



Quality HVAC Program | Quality Bid Tier I Checklist

Company Name | CSLB Number:

Household Last Name | Street Number:

Customer email:

Service Date:

DIRECTIONS: This comprehensive checklist is to be completed onsite and uploaded to Iris. Certain key findings -- indicated by thick boxes below -- must be reviewed with and signed off by the customer. This customer review can be done using this checklist or via the Quality Service Report you will get by email. The key findings must also be entered in the online form at: https://frontierenergy.formstack.com/forms/qb_i

INSPECTIONS

Attic Insulation	Results	4	<input type="radio"/> No Further Attention Needed on Attic Insulation	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">All sections must be completed. If they are Not Applicable, write "NA" and add an explanation in the comments box.</div> <div style="border: 1px solid black; padding: 2px; font-size: small;">Remember, boxed values must be entered online</div>
		5	<input type="checkbox"/> NA – no attic / not accessible	
		6	<input type="checkbox"/> Adequate and in good condition	
		7	<input type="checkbox"/> Needs minor adjustments	
		8	<input type="radio"/> Further Attention May Be Needed on Attic Insulation	
		9	<input type="checkbox"/> Needs more insulation	
10	<input type="checkbox"/> Needs replacement			
Duct Insulation	Results	12	<input type="radio"/> No Further Attention Needed on Duct Insulation	
		13	<input type="checkbox"/> NA – ductless system	
		14	<input type="checkbox"/> NA – ducts not accessible	
		15	<input type="checkbox"/> Ducts in conditioned space	
		16	<input type="checkbox"/> Adequate and in good condition	
		17	<input type="checkbox"/> Vapor barrier has only minor tears or gaps	
18	<input type="radio"/> Further Attention May Be Needed on Duct Insulation			
19	<input type="checkbox"/> Inadequate or in very poor condition			
20	<input type="checkbox"/> Vapor barrier has significant tears/gaps or no barrier			
Air Filter	Results	22	<input type="radio"/> No Further Attention Needed on Air Filter	
		23	<input type="checkbox"/> NA – no filter needed	
		24	<input type="checkbox"/> Filters are adequate	
		25	<input type="checkbox"/> Minor fouling	
		26	<input type="radio"/> Further Attention May Be Needed on Air Filter	
		27	<input type="checkbox"/> Extremely fouled	
28	<input type="checkbox"/> No filter			
29	<input type="checkbox"/> Undersized for system			
Ventilation Mechanism	Results	31	<input type="radio"/> No Further Attention Needed on Ventilation Mechanism	
		32	<input type="checkbox"/> All bathrooms have fans and kitchen hood works and exhausts to outside	
		33	<input type="checkbox"/> Has ERV or HRV	
		34	<input type="checkbox"/> HVAC has outside air duct	
		35	<input type="radio"/> Further Attention May Be Needed on Vent. Mechanism	
		36	<input type="checkbox"/> Some bathrooms have no operating fans or don't exhaust to outside	
37	<input type="checkbox"/> Kitchen hood not functioning/doesn't exhaust outside			
Thermostat	Results	43	<input type="radio"/> No Further Attention Needed on Thermostat	
		44	<input type="checkbox"/> Non-programmable but OK	
		45	<input type="checkbox"/> Good programming	
		46	<input type="checkbox"/> Programming with minor errors	
		47	<input type="checkbox"/> Overridden but OK	
		48	<input type="radio"/> Further Attention May Be Needed on Thermostat	
		49	<input type="checkbox"/> No thermostat	
		50	<input type="checkbox"/> Non-programmable and NOT OK	
51	<input type="checkbox"/> Programming with significant errors			
52	<input type="checkbox"/> Overridden and NOT OK			
53	<input type="checkbox"/> Inefficient			

INSPECTION Comments, Recommendations, and/or NA Explanation	72	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center;"> Enter anything the customer should know and explain anything that is Not Applicable (NA) </div>		

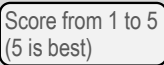
TESTS

System Airflow	Results	76	Total Airflow		cfm	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; font-size: small;"> = total airflow / system capacity; ideally ≥ 350 </div>
		77	System Capacity		tons	
		78	Normalized Airflow		cfm/ton	
Static Pressure	Results	81	Supply Static Pressure		IWC	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; font-size: small;"> = Supply SP - return SP; ≤ 0.7 required if ductwork is new </div>
		82	Return Static Pressure		IWC	
		83	Total External Static Pressure		IWC	
Temperature Split	System Mode During Test	86	<input type="radio"/> Heating Mode			<div style="border: 1px solid black; border-radius: 10px; padding: 5px; font-size: small;"> For heating = supply - return, ideally 25-65 For cooling = return - supply, ideally 15-25 </div>
		87	<input type="radio"/> Cooling Mode			
	Results	89	Supply Air Temperature		°F	
		90	Return Air Temperature		°F	
		91	Temperature Split		°F	

TEST Comments, Recommendations, and/or NA Explanation	147			
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DESIGN

