

PHILIPS

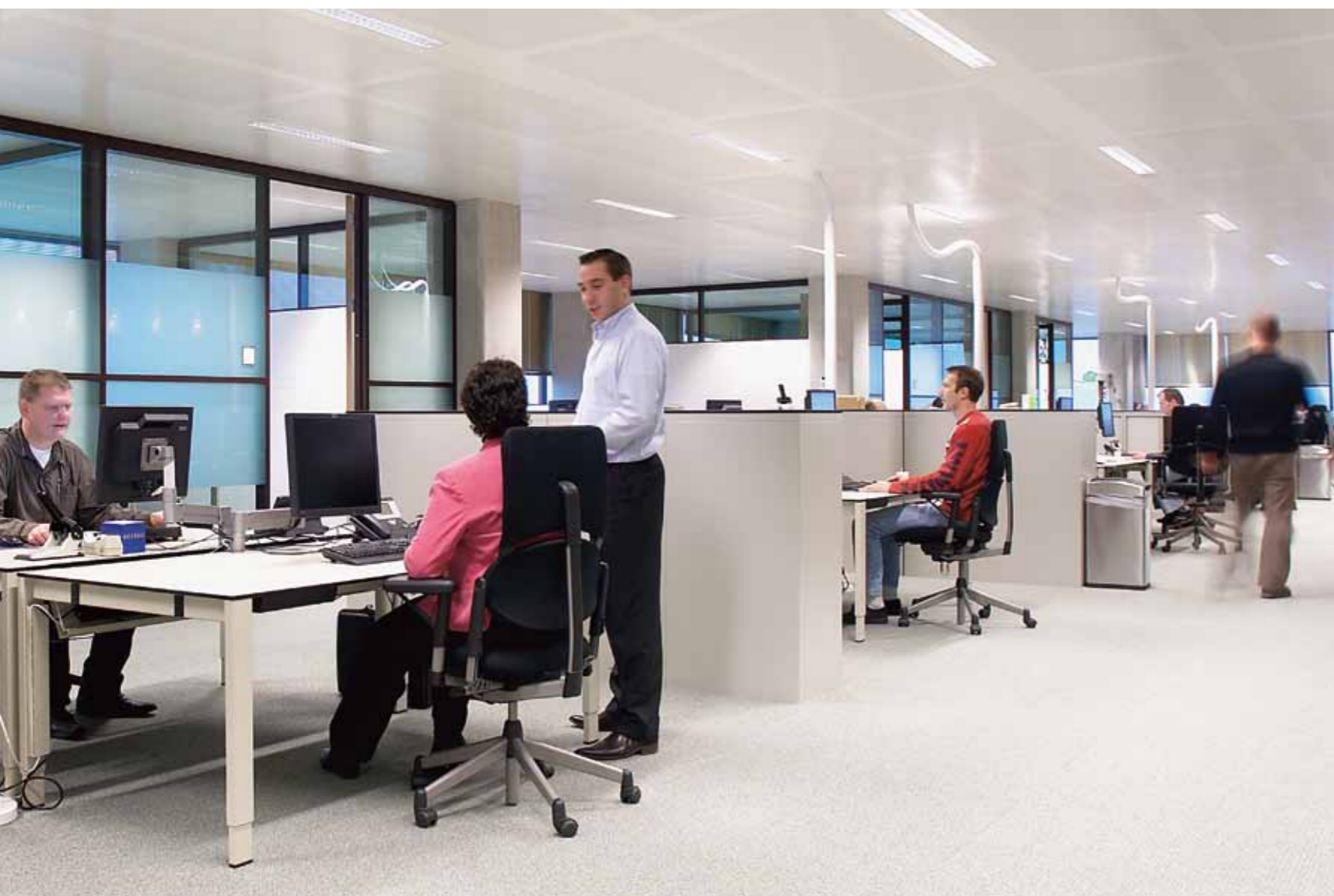
Office lighting

Green office guide



Better office life

Less energy, more flexibility, greater comfort



Offices are changing – and lighting is leading the way.

Owners and tenants want better energy efficiency, while staff want flexibility, comfort and adaptable spaces to help them work smarter. So whether you're looking to create a new space or refurbish an existing one, we can help you deliver the latest ideas and innovations in lighting – to help make office life better for everyone.

The move towards green buildings marks a significant shift in thinking – by investing in a sustainable green building you can benefit from energy and cost savings, reduce your CO₂ emissions, improve staff wellbeing and motivation, increase your brand reputation and stay competitive.

