

E3-E5



Efficient lighting for large spaces



E3 and E5 luminaires have a multitude of different reflectors to suit all possible lighting applications.

E3 and E5 are installation friendly systems for the efficient lighting of larger spaces such as industrial halls, warehouses, sports halls, shopping centres, etc. The luminaires can be suspended or ceiling mounted, as individual luminaires or as in-line versions. Depending on the project requirements they can be equipped with up to 4 lamps and a wide range of reflectors.

E3 (for T8-Ø26mm lamps) and E5 (for T5-Ø16 mm lamps) fits all needs: as individual luminaire or as versions for in-line assembly (continuous or not), ceiling mounted or suspended, etc.



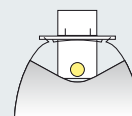
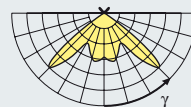
An appropriate reflector for every situation

Depending on the requirements of your project, you can choose between a large variety of reflectors: wide angled, narrow angled or even asymmetric beam distribution; with white painted baffles or with high end aluminium shielding; ... E3 and E5 offers it all.

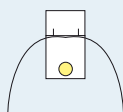
Versseput Architecten, Utrecht (Netherlands)



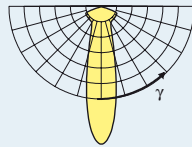
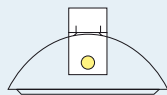
For accurate work or for visual comfort, reflectors with sophisticated aluminium baffles can be chosen to limit the luminance of the luminaires in all directions to less than 1000 cd/m².



Wide angled reflectors are often the best choice in various environments such as industrial halls, both as an individual luminaire or in-line assembly.



An appropriate reflector for every situation

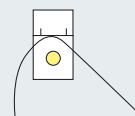


For some applications narrow angled reflectors are the best solution, for example to have good lighting between the racks.





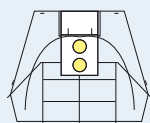
Asymmetric reflectors are used for specific situations such as lighting of workstations, shelves in shop spaces, etc.



An appropriate reflector for every situation



E5 luminaires can be equipped with 4 lamps, for applications with high areas.



In combination with a protective cover
ETAP light lines can also be used in sports halls.

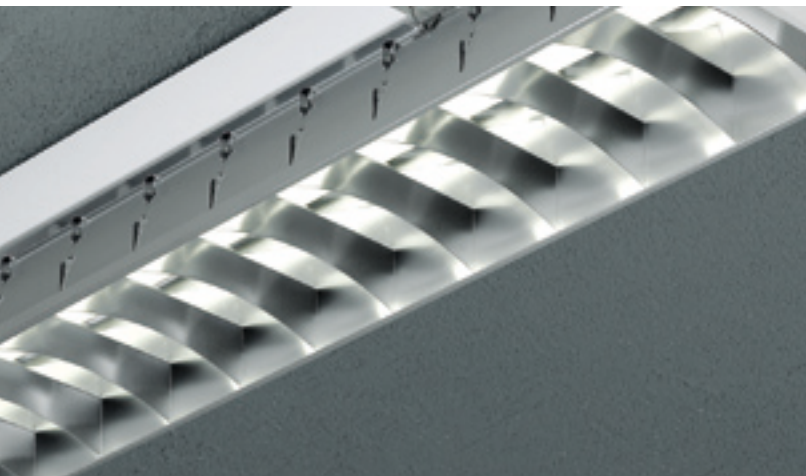


Best in class in energy efficiency

ETAP has a four-step strategy to maximise energy savings. E3 and E5 is completely fit for all those steps. The ETAP approach makes E3 and E5 best in class when it comes to energy efficiency:

Case Wälzholz

The Wälzholz project, a German manufacturer of cold- and warm-rolled steel, clearly shows the importance of a well-thought-out choice and of the position of the luminaires. The company wanted to update the lighting in its industrial halls. For one specific hall, specifications called for 255 [2 x 80W] industrial luminaires. Our study department developed an alternative, with better results. ETAP proved



STEP 1

Energy friendly luminaires

All E3 and E5 reflectors are designed to have a high LOR. We use HRSilver™ aluminium, which has an extremely high reflection factor (98 %) thanks to a layer of purest silver and 2 reflection strengthening layers on top of the base material. E3 and E5 are interesting for both new installations and for renovations (e.g. when the existing mounting points must be reused). Often, we obtain higher light levels with far less energy consumption. In some environments, the accumulation of dirt results in high depreciation. For such environments, we offer solutions with air ventilation sleeves, which assure that the LOR stays high over time.

