

PERFORMANCE CAPABILITIES HVAC ACOUSTICAL HEATING REFRIGERATION WITNESS



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Intertek is a leading Total Quality Assurance provider to industries worldwide. Our network of more than 1,000 laboratories and offices in more than 100 countries, delivers innovative and bespoke Assurance, Testing, Inspection and Certification solutions for our customers' operations and supply chains.

Get HVAC/R products to market faster and more confidently with the Total Quality Assurance leader in HVAC/R Certification and Testing



Intertek



Intertek is the world's largest independent HVAC/R testing company, providing manufacturers with nearby service through a network of labs across the globe. Intertek has the HVAC/R testing facilities, experience and certification authority to help you enter the global market, in an expedited manner. We provide a single source for product planning, testing, and certification needs. This saves our clients time and money and provides them with the ability to reach these markets faster.

HVAC/R manufacturers and leading industry associations partner with Intertek to expand their capacity and global footprint, through Intertek's own extensive network of services and expertise. While Intertek has been testing HVAC/R equipment for over six decades, we have partnered with AHRI (Air-Conditioning, Heating, and Refrigeration Institution) for over 50 years. Our engineers verify that HVAC/R equipment used in North America and abroad meets the performance claims of manufacturers when measured by standards established by AHRI.

Products	Number of Facilities	Capacity	Indoor Airflow	Outdoor Airflow	Water Flow	Water Temp	Indoor Temp	Outdoor Temp	ACCL Capacity	WCCL Capacity
USAC/USHP	14	6000 - 240000 Btu/Hr	40 - 13150 SCFM	40 - 8000 SCFM	2 - 80 GPM	32 - 180 °F	50-125°F	-14-130°F		
ULE	9	36000 - 780000 Btu/Hr	40 - 38000 SCFM	40 - 7500 SCFM	1 - 440 GPM	32 - 180 °F	50-125°F	10-130°F	180000 - 2160000 Btu/Hr	180000 - 960000 Btu/Hr
SPVU	9	6000 - 240000 Btu/Hr	40 - 13150 SCFM	40 - 7500 SCFM	1 - 80 GPM	32 - 180 °F	50 - 125 °F	-14-130°F		
W-to-A WSHP	8	6000 - 780000 Btu/Hr	40 - 38000 SCFM	40 - 7500 SCFM	1 - 440 GPM	32 - 200 °F	50-125°F	-5 - 128 °F	180000 - 2160000 Btu/Hr	180000 - 960000 Btu/Hr
W-to-W WSHP	2	6000 - 144000 Btu/Hr	40 - 5850 SCFM	40 - 7000 SCFM	1 - 30 GPM	32 - 200 °F	50-110°F	10-128°F		
DGX	1	6000 - 84000 Btu/Hr	150 - 2400 SCFM		1 - 30 GPM	32 - 200 °F	50-110°F			
Refrigerant Coils	1	36000 - 216000 Btu/Hr	800 - 6000 SCFM		7 - 80 GPM	45 - 180 °F	Max 115 °F			
Water Coils	10	18000 - 780000 Btu/Hr	40 - 38000 SCFM	40 - 8000 SCFM	1 - 440 GPM	32 - 180 °F	50 - 125 °F	-5 - 128 °F	180000 - 2160000 Btu/Hr	180000 - 960000 Btu/Hr
RAC	5	5000 - 54000 Btu/Hr	150 - 2270 SCFM	270 - 4500 SCFM			50-110°F	47 - 125 °F		
RAC - Demand Response	2	5000 - 36000 Btu/Hr	150 - 1200 SCFM				60 - 100 °F	47 - 125 °F		
PTAC/PTHP	5	5000 - 54000 Btu/Hr	150 - 2270 SCFM	270 - 4500 SCFM			50-110°F	47 - 125 °F		
Hydronic PTAC/PTHP	2	6000 - 84000 Btu/Hr	150 - 2400 SCFM		1 - 30 GPM	32 - 200 °F	50-110°F			
DH	З	5000 - 400000 Btu/Hr	150 - 2400 SCFM		1 - 30 GPM	32 - 200 °F	50-110°F			
HU	2	6000 - 84000 Btu/Hr	150 - 2400 SCFM		1 - 30 GPM	32 - 200 °F	50 - 110 °F			

