

L i g h t i n g

ThyssenKrupp Elevator (ES/PBB)



ThyssenKrupp

The possibilities of lighting



LED Skirt
band lighting



LED Balustrade
lighting

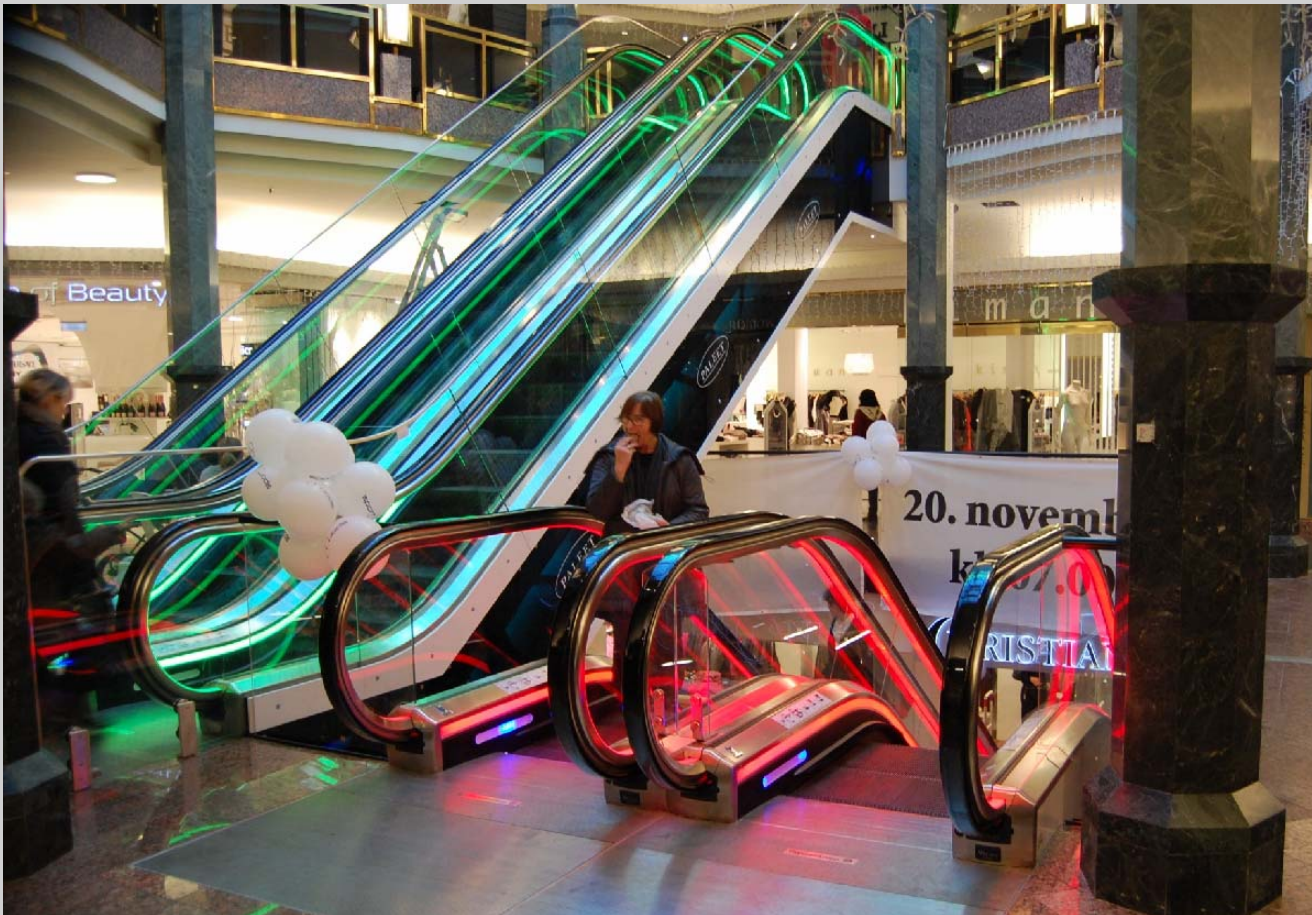


LED Comb
plate lighting

ThyssenKrupp Elevator (ES/PBB)



RGB-LED balustrade lighting and skirt band lighting with changing colours



ThyssenKrupp Elevator (ES/PBB)



RGB-LED balustrade lighting and skirt band lighting with changing colours



ThyssenKrupp Elevator (ES/PBB)



RGB-LED skirt band lighting



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RGB-LED skirt band lighting



Skirt lighting reflections on stainless steel balustrade.



