

Exhibit 21: Tier 1: Screening Tasks Prior to Site Visit

Issue	Task	Key Considerations	Resource	Task to Be Completed by...	Outcomes
Roof	Determine age of roof	<ul style="list-style-type: none"> The most viable projects have a new roof, one that is less than 2–3 years old, or are planning re-roofing. Roofs older than 8 years are not typically candidates for solar. 		Owner	Roof is _____ years old
	Determine warranty status of roof	<ul style="list-style-type: none"> Is the roof under warranty? If yes, what is the duration of the warranty? If yes, check how the warranty would be affected by a PV installation. 		Owner	Roof under warranty? <input type="radio"/> Yes (duration: _____) <input type="radio"/> No
	Identify type of roof	<ul style="list-style-type: none"> Flat roofs are ideal. Sloping roofs may be appropriate if the slope faces south. 	Google Earth	Owner	Roof is: <input type="radio"/> Flat <input type="radio"/> Sloping
	Determine ease of structural attachment	<ul style="list-style-type: none"> If the roof is obscured by roof vents, penetrations, skylights, chimney stacks, or other structures that might shade or make installation difficult, the site typically is less desirable. 	Google Earth	Owner	Multiple penetrations or structures? <input type="radio"/> Yes <input type="radio"/> No
Solar Potential	Evaluate solar exposure	<ul style="list-style-type: none"> Southern exposure offers the greatest potential for solar gain. 	Google Earth		Southern exposure? <input type="radio"/> Yes <input type="radio"/> No
	Assess shade	<ul style="list-style-type: none"> Large trees that shade the roof can obscure the needed sun. 95% unshaded solar access is ideal. Evaluate tree growth during site visit. 			_____% unshaded solar access current _____% unshaded solar access future
Housing Units in Multi-Family Properties	Count units in building	<ul style="list-style-type: none"> The larger the building the greater the common area electric load. Some solar developers/installers use a minimum of 50 units as a cut-off for economically viable multi-family projects. 		Owner	____ units in building
Utilities	Determine price paid for electricity	<ul style="list-style-type: none"> The more the owner pays for electricity the greater the potential benefit from a solar installation. 	Utility	Owner	Average cost of electricity is \$ _____ per month

It is often helpful to provide information gathered during a Tier 1 screening activity to a potential solar provider to help it assess, with an owner, the likelihood that PV installation will be feasible and financially viable.

Exhibit 22: Tier 2: Screening Tasks During Site Visit

Issue	Task	Key Considerations	Task to Be Completed by...	Outcomes
Roof	Identify roof materials and layers of roofing materials		Solar Developer and Owner	Roof is made of ____ and has ____ layers
	Determine structural integrity of roof	<ul style="list-style-type: none"> Flat roof (ideal): Steel frame truss joist system; short spans between load-bearing walls; poured concrete or steel roof structure. Sloping roof (ideal): Wood frame construction; rafters larger than 2x4; rafters less than 24 apart; show snow guards in schematic plans. 	Owner	Roof is: <input type="radio"/> Flat <input type="radio"/> Sloping Roof is structurally sound? <input type="radio"/> Yes <input type="radio"/> No Roof structure, describe: _____
	Evaluate roof penetrations	<ul style="list-style-type: none"> Assess existing and planned roof penetrations (chimneys, parapets, vents) for shading and limits they may place on the size and number of panels. 	Solar Developer	# and type of penetrations: _____ Penetrations create shading or limit size of PV panels? <input type="radio"/> Yes <input type="radio"/> No
	Evaluate roof condition	<ul style="list-style-type: none"> Confirm roof condition is good and structurally sound. 	Solar Developer	Roof is in good condition and structurally sound? <input type="radio"/> Yes <input type="radio"/> No
	Evaluate roof mount conditions		Solar Developer	Roof height from ground: ____ Orientation: ____ Roof pitch: ____ Ladder access: ____ Attic access: ____ Fire sprinklers in roof? <input type="radio"/> Yes <input type="radio"/> No
Solar Potential	Evaluate solar potential	<ul style="list-style-type: none"> Use Solar Pathfinder or other appropriate readings to assess solar potential. Use in conjunction with online spreadsheet to calculate system sizing. 	Solar Developer	Solar potential is sufficient? <input type="radio"/> Yes <input type="radio"/> No
	Evaluate shading	<ul style="list-style-type: none"> Develop a tree plan to show types and ages of trees to assess how trees will grow over the next 20–30 years. Determine which if any trees may pose shading issues and who owns them. 	Solar Developer	Tree growth will not create shading issues? <input type="radio"/> Yes <input type="radio"/> No If tree growth may create shading, owner able to cut trees? <input type="radio"/> Yes <input type="radio"/> No
Electricity	Evaluate current energy used and price paid	<ul style="list-style-type: none"> Review 12 months of energy bills to understand usage and costs 	Owner	Average monthly energy usage is ____ kWh Average cost of electricity is \$ ____ per month
	Evaluate connection issues and locations for electrical equipment	<ul style="list-style-type: none"> Where to locate AC+DC run Service voltage Space for breaker 	Solar Developer	AC/DC run available? <input type="radio"/> Yes <input type="radio"/> No Service voltage OK? <input type="radio"/> Yes <input type="radio"/> No Beaker space available? <input type="radio"/> Yes <input type="radio"/> No

Issue	Task	Key Considerations	Task to Be Completed by...	Outcomes
Building	Learn if the residence is under the jurisdiction of a homeowners association or other design review board, or is a historic building	May add complexity and delays to project implementation.	Owner	Building subject to design review? <input type="radio"/> Yes <input type="radio"/> No
	Determine existence of any code violations	<ul style="list-style-type: none"> ▪ Unpermitted remodels ▪ Unpermitted structures ▪ Unpermitted electrical work 	Owner	Code violations? <input type="radio"/> Yes <input type="radio"/> No
	Determine if customer has drawings of the property or building	Having drawings will facilitate design.	Owner	Drawings of property or building? <input type="radio"/> Yes <input type="radio"/> No
	Learn if any other construction is planned for the near future	Construction might affect the roof or shading.	Owner	Construction planned? <input type="radio"/> Yes <input type="radio"/> No