



PENNSYLVANIA  
**PETROLEUM**  
ASSOCIATION

## TECHNICAL TRAINING CENTER

**2019**

## Basic Duct Design

### COURSE DATES

**April 25**

PPA Training Center  
911B South Eisenhower  
Blvd  
Middletown, PA 17057  
717-939-1781

**9:00 am –3:00 pm**

In this class we will discuss the basics of duct design. We will go over equipment sizing using a manual J and using the manufacturer's specification sheets. We will cover pressure loss devices in a duct system such as evaporator coils, hot water coils, and filters. The class will cover duct fittings and how to evaluate equivalent lengths of different fittings and why one fitting is better than another. We will go over how to calculate the friction rate.

The class will design two duct systems in the same house showing how equipment location effects the friction rate.

Every student will receive a duct manual, duct calculator, and a duct fitting manual from Gray Metal Products.

*Lunch is provided for attendees at no additional cost.*

**Our Instructor:** Ralph Adams is Service Manager for Parker Fuel. He is the President of OESP and for many years, the co-chair of the Education committee. Ralph co-authored the manual and corresponding training program for the NORA Gold Advanced Airflow and NORA Gold Venting programs.

**REGISTRATION FEE:**  
**\$160/PPATEC Member**  
**\$200/Non Member**

**REGISTER ONLINE AT:**  
<https://ppatec.com/schedule/>