

Watkins, Robert

From: Watkins, Robert
Sent: Wednesday, August 18, 2021 3:01 PM
To: David Mullen
Cc: Werner, Jeffrey B
Subject: August 2021 BAR Decision

Certificate of Appropriateness Application

BAR 21-08-02

735 Northwood Avenue, TMP 340078000

North Downtown ADC District

Owner: Laura and Phillip Smith

Applicant: David Mullen, Halcyon

Project: Replace asphalt shingle roof with standing-seam metal, install PV panels

Dear David,

The Charlottesville Board of Architectural Review reviewed the above-referenced project at their monthly meeting on August 18. The BAR made the following motion for your project:

Carl Schwarz moves: Having considered the standards set forth within the City Code, including the ADC District Design Guidelines, I move to find that the proposed metal roof and PV panels at 735 Northwood Avenue satisfy the BAR's criteria and are compatible with this property and other properties in the North Downtown ADC District, and that the BAR approves the application as submitted.

Jody Lahendro seconds. Motion passes (5-2, Zehmer and Lewis opposed).

Please let me know if you have any further questions.

Robert

Robert Watkins
Assistant Historic Preservation and Design Planner
Neighborhood Development Services
PO Box 911
Charlottesville, VA 22902

**City of Charlottesville
Board of Architectural Review
Staff Report
August 17, 2021**



Certificate of Appropriateness Application

BAR 21-08-02

735 Northwood Avenue, TMP 340078000

North Downtown ADC District

Owner: Laura and Phillip Smith

Applicant: David Mullen, Halcyon

Project: Replace asphalt shingle roof with standing-seam metal, install PV panels



Background

Year Built: 1931

District: North Downtown ADC District

Status: Contributing

Prior BAR Reviews

March 2021 – BAR approved construction of a rear former and replacement of the roof shingles. Request to install photovoltaic shingles was omitted.

http://weblink.charlottesville.org/public/0/edoc/798395/2021-03_735%20Northwood%20Avenue_BAR.pdf

Application

- Applicant Submittal: Halcyon Contracting drawings 735 Northwood, dated July 27, 2021: existing elevations; proposed elevations; and roof perspectives. (Four pages.)

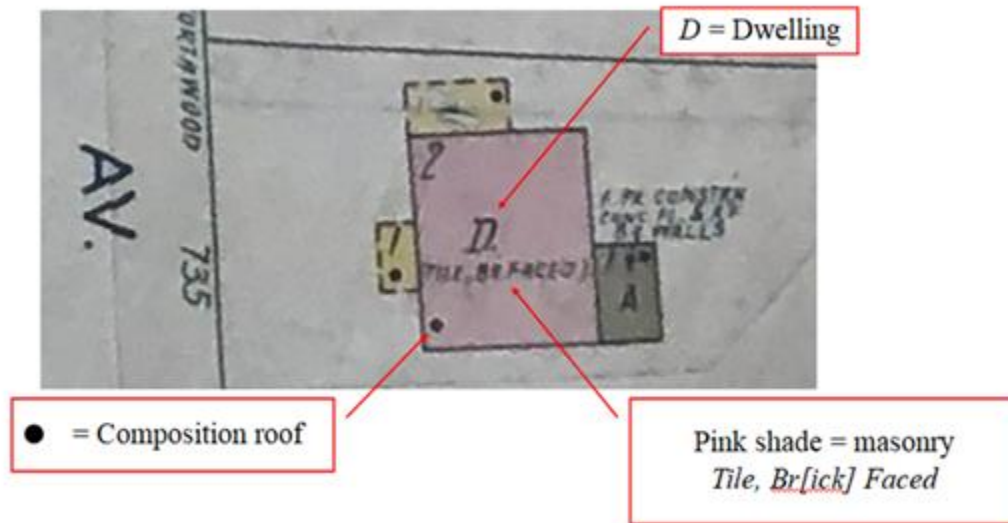
Request CoA to replace the existing asphalt shingles with standing-seam metal and install photovoltaic (PV) panels on the south facing roof. Replace existing, white, K-type gutters with half-round, white. (March 2021 CoA had approved copper gutters and downspouts.) The metal roofing to be crimped at the ridge, 21” pan widths, color to be Matte Black, low gloss.

