

CITY OF MANASSAS ARCHITECTURAL REVIEW BOARD
Design Guideline Supplement #4: Metal Seam Roofs

Draft for Public Comment – October 15, 2019

Action – January 21, 2020

Introduction

The City of Manassas Architectural Review Board (ARB) reviews applications for Certificates of Appropriateness for exterior alterations to properties in the Historic Overlay District pursuant to Section 130-405 of the City’s Zoning Ordinance. In addition, the ordinance authorizes the ARB to “develop, adopt, and from time to time modify design guidelines for the City’s historic overlay districts, to be considered by the ARB in granting or denying Certificates of Appropriateness, provided that such guidelines shall be consistent with the Secretary of the Interior Standards for Historic Preservation, the purposes of the intent of the Historic Overlay District, and with such standards, rules, regulations, and procedures as City Council may establish (Section 130-404(5)).”

Purpose of Design Guideline Supplement: Metal Seam Roof

The purpose of this guideline is to provide guidance regarding the replacement of Metal Seam Roofs on structures both residential and non-residential in the Historic Overlay District. In particular, the ARB wishes to provide specific guidance for the locking mechanisms to be used on Landmark, Contributing, Non-Contributing and In-Fill structures.

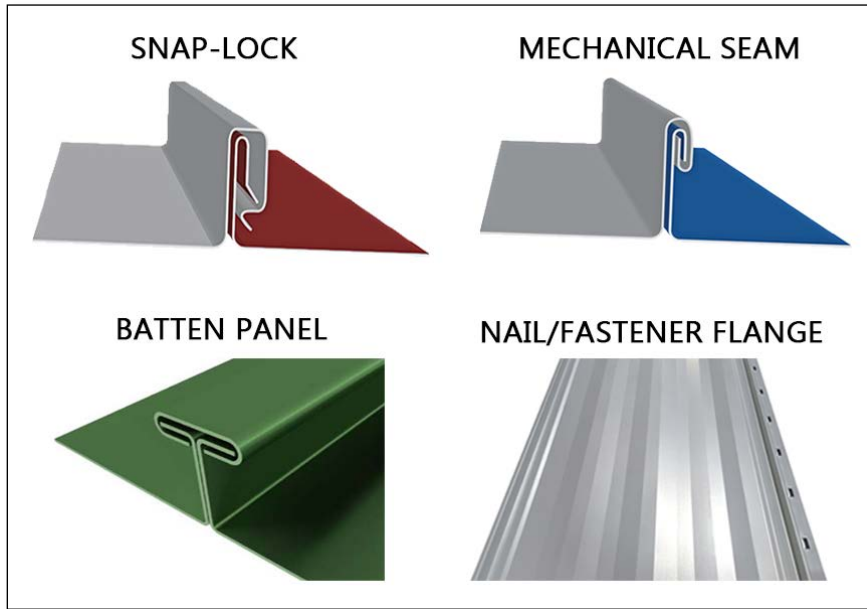
Background

Historically, metal roofs are made of galvanized steel, tin, or occasionally copper. This material is used in the form of rolled sheets with standing seams that were crimped by hand. In the late 1800s, steel roofs



began to be coated with “terne” metal: a mixture of 15% tin and 85% lead. The terne metal coating created a corrosion-resistant surface; however, terne-coated metal roofs had to be painted regularly. Copper, which did not need to be painted, was typically only used on higher-end homes or businesses. Metal is also laid on bay windows, porch roofs and other semi-flat roofs as shown in the picture on the left. Many of the historic structures in the Manassas Historic Overlay District have their original metal seam roof still intact.

The two most popular and cost-effective modern metal roofing materials are factory painted, galvanized steel and aluminum. Other materials available today include copper, zinc, terne-coated steel and terne-coated stainless steel. Modern technology has created several options for locking the seams of metal seam roofs including the four shown below. Of the four, the snap-lock and mechanical seam are the most prevalent and the nail/faster flange is NOT supported by the ARB.



Review Criteria

As always, the ARB prefers the rehabilitation and continued maintenance of historical materials over the installation of replacement roofs. However, if the deterioration of the original roof is such that replacement is the only alternative, the ARB will review the application utilizing the Historic Overlay Design Guidelines (pages 51-54) as supplemented by the following:

A. Design & Materials

1. As per page 52 of the Manassas Historic Overlay District, the use of modern asphalt shingles as a replacement for a standing seam metal roof can negatively impact the appearance of a historic structure and is NOT supported by the ARB.
2. Modern materials, including factory painted, galvanized steel and aluminum and historic materials such as copper, zinc, terne-coated steel and terne-coated stainless steel are both appropriate materials to be used for new or replacement metal seam roofs in the Historic Overlay District.
3. Pursuant to the Manassas City Zoning Ordinance, color changes of non-residential roofs require the approval of the ARB, to clarify, color changes of residential roofs do not require the approval of the ARB.
4. The profile seam of a replacement metal seam roof should match the historical profile of the original roof. Most often this will require a mechanical or hand seam to crimp the metal. Snap-lock mechanisms are not appropriate on landmark/contributing historical structures

but may be used on non-contributing or infill structures. Other types of locking mechanisms will be evaluated by the ARB on a case by case basis with the criteria being as stated earlier, the profile seam of the replacement roof should match the historical profile.