# Appendix B - Mechanical Plant & Equipment Numbering

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### Scope

This design guide details the acronyms and numbering system to be used for the common items of mechanical plant and associated equipment. All new plant and equipment must adhere to this system. New project work should include a check of existing plant names to ensure that there is no duplication of plant numbering per building and that the numbering is contiguous.

### **Purpose**

The purpose of this guide is to ensure that all plant and equipment is uniquely named within each building and follows an intuitive and consistent pattern. It is not intended for the numbering system to provide details of the area served or duty performed by the equipment.

### **Related Guides and Standards**

The UQ Design Standard, DS-07 Mechanical should be followed in relation to mechanical design and the UQ Design Guide BMS User Interfaces covers all matters related to BMS tag naming.

# **Naming Structure**

The naming structure consists of a designated acronym which uniquely defines the type of plant or equipment, the level of the building where the plant is located and an integer which increments for each type of similar plant on the building level. Where the building has segregated blocks the level number should include the designation ie North level 5 is N5.

The Nth equipment item of type XXX on level L would be represented as: XXX L-N

Where there are slave devices to the main item of plant, the secondary number is taken from the main item of plant with a tertiary number appended:

YYY L-N-n

Where possible the secondary and tertiary numbers will be assigned left to right across the mechanical floor plan layout or schematic drawing.

### **Examples**

The fourth air handling unit on level 2 would be represented as:

AHU 2-4

The second Variable Air Volume box for AHU 2-4 becomes: VAV 2-4-2

Three chillers in a level 7 plant room aligned west to east on the floor plan would be named:



CH 7-1

CH 7-2

CH 7-3

# **Designated Nomenclature**

The acronyms designated for the various items of plant and equipment are summarised below sorted by equipment type.

### **Air Conditioning Plant**

| AHU  | Ducted chilled water air handling unit serving one or more rooms.   |
|------|---|
| FCU  | Ceiling mounted or suspended chilled water unit with or without ducting serving the room in which it resides. |
| ACDX | Packaged or Split DX units.   |
| PAHU | Primary Air Handling Unit (eg. Outside Air Pre-conditioning unit). CRAC                                       |
| EVC  | Evaporative Cooler  |
| VAV  | Variable Air Volume Box (tertiary number used to designate box per unit)                                      |
| AHU  | Ducted chilled water air handling unit serving one or more rooms.   |

# **Ventilation Plant**

| SF  | Supply Air fan          |
|-----|-------------------------|
| RF  | Return Air Fan          |
| OAF | Outside Air Fan         |
| RLF | Relief Air Fan          |
| EF  | General Exhaust Fan     |
| TEF | Toilet Exhaust Fan      |
| KEF | Kitchen Exhaust Fan     |
| AEF | Articulated Exhaust Fan |
| FC  | Fume Cupboard           |

# **Chilled Water Plant**

| СН    | Chiller                      |
|-------|------------------------------|
| СТ    | Cooling Tower                |
| PCHWP | Primary Chilled Water Pump   |
| SCHWP | Secondary Chilled Water Pump |
| TCHWP | Tertiary Chilled Water Pump  |
| CWP   | Primary Condenser Water Pump |
| CHWT  | Chilled Water Tank           |
| PCH   | Process Chiller              |
| HEX   | Heat Exchanger               |

# **Heating Plant**

| HP  | Heat Pump  |
|-----|--|
| HWP | Hot Water Pump   |
| HWT | Hot Water Tank   |
| HWU | Hot Water Unit   |
| EDH | Electric Duct Heater (tertiary number used to designate heater per unit) |

# **Mechanical Boards and Panels**

| MSSB | Mechanical Services Switchboard |
|------|---------------------------------|
| DDC  | Direct Digital Controls Panel   |