

User Guide

eW Graze Powercore

An EssentialWhite™ Product

Preliminary

The eW® Graze Powercore is an exterior-rated, linear fixture for architectural applications of high-quality white light, including accent highlighting, wall grazing, and sign lighting. The slim form-factor makes it easy to fit into almost any architectural detail. The fixture uses proprietary power management and dimming technologies which translate to greater operational efficiency, ease of use, and compatibility with standard lighting infrastructure.

- Low power consumption
- 2700 K or 4000 K color temperatures
- 10° x 60° (narrow beam angle) and 30° x 60° (medium beam angle)
- Adjustable mounting foot with 90° rotation
- Line voltage operation via Powercore® technology (100, 120, 230, or 277 VAC)
- DIMand™ technology provides smooth dimming capability with ELV-type dimmers
- Optibin® technology ensures a consistent quality of light in all fixtures

The Philips logo, consisting of the word "PHILIPS" in a bold, blue, sans-serif font.

Scope Of This Guide

The eW Graze Powercore product line includes, and this installer's guide covers, these products:

eW Graze Powercore Item Numbers

| Voltage | Size | Beam Angle | Color Temp. | Item Number | Part Number |
|---------|----------------|------------|-------------|---------------|--------------|
| 120 VAC | 1 ft (305 mm) | 10° x 60° | 2700 K | 523-000030-00 | 910503700276 |
| 120 VAC | 1 ft (305 mm) | 10° x 60° | 4000 K | 523-000030-01 | 910503700277 |
| 120 VAC | 4 ft (1219 mm) | 10° x 60° | 2700 K | 523-000030-02 | 910503700278 |
| 120 VAC | 4 ft (1219 mm) | 10° x 60° | 4000 K | 523-000030-03 | 910503700279 |
| 120 VAC | 1 ft (305 mm) | 30° x 60° | 2700 K | 523-000030-04 | 910503700280 |
| 120 VAC | 1 ft (305 mm) | 30° x 60° | 4000 K | 523-000030-05 | 910503700281 |
| 120 VAC | 4 ft (1219 mm) | 30° x 60° | 2700 K | 523-000030-06 | 910503700282 |
| 120 VAC | 4 ft (1219 mm) | 30° x 60° | 4000 K | 523-000030-07 | 910503700283 |
| 277 VAC | 1 ft (305 mm) | 10° x 60° | 2700 K | 523-000030-08 | 910503700284 |
| 277 VAC | 1 ft (305 mm) | 10° x 60° | 4000 K | 523-000030-09 | 910503700285 |
| 277 VAC | 4 ft (1219 mm) | 10° x 60° | 2700 K | 523-000030-10 | 910503700286 |
| 277 VAC | 4 ft (1219 mm) | 10° x 60° | 4000 K | 523-000030-11 | 910503700287 |
| 277 VAC | 1 ft (305 mm) | 30° x 60° | 2700 K | 523-000030-12 | 910503700288 |
| 277 VAC | 1 ft (305 mm) | 30° x 60° | 4000 K | 523-000030-13 | 910503700289 |
| 277 VAC | 4 ft (1219 mm) | 30° x 60° | 2700 K | 523-000030-14 | 910503700290 |
| 277 VAC | 4 ft (1219 mm) | 30° x 60° | 4000 K | 523-000030-15 | 910503700291 |
| 230 VAC | 1 ft (305 mm) | 10° x 60° | 2700 K | 523-000030-16 | 910503700292 |
| 230 VAC | 1 ft (305 mm) | 10° x 60° | 4000 K | 523-000030-17 | 910503700293 |
| 230 VAC | 4 ft (1219 mm) | 10° x 60° | 2700 K | 523-000030-18 | 910503700294 |
| 230 VAC | 4 ft (1219 mm) | 10° x 60° | 4000 K | 523-000030-19 | 910503700295 |
| 230 VAC | 1 ft (305 mm) | 30° x 60° | 2700 K | 523-000030-20 | 910503700296 |
| 230 VAC | 1 ft (305 mm) | 30° x 60° | 4000 K | 523-000030-21 | 910503700297 |
| 230 VAC | 4 ft (1219 mm) | 30° x 60° | 2700 K | 523-000030-22 | 910503700298 |
| 230 VAC | 4 ft (1219 mm) | 30° x 60° | 4000 K | 523-000030-23 | 910503700299 |
| 100 VAC | 1 ft (305 mm) | 10° x 60° | 2700 K | 523-000030-24 | 910503700300 |
| 100 VAC | 1 ft (305 mm) | 10° x 60° | 4000 K | 523-000030-25 | 910503700301 |
| 100 VAC | 4 ft (1219 mm) | 10° x 60° | 2700 K | 523-000030-26 | 910503700302 |
| 100 VAC | 4 ft (1219 mm) | 10° x 60° | 4000 K | 523-000030-27 | 910503700303 |
| 100 VAC | 1 ft (305 mm) | 30° x 60° | 2700 K | 523-000030-28 | 910503700304 |
| 100 VAC | 1 ft (305 mm) | 30° x 60° | 4000 K | 523-000030-29 | 910503700305 |
| 100 VAC | 4 ft (1219 mm) | 30° x 60° | 2700 K | 523-000030-30 | 910503700306 |
| 100 VAC | 4 ft (1219 mm) | 30° x 60° | 4000 K | 523-000030-31 | 910503700307 |

