



The Brighter Choice



CAT-R

Replace. Reuse. Redeploy.

THE CAT-A/CAT-B FIT-OUT & STRIP-OUT CYCLE

It's unsustainable.



Current practice

A spec-built office will be fitted out and let to the first tenant with category A finishes. White walls, neutral floor coverings and basic lighting.

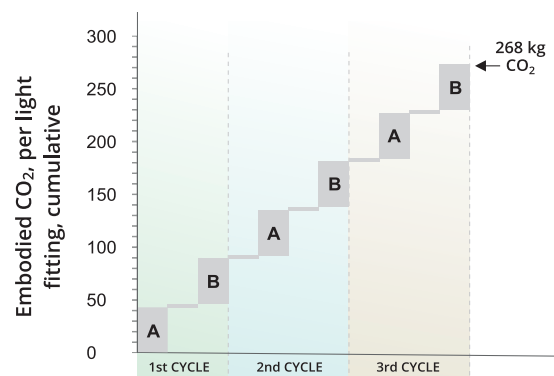
Before tenants move in, if they can afford it, they will strip out the CAT-A lighting and replace it with lighting to their own spec. That's CAT-B – and the result is entire skips being filled with the CAT-A lighting that has barely been used.

Most office tenancy agreements have a dilapidations clause. That requires the space to be returned to the “as-let” standard at the end of the tenancy. So the cycle starts again.

The CAT-B fittings go in the skip; new CAT-A fittings are purchased, only to be discarded when the next tenant moves in.

It's a repeating cycle of waste and CO₂ emissions.

Cumulative CO₂ emissions over 3 CAT-A / B cycles



Calculated using CIBSE TM65 methodology, this is the cumulative embodied CO₂ content per 600x600 office light fitting over 3 standard CAT-A / CAT-B fit-out & strip-out cycles.

It needs to change.

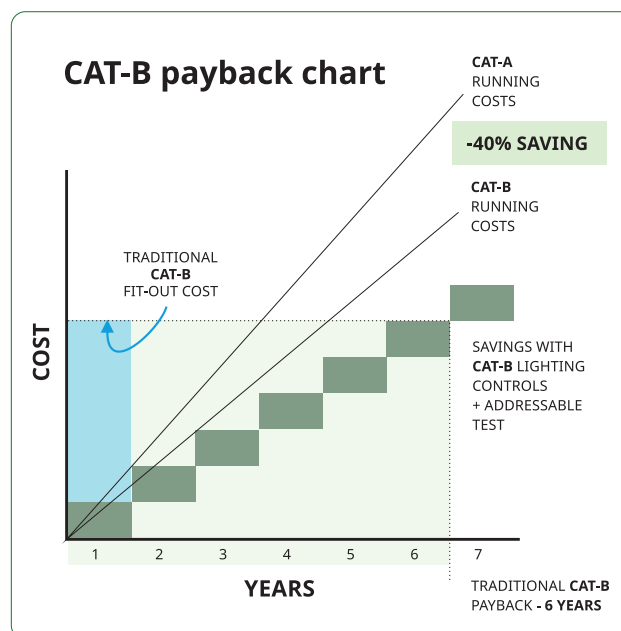
Right for the landlord, wrong for the tenant

For the landlord the priorities are low acquisition and installation costs. Technologies like lighting controls and automated emergency testing are rarely included in CAT-A lighting.

The tenant's priority is low running costs. Lighting controls alone can often save 40% of the energy costs, and automated emergency testing reduces running costs further. So, if tenants can afford it, they will strip-out the CAT-A lighting and replace it with CAT-B, with dimming, sensors and automated testing.

However, with a traditional CAT-B fit out, even 40%+ savings might only deliver a payback in c6 years.

