

XL-20

## LED LIGHT ENGINE

The Thorlux light engine uses the very latest medium power LEDs placed onto specially designed circuit boards having excellent thermal management and using our patented current sharing technology. Each group of LEDs is placed in a highly reflective light chamber behind a highly light transmissive satin panel producing low glare white light. The four versions operate at 860mA, 625mA, 430mA or 345mA - 40W, 29W, 20W and 16W respectively. A truly fit and forget, well-engineered, dedicated LED light engine solution having a life expectancy well in excess of 60,000 hours.



*Area Emergency version*



*Corridor Emergency version*



*Smart version*

## SUPREMELY EFFICIENT LED RECESSED OFFICE VDT LUMINAIRES



### SPECIFICATION

- Steel body finished full polyester non-yellowing satin white (RAL 9016)
- Shallow body depth
- 20 injection moulded LED mixing chambers with glare reducing satin diffusers
- Extremely efficient optical system - 137 lumens per "lamp" watt
- Glare cut back above 65°. LG7:2015 (<1500cd/m² @ 65°)
- Highly technical LED solution
- Emergency versions use dedicated LED downlighter
- Optional SmartScan wireless technology removes the need for control cabling. Ideal for retro-fit.
- Fitted with 4000K LEDs

### LED CHARACTERISTICS

Ra	°K	L80/B10	LL/CW <b>118.5</b>
80+	4000	60K	
P/U	%	R/Rx	PF
P	>85	R	>0.9

For LED characteristics explanation see [www.thorlux.com/led-characteristics](http://www.thorlux.com/led-characteristics)

### SmartScan Configurations



Find out more at [www.thorlux.com/smartsan](http://www.thorlux.com/smartsan)

### WEB LINK >

"PLUG AND PLAY"  
LIGHTING CABLE  
MANAGEMENT



XL-20 Design Registration Number 4027852

### RANGE

	NOMINAL SIZE (mm)	LED	CAT. No.	APPROX. kg	CIRCUIT
SMART	600 x 600	16W	<b>XL 18306</b>	4.9	D/SS
		20W	<b>XL 18307</b>	4.9	D/SS
		29W	<b>XL 18308</b>	4.9	D/SS
		40W	<b>XL 18309</b>	4.9	D/SS
STANDARD	600 x 600	16W	<b>XL 18310</b>	4.8	L/A
		20W	<b>XL 18311</b>	4.8	L/A
		29W	<b>XL 18312</b>	4.8	L/A
		40W	<b>XL 18313</b>	4.8	L/A

### EMERGENCY RANGE

	NOMINAL SIZE (mm)	LED	AREA VERSION	CORRIDOR VERSION	APPROX. kg	CIRCUIT
SMART	600 x 600	16W	<b>XL 18314</b>	<b>XL 18322</b>	5.4	D/SS
		20W	<b>XL 18315</b>	<b>XL 18323</b>	5.4	D/SS
		29W	<b>XL 18316</b>	<b>XL 18324</b>	5.4	D/SS
		40W	<b>XL 18317</b>	<b>XL 18325</b>	5.4	D/SS
STANDARD	600 x 600	16W	<b>XL 18318</b>	<b>XL 18326</b>	5.3	L/A
		20W	<b>XL 18319</b>	<b>XL 18327</b>	5.3	L/A
		29W	<b>XL 18320</b>	<b>XL 18328</b>	5.3	L/A
		40W	<b>XL 18321</b>	<b>XL 18329</b>	5.3	L/A

CIRCUIT TYPE - suffix catalogue number with:

**SMART** D - Smart / **SS** - SmartScan

**STANDARD** L - non-dimming (LED) / A - dimming (DALI) e.g. **XL 18314SS** etc.

EMERGENCY VERSION - prefix catalogue number with:

