

**Council of Chapter Representatives
Vancouver, BC, Canada
June 5-7, 2016**

SMACNA

Technical Services & Research



Technical Services & Research

- Bernoulli Equation (Barolo=Vino)

where:

V=Velocity

Gc=Dimensional constant

P=Absolute pressure

P1=Density

G=Acceleration caused by gravity

Z=Elevation



Technical Services & Research

- Technical Standards
- Technical Productivity Tools (Apps)
- Technical Education
- Model Building Codes
- Testing & Research Institute



Technical Standards

- **SMACNA/ANSI Residential Comfort System Installation Standard 8th edition**
 - ANSI Accredited 5/12/2016
 - Revised Duct Construction Chapter
 - Hydronic Systems
 - Multi Story & Zoning
 - Commissioning
 - New Energy Efficiency Chapter
 - Install/Operation/Maintenance



Technical Standards

- HVAC Duct Construction Standard
4th edition
 - ANSI Process
 - Expanded Aluminum Tables
 - Increased Duct Fitting Options
 - Upper Attachment Revisions
 - Flat Oval Tables?
 - General Revisions/Corrections



Technical Standards

- HVAC Total Systems Leakage Standard
 - ANSI Process
 - Engineering Chapter
 - Establish protocols for testing
 - Establish criteria for pass/fail



Technical Standards

- **Thermoset Fiberglass Reinforced Plastic (FRP) Standard 2nd edition**
 - ANSI Process
 - Major Construction Changes
 - ASTM revisions
 - Underground application
 - Stiffeners & Material Handling revisions
 - Expand to 96" diameter



Technical Standards

- **Kitchen Grease Duct Fabrication Tables**
 - Blend of the HVAC-DCS & Industrial
 - Code Compliant Flanges (1/2")
 - Compliant external reinforcements
 - Field Test Methods
- **Shop Fabrication Layout Guidelines**
 - Small, Medium & Large Sheet Metal Shops
 - Piping, Pre-Fab, Lean, etc.



Technical Standards

- **Fire, Smoke & Radiation Damper Installation Guide 6th edition**
 - Revised entire document
 - Design Engineer requirements
 - Code Compliance
 - Application/Installation
 - Firestopping



Technical Standards

- **Seismic Restraint Manual 4th edition**
 - Revising entire document
 - Design Engineer requirements
 - Code Compliance (IBC & ASCE-7)
 - Upper Attachment Hangers
(Cracked concrete testing)
- **OSHPD Version 2nd edition**



Technical Services

- **Productivity Enhancement Tools**
 - Gutter/Downspout sizing App
 - HVAC DCS App V2
 - Duct Fittings
 - Rectangular Industrial
 - Ductulator
 - Tech Video's



Technical Services

- **Duct Cleanliness Technical Paper**
 - Define Bldg Type Usage
 - ASHRAE 62.1 compliant
 - USGBC LEED compliant
 - Carbon Footprint



Technical Education

- **SMACNA Technical University**
 - Kansas City (March 2016)
 - Oklahoma (September 2016)
 - Boston (TBD 2016)
- **Industrial Only Tech University**
 - West Des Moines, IA (Dec 2016)
- **SMACNA Chapter Programs**
AIA/PDHs/CEUs/State Approved



Model Building Codes

- **ASHRAE/ICC/AIA 189.1**
-Duct Testing
- **IECC 2018**
-VAV Systems
- **UMC 2018**
-Flex Duct, Duct Testing, Grease Duct, Phenolic DCS
- **IMC 2018**
Phenolic DCS



Model Building Codes

- **Canadian Commission
Building & Fire Codes**
 - HVAC & Plumbing Committee
 - Ventilation rates
 - Ecology Units



Testing & Research Institute

- Shop Standards Verifications
- Product Verifications
 - Cable Hanger Systems
 - Duct Flange Systems
- Coping/Fascia Testing/2018 IBC
- Concrete Insert Testing
HVAC-DCS Upper Attachments



Q&A