STEP 2

Intelligent lighting design

Our lighting designers are trained to minimize the number of luminaires and the energy consumption. We choose the E3 or E5 reflector which is best suited for your specific application. We optimise the interdistances between luminaires. We choose the most appropriate lamp positions for every situation. We can select from a wide offer in lamp types, number of lamps and lamp power. On request, we make an exploitation analysis for your project. We assure that the correct amount of light is directed where it is needed in your situation. Light waste is scarce...

that as few as 204 [2 x 80W] luminaires (industrial E52 line luminaires) would do to achieve the intended 350 lux on the work floor. Quite a pleasant surprise in terms of the energy bill: 22 % better than the specifications. Compared to the old configuration, savings of no less than 46 % were achieved. Furthermore Wälzholz had all luminaires fitted with daylight control to enhance energy savings.

	Old lighting scenario	Specifications	ETAP solution (without daylight control)	ETAP solution (with daylight control: ELS)
Luminaires	140 luminaires 1 x 465W (high bay)	255 industrial luminaires 2 x 80W	204 E52 luminaires of 2 x 80W	204 E52 luminaires of 2 x 80W with ELS
Lighting level	200 lux	350 lux	350 lux	350 lux
Installed power	65 kW	45 kW	35 kW	35 kW
LENI *	51.7 kWh/m ² /year	34.7 kWh/m ² /year	27.7 kWh/m ² /year	22.6 kWh/m ² /year
Decrease in CO₂ emissions		34 tons/year	52 tons/year	73 tons/year

* Lighting Energy Numeric Indicator (EN15193)



STEP 3

Light control per luminaire or per room

To save even more energy, the integration of control systems is needed. In the large or high spaces where E3 or E5 is often used, this asks for very specific solutions, different from standard solutions in e.g. offices.

E3 and E5 can be combined with ELS, the ETAP daylight sensor that dims any luminaire depending on the amount of daylight in the workplace. We can integrate specific movement detectors into the line system, so that light will only be used where it is really needed. Or we combine different solutions, depending on your requirements.

STEP 4

Light control at the building level

E3 and E5 luminaires can be integrated in a light management system such as ELM (Energy & Light Manager) from ETAP subsidiary Excellum. ELM applies no fewer than six simultaneous strategies to make sure that the right quantity of light is present in the right place and at the right time. By making each luminaire addressable, combined with user-friendly software, ELM is able to quickly react to ever-changing lighting needs in a building, thereby maximising your energy savings.