Discussion

Re: replacing asphalt shingles with standing-seam metal

Slate or asphalt shingles are common on Colonial Revival styles homes; however, standing-seam metal is typical on many of Charlottesville's historic homes, especially on Park Street.

There is no historic survey or other information that identifies the original roof material. The City's 1962 Sanborn Maps (below) indicate the house is masonry, with the note *tile, brick faced*, and a solid dot indicating a *composition roof*; most likely asphalt shingles. Tabbed, asphalt shingles were common in the 1930s; however, we can only assume the current asphalt shingles reflect the original material.



Note: The house has brick veneer over clay structural *tiles*—or blocks—versus brick over framed-wood construction.

Prior BAR reviews related to changing the existing roof.

- July 2014 – 734 Park Street (c1892, Victorian vernacular): BAR approved replacing slate with standing-seam metal.
http://weblink.charlottesville.org/public/0/edoc/622126/BAR_743%20Park%20Street_July2014.pdf
- June 2017 - 632 Park Street (c1928, Colonial Revival, brick): BAR approved replacing asphalt shingles with synthetic slate.
http://weblink.charlottesville.org/public/0/edoc/720724/BAR_632%20Park%20Street_June2017.pdf
- June 2018 – 810 East High Street (c1872, Victorian, brick): BAR approved replacing slate with standing-seam metal.
http://weblink.charlottesville.org/public/0/edoc/757648/BAR_801%20East%20High%20Street_June2018.pdf

Re: PV panels

Since adoption of the current ADC District Design Guidelines, the BAR has reviewed and approved nine CoA request related to PV panels, six in the last three years.* Six were either IPPs or within an ADC District, all except one installed rooftop panels. Two were installations onto standing-seam metal roofs—1102 Carlton Ave and 420 Park Street. (* Not including March

2021 request to install PV shingles at 735 Northwood Avenue, which was omitted from the project prior to approving the CoA.)

The Design Guidelines (Rehabilitation, Roofing) do not specifically recommend against solar panels on historic roofs, but instead recommended they be placed *on non-character defining roofs or roofs of non-historic adjacent buildings*. However, the next provision recommends against adding *new elements that would be visible on the primary elevations of the building*. (The Design Guidelines closely follow the recommendations in the Secretary’s Standards, included in the Appendix.)

Due to the orientation of this house and the constraints of the parcel, there are only three options for functional PV panels: on the south-facing roof; on an addition to the primary elevation, or on a new structure erected in the front yard. The first is proposed, the other two would arguably be less preferable.

While not formally presented or approved, the BAR’s 2018 discussions on updating the Design Guidelines include a suggestion that the installation of PV panels *not damage or interfere with historic material*. That is, that PV panels be evaluated as non-permanent alterations that should not interfere with or alter the historic roof. (Relative to this request, that the PV panels not permanently interfere with the new, standing-seam metal roof.)

Given the above and that the Design Guidelines are intended to provide flexibility, with an acknowledgement that sustainable and green building design is complimentary to the goals of historic preservation, staff suggests this CoA can be approved, provided the BAR expresses that the alternatives are limited and less-preferable, and with the following conditions:

- the PV panels will not damage or interfere with the new roof;
- any associated PV equipment—boxes, cables, etc.—will be located to the side or rear of the house and properly screened.

Suggested Motions

Approval: Having considered the standards set forth within the City Code, including the ADC District Design Guidelines, I move to find that the proposed metal roof and PV panels at 735 Northwood Avenue satisfy the BAR’s criteria and are compatible with this property and other properties in the North Downtown ADC District, and that the BAR approves the application [as submitted].

Or [as submitted with the following conditions/modifications: ...]

