

## SOUTHWARK METAL MANUFACTURING CO.

Philadelphia, PA • Greenville, SC • McCordsville, IN • Southaven, MS Fremont, NE • Caldwell, ID • Casa Grande, AZ

*Corporate Headquarters:* 2800 Red Lion Road • Philadelphia, PA 19114 Telephone: (215) 735-3401 • (800) 523-1052 • Fax: (215) 735-3406

## SOUTHWARK METAL MFG CO – IN PERSON COURSES COURSE DESCRIPTIONS

## Introduction to Air Distribution and Duct Design (4 hrs)

With an end goal of attendees having a better understanding of the importance of a properly designed air distribution system, this four-hour module will serve as an introduction to industry-accepted procedures for HVAC system design described in the code-cited ACCA design manuals. Starting with a breakdown of the Manual J Speedsheet (an Excel-based worksheet created by ACCA), we will look at the pertinent information needed for a basic load calculation. Accurate load calculation is essential to help determine the heating and cooling requirements of a residence, and to overall duct system design. Additional duct design parameters such as friction rate and duct size calculator usage will help attendees leave with a basic knowledge of these critical design elements needed to populate a Manual D Speedsheet and begin the process of appropriately sizing ductwork in a residential application.

## The Basics of HVAC Sheet Metal (1 hr)

This course will explain how a residential forced air distribution system works and what specific sheet metal parts are used in the assembly. We will look at ducting components such as sheet metal trunks, take-offs, and various styles of branch ducts. Galvanized termination boots and boxes will be explained. Differences between the supply-side and return side, and the components unique to each will be discussed. Also discussed will be fabrication styles of metal ductwork (galvanized, spiral, paint grip, black) and their appropriate applications within a system.