

THORN

Lighting people and places

THORN

Install **9**
NEW PopPacks
in the same time it
used to take to do **4**



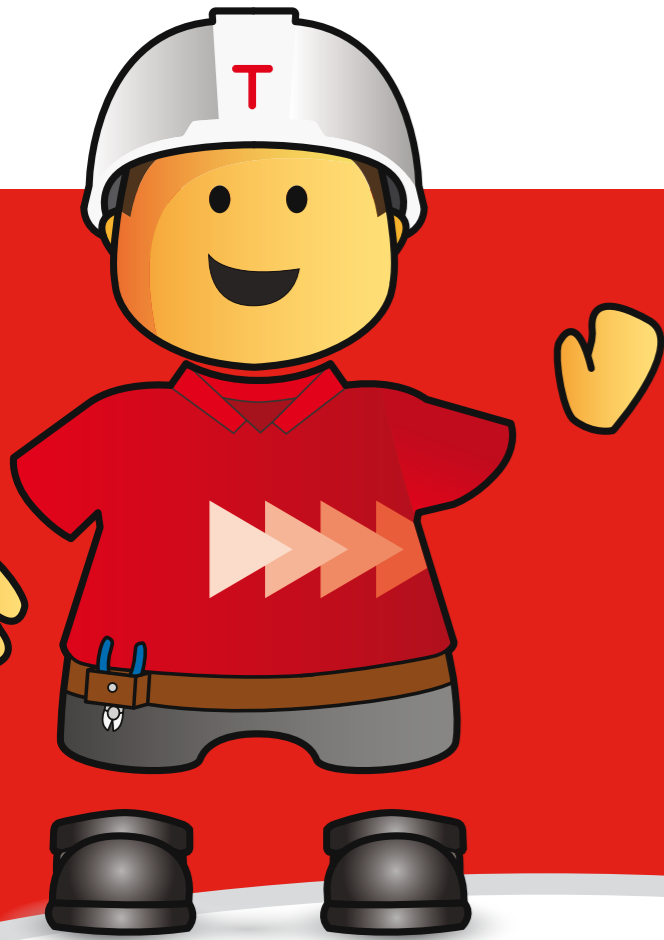
PopPack



Years to evolve
Seconds to install

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Imagine being able to install a fluorescent batten in seconds and then, add 3 hour emergency capability and/or motion and daylight sensing also in seconds.

We not only imagined it, we designed it - new PopPack - manufactured at our award winning factory in Spennymoor, near Durham.

Why is new PopPack so great?