Accessories for eW Graze Powercore Fixtures

Use one leader cable to connect line power to each series of fixtures. Note that the leader cables are location-specific (UL for North America and CE for elsewhere).

| Jumper Cables | Item Number | Part Number |
|--------------------------------------|---------------|--------------|
| Jumper Cable, 0 ft (0 mm), UL | 108-000039-00 | 910503700314 |
| Jumper Cable, 1 ft (305 mm), UL | 108-000039-01 | 910503700315 |
| Jumper Cable, 5 ft (15.24 m), UL | 108-000039-02 | 910503700316 |
| Jumper Cable, 0 ft (0 mm), CE/PSE | 108-000040-00 | 910503700317 |
| Jumper Cable, 1 ft (305 mm), CE/PSE | 108-000040-01 | 910503700318 |
| Jumper Cable, 5 ft (15.24 m), CE/PSE | 108-000040-02 | 910503700319 |

| Leader Cables | Item Number | Part Number |
|---------------------------------------|---------------|--------------|
| Leader Cable, 50 ft, (15.24 m), UL | 108-000041-00 | 910503700320 |
| Leader Cable, 50 ft (15.24 m), CE/PSE | 108-000041-01 | 910503700321 |

Owner / User Responsibilities

The contractor, installer, purchaser, owner, and user must install, maintain, and operate the eW Graze Powercore fixture to comply with all federal, state, and local laws, ordinances, and regulations.

⚠ WARNING

FIXTURES MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH ALL NATIONAL AND LOCAL BUILDING, ELECTRICAL, AND SAFETY CODES AND REGULATIONS.

1. Start Here

Before you begin the installation, read all of this installation guide, which contains important information about planning and installing your new eW Graze Powercore fixtures to ensure peak performance. Its safety and installation instructions will help you install eW Graze Powercore fixtures as quickly and easily as possible.

⚠ WARNING

DO NOT ATTEMPT TO INSTALL OR USE A FIXTURE UNTIL YOU READ AND UNDERSTAND THE INSTALLATION INSTRUCTIONS AND SAFETY LABELS.

2. Plan the Installation

If approved architectural drawings are not available:

- Create a layout plan that includes all fixtures, leader cables, and jumper cables. 1-foot eW Graze Powercore fixtures require one mounting hinge. 4-foot eW Graze Powercore fixtures require two mounting hinges.
- Refer to local and state codes, and consult with the appropriate electrical inspector to approve all wiring plans.

⚠ CAUTION

THE U.S. NATIONAL ELECTRICAL CODE (NEC) DOES NOT PERMIT CORDS TO BE CONCEALED WHERE DAMAGE TO INSULATION MAY GO UNNOTICED. TO PREVENT FIRE DANGER, DO NOT RUN CORD BEHIND WALLS, CEILINGS, SOFFITS OR CABINETS WHERE IT MAY BE INACCESSIBLE FOR EXAMINATION. CORDS SHOULD BE VISUALLY EXAMINED PERIODICALLY AND IMMEDIATELY REPLACED WHEN DAMAGE IS NOTED.

