home, make it more: Energy Efficient and Comfortable; Termite Resistant; Wind Resistant; Flood Resistant; Mold and Decay Resistant; Healthy; Convenient. [www.louisianaHouse.org](http://www.louisianaHouse.org) [http://www.lsuagcenter.com/en/family\\_home/home/la\\_house/my\\_house/index.htm](http://www.lsuagcenter.com/en/family_home/home/la_house/my_house/index.htm)
- Sustainable Buildings Industry Council (SBIC) Clearinghouse for whole building design, product information, professional training, consumer education, and analytical tools: [www.sbicouncil.org](http://www.sbicouncil.org)
- City of New Orleans' Vieux Carré Commission regulates all demolition, new construction, and additions or alterations to existing structures in the French Quarter. Similar activities in 13 other locally-designated historic districts in New Orleans are regulated by the New Orleans Historic District Landmarks Commission and the CBD Historic District Landmarks Commission. These three commissions offer detailed guidance on virtually every aspect of building in historic districts—in effect, a New Orleans-specific Pattern Book. You can access the resources available from all three of these commissions at [www.cityofno.com](http://www.cityofno.com).
- Preservation Resource Center of New Orleans maintains a typology of vernacular and historical building types particular to and characteristic of the city at [www.prcno.org](http://www.prcno.org). The PRC also details which building types are typically found in which of New Orleans' 17 National Register Historic District neighborhoods. These cover an area larger than the city's designated historic districts, including much of the land area developed prior to the 20th century.

# PARTICIPANTS

Sandy Avery	Charlie Forman, III	Bill Porter
Griff Blakewood	Frank Neelis	Don Powers
May Rose Bourgeois	Gail Gaienne	Pat Raaz
David Breaux	Tim Gaines	Kathleen Randall
Jim Brewer	George Gele	Trula Remson
Elizabeth Brooks	Brian Goad	Bob Rivers
Alvin Broussard	Brace Godfrey	Drew Sachs
Jim Broussard	Les Gomez	Kristin Sanders
Dana Brown	Lenny Kopowski	Jerry Self
Patrick Buckley	Jim Landry	William Smith
Rex Cabaniss	Grayling Hadnott	Lisa Smith
Leslie Campbell	Keith Hardy	Kyle Sullivan
Mr. and Mrs. Dwayne Carruth	Sharita Harris	Cherry Talbert
Pat Cave	Julie Harris	Christopher Toombs
Karen Chenevert	Nick Hernandez	James E. Touns
Corinne Chocolaad	Howard Hershberg	Phil Tullis
Ferrill Ann Coates	Bill Hogan	Susan L. Turner
Kathi Cowen	K.W. Holleman	Melvin H. UnKraut
David Craig	Greg Holmes	Jim Van Dyck
David R. Crais	Bobby Johnson	Aharon Varady
Miriam Davey	Kenneth W. Jones	Leo Verlander
James E. Davidson	E. Ray Kothe	Kolleen Verlander
Michele Deshotels	Jim Landry	Keith Villere
Paul Doherty	Les Gomez	Pamela Wall
Roy Domangue, Jr.	Janice Macomber	Marguerite Walter
Anne Dunn	Larry Manuel	John Welch
Shannon Dupont	Mr. & Mrs. Jim McCurry	Jeff White
Elizabeth English	Stan McGee	Allen Woolwich
Stephanie Eugster	Corey Miller	Kyle Zeringue
Lynda Evans	Yolanda Mills	
Jason D. Faulk	J. Dyke Nelson	
Christophor Faust	Jarod Newton	
Kevin Finch	James Noel	
Sidney Fontenot	Cindy O'Neal	
Patrick W. Forbes	Jim Porter	

## CONSULTANT TEAM

Urban Design Associates  
Jonathon Rose Companies, Inc.  
Enterprise Community Partners, Inc.  
Plus One Design + Construction  
Michael Desmond Ph.D.  
Jay Edwards Ph.D.  
Steve Oubre, AIA  
Katie Swenson  
Suzanne Turner, FASLA  
John Welch, RLA  
Sid Gray

OTHER CONTRIBUTORS:  
Elizabeth English, Ph.D.  
Andrew Sachs  
Michael Sartisky  
Hill Memorial Library, Louisiana State University

Design: Wolfe Design, Ltd.  
Editor: Karen Levine

Four complementary initiatives are an integral part of the Louisiana Speaks program for the recovery of South Louisiana.

**THE PARISH RECOVERY PLANNING PROCESS** engaged citizens actively in developing their vision, goals, strategies, and a list of high priority, high impact projects to jump start the recovery in their area.

A series of three demonstration **PLANNING CHARRETTEs** was conducted by Duany Plater-Zyberk & Company in three separate locations that have distinctly different urban conditions.

**A REGIONAL PLANNING PROGRAM**, led by Calthorpe Associates, undertook the development of a long-term vision for Louisiana.

**THE LOUISIANA SPEAKS PATTERN BOOK** and **TOOL KIT**, developed by Urban Design Associates, form the bridge between these initiatives. These two documents present tools and techniques from both the planning charrettes and the regional vision processes in a form that can be used by communities throughout the state for both rehabilitation and new construction.

For more information on the Louisiana Speaks program for the recovery of South Louisiana visit [www.louisianaspeaks.org](http://www.louisianaspeaks.org)