FixExpress

Quicker installation sequence

ConnectExpress

Easy access and connection

SafeExpress

Rapid authentic emergency module

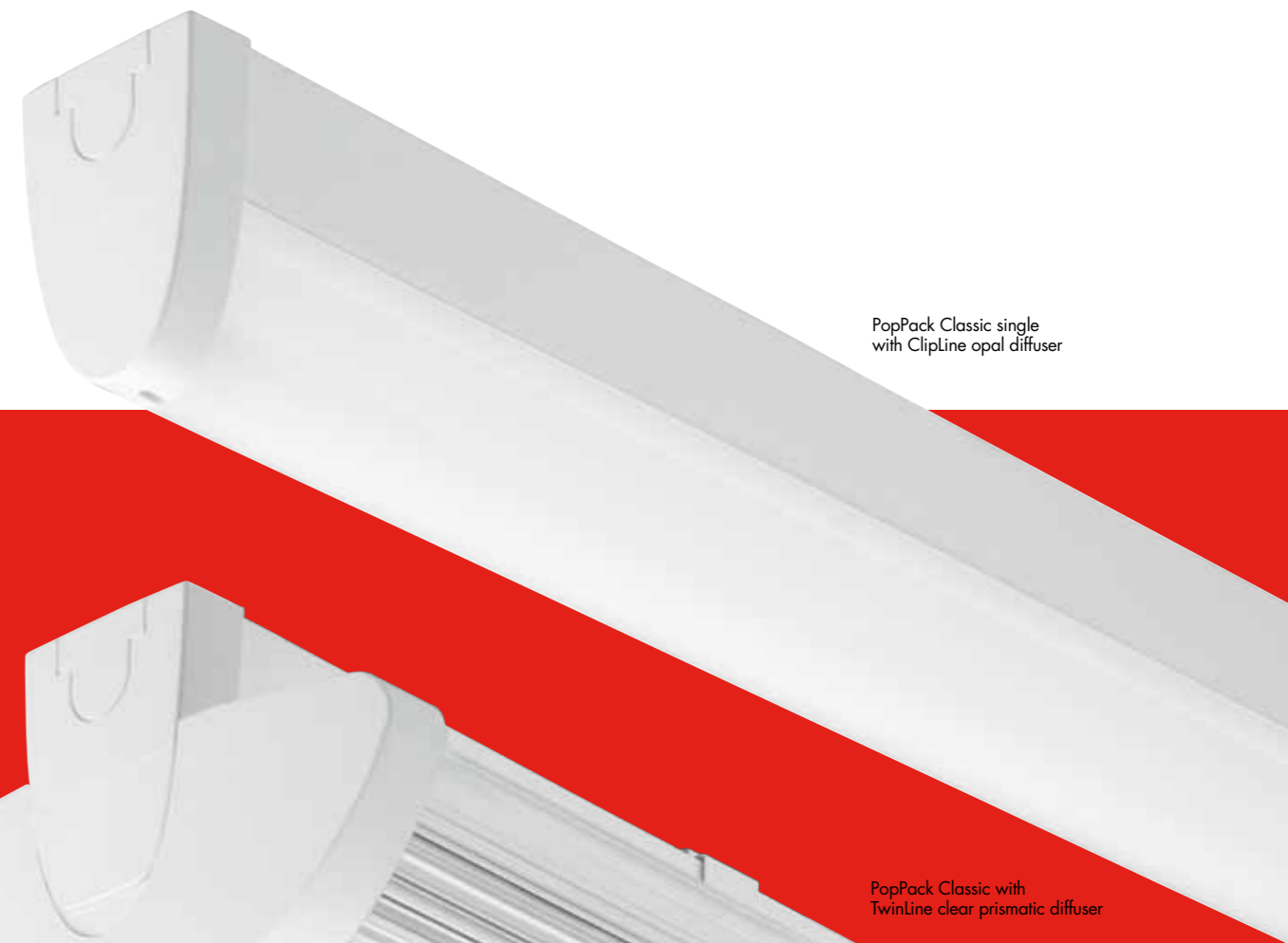
SaveExpress

Presence and daylight detection module

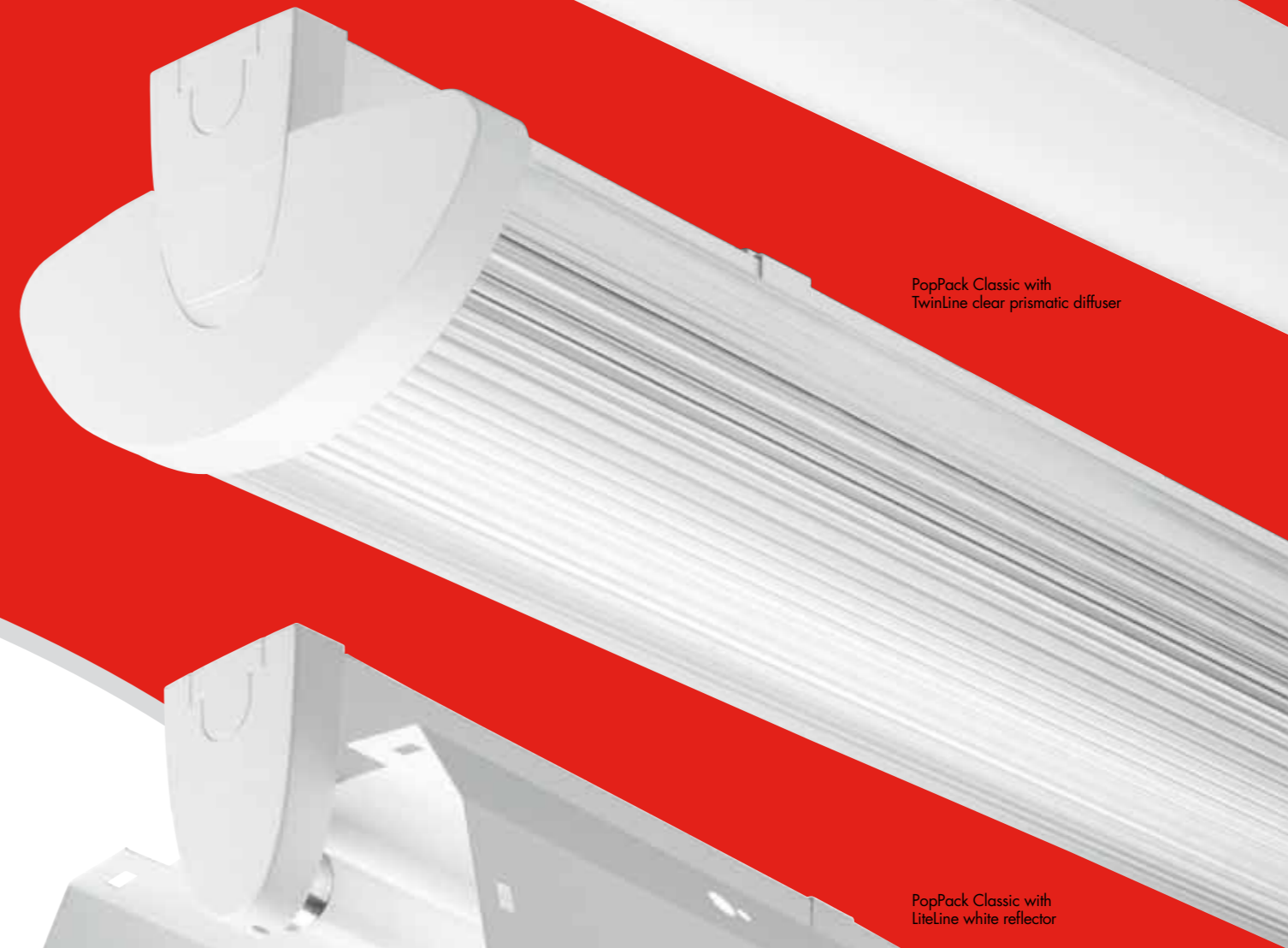
If they weren't reasons enough to convince you, we have also made sure that new PopPack scores very high on:

- Affordability
- Functionality
- A big range to satisfy all popular commercial and industrial requirements
- Unmatched reliability
- Excellent availability throughout the UK and Ireland