- Consult Application Engineering Services as needed at support@colorkinetics.com.

Each eW Graze Powercore installation has three steps:

1. Install Mounting Hinges.

⚠ CAUTION

NOT INTENDED FOR RECESSED INSTALLATION IN CEILINGS OR SOFFITS.

NOT INTENDED FOR SURFACE INSTALLATION INSIDE BUILT-IN RESIDENTIAL FURNISHINGS.

2. **Install and Connect the Fixtures.** Up to 50 ft (15.24 m) of fixtures can be in a run supplied by a single leader cable.
3. **Make Electrical Connections.**

⚠ CAUTION

DO NOT EXCEED THE MAXIMUM NUMBER OF FIXTURES CONNECTED IN A RUN OF INTER-CONNECTED FIXTURES.

⚠ CAUTION

DO NOT EXCEED THE SPECIFIED VOLTAGE AND CURRENT INPUT.

3. Preparation

Inspect The Fixtures

Carefully inspect the boxes containing the eW Graze Powercore fixtures, the fixtures themselves, and the included mounting hinges for any damage that may have occurred in transit. Also check any required accessories (leader and jumper cables).

⚠ WARNING

DO NOT USE A FIXTURE IF THE LENS, HOUSING, OR POWER CABLES ARE DAMAGED.

⚠ WARNING

FIXTURES HAVE LINE VOLTAGE RISK OF SHOCK AND NO USER SERVICEABLE PARTS. DO NOT ATTEMPT TO OPEN THEM.

Assemble Additional Items

To wire and mount an eW Graze Powercore fixture, you need:

- General tools to secure the mounting hinges (drill, screwdriver, level, measuring tools, etc.).
- Electrical tools and supplies (wire cutters, insulation strippers, wire nuts) to connect leader cables to a line circuit.

4. Install Mounting Hinges

Attach the mounting hinges to each eW Graze Powercore fixture. The 12-inch eW Graze Powercore fixtures require one mounting hinge. The 48-inch eW Graze Powercore fixtures require two mounting hinges. Be sure to use a screw or other hardware that is appropriate to the substrate material.

The swing radius and profile is determined by how the mounting hinges are oriented and what screw holes are used.

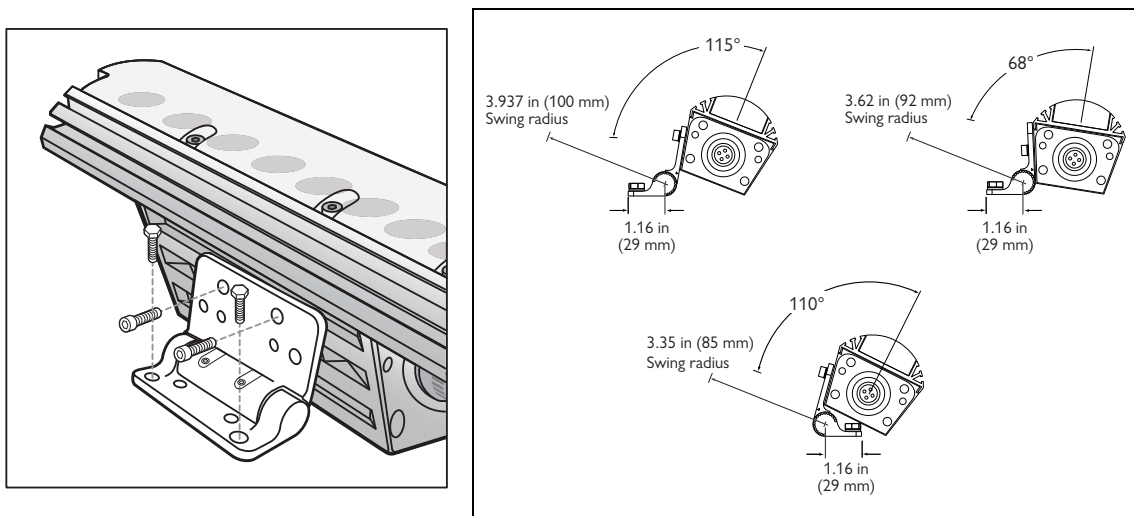


Figure 1: Install the supplied mounting hinges to the fixtures, and then mount the hinges to a secure surface. Once in position, use the hinge-locking set-screws to lock the fixture in place.