Want a more energy efficient solution? LED has allowed offices to reduce consumption dramatically, by over 50% in some cases. By adding smart controls, like scheduling,

presence detection and daylight harvesting, energy use can be reduced still further.

Need more flexibility? Touch of a button control now means you can pre-set lighting scenes and switch between them quickly and easily. This lets you adapt the same room for different uses, for example a presentation followed by a discussion meeting. It puts you in control.

Looking for more comfort? Nothing empowers workers more than allowing them complete control of their environment – staff can now adjust their desk lighting via smartphone, adding a level of personalization that simple wasn't possible before LED lighting and digital connectivity.

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People who appraise their lighting as good will also appraise the room as more attractive, be in a more pleasant mood, be more satisfied with the work environment, and more engaged in their work.”

Extract from: "Linking Lighting Appraisals to Work Behaviors" Jennifer A. Veitch, Mariska G. M. Stokkermans and Guy R. Newsham Environment and Behavior 2013 45: 198 originally published online 16 September 2011

Switch to automatic

It's simple really. Switch on a light when you need it, then switch it off to save energy. Applying this principle to an office space is now just as easy. By adding smart controls to LED lighting you benefit from additional energy savings and staff don't have to lift a finger. Use daylight harvesting to harness available daylight and presence detection to further minimize energy use.

Only when you need it

Use nature to your advantage. Daylight in combination with artificial lighting, automatically adjusted to maintain a constant light level, lets you make the most of freely available light with controls 'dialing up' or 'dialing down' lighting as needed.

Only when you're there

Presence detection using motion sensors ensure lights switch 'instantly on' from a safe background level to 100% brightness when someone enters the space – once people have left the area the lighting dims down again. Delay times can be adjusted to suit you.

Achieving the biggest savings

'Parallel linking' where other areas not in use also remain at a background level, ensures your lighting is only on fully where needed, reducing energy consumption and helping you to make further savings, while enhancing comfort.

Ready for further integration

Depending on the size of the installation and your wishes, sometime there is a desire to link these controlled areas to a central light or building management system. Our OccuSwitch DALI and ActiLume solutions, which provide intelligent daylight integration and energy savings, can be connected cost effectively via DALI to a central lighting control system, effectively creating a future proof system.

Lighting information at your fingertips

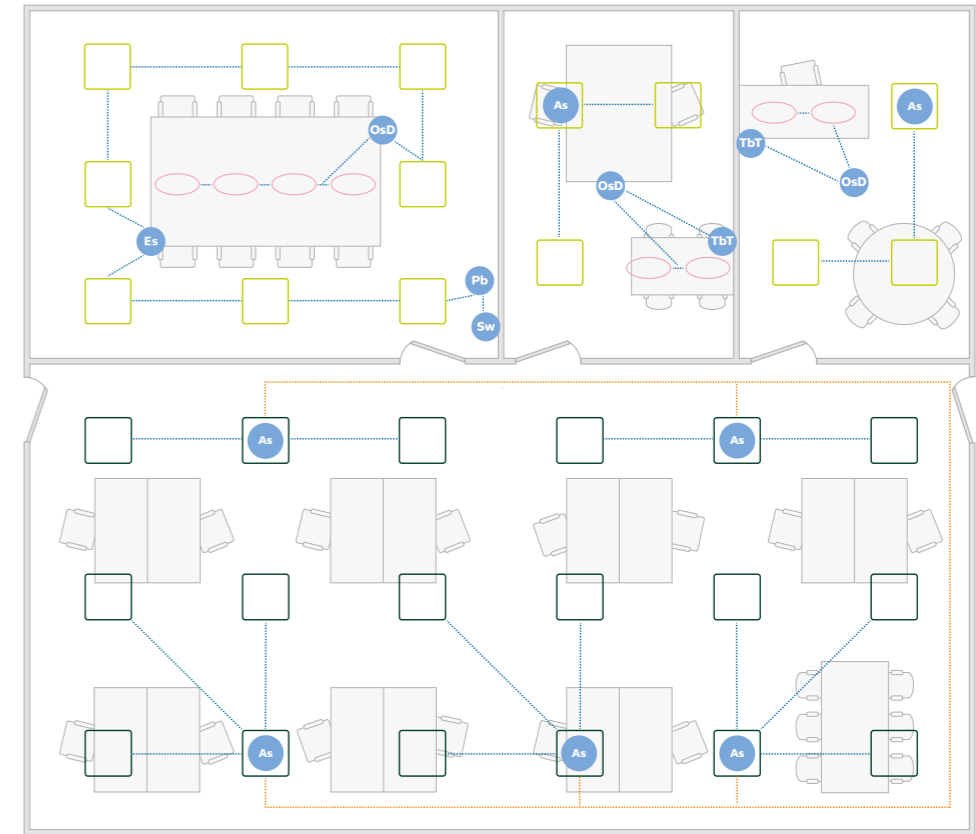
When digitally connected to a lighting management system, status information can be requested on the condition of the lighting – whether in real time, for example presence or operational information on lamp or driver failures, or detailed reporting over specific timeframes.




