A GUIDE TO MAINTAINING YOUR MID-CENTURY MODERN HOME











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Michael Fleenor. Director of Preservation Services
Shannon N. Cilento. Keithley Historic Preservation Intern

Cleveland Restoration Society
3751 Prospect Avenue
Cleveland. OH 44115-2705
www.clevelandrestoration.org
Telephone (216) 426-3109
Facsimile (216) 426-1975

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ABOUT THE CLEVELAND RESTORATION SOCIETY

Founded in 1972, the Cleveland Restoration Society (CRS) is the largest non-governmental regional historic preservation organization in Ohio and a Local Partner of the National Trust for Historic Preservation. The Society has an operating budget of $1.1 million, an engaged board of trustees, 12 staff positions, and a headquarters in Cleveland.

CRS's mission is to use the powerful tool of historic preservation to revitalize our diverse communities, strengthen the regional economy, and enhance the quality of life in northeastern Ohio. We focus on the following strategies:

- Creating vibrant, high-value neighborhoods in key historic areas
- Encouraging the preservation of Cleveland's greatest landmarks
- Advocating for preservation-friendly public policies
- Celebrating and communicating the positive role of preservation

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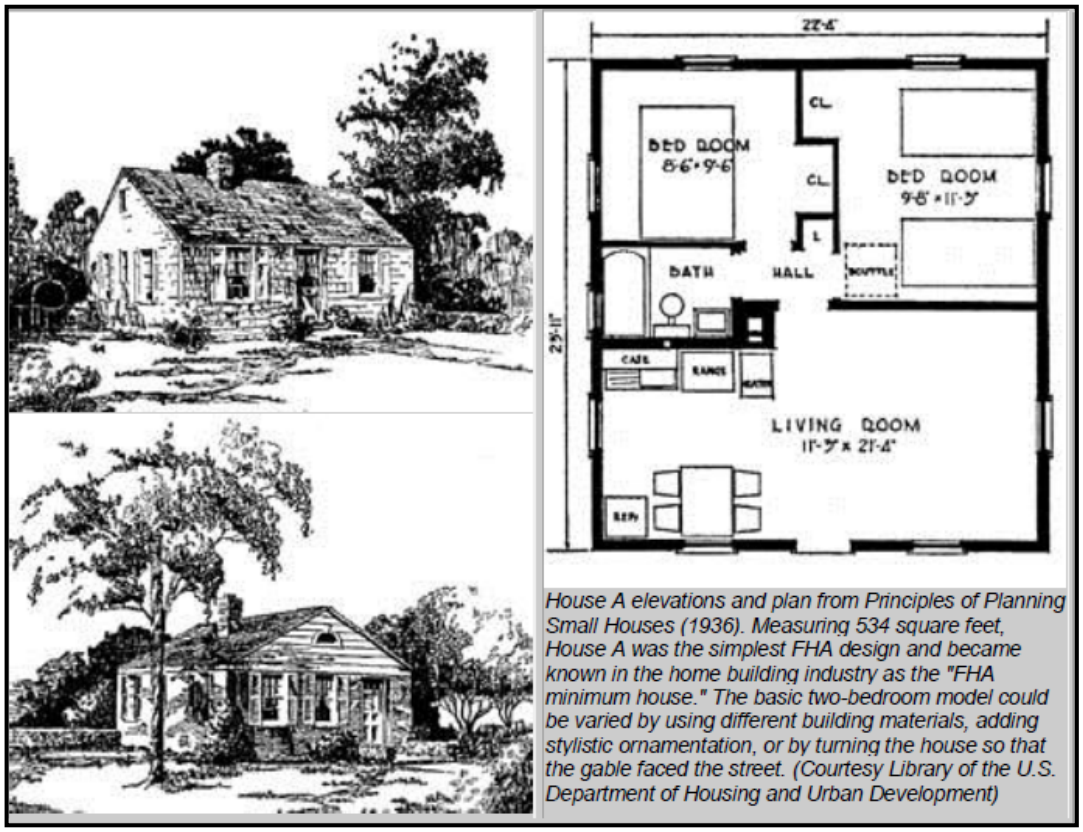
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Introduction

In the middle of the twentieth century, especially after World War II, the United States saw dramatic growth in both population and housing demand. At the close of the war, over twelve million men and women came home to the United States, dreaming of a quiet, comfortable life in the suburbs. Due to the GI Bill, the veterans had access to insured mortgages and low interest rates, allowing them to buy their own homes, but homes to purchase were in short supply. Housing construction had been down during the Great Depression, and building materials unavailable during the war years.

In 1940, the Federal Housing Administration published the *Principles of Planning Small Houses*. This guide was utilized greatly after the war when housing needed to be built quickly and economically to house the veterans and growing families of the Baby Boom era (1941-1961). These principles became the standard canon for small house construction, however, individual architects would integrate their own style into the design, allowing for variation in housing. The plans were intended to be adaptable and emphasized livability and privacy, appearance, and low construction cost. The single-story nature of the homes allowed for efficiency and economy in utilities such as plumbing and heating as well. "The purpose of this booklet is to show how these principles may be applied to a few basic plans and the plans adjusted or varied to meet individual requirements, desires, or conditions," the FHA guide explained.



House A elevations and plan from Principles of Planning Small Houses (1936). Measuring 534 square feet, House A was the simplest FHA design and became known in the home building industry as the "FHA minimum house." The basic two-bedroom model could be varied by using different building materials, adding stylistic ornamentation, or by turning the house so that the gable faced the street. (Courtesy Library of the U.S. Department of Housing and Urban Development)

Between 1946 and 1964, the country also saw the "Baby Boom," a time when birth rates grew at an unprecedented rate. This growth in families also supported the movement to the suburbs and outskirts of cities, as cities were annexing smaller towns to increase their land sizes. Because of these factors, the United States saw the rise of the suburb. Originally, these suburban areas were filled with 1 ½ story Cape Cod and Minimal Traditional-style houses, but by the 1950s ranches and split-levels predominated. In addition to supporting suburban development through the Federal Housing Administration, the government's Federal Highway Act of 1956 spurred the nationwide development of highways, making it the new norm to commute from the suburbs into the city for work.

