



# SmartForm – the new standard for office lighting with modular recessed luminaires

# **SmartForm TBS460**

Reflecting Philips' drive for simplicity and sustainability, SmartForm recessed is a complete family of highly versatile modular and semi-modular luminaires. These luminaires are available with a choice of LED or MASTER TL5 light sources in square and rectangular versions. Designed to fit in a wide range of ceiling types, SmartForm can fulfill the majority of project requirements in most applications. Energy efficiencyAs well as incorporating energy-efficient LED or MASTER TL5 light sources and a range of Philips electronic ballasts, the SmartForm recessed family can be equipped with lighting controls for presence detection and daylight regulation (ActiLume) or daylight regulation only (Luxsense) in order to reduce energy consumption (W/m2 is very low). In this way, this Green Flagship range also reduces the overall cost of ownership as well as CO2 levels, making SmartForm an environmentally friendly choice. SmartForm recessed TBS460 – ultra-flat 'light beam' SmartForm recessed TBS460 'light beam' luminaires are built around superior micro-optics and have a build-in height of a mere 45 mm, making them ideal for applications requiring very flat light fittings, e.g. refurbishment projects where ceiling space may be especially limited.

#### **Benefits**

- Square or rectangular recessed luminaires with superior micro-optics producing a combination of ultra-flat 'light beams'
- Built-in height of only 45 mm makes luminaires ideal for situations with little space above flat ceilings, such as in refurbishment projects
- Rim with a height of only 5 mm ensures the luminaire blends in with every ceiling

Product family leaflet, 2018, July 18 data subject to change

# **SmartForm TBS460**

#### **Features**

- Available in square and rectangular versions
- Choice of LED or MASTER TL5 light sources
- Micro-optics producing ultra-flat 'light beams'
- Electronic ballast
- Can be equipped with lighting controls for presence detection and daylight regulation (ActiLume) or daylight regulation only (Luxsense)

## Application

- Offices
- Education
- Healthcare
- Recreation
- Retail
- Industry

## **Specifications**

Туре	TBS460 (modular light beam)	
Ceiling grid	Module size: 600 mm	
	Exposed- and symmetrical concealed- T-bar ceiling and plaster	
	(board) ceilings	
Light source	Fluorescent:	
	- 2 x, 3 x or 4 x MASTER TL5 ECO / G5 / 13, 20 W (square version)	
	- 2 x, 3 x or 4 x MASTER TL5 / G5 / 14, 24 W (square version)	
	- 1 x or 2 x MASTER TL5 ECO / G5 / 25, 32, 45, 50, 73 W	
	(rectangular version)	
	- 1 x or 2 x MASTER TL5 / G5 / 28, 35, 49, 54, 80 W (rectangular	
	version)	
Lamp included	Yes, TL5 ECO (lamp color 830 or 840)	
	Yes, TL5 (lamp color 827, 830 or 840)	
	In certain versions no lamps are included	
Ballast	Electronic, 220 - 240 V / 50 - 60 Hz:	
	- High Frequency Performer (HFP)	
	- High Frequency Regulator, DALI (HFD)	
	- High Frequency Regulator (HFR)	
	- High Frequency Regulator, touch-switch (HFR-T)	

Optic	Micro OLC very high efficiency high-gloss optic (C8-VH)	
	Micro OLC performer high-gloss optic (C8)  Micro OLC excellent comfort high-gloss optic (C8-C)  Micro OLC very high efficiency semi-high-gloss optic (D8-VH)	
	Micro OLC performer semi-high-gloss optic (D8)	
	Micro OLC excellent comfort semi-high-gloss optic (D8-C)	
	Micro matt mirror, ribbed cross louvers (M2)	
	Micro high efficiency mirror, ribbed cross louvers (M2-H)	
Optical cover	Opal cover (O)	
Connection (outside	Push-in connector (PI) or with pull relief (PIP)	
housing)	Wieland connector GST 18, 3 or 4 poles (W, W4 respectively)	
	Wago connector, 3 or 4 poles (WA, WA4 respectively)	
	Ensto connector, 3 or 4 poles (EN, EN4 respectively)	
	Cable, length 200 cm, with plug CEE7 (CCE)	

## **Specifications**

Option	Emergency lighting: 1 hour (EL1), 3 hours (EL3)
	Lighting controls:
	- Luxsense daylight controller micro (LXM)
	- ActiLume multi controller (ACL)
	Euro fuse (FU) included
	Internal PVC free wiring (PVCFR)
	Safety cable (SC)
	Separate switching (SW)
	Separate switching EL-versions (SW-EL)
Infill plates	Infill plate closed (IP)
	Infill plate perforated (IPP)

Material	Housing: zinc-coated steel, rim post lacquered, white RAL 9016
	based
	Optional white RAL 9010 or silver grey RAL 9006 based
	Rim detailing: width 12 mm, height 5 mm, post lacquered
Installation	Exposed ceilings: lay-in, no brackets needed
	Concealed ceilings: bracket ZBS460 SMB (4 pcs) reach is 25 - 65
	mm
	Concealed ceiling with T-bar 38 mm: bracket ZBS460 SMB-TPM (4
	pcs)
	Plaster ceilings: bracket ZBS460 SMB-PLC (24 pcs), reach is 10 -
	20 mm
Accessory	Suspension bracket sets

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Protection foil to protect the optic during installation

Dedicated luminaires available with air-handling functionality (AIR), 50 m³/hour/luminaire

Main applications Office, education, healthcare, recreation, retail, industr	y
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## Versions



# Product details









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## Product details







