



Verbesserte LED-Technologie
Improved LED-technology

TOLEDO FLAT

EINBAU- UND ANBAU-DOWNLIGHTS FÜR INNENRÄUME
RECESSED- AND SURFACE MOUNTED DOWNLIGHTS FOR INDOOR USE

TOLEDO FLAT

Sensationell flünstig

Nein, das ist kein Tippfehler. Um der TOLEDO FLAT-Familie den verdienten Respekt zu zollen, mussten wir schlichtweg eine neue Begrifflichkeit erfinden. So wurde mit Blick auf die sensationell geringe Einbautiefe oder Anbauhöhe und das hochattraktive Preis-Leistungs-Verhältnis aus „flach“ und „günstig“ ... logisch: flünstig!

Neben seiner verblüffend flachen Bauart und der ausgeprägten Budgetorientierung hat TOLEDO FLAT aber noch einiges mehr zu bieten. Das LED-Downlight ist als Einbau-, Anbau- und Einlegeversion erhältlich und erschließt sich mit seinen zwei Bauformen - rund und quadratisch - in insgesamt neun Baugrößen eine bemerkenswerte Anzahl an Einsatzgebieten. Lightguide und Kunststoffabdeckung der Leuchte sind aus vergilbungsfreiem und somit dauerhaft brillant lichtdurchlässigem PMMA-Kunststoff gefertigt und in opal und prismatisch verfügbar. Gute Farbwiedergabewerte und minimale Farbtoleranzen tragen zur Sicherung der Lichtqualität während der 50.000 Stunden LED-Lebensdauer bei. Erwähnenswert auch die Effizienz: Gegenüber konventionell bestückten Downlights wird durch den Einsatz von TOLEDO FLAT eine Energieersparnis von bis zu 67 Prozent möglich.

Bei den Einbauversionen der Serie geht die Montage der Leuchte mittels Spannfedern besonders unkompliziert, zügig und sogar werkzeuglos vonstatten. Sowohl Anbaugeschäfte als auch Einlegerahmen für Modulrasterdecken 625 und 600 stehen als optionales Zubehör zur Verfügung.

Die Gesamtheit der technischen Raffinessen, der Variantenreichtum und nicht zuletzt die wohltuende und stilunabhängige Schlichtheit machen TOLEDO FLAT zu einem Favoriten im Downlight-Segment - zu einem echten Allrounder für den gewerblichen und privaten Bereich, der in puncto Wirtschaftlichkeit und Einsatzfreude seinesgleichen sucht.

TOLEDO FLAT

Outstandingly flaffordable

No, it's not a typo. To give the TOLEDO FLAT family the respect it deserves, we simply had to come up with some new terminology. The amazingly low recessed depth or mounting height and terrific value for money are what make the TOLEDO FLAT stand out - although not literally of course. Makes sense, doesn't it?

A strikingly flat design and an extremely low price aren't all that the TOLEDO FLAT has to offer. The LED downlight is available in a flush mounted, surface mounted and recessed version and with its choice of two designs - round and square - allows for a remarkable number of applications in a total of nine sizes. The light guide and plastic covers are made of non-yellowing and therefore permanently brilliant and translucent PMMA plastic and are available in opal and prismatic. Good colour rendition values and colour consistency help to ensure light quality over the 50,000 hours of the LED service life. The efficiency is also well worth mentioning: the TOLEDO FLAT uses up to 67 percent less energy than conventional downlights.

The tension springs in the flush mounted versions make installation as easy as pie and no tools are required. Surface mounted housing and recessed frames for module louvres 625 and 600 are available as optional accessories.

The overall combination of advanced technical features, a wide choice of versions and, not least, its pleasing and versatile simplicity is what makes the TOLEDO FLAT a real favourite in the downlight sector. This is a genuine all-rounder for the commercial and private sector and remains unparalleled in terms of cost efficiency and application.



