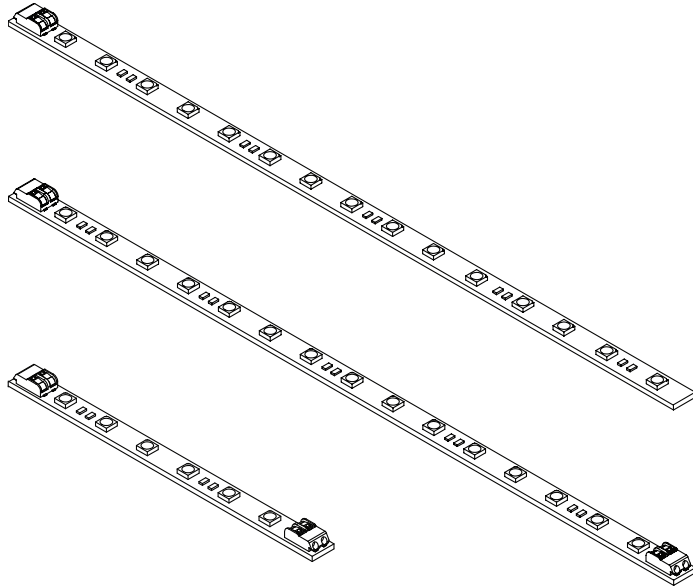


SPECIFORM[®] SEMI-RIGID CUSTOMIZABLE
LINEAR LED FIXTURE

SPECIFICATION SHEET



OVERVIEW

The ultimate solution for mass production of large-scale, commercial and residential LED linear lighting projects. SPECIFORM is perfect for those that have big plans and need lighting that is ready to install. Name your specs and we will deliver a modular, semi rigid, quick and easy to install, lighting solution that's made just for the job.

FEATURES & BENEFITS

- UL Listed
- Custom PCB designed to fit your lighting needs, ensuring maximum versatility and uniform lighting coverage.
- Completely customizable to fit perfectly within your display or retail shelving system. Specify your:
 - Product Length
 - Working Voltage (12V or 24VDC)
 - Lumen Output, CCT (Kelvin), CRI
 - Connector Type & Wire Length
 - Mounting Method
- Economical, high quality light that is easy to install with no soldering or complicated wiring.
- 5-Year Warranty

PRODUCT VARIANTS

SPECIFORM is built and sold to match the following product's specifications:

FLUID VIEW[®]

BLAZE[™]

ULTRA BLAZE[™]

Item #	
Project	

SPECIFICATIONS

Compliance & Regulatory Approvals

- UL Listed 2108. UL 1598 / CSA 250.0-08, UL 8750. UL 879 / CAN/ CSA-C22.2 no. 207-M89. E469769 (UL Listed), E469770 (SAMS Manual).

All Variant Specifications

- Input Voltage: 12VDC
- PCB Type: Semi-Rigid FR4 board
- Maximum Run Length¹: 16.4 ft.
- LED Chip Beam Angle: 120°
- CRI: 80+ (does not include Fluid View 2000K 70 CRI)
- Dimmable: Yes.
- Ambient Temperature²: -4 ~ 122°F (-20 ~ 50°C)
- Operating Temperature³: -4 ~ 176°F (-20 ~ 80°C)
- Environment⁴: Indoor / dry location.

Variants

	FLUID VIEW	BLAZE	ULTRA BLAZE
LED Chip Type	3528	3528	5050
Lumens/ft. ⁵	105-151	252-317	360-415
Power Consumption/ft	1.44W/ 120mA	2.88W/ 242mA	4.32W/ 360mA

CCT⁶

FLUID VIEW	BLAZE	ULTRA BLAZE
2000K	2400K	3000K
2400K	2700K	6300K
2700K	3000K	
3000K	3300K	
3300K	3800K	
3800K	4200K	
4200K	5000K	
5000K	6300K	
6300K		

Length⁷

- Min Fixture Length: 4 in.
- Max Fixture Length: 4 ft.

