

air<sup>3</sup>

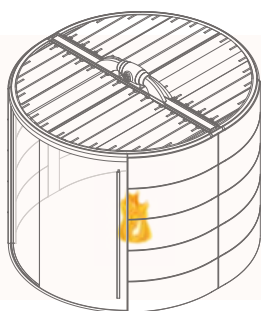
## Intergrated services

[roof options all products except Air-20]



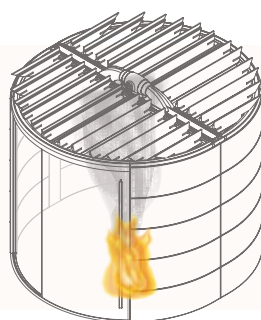
Air<sup>3</sup> can be specified with fixed or opening/closing roof panels (except Air-20 which only has a fixed roof).

# In the event of a fire



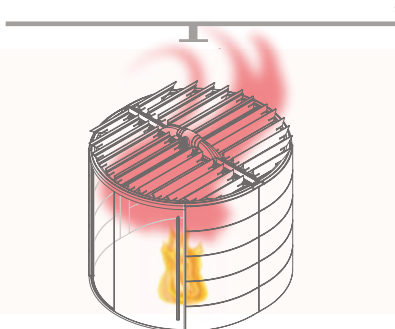
## Stage 1

If a fire starts in the pod it will be detected by the heat detector.



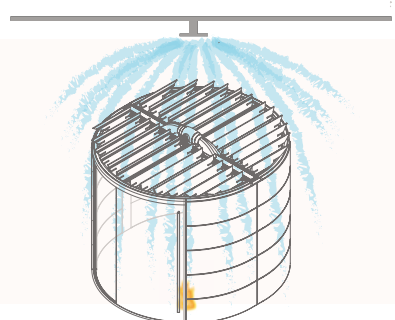
## Stage 2

The detectors immediately cut the power to the pod releasing the spring in the actuators which drives the louvres open in just **8 seconds**.



## Stage 3

The open roof then allows the heat of the fire to release and set off the closest sprinkler heads.



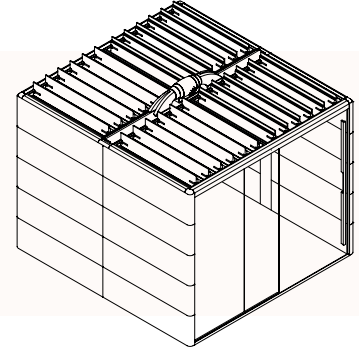
## Stage 4

The 74% open area allows enough even water ingress from the sprinklers (NO OBSTRUCTION), to control the size and spread of the fire within the pod. The roof blades have been proved (through sprinkler testing at BRE Global Fire Testing Facility) to greatly increase the even spread of water ingress against having no roof blades at all.

# Day to Day function

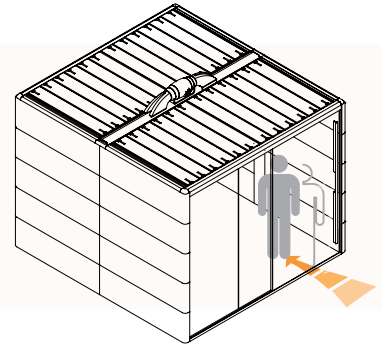
## Static Mode

When the pod is unoccupied, the roof is “always open”.



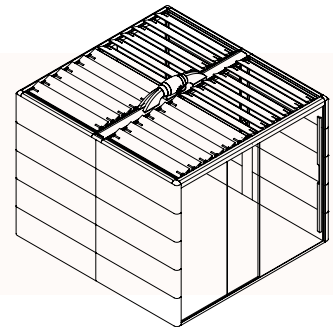
## In Use Mode

When you walk into the pod, the Passive Inferred sensor (PIR) senses movement and closes the roof to create acoustic privacy.



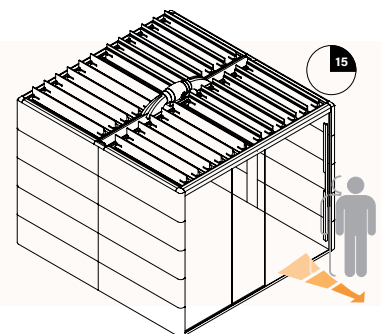
## Manual Mode

When the pod is occupied, it is possible to select either 10° or 90° open position for enhanced airflow.



