

# Air Conditioning Contractors of America

## Manual S (Residential Equipment Selection)



### Project Information

Name:

City:

State:  Altitude:  Altitude Adjustment:

### Cooling Design Information

Outdoor Design Temp:  °F db Summer

Outdoor Design Temp:  °F db Winter

Indoor Design Temp:  °F db  %RH  °F wb

### Manual J Load Calculations

Total Load	Sensible	Latent	SHR	Heat Loss
8777	6373	2404	0.726	61657

### Airflow Calculations

Design TD for Airflow

Design Sensible CFM

### OEM Information

Manufacturer:  Furnace Model #:  AFUE:

Coil or Fan-Coil Model #:  Condenser Model #:  SEER:  HSPF:

### (A) Manufacturer's Cooling Performance Data

Entering Coil Temperature = 75 (F db)	Lower CFM	Return Air (F wb)	Outdoor Temperature = <input type="text" value="95"/> (F db)		SHR	
			Total BTUH	Sensible BTUH	Latent BTUH	
Rated CFM @ Rated RA Temperature		<input type="text" value="67"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	#DIV/0!
Rated CFM @ Design RA Temperature	<input type="text"/>	<input type="text" value="63"/>	<input type="text"/>	#DIV/0!	<input type="text"/>	#DIV/0!
Rated CFM @ Rated RA Temperature		<input type="text" value="62"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	#DIV/0!

### (B) Manufacturer's Cooling Performance Data

Entering Coil Temperature = 75 (F db)	Higher CFM	Return Air (F wb)	Outdoor Temperature = <input type="text" value="95"/> (F db)		SHR	
			Total BTUH	Sensible BTUH	Latent BTUH	
Rated CFM @ Rated RA Temperature		<input type="text" value="67"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	#DIV/0!
Rated CFM @ Design RA Temperature	<input type="text"/>	<input type="text" value="63"/>	<input type="text"/>	#DIV/0!	<input type="text"/>	#DIV/0!
Rated CFM @ Rated RA Temperature		<input type="text" value="62"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	#DIV/0!

### Manufacturer's Cooling Performance Data (Interpolated)

	Design CFM	Return Air (F wb)	Outdoor Temperature = 95 (F db)		SHR	
			Total BTUH	Sensible BTUH	Latent BTUH	
Excess Latent Capacity Calculation				#DIV/0!	#DIV/0!	#DIV/0!
				+	#DIV/0!	#DIV/0!
Capacity @ Design CFM / RA (F wb)	<input type="text" value="275.89"/>	<input type="text" value="63"/>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Equipment Capacity as a % of Design			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

### Manufacturer's Heat Pump Data

Capacity @ 47 °F db	Capacity @ 17 °F db	Balance Point	Supplemental Heat Required
<input type="text"/>	<input type="text"/>	<input type="text" value="65.0"/>	<input type="text" value="18.07"/>

### Manufacturer's Furnace Data

Input Capacity	Output Capacity	AFUE	Desired Temp. Rise	Calculated Airflow
<input type="text" value="140,000"/>	<input type="text" value="117,000"/>	<input type="text" value="83.0"/>	<input type="text" value="50"/>	<input type="text" value="2,167"/>