5. Install and Connect the Fixtures

1. Install the fixtures using the hinges attached in the previous step.
2. Connect each pair of fixtures with jumper cables. The cables twist onto the ends of each pair of fixtures. Refer to Figure 2.
3. Twist a terminator end cap onto the final connector of the last fixture in the series.

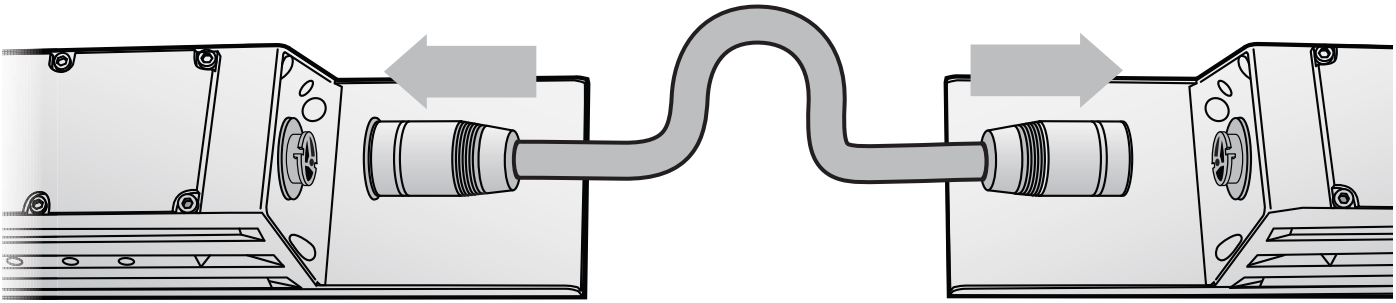


Figure 2: Use Jumper Cables To Connect Fixtures In a Series. Cables are available with end-to-end connectors for abutting fixtures, and 1 ft or 5 ft for spaced fixtures.

6. Make Electrical Connections

eW Graze Powercore fixtures are wired just like any other line-voltage fixtures.

There are two leader cables available, one for North America and one that is CE-compliant for installations outside North America.

⚠ WARNING

ENSURE THAT POWER TO THE SERIES IS OFF BEFORE WORKING ON, CONNECTING, OR DISCONNECTING INDIVIDUAL FIXTURES.

North America Installations

A line circuit is connected to the line, neutral, and ground leads of the leader cable. The leader cable connects line voltage to the first fixture in the series. Install the terminator that is packaged with the leader cable in the end cap of the last fixture in the run. Refer to Figure 3.

Installations Outside North America

For installations outside North America, a CE-compliant leader cable with flying leads on one end (item # 108-000041-01) must be connected to a line circuit by a method that meets all national, regional, and local regulations.

If a terminal block is used, it must conform to EN 60998-2-1 or EN 60998-2-2 and must be rated for the voltage listed in “eW Graze Powercore Specifications” on page 7.

Install the terminator that is packaged with the leader cable into the end cap of the last fixture in the run.

7. Turn the Power ON

After the fixtures are connected, the leader cable is attached to the first fixture in the run and the terminator is installed in the final fixture, turn on power to the circuit to test the installation.