## Meeting Over Mode

When the meeting is finished and the room becomes unoccupied, the PIR turns the power off after 15 minutes and the roof automatically opens.

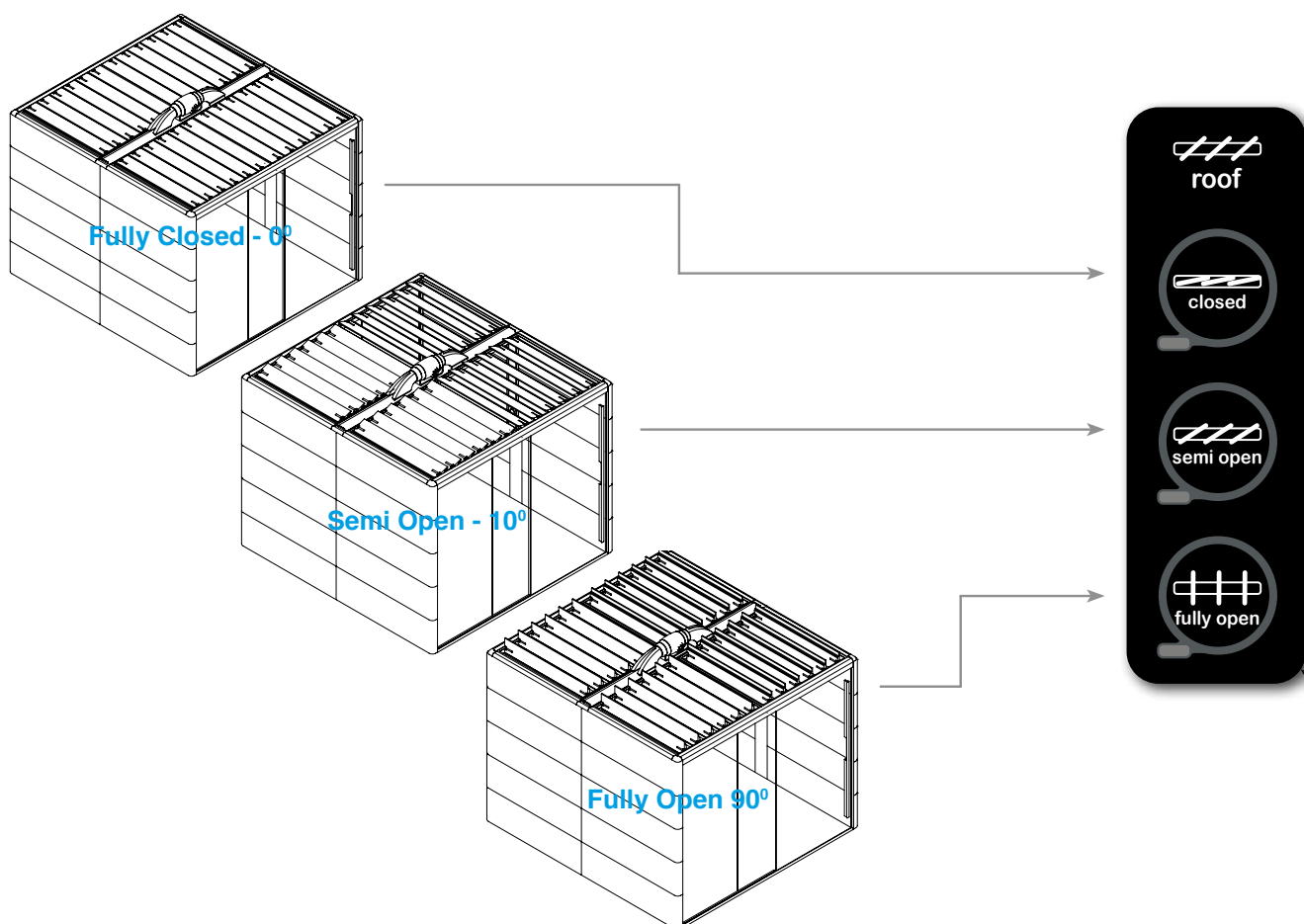


# Roof settings

Since we are in control of the whole engineering system including the programming of the electronics, we decided to create 2 added bonus features.