Denial: Having considered the standards set forth within the City Code, including the ADC District Design Guidelines, I move to find that the proposed metal roof and PV panels at 735 Northwood Avenue do not satisfy the BAR’s criteria and are not compatible with this property and other properties in the North Downtown ADC District, and that for the following reasons the BAR denies the application as submitted:

Criteria, Standards and Guidelines

Review Criteria Generally

Sec. 34-284(b) of the City Code states that, in considering a particular application the BAR shall approve the application unless it finds:

- (1) That the proposal does not meet specific standards set forth within this division or applicable provisions of the Design Guidelines established by the board pursuant to Sec.34-288(6); and
- (2) The proposal is incompatible with the historic, cultural or architectural character of the district in which the property is located or the protected property that is the subject of the application.

Pertinent Standards for Review of Construction and Alterations include:

- (1) Whether the material, texture, color, height, scale, mass and placement of the proposed addition, modification or construction are visually and architecturally compatible with the site and the applicable design control district;
- (2) The harmony of the proposed change in terms of overall proportion and the size and placement of entrances, windows, awnings, exterior stairs and signs;
- (3) The Secretary of the Interior Standards for Rehabilitation set forth within the Code of Federal Regulations (36 C.F.R. §67.7(b)), as may be relevant;
- (4) The effect of the proposed change on the historic district neighborhood;
- (5) The impact of the proposed change on other protected features on the property, such as gardens, landscaping, fences, walls and walks;
- (6) Whether the proposed method of construction, renovation or restoration could have an adverse impact on the structure or site, or adjacent buildings or structures;
- (7) Any applicable provisions of the City's Design Guidelines.

Pertinent Guidelines for Rehabilitation:

G. Roof

- 1) When replacing a standing seam metal roof, the width of the pan and the seam height should be consistent with the original. Ideally, the seams would be hand crimped.
- 2) If pre-painted standing seam metal roof material is permitted, commercial-looking ridge caps or ridge vents are not appropriate on residential structures.
- 3) Original roof pitch and configuration should be maintained.
- 4) The original size and shape of dormers should be maintained.
- 5) Dormers should not be introduced on visible elevations where none existed originally.
- 6) Retain elements, such as chimneys, skylights, and light wells that contribute to the style and character of the building.
- 7) When replacing a roof, match original materials as closely as possible.
 - a. Avoid, for example, replacing a standing-seam metal roof with asphalt shingles, as this would dramatically alter the building's appearance.
 - b. Artificial slate is an acceptable substitute when replacement is needed.
 - c. Do not change the appearance or material of parapet coping.
- 8) Place solar collectors and antennae on non-character defining roofs or roofs of non-historic adjacent buildings.
- 9) Do not add new elements, such as vents, skylights, or additional stories that would be visible on the primary elevations of the building.

Appendix

Pertinent Guidelines from the Secretary's Standards

Building Exterior – Roofs: Alterations/Additions for the New Use

Recommended:

Installing mechanical and service equipment on the roof such as air conditioning, transformers, or solar collectors when required for the new use so that they are inconspicuous from the public right-of-way and do not damage or obscure character-defining features.

Designing additions to roofs such as residential, office, or storage spaces; elevator housing; decks and terraces; or dormers or skylights when required by the new use so that they are inconspicuous from the public right-of-way and do not damage or obscure character-defining features.

Not Recommended:

Installing mechanical or service equipment so that it damages or obscures character-defining features; or is conspicuous from the public right-of-way.

Radically changing a character-defining roof shape or damaging or destroying character-defining roofing material as a result of incompatible design or improper installation techniques.

Energy Conservation - Roofs

Recommended:

Placing solar collectors on non-character-defining roofs or roofs of non-historic adjacent buildings.

Not Recommended:

Placing solar collectors on roofs when such collectors change the historic roofline or obscure the relationship of the roof features such as dormers, skylights, and chimneys.



