



System Inspection

8218 Center Dr.

Section	Item	Details / Findings
Property Information	Property Address	8218 Center Dr. Arden, NC 28704
	Client Name	John and Jane Doe
	Inspection Date	4/17/2026
	Inspector Name & Company	Mitchell Cole Three Pillars Solar
	Weather Conditions	Mid Morning, Partially Cloudy
	Utility Provider	Duke
Executive Summary	Overall System Condition	Excellent / Good / Fair / Poor
	System Operational at Time of Inspection	Yes / No
	Major Findings	No Critter Guard Present evidence of squirrel intrusion found – recommended tree trimming to limit squirrel access or installation of critter guard
		Loose grounding connections on racking - remediated
	General Recommendation	Panel Cleaning recommended, see Solar Unsoiled addendum
		Inverter 8 years old in good condition, regular monitoring recommended typical life expectancy of 10-15 years
System Overview	System Type	Grid-Tied / Hybrid / Off-Grid
	Installation Year	2016
	Roof Type	Asphalt / Metal / Tile / Flat
	Array Orientation	South / East / West
	Array Tilt	30 Degrees
	Number of Arrays	1
	Rapid Shutdown Present	Yes / No
	Battery Storage Present	Yes / No
Solar Modules	Manufacturer	Sun Edison
	Model Number	SE-F325BzD
	Quantity	28
	Module Wattage	325 W
	Total DC Capacity	9.1 kW
	Visible Condition	Good / Fair / Poor

Solar Modules	Observed Defects	Cracks / Delamination / Discoloration / None
		Minor hot spotting present, see thermal image, within range for OEM permissible values.
Inverter Information	Manufacturer	Solar Edge
	Model Number	SE7600H-US
	Quantity	1
	Inverter Type	String / Microinverter / Hybrid
	Operational Status	Operational / Faulted / Offline
	Error Codes Observed	None Active
		Historical – Comm lost, No Grid detected
	Visible Condition	Good / Fair / Poor
Balance of System Components	Disconnects	Satisfactory / Needs Attention
	Conduit & Wiring	Satisfactory / Needs Attention
	Junction Boxes	Satisfactory / Needs Attention – No weep hole/drain present, no signs of water intrusion
	Labeling & Placards	Satisfactory / Needs Attention – Missing Labels per code for PC source
	Grounding & Bonding	Satisfactory / Needs Attention – tightened loose termination found on site
	Roof Attachments & Flashing	Satisfactory / Needs Attention – no signs of water penetration present in attic, all lags are correctly landed joists
	Monitoring Equipment	Operational / Offline
Roof & Structural Observations	Roof Condition Around Array	Slightly worn shingles around array, squirrel nest present
	Evidence of Leaks	Yes / No
	Corrosion Observed	Yes / No
	Mounting Hardware Condition	Good / Fair / Poor
	Structural Concerns Observed	None observed
Electrical Observations	Conductor Management	Acceptable / Deficient – leads properly managed, no contact with roof observed
	Conduit Securement	Acceptable / Deficient
	Disconnect Accessibility	Acceptable / Deficient
	NEC Labeling Present	Yes / No – Missing Labels in Attic
	Grounding/Bonding Adequate	Yes / No
Shading Analysis	Primary Shading Sources	Trees / Chimneys / Adjacent Structures / Roof Features
	Morning Shade Impact	None / Low / Moderate / Heavy
	Midday Shade Impact	None / Low / Moderate / Heavy
	Afternoon Shade Impact	None / Low / Moderate / Heavy

Shading Analysis	Estimated Annual Solar Access	90%
	Shading Notes	Morning shade present from tree in summer months, neighbor in winter-time
Expected Production	Estimated Annual Production	10,000 kWh/year PVwatts 14% efficiency + shading losses
	Estimated Utility Offset	80 % household usage estimated at 12,500kWh
	Historical Production Available	Yes / No
	Production Notes	Annual production slightly lower than PVsyst estimate, due to panel degradation/soiling
Safety & Code Review	Rapid Shutdown Compliance	Pass / Fail – DC optimizers in use
	Working Clearances Adequate	Pass / Fail – array set backs from roof edge acceptable
	Labeling Compliance	Pass / Fail – PV Source labels need to be re-applied
	Grounding/Bonding Compliance	Pass / Fail
	Additional Safety Notes	Had to remove items from working area in front of main house panel. For customer knowledge this should be kept clear
Recommendations	Immediate Repairs Recommended	None
	Preventative Maintenance Recommended	Panel Cleaning
	Vegetation Management Recommended	Afternoon tree shade appears close enough for the roof to be accessed by rodents, recommend limbing of this tree section
	Further Evaluation Recommended	Roofer / Electrician / Manufacturer/ None
	Monitoring Recommended	Yes / No – Solar Edge app access need for Homeowner was able to access inverter status via QR code but could not see system map. Additional set up may be needed with OEM.
		Pricing for this service – primarily remote Estimated at \$250/year
Inspection Limitations	Scope Limitation Statement	This inspection is a visual, non-invasive assessment of accessible solar PV system components at the time of inspection. Hidden defects or intermittent issues may not be identifiable during the inspection.
Attachments	Site Photos Included	Yes / No – Accessible at Google drive link
	Array Photos Included	Yes / No – Accessible at Google drive link
	Thermal Imaging Included	Yes / No – Accessible at Google drive link
	Shade Analysis Images Included	Yes / No – Accessible at Google drive link
	Utility Bill Review Included	Yes / No
Inspector Information	Inspector Name	Mitchell Cole
	Signature	
	Date	