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RGB-LED Soffit cladding



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RGB-LED Soffit cladding

Customer Logos



ThyssenKrupp Elevator (ES/PBB)



Special lighting for soffit cladding

Optical Lighting



Fibre Optic

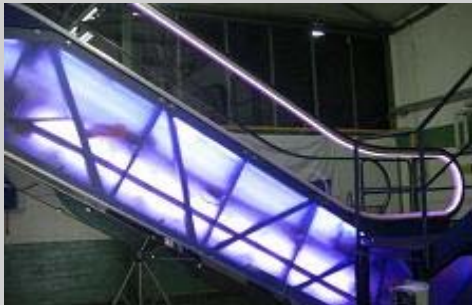
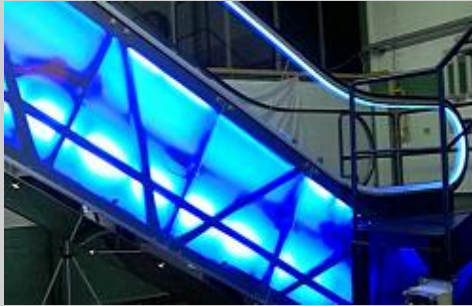


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Truss lighting with RGB-LED



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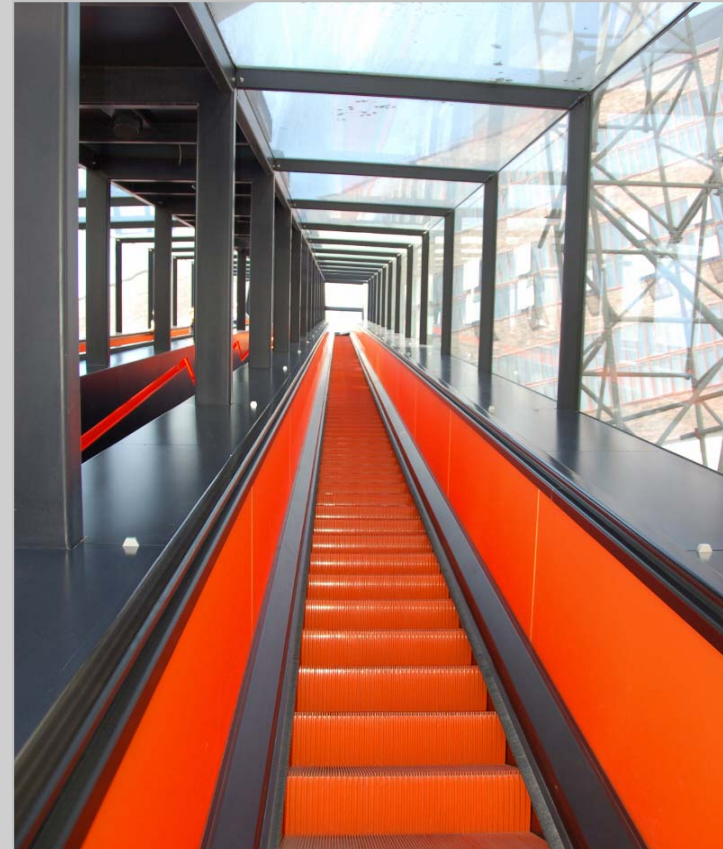
Truss lighting with fluorescent tubes



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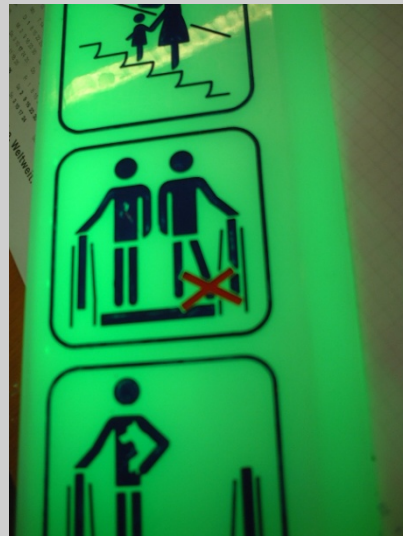
Balustrade lighting in combination with orange laminated glass



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Illuminated inner decking profiles with RGB-LED lighting below deckings