Board of Architectural Review (BAR) Certificate of Appropriateness

Please Return To: City of Charlottesville
Department of Neighborhood Development Services
P.O. Box 911, City Hall
Charlottesville, Virginia 22902
Telephone (434) 970-3130

Please submit ten (10) hard copies and one (1) digital copy of application form and all attachments.
Please include application fee as follows: New construction project \$375; Demolition of a contributing structure \$375;
Appeal of BAR decision \$125; Additions and other projects requiring BAR approval \$125; Administrative approval \$100.
Make checks payable to the City of Charlottesville.
The BAR meets the third Tuesday of the month.
Deadline for submittals is Tuesday 3 weeks prior to next BAR meeting by 3:30 p.m.

Owner Name Philip Smith & Laura Proudsmith Applicant Name David Mullen
Project Name/Description 735 Northwood Avenue Photovoltaic Array & Metal Roofing Parcel Number _____
Project Property Address 735 Northwood Avenue, Charlottesville, VA 22902

Applicant Information

Address: 272 Lakeview Drive, Charlottesville VA, 22901
Email: dmullen@halcyon-contracting.com
Phone: (W) _____ (C) 434-218-9694

Property Owner Information (if not applicant)

Address: 735 Northwood Avenue, Charlottesville, VA 22902
Email: philipwilliamsmith@gmail.com;
lauraproudsmith@gmail.com
Phone: (W) _____ (C) 434 825-5563

Do you intend to apply for Federal or State Tax Credits for this project? _____

Signature of Applicant

I hereby attest that the information I have provided is, to the best of my knowledge, correct.

David Mullen 21/07/27
Signature Date

David Mullen 21/07/27
Print Name Date

Property Owner Permission (if not applicant)

I have read this application and hereby give my consent to its submission.

Signature Date

Print Name Date

Description of Proposed Work (attach separate narrative if necessary): Replacement of asphalt shingle roofing on existing roof with painted metal roofing and photovoltaic panels as shown in attached drawings.

Double lock standing seam panels. Panels are 21" wide with 1" tall standing seams. All hips and ridges are finished by folding the roofing panels together into a standing seam (no cap). Metal is factory painted with a low gloss finish. Photovoltaic panels are Rec Alpha Black

List All Attachments (see reverse side for submittal requirements):