Manual 10° Open Roof Mode  
Manual 90° Open Roof Mode

- This creates enhanced airflow through the room while still maintaining a level of acoustic privacy.
- No need to tether to the air-con or move ceiling units.
- The acoustics are still optimized despite the roof being open, by doubling the absorbent surface area through double sided louvres.





## User Interface

At the heart of the air pods is the hoop, which contains all the intelligence and complexity.

The lighting, ventilation and opening roof actuators are all integrated within the hoop and linked through our unique electronic control system, the Air Management System (AMS). This links all the elements together through the PIR motion sensor, the smoke and heat detectors and also the user control panel integrated within the room.

This link is critical enabling the sensors to turn the power to all elements off (even in multiple hoop pods), in the event of a fire or when the pod is unoccupied.

The switch panel itself is a flush membrane switch panel with LED indicators, integrated within the hoop uprights.

# Roof settings

## Fire Detection / Fault / Test Reset.

In the event of a fire detection, power fault, power test or if connected to the building fireboard, the power will be instantly cut to the pod, causing the roof to automatically open through the actuator spring mechanism.

### In order to reset the pod:

1. Unplug the pod from the floor or wall sockets, or press the re-set switch
2. Wait 1 Minute - then re-plug / reset the power.
3. If there is a re-set switch integrated within the hoop switch the re-set button off, wait 1 minute, then switch on.
4. In either option above the pod switch panel LEDs will flash to indicate re-setting, and after 30 seconds the pod will turn back on and re-set itself.
5. If it doesn't come on, check the isolator switch and the reset switch. If necessary repeat as above.

### For normal pod function:

1. Please ensure your pod is plugged in, either to a floorbox, wall socket or ceiling connection.
2. Ensure isolator switch located on the sockets is switched on and the reset switch located inside the cover through the cable grommet is also switched on (all Air3 Pods - except the air 20 Minipod).
3. Check all fuses are in working order.

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## Intergrated services

[air fan]

section



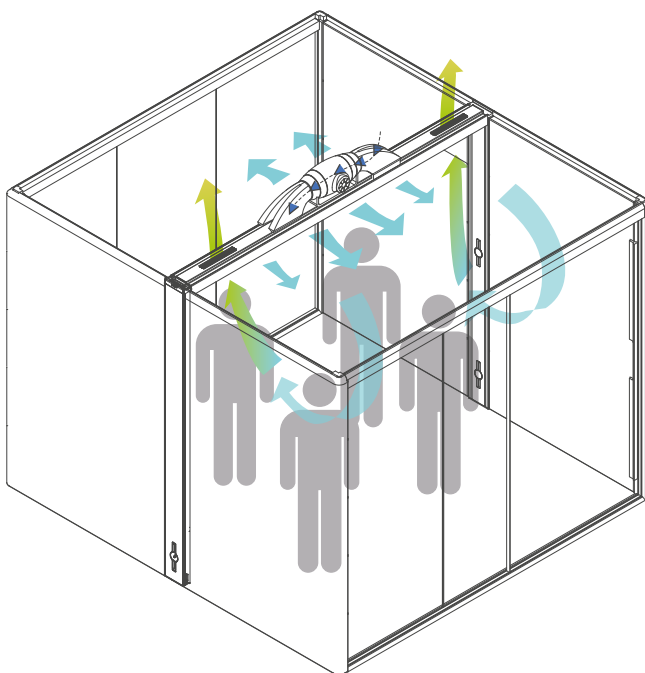
An intergrated air fan accessory is available as an option on every Air<sup>3</sup> Pod (except Air-20 which as an intergrated air system as standard)

# Air flow systems

## Air Flow System Example:

Air flow rate for 4 users inside a pod with single service hoop / one air fan.

Indoor environmental input parameters for design and assessment of energy performance of buildings addressing indoor air quality, thermal environment, lighting and acoustics.



## Control of CO2 Heat & Humidity inside Pod

Air<sup>3</sup> Pod Size:

L. 2.96m

D. 2.85m

H. 2.25m

Use: Meeting

Duration: 1 Hour

Number Of People: 4

Activity Level: 1.2

(metabolic rate for sedentary work)

## Air Handling Capability of the Air3 Fan:

To provide fresher air into the pod the analysis shows how the air fan provides much more airflow rate measured in cubic metres per hour (m<sup>3</sup>/hr), than the minimum required.