Easy to install

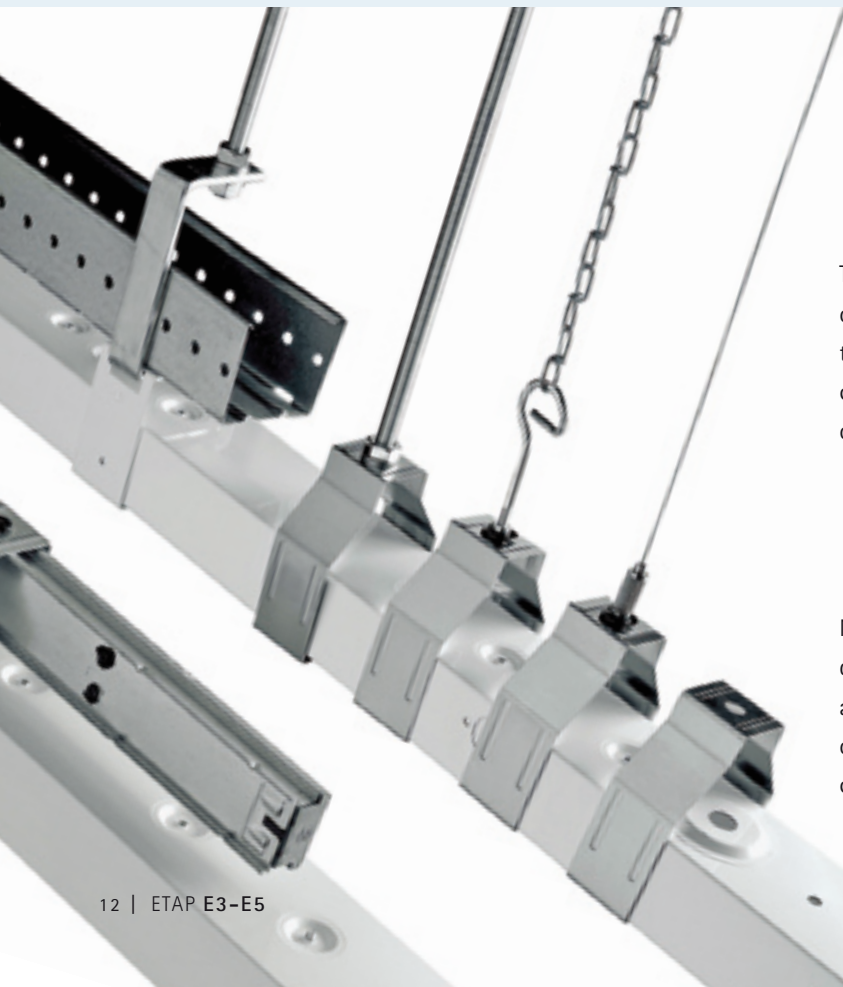
E3 and E5 are designed for fast and easy installation. The line is set up in just two steps.



First you install the completely finished, prewired housings which are connected by means of rigid coupling pieces. Every housing is fitted with through wiring (5x 2.5 mm²) and plugs. A phase selector allows balanced loading of the three mains phases or switching of the lighting in groups.

Up to 11 wires are possible for integration of emergency functions and sensors.

As a second step, the reflector and lamps are mounted. This can be done without tools.

