

W O R

K — THE HEIGHTS  
WEYBRIDGE

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B U I L D I N G 5



CIRCADIAN AND HUMAN CENTRIC  
LIGHTING SYSTEM

## BUILDING 5 BENEFITS FROM CIRCADIAN AND HUMAN CENTRIC LIGHTING (HCL).

HCL BRINGS LIGHT INDOOR THAT MIMICS THE SUN AND AUTOMATES TO YOUR ENVIRONMENT PROVIDING OVERWHELMING BENEFITS TO YOUR HEALTH AND WELL-BEING. HEALTHIER AND SMARTER LIGHTING NOT ONLY HELPS CONSERVE ENERGY AND REDUCE COSTS BUT ALSO SERVES BOTH THE INTERNAL NEEDS AND AESTHETIC DESIRES OF THE OCCUPANTS.

THE LIGHTING EXPOSES OCCUPANTS TO FULL-SPECTRUM LED INFLUENCING THEIR MOOD, BEHAVIOUR AND SLEEP PATTERNS WITH BENEFITS OF INCREASED PRODUCTIVITY, LESS EMPLOYEE ABSENCES AND ENHANCED GENERAL WELL-BEING.



# THE HEIGHTS

WEYBRIDGE

# EVERY DAY – REDEFINED

Circadian lighting mimics the natural daylight, providing a lighting system that complements the natural body clock. The lighting cycle is optimised to stimulate brain receptors to know when it is daytime helping to boost alertness as well as keeping the body clock cycle on track.

## HOW IT WORKS



**6:00**

Warm white light gets the day off to an agreeable start.



**10:30**

Artificial lighting is turned down as more daylight becomes available, light colour is more intermediate.



**12:00**

Just as outdoors, the colour temperature reaches its maximum level at midday.



**14:30**

Intermediate white luminaries supplement the general lighting and compensate for low levels of daylight.



**17:00**

When darkness falls, artificial lighting ensures a balanced ratio of warm white light components.



## BENEFITS

The change in light is the main trigger for keeping the body clock on track. The benefits of Circadian lighting include:

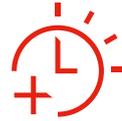
- Simulation of the changes in natural light throughout the day
- Lower Stress & Anxiety
- Improved cognition, focus and productivity  
– lower operating costs
- Improved Memory, Learning & Motivation
- Increased vitality, concentration and Energy
- Faster reflexes
- Improved immunity, lower absence  
(SAD, ADHD, Sleep disturbances)
- Reduced therapy times and capacity requirements



Better sleep  
(46 minutes extra)



Better staff retention



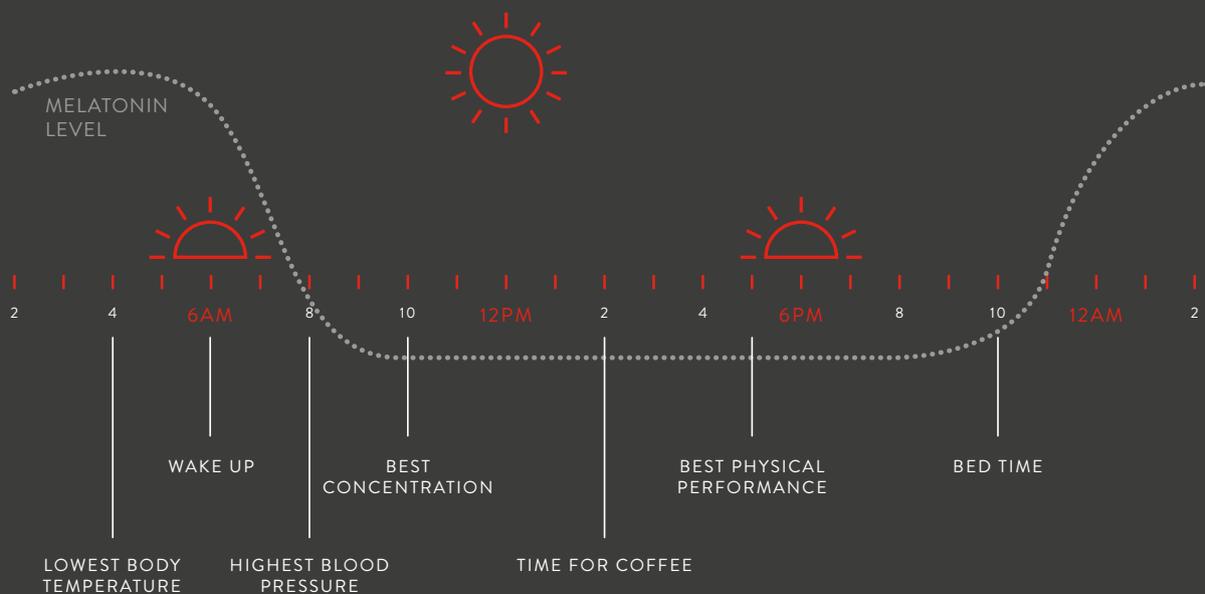
Increased concentration  
and productivity



Mood Support in wellness  
(general life quality improvement)

## THE CIRCADIAN CYCLE

Circadian rhythm, also known as the 'body clock' is the human cycle which tells the body when to sleep, rise and eat - regulating many of our everyday processes. The human body clock is easily affected by the environment e.g. sunlight or temperature. When these are disrupted sleeping and eating patterns can be negatively affected, and if this continues over long periods there can be adverse health effects.



Body clocks are controlled by a part of the brain known as Suprachiasmatic Nucleus (SCN), a group of cells in the hypothalamus that respond to light and dark signals. Light travels to the SCN and lets the body know that it is time to be awake or asleep. The SCN responds to light and signals to other parts of the brain which control hormones, body temperature and other functions creating feelings of alertness or sleepiness. For example, the SCN will respond to darkness by signalling the release of melatonin - the hormone to promote sleep.