E.P. Homiek Sheet Metal & HVAC Supply Quarterly Newsletter November 2021

HVAC Contractor News You Can Use

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## UPCOMING WEBINARS

neet Metal Fabrication &

### HVAC Physics, Concepts & Theory

Thurs, Nov. 11 | 4:30-6:00 p.m.

HVAC topics discussed will include properties of refrigerant, heat transfer including latent and sensible, and associated concepts and theories. Instructed by Goodman's Doug Hocker.

#### Goodman

#### Basic Electrical Principles

Thurs, Dec. 2 | 4:30-6:00 p.m.

Instructor Doug Hocker will identify, apply, illustrate, and accurately define electrical conscepts and components as they pertain to the HVAC industry.

Goodman Air Conditioning & Heating

#### HVAC Diagnostics Fundamentals

#### Thurs, Dec. 16 | 4:30-6:00 p.m.

Dean Altemus will cover the basics of refrigeration system troubleshooting and how they are affected by refrigerant charge, restrictions, airflow, metering devices, and air in systems

All webinars are FREE. To register please call our Lakewood branch at (732) 364-7644 or email <u>vsanders@ephomiek.com</u>

# Residential Testing, Adjusting & Balancing Study: TAB Benefits Both Owners and Contractors

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Airflow testing and balancing, or TAB, has long been used in large commercial and industrial HVAC systems to achieve peak system performance. It is becoming increasingly popular among residential customers looking to correct low airflow issues that cause problems like inconsistent temperatures from room to room, poor indoor air quality, poor humidity control, and high utility bills.

An energy efficiency study published by National Comfort Institute examined air balance tests performed on hundreds of existing residential HVAC systems. Some results were surprising:

- The average HVAC system operated at just 48% of its rated capacity.
- Less than 10% of the systems were performing above 80%.



- Of the 852 systems tested, 462 owners opted to move forward with improvements recommended by the TAB specialist.
- Upon retesting, HVAC systems that underwent TAB were found to be achieving an average of 83% capacity (up from 48%) and energy efficiency was improved by an average of 34%.

It isn't just home and building owners that stand to benefit from HVAC testing, adjusting and balancing. The participating TAB contractors' average sales closing rate for making system upgrades was an impressive 54%. These statistics show that when customers are presented with detailed airflow testing date, they are far more likely to see the benefits of TAB and go ahead with recommended improvements. Corrective measures can include duct sealing; repairing ductwork kinks, broken dampers and obstructions; insulation improvements; evaporator coil cleaning; filtration modifications; fan speed adjustments; and correcting duct and return sizing issues. The Duct Man

## **ASHRAE Equipment Life Expectancy Chart\***

| Window units                      | 10       |
|-----------------------------------|----------|
| Residential single or split       | 15       |
| Commercial through-the-wall       | 15       |
| Water-cooled package              | 15       |
| Water-cooled package              | 15       |
| Heat Pumps                        |          |
| Residential air-to-air            | 15       |
| Commercial air-to-air             | 15       |
| Commercial water-to-air           | 19       |
| Rooftop Air Conditioners          |          |
| Single-zone                       | 15       |
| Multi-zone                        | 15       |
| Boilers, Hot Water (Steam)        |          |
| Steel water-tube                  | 24 (30   |
| Steel fire-tube                   | 25 (25   |
| Cast iron                         | 35 (30   |
| Electric                          | 15       |
| Burners                           |          |
| (all)                             | 21       |
| Furnaces                          |          |
| Gas- or oil-fired                 | 18       |
| Unit Heaters                      |          |
| Gas or electric                   | 13       |
| Hot water or steam                | 20       |
| Dedient Heater-                   |          |
| Radiant Heaters                   | 10       |
| 2.000.10                          | 10<br>25 |
| Hot water or steam                | 25       |
| Air Terminals                     |          |
| Diffusers, grilles, and registers | 27       |

| Air Washers               |    |
|---------------------------|----|
| (all)                     | 17 |
| Ductwork                  |    |
| (all)                     | 30 |
| Dampers                   |    |
| (all)                     | 20 |
| Fans                      |    |
| Centrifugal               | 25 |
| Axial                     | 20 |
| Propeller                 | 15 |
| Ventilating roof-mounted  | 20 |
| Coils                     |    |
| DX, water or steam        | 20 |
| Electric                  | 15 |
| Reciprocating Compressors |    |
| (all)                     | 20 |
| Packaged chillers         |    |
| Reciprocating             | 20 |
| Centrifugal               | 23 |
| Absorption                | 23 |
| Cooling Towers            |    |
| Galvanized metal          | 20 |
| Wood                      | 20 |
| Ceramic                   | 34 |
| Air-Cooled Condensers     |    |
| (all)                     | 20 |
| Evaporative Condensers    |    |
| (all)                     | 20 |

| Insulation<br>Molded  | 20            |
|-----------------------|---------------|
| Blanket               | 20            |
| Bidriket              | 24            |
| Pumps                 |               |
| Base-mounted          | 20            |
| Pipe-mounted          | 10            |
| Sump and well         | 10            |
| Condensate            | 15            |
| Reciprocating Engines |               |
| All                   | 20            |
|                       |               |
| Steam Turbines        |               |
| (all)                 | 30            |
| Electric Motors       |               |
| (all)                 | 18            |
|                       |               |
| Motor Starters        |               |
| (all)                 | 17            |
| Electric Transformers |               |
| (all)                 | 30            |
| Controls              |               |
| Pneumatic             | 20            |
| Electric              | 16            |
| Electronic            | 15            |
|                       | 10            |
| Valve Actuators       |               |
| Hydraulic             | 15            |
| Pneumatic             | 20            |
| Self-contained        | 10            |
|                       | *median years |
|                       | meutan years  |



## E.P. HOMIEK PROVIDES NO-WAIT CUSTOM DUCT FABRICATION

Waiting days, or even weeks, for custom ductwork can result in costly job delays and unhappy customers. We provide:

- 1-2 day turnaround on all residential & light commercial
- 1-2 hour emergency service
  - Free delivery
  - Competitive prices
  - All work is guaranteed