

# NOTICE OF DECISION

PLANNING DIVISION  
555 LIBERTY ST. SE, RM 305  
SALEM, OREGON 97301  
PHONE: 503-588-6173  
FAX: 503-588-6005



*Si necesita ayuda para comprender esta informacion, por favor llame  
503-588-6173*

## DECISION OF THE PLANNING ADMINISTRATOR

**HISTORIC DESIGN REVIEW CASE NO.:** HIS19-12

**APPLICATION NO. :** 19-107231-DR

**NOTICE OF DECISION DATE:** APRIL 26, 2019

**SUMMARY:** A proposal to replace the front and side entry roofing and adjacent siding on the Joseph and Lillie Adolph House, c1923.

**REQUEST:** Minor Historic Design Review of a proposal to replace damaged roofing material over the arch canopy entrances on the eastern and southern façades, and to replace associated damaged and rotted siding, shingle mold, fascia board, soffit, and trim on the Joseph and Lille Adolph House, c1923, a historic contributing resource in the Court Chemeketa National Register Historic District, on property within the RD (Duplex Residential) zone, and located at 240 14<sup>th</sup> Street NE (Marion County Assessors Map and Tax Lot number 073W26BA - 11500).

**APPLICANT:** Tobias Moore

**LOCATION:** 240 14<sup>th</sup> St NE

**CRITERIA:** Salem Revised Code (SRC) Chapter 230.025 Standards for historic contributing buildings in residential historic districts

**FINDINGS:** The findings are in the attached Decision dated April 26, 2019.

**DECISION:** The Historic Preservation Officer, a Planning Administrator Designee, **APPROVED** Historic Design Review HIS19-12 based upon the application materials deemed complete on April 3, 2019 and the findings as presented in this report.

*This Decision becomes effective on May 14, 2019. No work associated with this Decision shall start prior to this date unless expressly authorized by a separate permit, land use decision, or provision of the Salem Revised Code (SRC).*

The rights granted by the attached decision must be exercised, or an extension granted, by May 14, 2021 or this approval shall be null and void.

Application Deemed Complete:	<u>April 3, 2019</u>
Notice of Decision Mailing Date:	<u>April 26, 2019</u>
Decision Effective Date:	<u>May 14, 2019</u>
State Mandate Date:	<u>August 1, 2019</u>

**Case Manager:** Hayley Feightner, [hfeightner@cityofsalem.net](mailto:hfeightner@cityofsalem.net), 503-540-2315

This decision is final unless written appeal from an aggrieved party is filed with the City of Salem Planning Division, Room 305, 555 Liberty Street SE, Salem OR 97301, no

later than 5:00 p.m., Monday, May 13, 2019. The notice of appeal must contain the information required by SRC 300.1020 and must state where the decision failed to conform to the provisions of the applicable code section, SRC Chapter 230. The appeal must be filed in duplicate with the City of Salem Planning Division. The appeal fee must be paid at the time of filing. If the appeal is untimely and/or lacks the proper fee, the appeal will be rejected. The Historic Landmarks Commission will review the appeal at a public hearing. After the hearing, the Historic Landmarks Commission may amend, rescind, or affirm the action, or refer the matter to staff for additional information.

The complete case file, including findings, conclusions and conditions of approval, if any, is available for review at the Planning Division office, Room 305, City Hall, 555 Liberty Street SE, during regular business hours.

<http://www.cityofsalem.net/planning>

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**BEFORE THE PLANNING ADMINISTRATOR OF THE CITY OF SALEM**

**HISTORIC DESIGN REVIEW CASE NO. HIS18-22  
DECISION**

**IN THE MATTER OF APPROVAL OF ) MINOR HISTORIC DESIGN REVIEW  
HISTORIC DESIGN REVIEW )  
CASE NO. HIS19-12 )  
240 14<sup>TH</sup> STREET NE ) APRIL 26, 2019**

In the matter of the application for a Minor Historic Design Review submitted by Tobias Moore, the Historic Preservation Officer, (a Planning Administrator Designee), having received and reviewed evidence and the application materials, makes the following findings and adopts the following order as set forth herein.

**REQUEST**

**SUMMARY:** A proposal to replace the front and side entry roofing and adjacent siding on the Joseph and Lillie Adolph House, c1923.

**REQUEST:** Minor Historic Design Review of a proposal to replace damaged roofing material over the arch canopy entrances on the eastern and southern façades, and to replace associated damaged and rotted siding, shingle mold, fascia board, soffit, and trim on the Joseph and Lille Adolph House, c1923, a historic contributing resource in the Court Chemeketa National Register Historic District, on property within the RD (Duplex Residential) zone, and located at 240 14<sup>th</sup> Street NE (Marion County Assessors Map and Tax Lot number 073W26BA - 11500).

A vicinity map illustrating the location of the property is attached hereto, and made a part of this decision (**Attachment A**).

**DECISION**

**APPROVED** based upon the application materials deemed complete on April 3, 2019 and the findings as presented in this report.

**FINDINGS**

1. Minor Historic Design Review Applicability

SRC230.020(f) requires Historic Design Review approval for any alterations to historic

resources as those terms and procedures are defined in SRC 230. The Planning Administrator shall render a decision supported by findings that explain conformance or lack thereof with relevant design standards, state the facts relied upon in rendering the decision, and explain justification for the decision.

## 2. Analysis of Minor Historic Design Review Approval Criteria

**Summary and Background:** The physical description included within the National Register Nomination describes the roof of the resource as being tile (**Attachment B**). This roof was replaced in 2018 due to its poor condition. While it's not clear whether the roofing on the arch canopies were replaced at this time, it appears as though this roofing is not original to the resource. Regardless, the roofing material on these canopies is not significant nor character-defining.

The existing roofing on the east and south arch canopy entrances of the resource are suffering from rust and decay caused by water damage. The dysfunctional roofing has caused rotting of adjacent wooden soffit, fascia board, and siding which has allowed water intrusion into the building (**Attachment C**). Due to poor condition caused by water leakage, the applicant is proposing to replace the existing galvanized steel roofing on the east and south entrance of the resource with sheet copper roofing (**Attachment C1**) and Mule-Hide Ethylene Propylene Diene Monomer (EPDM) rubber membrane underlayment to prevent future water leaks (**Attachment C2**). To prevent any future water damage to the arched roofs, the applicant is proposing to use copper head metal roofing screws with neoprene washers to seal any intrusions (nail holes) into the copper roofing.

In addition, the applicant is proposing to replace the soffit, fascia, and the shingle mold with hemlock (wood) of similar design. The curved sections of the shingle mold will be replaced with flex trim, a polymer resin blend material that can be molded to replicate the exterior appearance of the existing shingle mold (**Attachment C**). The flex trim material can be painted to match the trim throughout the house.

