



# STANDARDS AND GUIDELINES FOR SIDING AND MASONRY

## INTRODUCTION

Wood frame structures must have some type of exterior cladding. Wall structure systems are clad in either a wood or masonry material to protect the wall structure beneath. Wood cladding is typically made up of either horizontal or vertical boards. This type of cladding is unusual for masonry structures. Around the turn of the century, as veneering techniques became easier to install and more popular, wood frame buildings can be found clad in a masonry material, typically brick or stucco. This chapter will explore the most common types of cladding found in the Fairmount Historic District. The following can be found in this chapter:

### TYPES OF WOOD SIDING

### ASBESTOS SIDING

### ALTERNATIVE SIDING

### MASONRY

### DECORATIVE ELEMENTS

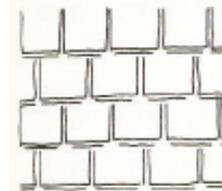


## TYPES OF WOOD SIDING

Wood wall cladding can be divided into three broad categories: shingles, vertical and the most common horizontal.

### SHINGLE CLADDING

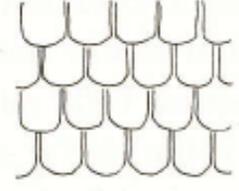
Wood shingles are typically only used in gable ends; however, some structures are clad entirely in shingles. The shingles are tapered and installed in an overlapping pattern to prevent moisture infiltration. Below are common patterns.



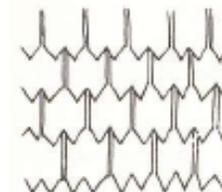
COURSED



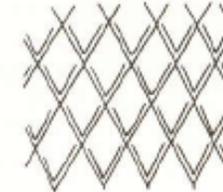
STAGGERED



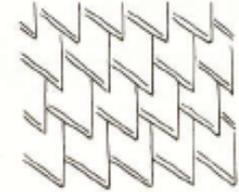
FISHSCALE



SAWTOOTH



DIAMOND



CHISEL

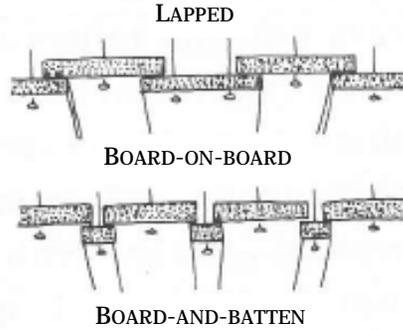
ABOVE: The images of wood shingles are from *A Field Guide to American Houses* by Virginia and Lee McAlester.

**REMINDER:** All exterior work requiring a building permit requires a Certificate of Appropriateness and must conform with all of City of Fort Worth ordinances. It is helpful when using these guidelines to be familiar with your architectural style.

VERTICAL SIDING

In the image to the right from *A Field Guide to American Houses* by Virginia and Lee McAlester, you can see that vertical siding is often lapped with either board on board or with a batten.

BOARDS, VERTICAL



HORIZONTAL SIDING

Until the mid-19th Century most wood frame houses could be found with a square boards that were over lapped to prevent water intrusion. Toward the latter part of the 19th century drop siding became popular. **Simple drop siding in the 105 profile and false bevel siding in the 117 profile are the most common in the Fairmount Historic District.** Flush siding is typically found on the interior of the structures as a wall finish.

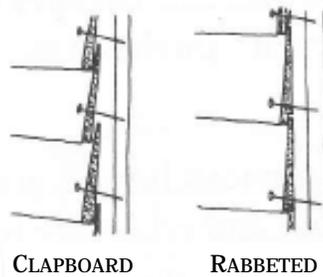
*RIGHT : The images of wood weatherboards are from A Field Guide to American Houses by Virginia and Lee McAlester.*