**EXL** - Emergency / **TXL** - AutoTest / **DXL** - Scanlight AT (DALI) / **WXL** - SmartScan e.g. **EXL 18314SS** etc.

### ACCESSORY

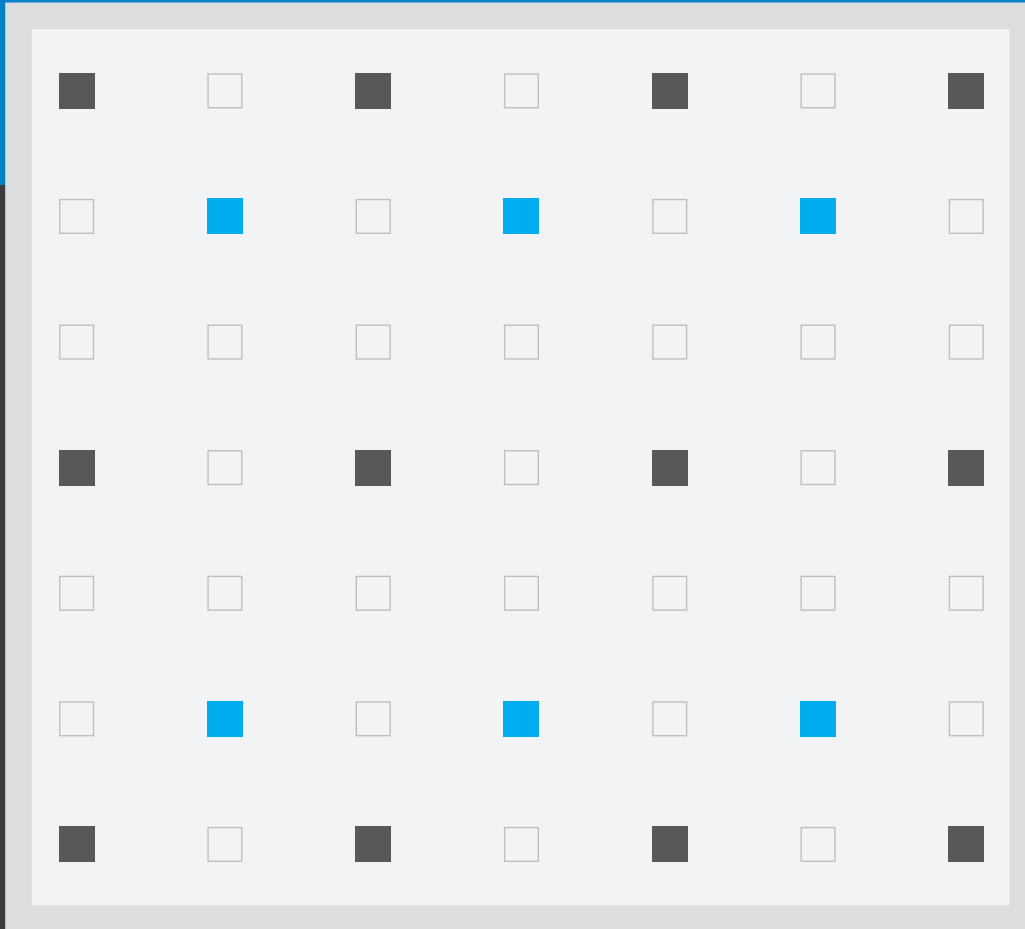
DESCRIPTION	CAT. No.
Optional side arm suspension kit ▲	<b>XL 15402</b>

▲ 4 arms per kit - not required for lay-in mounting

## Typical Emergency Lighting Application

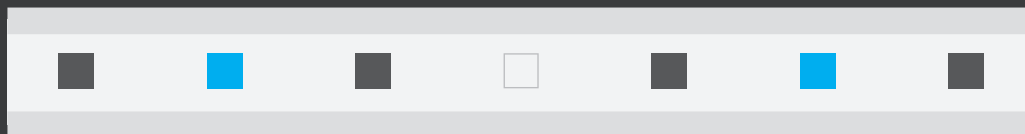
Emergency versions use a tried and tested dedicated LED Downlighter mounted within the central panel. Sophisticated lens technology, illuminated only during mains failure, transmits light at higher angles than would normally be acceptable in VDT areas. Wider spacings mean fewer emergency luminaires are required reducing capital, maintenance and installation costs. Emergency versions are also available as Stand-alone AutoTest, full communication Scanlight AT compatible (DALI) and full SmartScan wireless communication compatible.