Mounting

1. VHB 3M™ 55280 Tape Adhesive
2. Magnetic Tape Adhesive

SPECIFORM MODELS

Item

DI-12V-SP-FV-CSTM

DI-12V-SP-BL-CSTM

DI-12V-SP-UB-CSTM

CONTROLS / DRIVERS / PHOTOMETRICS

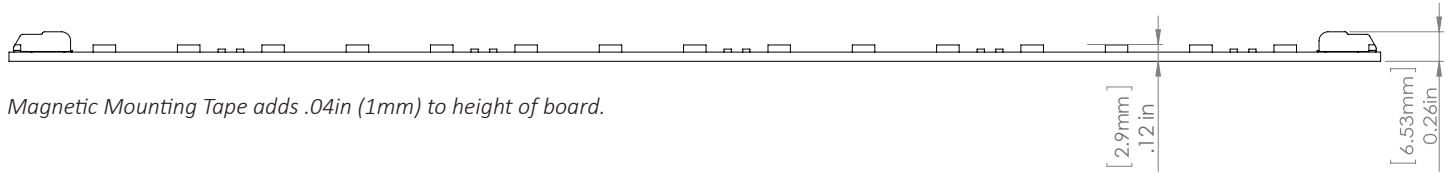
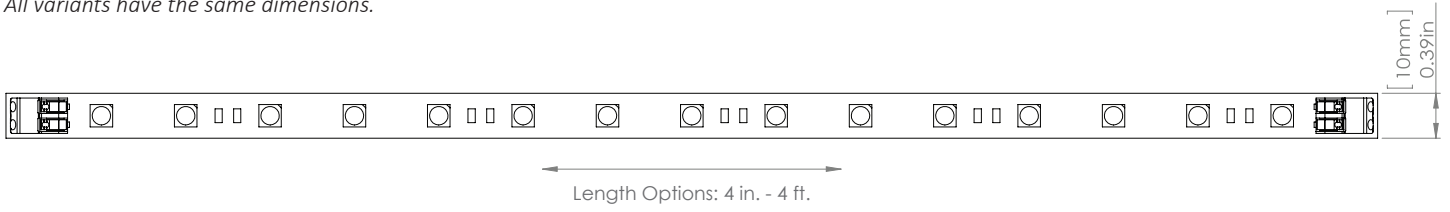
For compatible controls and drivers, refer to elementalld.com or contact customer support. SPECIFORM photometric data can be found on FLUID VIEW, BLAZE, and ULTRA BLAZE LED TAPE LIGHT Specification Sheets.

1. Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
2. Do not install product in an environment outside the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, lumen output, and/or adversely impact color consistency.
3. Operating temperature is measured according to the minimum and maximum ambient temperature environment.
4. Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will occur.
5. Lumen value varies per CCT and is measured in accordance to IES LM-79-08. LED chips have a luminous flux range with a tolerance of +/- 5%. For exact lumen values see Tape Light Specification Sheet.
6. Chip binning ranges vary based on chip type and CCT. See Tape Light Specification Sheet for all CCT binning ranges.
7. LED Chip spacing will have slight variance based on length selection.

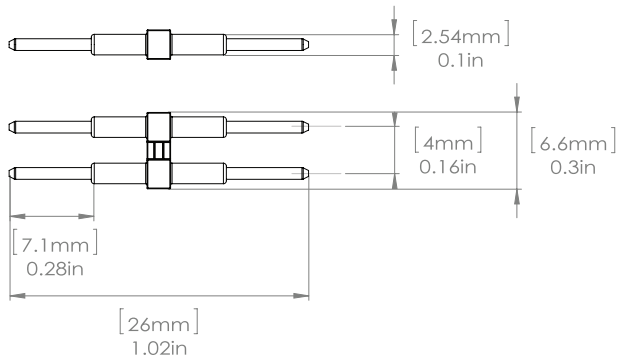
MECHANICAL DIAGRAMS

SPECIFORM

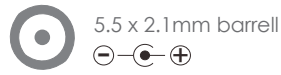
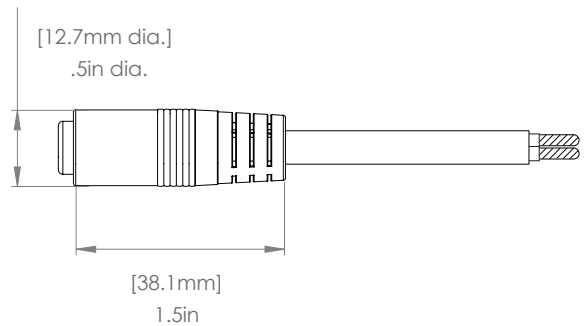
All variants have the same dimensions.