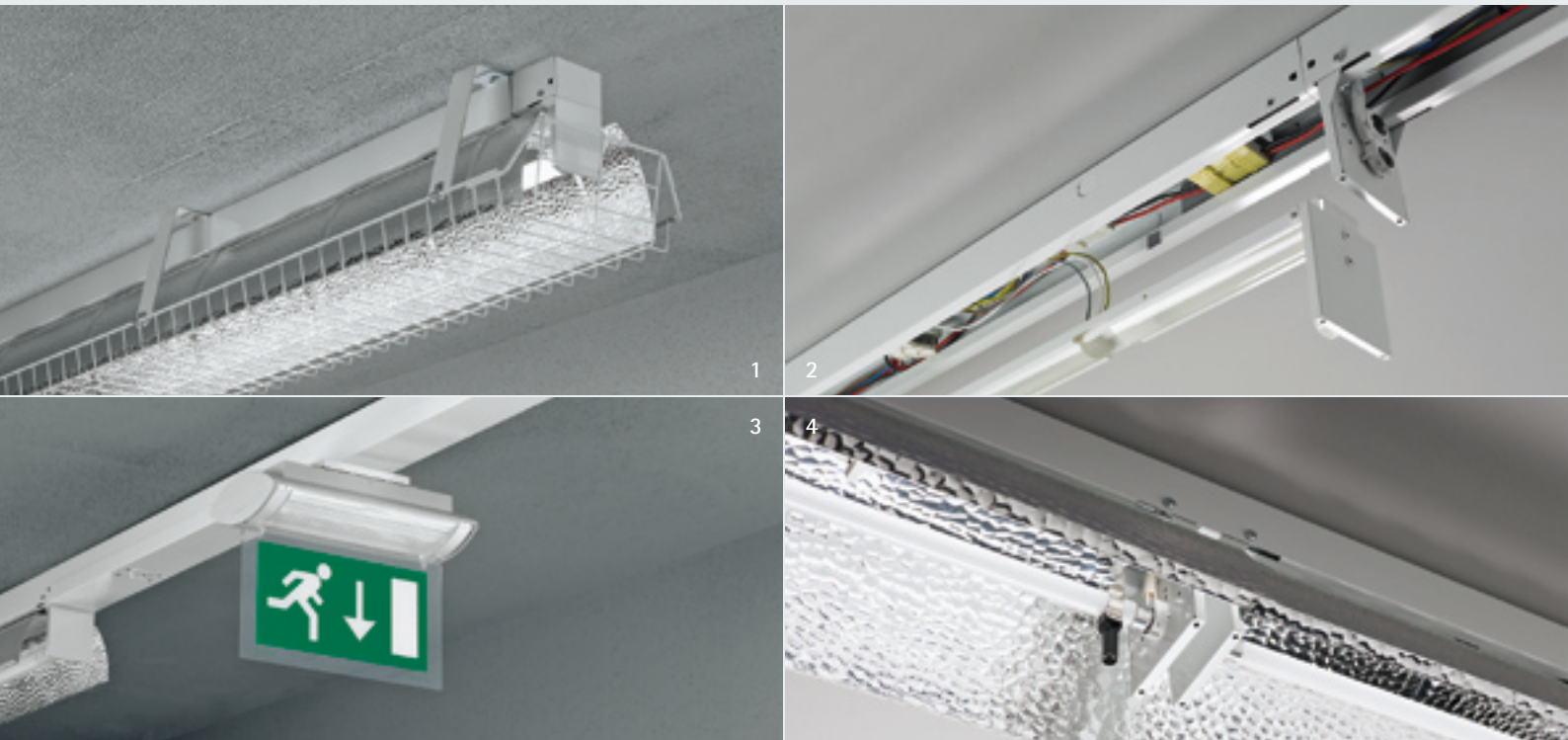


To reduce the time for sorting out components during installation on site, we can provide you with clear installation diagrams and extra labelling on the packaging.

Mounting needs in industry, sports halls or shops are very diverse. To deal with all possible situations, various mounting accessories are available: for direct mounting to the ceiling or to an industrial rail system, for suspended mounting with chains, threaded rods or steel wires, and so on.

Flexibility on demand

Several accessories and our flexibility in specials make E3 and E5 a range that fits all specific needs, such as:

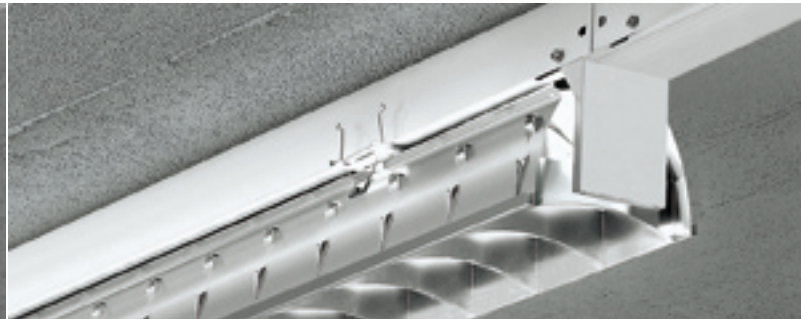
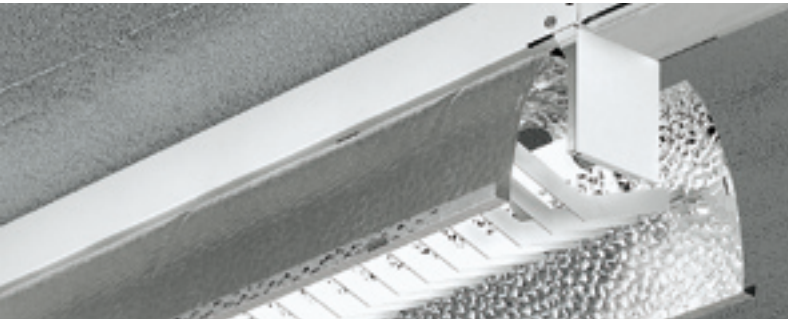


- > protective covers are available for sports halls (1);
- > empty places in the line can be filled in a later stage (by adding the plug-in add-on element) to increase light levels (2);
- > emergency lighting and emergency units can easily be integrated (3);
- > light control systems can be integrated in the E3 and E5 luminaires: standard ETAP daylight sensors (ELS), standard ETAP movement sensors (MDD or MDS) or customised control devices (4);
- > versions with air sleeves reduce light depreciation in situations where much dirt is produced;
- > up to 11 wires can be integrated;
- > specific line lengths can be ordered in order to optimise
 - in combination with a good choice of reflector and control system(s) – energy consumption and number of luminaires.