More information about midcentury development in northeastern Ohio can be found in *Mid-20th Century Architecture and History Reconnaissance Survey: Cuyahoga County Urban County Communities*, prepared by the Cuyahoga County Planning Commission, 2016.

By the 1940s, the changing population dynamic, fueled by a desire for new housing and aided by infrastructure improvements and greater access to transportation, ushered in a wave of land use, design, and housing changes that swept the nation. As discussed in the National Register Bulletin Historic Residential Suburbs, Guidelines for Evaluation and Documentation for the National Register of Historic Places, "during the 1940s, the average population of core cities increased 14 percent while that of the suburbs increased 36 percent. For the first time, the absolute growth of the population residing in suburbs nationwide, estimated at nine million, surpassed that of central cities, estimated at six million.



New homes on E. 174th Street, south of Tarkington Avenue, 1960. Photograph courtesy Cleveland State University, Michael Schwartz Library, Special Collections.

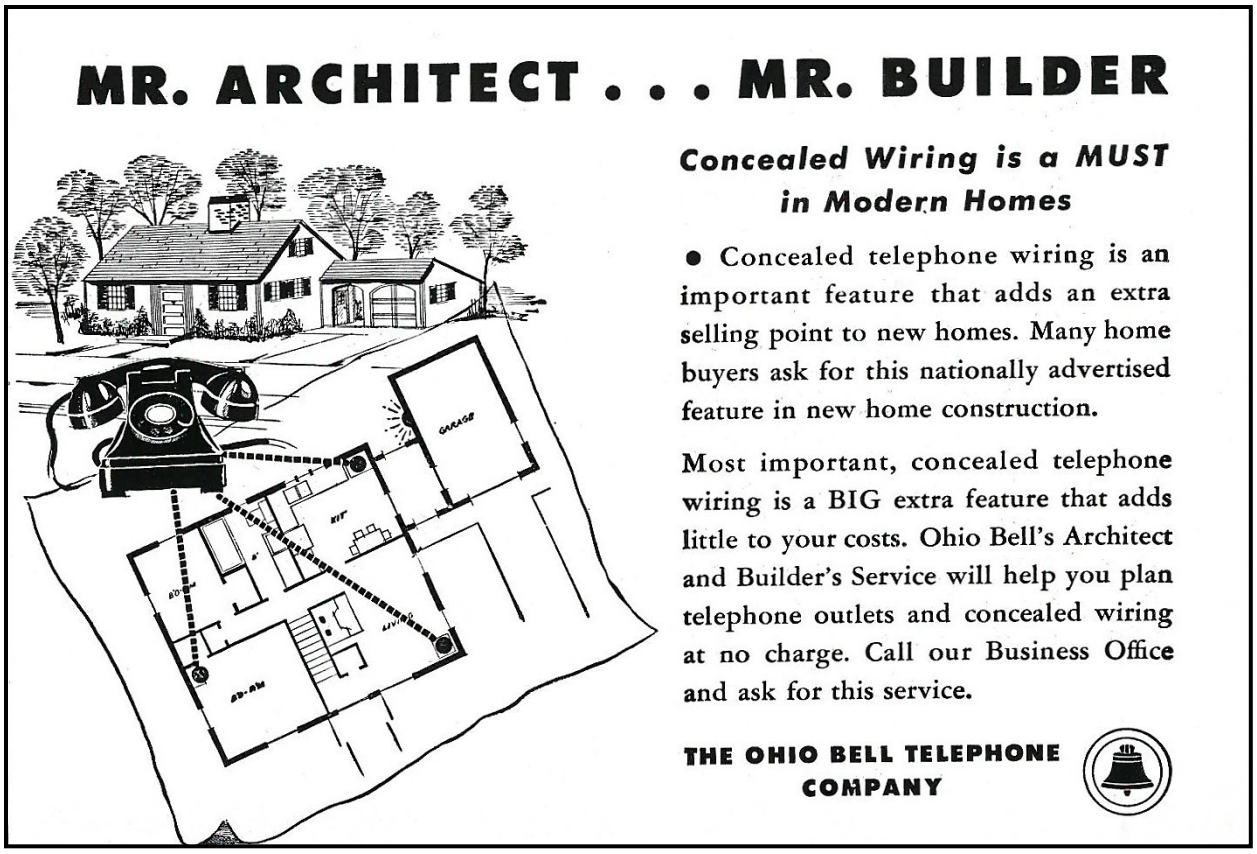
This trend continued, and in the 1950s, the population of suburban areas increased by 19 million compared to an increase of six million in the core cities. This growth signaled the post-World War II suburban boom. By 1960, a greater number of people in metropolitan areas lived in the suburbs than in the central city…."

Generally, the development history of Cuyahoga County has occurred in three distinct phases. The first phase, in the City of Cleveland and adjacent first ring suburbs, had a significant amount of development prior to 1940. In this phase, the spread of population within Cleveland and to adjacent suburbs was facilitated by the expanding streetcar network on arterial roads

The second phase, during the 1940s, 1950s, and 1960s, had a significant amount of development in the second ring of suburban communities. This phase of development coincided with the domination of the road network by automobiles, as many of the County's roads were widened, improved, and new segments built to add capacity and improve traffic flow. The third and final phase, the 1970s through the first few years of the 21st century, had a significant amount of development in the outermost suburban communities of Cuyahoga County, which also extended into communities in adjacent counties. The third phase was influenced by the completion of the interstate highway system in Cuyahoga and adjacent counties during the 1970s, where interchanges markedly improved access to the outermost communities in Cuyahoga County, as well as adjacent counties.

Narrowing the analysis from building construction by decade to residential housing unit construction in two time periods – 1939 or earlier and 1940 to 1969 – clearly shows the shift outward from Cleveland. By 1939, it was common for more than 60% of housing units, or even more than 80%, to have already been built in many areas of Cleveland or the first-ring suburbs. From 1940 to 1969, that wave of new construction moved to the second ring of suburbs.