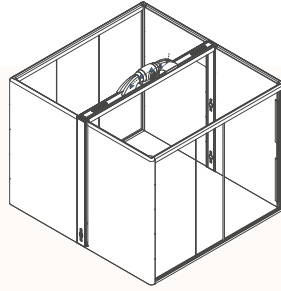
Required airflow rate per person: 10 Litres/s Person = 40 Litres/s for 4 people  
(BS EN 15251 Cat 1, B3)

Air3 Fan provides a maximum of 380m<sup>3</sup>/ hr = 105 Litres/s (ie; 2.5 x more than the minimum requirement)

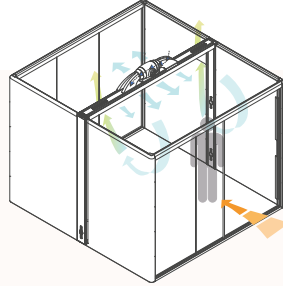
See 'User Control' Section for air fan user operation.



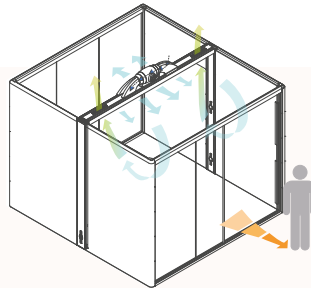
**Pod Unoccupied Fan Off**



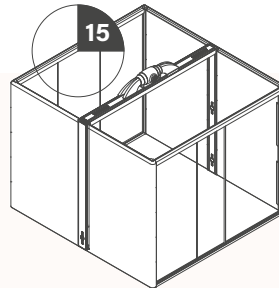
**Person Enters Pod  
Fan linked to PIR System  
Activates automatically**



**Person leaves pod  
Fan stays on for 15 minutes  
to expel CO2**



**If left unoccupied fan stops  
after 15 minutes**



- scene
- work
- think
- present
- air
- ON
- OFF
- roof
- closed
- semi open
- fully open

An air fan is optional, but is always recommended for all workspace situations.

When specified it is one fan per service hoop (whether this be for the 2.8m service hoop or the 4.1m service hoop).

Example: Air 24  
Service Hoop = 1 x Fan



Example: Air 26  
2 Service Hoops = 2 x Fans



# Air flow systems

The opening / closing roof provides additional air handling capabilities.

When using the pod, manual control of the roof by means of the user control panel allows pod users to open the roof at any point to allow cleaner, cooler air in, and at the same time let staler, warmer air out quickly.



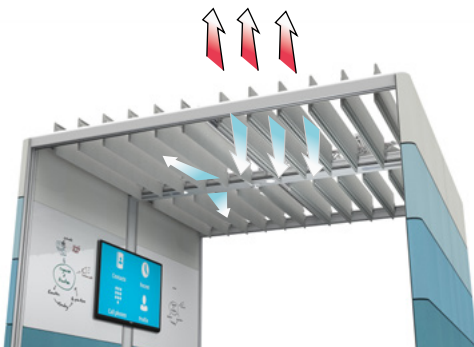
## Roof Closed

Air brought into the pod by air fan only.



## Roof Semi Open

Air brought into the pod by air fan and through the gaps in the roof blades. Stale air can very quickly exit through the gaps.



## Roof Fully Open

Maximum air brought into the pod by air circulation fan and through the open roof blades. Stale air can immediately exit through the roof blades.

## Building Air Conditioning

Air conditioning units will bring cool air into the pod when it is unoccupied (ie; roof fully open).

There is no need for the air conditioning unit to be fully connected to the pod.

The minipod has an integrated air system consisting of 2 fan units mounted in the pod ceiling panels. One is for bringing in fresher, cooler air, and the other is for extracting the staler air. These fan units are operated automatically through PIR sensor control, activating when a person enters the pod and stopping when the pod has been unoccupied for 10 minutes.

### Minipod Fan / Power Details

Fan Flow Rate - 19.5 Litres per second. Taking the grills into consideration.