PIN CONNECTOR



FEMALE DC CONNECTOR

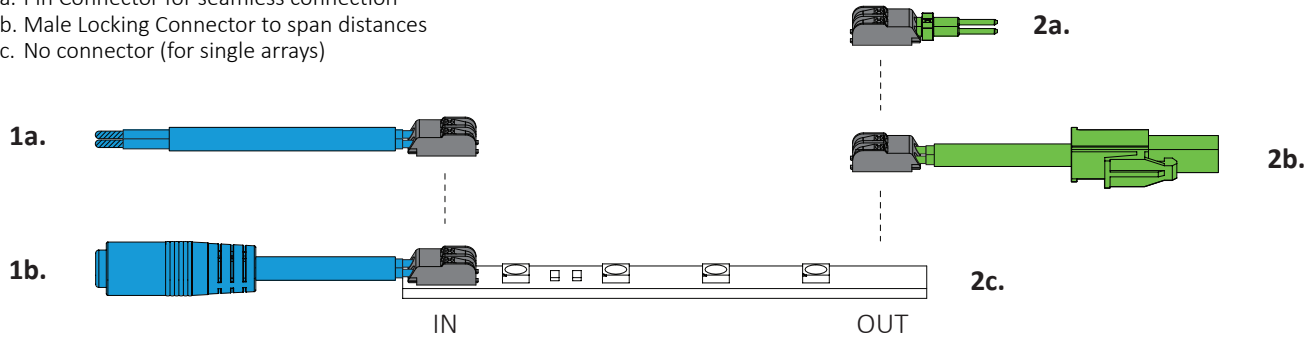


SPECIFORM BOARD & CONNECTION OPTIONS

SPECIFORM is simplified to 3 Board Options for ease of ordering. Refer to the SPECIFORM Configurator Tool at elementalld.com to build your fixture(s).

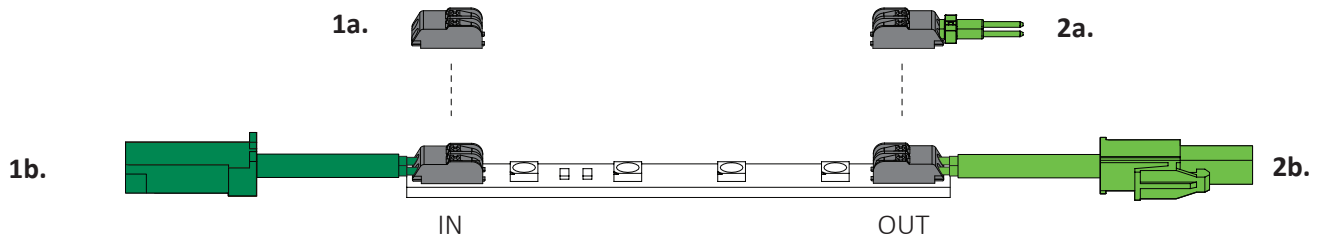
POWER BOARD*

1. Input: Choose power cord type (available in 3-42 in. lengths)
 - a. Hard-Wire Lead
 - b. Female DC Plug Connector
2. Output: Choose connection type or no connection
 - a. Pin Connector for seamless connection
 - b. Male Locking Connector to span distances
 - c. No connector (for single arrays)