In the City of Cleveland, mid-century architecture can be found in the outer limits of the City. To the west, large ranches were built along Lake Avenue and Edgewater Drive in Edgewater, in large tracts in Bellaire Puritas and Westown and interspersed with older neighborhoods in Kamm's Corner and Riverside. To the South, there are mid-century neighborhoods near the Zoo along the Metro Parks and bordering Parma. To the east, mid-century apartment buildings and a few neighborhoods were built along Lakeshore Boulevard in North Collinwood. In Lee-Harvard, perhaps the most intact collection of single-family homes, apartment buildings, schools and churches from the period form a "suburb in the City."



From *Homes and the Growth of Cleveland*, The Cleveland Real Estate Board, 1952.

The suburban small homes of the mid-century post-war era came to represent the "American Dream." Popular magazines touted the small home as the best and even fashionable. The house evolved from a place to sleep and eat into a social space. An emphasis was placed on the backyard as an area for social gatherings and quality family time. The small ranch and Cape Cod home in their suburban neighborhood setting is a physical representation of mid-century ideals, values, and design, which is why their preservation is so important.

The purpose of this guide is to educate homeowners on the character-defining features of their midcentury homes, as well as the routine maintenance and repair of those features. The following guidelines are suggested methods that fit a broad array of conservation situations, but it is important to assess your home's needs on a case-by-case basis to determine which treatment is best.

Architectural Types vs. Styles

Architectural ***type*** and ***style*** are categories that provide information about a structure retrospectively. They group buildings based on past trends and available resources. A building's functional features define its type and its aesthetic features identify its style. In a sense, the relationship between the two is like a paper doll: the type is the doll itself while the style is the dress that can be clipped on it. Certain architectural types and styles are location-dependent, such as the Cleveland Double type. However, the proliferation of mail-ordered houses and their catalogues in the mid-19th century caused certain designs and styles, such as Colonial Revival, to spread on a national scale.

Architectural Type (Functional)	**Architectural Style (Aesthetic)**
♦ Defined by a building's ◊ Function ◊ Floor plan ◊ Height/Number of stories ◊ Chimney location ◊ Roof shape ◊ Window and door arrangements	♦ Defined by a building's ◊ Gables ◊ Dormers ◊ Roof orientation ◊ Ornamentation ◊ Window and door shapes
♦ Helps to determine when or why that structure was built, even in the absence of decoration	♦ Helps to determine the origin of the structure, e.g. whether it was ready-made or custom-made, helps to date the building
Examples: ♦ Cape Cod ♦ Split Level ♦ Ranch	Examples: ♦ Colonial Revival ♦ Minimal Traditional ♦ Contemporary

Next page: Top: Both homes are of the Ranch Type; The upper is a modern style, while the one below has elements of the Colonial Revival style: pilasters and coach lights flanking the door, shutters, a bay window, and dormers. Bottom, these homes in the Moreland Neighborhood of Shaker Heights are no discernable Type, but of the Minimal Traditional style.







Mid-Century Architectural Types:

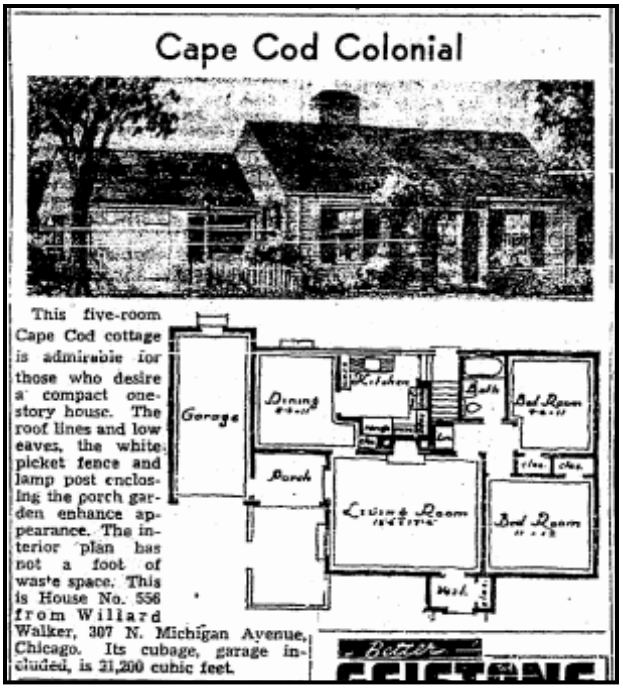
Cape Cod

Although the Colonial Revival was popular throughout the early 20th Century, the Cape Cod Revival did not become popular until the 1920s. *Cape Cod* references vernacular hall & parlor houses built by Colonists in New England and the Virginia Tidewater in the 17th and early 18th centuries. Original New England Capes had steep roofs, but typically lacked dormers. They were often shingled and left unpainted. These cottages varied in width and could be symmetrical or asymmetrical. The type was adapted in the 1920s by Boston architect Royal Barry Wills and the widely promoted *Modern Homes* catalogs distributed by Sears Roebuck. Sears promoted the Cape Cod throughout the 1930s in designs such as The Stanford and The Carver—both small, symmetrical, and lacking dormers—to The Gordon, The Attleboro, The Warren, The Milford, The Colebrook and The Branford—larger and featuring dormers, side porches and attached garages.

The Cape Cod's small scale and simplicity, as well as its picturesque associations with the Colonial past, made it especially popular with builders and buyers after the Second World War. Whereas the original Capes may have been embellished with Greek Revival details such as frieze boards, sidelights and corner pilasters, the mid-20th century revival was simpler, yet still had simple side gables and false shutters.

The Cape Cod type was more closely identified with Post-War housing developments after William and Alfred Levitt developed Levittown, Long Island starting in 1947. Initially, the Levitts built only Cape Cod type houses. The Levitts used construction methods developed to facilitate the war effort. Using an assembly line method, workers focusing on a particular task moved from house to house in the development. Using standardized, pre-fabricated components, these homes were built inexpensively and quickly. Built upon a poured concrete slab, each Cape followed the same basic internal plan with one entering into the combined Living Room/ Dining Room with an open kitchen. The bathroom was behind the kitchen—consolidating plumbing—and two bedrooms took up the rear of the house.

In the early 1950s, Cape Cods might be built with metal casement windows, added carports and garages, or aluminum or asphalt siding. By the mid-1950s, the popularity of the Cape waned as the Ranch became a more popular and adaptable type.



