

01 01 00 PROJECT DOCUMENT FORMAT

and

23 05 01 Mechanical General Requirements

Modify Sections 01 01 00 subsection .01 and 23 05 01 subsection .05 per the following (deletions are shown struck through and additions are double underlined). Remainders of sections are unchanged.

01 01 00 PROJECT DOCUMENT FORMAT

.01 ~~Standard Drawing Size~~ General Owner Requirements

A. Standard Drawing Sizes: Drawings shall be prepared on standard sheet sizes 24 inches by 36 inches or on sheets 30 inches by 42 inches. Use of any other sheet size requires the prior approval by the University Project Manager.

B. Electronic documents shall comply with the standards in the table below.

C. All equipment shown on Contract Documents shall conform to University's abbreviations and numbering conventions defined in the Equipment Acronym List found in the table below.

~~A.~~

Document	Version Date	Description
CADD Drawing and Submission Standards	July 2002	This document provides Professionals with guidelines for creating and submitting electronic drawings to The Pennsylvania State University.
Equipment Acronym List	<u>May 2011</u>	<u>List of equipment abbreviations and identification numbering conventions.</u>

Replace Equipment Acronym List hyperlink with following file.



EquipmentAcronym-ver2011-05.xls

23 05 01 Mechanical General Requirements

.05 Mechanical Identification

A. By Professional

1. All Mechanical drawing symbols used shall be in accordance with standards of accepted practice. ~~The University's Equipment Identifier~~

~~Prefix Acronym Standard shall be used when naming all equipment for a project.~~

Document	Version	Date	Description
Equipment Acronym List			

- ~~2. All equipment shown on Contract Documents shall conform to University's abbreviations and numbering conventions defined in the Equipment Acronym List found in Division 01: 01 01 00 PROJECT DOCUMENT FORMAT. All equipment shall be individually numbered on the drawings by the Professional (for example--unit heaters, use UH-1, UH-2, etc., even though both units may be the same size and type). Numbers shall be in accordance with the University's Central Control System (CCS) numbering guidelines. On renovation projects, numbers shall be in sequence with the CCS numbering scheme already in place for the building. The Professional should consult with CCS to obtain these numbers.~~

END of revision

Update Commentary:

Sections were updated primarily for the following reasons:

- 1) To relocate the Acronym List to a more General location Div1, since it covers equipment from many Divisions.
- 2) The list was reorganized first with respect to the associated Specification/Standard Section number and then alphabetically within those sections.
- 3) To more closely follow common equipment acronyms generally accepted and used in the industry such as:
 - a. ASHRAE 2009 Fundamentals
 - b. US National CAD Standards.
- 4) To reduce common coordination problems arising during design development and shop drawings review causing frustration among design consultants, PSU staff and contractors. Examples include:
 - a. "AHU" for Air Handling Unit in lieu of prior "ACF" (Air Conditioning Fan). A Fan is a single component of a larger Air Handling Unit assembly with many components that performs the function of conditioning air. Also, it is common to associate "Air Conditioning" unit with packaged DX unitary equipment and "Air Handling" unit with hydronic sources of heating and cooling.
 - b. "MAU" for Makeup Air Unit in lieu of prior "SFN" (Supply FaN) for the function of 100% outside air for makeup supply. Again, technically a Supply Fan is a single component of a larger Unit assembly with many

components that performs the overall function. In larger units, one might have multiple, parallel “supply fans” in any sort of AHU or MAU or RTU, etc. Using MAU to designate that function helps avoid confusion with limited function of a supply fan as a component.

- 5) In general suffixes can be added to give acronyms some additional flexibility to allow more detailed descriptions of specific type or use for purposes of scheduling, specification grouping and for control tag purposes.
- 6) Individual equipment numbering: The goal is to give each piece of equipment its own ID tag by type/subtype category and then either sequentially within each category (for primary equipment) or by room location of control sensor it serves (for terminal equipment). Each subtype of HVAC pump is sequentially numbered within its fluid service type. In other words, chilled water pumps are to be numbered sequentially within that category separate from hot water pumps and condenser water pumps, etc.
- 7) Design Professional must coordinate ID and equipment numbering scheme with OPP staff to improve and maintain consistency.