735 Northwood Avenue BAR app drawing set 210727.pdf

For Office Use Only

Received by: _____

Fee paid: _____ Cash/Ck. # _____

Date Received: _____

Revised 2016

Approved/Disapproved by: _____

Date: _____

Conditions of approval: _____



WEST ELEVATION - October 21 3:00 PM



EAST ELEVATION - October 21 10:00 AM



NORTH ELEVATION - June 21 6:00 PM



SOUTH ELEVATION - October 21 10:00 AM



WEST ELEVATION - October 21 3:00 PM



NORTH ELEVATION - June 21 6:00 PM



EAST ELEVATION - October 21 10:00 AM



SOUTH ELEVATION - October 21 10:00 AM



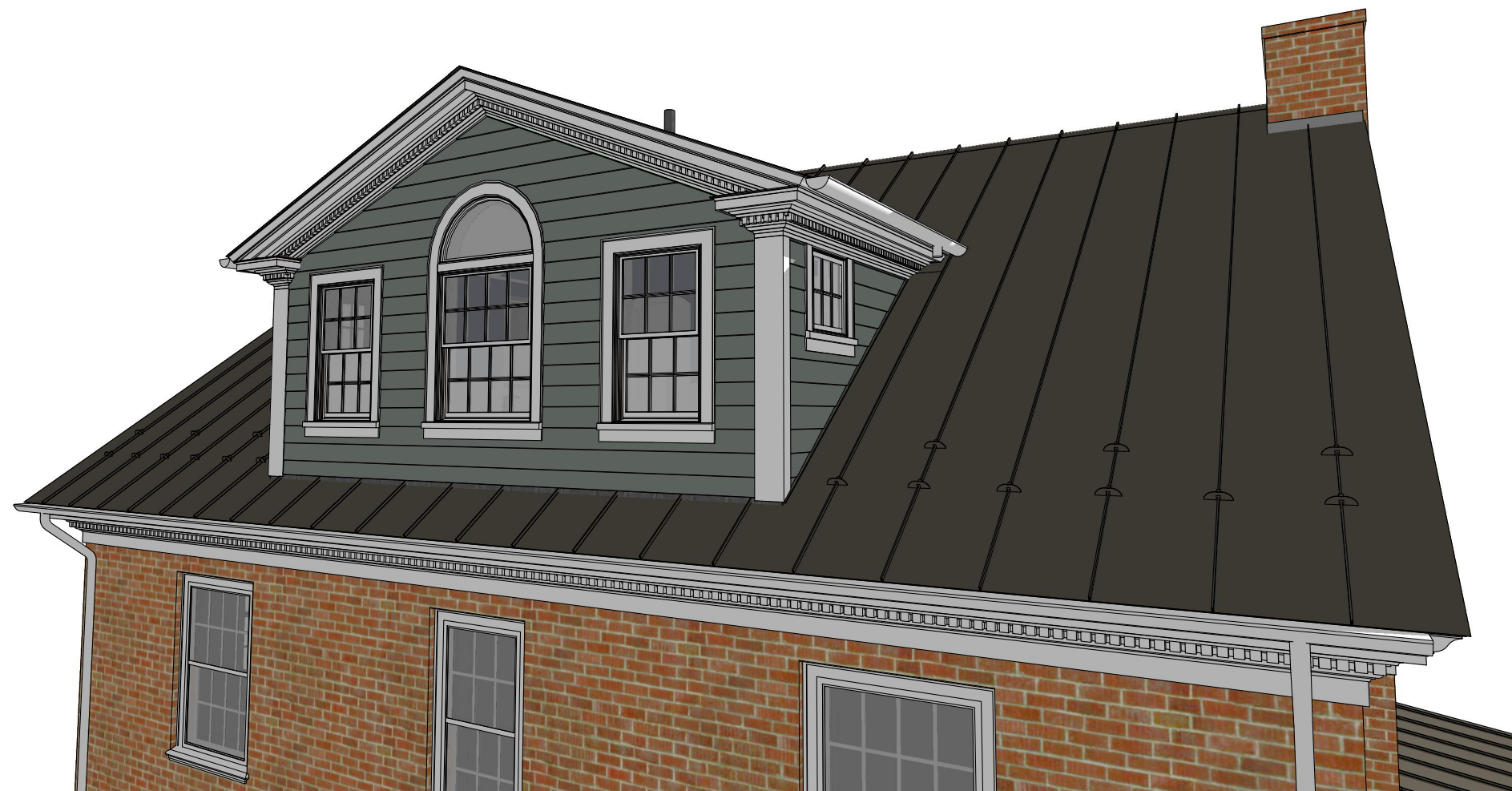
735 NORTHWOOD - METAL ROOFING AND PHOTOVOLTAIC ARRAY

SCALE: 1/4" = 1'-0"

Roof Perspectives

HALCYON
CONTRACTING
DESIGN // BUILD // REMODEL

July 27, 2021



SCALE: 1/4" = 1'-0"

Werner, Jeffrey B

From: David Mullen
Sent: Monday, August 2, 2021 6:30 PM
To: Werner, Jeffrey B
Cc: Watkins, Robert
Subject: Re: 735 Northwood

WARNING: This email has originated from **outside of the organization**. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jeffrey,

Re roofing;

Here's the Blue Ridge Roofing's exact specification for the roofing panels;