The applicant is not planning to remove or replace siding unless there is evidence of dry rot due to water damage within the areas adjacent to the arched roofs (**Attachment C3**). Should it be necessary to replace siding, the applicant is proposing to match the material and design of the existing siding using Parr Lumber Primed Cedar Bevel Siding (**Attachment C4**).

Staff finds that the applicant adequately demonstrated that this proposal complies with the applicable provisions of the Salem Revised Code (SRC) as follows:

**Criteria: 230.025 Standards for historic contributing buildings in residential historic districts.**

### **Siding**

**230.025(a) Siding, Exterior Trim and Minor Architectural Features.** *Replacement of*

*siding, exterior trim, and minor architectural features of historic contributing buildings shall be allowed only where the owner has attempted to repair the original siding, exterior trim or minor architectural feature, but repair was determined to be unfeasible due to poor condition of the original materials. If the trim or siding is not original then every effort shall be made to replicate the original trim or siding; the effort shall be substantiated by historic, physical, or pictorial evidence. If the trim and siding cannot be replicated then it should be of a compatible design and material.*

**(1) Materials.** *The replacement materials are the same type and quality as the original siding, exterior trim or minor architectural feature, or duplicate, to the greatest degree possible, the appearance and structural qualities of the material being replaced.*

**Finding:** The applicant is not planning to remove or replace siding unless there is evidence of dry rot due to water damage. Should it be necessary to replace siding, the applicant is proposing to match the material and design of the existing siding using Parr Lumber Primed Cedar Bevel Siding (**Attachment C4**). Staff finds that SRC 230.025(a)(1) has been met.

**(2) Design.** *The replacement reproduces the appearance of the original siding, exterior trim or minor architectural feature.*

**Finding:** The applicant is proposing to install Parr Lumber Primed Cedar Bevel Siding that measures 9/16" in thickness and 3 5/8" in width. This new siding is compatible with the resource and matches the appearance of the existing original siding throughout the resource. Staff finds that SRC 230.25(a)(2) has been met.

**(3) Energy Efficiency.** *Improvements to improve energy efficiency are allowed, provided the exterior appearance of the historic resource is preserved to the greatest extent possible. Example: Adding additional insulation to attics, crawl spaces or basements.*

**Finding:** The applicant is not proposing any alterations to improve energy efficiency. Staff finds that SRC 230.025(a)(3) is not applicable to the evaluation of this proposal.

**230.025 (e) Roofs.** Replacement of roofs on historic contributing buildings shall be allowed only where the owner has attempted to repair the original roof, but repair was not feasible due to the poor condition of the original materials.

**(1) Materials.**

**(A)** *Historic specialty roofing materials, such as original tile, slate, or rolled composition roofing should be maintained in place whenever possible.*

**Finding:** The original roofing material of the Joseph and Lille Adolph House has been replaced. The existing non-original roofing consists of a patchwork of small sheets of metal (steel) which have been galvanized to varying degrees. Due to its poor condition, the existing non-original roofing material cannot be maintained in place. Therefore, staff

finds that SRC 230.025(e)(1)(A) is not applicable to the evaluation of this proposal.

**(B)** *New roof materials should match the original materials in scale and texture as closely as possible. Use of plastic or concrete simulated materials is not allowed.*

**Finding:** The applicant is proposing to install a new metal roof (copper) which is substantially the same material as the existing. The applicant is proposing to replace the existing galvanized steel roofing with copper sheet metal panels soldered with silver on all seams. To protect from future water damage, the applicant is also proposing to place a Mule-Hide 60 and 90 mil thick Ethylene Propylene Diene Monomer (EPDM) rubber membrane underlayment to prevent future water leaks (**Attachment C2**). The underlayment will not be visible thereby minimizing any potential visual adverse effect to the resource. To prevent any future water damage to the arched roofs, the applicant is proposing to use copper head metal roofing screws with neoprene washers to seal any intrusions (nail holes) into the copper roofing.

The proposed roof is metal, which is substantially the same material as the existing. While the copper material will appear differently from the existing roof material, the metal roofing replacement is compatible with the existing resource, and staff finds that SRC 230.025(e)(1)(B) has been met.

**(C)** *Composition roofing is allowed as a substitute for wood shingles in a complete replacement.*

**Finding:** The applicant is not proposing to replace the composition shingles with wood shingles, therefore this criteria is not applicable to the evaluation of this proposal.

**(D)** *Imitation slate and wood are allowed as a substitute for original materials in a complete replacement.*

**Finding:** The applicant is not proposing to install imitation slate or wood as a replacement roofing material, therefore this criteria is not applicable to the evaluation of this proposal.

## **(2) Design.**

**(A)** *The original roof form and detailing shall be preserved.*

**Finding:** The applicant is proposing to retain the original roof form. All of the significant character-defining features of the arched roofs will be replicated. The existing v-groove fir soffit will be replaced with v-groove hemlock soffit to match the existing. The existing fascia board will be replaced with new fascia to match existing. In addition, the existing wooden shingle mold is proposed to be replaced with new hemlock shingle molding of a similar design, and the curved sections are to be replaced with flex trim of the same profile. While the flex trim is a polymer material, after it is painted it will have substantially the same appearance as the original shingle molding. Therefore, staff finds that SRC 230.025(e)(2)(A) has been met.

**(B)** *Original eave overhangs shall be maintained.*

**Finding:** There are no proposed alterations to the original eave overhangs. Staff finds that SRC 230.025(e)(2)(B) has been met.

**(C)** *Cutting back roof rafters and soffits, boxing in exposed rafter tails, adding fascia boards where none existed, or otherwise altering the historical roof overhang is not allowed.*

**Finding:** The applicant is not proposing to cut back the roof rafters, soffits, or adding fascia boards where none existed. Due to rotting and decay, the applicant is proposing to replace the existing soffit, fascia board, and shingle molding adjacent to the arch canopy entrances where the water damage has occurred (**Attachment C**). Staff finds that SRC 230.025(e)(2)(C) has been met.

**(D)** *To the extent feasible, inappropriate repairs or additions should be removed or corrected.*

**Finding:** The existing metal arch roofs were most likely repaired by a previous owner to prevent water intrusion. This existing metal roofing material is not a character-defining feature of the resource. The applicant is proposing to replace the existing galvanized steel roofing on the east and south entrance of the resource with sheet copper roofing and Ethylene Propylene Diene Monomer (EPDM) rubber membrane underlayment to prevent future water damage. In addition, the applicant is proposed to replace the existing rotted soffit, fascia board, and shingle molding with like materials. Therefore, staff finds that SRC 230.025(e)(2)(D) has been met.

**(3) Solar Panels, Rooftop Mechanical Devices, and Skylights.** *Solar panels and other rooftop mechanical structures may be added to historic contributing buildings.*

**(A) Materials.**

- (i)** *Non-reflective glass and metal panels are allowed.*
- (ii)** *Reflective glass and plastic frames are prohibited.*

**Finding:** The applicant is not proposing to install solar panels, rooftop mechanical devices, or skylights, therefore this criteria is not applicable to the evaluation of this proposal.

