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Smart Buildings SHOW

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KNX NATIONAL U.K.

Smart home and
building solutions.

Global. Secure. Connected

Buildings for Life

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A constantly evolving situation

My house adapts to me and my condition NOT the other way round.

I regulate my heating from a simple control

Daily Tasks are automated

I can avoid many accidents

I am safer

By definition we all change as we age

Our needs and requirements change: Either by choice or circumstance

The interface needs to be adaptable: Touch, Voice, All options for disabled users

Updateable - As styles change - As technology changes/improves

Changes to the supply grid need to be factored in – EV, local storage, community energy grids etc

But the underlying infrastructure can remain.

Achieving a Building for Life

Lets consider a “home”

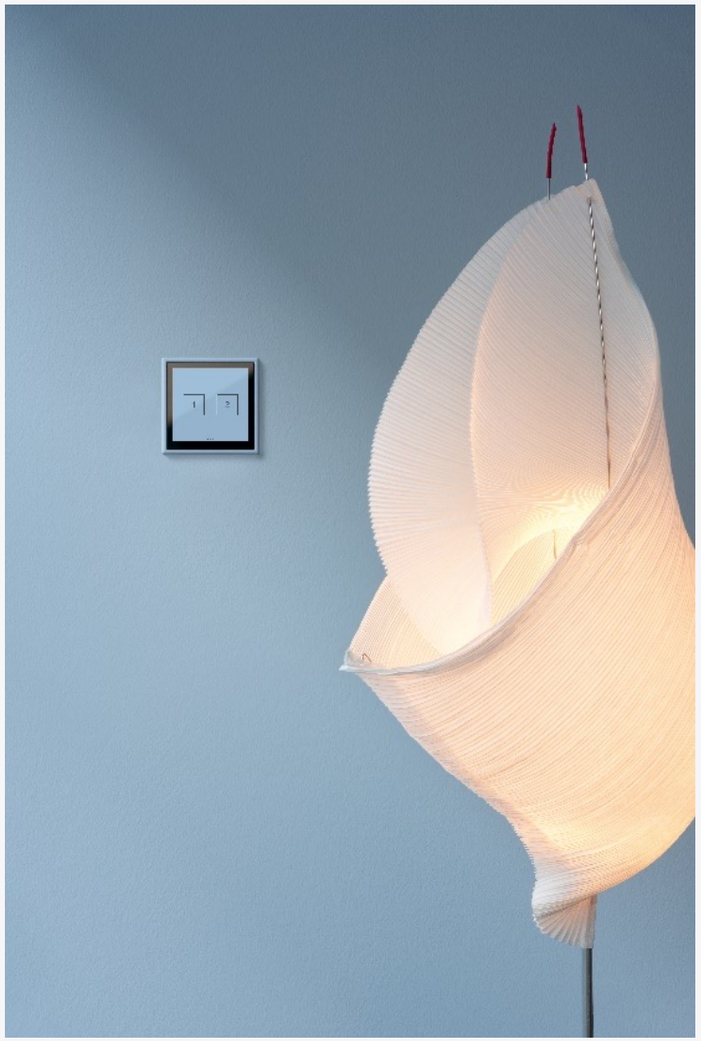
To achieve a “home for life”:

- Identify the long term goals
  - Who
  - Different use profiles
  - Change of use
- Planning on how to achieve those goals from the earliest stages of design

- The need for integration of ALL services/infrastructure
  - Top to bottom, back to front
  - “The most expensive cable you’ll install is the one you forgot!”
  - (Wireless is good but it can be used by a developer as a “runaway” clause!)

Design & Aesthetics

- Designing projects for future use – wired for all eventuality enabling the client to add products solutions as needs change without rewiring, backwards compatible to enable adding of new technology as it develops
- Open protocol supported by over 500 manufacturers
- Creating a client led experience – choosing of multiple styles and finishes
- Design led sockets and media outlets matching the finishes and design of switches
- Solving client issues with colour ie sockets red light - switches blue for visually impaired
- Simple to use switches scene selection or fully customised solutions to meet client requirements engraved options colour coding
- Visualisation on wall or mobile device



Design & Aesthetics

- Voice activation
- Pressure pads notification, window sensors to control heating and cooling shut off saving energy - PIR control to enable low light levels after a particular time. Occupancy activation or simulation of controls
- Time based scenes

- Single or zoned heating or cooling room control every switch having built in temperature sensing
- Single simple system to learn
- Removal of wall acne 1 switch controlling lighting heating blinds etc…
- Weather stations tracking suns movements to manage solar gain or irrigation dependent on rain fall

How to achieve this

KNX is a managed open-source, non-proprietary International standard for building automation.

KNX operates on a standardised language allowing harmonious communication between KNX certified products from KNX manufacturers.

KNX uses a single cable solution with a single language and software tool to achieve the three levels of control: Field, Automation and Supervisory.

KNX operates on 29V DC SELV.

KNX Certified Product Types

Typical KNX certified Products include :

- Room Controllers / Push Buttons
- Power Supplies
- Interfaces, Routers and Gateways
- Actuators and Binary Inputs
- Sensors

KNX Sensors & Push Buttons can feature:

- Contact Light Control on Presence
- Occupancy Monitoring with anti-tamper
- Scenes, Logic & Timer
- CO2, Air Pressure, Humidity & Temperature Reading
- Noise Monitoring

KNX Functionality – Complete control

KNX capabilities include:

- Lighting Control
- HVAC Control
- Blind & Shutter Control
- Energy Management
- Metering
- Automation
- Remote Access
- Visualisation
- Critical System Monitoring
- Audio Visual

KNX Total Integration. Never tied to one manufacturer.

KNX offers flexibility through integration with dozens of other protocols:

- BACNET
- MODBUS
- MBUS
- DALI / DALI2
- DMX

KNX offers advanced functionality and control through integration with other systems:

- Savant
- Control 4
- RTI
- Crestron
- AMX

What KNX can achieve for your build. Positive outcomes

Building Automation is integral to building design:

- Efficient building operation
- Occupant comfort
- Improving energy efficiency
- Reduced maintenance costs
- Security
- Improved life cycle

KNX can deliver:

- Functionality
- Performance
- Scalability
- Usability
- Reliability
- Efficiency
- Longevity

That's why KNX is the only worldwide standard for building automation.

Questions?

For more information:

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Better buildings now…

Why do we consider it acceptable to put the minimum amount of insulation in, the minimum amount of technology in?

We need a more flexible future-thinking approach to the way we design building infrastructures and we need it now.

“IN OUR ANXIETY TO LEAVE THE HOUSING MARKET AS FREE AS POSSIBLE WE ALLOW SHORT-TERM COSTS TO DOMINATE OUR POLICIES…EVERY YEAR WE ADD TO THE COUNTRY’S HOUSING STOCK, DWELLINGS WHOSE INFLEXIBILITY MAKES THEM EVEN LESS SUITABLE FOR ANY BUT THE YOUNG AND AGILE …” ROWE 1991

Thank you for joining us

KNX NATIONAL U.K.

To see projects and case studies, or to find an integrator for a KNX project...

Visit: **www.knxuk.org**

Or to speak to one of our experts visit us at Stand C53

Claim CPD points

Email **admin@knxuk.org** with your company name and contact details for a CPD certificate.

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We look forward to seeing you in 2024