Fan Flow Rate - 28.5 litres per second

Air Flow @ 12V 102.6m<sup>3</sup>/h

Air Pressure @ 12V (mm H<sub>2</sub>O) 0.81

Noise Level @ 12V 15.8 dB(A)



air<sup>3</sup>

## **Intergrated services**

[LED lighting system]

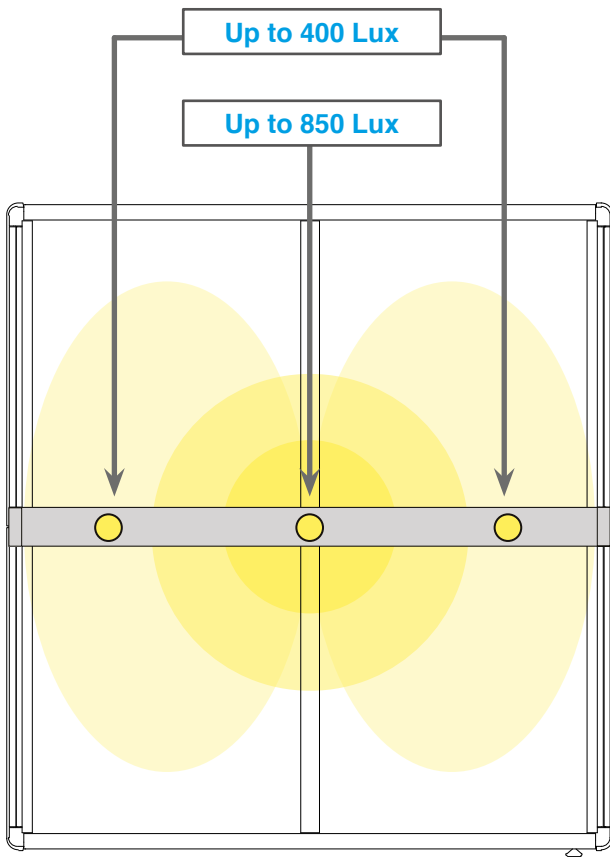
section

An integrated LED lighting system is available on every Air<sup>3</sup> Pod - controlled automatically by a PIR sensor. Manual control is also available on every Pod (except Air-20).

