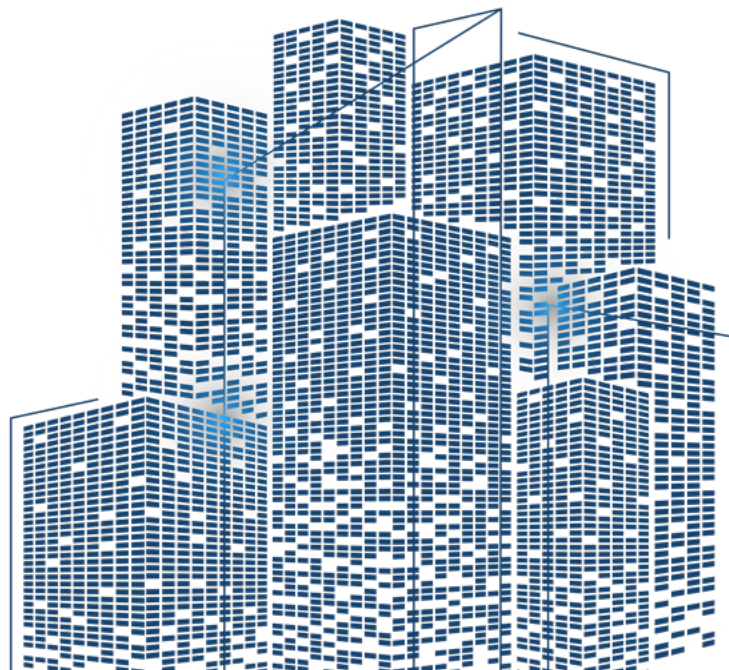


WHAT'S IN A NAME?

“The critical importance of a naming convention for smart buildings”



As we continue to advance in technology, the idea of smart buildings is becoming more and more popular.

The equipment and sensors in our buildings can provide vast amounts of data in real time. Used correctly this data can lead to significant benefits in terms of the efficiency and functionality of the property.

Tenants are no longer fooled by “Connectivity Ready” only offices, they want and value “Smart Buildings and Workplaces”. Location, Location, Location has become Smart, Smart, Smart.

However, one aspect that is often overlooked when designing and constructing buildings, never mind smart buildings, is the importance of a single naming convention for the building Operational (OT) and Information (IT) Technology systems.

In fact, it is more important to ensure that a single naming convention is chosen and followed for the project, rather than to worry about the relative pros and cons of each convention.

Ensuring a predefined single naming convention across systems at the design stage can drastically reduce inconsistencies and delays.

SO, WHAT IS A NAMING CONVENTION?

A naming convention is a standardised system used to assign unique names or identifiers to various components and equipment within a building system.

The naming convention sets out the guideline / rules for naming building systems, devices and components based on their location, function, instance, or other relevant factors.

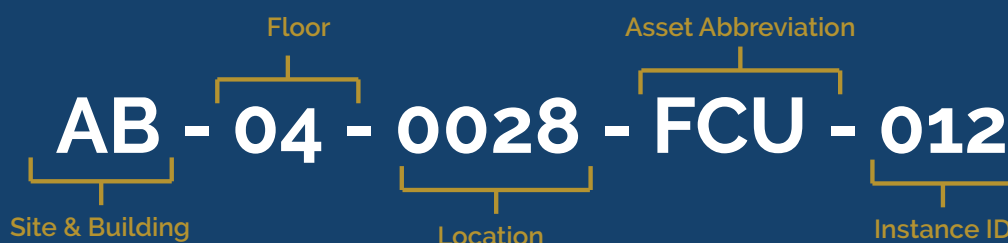


Figure 1 – Example Naming Convention for a Fan Coil Unit (FCU)

Why do we need a naming convention?

A single naming convention enables different systems to communicate more easily. It ensures consistency and simplifies interoperability across building systems, workplace technologies, IoT and ICT solutions.

Why is naming critically important to Smart buildings?

Primarily, it helps to ensure that the data generated by different sensors, devices, and systems can be accurately attributed to the correct system, location, equipment type, and device.

Example 1

Structuring information in this standardise way allows data from different sources to be easily integrated and aggregated helping to create a more accurate picture of the building performance, enabling better decision making and more efficient operations.

Example 2

Structuring information in this standardise way supports the uploading of building performance data to the independent data layer (Cloud) in a consistant manner ensuring the data is accessible and understandable and interpreted by any number of analytical, business, FM, and property technologies.

Example 3

Structuring information in this standardise way provides context and meaning to building data, making it easier to understand by different stakeholders.

How easy is it to apply a naming convention?

Very easy, once a naming convention is specified/applied during the design stage of the project. The technical knowledge of the Digital Building Consultant has made it easier to manage and deliver this consistency across building systems.

Additionally, the emergence of the Master System Integrator and the upskilling of the trades also supports the new smart building data and integration requirements.

Who is responsible for ensuring a naming convention is applied?

While the single naming approach is currently designed by the Digital Building Consultant, everyone involved in the delivery of a new or retro-fit office projects should be responsible for ensuring a consistent naming convention is applied to the building.

From the architect and engineers to the construction and operational teams, everyone needs to be aware of the importance of a naming convention and its benefits.

Can a naming convention be applied retrospectively?

Applying a single naming convention retrospectively is possible. Smart planning by the Digital Building Consultant will ensure costs remain at a low level whether looking at a retro-fit or fit-out project leveraging the existing base-build silo naming methodologies.

What Are Some Typical Issues If a Naming Convention is not applied?

The cost of not having a single naming convention in a building project can be significant.

- Inconsistencies can make it difficult for both the design and construction teams to work together, leading to potential delays and errors in the project.
- It can lead to higher engineering time and system costs during construction - trying to integrate systems to achieve the required efficiencies and experiences now demanded by tenants.
- With the focus on performance transparency for sustainability and wellness, the building may struggle due to its inability to meet ESG/CSRD operational and reporting requirements, leading to significant losses for investors.
- Maintaining the building will also incur greater costs as the ability to integrate analytics, intelligent automation, machine learning and artificial intelligence is limited, leaving just a manual process to meet the ever-changing needs of the building.
- Additionally, staff may prefer to work remotely or elsewhere due to the building's performance, leading to lower productivity and higher staff turnover.

It all starts here for smart buildings...

A single naming convention is a core pillar in delivering a smart building. It ensures consistency and interoperability across building systems, enabling the building to deliver on its promised smart building outcomes.

But regardless on the GO or NO/GO decision on Smart...

The implementation of a naming convention should be a priority on any project as it will provide a common language to help to track and manage system and components during construction and greatly support the maintenance of the building over time.

FURTHER TRENDS ARE NOTED THAT INFLUENCE THE NEED FOR A NAMING CONVENTION.

As we move forward with the advancement of technology, the world of IoT and artificial intelligence is progressing, leading to more convergence and interoperability among systems within buildings.

Sustainable goals are also targeted, requiring a common data environment for sharing information and automating controls based on usage for optimisations.

SO, WHAT'S IN A NAME? EVERYTHING!

Naming conventions equip the design, construction, and engineering teams with the ability to prevent problems and embrace interoperability in the digital curation of buildings.

“A naming convention may seem like a small detail, but it can have a big impact on the efficiency and management of a smart building.”

Brian Coogan
Director, Digital

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