BOARDS, HORIZONTAL



LAPPED

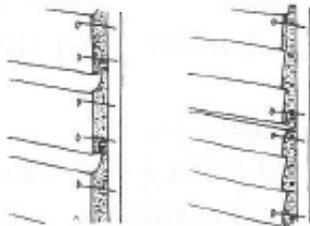
BEVEL



CLAPBOARD

RABBETED

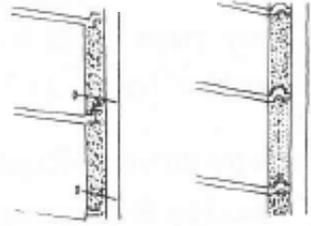
DROP



SIMPLE OR 105 PROFILE

FALSE BEVEL OR 117 PROFILE

FLUSH



SHIPLAP JOINT

TONGUE AND GROOVE JOINT

ASBESTOS SIDING

Asbestos siding became popular at the beginning of the 20th century. With appropriate maintenance, asbestos shingles can be expected to last over 30 years. The EPA banned asbestos in 1973, as a result, the repair of asbestos roof shingles and siding is not always feasible. If more than 20% of siding is damaged then replacement is most likely warranted. **The removal of asbestos siding and the restoration of the wood siding is encouraged.**



ALTERNATIVE SIDING

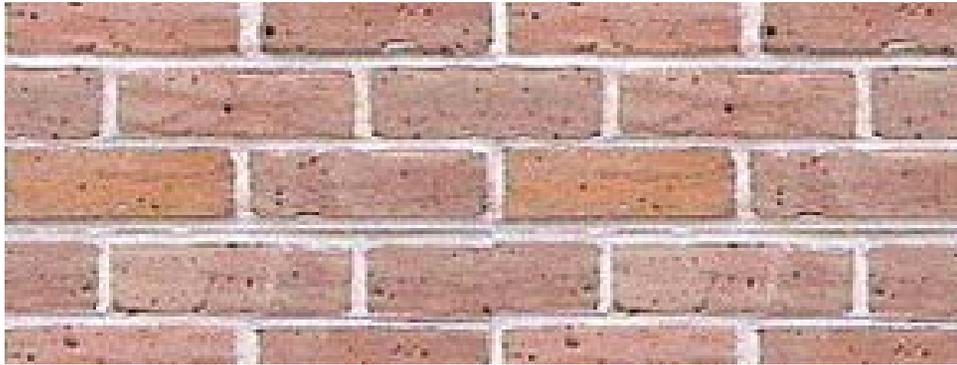
**Artificial siding and veneers such as vinyl and asphalt siding are not appropriate for historic districts are not suitable materials.** Currently there is not a cement fiber board available in the prominent 105 and 117 siding profile. As more profiles become available they will be reviewed by the HCLC on a case by case basis.



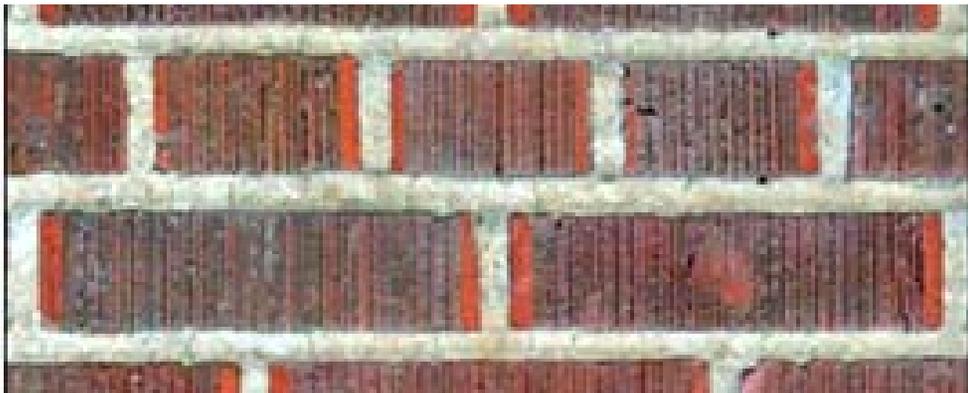
*ABOVE: The structure has a brick veneer on the front and inappropriate vinyl siding at the side.*

## BRICK MASONRY

**WOOD MOLD BRICK**– Is wet or dry clay that is pressed into a wood mold allowed to dry and then fired. Depending on the firing method used strength (soft vs. hard) and color (shade) can vary. These are typically solid. They are most prevalent in structures constructed prior to 1900; however, can still be found today at various brick factories. Wood mold bricks can be identified by their rounded edges and corners and by holes and voids in the surface.