Products	Number of Facilities	Capacity	Indoor Airflow	Outdoor Airflow	Water Flow	Water Temp	Indoor Temp	Outdoor Temp	ACCL Capacity	WCCL Capacity
ERV	1	Effectiveness Max 100%	100 - 4000 SCFM	100 - 4000 SCFM			55 - 80 °F	35 - 110 °F		
WICF - Evaporator Only				*Co	 ntact Engineerir 	ng for details. I				
WICF - Matched Pair	4	12000 - 240000 Btu/Hr	65 - 7500 SCFM	50 - 7500 SCFM	1 - 80 GPM	40 - 180 °F	50 - 125 °F	-14-130°F		
WICF - Dedicated Condenser	2	12000 - 240000 Btu/Hr	250 - 7500 SCFM	350 - 7500 SCFM	1 - 80 GPM	40 - 180 °F	50 - 125 °F	-14-130°F		
WCCL	1	138000 - 780000 Btu/Hr	2500 - 38000 SCFM		2 - 440 GPM	40-180°F	50-125°F	17-125°F	180000 - 2160000 Btu/Hr	180000 - 960000 Btu/Hr
ACCL	1	138000 - 780000 Btu/Hr	2500 - 38000 SCFM		2 - 440 GPM	40 - 180 °F	50 - 125 °F	17 - 125 °F	180000 - 2160000 Btu/Hr	180000 - 960000 Btu/Hr
DCOM	З	36000 - 780000 Btu/Hr	800 - 38000 SCFM	800 - 7500 SCFM	1 - 440 GPM	40-180°F	50-125°F	10-125°F	180000 - 2160000 Btu/Hr	180000 - 960000 Btu/Hr
Remote condensers	2	96000 - 780000 Btu/Hr	2400 - 38000 SCFM		2 - 440 GPM	40 - 180 °F	50 - 125 °F	17 - 125 °F	180000 - 2160000 Btu/Hr	180000 - 960000 Btu/Hr
HPPH	1	96000 - 300000 °F	2400 - 22000 SCFM		2 - 200 GPM	Max 180 °F	50 - 125 °F			
LLHE	1	96000 - 300000 °F	2400 - 22000 SCFM		2 - 200 GPM	Max 180 °F	50 - 125 °F			
Fan coils	5	6000 - 144000 Btu/Hr	40 - 5850 SCFM	40 - 7000 SCFM	1 - 30 GPM	32 - 200 °F	50-110°F	-5 - 128 °F		
DOAS	2	Max 780000 Btu/Hr	1055 - 28500 SCFM		Max 80 GPM	40 - 180 °F	60-100°F	35-130°F		
VRF	2	Max 240000 Btu/Hr	260 - 13150 SCFM	150 - 4150 SCFM	Max 80 GPM		60 - 90 °F	17-128°F		
CAGI	1	Max 420000 Btu/Hr	1055 - 17500 SCFM		Max 80 GPM	40-180°F	60 - 100 °F	40 - 128 °F		