Steckbrief

- Superflaches LED-Downlight für Einbau- und Anbaumontage und als Einlegeleuchte für Rasterdecken
- Lightguide und Kunststoffabdeckung aus vergilbungsfreiem PMMA opal und prismatisch
- Sehr attraktives Preis-Leistungs-Verhältnis
- Zwei Bauformen - rund in 5 und quadratisch in 4 Baugrößen
- Bis zu 67% Energieeinsparung gegenüber konventioneller Bestückung
- LED Lebensdauer 50.000 h (L70, B10)
- Farbwiedergabe Ra > 80
- Minimale Farbtoleranzen: 4-fach Mac Adam (4 SDCM)
- Farbtemperatur 3000 K und 4000 K
- Konverter für Standard (Ein/Aus) oder dimmbar DALI
- DALI-Konverter gleichspannungstauglich - geeignet für zentrale Notstromversorgung

Einbauversion:

- Sehr flache Bauform:
Leuchtenhöhe 22 - 27 mm, Konverterhöhe 25 - 32 mm
- Geeignet für Deckenstärken 1 - 20 mm
- Sehr geringe Einbauhöhe 27 - 59 mm, abhängig von der Deckenstärke
- Einfache Federbefestigung für werkzeuglosen Einbau
- Geeignet für direkte Abdeckung mit Wärmedämmungsmaterial (nicht für Durchmesser D 495 mm)
- Separate Konverterbox über Steckverbindung
- Anbaugehäuse auch als Zubehör für alle Größen
- Einlegerahmen für Rasterdecken Modul 625 und 600 als Zubehör für Toledo Flat Round D 495 mm

Anbauversion:

- Sehr geringe Aufbauhöhe: 57 mm bis 63 mm
- Für Decken- und Wandmontage geeignet

Einlegeversion:

- Für Rasterdecken Modul 625 und 600 mit opaler und prismatischer Abdeckung

Einsatzgebiete:

- Flur, Nebenräume, Hotel, Restaurant, Besprechungsräume, privater Bereich

Characteristics

- Extremely flat recessed and surface mounted LED downlights
- Light guide and plastic cover made of non-yellowing PMMA, available in opal and prismatic
- Excellent price-performance ratio
- Two versions: Round (5 different sizes) and Square (4 different sizes)
- Energy savings up to 67 % compared to conventional light sources
- 50,000 hours LED service life (L70, B10)
- Colour rendering CRI 80
- Minimal colour tolerances: 4-step MacAdam (4 SDCM)
- Light colours: 3000 K and 4000 K
- Converter for standard (On/Off) or dimmable DALI
- DC DALI converter - suitable for central emergency power supply

Recessed version:

- Very flat design:
luminaire height 22 - 27 mm, converter height 25 - 32 mm
- Suitable for ceiling thickness 1 - 20 mm
- Very low recessed depth 27 - 59 mm, depends on the ceiling thickness
- Simple spring mounting system for tool-free installation
- Suitable for direct contact with thermal insulation material (not for diameter D 495 mm)
- Separate converter box, with plug & play connection
- Surface-mounted housing as accessory for all sizes
- Lay-in frame for grid ceilings - module 625 and 600 - available for Toledo Flat Round D 495 mm as an option.

Surface mounted version:

- Very low mounting height: 57 mm to 63 mm
- Suitable for ceiling and wall mounting

Lay-in version:

- For grid ceilings - module 625 and 600 - available with opal and prismatic cover

Areas of application:

- Corridors, ancillary areas, hotels, restaurants, meeting rooms, private areas

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------------|------------------------------------|--------------------------|--------------|----------------------------------|--------------------------|--------------|--|---|--------------|------------------------------------|--------------------------|-----------|----------------------------------|--------------------------|------------|--|--|--------------|------------------------------------|--------------------------|-----------|----------------------------------|--------------------------|-----------|--|
| <table border="1"> <tr><td>901451.002.1</td></tr> <tr><td>Flur 12 x 2,5 x 3 m (0,2 m)</td></tr> <tr><td>100 lx 150 lx 200 lx</td></tr> <tr><td>16 24 32</td></tr> <tr><td>Raum 6 x 4 x 3 m (0,75 m)</td></tr> <tr><td>200 lx 300 lx 500 lx</td></tr> <tr><td>23 35 58</td></tr> </table> | 901451.002.1 | Flur 12 x 2,5 x 3 m (0,2 m) | 100 lx 150 lx 200 lx | 16 24 32 | Raum 6 x 4 x 3 m (0,75 m) | 200 lx 300 lx 500 lx | 23 35 58 | | <table border="1"> <tr><td>901453.002.1</td></tr> <tr><td>Flur 12 x 2,5 x 3 m (0,2 m)</td></tr> <tr><td>100 lx 150 lx 200 lx</td></tr> <tr><td>4 6 8</td></tr> <tr><td>Raum 6 x 4 x 3 m (0,75 m)</td></tr> <tr><td>200 lx 300 lx 500 lx</td></tr> <tr><td>6 9 14</td></tr> </table> | 901453.002.1 | Flur 12 x 2,5 x 3 m (0,2 m) | 100 lx 150 lx 200 lx | 4 6 8 | Raum 6 x 4 x 3 m (0,75 m) | 200 lx 300 lx 500 lx | 6 9 14 | | <table border="1"> <tr><td>901585.002.1</td></tr> <tr><td>Flur 12 x 2,5 x 3 m (0,2 m)</td></tr> <tr><td>100 lx 150 lx 200 lx</td></tr> <tr><td>2 3 4</td></tr> <tr><td>Raum 6 x 4 x 3 m (0,75 m)</td></tr> <tr><td>200 lx 300 lx 500 lx</td></tr> <tr><td>3 4 7</td></tr> </table> | 901585.002.1 | Flur 12 x 2,5 x 3 m (0,2 m) | 100 lx 150 lx 200 lx | 2 3 4 | Raum 6 x 4 x 3 m (0,75 m) | 200 lx 300 lx 500 lx | 3 4 7 | |
| 901451.002.1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flur 12 x 2,5 x 3 m (0,2 m) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 lx 150 lx 200 lx | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 24 32 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raum 6 x 4 x 3 m (0,75 m) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200 lx 300 lx 500 lx | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 35 58 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 901453.002.1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flur 12 x 2,5 x 3 m (0,2 m) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 lx 150 lx 200 lx | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 6 8 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raum 6 x 4 x 3 m (0,75 m) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200 lx 300 lx 500 lx | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 9 14 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 901585.002.1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flur 12 x 2,5 x 3 m (0,2 m) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 lx 150 lx 200 lx | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 3 4 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raum 6 x 4 x 3 m (0,75 m) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200 lx 300 lx 500 lx | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 4 7 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>901452.002.1</td></tr> <tr><td>Flur 12 x 2,5 x 3 m (0,2 m)</td></tr> <tr><td>100 lx 150 lx 200 lx</td></tr> <tr><td>8 12 16</td></tr> <tr><td>Raum 6 x 4 x 3 m (0,75 m)</td></tr> <tr><td>200 lx 300 lx 500 lx</td></tr> <tr><td>12 17 29</td></tr> </table> | 901452.002.1 | Flur 12 x 2,5 x 3 m (0,2 m) | 100 lx 150 lx 200 lx | 8 12 16 | Raum 6 x 4 x 3 m (0,75 m) | 200 lx 300 lx 500 lx | 12 17 29 | | <table border="1"> <tr><td>901484.002.1</td></tr> <tr><td>Flur 12 x 2,5 x 3 m (0,2 m)</td></tr> <tr><td>100 lx 150 lx 200 lx</td></tr> <tr><td>3 5 6</td></tr> <tr><td>Raum 6 x 4 x 3 m (0,75 m)</td></tr> <tr><td>200 lx 300 lx 500 lx</td></tr> <tr><td>5 7 11</td></tr> </table> | 901484.002.1 | Flur 12 x 2,5 x 3 m (0,2 m) | 100 lx 150 lx 200 lx | 3 5 6 | Raum 6 x 4 x 3 m (0,75 m) | 200 lx 300 lx 500 lx | 5 7 11 | | <table border="1"> <tr><td>901586.002.1</td></tr> <tr><td>Flur 12 x 2,5 x 3 m (0,2 m)</td></tr> <tr><td>100 lx 150 lx 200 lx</td></tr> <tr><td>2 3 4</td></tr> <tr><td>Raum 6 x 4 x 3 m (0,75 m)</td></tr> <tr><td>200 lx 300 lx 500 lx</td></tr> <tr><td>3 4 6</td></tr> </table> | 901586.002.1 | Flur 12 x 2,5 x 3 m (0,2 m) | 100 lx 150 lx 200 lx | 2 3 4 | Raum 6 x 4 x 3 m (0,75 m) | 200 lx 300 lx 500 lx | 3 4 6 | |
| 901452.002.1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flur 12 x 2,5 x 3 m (0,2 m) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 lx 150 lx 200 lx | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 12 16 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raum 6 x 4 x 3 m (0,75 m) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200 lx 300 lx 500 lx | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 17 29 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 901484.002.1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flur 12 x 2,5 x 3 m (0,2 m) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 lx 150 lx 200 lx | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 5 6 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raum 6 x 4 x 3 m (0,75 m) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200 lx 300 lx 500 lx | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 7 11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 901586.002.1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flur 12 x 2,5 x 3 m (0,2 m) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 lx 150 lx 200 lx | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 3 4 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raum 6 x 4 x 3 m (0,75 m) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200 lx 300 lx 500 lx | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 4 6 | | | | | | | | | | | | | | | | | | | | | | | | | | |