**(B) Design.**

- (i)** *Solar panels shall not alter the existing profile of the roof, and shall be mounted parallel to the roof plane on rear-facing roofs or placed on the ground in an inconspicuous location.*

**Finding:** The applicant is not proposing to install solar panels, therefore this criteria is not applicable to the evaluation of this proposal.

- (ii)** *Satellite dishes, TV antennae and other rooftop mechanical structures shall be*

*installed so they are not visible from the street and do not damage or obscure significant architectural features of the resource.*

**Finding:** The applicant is not proposing to install satellite dishes, TV antennae or any other rooftop mechanical structures, therefore this criteria is not applicable to the evaluation of this proposal.

**(iii)** *Skylights shall be flat and shall not alter the existing profile of the roof. Bubble-type skylights are prohibited.*

**Finding:** The applicant is not proposing to install skylights, therefore this criteria is not applicable to the evaluation of this proposal.

### DECISION

Based upon the application materials deemed complete on April 3, 2019 and the findings as presented in this report, the application for HIS19-12 is **APPROVED**.



Kimberli Fitzgerald, AICP  
Historic Preservation Officer  
Planning Administrator Designee

Prepared by: Hayley Feightner, Planner I

- Attachments:
- A. Vicinity Map
  - B. Excerpt from National Register Historic Resource Document
  - C. Applicant's Submittal Materials
    - C1. Photo of Copper Sheeting Sample
    - C2. Mule-Hide Ethylene Propylene Diene Monomer (EPDM) Rubber Membrane Underlayment Sample
    - C3. Photo of Potential Dry Rot Areas
    - C4. Photo of Parr Lumber Cedar Bevel Siding Sample

Application Deemed Complete: April 3, 2019  
Notice of Decision Mailing Date: April 26, 2018  
Decision Effective Date: May 14, 2018  
State Mandate Date: August 1, 2019

*This Decision becomes effective on **May 14, 2019**. No work associated with this Decision shall start prior to this date unless expressly authorized by a separate permit, land use decision, or provision of the Salem Revised Code (SRC).*



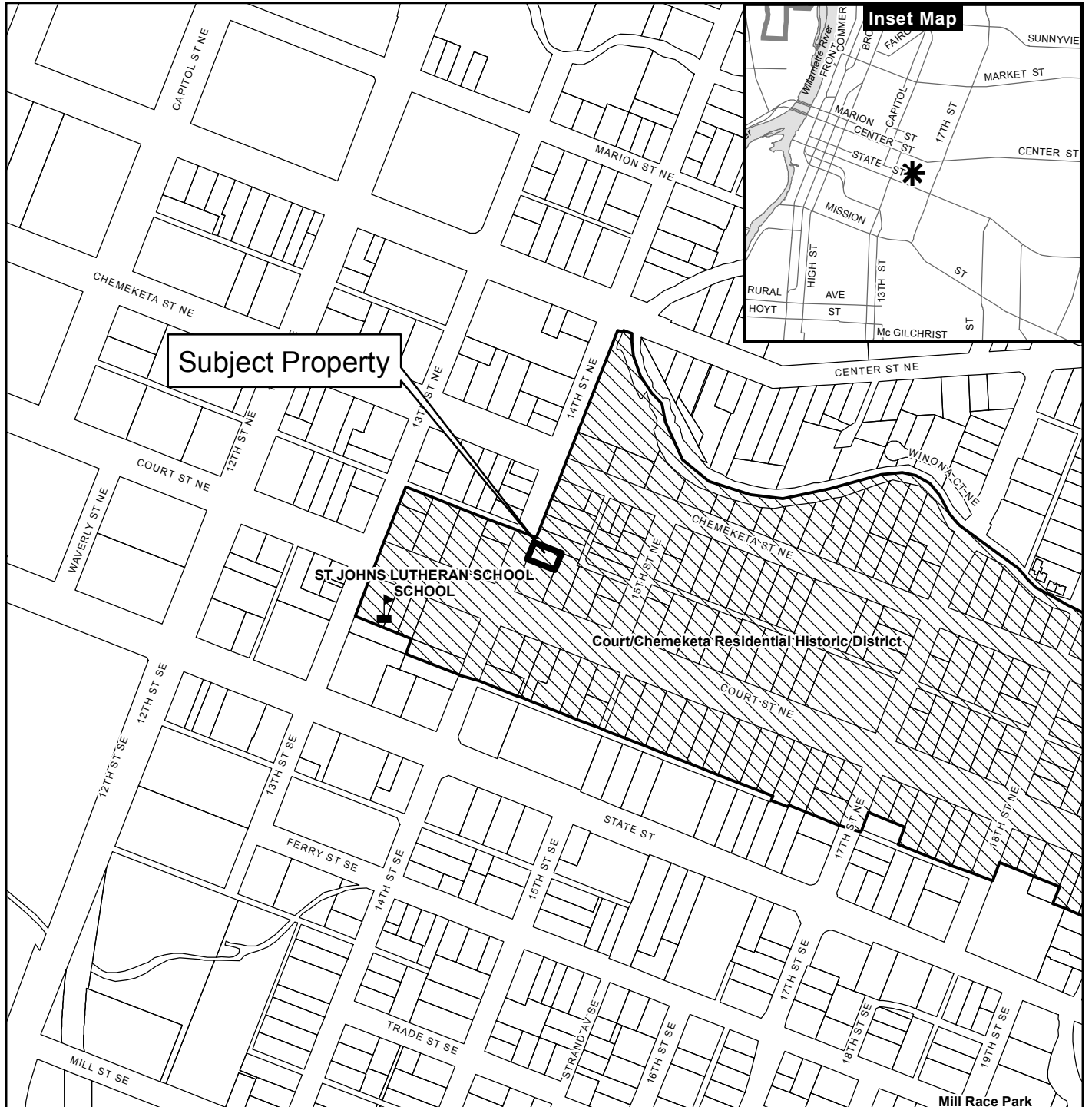
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
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The complete case file, including findings, conclusions and conditions of approval, if any, is available for review at the Planning Division office, Room 305, City Hall, 555 Liberty Street SE, during regular business hours.