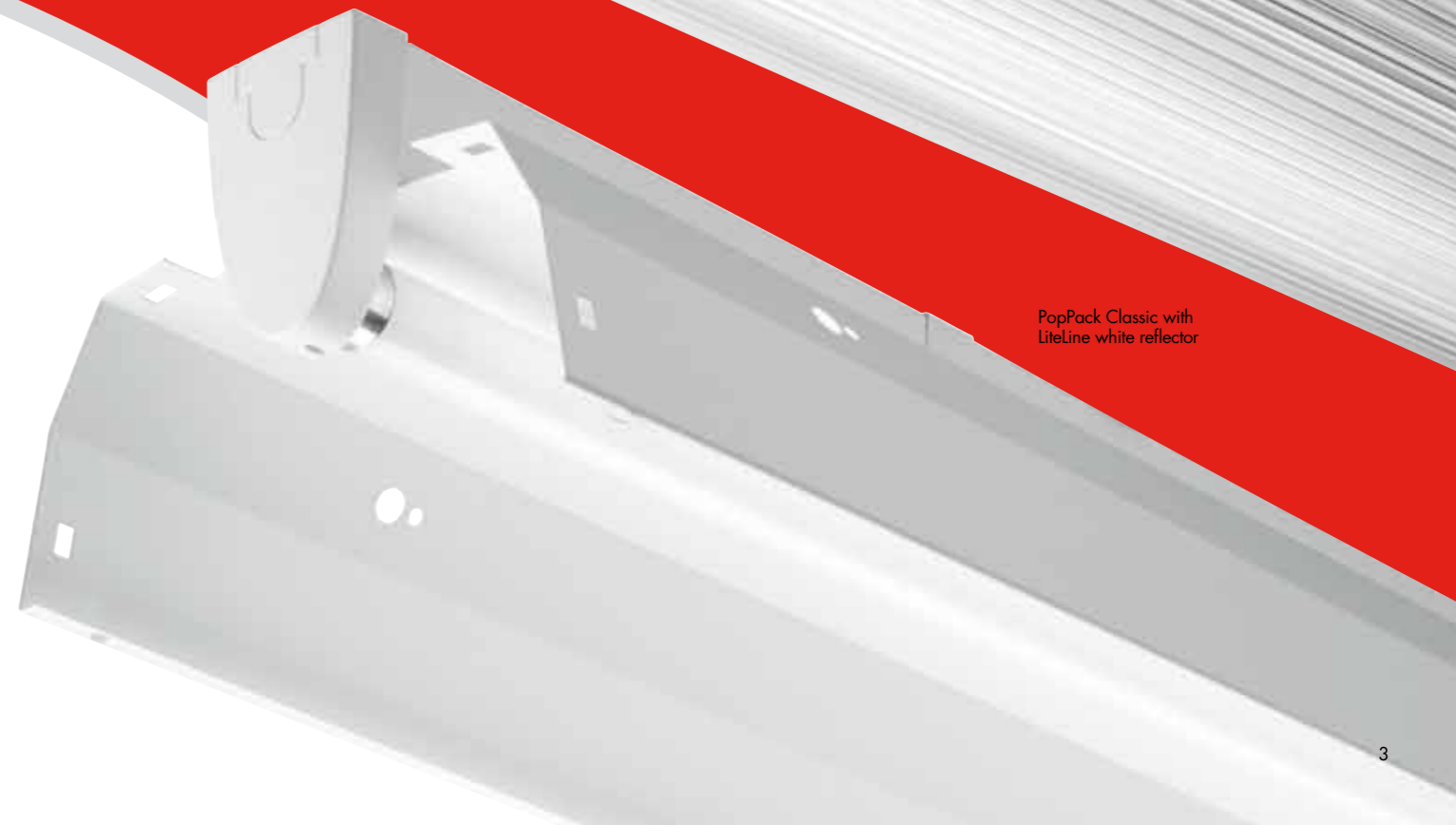
All fluorescent battens are NOT the same, new PopPack stands head and shoulders above the rest



PopPack Classic single with ClipLine opal diffuser



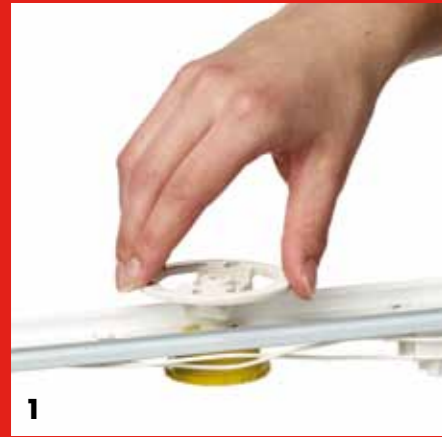
PopPack Classic with TwinLine clear prismatic diffuser



PopPack Classic with LiteLine white reflector

Install **9**
NEW PopPacks
in the same time it
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Patent pending fixing device improves speed of installation



1 Remove the mounting plates from the back spine



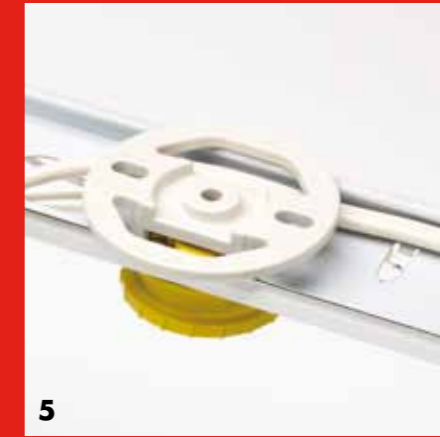
2 Fix mounting plates to the surface/BESA box, using the fixing centres template if required



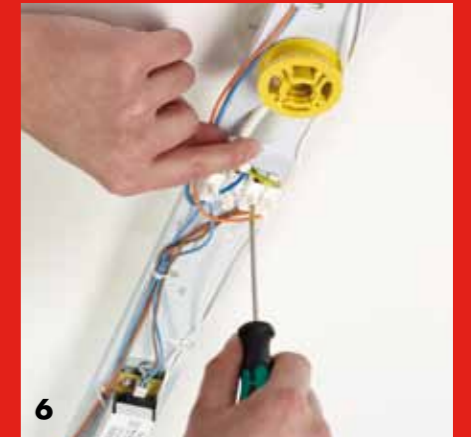
3 Offer up the spine plate (see below) and, using the yellow snap ratchets, push home and secure with short twist (see above)



