

GUIDELINES/STANDARDS FOR SOLAR INSTALLATIONS IN VIRGINIA LOCALITIES WITH CORRIDOR AND/OR HISTORIC OVERLAYS

LOCALITY	DISTRICT TYPE		GUIDELINES/STANDARDS
COUNTIES	Corridor Overlay	Historic District	
Fairfax		X	Centreville district: In non-visible locations, consider the use of solar shingles to reduce energy consumption. Hollin Hills district Recommended: - Installing low-profile solar (photovoltaic) panels; solar shingles; a green roof; or cool roof products on flat roofs, non-visible elevations, or in a non-obtrusive manner - Take efforts to minimize the visual presence of solar panels, solar shingles, solar modules, mechanical and electrical connections, and mountings wherever possible - Use solar products and mounting systems that compliment historic roof materials - If possible, consider placing solar products on an existing non-historic addition, or on a garage, carport or shed structure Hollin Hills district Not Recommended: - Installing solar panels and associated equipment in a manner that severely interrupts the original roof form as viewed from the street or that rises substantially higher than the existing roof - Replacing window glazing, sashes and/or frames with heavily tinted glazing or vinyl frames - Removing roofing structure, materials, or features to accommodate new systems”
Rockbridge	X		Solar panels are acceptable but should be placed below the ridge of the roof and out of sight whenever possible.
CITIES/TOWNS			
Abingdon		X	Solar panels should be located on rear sections of the roof of a building, behind dormers, gables or in other areas not readily visible to the public.
Alexandria		X	- On historic structures where a roof mounted solar collector would create a visual intrusion, solar collectors can be mounted on the roofs of accessory buildings such as a shed or outbuilding ... The installation of solar collectors is generally discouraged as not compatible with the architectural character of the historic districts. In certain instances, however, solar collectors can be mounted on the ground so that they are not visible from a public way. - Roof mounted solar collectors should be located on the most visually inconspicuous area of a structure consistent with the requirements of maximum access to the sun. - PV solar collectors should be as small as possible consistent with operational requirements. - Solar collectors should be mounted at an angle which is as close to the adjacent roof slope as possible. - Trim work on solar collectors should be painted to match the predominant color of the roof material to limit visibility.
Alta Vista	X		Rooftop-mounted solar energy systems are considered part of the principal building or structure and are allowed. The maximum height of a structure shall not exceed 45’ or 4 stories. Systems that are hidden from public view are encouraged.
Charlottesville	X		Recommend screening of conduits, wires, and ground level equipment.
		X	Place solar collectors and antennae on non-character defining roofs or roofs of non-historic adjacent buildings.
Chesapeake		X	South Norfolk Historic District: - Place new solar panels in a discrete location, not visible from a paved public street. - Solar energy systems may be installed ... provided the physical connection to the historic building has minimal impact on significant historic fabric or can be repaired once removed. - Minimize adverse impacts to the historic character-defining features of the building. - Use the least invasive method available to attach the system to a historic roof. If possible, install solar panels so that they may be removed and the original roof can be easily restored. - Locate panels to avoid obscuring or impacting distinctive roof features, such as dormers or chimneys. - Install equipment associated with the system on the rear or secondary elevation. - When installed on a pitched roof, the system must: - Be mounted parallel to the plane of the roof. - Not be more than 8” from the surface of the roof to the face of the panel and must be set back a minimum of 12” from the roof edge and ridgeline. - When installed on a flat roof or roof surrounded by a parapet that is at least 12” high, the system may be installed in any configuration and set on an angle as long as the panels are entirely below the top of the parapet.