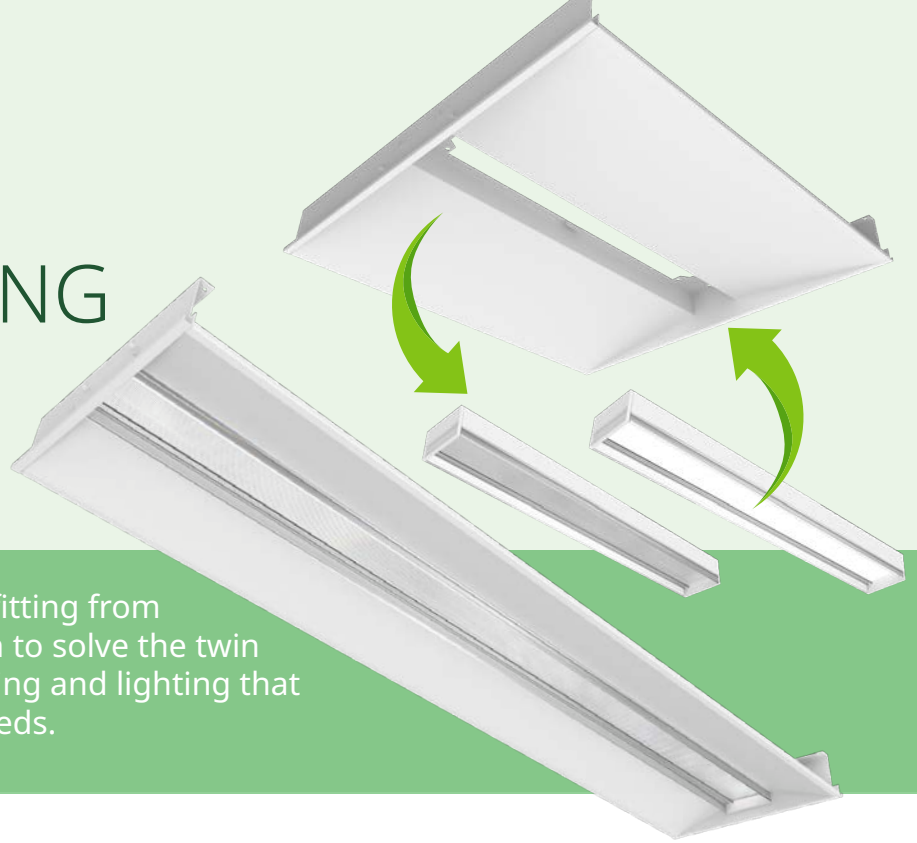
Sadly, this drives some tenants to continue to use the CAT-A fittings, despite their high running costs.



Isn't there a better way?

Yes, there is....

INTRODUCING CAT-R



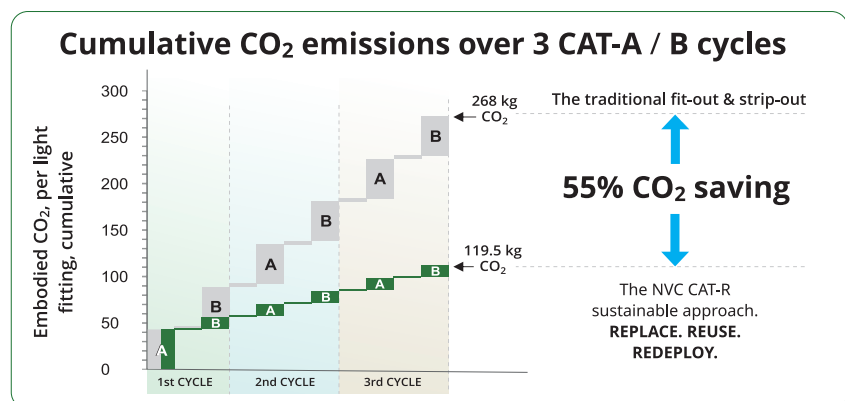
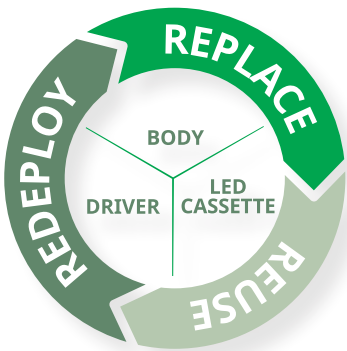
CAT-R is the new office light fitting from NVC. It has a modular design to solve the twin problems of short-lived lighting and lighting that doesn't meet the tenant's needs.

From throwaway to REPLACE, REUSE, REDEPLOY

CAT-R is designed as a CAT-A fitting to suit the landlord – cost-effective and easy to install.

CAT-R is designed to be modified – so it becomes the CAT-B fitting the tenant needs – packed with features like acoustic panels, low-glare controllers and lighting controls.

Changing from a basic CAT-A configuration to a high-spec CAT-B configuration is a plug-and-play, tool-free operation. Any components swapped-out are designed to be re-used when the office returns to a CAT-A spec at the end of the tenancy, or deployed on another project.



Making CAT-B affordable for the tenant

With our CAT-R fitting tenants can add just the features they want. There's no need to discard an entire fitting if all that's required is to upgrade to UGR<19 or from standard emergency to addressable test.