4 The mounting plates allow quick wiring from BESA fixings



5 Easy routing of electrical wiring via spine plate channel



6 The unusually flat profile of the spine plate allows easy access to the screw terminal block

Quicker and easier than any batten product I've ever installed...
Paul Dodsworth - CLS Electrical
County Durham



7 'U' shaped cover 'snaps' onto the spine plate



See for yourself. View our video at:
www.thornlighting.com/PopPack

SafeExpress

Rapid authentic emergency module

- A standards compliant, LED 'plug and play' 3 hour emergency conversion module
- Plugs directly into any new PopPack - no need for separate emergency versions
- Electrically connected in seconds
- Manual or SelfTest options
- The self-contained emergency LED is non-maintained
- Generous fitting spacings due to high output LED (see table)
- Long life LED eliminates lamp changes

Spacing data for 2m escape route

Centre-line Minimum illuminance (lux)	Mounting height (h)	Centre to end		Between centres	
		Maximum spacing (m)	Diversity	Maximum spacing (m)	Diversity
0.2 Trans	2.5	5.05	0.053	12.30	0.053
	3.0	5.30	0.077	13.40	0.077
	3.5	5.30	0.104	14.25	0.104
0.2 Axial	2.5	5.10	0.053	13.00	0.053
	3.0	5.35	0.077	13.75	0.077
	3.5	5.50	0.106	14.40	0.104
1.0 Trans	2.5	2.55	0.271	7.10	0.263
	3.0	2.50	0.390	7.30	0.372
	3.5	2.30	0.522	7.30	0.497
1.0 Axial	2.5	2.55	0.271	7.15	0.263
	3.0	2.50	0.382	7.30	0.371
	3.5	2.30	0.524	7.30	0.495

Centre band illumination is not less than 50% of centre-line value
Diversity = ratio of Emin to Emax. Limit 0.025

Open area

Minimum illuminance (lux)	Mounting height (h)	Maximum spacing (m)				Diversity
		Centre to end		Between centres		
		Trans	Axial	Trans	Axial	
0.5	2.5	2.55	2.50	8.65	0.053	0.130
	3.0	2.60	2.60	9.15	0.077	0.184
	3.5	2.60	2.60	9.50	0.104	0.247
5.0	2.5	-	-	3.20	3.20	0.897
	3.0	-	-	2.65	2.65	0.864
	3.5	-	-	2.00	2.00	0.854



Remove end cap



Replace with module



Slide lamp holder onto module



Connect module to spine plate wiring

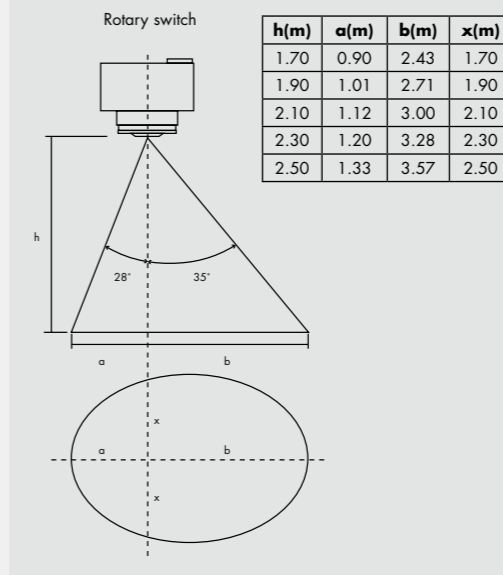


SaveExpress

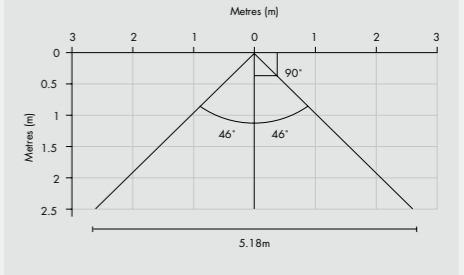
Presence and daylight detection module

- The 'plug and play' theme continues with a presence detector and daylight sensor module.
- The motion sensor enables the luminaire to be automatically switched on and off (15 mins Off delay time).
- The brightness measurement switches off when a sufficiently high light level is reached (Off; 350 lux).
- An LED emergency module and sensor module can be mounted on the same PopPack, simply by using both ends of the fitting
- High frequency control gear gives potential energy savings of around 20% when compared with switch start operation