Einbau-Downlight | Recessed downlights

Toledo Flat Square

Schutzart: **IP 40**

Schutzklasse: II

Deckenstärke: 1-20 mm

Schlagschutz: IK06

Glühdrahtprüfung: 650°C

Gehäuse Aluminium Druckguss. Lightguide und Kunststoffabdeckung aus vergilbungsfreiem PMMA. Abdeckung opal matt. Deckenbefestigung mit Federsystem. Einbautiefe abhängig von Deckenstärke. Betriebsgerät (LED-Konverter) extern über Steckverbindung, Verbindungsleitung 250 mm.

Leuchtmittel (LED) und Konverter im Lieferumfang enthalten.

Lieferbare Farbe: weiß

Type of protection: **IP 40**

Protection class: II

Ceiling Thickness: 1-20 mm

Impact Protection: IK06

Glow Wire Test: 650°C

Housing die-cast aluminium. Light guide and plastic cover made from non-yellowing PMMA. Opal matt. Spring fastening system. Recessed depth depends on ceiling thickness. Separate LED converter with connecting cable 250 mm.

LED and converter included.

Available colour: white

| Bestellnummer Reference number | Abmessungen Dimensions | Lampe Lamp | Lichtfarbe Light colour | Leuchtenlichtstrom Luminaire flux | Systemleistung System power | α | UGR | EEK EEC | € brutto o. MwSt. € gross without VAT |
|----------------------------------|--------------------------|--------------|---------------------------|-------------------------------------|-------------------------------|----------|-----|-----------|---|
|----------------------------------|--------------------------|--------------|---------------------------|-------------------------------------|-------------------------------|----------|-----|-----------|---|

Einbau-Downlights | Recessed downlights

Preisgruppe 21 | Price Category 21

Deckenausschnitt | Ceiling cutout LA 96 x BA 96 mm

| | | | | | | | | | |
|-----------------|-----------------------------|-----|-----|--------|-------|------|------|---------|-------|
| 901485.002 | L 110, B 110, H 3, HE 27-56 | LED | 830 | 370 lm | 4,7 W | 107° | 27,8 | A+ A+ | 34,00 |
| 901485.002.76 | L 110, B 110, H 3, HE 31-56 | LED | 830 | 370 lm | 4,7 W | 107° | 27,8 | A+ A+ | 84,00 |
| 901485.002.1 | L 110, B 110, H 3, HE 27-56 | LED | 840 | 390 lm | 4,7 W | 107° | 27,9 | A+ A+ | 34,00 |
| 901485.002.1.76 | L 110, B 110, H 3, HE 31-56 | LED | 840 | 390 lm | 4,7 W | 107° | 27,9 | A+ A+ | 84,00 |

