Why Smart Buildings Product Approval?

Audio/Visual
Digital Signage
Access Control
Voice, Video, Data
Automated Window Treatments
Batteries
Building Automation
Commercial Property Management
Clock Systems
Domestic Water & Gas Meters
Door Locks & Systems
Energy/Co-Generation
Energy Applications
Enterprise HMI/MMI/OPS
Enterprise/Facility/Operations Management
ERP
Glass
HVAC Controls
Dashboard Applications
Irrigation and Domestic Water
IT systems
Life Safety Systems
Lighting Control
Medical Gas
Metering
Middleware Applications
Parking Control/Solutions
Power Management
Asset Tracking Systems
Security Systems
Specialized Equipment
Structure Cabling
Switchgear & distribution
UPS & Power conditioning
Wireless Network Applications

Not every building product will fit an open protocol, open standards system. To meet these standards, the product needs to meet criteria that indicate the product can be integrated and can add functionality to the building's performance. The Smart Buildings Product Approval evaluates building system products and determines if it qualifies as a Smart Building product. The Smart Buildings evaluation provides a means to investigate the products and provide firsthand information from independent industry experts.

With product approval, stakeholders find the design, sourcing, and integration of building systems simplified. Owners have a non-biased, third party approved product, mitigating the need to rely on manufacturer and vendor testimonies.

As the market continues to evolve, new products emerge. With the wealth of products, promises and multitude of systems within the market, sourcing the right product mix can be a cumbersome duty. However, to ensure that the strategy and vision meet the requirements for an integrated building, this is an important and necessary step.

Approved products offer benefits to all players in the design process. Approved products shorten the sourcing time, provides owners/developers, architects, and consultants with a source to procure the products relevant to the building, leads to improved user-experience, higher customer satisfaction rates, reduced costs and faster delivery times. Product approval is based on existing standards and can be sourced to meet the requirements and objectives of the project.

Integrated building systems can truly save capital and operating building costs and have taken on a

prominent role in smart buildings. There are different ways to design integrated building systems, different concepts of what integration is and many products that profess open standards. It would seem that if we had a common framework for what integrated building systems means that the industry would have an easier time of explaining the approach and benefits. Clients could be better informed, designers and contractors may better understand what products are best suited for their projects.

The typical way to unify the building technology systems is to simply procure all the BAS, security and life safety systems from one manufacturer. This may result in the use of proprietary protocols and deployments, and lock a facility manager into procuring ongoing equipment and services from one company. Approved smart building products will standardize the systems and their performance giving the building owner and occupants alternatives in price, availability, and services. As an owner, your objective in procuring product for your smart building should include;

- Improving the functionality of existing systems. The bulk of systems the industry is dealing with are legacy propriety systems in existing buildings that have little or no integration, that generate little or no meaningful information about the performance of the building.
- Allowing new construction to deploy the “best of breed” systems and products. New builds can select the best individual systems and products.
- Allowing for multiple user interfaces (web, mobile, etc.) and standard interfaces for all systems. This minimizes training on managing and controlling several different systems.
- Going wide, as in wide area enterprise deployment.
- Providing for vertical as well as horizontal integration of systems. That is, the information and data of the building systems needs to flow up to and synchronize with facility management and business systems. The integration with business systems is important as executives in their corner offices are now more interested in the performance of their buildings. They’re motivated to track energy use, analyze historical and real-time energy consumption, examine the types of work requests being generated, account for corporate assets, etc.
- Permits the sharing of information between systems through true software integration instead of hard contact point-to-point integration.

Each product designated as approved by Smart Buildings will bear the Smart Building Approval emblem and will be listed on Smart Buildings’ approved product directory. The evaluation of the products by Smart Buildings allows objective assessment and judgment of the products from a firm independent of manufacturers and dealers. The Smart Building Product Approval reassures potential buyers and interested parties that products used for integrated building systems have the standards to promote interpretability and integration.

Evaluation Criteria

Smart Buildings evaluates products in every potential product class - from wireless sensors to information dashboards. The products are submitted for evaluation by manufacturers and vendors. The Smart Buildings team evaluates the product against an established and rigorous set of guidelines known as the *Smart Building Principle's of Integration©*. The criteria evaluated may include;

- Connectivity (structured cable/wireless)
- IP-based protocols
- Web access and services
- Open & standard software/database platforms
- Energy & sustainability impact (if applicable)

The evaluation process may involve data gathered from the manufacturers as well as from their clients using the product. It may also include product specifications, interviews, testing by third-parties, review of certifications and demonstrations. Smart Buildings may also review or observe testing of the product by the manufacturer. The first products to qualify for the Smart Building Product Approval will be announced in September.

Smart Buildings will provide a database of approved products to consumers including building owners, building developers, architects, general contractors, integrators, designers, organizations, and potential product buyers. The database will provide detail on the products ability to meet or exceed the *Smart Buildings Principle of Integration©*.

For further information, write us at productapproval@smart-buildings.com.