Audi Offices, Neckersulm, Germany


FloorPlan


Our suggested lighting scheme will give you an idea of what's possible using our energy saving solutions.





Luminaires

 **PowerBalance RC461B G2 1xLED40S/840**
<http://philips.to/1zUuMK7>


 **PowerBalance RC461B G2 1xLED34S/840**
<http://philips.to/18gYMt8>

 **LumiStone SP522P 2xLED20S/840**
<http://philips.to/1ELzj52>


 **PowerBalance with integrated Actilume**
<http://philips.to/1B4Vjav>

 **ToBeTouched DALI UID8520**
<http://philips.to/1Fn5bNn>


 **OccuSwitch DALI LRM 2090**
<http://philips.to/1w67ake>

 **Extension sensor LRM 8118**
<http://philips.to/1Bjwf98>

 **Switch standard push button**

 **Unit push button LCU 2070**
<http://philips.to/1aaQaVl>

 **Interlink cable (2 core mains rated)**

 **DALI signal cable (2 core mains rated min 1.0mm)**

Flex your space

Add flexibility to your green lighting by using additional sensors and controls. Workers will enjoy the freedom that controlling different lighting scenes in rooms gives them and the personalization that lighting their own desk space allows too. Wireless control adds a further dimension – now you don't have to connect everything using traditional wiring and office staff can benefit from remote control.

Open plan
Ideal for open spaces, our free floor standing luminaires can be positioned anywhere, to complement ceiling luminaires. All except the recessed version can be upgraded to connect wirelessly too – allowing you to group them into local networks that you can control easily.

Open plan

Our SmartBalance family of four different types of luminaire, including the iF award-winning suspended version are designed to work together to give visual coherence and effective lighting – ceiling mounted, recessed and free floor standing complete the line-up.

Cell office

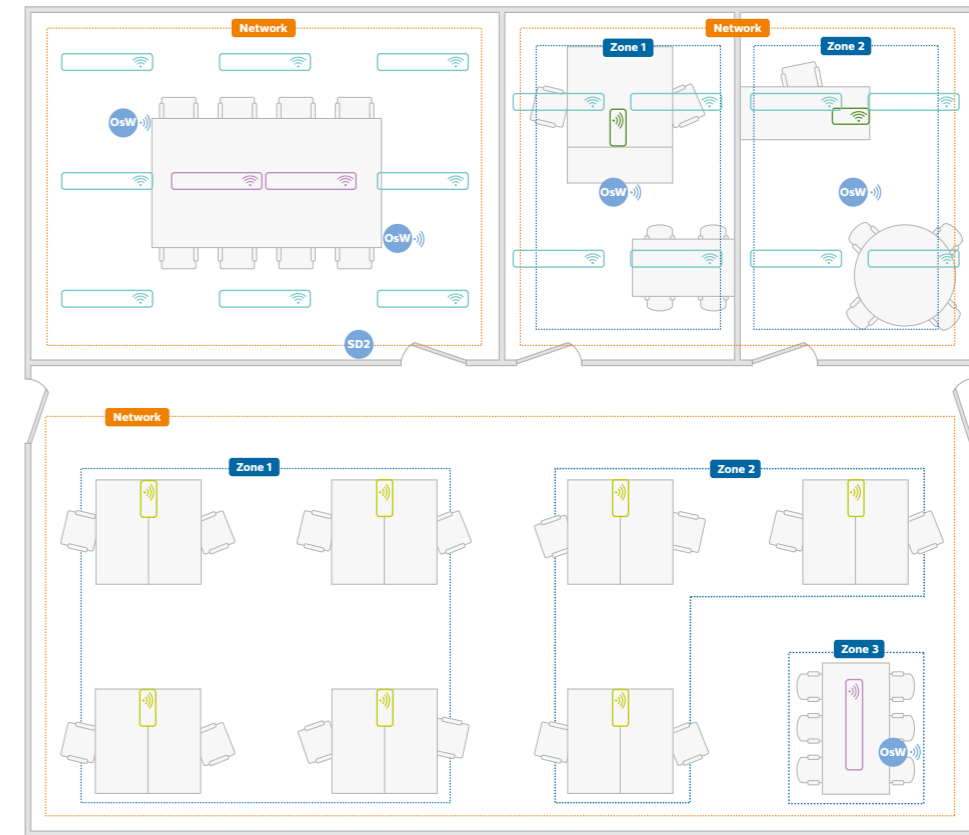
SmartBalance ceiling luminaires have an additional sensor for presence detection and daylight harvesting. They can be connected wirelessly to free floor standing luminaires and grouped into zones, giving flexibility and touch button control.