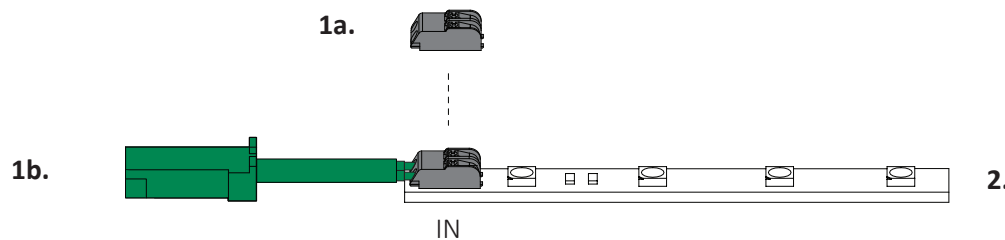
DAISY BOARD

1. Input: Choose connection type:
 - a. Pin Connector for seamless connection (Pin attached to previous board)
 - b. Female Locking Connector to span distances
2. Output: Choose connection type
 - a. Pin Connector for seamless connection
 - b. Male Locking Connector to span distances



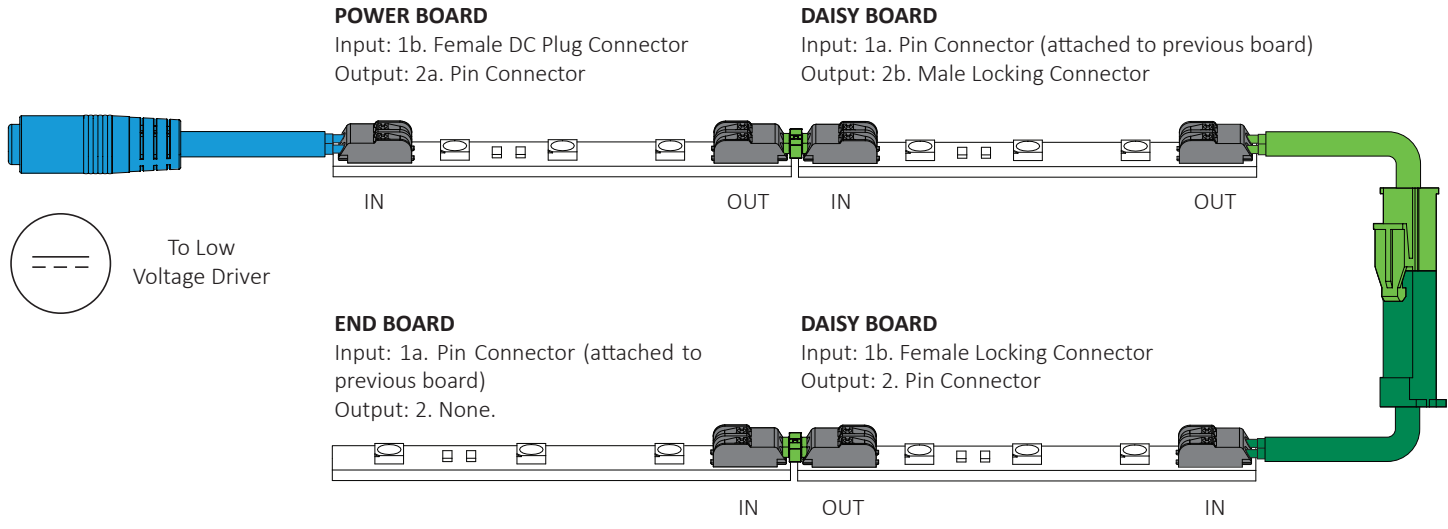
END BOARD*

1. Input: Choose connection type:
 - a. Pin Connector for seamless connection (Pin attached to previous board)
 - b. Female Locking Connector to span distances
2. Output: None. On-Board Connector is omitted to end run



* When the Output Connector is omitted, Elemental engineers will slightly adjust the chip spacing across the fixture to eliminate dark spots at end of the run. The human eye cannot perceive any difference in comparison to a Daisy-Board with chips that haven't been adjusted.

EXAMPLE SYSTEM DIAGRAM



VOLTAGE DROP CHARTS

For best performance and lumen output, ensure proper wire gauge is installed to compensate for voltage drop of low voltage circuits.

18/2 MAX WIRE GAUGE
 Maximum wire gauge for On-Board connector is 18/2AWG. If a heavier gauge is required to compensate for voltage drop the SPECIFORM lead would need to be connected via a small junction box or wire box.

