Errata to
***Fundamentals of Air System Design* Self-Directed Learning Course, I-P Edition (2008)**
July 27, 2017

Shaded items have been added since the previously published errata sheet dated April 4, 2017.

Page 1-6: The sentence beginning "Air behaves as a perfect gas" should read: "Air behaves as a perfect gas and the change in density is **inversely** proportional to the absolute temperature."

Page 6-25: The equation and nomenclature formerly read: "If the duct is rectangular, the equivalent duct diameter is calculated by:

$$D = \sqrt{\frac{4HW}{\pi}}$$

where:

D = equivalent duct diameter, in.

H = rectangular duct height, in.

W = rectangular duct width, in."

But should read: "If the duct is rectangular, the equivalent duct diameter is calculated by:

$$\boldsymbol{D_h} = \frac{4HW}{2(H+W)}$$

where:

$\boldsymbol{D_h}$ = equivalent duct diameter, in.

H = rectangular duct height, in.

W = rectangular duct width, in.

Page 7-25 The equation at the top of page 7-25, under "*Answer*: Using *Equation 1-8*, we determine that the velocity pressure is 0.39 in. wg" formerly read

" $p_v = \left(\frac{V}{4005}\right)^2 = \left(\frac{2500}{4500}\right)^2 = 0.39$ in. wg ,"

but should read

" $p_v = \left(\frac{V}{4005}\right)^2 = \left(\frac{2500}{\mathbf{4005}}\right)^2 = 0.39$ in. wg "

Page 7-29: In number 3, section c, the equation currently reads
0.359 in. wg $\times 2 = 0.072$ in. wg but should read
0.359 in. wg $\times$ **0.2** $= 0.072$ in. wg.

Page 9-3:	The last sentence of the last paragraph currently reads "The parameter *a* in both figures is the ratio of the system pressure drop to the drop across the damper at maximum (fully open) flow" but should read "The parameter *a* in both figures is the ratio of **the pressure drop across the fully open damper at design flow to the total subsystem pressure drop, including fully open control damper pressure drop**."
Page 10-2:	"Typical hearing range is from 200 to 20,000 cycles per second" should read "Typical hearing range is from **20** to 20,000 cycles per second"