

**EX.AHU-1 & 2 VENTILATION CALCULATIONS**

IMC 2012  
 Project Name: MICA  
 Arium Project #: MILV-3F16  
 Air Handling Unit #: AHU1-2

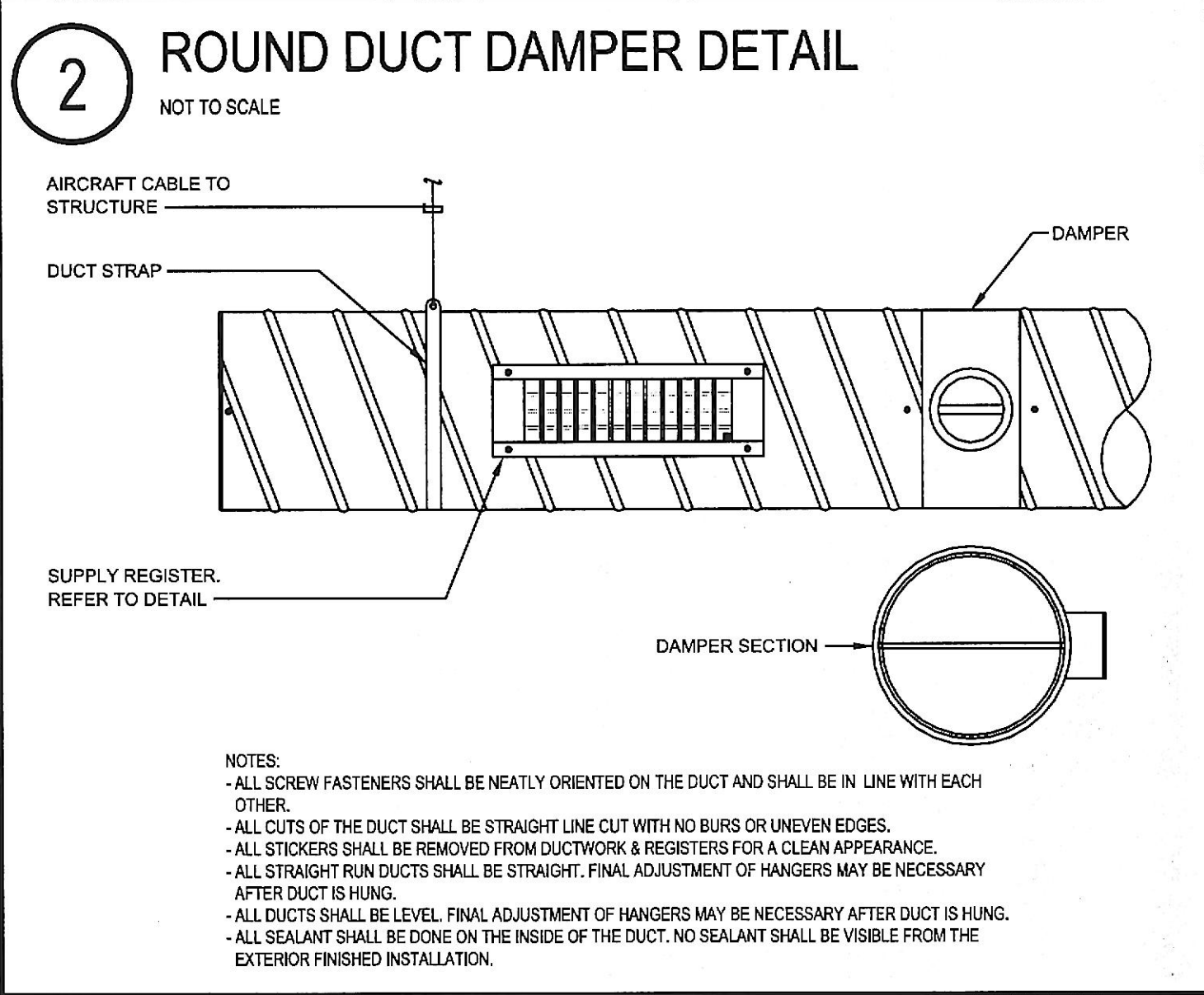
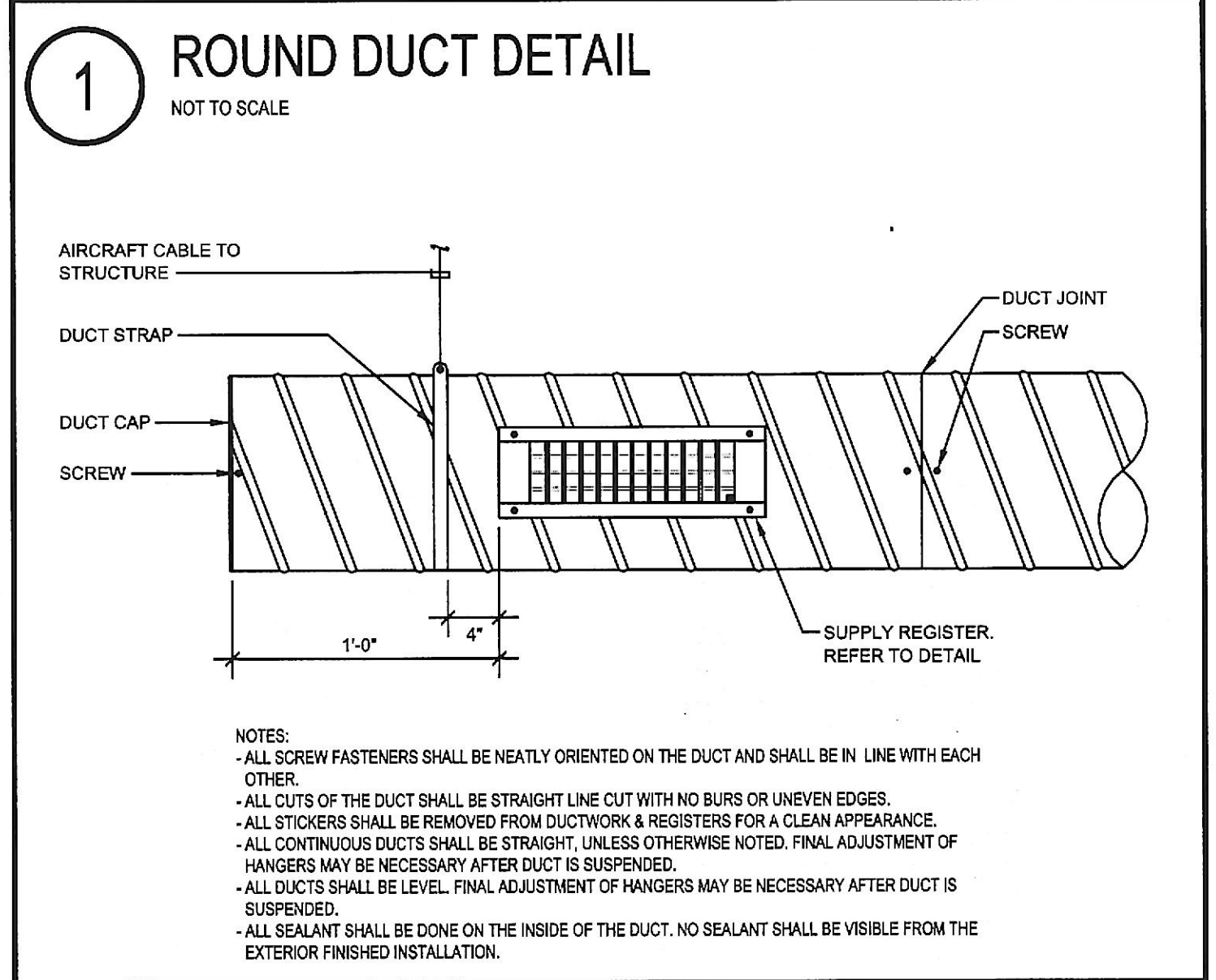
Room	Area (ft <sup>2</sup> ) AZ	Area Outdoor Air Rate Per IMC Table 403.3 RA	Area Outdoor RaAz (CFM)	Occupant Load Rate Per IMC Table 403.3 (People/ft <sup>2</sup> )	Occupancy C*F/1000 PZ	Occupant Outdoor Air Rate Per Table 403.3 Rp	Occupant Outdoor Air RpPz (CFM)	Breathing Zone Outdoor Air Vbz=RpPz+RaAz (CFM)	Zone Air Distribution Effectiveness Ez	Zone Outdoor Air Voz=Vbz/Ex (CFM)	Supply Air Design Vpz	Outdoor Air Fraction Zp=Voz/Vpz
301 Open Office	930	0.06	55.8	5	4.65	5	23.3	79.05	0.8	98.8	3,070	0.03
302 Office	200	0.06	12	5	1	5	5.0	17	0.8	21.3	330	0.06
304 Copy Room	65	0.06	3.9	4	0.26	5	1.3	5.2	0.8	6.5	200	0.03
305 Office	115	0.06	6.9	5	0.575	5	2.9	9.775	0.8	12.2	200	0.06
<b>Totals</b>								<b>Vou = 111.0</b>			<b>3,800</b>	<b>Max Zp = 0.06</b>