Meeting room

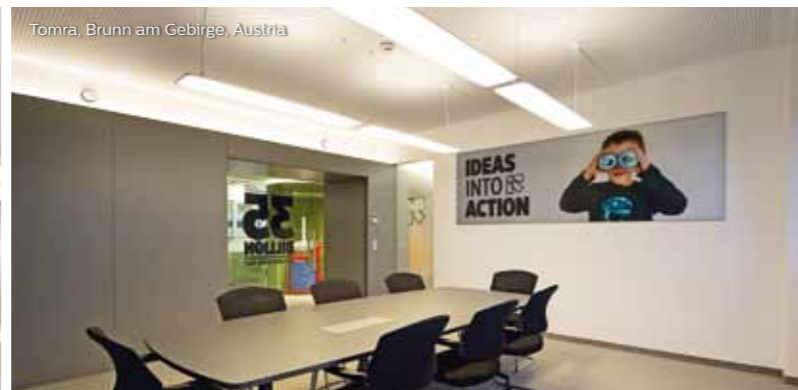
We usually recommend installing a combination of SmartBalance surface mounted and suspended luminaires – again these can be linked wirelessly to provide scene setting, controlled easily via an intuitive user interface.

FloorPlan

Our plan shows how you can add flexibility to your office lighting scheme.



Plantteams.ch AG, Kaegiswil, Switzerland



Tomra, Brunn am Gebirge, Austria





Plantteams.ch AG, Kaegiswil, Switzerland





Tomra, Brunn am Gebirge, Austria


Luminaires


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SmartBalance FS484F LED118S 840 ACC-MLO
<http://philips.to/1AFkxvG>
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SmartBalance FS484F LED45S 840 ACC-MLO
<http://philips.to/1GnM4nr>
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SmartBalance SM480C LED30S/840 AC-MLO
<http://philips.to/1Fn5uYq>
- 


SmartBalance SP482P LED40S/840 AC-MLO
<http://philips.to/1w67vTN>
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OccuSwitch Wireless LRM 1763
<http://philips.to/1Fn5zeH>
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Wireless Scene Remote UID8410/10
<http://philips.to/1x8eagU>

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Switch Dim 2B UID8450/10 ZGP

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Switch Scene Recall 4B UID8460/10 ZGP
(Alternative switch to replace Switch Dim 2B UID8450/10 ZGP for meeting rooms)

Enjoy comfort and control

Bright glare-free light with softened acoustics, complete control of each light point, plus digital connectivity – that's what Soundlight Comfort Ceiling offers you. Each panel combines a soft, non-dazzling LED light source with sound absorbing material, making it ideal for use in large open plan offices.

Our Soundlight Comfort Ceiling system improves well-being and performance in the office space. When both light and sound behave in a more natural way, it creates a unique feeling of comfort for office staff, which helps them to work efficiently.

Open Plan

Get the right light every time. Presence detection and light sensors ensure that the right level of light is always maintained. Dimming profiles can be specified to have gentle and unnoticeable dimming patterns. Additionally, scheduling can make the system respond intelligently to input from sensors, depending on the time of the day. For example, after working hours, the time-out for the presence sensor is shorter. Automatic control ensures maximum savings, with no compromise on comfort.

Meeting Room

Host more successful meetings. Different meetings require a different light setting – users can select the right setting via an elegant button panel on the wall. For example, during a presentation, lights can be dimmed and made brighter again

at the end. Additionally, a light sensor can be used to gently dim the light in sync with sunlight harvested from windows.

Cell Office

Stay in control – by selecting the right dimming level at the touch of a button. A presence detection sensor in the ceiling automatically switches the lights off once people have left the office. To make the most of a free natural resource, a light sensor dims the lighting in response to increased daylight levels.