### AREA

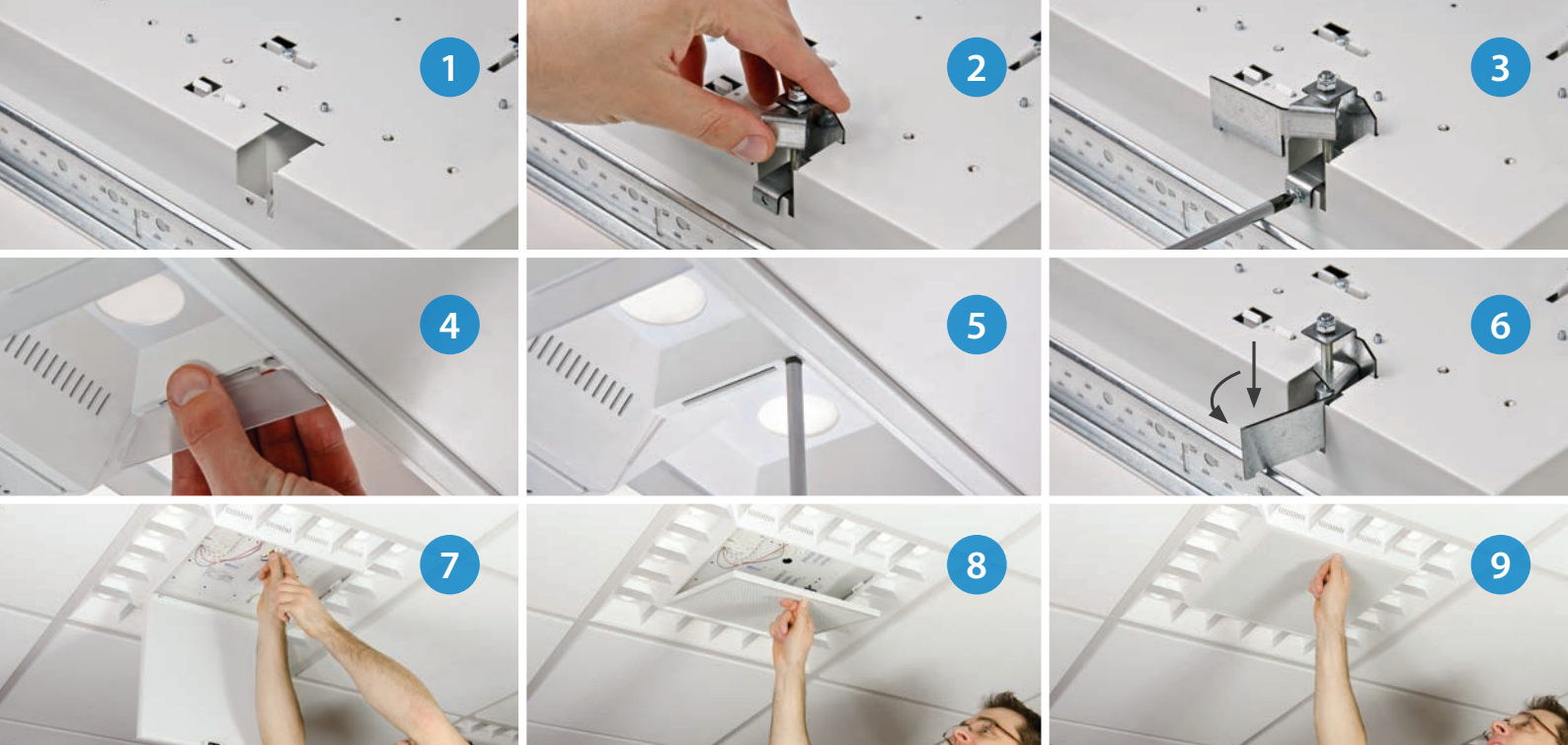


- "Conventional" 14W emergency fluorescent (12 required)
- XL-20 with dedicated LED Downlighter (area lens) (6 required)