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ACOUSTICAL

Product	Standard
Room Air Conditioners	AHAM-RAC Room Air Conditioner Sound Rating Standard
Split System Air Conditioners (10 ton max)	AHRI 270 – Sound Rating of Outdoor Unitary Equipment
Single Package Air Conditioners (10 ton max)	AHRI 270 – Sound Rating of Outdoor Unitary Equipment
Ducted Air Moving and Air Conditioning Equipment	AHRI 260 – Sound Rating of Ducted Air Moving and Conditioning Equipment
	(Water Source Heat Pumps, Air Conditioners, Fan Coils, Fans, Blowers, etc.)
	The range of these products and related test conditions are large. Please contact Cortland Acoustical Engineering Staff for Details
Non-Ducted Air Moving and Air Conditioning Equipment	AHRI 350
	Sound Rating of Non-Ducted Indoor Air Conditioning Equipment,
PTACs	AHRI 300 – Sound Rating and Sound Transmission Loss of Packaged Terminal Equipment
	Comprised of 3 Standards
Duct Silencers	ASTM E477 – Test Method for Measuring Acoustical and Airflow Performance of Duct Liner Materials and Prefabricated Silencers
Grilles, Registers, Diffusers	ASHRAE 70 - Method of Testing for Rating the Performance of Air Outlets and Inlets
Humidifiers, Dehumidifiers	ANSI S12.51 – Acoustics – Determination of Sound Power Levels by the Reverberation Room Method
Vent Fans	HVI 915 Procedure for Loudness Rating of Residential Fan Products HVI 916 Air Flow Test Procedure
Air Cleaners	AHAM AC2 – Method for Sound Testing of Portable Household Electric Room Air Cleaners
ARI 880, ASHRAE 130	ANSI S12.51 – Acoustics – Determination of Sound Power Levels by the Reverberation Room Method

HEATING

Products	Number of Facilities	Capacity	Indoor Airflow	Water Flow	Water Temp
LLBF	0				
RWH	5	3000 - 199900 Btu/hr		2 - 30 GPM	
CWH	3	200000 - 500000 Btu/hr		Max 14 GPM	
DHE	1	5000 - 400000 Btu/Hr			
CFTR	2			Max 4 GPM	90 - 210 °F
RBLR	2	6000 - 650000 Btu/Hr	800 - 6000 SCFM	Max 30 GPM	80 - 180 °F
CBLR	2	6000 - 650000 Btu/Hr	800 - 6000 SCFM	Max 30 GPM	80 - 180 °F
CFRN	2	200000 - 1000000 Btu/hr			
RFRN	4	5000 - 400000 Btu/Hr			
RBR	1			Max 4 GPM	90 - 210 °F

REFRIGERATION

REFRIGERATION								
Products	Number of Facilities	Indoor Airflow	Indoor Temp					
Residential Refrigerators and Freezers	2	Max 50 FPM	Max 110 °F					
Commercial Refrigerators and Freezers	2	Max 50 FPM	Max 110 °F					
Commercial Ice Makers	2	Max 50 FPM	Max 110 °F					
Vending Machines	2	Max 50 FPM	Max 110 °F					
Water Coolers	2	Max 50 FPM	Max 110 °F					
Pool Pumps	2	Max 50 FPM	Max 110 °F					

REFRIGERANTS / CHEMICAL								
Products	Number of Facilities	Capacity	Indoor Airflow	Water Flow	Water Temp			
RRRE	1	×						
SAE Program	1		X					
UL 60335-2-89	2	×	X	X				
UL 60335-2-24	1	×	X	Х				
UL 60335-2-34, UL 157, UL 207	1				×			
Fluid, Dyes and Additives	1				Х			
PRGE	1			Х				
CFRN	2	200000 - 1000000 Btu/hr						
RFRN	4	5000 - 400000 Btu/Hr						
RBR	1			Max 4 GPM	90 - 210 °F			

WITNESS

Product	Number Test Kits	RTD	Pressure Transducer 0-25	Pressure Transducer 0-100	3 Phase Power Analyzer w/ Current Probes to 1000A*	Barometer
USAC/USHP	2	-20 - 200 °F Qty:8	Max 25 PSIG Qty:2	Max 100 PSIG Qty:2	Qty:1	Qty:1
ULE	2	-20 - 200 °F Qty:8	Max 25 PSIG Qty:2	Max 100 PSIG Qty:2	Qty:1	Qty:1
WCCL	5	-20 - 200 °F Qty:4	Max 25 PSIG Qty:2	Max 100 PSIG Qty:2	Qty:1	Qty:1
ACCL	5	-20 - 200 °F Qty:4	Max 25 PSIG Qty:2	Max 100 PSIG Qty:2	Qty:1	Qty:1
DCOM	2	-20 - 200 °F Qty:8	Max 25 PSIG Qty;2	Max 100 PSIG Qty:2	Qty:1	Qty:1
TR	1				Qty:2	
LLHE	5	-20 - 200 °F Qty:4	Max 25 PSIG Qty:2	Max 100 PSIG Qty:2	Qty:1	Qty:1
LLBF	5	-20 - 200 °F Qty:4	Max 25 PSIG Qty:2	Max 100 PSIG Qty:2	Qty:1	Qty:1

* Witness Testing capabilities can be extended with the use of any available ISO 17025 Calibrated Test Equipment that the client has on site.