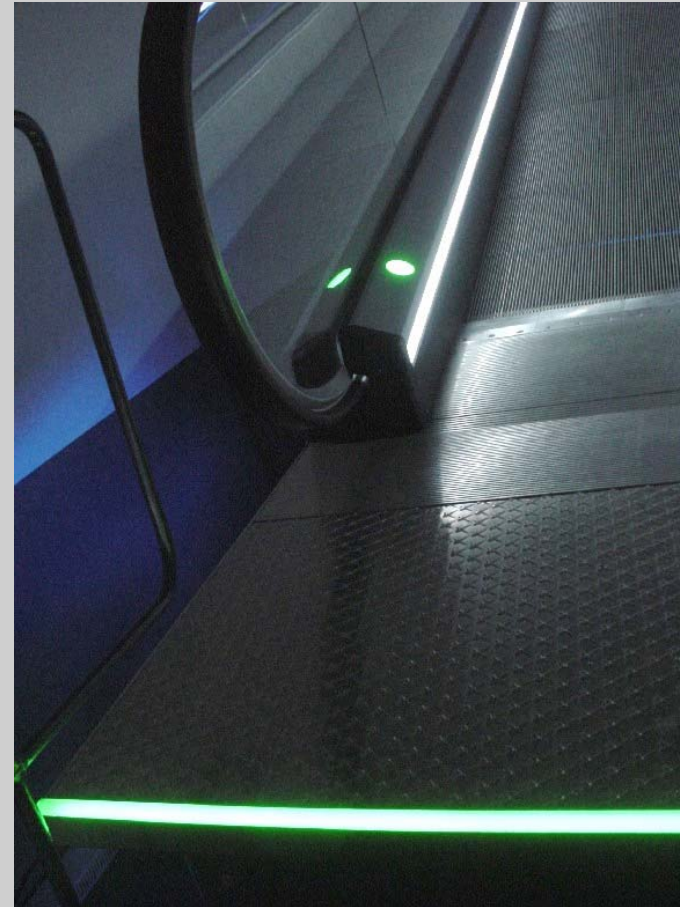


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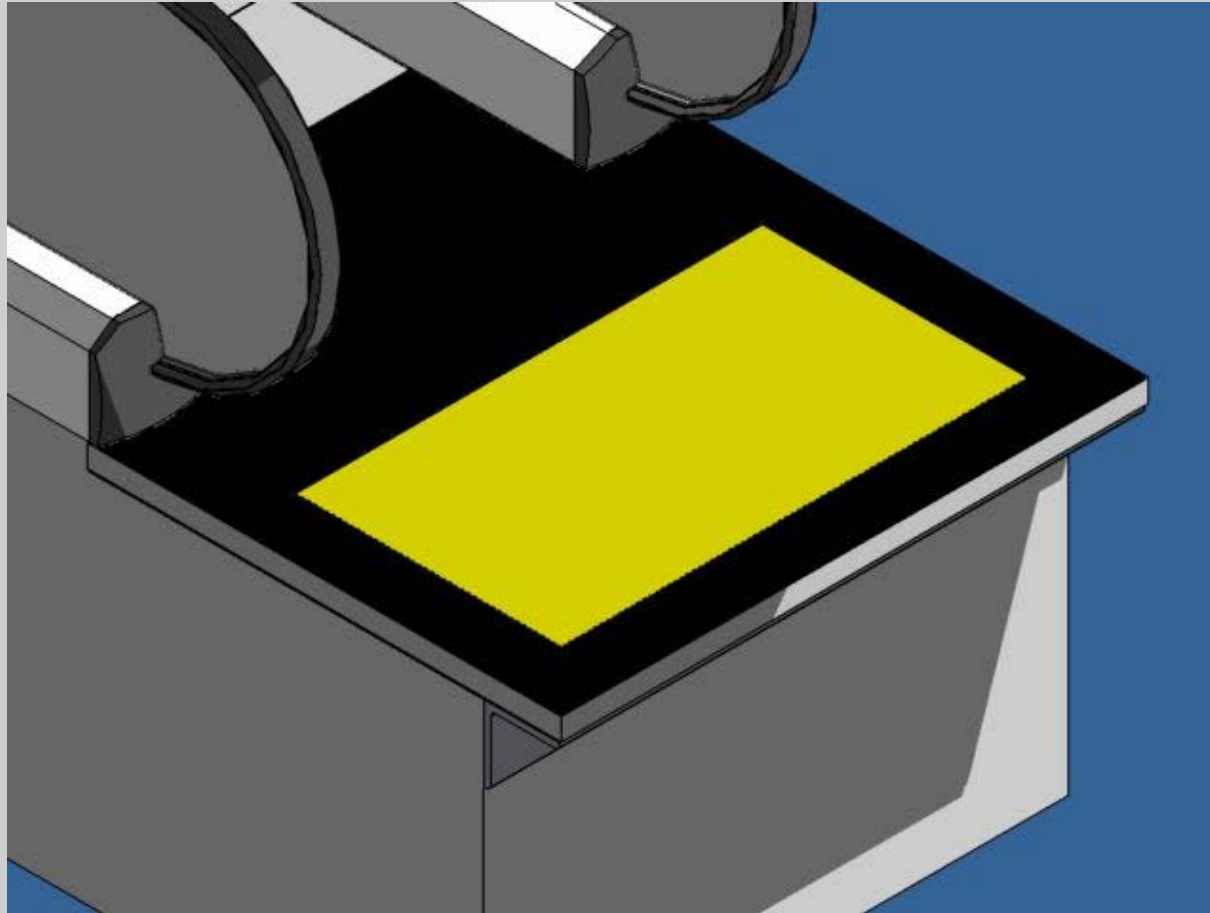
LED lighting in front of floor plate frame with a function as traffic light