# Vicinity Map 240 14th Street NE



**Legend**

-  Taxlots
-  Urban Growth Boundary
-  City Limits
-  Outside Salem City Limits
-  Historic District
-  Schools
-  Parks



0 100 200 400 Feet



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## Attachment B

136. JOSEPH AND LILLIE ADOLPH HOUSE (c. 1923) SECONDARY (Contributing)  
240 14th Street NE; Assessor's Map 26BA073W; 073W-26BA-11500; Tax Lot 86010-110  
Owner: Kenneth Sims, ET AL, 240 14th ST NE, Salem, OR 97303

Description and Cultural Data: This is a side-gabled one-story Colonial Bungalow with the gables capped by a hip. A full rear-gabled wing extends the house to the back. The focal point of the front is an attached neo-classical entry porch---an arch canopy supported by two pairs of columns, with capitals and bases. The front door, with an arch multi-pane window, is flanked by side windows of five panes vertically arranged. Large stationary windows to either side of the entry are divided by one horizontal and two vertical members. The window framing and other details are in high relief, giving the house a solid, sculptured quality. A central chimney reinforces the general symmetry of the design. Siding is clapboard; roofing is tile. The lot is the back fraction of Lot 7, Block 1 of Watts Addition (the site of the Witzel-Watters House, #8) Lot 7 was divided in 1921 and the rear fraction was purchased by Joseph Adolph in 1922. He and his wife, Lillie, are listed as living at 240 14th in 1924 and presumably built the house about 1923. Located on the lot south of the three William H. Byrd Craftsman Bungalows, it relates in scale and architectural quality to those while offering a newer variation of the small houses that line the east side of 14th Street in this block. As a Colonial Bungalow, it is similar to the Kappahn House (#17), built about 1925.

### Historic Alteration Review Worksheet

Site Address: 240 14th street NE Salem, OR 97301

Resource Status: Contributing  Non- Contributing  Individual Landmark

Type of Work Activity Proposed: Major  Minor

Chose One: Commercial District  Individual Resource  Public District   
Residential District  Sign

#### Replacement, Alteration, Restoration or Addition of:

**Architectural Feature:**

- Awning
- Door
- Exterior Trim, Lintel
- Other architectural feature
- Roof/Cornice
- Masonry/Siding
- Storefront
- Window(s) Number of windows: \_\_\_\_\_

**Landscape Feature:**

- Fence
- Streetscape
- Other Site feature (describe) \_\_\_\_\_

**New:**

- Addition
- Accessory Structure
- Sign
- Mural
- Accessibility Ramp
- Energy Improvements
- Mechanical Equipment
- Primary Structure

Will the proposed alteration be visible from **any** public right-of-way?  Yes  No

Project's Existing Material: galvanized steel, wood siding, wood fascia board, wood trim, wood soffit \_\_\_\_\_ Project's New Material: copper, wood siding, wood fascia board, wood trim, wood soffit \_\_\_\_\_

#### Project Description

Briefly provide an overview of the type of work proposed. Describe how it meets the applicable design criteria in SRC Chapter 230. Please attach any additional information (i.e., product specification sheets) that will help staff and the HLC clearly understand the proposed work:

Removal of decayed and dysfunctional galvanized steel soldered roofing. removal of water damaged and rotten wood siding, fascia board, soffit and trim. Replacement in exact dimensions of the rotten and water damaged wood siding, fascia board, wood soffit and wood trim with new wood siding, wood fascia board, wood soffit, wood trim. Replacement of decayed and dysfunctional galvanized steel soldered roofing with copper soldered roofing with rubber underlayment to prevent future water damage.

Signature of Applicant

3/21/19

Date Submitted/Signed



**Tobias Moore**  
240 14th St NE  
Salem, OR 97301  
(208) 249-0078

## Work with Miller LLC

1677 Chemeketa St NE  
Salem, Oregon 97301

Phone: (503) 881-4315

Email: [workwithmiller@gmail.com](mailto:workwithmiller@gmail.com)

Web: [www.WorkwithMiller.com](http://www.WorkwithMiller.com)

Estimate #

000268

Date

03/01/2019

## Description

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### Smooth Soffit Replaced

Total cost of materials and labor to remove and replace 20 sq ft of soffit.

Includes:

- demo and assessment of soffit and surrounding area.
- replace with smooth exterior grade plywood
- galvanized fasteners
- caulk and exterior spackle (paint prep)\*
- \*paint not included

### Hemlock V Groove Soffit Installed

Materials and labor to install new hemlock soffit under both porches (under curved section only) on both porches for a total of 92 sq ft (including waste)

- demo and prep for new soffit (add/replace framing where necessary)
- purchase and install stain grade tongue and groove V groove hemlock (5/8"x4")
- galvanized fasteners
- caulk and exterior spackle (paint prep)\*
- \*paint not included

### Facia board and Shingle molding replaced

Total cost materials and labor to replace facia and shingle molding.

Includes:

- removal and replacement of all facia and shingle molding on small porch
- removal and replacement of all facia and shingle molding on larch porch (except facia behind gutter)
- 2x8 primed SPF Facia board on straight sections
- cutting down of oversized facia to create seamless look on curved sections (with solid or finger jointed wood, not plywood)
- Paintable Waterproof Flex trim installed to match shingle molding 15'
- Hemlock shingle mold installed on straight sections 33'
- galvanized fasteners
- caulk and exterior spackle (paint prep)\*
- \*paint not included

## Rubber/Copper Roofing

Total cost of materials and labor to install new Sheet Copper Roofing with EPDM rubber underlayment.

**Includes:**

- Removal of shingles a few rows back from valley/transition from shingles to metal
  - Installation of EPDM Rubber (one piece per porch)
  - Installation of Copper Sheeting (19oz) 3' wide panels cut to fit
  - Silver Soldering on all copper seams (V crimped edges for a tight solder bond)
- 

**Notes:**

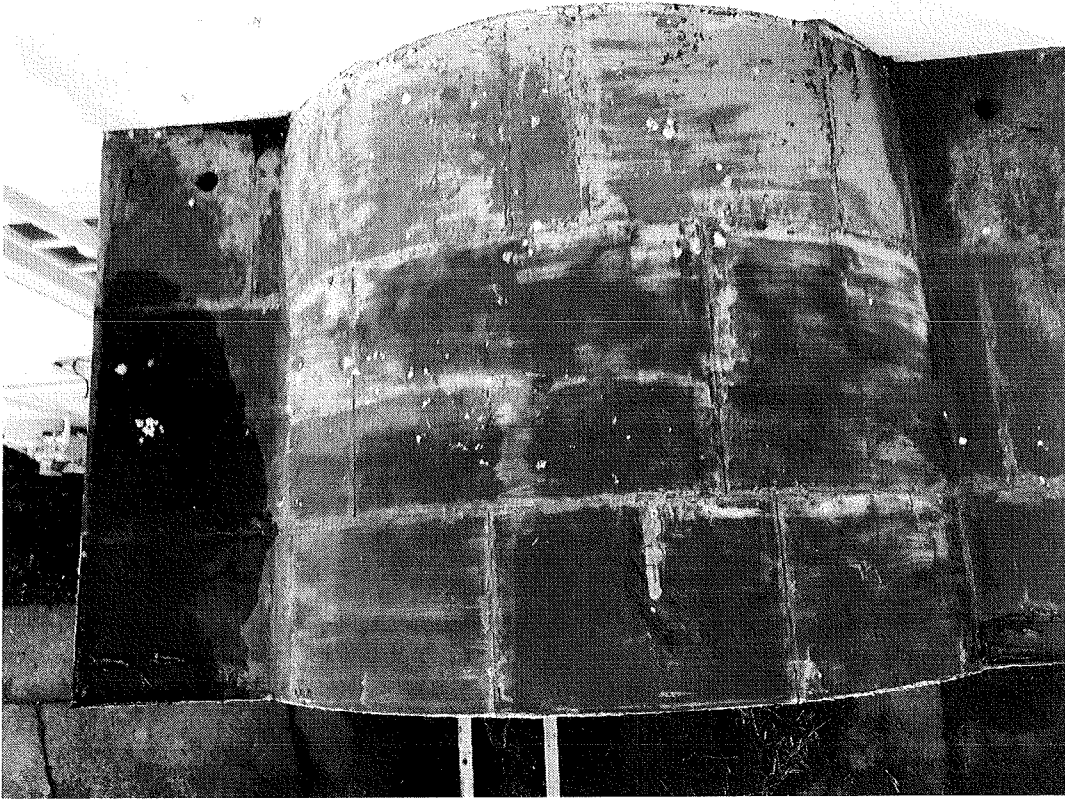
Any additional damage discovered due to dry rot, water or pests will be presented to homeowner and agreed upon before moving forward.