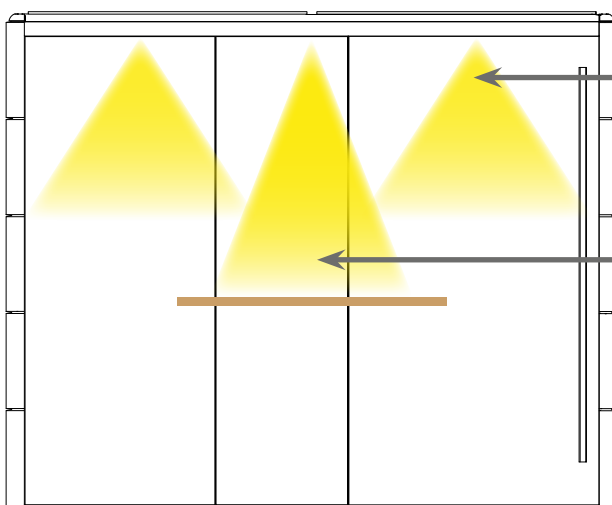
orangebox

# LED Lighting Systems & Settings

Working, thinking and presenting

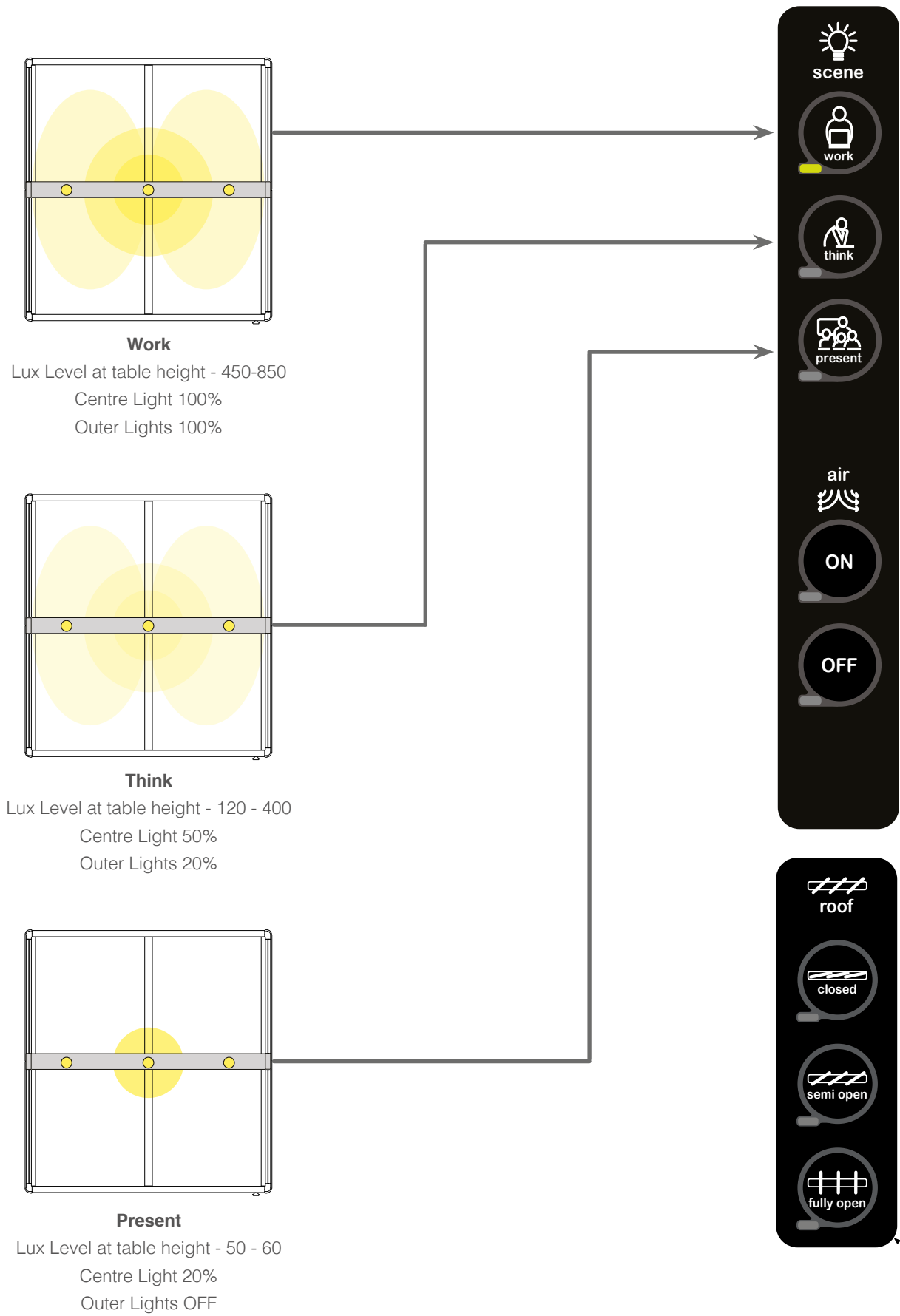


- High light output, low energy consumption
- Extremely long lamp life - Min 5 Years
- Recyclable
- Zero Maintenance



2.8m Service Hoop - Total of 3 LED Lights. Total Output of 30W per hoop

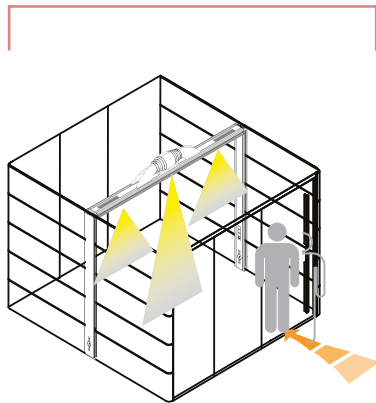
4.1m Service Hoop - Total of 4 Lights. Total Output of 40W per hoop



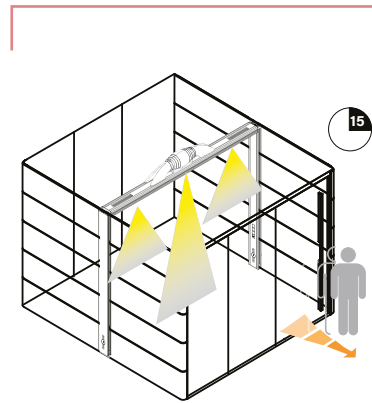
# LED Lighting Systems & Settings

Achieving clever acoustics to maximise privacy

Person Enters Pod  
Lighting linked to PIR system  
(Auto ON/OFF)



Person Exits Pod  
Lighting stays on for 15 minutes



The minipod has integrated LED lights mounted in the pod ceiling panels. These lights are operated automatically through PIR sensor control, which activates when a person enters the pod and stops when the pod has been unoccupied for 10 minutes.

## Minipod Light Details

- 2 x LED Lights. 28W
- Full Lighting / Fan System Wattage - 33w
- Light Level at table height - 850 Lux