Example: 12V Voltage Drop & Wire Length Distance Chart

Wire Gauge	10 W .83 A	20 W 1.7 A	30 W 2.5 A	40 W 3.3 A	50 W 2.1 A	60 W 4.2 A
18 AWG	34 ft.	17 ft.	11 ft.	8 ft.	6 ft.	5 ft.
16 AWG	54 ft.	27 ft.	18 ft.	13 ft.	10 ft.	9 ft.
14 AWG	86 ft.	43 ft.	29 ft.	21 ft.	17 ft.	14 ft.
12 AWG	134 ft.	68 ft.	45 ft.	34 ft.	27 ft.	22 ft.
10 AWG	199 ft.	99 ft.	66 ft.	49 ft.	39 ft.	33 ft.

③ It's recommended to install 12 AWG to eliminate excess voltage drop.

- ① Determine load size. Let's assume load is 55 W. Round up to nearest load.
- ② Determine distance from driver to load. Let's assume the distance is 20 ft.

12V Voltage Drop & Wire Length Distance Chart

Wire Gauge	10 W .83 A	20 W 1.7 A	30 W 2.5 A	40 W 3.3 A	50 W 2.1 A	60 W 4.2 A
18 AWG	34 ft.	17 ft.	11 ft.	8 ft.	6 ft.	5 ft.
16 AWG	54 ft.	27 ft.	18 ft.	13 ft.	10 ft.	9 ft.
14 AWG	86 ft.	43 ft.	29 ft.	21 ft.	17 ft.	14 ft.
12 AWG	134 ft.	68 ft.	45 ft.	34 ft.	27 ft.	22 ft.
10 AWG	199 ft.	99 ft.	66 ft.	49 ft.	39 ft.	33 ft.

SAFETY / WARNINGS / DISCLOSURES

1. Install in accordance with national and local electrical code regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. This product requires a compatible Class 2 LED driver for proper configuration. Do not connect directly to high voltage 120~277V AC power.
4. It is generally recommended to load the driver no more than 80% the labeled rating for maximum performance and longevity. However, see each driver specification sheet for exact minimum and maximum loading values.
5. Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
6. Ensure applicable wire is installed between driver, fixture, and any controls in-between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.). Inadequate wire installation could overheat wires, and cause fire.
7. Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will occur.
8. Do not modify product beyond instructions or warranty will be void.
9. Actual color may vary from what is pictured on this sheet and other print materials due to the limitations of photographic processes.
10. We reserve the right to modify and improve the design of our fixtures without prior notice. We cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.

WARRANTY

Limited Warranty

This product has a five (5) year limited warranty from the date of shipment. This warranty does not include the additional accessories referenced in this specification sheet. Complete warranty details for fixtures and additional accessories are available at www.elementaled.com under the 'Policies' page. For warranty related questions please contact product support.

Consumer's Acknowledgment

Elemental LED, Inc. stands behind its products when they are used properly and according to our specifications. By purchasing our products, the purchaser agrees and acknowledges that lighting design, configuration and installation is a complex process, wherein seemingly minor factors or changes in layout and infield adjustments can have a significant impact on an entire system. Choosing the correct components is essential. Elemental LED is able to work with the original purchaser to make an appropriate product selection to the extent of the limited information that the customer can provide, but it is virtually impossible for Elemental LED to design a system that foresees every unknown factor. For this reason, this Warranty does not cover problems caused by improper design, configuration or installation issues. Any statement from a Elemental LED employee or agent regarding a customer's bill of goods and/or purchase order is NOT an acknowledgment that the products purchased are designed and configured correctly. The purchase agrees and acknowledges that it is the customer's responsibility to adhere strictly to all information contained in the Product Specification Sheets.

There is often more than one way to design, configure and layout an LED lighting application properly to achieve the same lighting effect. Elemental LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Elemental LED products. The specifications include important information that a designer and installer should carefully review and strictly follow. Qualified designers and certified and/or licensed installers, with access to the final installation environment, customer goals, and Elemental LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.