This bid does not include painting.

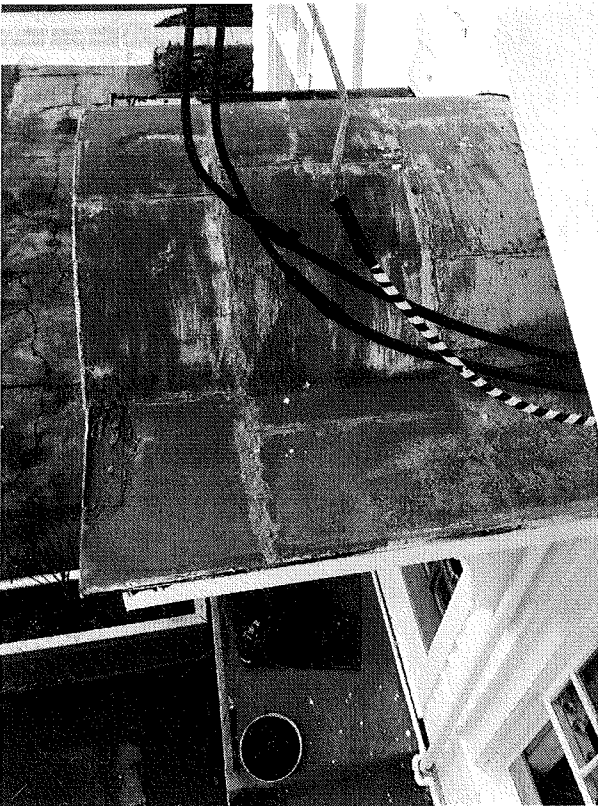
All job related debris will be cleaned up and hauled away.

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Matthew Miller  
General contractor  
Lead paint certified renovator  
CCB#221552