***Cleveland Plain Dealer*, 2-22-1942**

Cape Cod



Moreland Neighborhood, Shaker Heights, OH

Gable roof—often with dormers

1 ½ story

False shutters (Sometimes paired with casement windows)

Clapboard, brick or aluminum common

Simple stoop. Door may be center of façade or off-center

Ranch

The Ranch House is by far the most popular housing type in the Post-World –War II era. Based on a distinctive nineteenth-century frontier vernacular architecture of California and the American southwest, the modern Ranch house was developed and refined in the early decades of the Twentieth Century. Developer Cliff May (1909-1989), whose extended family owned the Casa de Estudillo, designed and built more than fifty suburban Haciendas and Ranchieras in the San Diego area., beginning in 1932. May sought to promote a casual, family-oriented and open home that was connected to the landscape around it. Articles in *Sunset* magazine and *The Architectural Digest* brought regional and national exposure to May's ranch house designs during the 1930s. These early ranches were generally one-room deep, had a low roof and deep eaves, were somewhat austere from the street, but open and bright at the rear, with rooms looking out to or opening onto backyard courtyards and patios.

While ranch houses may change somewhat by regional taste, Modern and Colonial sub-styles are most common. The architect Frank Lloyd Wright influenced the design of the Ranch house, especially those built in the late 1950s and early 1960s. Wright's "Usonian" houses, affordable and functional houses constructed in the 1930s, set the pattern for later Ranch house designs—they had open living spaces and zoned bedroom spaces; their massing was low to the ground and emphasized their horizontality; their fenestration often presented a screen to the street, but an openness to nature through generous windows directed toward the private backyard. Usonian houses also presented a radically "modern" appearance that emphasized the connection to the natural surroundings.

Overall, there are several characteristics of the ranch house, as defined by author Allen Hess in the book, *Ranch House* (Harry N. Abrams, Inc. New York, 2004):

- *A one-story house with a low pitched, gabled, or hipped roof with wide eaves;*
- *A house of general asymmetry;*
- *A house with a general horizontal emphasis;*
- *An open-interior plan blending functional spaces;*
- *A house with a designed connection to the outside;*
- *A house with informal or rustic materials or details;*
- *A house whose plan is rambling and suggestive of wings and additions.*

In the early 1950s, the Levitts started building ranch houses, which was what they were building predominantly by 1955. Nationally, the ranch house became the central building type of suburban tract house developments because of its affordability and flexibility.

The ranch house remained popular until the early 1980s, when rising land and energy prices as well as changing tastes made two-story houses on smaller lots the preferred style.

Ranch



Myrtle Avenue, Arthur Bussey Historic District, Cleveland, OH

Ranch



Forest Hills, East Cleveland, OH

Split-level

In the mid-1950s, a new house type began to gain prominence. Often resembling a typical two-story Colonial, the split level had a two story wing with bedrooms over a recreation room and/or garage and a one story wing for the Living and Dining Room. The entrance might even be on an intermediate level. Introduced in the mid-1930s by the Sears, Roebuck & Company's Modern Homes catalog, the type did not catch on nationally for twenty years. As families grew, many of the earlier tract ranches were not sufficient. The cost of land also inceased, making the economical use of multiple levels separated by half flights of stairs attractive to developers. Split levels also took advantage of uneven lots where ranches would be difficult to build.

Split levels were typically a mixture of siding materials, with brick on the lower level and Clapboard, shingles, or vertical siding on the higher section. They typically had no true basement, but might have a recreation room next to or instead of a garage. Buyers also liked the fact that the split level separated the home into zones: the den or recreation room where a television would be found was in the lower section of the house; The living room/dining room combination and kitchen were in an intermediate zone accessible to the front door; and the bedrooms were raised above the garage and away from both public rooms and the street. While the split level might look more traditional stylistically, siding might also be a newer asphalt siding or include a faux stone veneer. Windows and doors also might take a more modern look with sash being divided into two horizontal panes over two horizontal panes.

Photos, top to bottom: Fairview Park, OH; University Heights, OH; University Heights, OH; University Heights, OH.









Part of the appeal of the Split-Level was that it was so adaptable to different sites, materials, and roof configurations: full gable, cross gable, hip or paired hips. Larger examples (such as the one at top) might have the garage in front creating a court or have all levels under a front-facing gable, although these may read more as a Contemporary style rather than as a Split Level.

Split level



Fairview Park, OH

Mid-Century Architectural Styles:

Minimal Traditional

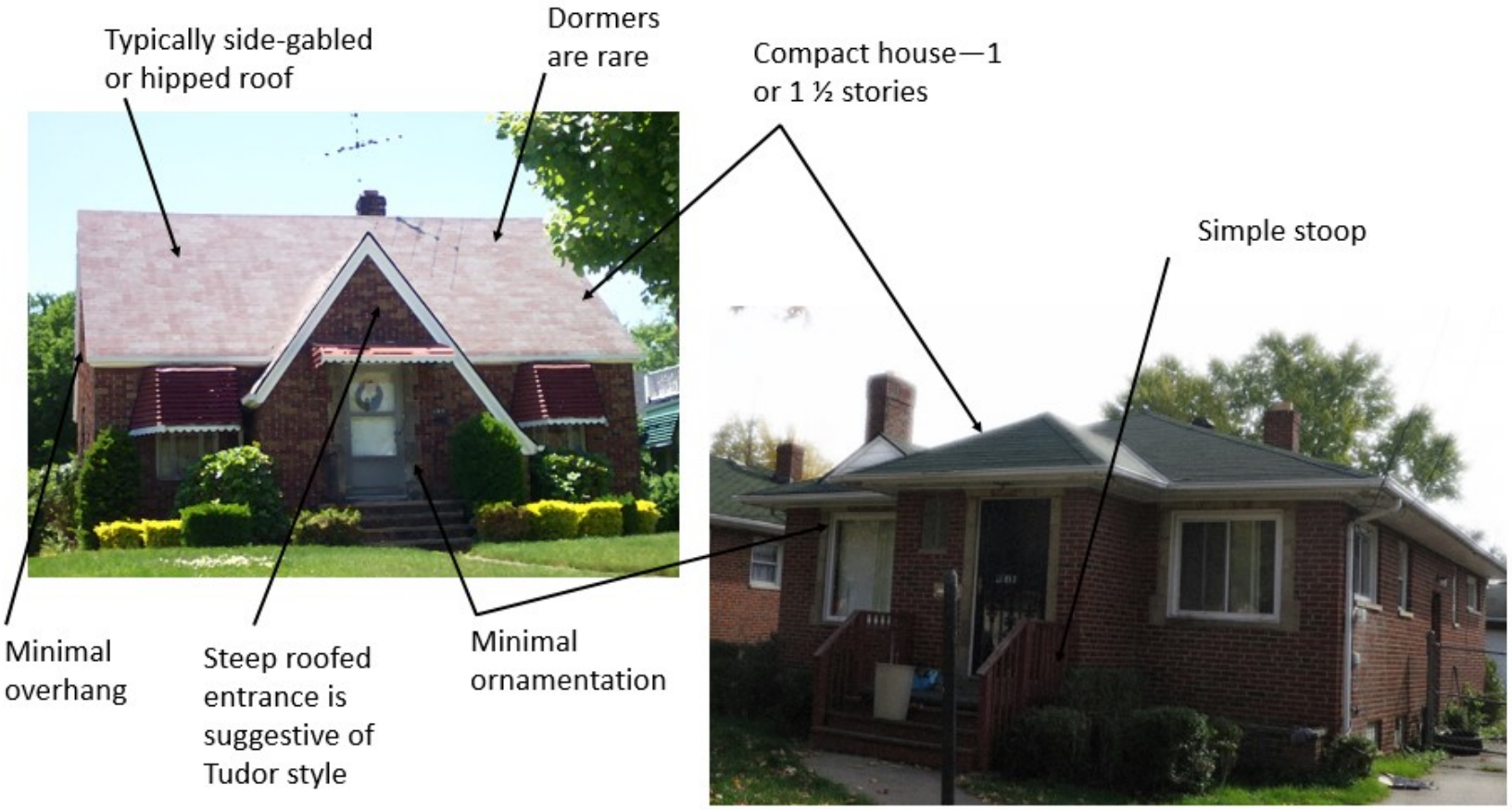
Housing starts were down during the Great Depression of the 1930s and the war years. After the war ended, there was a need for housing to be built quickly and economically. Thus, streamlined homes were constructed in great numbers that echo vestiges of historical styles popular in the 1920s—Tudor or Colonial Revival—but in a smaller, simpler form. We are often at a loss for an appropriate stylistic label by which to catalog these homes. In their book, *A Field Guide to American Houses*, Virginia & Lee McAlester coined the term *Minimal Traditional*. The Historic Preservation Division of the Georgia Department of Natural Resources—a leader in surveying and inventorying houses of the mid-century period—has branded them the *American Small House.* Other architectural historians and writers call them *Developer Houses.* Sometimes the mid-century revival of the Cape Cod is included in this group. At other times, they are not.

We believe the term, *Minimal Traditional* is a helpful label. What is to be considered small is somewhat subjective, but what these houses have in common is an attempt at a few stylistic ornaments—a bit of stone trim on a brick house, false shutters and an American Eagle on a clapboard cottage, or an iron railing on a stucco house—that hint at a historical style on an otherwise simple form. Eaves and rake are close to the house. Trim-boards, if there are any, are simple. Some sources say that roof pitches "are low or intermediate," but there are a number with steep pitches that mimic the Tudor style in a simple way. Most of all, these homes reflect the returning veteran's need to purchase and the builder's need to provide a house that fit within the parameters of FHA financing at a cost that the vet could afford.

New homes on Myrtle Avenue were developed by African American builder Arthur Bussey starting in 1949 and continuing through the mid-1960s. (Photograph Courtesy, Cleveland State University, Michael Schwartz Library, Special Collections.)



Minimal Traditional



Myrtle Avenue & Highview Road, Arthur Bussey Historic District, Cleveland, OH

Colonial Revival

The Centennial Exhibition that took place in Philadelphia in 1876 celebrated the 100th anniversary of the Declaration of Independence. It featured excerpts of early American life, which sparked interest in Colonial architecture. Designers across the country began to interpret the style of these early houses in a contemporary fashion. This style came to known as the Colonial Revival.

In the 1890s and 1910s, Colonial Revival stylistic elements (palladium windows, fanlights, Tuscan columns, were added to houses that were otherwise Queen Anne in nature or were exaggerated in scale. By the 1920s, designs came closer to the 18th century originals, especially in Cape Cod forms.

The U.S.'s diverse heritage is reflected through the development of styles such as the Dutch Colonial Revival, the Spanish Colonial Revival, the Tudor Revival and the Cape Cod Revival.

By the mid-century time period, Colonial Revival continued to be popular, whereas other revival styles were not. Colonial revival stylistic elements were often employed on ranch and split-level house types.

Bottom: Garrison Colonials (with second floor over-hanging the first) are common in the Moreland Neighborhood of Shaker Heights, OH.



Colonial Revival



Moreland Neighborhood, Shaker Heights OH



Fanlight

Dormers

Symmetry

Pedimented porch with columns

Multi-paned Windows

False shutters

Clapboard siding or combination of wood, brick and stone

Simple front stoop

Decorative pilasters and cornice at door

Contemporary

When Veterans returned home after the Second World War, most were looking to buy a fairly small, affordable home with modern conveniences built as part of tract developments. Some folks, however, could afford custom-built homes. Many of the leading architectural schools in the United States were led by Bauhaus architects who had fled Nazi persecution and war in Europe. Their architectural ideals would influence generations of architects after the war.

Although *Contemporary*, by definition, implies no connection to historical styles, post-war Contemporary designs were influenced by divergent forces: the Craftsman style, the Bauhaus of the 1920s, the Prairie School and Usonian designs of Frank Lloyd Wright, and even the arches and colonnades of Classical architecture.