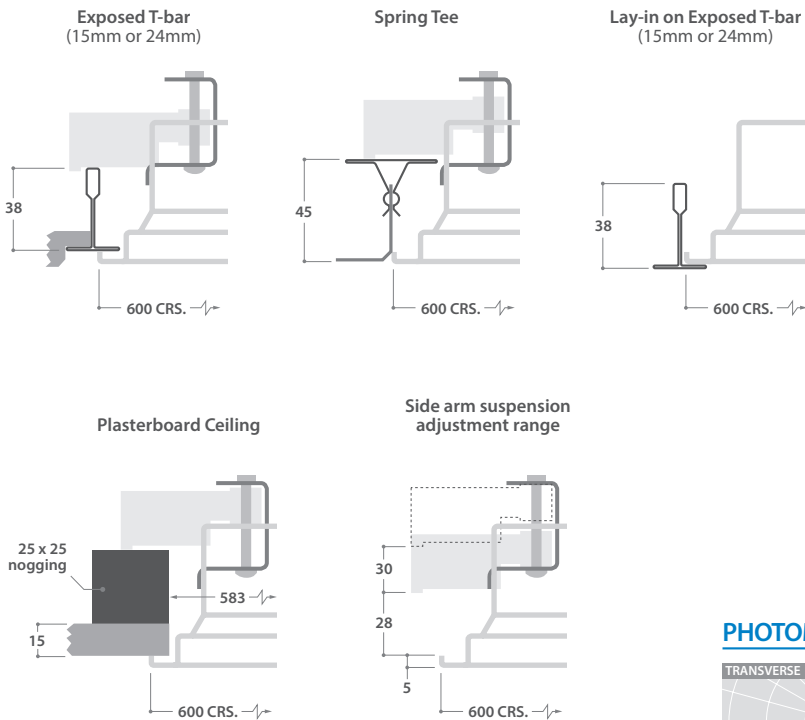
### CORRIDOR



- "Conventional" 14W emergency fluorescent (4 required)
- XL-20 with dedicated LED Downlighter (corridor lens) (2 required)



## MOUNTING ARRANGEMENTS

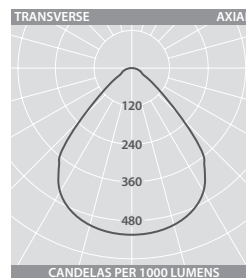


## PERFORMANCE GUIDE

Typical task area illuminance assuming an open area with good reflection factors, 0.85 maintenance factor and a 2.65 metre ceiling height.

LED	SPACING (Metres)	LUX AVERAGE 70/50/20	LUX AVERAGE 80/60/30
16W	3.0 x 3.0	245	275
	3.0 x 2.4	300	335
	2.4 x 2.4	365	410
20W	3.0 x 3.0	300	340
	3.0 x 2.4	370	415
	2.4 x 2.4	450	505
29W	3.0 x 3.0	410	460
	3.0 x 2.4	500	565
	2.4 x 2.4	615	690
40W	3.0 x 3.0	535	605
	3.0 x 2.4	655	740
	2.4 x 2.4	805	900

## PHOTOMETRIC GUIDE



**LED**  
LUMINAIRE LUMEN OUTPUT  
16W = 2200lm  
20W = 2725lm  
29W = 3705lm  
40W = 4835lm

## DIMENSIONS