PERFORMANCE CAPABILITIES

HVAC ACOUSTICAL HEATING REFRIGERATION WITNESS

ENERGY EFFICIENCY TESTING FOR HVAC/R EQUIPMENT

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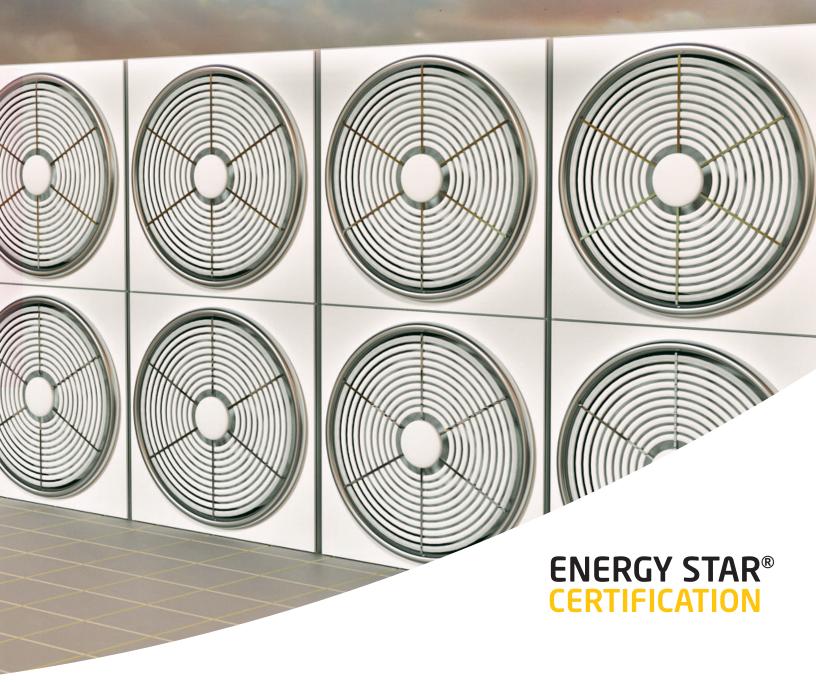
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Meet the latest requirements for HVAC/R Energy Efficiency

Whether you are looking to determine energy consumption for your HVAC/R products or require R&D assistance in your product development process, Intertek has the expertise, accreditations and capabilities to help your products gain a competitive edge. As the testing industry leader for HVAC/R equipment, Intertek has partnered with leading industry organizations to certify that HVAC/R equipment meets the performance claims of the manufacturers and required Energy Efficiency standards. With a large scope of capabilities, Intertek can customize testing for any HVAC/R unit, regardless of design.



Intertek's broad scope of product expertise and long list of energy efficiency accreditations provide us with the resources and know-how to deliver the fastest, most efficient path to ENERGY STAR® Certification.

Regardless of where you are located, Intertek provides speed-to-market and local service around the globe for all ENERGY STAR® product categories. We are an EPA-Recognized Certification Body (CB), maintaining a global network of 22 EPA-Recognized Accredited Energy Efficiency Testing Laboratories. We help you meet consumer demand and stay on the cutting edge of energy efficiency requirements. Our scope of accreditation allows us to test and certify all gas and electrical ENERGY STAR® product categories, providing a single source solution for our clients. In addition, our proprietary Energy Efficiency Certification Program covers more than just ENERGY STAR® requirements,

providing you with the convenience and savings of all-in-one testing and certification for the world's most prominent Energy Efficiency schemes including, DoE, NRCan, CEC, Ecodesign Directive, SASO, EcoLabel and other MEPS.







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