**EXTRUDED BRICK**– Is very dry clay that is forced through a form (creating a long ribbon) and cut by either a machine or by a wire into individual bricks and then fired. They are often hollow. Because they are produced on a massive scale they are typically very hard and the color (shade) is more consistent. These bricks were popularized in the early 20<sup>th</sup> century. Extruded brick can be identified by its smooth surface and hard edges and corners. Wire cut brick can be identified by a series of vertical ridges in the surface and by hard edges and corners.



## MORTARS

**BASIC MORTAR INGREDIENTS/ FORMULA:** Lime or Portland cement (binder), sand, water and additives (animal hair, oyster shells, etc.)

**PRIOR TO MID-19<sup>TH</sup> CENTURY:** Lime based. High lime mortar is soft, porous and varies little in volume with seasonal temperatures.

**MID-19<sup>TH</sup> CENTURY- EARLY 20<sup>TH</sup> CENTURY:** Lime and Portland cement based. The amount of Portland cement used in mortar was gradually increased during this time. This corresponds with the evolution of brick. As the brick became harder the mortar became harder.

**EARLY 20<sup>TH</sup> CENTURY- PRESENT:** Portland cement based. Portland cement is extremely hard, resistant to water movement and is sensitive to seasonal temperatures.

## MASONRY VENEERS

Masonry veneer is most commonly found in 20<sup>th</sup> Century structures. These are wood frame buildings that are clad in brick, stucco or stone. The masonry materials on these building are not structural and are purely decorative. After World War I, veneer techniques advanced significantly and thus more homes were built using this technique.



## TRIM AND DECORATIVE ELEMENTS

Trim and decorative elements often have a strong visual impact and aesthetic value which functionally serves as a transition between building elements and often acts as a sealant, providing protection from water intrusion. Examples include corner boards, fascia, window and door trim, half timbering, brackets, stucco banding, brick and wood quoins and dentil work.



*LEFT: The half timbering in the front gable of this structure identifies it as an Arts and Crafts structure, but it also serves as expansion and ventilation joints for the stucco veneer.*

*RIGHT: The corner boards, fascia and trim surrounding the windows unit creates a water tight seal at the siding joints. The trim provides weather proofing to the interior wall system and decreases water intrusion.*



## SIDING AND MASONRY STANDARDS

(Required)

1. Original siding, brick, stone, stucco and decorative elements shall be maintained.
2. Original siding, brick, stone, stucco and decorative elements on a structure shall not be changed or concealed by the introduction of a different material.
3. When restoring wood siding, masonry and decorative elements, the manner in which they are used, applied or joined together shall be typical of the style and period of the existing structure.
4. Use of synthetic materials may be permitted on a case by case basis provided the material accurately replicates original materials in size, profile, exposure, detail, relief and dimension.
5. Vinyl, plastic, metal and E.I.F.S cladding is prohibited.
6. Historic brick, stone or other naturally unpainted materials shall not be painted unless the material has been previously painted.
7. Florescent, neon, and metallic paint colors are prohibited.

## SIDING AND MASONRY GUIDELINES

(Recommended not required)

1. Appropriate colors are those which are complimentary to the style and period of the structure, as well as the overall character and colors of adjacent structures.

## ADDITIONAL RESOURCES

- NPS Preservation Brief #2: Repointing Mortar Joints in Historic Masonry Buildings
- NPS Preservation Brief #6: Dangers of Abrasive Cleaning to Historic Buildings
- NPS Preservation Brief #10: Exterior Paint Problems of Historic Woodwork