

## **“How to determine Air Flow through an A/C unit”**

### **Test for Correct System Airflow: A/C**

		Indoor Dry Bulb °F							
		70	72	74	76	78	80	82	84
Indoor Wet Bulb °F	58	51	52	53	54	55	56	57	58
	60	52	53	54	55	56	57	57	59
	62	53	55	55	56	57	58	59	60
	64	55	56	57	57	58	59	60	61
	66	56	57	58	59	60	61	62	63
	68	58	59	60	61	62	63	64	64
	70	60	61	62	63	64	65	66	66
	72		63	64	65	66	67	68	68
	74			65	67	68	69	70	70
	76						71	72	72

**Required supply air temp °F**

Measure the indoor wet bulb & indoor dry bulb temps. Find the intersection of wet and dry bulb temps. If the air exiting the duct is 3° colder than the required supply air temp, the airflow is too low: replace the filter and/or clean evap and/or increase the blower speed. If the temp is higher than required, the system has too much airflow and/or low refrigerant and/or has weak compressor valves.

#### **Tools you'll need to determine air flow through an A/C unit:**

- 1. Digital thermometer**
- 2. Digital humidity tester**

#### **Most common problems if the tested temperature is 3° warmer:**

- 1. Low refrigerant**
- 2. Weak compressor**
- 3. A restricted metering device or bad TXV**
- 4. A leak in the return air duct work**
- 5. An oversized furnace or air handler**

#### **Most common problems if the tested temperature is 3° colder:**

- 1. A dirty filter**
- 2. A dirty coil**
- 3. The fan is on too low of a speed**
- 4. Too many registers or supply ducts are closed**
- 5. The duct system is too small**
- 6. The furnace or air handler is too small**
- 7. The coil is too small for the condensing unit**



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