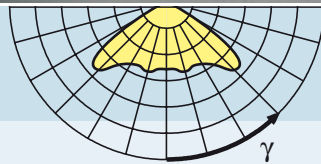
Contact your ETAP representative to discuss solutions that fit your projects specific needs.



Product overview



Wide angle



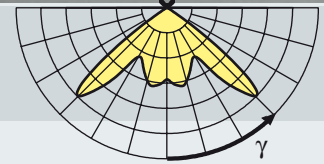
T5-ø16mm lamp (1, 2 or 4 lamps)

- > Hammered aluminium, extreme wide-angle **(E52)**
- > Hammered aluminium, white baffles, extreme wide-angle **(E522)**

T8-ø26mm lamp (1 or 2 lamps)

- > Hammered aluminium, compact reflector, wide-angle **(E31)**
- > Hammered aluminium, extreme wide-angle **(E32)**
- > Hammered aluminium, white baffles, extreme wide-angle **(E35)**

Visual comfort



T5-ø16mm lamp (1 or 2 lamps)

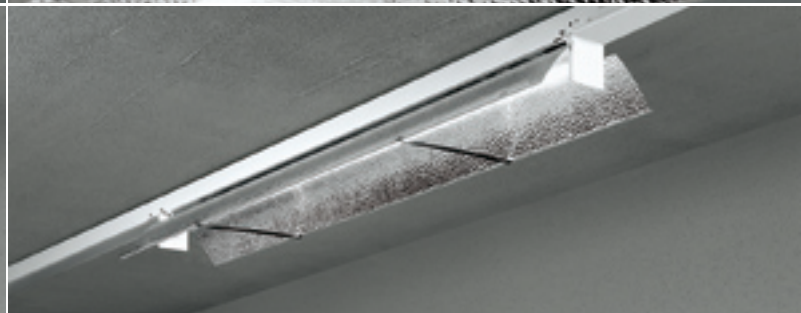
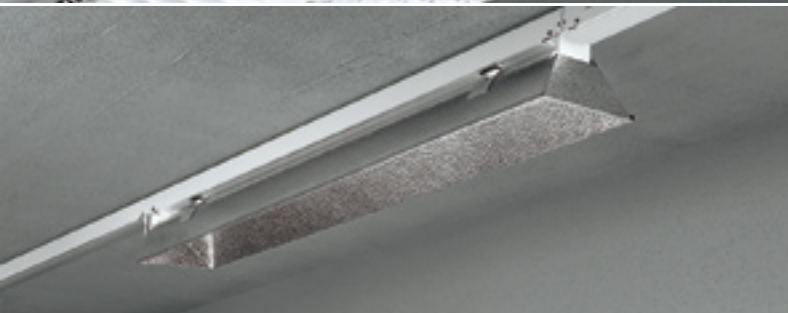
- > Satin-anodised aluminium, EQUILUM® baffles, wide-angle **(E58)**

T8-ø26mm lamp (1 or 2 lamps)

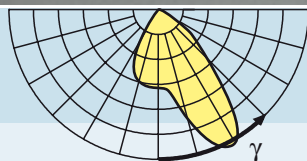
- > Satin-anodised aluminium, SLL (Symmetrical low luminance) baffles, wide-angle **(E34)**
- > Satin-anodised aluminium, ISOLUM® baffles, wide-angle **(E38)**
- > Satin-anodised aluminium, ISOLUM® baffles, white housing, wide-angle **(E39)**

Individual

Every E3 and E5 luminaire is also available as an individual version.