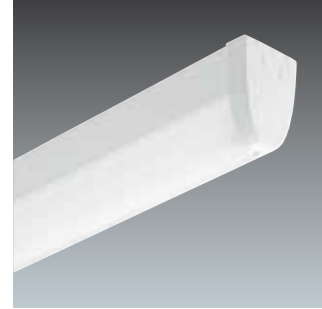
Light level detection area



Presence detection area



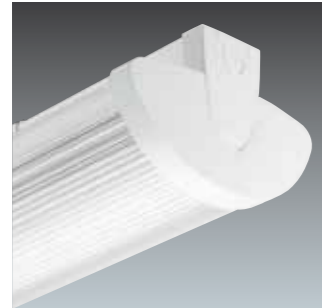
Product features



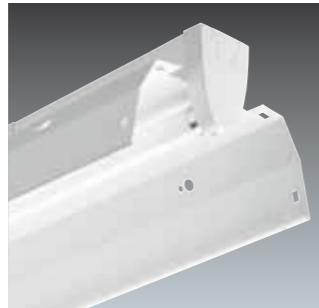
T16 (T5) ClipLine diffuser, single (High output lamps only)



T16 (T5) ClipLine diffuser, twin (High output lamps only)



TwinLine clear prismatic diffuser



LiteLine white reflector



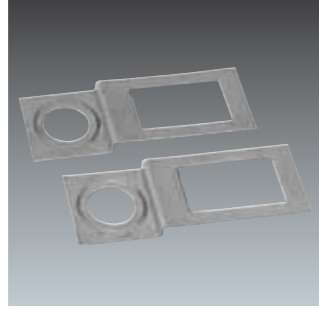
LiteLine white reflector with wire guard



LED emergency module



Presence/daylight detection module



Fixing kit for trunking

Lamps

- ⇒ 36-70W T26 (FD) Linear fluorescent. Cap: G13
- ⇒ 14-54W T16 (FDH) Linear fluorescent. Cap: G5

Materials/Finish

Batten: White pre-coated rolled form steel
End cap/lamp holders: Injection moulded white polycarbonate
FixExpress: Injection moulded polycarbonate
Sensor & emergency modules: Injection moulded polycarbonate
TwinLine diffusers: Clear prismatic acrylic, opal prismatic acrylic, with white polycarbonate end caps
ClipLine diffusers: Opal acrylic
LiteLine reflector: White steel

Installation/Mounting

PopPack Classic comes with two FixExpress mounting plates to ensure rapid installation directly onto a surface or BESA box. For trunking installation use the separate accessory kit PPTRK (SAP code: 96239199).

All versions have 600mm fixing centres except for 14/24W versions which are at 445mm centres. It is supplied with a screw terminal block that accepts 2x2.5mm² cable and is suitable for loop in/loop out wiring.

All internal wiring uses halogen free cable. Sensor and emergency modules push fit on either end after the end caps have been removed and are connected with 'one-way' plugs and sockets. All attachments are installed without the need for any tools.

Standards

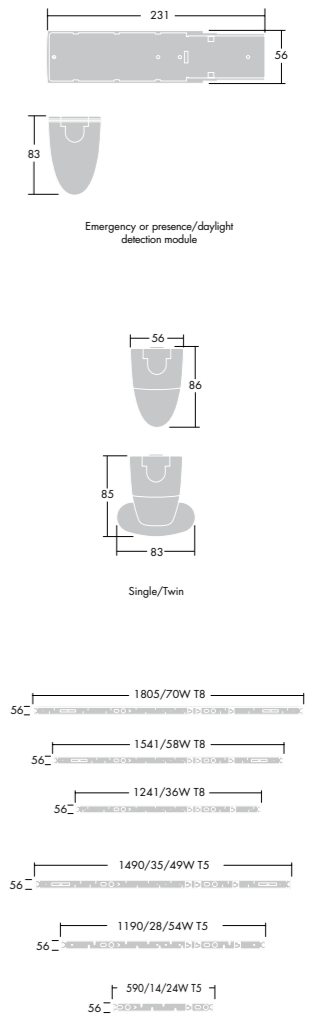
Designed and manufactured to comply with EN 60598 and EN 60598-2-22
 Ⓢ Class I electrical
 Ta 25°C
 IK02 (with diffuser or reflector combined with wire guard)
 Glow wire 650°C (with diffuser) 850°C (without diffuser)
 IP20