Deckenausschnitt | Ceiling cutout LA 156 x BA 156 mm

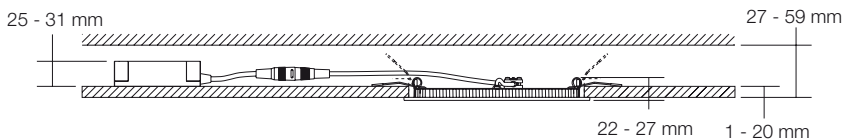
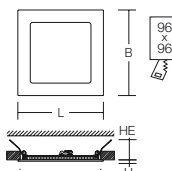
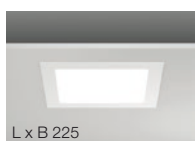
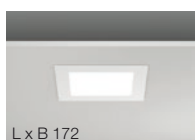
| | | | | | | | | | |
|-----------------|-----------------------------|-----|-----|--------|-----|------|------|---------|-------|
| 901486.002 | L 172, B 172, H 3, HE 28-56 | LED | 830 | 730 lm | 8 W | 108° | 25,3 | A+ A+ | 44,00 |
| 901486.002.76 | L 172, B 172, H 3, HE 31-56 | LED | 830 | 730 lm | 8 W | 108° | 25,3 | A+ A+ | 94,00 |
| 901486.002.1 | L 172, B 172, H 3, HE 28-56 | LED | 840 | 750 lm | 8 W | 108° | 25,3 | A+ A+ | 44,00 |
| 901486.002.1.76 | L 172, B 172, H 3, HE 31-56 | LED | 840 | 750 lm | 8 W | 108° | 25,3 | A+ A+ | 94,00 |

Deckenausschnitt | Ceiling cutout LA 208 x BA 208 mm

| | | | | | | | | | |
|-----------------|-----------------------------|-----|-----|---------|--------|------|------|-------|--------|
| 901487.002 | L 225, B 225, H 3, HE 29-56 | LED | 830 | 1600 lm | 17,8 W | 108° | 25,6 | A A | 64,00 |
| 901487.002.76 | L 225, B 225, H 3, HE 31-56 | LED | 830 | 1600 lm | 17,8 W | 108° | 25,6 | A A | 114,00 |
| 901487.002.1 | L 225, B 225, H 3, HE 29-56 | LED | 840 | 1650 lm | 17,8 W | 108° | 25,6 | A A | 64,00 |
| 901487.002.1.76 | L 225, B 225, H 3, HE 31-56 | LED | 840 | 1650 lm | 17,8 W | 108° | 25,6 | A A | 114,00 |

Deckenausschnitt | Ceiling cutout LA 280 x BA 280 mm

| | | | | | | | | | |
|-----------------|-----------------------------|-----|-----|---------|------|------|------|-------|--------|
| 901488.002 | L 300, B 300, H 3, HE 31-56 | LED | 830 | 2050 lm | 22 W | 108° | 23,9 | A A | 99,00 |
| 901488.002.76 | L 300, B 300, H 3, HE 31-56 | LED | 830 | 2050 lm | 22 W | 108° | 23,9 | A A | 159,00 |
| 901488.002.1 | L 300, B 300, H 3, HE 31-56 | LED | 840 | 2200 lm | 22 W | 108° | 24,2 | A A | 99,00 |
| 901488.002.1.76 | L 300, B 300, H 3, HE 31-56 | LED | 840 | 2200 lm | 22 W | 108° | 24,2 | A A | 159,00 |



Vergleich | Comparison LED : konventionelle Lampen LED : conventional lamps

LED 4,7 W ≈

1 x 10 W TC-D (16 W KVG | CB)

LED 8 W ≈

1 x 18 W TC-D (26 W KVG | CB)

LED 17,8 W ≈

2 x 18 W TC-D (52 W KVG | CB)

LED 22 W ≈

2 x 26 W TC-D (68 W KVG | CB)

Zubehör

Anbaugehäuse Toledo Flat

Anbaugehäuse Stahlblech pulverbeschichtet. Downlight werkzeuglos verriegelbar.

Accessories

Surface mounted housing Toledo Flat

Surface mouted housing sheet steel powder-coated. Downlight can be locked without tools.

Anbaugehäuse | Surface mounted housing

Preisgruppe 21 | Price Category 21

| | | | |
|-------------|-----------------------|--|-------|
| 982138.002* | L 111, B 111, H 58 mm | für for Toledo Flat Square 110 x 110 | 29,00 |
| 982139.002 | L 173, B 173, H 58 mm | für for Toledo Flat Square 172 x 172 | 34,00 |
| 982140.002 | L 226, B 226, H 58 mm | für for Toledo Flat Square 225 x 225 | 39,00 |
| 982141.002 | L 301, B 301, H 58 mm | für for Toledo Flat Square 300 x 300 | 49,00 |

* nicht geeignet für DALI-Version | * not for DALI-Version