Real time monitoring and control

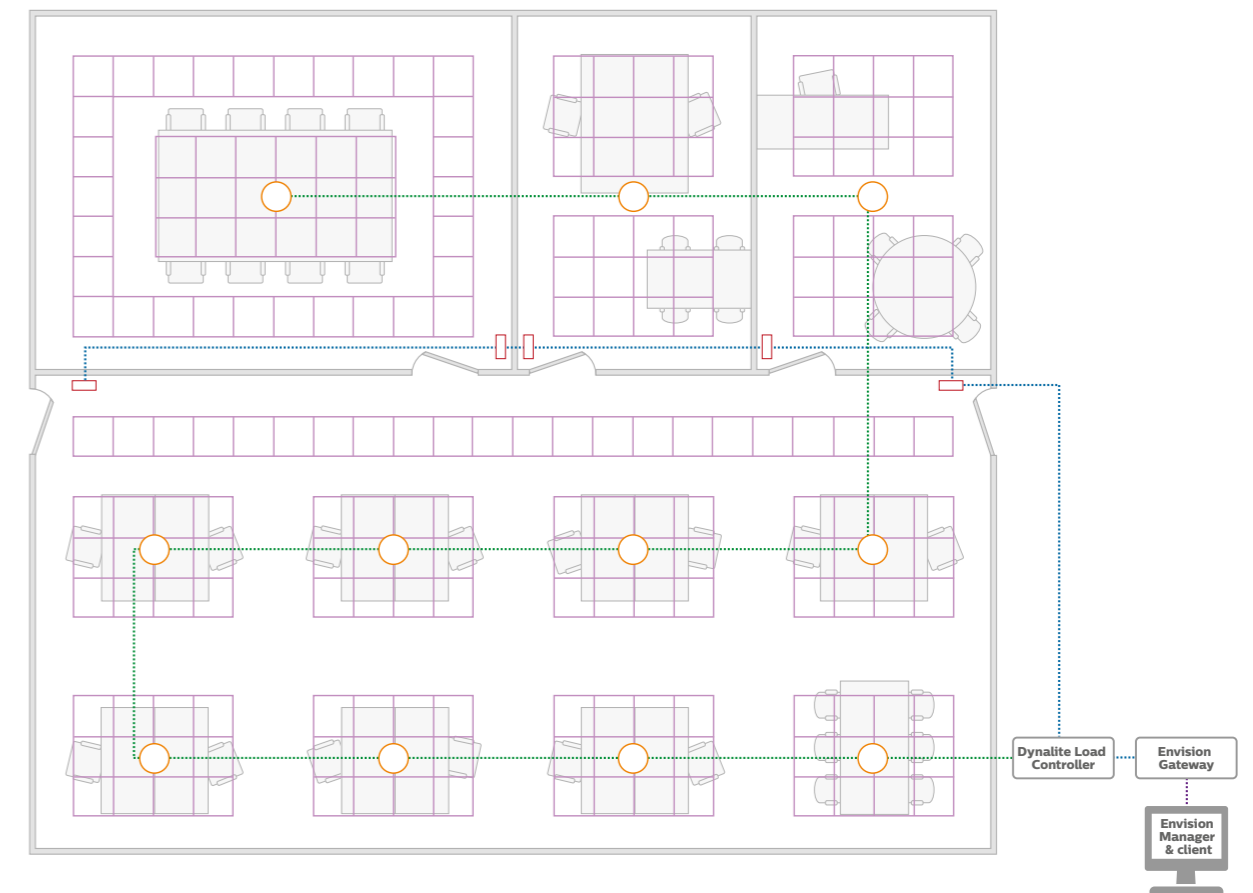
View what's happening in real time – see the status of fittings and adjust light settings and schedules as needed across the entire building from one central point.

Trouble-free integration

Because our systems use industry standard protocols, you can easily integrate the lighting system into your existing building management system.

FloorPlan

Our lighting suggestions give more detail on how to add comfort to your office scheme.



Haworth Vianen, the Netherlands



Luminaires



SoundLight Comfort Ceiling
www.soundlightcomfort.com



Antumbra touch
http://philips.to/1BLdvZv



Dynalite sensor DUS804C
http://philips.to/1GnMavl



Data link (Dynet)



Data link (Dali*/ Dynet)



Client/Host PC for Dynalite system

* only when using DALI Multimaster

**DALI wiring to luminaires not shown on diagram. Install as per standard lighting installation for DALI.

Haworth Vianen, the Netherlands