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Transparent floorplate with lighting



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Transparent floorplate with lighting and numbering



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Comb plate lighting

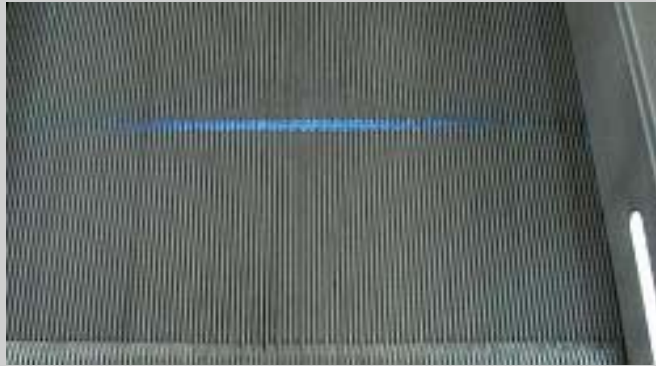


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Step gap lighting



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Variants of illumination

further attributes for RGB-LED:

1. automatic change of colour

Schritt	Befehl	Rot	Grün	Blau	Parameter	Farbe
1	Fabwechsel	255	0	0	1	Red
2	Fabwechsel	0	255	0	1	Green
3	Fabwechsel	255	0	255	1	Magenta
4	Fabwechsel	0	255	255	1	Cyan
5	Fabwechsel	0	0	255	1	Blue
6	Ende	0	0	0	0	Black

default colour sequence

switching on the escalator

hard colour sequence

soft colour sequence

time base e.g. 10h

2. manual change of colour or colour sequence



display TKF (available only for AS-I control systems)

manual selection via display

3. remote control via PC (Future)



escalator 1

escalator 2

escalator 3

time base e.g. 1h

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Further technical items

comparison of light intensity:

<i>demanded in EN115:</i>	<i>50 lx</i> in the middle of the step band
<i>CCFL:</i>	approx. <i>950 lx</i> (100mm above the cover) approx. <i>130 lx</i> (middle of the step band – 500mm distance)
<i>STANDARD LED system:</i>	approx. <i>1000 lx</i> (100mm above the cover) approx. <i>150 lx</i> (middle of the step band – 500mm distance)
<i>PREMIUM LED system:</i>	approx. <i>1420 lx</i> (100mm above the cover) approx. <i>220 lx</i> (middle of the step band – 500mm distance)
<i>RGB LED system (white):</i>	approx. <i>1200 lx</i> (100mm above the cover) approx. <i>190 lx</i> (middle of the step band – 500mm distance)



improvement of light intensity with all LED systems, in conformity with EN115

Further technical items

comparison of life cycle:

- CCFL:** approx. **15.000 h** (attention: after 3.000 working hours a CCFL tube has only 60% of their starting light intensity)
- RGB LED system:** approx. **40.000 h** (after that time the LED has even 80% of their starting light intensity)
- LED system (white):** approx. **50.000 h** (after that time the LED has even 80% of their starting light intensity)

comparison of energy balance:

- CCFL:** approx. **13 W/m**
- LED system:** approx. **8 W/m**

Energy saving potential of approx. 40% (for a standard escalator 4,5m rise, 10 hours on a day, 6 days in a week, 52 weeks in a year – energy saving of 320kWh)

further advantages:

reduce the installation time, transportation, low disposal cost, low maintenance cost, small dimensions, safe cause of safety extra low voltage (SELV)...

ThyssenKrupp Elevator (ES/PBB)



Comparison of appearance - without lighting



ThyssenKrupp Elevator (ES/PBB)



Comparison of appearance - with lighting



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