2. Double-Lock Standing Seam Roofing System

- Metal Material
 - i. All roofing panels, locking strip, and flashings to be 26 gage pre-painted galvalume.
- Eave & Rake Trim
 - i. Furnish and install shop fabricated eave and rake trim with "lipped" edge to allow roof panels locked onto trim as the perimeter termination of roofing panels.
 - ii. Eave & rake trim shall be fabricated from same metal as roofing panels.
 - iii. Eave & rake trim will be attached to the existing structure and will reflect any structural irregularities.
- Roofing Panels
 - i. Furnish and install standing seam roofing panels, fabricated on site to form a continuous pan/hip/ridge/penetration. Roofing panels will be attached to the existing structure and will reflect any structural irregularities.
 - ii. Standard roofing panels shall be fabricated with seams being 21" on center.
 - iii. Panel seam width may be varied at dormer, rake, penetrations and valleys to maintain a mirror flat of pan and allowing a minimum 4" vertical height for flashing.
 - iv. Panels shall be field hemmed to lock onto eave and rake trim.
 - v. Panels at valley metal shall be
 - ~~Copper – Field formed and double locked into valley metal.~~
 - Pre-Painted – Roofing panels will be attached to a hidden locking strip.
 - vi. Panels at hips/ridges shall be

Is this the detail you're looking for? There are further specifications in this document which maybe I could submit without the quotation?

The clients have selected Englert Matte Black low gloss for the roofing, I can provide a sample if necessary. The gutters will be reinstalled as white (current gutters are white) half round with round downspouts (currently k-style and rectangular) and I could possibly also provide the roofers spec for that.

Re the PV panel roof connections I will confirm the attachment method. We plan to have a conduit from the PV panel through the roof and interior of the house to the location of the batteries, which will be located under the existing rear concrete and brick deck in a fully enclosed area, so other than the panels there shouldn't be any externally exposed equipment.

On Mon, Aug 2, 2021 at 5:47 PM Werner, Jeffrey B wrote:

David:

Working on the staff reports. A question and some items to be aware of.

Standing-seam metal roof

- Q: Proposed pan-width, seam height, and roof color?
- The BAR typically applies a condition that the ridge of the standing-seam metal roof be hand crimped, and not have commercial-looking ridge caps or ridge vents.

PV panels

- The BAR typically applies two conditions:
 - the PV panels will not damage or interfere with the roof (so they will ask about the connections);
 - any associated PV equipment—boxes, cables, etc.—will be located to the side or rear of the house and properly screened.

Jeff

Jeff Werner, AICP

Historic Preservation and Design Planner

City of Charlottesville

Neighborhood Development Services

City Hall | P.O. Box 911

[610 East Market Street](#)

[Charlottesville, VA 22902](#)

Re: Agenda and Staff Report for 08/17 BAR Meeting

David Mullen dmullen@halcyon-contracting.com

Mon 8/16/2021 12:51 PM

To: Watkins, Robert <watkinsro@charlottesville.gov>

Cc: Werner, Jeffrey B <wernerjb@charlottesville.gov>

WARNING: This email has originated from **outside of the organization**. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jeffrey and Robert,

further specifications from the photovoltaic installer (Crux Solar):

We will need to coordinate with the roofer a penetration for conduit from the top of the solar array through the front roof to connect to the location where the battery and panels will be installed below the existing rear deck. We may run the conduit from the rear soffit down alongside the existing externally installed radon chimney at the left corner of the rear elevation and back under the deck, or we may opportunistically run conduit for wiring all the way from the roof down through the basement and into the storage area under the deck which will be the location of the solar batteries.

The rails for the attachment of solar panels will be black Ironridge XR rails:

<https://www.ironridge.com/pitched-roofs/xr-flush-mount-for-pitched-roofs/>

mounted on S5 solar panel clips which are designed to attach to the standing seam of a metal roof;

<https://s-5.com/products/s-5-u-clamps/>

The Snowguard at the front edge of the solar panel array will be this;

<https://fromridgetoeave.com/why-we-love-snowmax-and-you-should-too/>

This snowguard, mounts with clips on the standing seam like a traditional snowguard, holds snow at the bottom edge of the PV array and has a clip-in section for a strip of metal roofing to match color but we are considering having the full rail powder coated so as to be more uniform.

These are the solar panels;

https://usa.recgroup.com/sites/default/files/documents/ds_rec_alpha_black_series_en.pdf?t=1629131426

Kelly Faust has also provided a photo of a similar installation that he installed a while back, black solar panels on black roof, attached.

Best Regards,

David