Most high-style single family homes of the mid-century period found in northeastern Ohio are either influenced by the International or Craftsman styles. Those houses influenced by the International Style typically would have a flat roof and a superstructure of thin steel beams. This building method allowed for large expanses of glass and even windows that wrapped corners. Those influenced by the Craftsman style, more common in our region, would have a large street-facing gable, exposed rafter tails, and natural materials that blended well in the landscape. Northeastern Ohio is fairly Conservative architecturally, so examples of either are scattered except for a few locations, such as Pepper Ridge in Pepper Pike and Valley Forge/West Valley in Fairview Park.

Photos, top to bottom: Lakewood, OH; Euclid, OH; Mentor, OH; Independence, OH.









Contemporary



Parma, OH

Clerestory and slit windows emphasize privacy (rear elevation likely much more open).

Dramatic gable with deep overhang

Exposed rafter tails

Street-facing windows emphasize privacy

Brick half-wall emphasizes horizontal

Recessed double entry doors

Broad expanses of uninterrupted wall surfaces

Materials & Maintenance:

Masonry

Reference: *National Park Service Preservation Briefs* 1, 2, 6, 7, 15, 16, 22, 42, 47.

Recommended Treatments:

- Clean masonry only when necessary to halt deterioration or to remove heavy soiling. Use the gentlest means possible. Water and a natural bristle brush may be sufficient.
- Carry out masonry surface cleaning after conducting tests on limited areas not exposed to public view.
- Inspect painted masonry surfaces to determine whether repainting is necessary. Remove damaged paint only to the next sound layer with the gentlest means possible before repainting.
- The use of epoxies, stone consolidants and preservation mortars on spalling stone is acceptable so long as the patch matches the color, surface texture, reflectivity, finish, details, and other qualities of the original stone.
- When repointing masonry, the new mortar should match the original composition in color, texture, and tooling.
- If waterproofing is needed—such as for a split-level built into a hillside—it should be done from the exterior and not the interior. Interior water-proofing actually encourages more water to come through the foundation (potentially causing further deterioration) and then pumps it back out.
- Rust on concrete is a sign of internal corrosion of rebar, known as "rust jacking." The cause of the damage should be located and repaired. Any exposed rebar should be wire brushed and coated with epoxy to prevent further corrosion poured concrete.



Masonry is often used in ranches to emphasize a low horizontal orientation. Above, the front wall surface is divided in order to make the two parts appear more horizontal. Furthermore, the walls extend for the same purpose (as well as to screen the side garage doors).

Treatments Which Are Not Recommended:

- Sandblasting, brick or stone surfaces should not be undertaken as it abrades the surface and can cause permanent damage.
- High pressure cleaning using any type of abrasive can be damaging.
- Cleaning with water pressure can also be damaging both to the masonry and to the mortar joints. Chemical cleaning should not be undertaken without extensive testing. Chemical residues should never be left on the building. Even when cleaning with water, avoid water pressure over 300 pounds per square inch. Garden hose pressure may be sufficient.
- Methods of removing paint which are destructive to the masonry, such as sandblasting, should not be used.
- Mortars that have a heavy cement content can cause spalling of the brick and should be avoided.
- Removing or radically changing masonry features which are character-defining features shall be avoided.

Below, from left: stacked bond—or brick laid lined up in a vertical row—is characteristic of mid-century architecture; stone-trim and variegated brick breaks up a façade and helps the house blend in with the natural surroundings; wall extensions help provide privacy from the street.







Photos, both pages: Dalebrook Estates, Independence, OH

Wood & Other Exterior Elements

WOOD: Clapboard, Weatherboard, Shingles, Trim, Doors

Reference: *National Park Service Preservation Briefs* 6, 8, 10, 16, 37, 47.

Recommended Treatments:

- Preserve wood features that are important in defining the overall historic character of the building such as siding, trim, exposed rafter tails, original doors, etc.
- Protect wood features by providing proper drainage so that water does not accumulate.
- Keep wood surfaces painted to protect them from deterioration.
- Remove damaged paint prior to painting. Check carefully all wood surfaces to determine whether patching or caulking is necessary. When patching wood surfaces, use compatible materials cut to the same dimensions. Use a high-quality, long-lasting caulk and avoid inexpensive latex caulks which usually have limited life spans.
- If paint is failing, determine the cause of the failure. It could be overflowing gutters or leaking downspouts, moisture splashing up from a driveway, insulation installed without the appropriate vapor barrier, or insufficient preparation before painting.

ALUMINUM:

Recommended Treatments:

- A process to bake enamel coating over aluminum siding was invented in 1947, and this siding material became a popular and inexpensive choice.
- While aluminum siding installed over wood siding should be removed, for smaller homes built after 1947, it maybe original. If it is, maintain it by hosing off every year or two.
- Ordinary laundry detergent mixed with water (1 to 100 ratio) and a soft bristle brush should sufficiently remove dirt. Don't use high pressure!
- Aluminum may oxidize, especially if it is scratched or dented. Apply a primer over scratches on aluminum before they oxidize. (Don't use a latex primer as it will oxidize aluminum and cause blemishes). Finish with two coats of acrylic house paint.
- Patch small holes with a two-part epoxy filler like that used for auto repairs. Once cured, sand, prime and paint.
- If your aluminum siding has faded or become chalky, you may be able to brighten it with a product such as *Everbrite*.
- To repair dents, drill a few 1/8 inch holes in the dented area. Put a flat washer on a 3/16 inch diameter sheet metal screw and screw it part way into one of the holes. Use pliers to pull on the screw and pop out the dent. Remove the screw and patch the hole using a putty knife to apply two-part epoxy filler behind the dent.

Treatments Which Are Not Recommended:

Do not remove or radically alter wood decorative features as this can jeopardize the historic appearance of the building.

Do not use chemical preservatives such as creosote which can change the appearance of wood features. Do not use destructive paint removal methods. Propane or butane torches can not only scorch the wood and burn off decorative features; these are also dangerous treatments which may cause fire. If chemicals are used to remove paint and they are not first neutralized, the paint applied over these chemicals may not bond properly. As with masonry, any type of blasting to remove paint is inappropriate and will pit and damage wood.