Ordering guide

Ordering Guides Supplied complete with lamp(s)

Description	Ilcos Code	Socket	Weight (Kg)	SAP Code	UK Cat. No.
PopPack Classic T26 (T8) batten with long last lamps					
POPPACK CLASSIC 1X36W T26 HF L840	FD	G13	1.2	96504863	PPHF136
POPPACK CLASSIC 2X36W T26 HF L840	FD	G13	1.2	96504864	PPHF236
POPPACK CLASSIC 1X58W T26 HF L840	FD	G13	1.3	96504865	PPHF158
POPPACK CLASSIC 2X58W T26 HF L840	FD	G13	1.4	96504866	PPHF258
POPPACK CLASSIC 1X70W T26 HF L840	FD	G13	1.4	96504867	PPHF170
POPPACK CLASSIC 2X70W T26 HF L840	FD	G13	1.5	96504868	PPHF270
PopPack Classic T16 (T5) batten with High Efficiency lamps (HE)					
POPPACK CLASSIC 1X14W T16 HF L840	FDH	G5	1.2	96504875	PP114
POPPACK CLASSIC 1X28W T16 HF L840	FDH	G5	1.5	96504877	PP128
POPPACK CLASSIC 2X28W T16 HF L840	FDH	G5	1.7	96504878	PP228
POPPACK CLASSIC 1X35W T16 HF L840	FDH	G5	1.7	96504879	PP135
POPPACK CLASSIC 2X35W T16 HF L840	FDH	G5	1.9	96504880	PP235
PopPack Classic T16 (T5) batten with ClipLine opal diffuser and High Output lamps (HO)					
POPPACK CLASSIC 1X49W T16 HF L840	FDH	G5	1.7	96504889	PPDB149
POPPACK CLASSIC 2X49W T16 HF L840	FDH	G5	1.9	96504890	PPDB249
POPPACK CLASSIC 1X54W T16 HF L840	FDH	G5	1.5	96504891	PPDB154
POPPACK CLASSIC 2X54W T16 HF L840	FDH	G5	1.6	96504892	PPDB254
PopPack Classic T16 (T5) dimmable batten with High Output lamps (HO)					
POPPACK CLASSIC 1X49W T16 HFD L840	FDH	G5	1.9	96504895	PP149D
POPPACK CLASSIC 2X49W T16 HFD L840	FDH	G5	1.5	96504896	PP249D
POPPACK CLASSIC 1X54W T16 HFD L840	FDH	G5	1.6	96504897	PP154D
POPPACK CLASSIC 2X54W T16 HFD L840	FDH	G5	1.0	96504898	PP254D
LED emergency module - SaveExpress					
POPPACK LED E3 KIT - Manual test emergency			0.4	96504901	PPE3
POPPACK LED E3T KIT - SelfTest emergency			0.4	96504902	PPE3T
Presence and daylight detection module - SaveExpress					
POPPACK SLD KIT			0.2	96504903	PPS
TwinLine Clear Prismatic Acrylic Diffusers					
POPPACK CLASSIC DIFF 1/2X36 CL PR AC			1.0	96239027	PPC36
POPPACK CLASSIC DIFF 1/2X58 CL PR AC			1.7	96239028	PPC58
POPPACK CLASSIC DIFF 1/2X70 CL PR AC			2.0	96239029	PPC70
POPPACK CLASSIC DIFF 1/2X28/54 CL PR AC			1.0	96239034	PPC28/54
POPPACK CLASSIC DIFF 1/2X35/49 CL PR AC			1.7	96239035	PPC35/49
TwinLine opal prismatic acrylic diffusers					
POPPACK CLASSIC DIFF 1/2X36 OP PR AC			1.0	96239030	PPD36
POPPACK CLASSIC DIFF 1/2X58 OP PR AC			1.7	96239031	PPD58
POPPACK CLASSIC DIFF 1/2X70 OP PR AC			2.0	96239032	PPD70
POPPACK CLASSIC DIFF 1/2X28/54 OP PR AC			1.0	96239037	PPD28/54
POPPACK CLASSIC DIFF 1/2X35/49 OP PR AC			1.7	96239038	PPD35/49
LiteLine white reflectors					
POPPACK CLASSIC REFL 1/2X36 RHW			0.8	96239039	PPD36
POPPACK CLASSIC REFL 1/2X58 RHW			0.9	96239040	PPD58
POPPACK CLASSIC REFL 1/2X70 RHW			1.0	96239041	PPD70
POPPACK CLASSIC REFL 1/2X28/54 RHW			0.8	96239043	PPD28/54
POPPACK CLASSIC REFL 1/2X35/49 RHW			0.9	96239044	PPD35/49
Wire guard kit for use with LiteLine white reflectors					
POPPACK CLASSIC KIT 1/2X36 WG (RHW)			1.5	96239045	PPWG36
POPPACK CLASSIC KIT 1/2X58 WG (RHW)			1.7	96239046	PPWG58
POPPACK CLASSIC KIT 1/2X70 WG (RHW)			1.9	96239047	PPWG70
POPPACK CLASSIC KIT 1/2X28/54 WG (RHW)			1.5	96239049	PPWG28/54
POPPACK CLASSIC KIT 1/2X35/49 WG (RHW)			1.7	96239050	PPWG35/49
Accessories					
POPPACK TRUNKING FIX KIT QTY 20			1.0	96239199	PPTRK