Before



Before





Before



Before

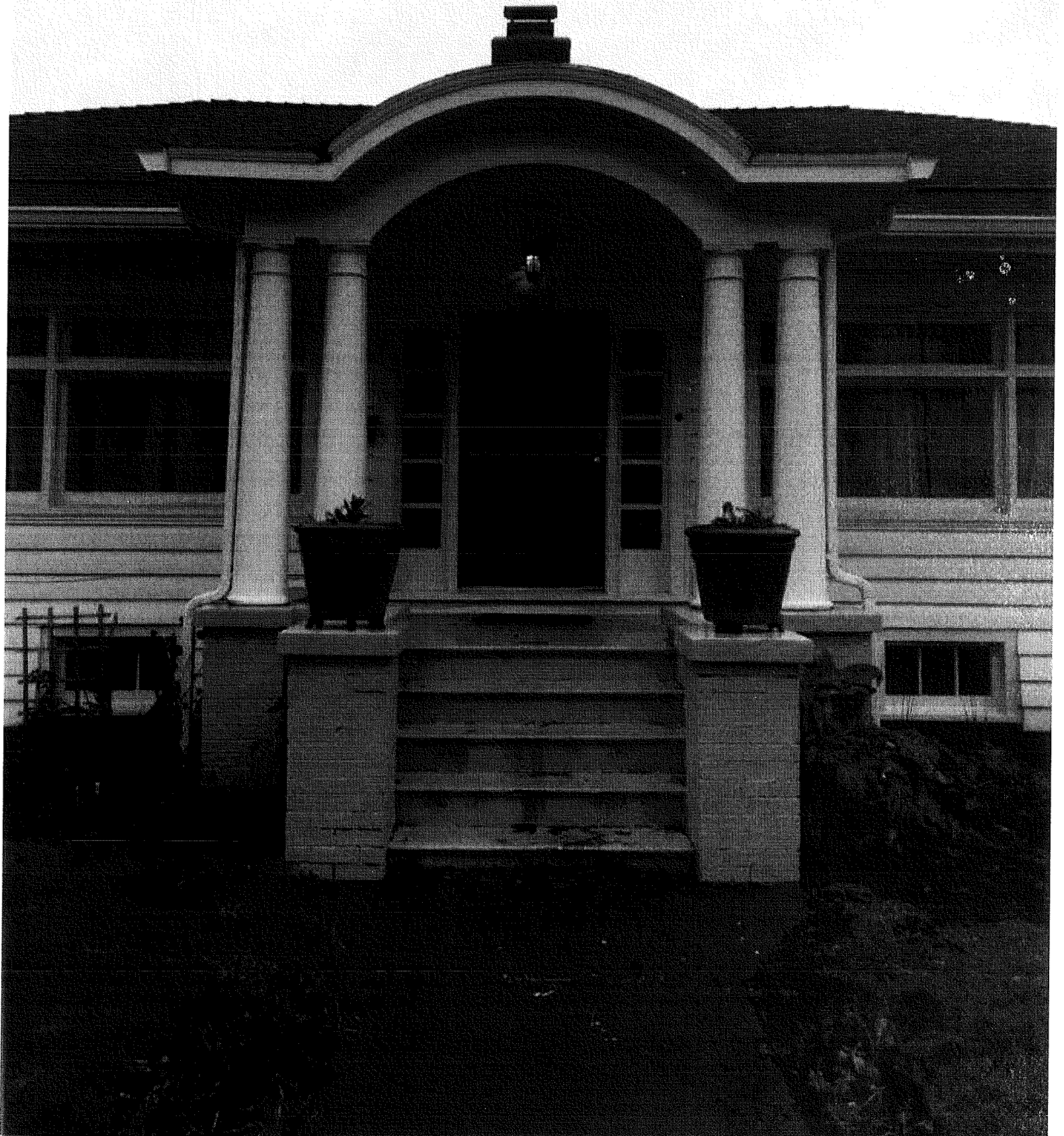




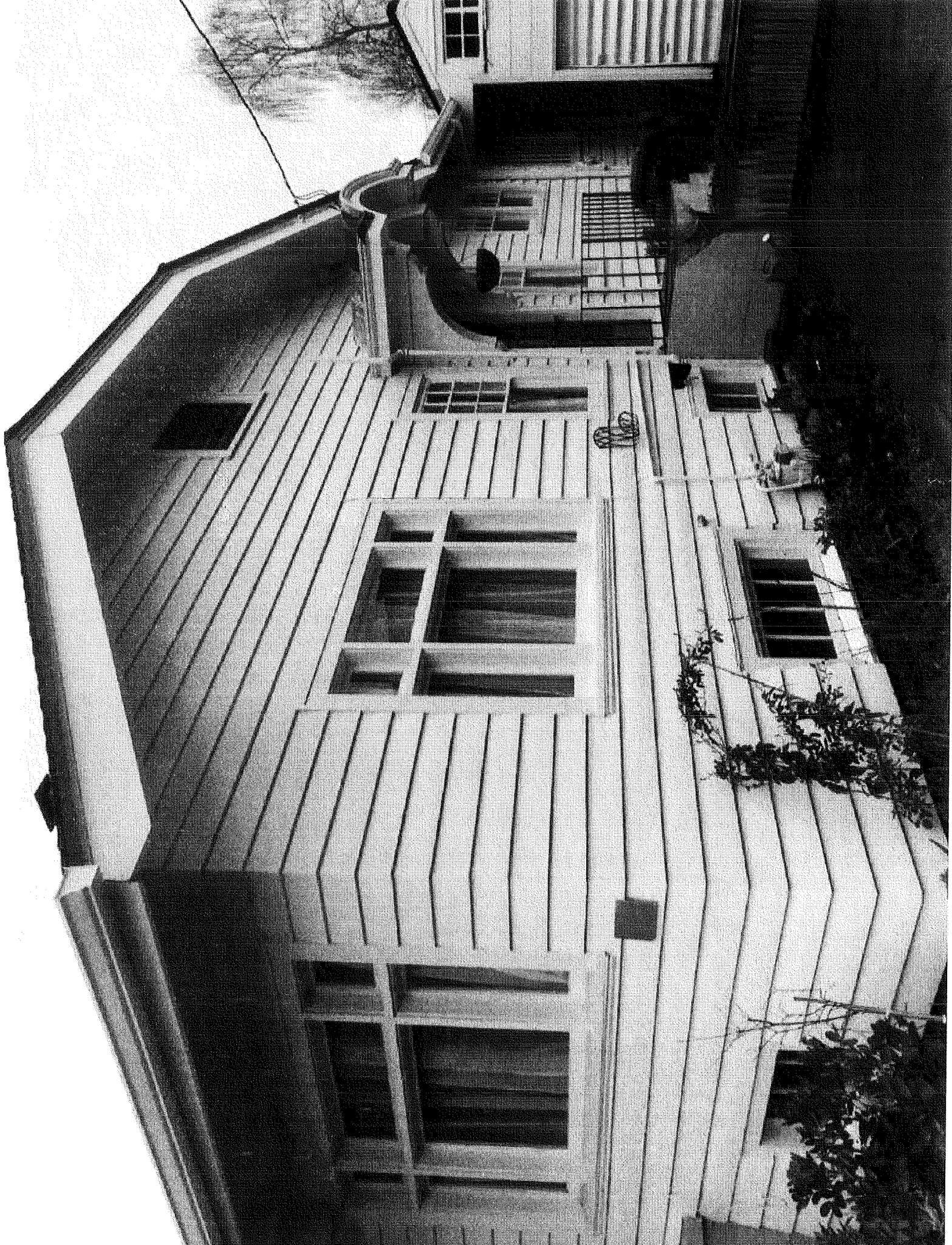
Before



Before









# Product Data Sheet

## MULE-HIDE FR 60 and 90 MIL EPDM MEMBRANE (PRE-CLEANED)

### PRODUCT DESCRIPTION

Mule-Hide 60 and 90 mil thick FR EPDM membranes (Pre-Cleaned) are high performance non-reinforced membrane that stands up to tearing, impacts, punctures and normal roof traffic. The elastomeric properties of the EPDM membrane compensate for thermal shock and building movement. EPDM membranes provide excellent resistance to ozone and aging. The membrane is manufactured in accordance with the guidelines established by the RMA (Rubber Manufacturers Association) and meets or exceeds the ASTM Standard Specification D 4637.



Fire Retardant (FR) EPDM membranes are specially formulated to inhibit spread of flame and meet or exceed code body testing criteria for fire retardant roofing membranes.

Mule-Hide EPDM (Pre-Cleaned) membranes are available with in-seam tape that is pre-applied to the sheet

### BASIC USES

Can be used as a elastomeric single-ply roofing membrane for new construction and re-roofing applications. Pre-Cleaned 60 and 90 mil membranes are used primarily in Fully Adhered roofing systems, but can also be Ballasted.

### SPECIFICATIONS Mule-Hide 60-mil and 90-mil Thick FR EPDM Membranes (Pre-Cleaned)

Physical Properties*	Test Method	Specification	Typical
Tolerance on Nominal Thickness, %	ASTM D 412	± 10	± 10
Weight, lbf/ft <sup>2</sup> (kg/m <sup>2</sup> ) .060 .090			0.35 (1.7) 0.59 (2.9)
Tensile Strength, min, psi(Mpa)	ASTM D 412	1305 (9)	1600 (11.0)
Elongation, Ultimate, min, %	ASTM D 412	300	465
Tear Strength, min, lbf/in (kN/m) - (Die C)	ASTM D 624	150 (26.3)	200 (35.0)
Factory Seam Strength, min.	ASTM D 816 (Modified)	Membrane Rupture	Membrane Rupture
Resistance to Heat Aging* Properties after 4 weeks @ 240°F(116°C)	ASTM D 573		
Tensile Strength, min, psi(MPa)	ASTM D 412	1205(8.3)	1450(10.0)
Elongation, Ultimate, min, %	ASTM D 412	200	280
Tear Resistance, min, lbf/in(kN/m)	ASTM D 624	125(21.9)	215 (37.6)
Linear Dimensional Change, max, %	ASTM D 1204	± 1.0	-0.5
Ozone Resistance** Conditions after exposure 100 pphm Ozone in air for 168 hrs @ 104°F(40°C) Specimen is at 50% strain	ASTM D 1149	No Cracks	No Cracks
Brittleness Temp., max, deg. F (deg.C)	ASTM D 746	-49 (-45)	-49 (-45)
Resistance to Water Absorption* After 7 days immersion @ 158°F (70°C), Change in mass, max, %	ASTM D 471	+8, -2	+2.0
Water Vapor Permeability* MAX. perm mils	ASTM E 96 (Proc. B or BW)	0.10	0.03