Load Calculation	Method	151	Like for Like Replacement?	<input type="radio"/> Yes <input type="radio"/> No	
		154	Load Calculation Input Type		
		155	<input type="radio"/> Simplified Load Calc Inputs Used		
		156	<input type="radio"/> Full Load Calc Inputs Used		
	Results	158	Design Total Cooling Load		kBtuh
	159	Design Heating Load		kBtuh	
Uploads	161	<input type="checkbox"/> PDF or Photo of Load Calculation Report			
Design of Existing System	Make, Model, Year	164	Indoor Unit Make, Model, and Year (est.)		
		165	Outdoor Unit Make, Model, and Year (est.)		
	Rated Efficiency	167	Cooling Efficiency		SEER or SEER2 (circle one)
		168	Heating Efficiency		HSPF, HSPF2, or AFUE (circle one)
	Capacity	170	Indoor Unit Capacity		kBtuh
171		Outdoor Unit Capacity		kBtuh	
Design of Recommended System	Make, Model	174	Indoor Unit Make and Model		
		175	Outdoor Unit Make and Model		
	Rated Efficiency	177	Cooling Efficiency		SEER or SEER2 (circle one)
		178	Heating Efficiency		HSPF, HSPF2, or AFUE (circle one)
	Capacity	180	Indoor Unit Capacity		kBtuh
		181	Outdoor Unit Capacity		kBtuh
	Determine if Rec. System is Compliant: ALL 3 Criteria Must be Met	183	<input type="checkbox"/> Criterion 1: Is a Heat Pump		
		184	<input type="checkbox"/> Criterion 2: Meets all Sizing Criteria:		<div style="border: 1px solid black; border-radius: 10px; padding: 5px; font-size: x-small;"> No less than load (not including Supp Heating) </div>
		185	<input type="checkbox"/> Heating not too small		<div style="border: 1px solid black; border-radius: 10px; padding: 5px; font-size: x-small;"> Furnace: capacity ≤ 6 kBtuh over load OR Heat pump: capacity ≤ 12 kBtuh over load </div>
		186	<input type="checkbox"/> Heating not too large		
		187	<input type="checkbox"/> Cooling not too large		<div style="border: 1px solid black; border-radius: 10px; padding: 5px; font-size: x-small;"> Capacity ≤ 6 kBtuh over load OR airflow ≥ 400 cfm/ton </div>
188		<input type="checkbox"/> Variable or multi speed system turns down		<div style="border: 1px solid black; border-radius: 10px; padding: 5px; font-size: x-small;"> Low speed capacity ≤ 80% of load OR NA if single speed </div>	
189		<input type="checkbox"/> Criterion 3: Meets Other Criteria:		<div style="border: 1px solid black; border-radius: 10px; padding: 5px; font-size: x-small;"> HP strip heater capacity ≤ 2.7 kW/ton </div>	
190		<input type="checkbox"/> HP strip heater capacity not too large			
191	<input type="checkbox"/> HP supp heating lockout has controls & instructions				
192	<input type="checkbox"/> Crankcase heating absent or well-controlled				
		Compliant?	<input type="radio"/> Yes <input type="radio"/> No	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; font-size: x-small;"> Remember, enter NA for anything Not Applicable and </div>	

Design of Rec. System (Cont.)	Value of Proposed System	194	Overall Value		
		195	Energy Savings or Bill Reduction		
		196	Improved Air Quality		
		197	Improved Comfort		
		198	Convenience		
Uploads	227	<input type="checkbox"/> PDF/Photo of Bid for Recommended System		<input type="text" value="Redact pricing information"/>	

DESIGN Comments, Recommendations, and/or NA Explanation	237	
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SERVICE COMPLETION

Other Programs	Referral to Other Programs	344a	Review the following programs with the customer: <input type="checkbox"/> TECH Clean California: \$1,000 incentives for new single family heat pump HVAC systems (up to two systems per home). Requirements: 1) must be a TECH-enrolled contractor, 2) project must be a non-heat pump to heat pump installation, 3) no new construction, retrofits only, 4) equipment must be AHRI matched systems, and 5) equipment must meet Title 24 code minimum standards. See https://techcleanca.com/ .
		344b	<input type="checkbox"/> GoGreen Financing: GoGreen Home provides California residents with financing for energy efficiency upgrades with zero fees or closing costs and some of the best rates available. Eligibility requires that the property receive electric or natural gas service from PG&E, SDG&E, SCE, or SoCalGas. See https://gogreenfinancing.com/ .
		344c	<input type="checkbox"/> Self-Generation Incentive Program: SGIP provides incentives for the installation of qualifying on-site power generation and storage technologies. The current residential incentive is \$0.15 per Wh-AC of the system. Advanced approval and funding reservation is required. The program is implemented by your IOU (PG&E, SDG&E, SCE, or SoCalGas). See https://www.selfgenca.com/ , or research your IOU's website.

COMPLETION Comments, Recommendations, and/or NA Explanation	346	
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SIGNATURES

- Electronic signatures will be uploaded later, after review of the emailed Quality Service Report, at: https://frontierenergy.formstack.com/forms/qhvac_claim_signature_attachment
- Signatures have been obtained below after review of boxed values in this checklist

Customer Name

Technician Name

Customer Signature

Technician Signature

I hereby certify that I reviewed the above key findings with the technician. I understand that this does not signify that I am selecting this contractor or accepting this bid.

I hereby certify that I reviewed the above key findings with the home decision maker.

The Quality Residential HVAC Services Program is funded by California utility customers under the auspices of the California Public Utilities Commission and implemented by Frontier Energy under a contract awarded by San Diego Gas & Electric Company (SDG&E®). Customers who choose to participate in this program are not obligated to purchase any additional services offered by the contractor. Actual savings may vary. The trademarks used herein are the property of their respective owners.