This makes the CAT-B spec affordable, so the low running cost features tenants want deliver a viable payback. Where a c6 year payback made lighting controls unviable, now a c3 year payback makes them attractive.

HubSense is a great way to add these cost-saving features – see page 6 for more details.



OPTIONAL STEP 4 **CHOOSE AN EMERGENCY PACK**

MANUAL TEST DALI ADDRESSABLE TEST HubSense ADDRESSABLE TEST SELF TEST

CAT-R is ordered as three items (four items for emergency fittings) and assembled on site.

Assembly is tool-free, snap-fit, plug & play.

HUBSENSE

State-of-the-art lighting controls and emergency test

HubSense

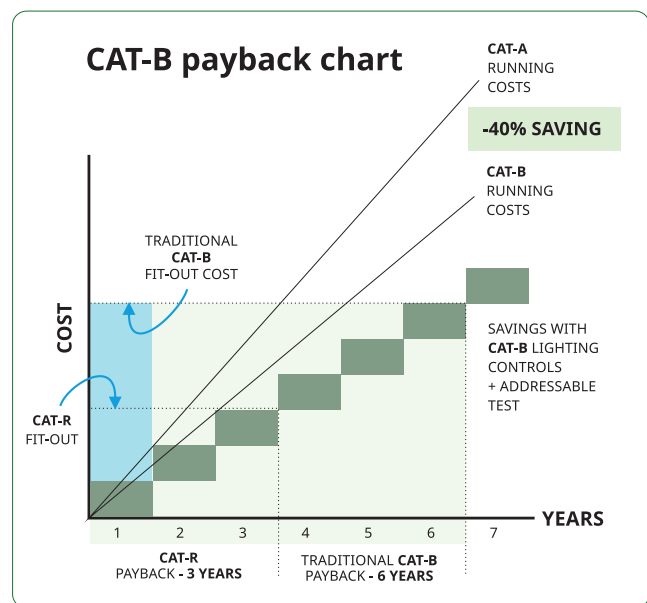
CAT-A fit-outs have no lighting controls and only the simplest manual test for the emergency lighting. The acquisition costs will have been low but, like this, a CAT-A fit out will be expensive to run for the tenant.

Lighting controls would reduce the tenant's energy costs, typically by up to 40%.

An addressable emergency lighting test system will lower running costs still further.

Together, CAT-R and HubSense lower the cost of the features that tenants are looking for.

That can reduce the payback for a CAT-B specification from c6 years to c 3 years.



HubSense is two systems in one:

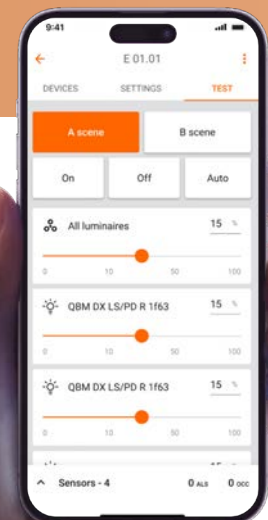
1. **Lighting control**, for on/off occupancy sensing, daylight harvesting and time-based control
2. **Emergency lighting testing**, fully automated, including the mandatory reporting and record keeping for 5 years.

Adding HubSense to CAT-R is easy:

- Unplug the CAT-A fixed output drivers. Keep them for use on another project, or for when the office has to be returned to the CAT-A state at the end of the tenancy.
- Plug in HubSense drivers
- Plug-in HubSense addressable test modules on emergency fittings
- Download the (free) HubSense app to your phone.
- Commission your HubSense installation. The app is intuitive – no specialist skills required.

No need to change the entire fitting. No extra wiring. No specialist commissioning engineer required.

With CAT-R and HubSense, upgrading to a CAT-B spec with lighting controls and addressable test is affordable, sustainable and delivers the lowest running costs.





EMERGENCY LIGHTING

The CAT-R approach of replace, reuse, redeploy extends beyond the body, light engine and driver. It includes emergency lighting modules too.