--See continued on next page--

# Product Data Sheet

MULE-HIDE FR 60 and 90 MIL EPDM MEMBRANE (PRE-CLEANED)

## **SPECIFICATIONS (continued)**

Flexibility / Torsion DMA @ -40°F	ASTM D5279	N/A	225 MPa
Resistance to Outdoor (Ultraviolet) Weathering Xenon-Arc, total irradiate exposure at 0.70 W/m <sup>2</sup> irradiance, 176°F (80°C) black panel temperature	ASTM G 155	No Cracks No Cracking 7,560 kJ/m <sup>2</sup> 3,000 hours	No Cracks No Cracking 41,580 kJ/m <sup>2</sup> 16,500 hours
At 0.35 W/m <sup>2</sup> irradiance, 176°F (80°C) black panel temperature		6,000 hours	33,000 hours
Fungi Resistance	ASTM G21	N/A	0 (no growth)
*Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.			
**Not a Quality Control Test due to the time required for the test or complexity of the test. However, all tests are run on a statistical basis to ensure overall long-term performance of the sheeting.			

<b>LEED Information</b>	
Pre-consumer Recycled Content	5%
Post-consumer Recycled Content	0%
Manufacturing Location	Carlisle, PA or Greenville, IL
Solar Reflectance Index (SRI)	9

## **PACKAGING**

Mule-Hide 0.060" and 0.090" FR EPDM Membranes (with and with-out tape) are available in a variety of sheet sizes with widths up to 40' and lengths up to 100' long. Contact Mule-Hide Products for specific sheet sizes.

## **BENEFITS & SUPPLEMENTAL STATEMENTS**

- Can be installed over a variety of roof decks
- Outstanding weatherability
- Sheets can be pre-taped for labor savings and consistent seam placement
- Requires no special equipment to install
- Available as a lightweight system
- Full line of pre-taped accessories available

## **CODE APPROVALS/COMPLIANCE**

A variety of Factory Mutual Ratings, Underwriters Laboratories Classifications and Miami-Dade Approvals are available. Contact Mule-Hide Warranty Department for additional information. Meets or exceeds requirements of ASTM D 4637 for Type 1 non-reinforced EPDM single-ply roofing membranes.

## **INSTALLATION INSTRUCTIONS**

- 1) Fully Adhered Roofing System
  - a) Approved insulation shall be attached to the roof deck with an approved insulation adhesive or approved fasteners and plates.
  - b) The field of the roof is fully adhered to the substrate with Mule-Hide membrane adhesive.
- 2) Ballasted Roofing System
  - a) Approved insulation to be loosely laid to the deck.
  - b) Roofing membrane is loosely laid over insulation and ballasted with washed river rock or pavers.

# Product Data Sheet

MULE-HIDE POLY 60 and 90 MIL EPDM MEMBRANE (PRE-CLEANED)

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## **INSTALLATION INSTRUCTIONS (continued)**

- 3) The membrane is required to be mechanically attached at the base of all vertical surfaces, roof edges, and angle changes greater than 2:12.
- 4) All seams are to be constructed with seam tape and tape primer, and checked for voids.
- 5) All details will be done in accordance with Mule-Hide details.
- 6) On projects where a Mule-Hide Standard or Premium Warranty is requested, an authorized Mule-Hide representative shall inspect all completed work. This is only a brief summary and not the complete specification. The Mule-Hide Specifications, Details, Technical Bulletins, and associated documents should be thoroughly reviewed prior to starting any project. Contact Mule-Hide Products for additional information.

## **STORAGE & HANDLING**

- Use proper stacking procedures to ensure sufficient stability of the materials.
- Surfaces may be slippery when wet, or due to frost and ice build-up. Exercise caution to prevent falls.
- Exercise care when working near edge of roof.
- Store Mule-Hide membrane in original wrappings in a cool, shaded area. Cover with light colored, breathable, waterproof tarpaulins.
- Pre-Taped membranes should not be exposed to prolonged jobsite storage temperatures in excess of 90°F (32°C), otherwise the shelf life of the Pre-Tape may be affected.
- When using pre-taped membranes in warm, sunny weather, shade the tape end of the rolls until ready to use.
- Mule-Hide Pre-Tape has a shelf life of one year.

## **PROTECTION & SAFETY**

Mule-Hide maintains Safety Data Sheets on all of its non-exempt products. Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees and customers. Mule-Hide's Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Mule-Hide products in your facilities.

## **ADDITIONAL INFORMATION**

The information given on this PDS is subject to change without notice. Always check the Mule-Hide website at [www.mulehide.com](http://www.mulehide.com) for the latest information, changes and updates or contact Mule-Hide Products Company at 800-786-1492.

## **DISCLAIMER**

The statements provided concerning the material shown are intended as a guide for material usage and are believed to be true and accurate at the time of printing. No statement made by anyone may supersede this information, except when done in writing by Mule-Hide Products Co., Inc. Since the manner of use is beyond our control, Mule-Hide does not authorize anyone to make any warranty of merchantability or fitness for any particular purpose or any other warranty, guarantee or representation, expressed or implied, concerning this material. This product may be eligible for a Mule-Hide warranty, please check the Mule-Hide website at [www.mulehide.com](http://www.mulehide.com) or contact Mule-Hide directly at 800-786-1492 for details. Buyer and user accept the product under these conditions and assume the risk of any failure, any injury person or property (including that of the user), loss or liability resulting from the handling, storage or use of the product whether or not it is handled, stored or used in accordance with the directions or specifications. Mule-Hide must be notified in writing of any claims and be given the opportunity to inspect the alleged failure before repairs are made.