Do not use new colors which are inappropriate to the historic style of the building or to the neighborhood in general. Midcentury colors tend to be somewhat paler. Sherwin Williams offers an appropriate midcentury palette: http://www.sherwin-williams.com/architects-specifiers-designers/color/find-and-explore-colors/color-collections/residential-exterior-palettes/suburban-modern/





Top: Wallhaven Neighborhood, Akron, OH; Bottom: Lee-Harvard Neighborhood, Cleveland, OH.

Windows

Reference: *National Park Service Preservation Briefs* 3, 9, 13.

Recommended Treatments:

- Retain and repair existing historic windows. Identify which windows are original . Protect and maintain the historic windows by preserving the wood and metal which make up the window frame, sash, muntins and surrounds through appropriate treatments such as cleaning, limited paint removal, rust removal and reapplication of protective coatings such as paint.
- Make windows weathertight by recaulking and replacing or installing weather stripping. By doing this, thermal efficiency is improved.
- Repair window frames by patching, consolidating or otherwise reinforcing. This could include replacing certain parts of the window, such as a rotted sill or sagging horizontal muntin when they are extensively deteriorated. Use original materials such as wood and metal when replacing elements of windows.
- If a window is so badly deteriorated that it cannot be salvaged (and most windows can be salvaged), then replacement windows should match the original design as closely as possible.
- Midcentury windows often have a thin profile. Thicker aluminum wrapped muntins may not be appropriate replacements for these windows.
- Original Midcentury windows may be in configurations that are not easily duplicated with "big box" replacements, such as two horizontal panes over two horizontal panes. A smaller hardware store may be better able to custom make replacements.
- Some Midcentury windows may have unusual hardware, such as metal pins, that may be repaired.
- Jalousie windows (Adjustable glass louvers) can be made more energy efficient through the use of interior storms.



Treatments Which Are Not Recommended:

- Removing or changing windows which are important defining the overall historical character of the building so that, as a result, the character is diminished. For example, removing a three-part picture window and replacing it with two double hungs will alter the character of the house. Also, adding new windows where none existed previously can also harm the historic appearance of a building.
- Changing the size of the window opening by either enlarging it or blocking it down to accommodate a stock replacement size would harm the character of the home.
- Replacing windows when it is possible to repair them can impart an inappropriate new appearance to the building.

Original Mid-Century windows are important character-defining features for homes of the period. *Photos, top: Dalebrook Estates, Independence, OH; bottom: Highview Road, Arthur Bussey Historic District, Clevland; Left: Dalebrook Estates.*







Roofs

Reference: *National Park Service Preservation Briefs* 4, 19, 29, 30, 39.

Recommended Treatments:

- It is important to have the roof membrane free of leaks to avoid damage to the building's interior features.
- Gutters and downspouts should be kept in good condition.
- When replacing or repairing roof drainage systems, be sure to direct runoff away from the foundation to avoid water damage here or to the lower walls.
- Paint the gutters and downspouts so that they match the colors of the house, but do not accent these features. They should be painted in a discreet way that blends either with the trim or matches the surrounding wall surface.

Treatments Which Are Not Recommended:

- Permitting a leaking roof to remain unprotected so that accelerated damage to interior features such as plaster, wood and paint can occur.
- Removing a feature of a roof which is not repairable, such as an ornate chimney, can harm the appearance of the building.





Above: Roof material and color help provide stylistic references to Mid-Century homes, which may be minimally "Colonial" or "Rustic." With multi-gables, low, broad chimneys, and dove-coats, it is important that roofs be well flashed. Opposite: Some larger, architect designed ranches may have wood shingle or slate roofs; below right: large expanses of shallow hipped roofs need appropriate gutters and downspouts.

Top photo: Amber Drive, Kamm's Corner Neighborhood, Cleveland, OH; remainder on these two pages: Dalebrook Estates, Independence, OH







Awnings

Reference: *National Park Service Preservation Brief* 44.

Recommended Treatments:

Awnings have been appearing in streetscapes since the height of Ancient Egypt and Syria, where woven mats were used to shade homes and market stalls from the intense sunlight. The Romans also used fabric awnings in the Coliseum to protect spectators and implemented hardware to allow the awning to retract. Although millennia have passed since the advent of the awning, the mechanics have remained largely unchanged, whereas design and materials have adapted to fit contemporary contexts.

The use of awnings in America grew first in the first half of the 19th century, where they found their place on storefronts, characterizing Main Streets across the country. By the early 1900s, canvas awnings were being marketed to homeowners to block the sunlight while encouraging air circulation. It was not until the middle of the 20th century that aluminum awnings gained prevalence, characterizing the mid-century Minimal Traditional cottages, Cape Cods, and ranches that appeared in great numbers after the Second World War.

- Proper maintenance of the awnings on your home can help reduce cooling costs and increase longevity as well as contribute to the unique historic character. Because it is best practice in preservation to both maintain and repair historic features, regular maintenance should be performed to ensure your awnings are in good condition.

- Awnings have two main components—the covering and the hardware. Both of these elements should be cleaned regularly to keep them free of dirt and debris. This can be done with a broom or other small brush. If you should notice any of the metal components rusting, the rust should be scraped off and the metal repainted to increase its lifespan and also prevent fabric discoloration.

- For fabric awnings, hose the covering down once a month with water and twice a year use a mild soap and a brush to clean more thoroughly. Mild to moderate cleaners can be used on aluminum awnings and cleaned with a cloth and water for regular maintenance. Application of a clear watertight coating can also help preserve your aluminum awning.



An advertisement from the Astrup Awning Company in Cleveland, Ohio encouraging buyers to get their fabric awnings.

Cleveland Memory Project, Postcards of Cleveland Collection. Cleveland State University Special Collections.

Ironwork

Reference: *National Park Service Preservation Briefs* 27.

Recommended Treatments:

Wrought iron has been a popular material in furniture and architecture since the Roman Empire. With the emergence of cast iron and steel, wrought iron quickly became a material of the past and is now seldom manufactured. It was used frequently in railings and other decorative exterior elements in mid-century ranch homes.

- Since iron is a metal, it is prone to rusting, especially when exposed to the elements in Northeast Ohio. As with any other exterior material, keeping it clean and free of debris is key.