⚠ CAUTION

LED RADIATION
DO NOT STARE INTO BEAM
CLASS 2 LED PRODUCT

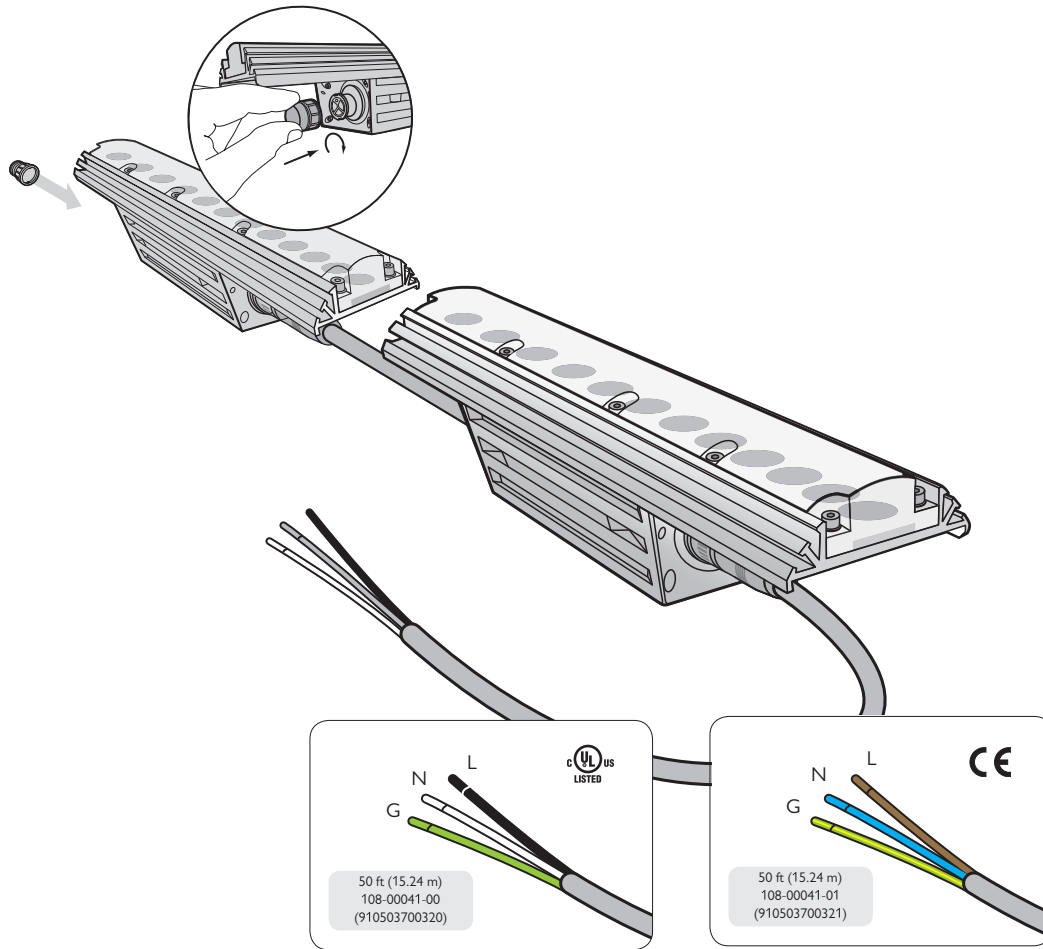
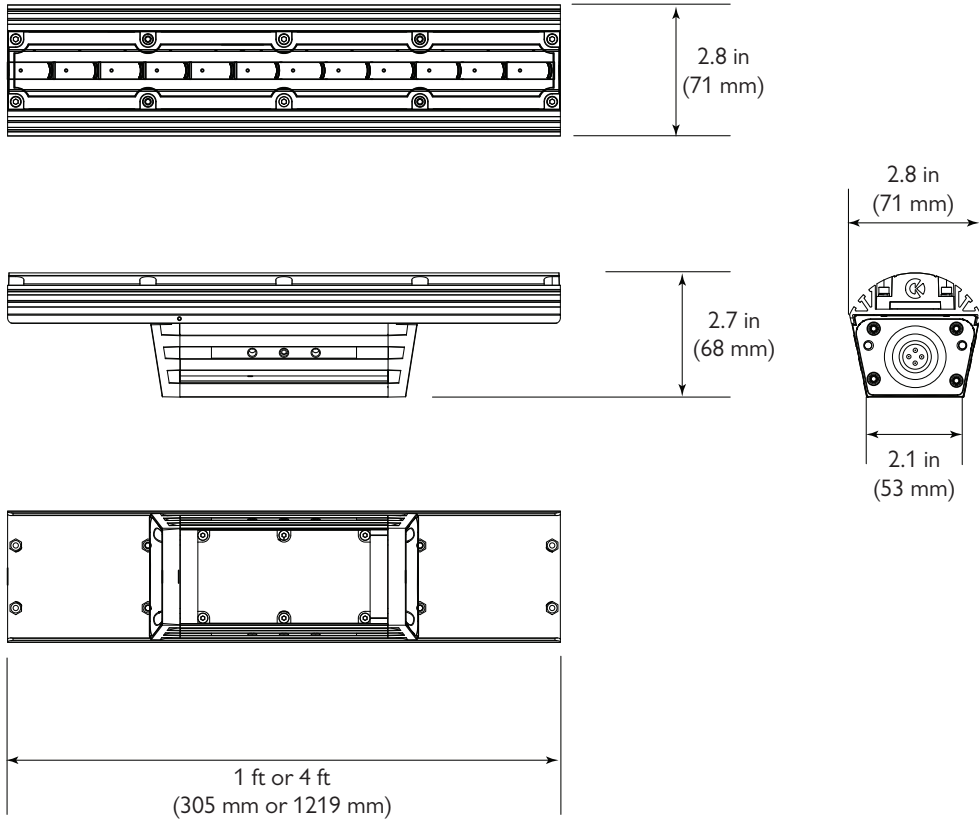