**\* Ventilation provide via operable windows.**

**Required Design Information:**  
 Total Req'd Outdoor Air (Vot = Vou/Ev) 111.0 CFM  
 Percentage of Outdoor Air: 2.9%

**Actual Design Information:**  
 AHU1-2 3800 Supply Air CFM  
 \* Ventilation CFM

Ev = 1.0



<p><b>PROJECT NUMBER:</b> MICA</p> <p><b>PROJECT:</b> MICA ANNEX BLDG</p> <p><b>PROJECT MANAGER:</b> MICA</p> <p><b>PROJECT LOCATION:</b> 5807 WINDMILLS ROAD COLUMBIA, MD 21045 BALTIMORE, MARYLAND www.AriumAE.com</p>	<p><b>DATE:</b></p> <p><b>DESCRIPTION:</b></p> <p><b>ISSUE DATE:</b> 5/20/16</p> <p><b>ISSUE:</b> MECHANICAL</p> <p><b>PROJECT FILE NAME:</b> MILV-3F16</p> <p><b>COPYRIGHT © 2016 AriumAE, LLC</b></p>
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**ARIUM | AE**

**MICA ANNEX BLDG**

THIRD FLOOR  
115 WINDMILLS STREET  
BALTIMORE, MARYLAND

**M3**

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