To convert a CAT-R fitting from standard to emergency or from manual test (the typical CAT-A spec) to HubSense addressable test (a great choice for a CAT-B spec) is a simple plug-in task. No tools required. Here are the options:

	EMERGENCY TEST METHOD			
	MANUAL	SELF-TEST	DALI ADDRESSABLE	HUBSENSE ADDRESSABLE
Testing	Manual	Automatic	Automatic	Automatic
Scheduling	No	No	Yes	Yes
Recording	Manual	Manual	Automatic	Automatic
Reporting	Manual	Manual	Automatic	Automatic

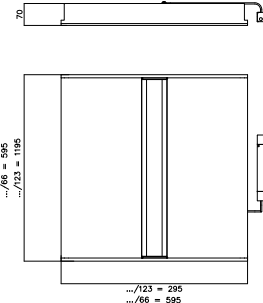
All our emergency modules are plug-compatible with the CAT-R LED panel, they come complete with lithium batteries and they are warranted for 7 years – batteries included.

With CAT-R and HubSense, upgrading from manual test to a more cost-effective addressable test, has never been easier, more sustainable or more affordable.



Body

ORDER CODE	DESCRIPTION	DIMENSIONS	
		WIDTH	LENGTH
FOR 600 X 600 BODY			
NCATR/BODY/66/BASIC	CAT-R Body 600x600 Basic	595	595
NCATR/BODY/66/SQUARE	CAT-R Body 600x600 Square	595	595
NCATR/BODY/66/WINGED	CAT-R Body 600x600 Winged	595	595
NCATR/BODY/66/ACOUSTIC	CAT-R Body 600x600 Acoustic	595	595
1200X300			
NCATR/BODY/123/BASIC	CAT-R Body 1200x300 Basic	295	1195
NCATR/BODY/123/SQUARE	CAT-R Body 1200x300 Square	295	1195
NCATR/BODY/123/WINGED	CAT-R Body 1200x300 Winged	295	1195
NCATR/BODY/123/ACOUSTIC	CAT-R Body 1200x300 Acoustic	295	1195



SCAN QR CODE
TO DOWNLOAD
CATALOGUE PAGE

LED Cassette

ORDER CODE	POWER (W)	LUMENS (lm)	EFFICACY (l./lm/c.W)	OPTICS	CRI	CCT (K)
FOR 600 X 600 BODY						
NCATR/CASS/6/O/830	26 / 32 / 38 / 43	3144 / 3755 / 4356 / 4800	125 / 121 / 118 / 116	Opal	>80	3000
NCATR/CASS/6/O/840	26 / 32 / 38 / 43	3144 / 3755 / 4356 / 4800	125 / 121 / 118 / 116	Opal	>80	4000
NCATR/CASS/6/UGR/830	26 / 31 / 38 / 43	3032 / 3365 / 1028 / 4364	114 / 110 / 108 / 104	UGR<19	>80	3000
NCATR/CASS/6/UGR/840	26 / 31 / 38 / 43	3032 / 3365 / 1028 / 4364	114 / 110 / 108 / 104	UGR<19	>80	4000
FOR 1200 X 300 BODY						
NCATR/CASS/12/O/830	25 / 30 / 36 / 41	3433 / 4115 / 4835 / 5479	145 / 142 / 140 / 136	Opal	>80	3000
NCATR/CASS/12/O/840	25 / 30 / 36 / 41	3433 / 4115 / 4835 / 5479	145 / 142 / 140 / 136	Opal	>80	4000
NCATR/CASS/12/UGR/830	25 / 30 / 36 / 41	3256 / 3698 / 4459 / 4805	129 / 128 / 127 / 123	UGR<19	>80	3000
NCATR/CASS/12/UGR/840	25 / 30 / 36 / 41	3256 / 3698 / 4459 / 4805	129 / 128 / 127 / 123	UGR<19	>80	4000

Driver

ORDER CODE	DESCRIPTION
NCATR/DRV/FO	CAT-R Driver Fixed Output Wattage Selectable 25 - 41W
NCATR/DRV/DD	CAT-R Driver Dali Dim Wattage Selectable 25W - 41W
NCATR/DRV/HS	CAT-R Driver Hubsense Wattage Selectable 25W - 41W

Optional - Emergency conversion packs

ORDER CODE	DESCRIPTION
N/REC/M3/PACK/V2	M3 Pac-k V2 LiFePO4 For Recessed Product Ranges
N/REC/STM3/PACK/V2	M3 Pack V2 LiFePO4 Self Test For Recessed Product Ranges

for **DALI addressable** and **HubSense addressable**
please contact us for further information.



NVC LIGHTING LTD

NVC Park 201, Hollymoor Way, Rubery, Birmingham, B31 5HE UK

+44 (0)121 457 6340 | sales@nvcuk.com | www.nvcuk.com

