

**ERRATA SHEET FOR ASHRAE GUIDELINE 1.1-2007  
HVAC&R Technical Requirements for the Commissioning Process**

**July 2, 2012**

The corrections listed in this errata sheet apply to all copies of ASHRAE Guideline 1.1-2007. The first printing is identified as “86812 PC 6/08” on the outside back cover, the second printing is identified as “Product Code: 86812 8/09”, the third printing is identified as “Product Code: 86812 9/11”. The shaded item has been added since the previously published errata sheet dated November 7, 2011 was distributed.

**Page      Erratum**

**85      Table 9A. Ductwork: Installation.** In Item 1.A.4 of Table 9A change the word “casting” to “casing”.

**95      Table 13. Fan Coil Unit, CW & HW: FCU-1.** Renumber the items in Item 2.H of Table 13 as follows:

H	TAB		
1	Filters and coils are clean	Yes	No
2	Motor rotation verified	Yes	No
3	Motor overloads verified	Yes	No
4	Motor voltage and amps verified - each phase	Yes	No
5	Entering and leaving cooling coil air temperature (°F)	/	/
6	Entering and leaving heating coil air temperature (°F)	/	/
7	Entering and leaving chilled water temperature (°F)	/	/
8	Entering and leaving hot water temperature (°F)	/	/
9	Coil flow and air/water pressure drops verified - each coil	Yes	No

**98      Table 17. HVAC Piping: Installation.** Change Step 3 in the Instructions as follows:  
(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)

Step 3: Samples of installed pipings ~~ductwork~~ will be periodically reviewed to verify compliance.

**98      Table 17. HVAC Piping: Installation.** In Item 1.A.4 of Table 17 change “close” to “closed.”

**98      Table 17. HVAC Piping: Installation.** Reformat Table 17 with indentation and bolding as shown in the attached.

**100      Table 18. VAV Box, Non Fan Powered w/HW Heat: VAV-1.** Remove the “Yes” or “No answer in Item 2.F.4 and replace with:

4	Entering and leaving coil water temperatures (°F)	/	/
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**101      Table 19. Pump, HVAC: P-1.** Renumber the items in Item 1.B of Table 19 as follows:

B	Physical Checks		
1	Unit is free from physical damage	Yes	No
2	All components present	Yes	No
3	The water openings are sealed with plastic plugs	Yes	No
4	Unit tags affixed	Yes	No
5	Installation and startup manual provided	Yes	No
6	Manufacturer’s ratings readable/accurate	Yes	No

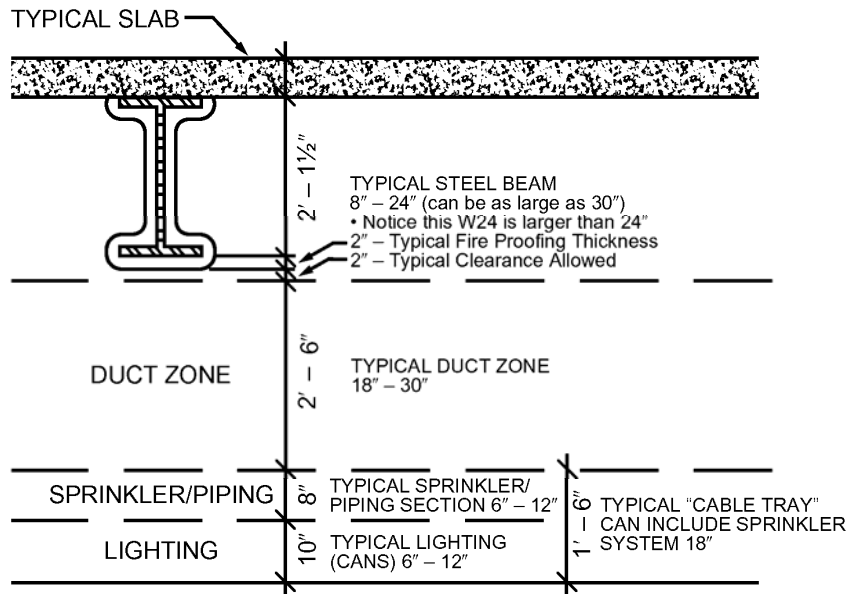
**132** **Figure S-1 Typical interdisciplinary coordination and ceiling section detail on drawings.** The current Figure S-1 in Guideline 1.1-2007 is unreadable. Replace it with the version attached.

## 17. HVAC Piping: Installation ASHRAE Guideline 1.1 Example Checklist

Instructions: Step 1: Circle Yes or No and fill in with requested information.  
 Step 2: Explain all "No" responses at the bottom of the checklist.  
 Step 3: Samples of installed piping will be periodically reviewed to verify compliance.

Item	Task Description	Response	
		Submitted	Delivered
<b>1</b>	<b>System Checks</b>		
<b>A</b>	<b>Installation Checks</b>		
1	Piping is clean and free of damage prior to installation.	Yes	No
2	Piping is free to expand and contract without noise or damage to hangers, joints, or the building.	Yes	No
3	Piping is installed with sufficient pitch and arranged in a manner to ensure drainage and venting of the entire system.	Yes	No
4	Manual air vents are provided at high points in closed water systems.	Yes	No
5	Changes in pipe sizes are made with the proper size reducing fittings, reducing fittings, reducing elbow or reducing tees. Bushings are not allowed.	Yes	No
6	All piping supports and hangers meet criteria set in Section 15140 of the specifications.	Yes	No
7	All fittings meet specification requirements.	Yes	No
8	All equipment requiring maintenance is accessible (valves, junction boxes, etc.).	Yes	No
9	Piping does not block access to equipment that is part of this system or another system (e.g., air terminal units).	Yes	No
10	Piping is installed in a manner to ensure that insulation will not contact adjacent surfaces.	Yes	No
11	All pipe openings are temporarily sealed to maintain piping system cleanliness.	Yes	No
12	Record drawings have been updated to reflect any changes made.	Yes	No
13	Nipples are made of the same material as the pipe.	Yes	No
14	Connections between copper and steel pipes are made with dielectric fittings.	Yes	No
15	A union is provided ahead of each screwed valve, trap, or strainer, and on each side of each piece of equipment and whatever needed to dismantle piping.	Yes	No
16	Mechanical coupling if used is only used for piping and locations as described in the specification section 15060.	Yes	No
17	The chilled water system is installed with high pressure fittings, flanges and unions.	Yes	No
18	Auxiliary drain valves are provided at all low points in hose bib piping to facilitate seasonal draining.	Yes	No
19	A clearance of 8 ft 2 in. is maintained throughout the parking structure. Walker's drawings have been consulted for exact location of pipe spaces, ceilings heights, and other details before installing piping.	Yes	No

PLOT OK



**1 INTERDISCIPLINARY COORD @ CEILING SECTION**  
 1/2" = 1'-0"

SCALE	1/2" = 1'-0"		---
DATE	12/2004		
DRAWN			
COMM. NO.			

Figure S-1 Typical interdisciplinary coordination and ceiling section detail on drawings.