- If you notice rust on your wrought iron railings, there are several steps that should be taken to prevent further rusting. To prepare the railing, remove all peeling paint with a wire brush, or use a wire brush attachment on a drill. If you are using a drill, a wheel-shaped wire brush head is best for removing paint from the spindles and corners of a railing.

- After the surface is clean of loose paint, coat the railing with a rust-converting sealer to make the surface ready for paint. Do this as soon as the paint has been removed to ensure the conservation of the iron—the smallest chip in paint can lead to further rusting. Before painting, cover and tape off the surrounding brickwork or other non-iron materials to avoid getting paint on them.







Above: Dalewood Estates, Independence, OH;

Left: Myrtle Avenue, Arthur Bussey Historic District,

Additional Resources

Bock, Gordon. "Amazing Asphalt." *Old House Journal*, July-August, 2005.

Carley, Rachel. *The Visual Dictionary of American Domestic Architecture*. New York, NY: Roundtable Press, 1994.

Grimmer, Anne E. and Kay D. Weeks. *Preservation Brief 14: New Exterior Additions to Historic Buildings: Preservation Concerns*. Washington, DC: Preservation Assistance Division, National Park Service, U.S. Department of the Interior, 2010.

Hensley, Joe Ellen and Antonio Aguilar. *Preservation Brief 3: Improving Energy Efficiency in Historic Buildings*. Washington, DC: Preservation Assistance

Hess, Alan. *The Ranch House*. Harry N. Abrams, New York, 2004Division, National Park Service, U.S. Department of the Interior, 2011.

Madonald, Susan, ed. *Preserving Post-War Heritage: The Care & Conservation of Mid-Twentieth Century Architecture.* Donhead Publishing, UK, 2001.

Mack, Robert C. and Anne Grimmer. *Preservation Brief 1: Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings*. Washington, DC: Preservation Assistance Division, National Park Service, U.S. Department of the Interior, 2000.

Mack, Robert C. and John P. Speweik. *Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings*. Washington, DC: Preservation Assistance Division, National Park Service, U.S. Department of the Interior, 1998.

Massey, James C. and Shirley Maxwell. "After the War: How the Rush to House returning Vets Recast Suburbia." *Old House Journal*, April 2004.

McAlester, Virginia and Lee. *A Field Guide to American Houses*. New York, NY: Knopf, Inc., 1984.

Morton, W. Brown, Anne E. Grimmer, and Kay D. Weeks. *The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines for Rehabilitating Historic Buildings*. Washington, D.C.: U.S. Department of the Interior, National Park Service, Cultural Resources, Preservation Assistance Division, 1992.

Myers, John H. *Preservation Brief 9: The Repair of Historic Wooden Windows*. Washington, DC: Preservation Assistance Division, National Park Service, U.S. Department of the Interior, 1981.

Poore, Patricia, ed. The Old House Journal Guide to Restoration. New York, NY: Dutton, 1992.

Park, Sharon C. *Preservation Brief 47: Maintaining the Exteriors of Small and Medium Size Historic Buildings*. Washington, DC: Preservation Assistance Division, National Park Service, U.S. Department of the Interior, 2007.

Randl, Chad. A-Frame. Princeton Architectural Press, 2004.

Randl, Chad. *Preservation Brief 44: The Use of Awnings on Historic Buildings: Repair, Replacement, and New Design*. Washington, DC: Preservation Assistance Division, National Park Service, U.S. Department of the Interior, 2000.

Sherwin-Williams Mid-Century paint palate website/guides

http://www.sherwin-williams.com/architects-specifiers-designers/color/find-and-explore-colors/color-collections/residential-exterior-palettes/suburban-modern/

Taylor, Jonathan. "Wrought Ironwork." *The Building Conservation Directory*, 2005. http://www.buildingconservation.com/articles/wroughtiron/wrought2000.htm.

Twentieth-Century Building Materials: History and Conservation. Edited by Thomas C. Jester, National Parks Service. Washington, D.C.: The McGraw-Hill Companies, 1995.

Waite, John G. and Margot Gayle. *Preservation Brief 27: The Maintenance and Repair of Architectural Cast Iron*. Washington, DC: Preservation Assistance Division, National Park Service, U.S. Department of the Interior, 1991.

Wilson, Ricka and and Snodgrass, Kathleen. "Early Twentieth Century Building Materials: Siding & Roofing," Facilities Tech Tips, United States Department of Agriculture Forest Service, Tehnology & Development Program, February, 2008.

Wright, Gwendolyn. *Building the Dream: A Social History of Housing in America*. Cambridge, MA: The MIT Press, 1981.

Your Old House: Give New Life to Your Older Home. Edited by Time-Life Books. Alexandria, VA: Time Life Inc., 1996.

Web-based Resources

- **National Park Service Preservation Briefs**

The NPS Preservation Brief give detailed information regarding various preservation treatments for different elements and building types:

https://www.nps.gov/tps/how-to-preserve/briefs.htm

- **Recent Past Preservation Network**

The Recent Past Preservation Network promotes preservation, education, and advocacy to encourage a contextual understanding of our modern built environment.

http://recentpast.org/about-rppn/

- **Ohio Modern Initiative**

In 2009 the Ohio Historic Preservation Office launched the Ohio Modern initiative to identify important social, political, and economic trends that shaped land use decisions, architectural styles, property types and building technology in Ohio from 1940-1970 and record related properties.

https://www.ohiohistory.org/preserve/state-historic-preservation-office/hpsurvey/ohio-modern-preserving-our-recent-past

- **Heritage Home Program**

The Heritage Home Program℠ is a regional program operated by the Heritage Home Educational Society, a subsidiary of The Cleveland Restoration Society. The program offers technical advice and low interest home rehab financing in qualified areas of northeastern Ohio.

http://www.heritagehomeprogram.org/

Secretary of the Interior's Guidelines for Rehabilitation

The Secretary of the Interior's Standards for Rehabilitation guide the administration of historic preservation in the United States. *The Standards* are applied to projects in a reasonable manner, taking into consideration economic and technical feasibility. *The Standards* apply to historic buildings of all periods, styles, types, materials, and sizes.

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

A Guide to Maintaining Your Mid-Century Modern Home was created by the

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