Figure 3: eW Graze Powercore fixtures require a UL- or CE-compliant wiring compartment to provide line power. A UL- or CE-compliant leader cable from the wiring compartment supplies power to the fixtures.

eW Graze Powercore Dimensions

Dimensions of eW Graze Powercore fixtures are given below.



eW Graze Powercore Specifications

Specifications are subject to change without notice.

| | 1-Foot Fixture | 4-Foot Fixture |
|--------------------------|--|--|
| Length | 12 in (305 mm) | 48 in (1219 mm) |
| Width | 2.8 in (71 mm) | |
| Height | 2.7 in (69 mm) | |
| Weight | 2.7 lbs (1.2 kg) | 10.8 lbs (4.9 kg) |
| LEDs Per Fixture | 12 warm or cool | 48 warm or cool |
| Color Temperature | 2700 K (+375 / -300) or 4000 K (+400 / -500) | |
| Beam Angle | 10° × 60°: narrow 30° × 60°: medium | |
| Total Output (Lumens) | 404 (2700 K, 10° × 60°) 384 (2700 K, 30° × 60°) 477 (4000 K, 10° × 60°) 437 (4000 K, 30° × 60°) | 1616 (2700 K, 10° × 60°) 1536 (2700 K, 30° × 60°) 1908 (4000 K, 10° × 60°) 1748 (4000 K, 30° × 60°) |
| Efficacy (Lm/W) | 27.9 (2700 K, 10° × 60°) 28.6 (2700 K, 30° × 60°) 33.4 (4000 K, 10° × 60°) 31.0 (4000 K, 30° × 60°) | |
| Mixing Distance | < 6 in (152 mm) | |
| Housing | Extruded, anodized aluminum | |
| Lens | Clear polycarbonate. V-0 flame rating, FI UV rating. | |
| Environment | UL wet; IP66 | |
| Inter-fixture Connectors | Over-molded, integral male/female | |
| Maximum Run Length | 50 ft (15.24 m) total | |
| Listings | CE, RoHS, UL/cUL, WEEE | |
| Control | Line switches or ELV (electronic low voltage) commercially available dimmers. | |
| Line Voltage | 100, 120, 230, or 277 VAC | |
| Power Consumption | 14.5 W (2700 K, 10° × 60°) 13.4 W (2700 K, 30° × 60°) 14.3 W (4000 K, 10° × 60°) 14.1 W (4000 K, 30° × 60°) | 58 W (2700 K, 10° × 60°) 53.6 W (2700 K, 30° × 60°) 57.2 W (4000 K, 10° × 60°) 56.4 W (4000 K, 30° × 60°) |
| Current @ 120 V | 0.125 A | |
| Temperature Range | -4°F – 122°F (-20°C – 50°C) | |
| Humidity Range | 0 – 95% non-condensing | |
| LED Source Life | 50,000 hours, based on LED manufacturers' test data | |
| LED Classification | Class 2 LED | |



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