Danville		X	Technology is an important part of modern life, but it should be shielded from view. All.... solar panels and other such items attached to buildings should be screened from view as much as possible (typically by placing these items where they are not visible from the street). Solar panels and similar equipment should be as small as feasible and located so as not to be visible from the street.
Farmville		X	Position any roof feature toward the rear of the building so that it is not visible from the street (e.g., skylight, chimney, solar panels, vents). Exceptions may be made for the orientation of solar panels in order to maximize their efficiency.
Fredericksburg		X	• The ARB is committed to finding ways to make historic buildings more energy efficient, and open to alternative energy sources such as solar power, without sacrificing the qualities that make them historic. • New elements such as vents or skylights should not be added to the facade or other highly visible areas of a roof. Install new elements such as vents, skylights, or solar equipment without diminishing the original design of the building. New skylights, for instance, should be installed so as not to be visible from building facades. • Proposals for installation of renewable energy structures must be based on a hierarchy of preferred locations, beginning with roofs not visible from the public right-of-way. • Character-defining elements of the building must not be obscured or damaged by installation. • Solar panels installed on pitched roofs shall run parallel to the roofline and not rise above the roof peak. • Solar arrays installed on roofs shall be set back from the parapet or roof edge to remove them from public view and set back at least 6” from the eave. • While energy collection equipment will generally project to some degree, the projections should be minimized, wherever possible.
Leesburg		X	• When adding skylights, vents, or solar panels on secondary elevations, ensure that they are compatible with the character of the building. • Do not add vents, skylights, or solar panels unless placed inconspicuously on secondary elevations. • When used on roofs, solar panels should be located in the areas least visible from the public right-of-way (often the rear slope of the roof). For standing seam metal roofs, employ a racking system such that solar panels may be easily removed in the future as better technologies become available. • When mounted on a structure, solar arrays or wind turbines should be integrated into the overall building design and compatible with its architectural expression.
Manassas		X	• Place mechanical equipment, solar collectors, satellite dishes, and other antennae, including emerging technology equipment, in a manner to protect the visual impact of primary elevation [on less visible locations of the roof; on non-character defining roofs; or roofs of non-historic adjacent buildings]. Alterations on the primary facade may be considered if the overall visual impact is small. Ensure that any such installations minimize damage to historic integrity. • Locate energy-generating technology to minimize impacts to the historic character of the site and structure. • Locate technology where it will not damage, obscure, or cause removal of significant features or materials. • Install technology in such a way that it can be readily removed and the original character of the building easily restored. • Solar panels and photo-voltaic cells should be placed in locations with limited or no visibility—such as on a flat roof, a shallow pitched roof, on a secondary roof slope, on a rear addition, behind a parapet wall of the primary building, or a nearby secondary building that may be less visible from a public right-of-way such as a garage, shed, pergola, or other similar building. • The size of collector arrays should be scaled appropriately to the historic structure. • Mount collectors flush below the ridge line on a sloping roof. • Ensure that exposed hardware, frames, and piping have a matte finish, and are consistent with the color scheme of the primary structure. • Use the least invasive method feasible to attach solar collectors to a historic roof.
Martinsville		X	Installation of this type of equipment and its related fastener and other parts should be placed to be as unobtrusive as possible. It is preferable that this equipment be installed in the rear of buildings or concealed by fencing or plant material so as to not interfere with the historic integrity of the district. Equipment such as vents and air conditioners should be painted the same color as the surface or window trim, respectively. If roof installation of mechanical equipment is required then units should be placed out of the direct sight lines of the public, such as behind a chimney, parapet or on the rear slope.
Newport News		X	North End Huntington Heights Historic District: • The surface area of the solar panel may not be visible from the front of the house nor from the side facing a street if the property is a corner lot. • Panels may only be installed on the rear roof. • Panels shall be uniformly colored. • Panels must be fixed and not moveable. • Roofing under the panels must comply with standards set forth in the Guidelines. The panels must be parallel to the existing roof and may not extend more than six inches above the roof surface.
Richmond		X	• The addition of solar panels should not require removing historic roofing material visible from the public right-of-way. • Solar panels should not alter historic roofing configurations such as dormers or chimneys.