Asymmetric



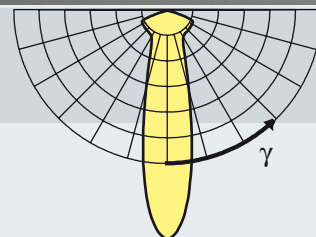
T5-ø16mm lamp (1 or 2 lamps)

- > Hammered aluminium, asymmetric-beam (E56)
- > Hammered aluminium, white baffles, asymmetric-beam (E562)

T8-ø26mm lamp (1 or 2 lamps)

- > Hammered aluminium, asymmetric-beam (E36)
- > Hammered aluminium, white baffles, asymmetric-beam (E37)

Narrow angle



T5-ø16mm lamp (1 or 2 lamps)









- > Hammered aluminium, narrow-angle (E53)

T8-ø26mm lamp (1 or 2 lamps)

- > Hammered aluminium, extreme narrow-angle (E33)

Possibilities for light lines

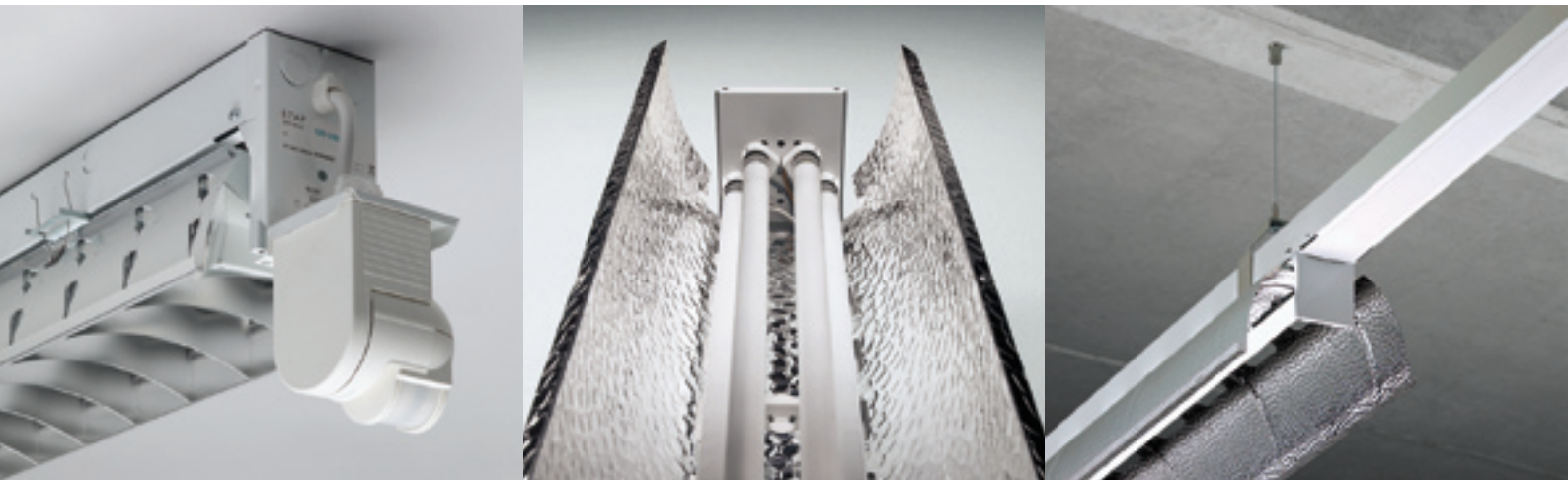
Double lamp length

		Luminaire left
		Luminaire left and right
		Luminaire right
		No luminaire

Single lamp length



E3-E5



High flexibility

- T8-ø26mm lamps (E3) or T5-ø16mm lamps (E5)
- Wide range of high end reflectors for every application
- Individual luminaires or line system, surface mounted or suspended
- Professional through wiring up to 11 wires
- Integrated emergency lighting possible

Lowest energy consumption

- Highest LORs through innovative HRSilver™ aluminium
- Integrated lighting control systems possible

Easy installation

- 2 step installation
 - Mounting of the housing including the complete electrical equipment
 - Mounting of reflector and lamps without tools

Possibility to create specials to fit your projects needs

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