PRODUCT COMPARISON INFORMATION

Characteristic	Flex Trim / Ultra-Flex / Carter Millwork				Main Competitor
	Flex Trim	Zzz Flex	Ultra-Flex	Machinable S4S	
FLEXIBILITY	⊙ ⊙	⊙ ⊙ ⊙	X	X	⊙
PAINABILITY	X	X	X	X	X
STAINABILITY	⊙	⊙ ⊙	⊙ ⊙ ⊙		⊙
WEIGHT			⊙ ⊙	⊙	
XTRULINEAR (Extended Lengths)	⊙	⊙			⊙
MACHINABLE			⊙	⊙ ⊙	
STRENGTH	⊙	⊙ ⊙	X	X	⊙
WARRANTY	Lifetime	Lifetime	1 Year	1 Year	1 Year
MOISTURE RESISTANCE	X	X	X	X	X
INSECT RESISTANCE	X	X	X	X	X
INTERIOR	X	X	X	X	X
EXTERIOR	X	X	X	X	X
AVAILABILITY	UT / NC	UT / NC	UT ONLY	UT ONLY	NC/CA
# of PROFILES AVAILABLE	OVER 35,000				15,000
KEY CHARACTERISTIC	Ideal solution for most standard applications	Ideal for "extreme applications" (Very tight radius, more flexible in cold, etc) 20% more expensive than std Flex Trim	Extremely lightweight (40-50% lighter) Pre-primed (stains better) Ideal for larger profiles (due to weight) Better glue adhesion (back-sanded)	Okay for use with Moulders Composition more similar to wood **dimension limitations: maximum 2" thick, 16" wide, 12' long minimum 1/2" thick, 1-3/4" wide, 8' long	

## Material Info

Unlike our competitors (who offer one material), Flex Trim provides our flexible molding solutions in four different material formulations in order to accommodate every application. The below information provides a detailed description of each of the materials that we offer but please **Click Here** to see a detailed comparison chart of each.

### Flex Trim™

Flex Trim is our original flexible moulding product. It is a unique polymer resin blend and is the ideal solution for most standard flexible moulding applications. Although it is less expensive than ZzzFLEX, Flex Trim still exceeds the performance of our competitors' "high end" products.





800-861-0734 ( NC – Flex Trim East )

877-877-4595 ( UT – Flex Trim West )



Email: [sales@flextrim.com](mailto:sales@flextrim.com)  
[orders@flextrim.com](mailto:orders@flextrim.com)



Sitemap



Contact

- Installation Information



## Installation Information

### (Tips)

ALWAYS lay out the material to let it relax back into its original shape; this is a good time to double-check molding style and application.

NEVER pre-finish the material prior to installation. The material may flex during installation and cause fractures in the finish.

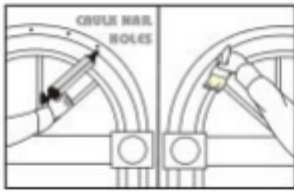
ALWAYS make certain that the surface you are applying the material to is flat and smooth.

Flexible molding will follow any irregularities in the surface.

NEVER use staples or nails with large heads. Keep nails to a minimum and away from edges to avoid "bumps" at the edge.

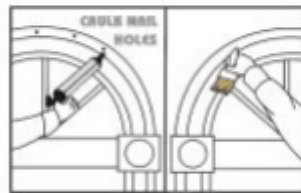
ALWAYS use a construction adhesive in conjunction with (or in lieu of) nails or screws. This will ensure a quick and easy application and a cleaner finished look.





### Flex Trim Flexible Moldings - Painting Tips

- Clean material before painting.
- A primer coat is recommended but not required.
- Never paint before installation. The material is flexible and the paint may crack during installation.
- All paints work well.



### Flex Trim Flexible Moldings - Staining Tips

- Wood grain material appearance can be affected if the surface is scratched, sanded or altered.
- Never stain before installation. Flexing of the material during installation may damage the stain.
- Clean material thoroughly before staining.
- Mask off surrounding areas.
- Heavy stains such as "gelled stains" work best.
- Clear coat after staining.



### Flex Trim Flexible Moldings - Cutting Tips

- Flex Trim and Zzzz Flex moldings can be cut, sanded and shaped using typical woodworking tools.
- Hold material firmly to table or fence when cutting.
- Cut material long and then shave to exact length.
- When shaping, use several "shallow" presses rather than one "deep" cut.
- Do not sand or shape the wood grain on stain grade material.



### Flex Trim Flexible Moldings - Fastening Tips

- Pre-determine material placement and layout.
- Use construction adhesive.
- Use our No-Nail (R) Adhesive for instant bonding.
- Keep nails and screws to a minimum.
- Keep nails and screws away from edges to prevent "bumps" at edges.

Attachment C1: Photo of Copper Sheeting Sample



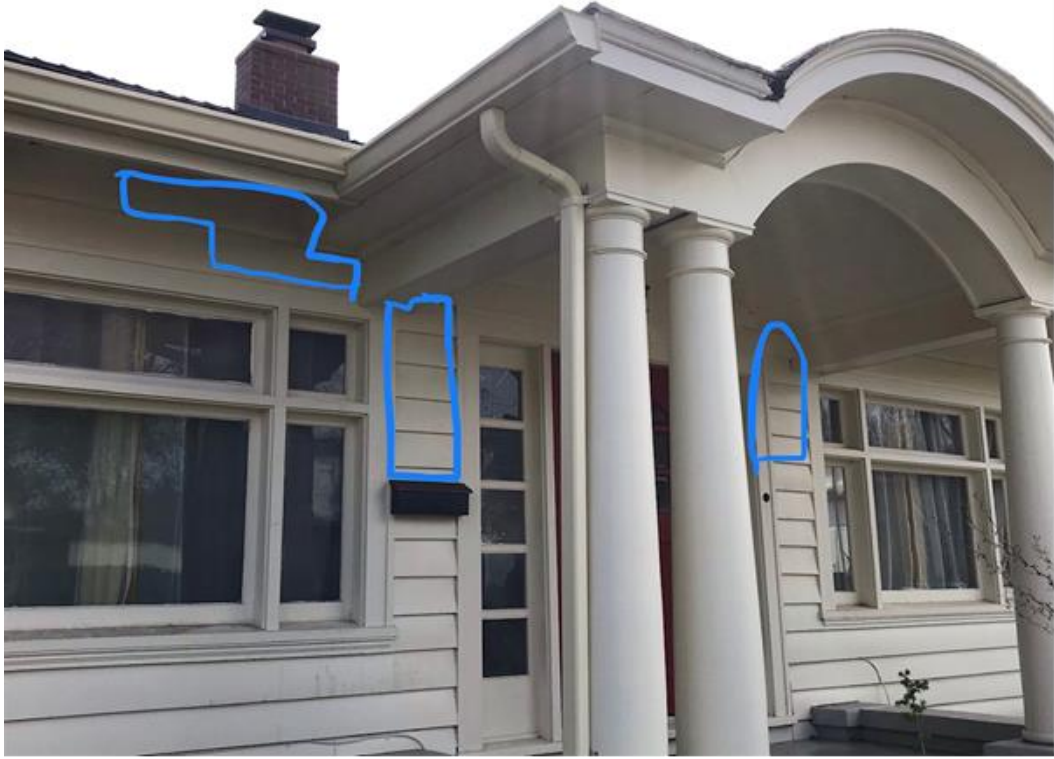
Attachment C2: Photo of Mule-Hide Ethylene Propylene Diene Monomer (EPDM) Rubber Membrane Underlayment Sample





Attachment C3: Photo of Potential Dry Rot Areas









Attachment C4: Photo of Parr Lumber Cedar Bevel Siding Sample