			- Solar panels should be minimally visible from the public right-of-way. The installation method must be reversible and not compromise the historic integrity of the structure or the historic district. - The Commission Staff is authorized to approve: Solar panels, vent stacks, condenser units and other major HVAC components that are screened altogether from a public view or have a minor secondary view from the rear or alley side of the property and are as far away from the front of the building as possible. - The following items shall under no circumstances be approved administratively and will require a certificate of appropriateness from the Commission of Architectural Review. It will be necessary for the Commission to determine if they are in compliance with the Old and Historic District Handbook and Design Review Guidelines: 3. Solar panels, condensers, or other equipment that is visible from a public street without screening.
Roanoke		X	H1 district: - Solar appliances, such as solar panels, are difficult to incorporate into the historic elevations and should be located in areas that have the least negative impact upon the character of the building and the historic district. - Solar collectors should not alter the existing profile of the roof, or be highly visible, particularly from the street elevations. - Solar collectors should be mounted on roofs, in an inconspicuous location, or concealed behind a parapet wall. - Metal frames of solar collectors should be painted to match existing trim. H2 district: Do not add skylights or roof-top utilities, such as mechanical equipment and solar collectors, to the primary slope of a roof.
Smithfield		X	As a general rule, solar panels should be installed in a location not visible from the ground or the public right of way. Best Practices: - Solar panels should have a low profile and be mounted less than or equal to six inches above the surface of the roof. - Solar panels should be set at angles consistent with the slope of the supporting roof. - When possible, solar panels should be hidden behind existing architectural elements such as dormers and cross gables. - Solar panels should be arranged in an organized configuration and blend in with the surrounding features of the historic building with respect to the color of the panels, support structures, and conduits. - Any support structures, conduits, inverters, storage units, or other hardware should be installed on the rear of the building or areas with limited visibility from the street and the public right of way. - Solar panels should be installed in a way that allows them to be easily removed without causing permanent damage or alteration to the building or site. Avoid: - Installing solar panels in locations that are visible from the street or public right of way such as the primary facade of a building. - Removing historic features of a building or site when installing solar panels. - Installing solar panels in a manner that obstructs the view of historic architectural features of a building or site. - Erecting ground-mounted arrays. - Installing solar panels on primary Landmark buildings. Installing on accessory structures for Landmark properties may be considered. - General Principles in Building Design: Solar panels, utility boxes, and other electrical equipment should be installed at the rear or sides of the building where they are not easily visible from the street. - Roof Best Practices: New roof features such as mounted utilities, satellite dishes, HVAC units, and solar panels should be located on the side or rear of a building where they are less visible from the right of way. - Mechanical and utility equipment best practices: Solar panels should be installed in such a manner that their visual impact is minimized from the right of way. The side and rear of a building’s roof is often the most appropriate setting for solar panels. Code includes this exemption from review: Addition or deletion of solar collectors ... in locations not visible from a public street.
South Boston		X	Position any roof feature toward the rear of the building so that it is not visible from the street.
Staunton	X		- In the near future, it can be anticipated that some corridor parcels and buildings will contain solar panels in order to reduce energy costs and contribute to a reduction of fossil fuel use. Considerations would include the type and size of the lot, the building type and design (particularly the roof size and configuration), the need or desire to screen the panels without affecting the functioning of the panels themselves. This concept is known as the “least visible high-performance location.” - GUIDELINES FOR [ROOFTOP] INSTALLATION - Rooftop arrays should follow the general shape of the roof. - Frames should not extend beyond the roof edge. - The height of the panel array should not be taller than the ridge of the roof. - On larger flat-roofed buildings, a parapet wall or other screening techniques may conceal panel arrays if they are visible without affecting their performance.

		X	Orderly maintenance and repair ... does not require a CofA, [including] addition or deletion of television or radio antennas, skylights or solar collectors in locations not visible from a public street.
Suffolk		X	Exempt from review: add or delete solar collectors ... in locations not visible from the street.
Williamsburg	X	X	Corridor Protection District and Architectural Preservation Districts 2 and 3: - Only facilities located on the roof are allowed. - Facilities shall not be visible from the Colonial Williamsburg Historic Area. - Use of solar roof tiles, laminates, glazing, and other technologies requiring removal of intact historic fabric or permanently altering/damaging such fabric should be avoided. - Solar panels should not project greater than 12 inches above the existing roof surface and should not be visible above the roof line of a primary facade. - Solar panels and their supporting structures should be compatible with the existing roof color. - Consider placing solar panels on an existing, non-historic addition or accessory structure, thereby minimizing the impact of solar installation on the significant features of the historic resource as well as specifically protecting historic fabric from alteration. - To the greatest extent possible, avoid placing solar panels on street-facing walls or roofs, including those facing side streets. Installations below and behind parapet walls and dormers or on rear-facing roofs are encouraged. - Solar panels should not require alterations to significant or character-defining features of a historic resource, such as altering existing roof lines or dormers. Avoid installations that obstruct views of significant architectural features, such as overlaying windows or decorative detailing.
		X	Architectural Preservation District 1: None allowed.

Information in this table was excerpted and summarized from documents provided or linked at the websites of the various localities listed in this table.