

PHILIPS

dynalite

Lighting Control

Venlo, Netherlands



Supporting educational
outcomes at
**Sint Martinus
Primary School**

About the project

Lighting control plays a critical role in supporting educational outcomes by empowering students to feel and perform at their best.

With this knowledge in mind, Sint Martinus' board set out to transform their 43-year-old school building for the benefit of its 200 students and 15 faculty. Their two primary objectives were to optimise the environment for learning and to improve sustainability.



The challenge

Sint Martinus is a primary school with students as young as four, making ease of operation a key requirement for the new lighting control system.

Further, varying natural daylight levels throughout the school require the system to be flexible and responsive so that the illumination levels in each room remain optimal regardless of the time of day or year.

To achieve these goals and maximise sustainability, the new system would require:

- Intuitive user interfaces for seamless control by all users.
- Flexible programming groups for the creation of bespoke scenes.
- Daylight harvesting and presence detection sensors to save energy.
- Integration with the school's alarm system for safety and energy savings.

Benefits

The Dynalite System is:



Sustainable



Human-centric



Reliable

The solution

Connected by a passion for people and technology, Certified System Integrator, Ysmart, leveraged the Dynalite System to transform Sint Martinus. The team's extensive knowledge of lighting control enabled the following outcomes:

Tailored for the task at hand

Making the learning environment as comfortable as possible for each activity, helps keep young minds alert and eager to take part, improving outcomes for teachers and pupils alike.

DALI-2 DT8 tuneable white lighting was leveraged to create four distinct scenes by varying the balance between light intensity and colour temperature.

Those scenes are, "Normal" for regular classroom activities, "Energize" to invigorate pupils when they need to be more active, "Focus" to aid concentration during challenging tasks, and "Calm" to create a relaxing ambience for individual work and quiet time.

The scenes are selectable via an Antumbra user interface, which is so intuitive that students as young as four years old can easily operate it.

The response of the new lighting control system is so engaging that the students get excited to change the lighting scenes for upcoming lessons.

Smart and sustainable

Philips Dynalite's enhanced DALI capabilities enabled the incorporation of strategies such as dimming, daylight harvesting, occupancy detection, and scheduling to help Sint Martinus achieve its sustainability targets.

DALI daylight sensors dim the lights when there is sufficient natural daylight and motion sensors turn the lights off when the classroom is empty. Additionally, DALI Part 251 Luminaire Data helps the faculty to monitor the health of their lighting network and plan for proactive maintenance. This way, class is never unexpectedly disrupted due to a blown lightbulb.

"The dynamic scenes provided by the Dynalite/DALI system support the circadian rhythm, mood and energy levels of students throughout the day to help them feel their best."

Frans Konings
CCO, Ysmart



“The lighting control contributes towards improving the performance, concentration, and motivation of students, and ultimately improves the well-being of students and teachers.”

Frank Giesen
Director, Sint Martinus Venlo

Conclusion

Ysmart was inspired to pursue a Philips Dynalite solution for Sint Martinus primary school, based on well-established evidence of the power of lighting control to influence educational outcomes. This project now stands as further testament to the value of good quality lighting, the benefits of which are enhanced by a DALI compliant system.

The Dynalite DALI approach is engaging students to interact with their environment in new and exciting ways. Students now have a better understanding of the lighting conditions that benefit them, dependent on the task at hand, and can apply this information to their everyday lives now and into the future.

Also, the new lighting control system has enabled Sint Martinus to achieve significant light-related energy savings of 57%. This means the school is playing its part to protect the future of the planet for the next generation, whilst empowering those students to reach their full potential through their education and the power of light.

Project team

Customer

Sint Martinus Primary School

System spec. and commissioning

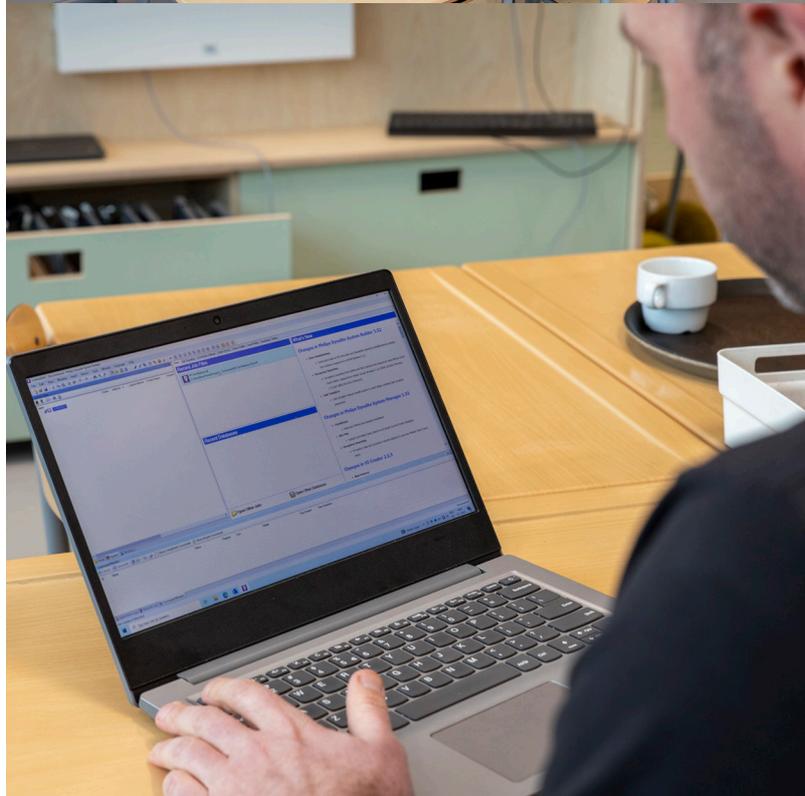
William Haverhals and Izaäk den Dekker
Ysmart

General contractor

Dierx Group

A proud Certified System Integrator

 **YSMART**





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