HF - High Frequency, HFD - High Frequency dimmable, RHW - white reflector, CL - clear, OP - opal, PR - prismatic, AC - acrylic, WG - wire guard, E3 - 3 hour emergency version, E3T - 3 hour SelfTest emergency version



These products are available now, look out for the full range in Autumn 2010

Full PopPack range available Autumn 2010

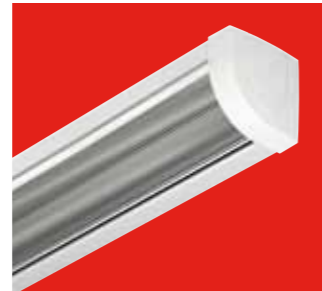


PopPack Compact

Attachments for PopPack Classic:



Architectural attachment



Cornice attachment



LiteLine white reflector with Satinbrite louvre



LiteLine white reflector with white louvre



Asymmetric reflector

PopPack The Incredible story

1959

1 Millionth fitting built!

1966

The debut of the modern day 'PP' PopPack, in white, with a square cross section

1969

15 millionth fitting built!



1994

Louvre attachments for display screen use become standard

2010



Once again the PopPack redefines the humble fluorescent batten, and underlines why it remains the world's best selling light fitting.

Over 80 million PopPacks have now been sold

1950

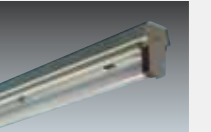
1954

The 5ft.80W "HD" PopPack is launched - the first fluorescent fitting to be sold with its tube as a single package ready for the contractor to install on site



1960

The 'HD' fitting is turned upside down and given a cover plate so that it can be fixed more easily. Marketed under the 'Superslim' name the fittings carry distinctive grey end-caps.



1960

1967

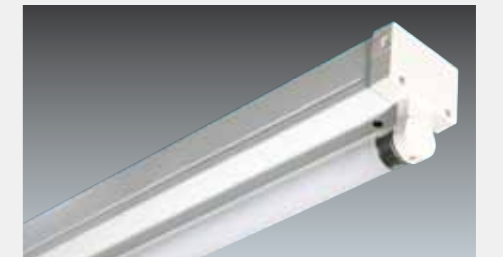
A roll forming production line, where the sheet steel comes in big rolls, replaces slow brake presses
First use of 6ft 85W tubes

1970

1980

1981

Arrival of T26 (T8) tubes, soon to be followed by high frequency control gear. Sales exceed **50 million**.



1990

1995

The Queen switches on the **60 millionth pack**



2000

2010