Firefly
LIGHTING

FloppyFlex® F2008

VARIABLE COLOUR IN-GROUND LED NEON

INDOOR OUTDOOR

UV STABILISED

24V EXTRA LOW VOLTAGE

OUTDOOR IP RATED

COMMERCIAL GRADE

VANDAL RESISTANT

PRESSURE RATED

GREEN FRIENDLY

SILICONE
5 YEAR WARRANTY

EDITION 1 - 2023

FloppyFlex® F2008 A/E/D

RGB / RGBW / DYNAMIC WHITE
VARIABLE COLOUR IN-GROUND LED NEON

INDOOR OUTDOOR · UV STABILISED · 24V EXTRA LOW VOLTAGE · OUTDOOR IP RATED · COMMERCIAL GRADE · VANDAL RESISTANT · PRESSURE RATED · GREEN FRIENDLY · SILICONE 5 YEAR WARRANTY

F2008 LED Strip
6mm
15.5mm
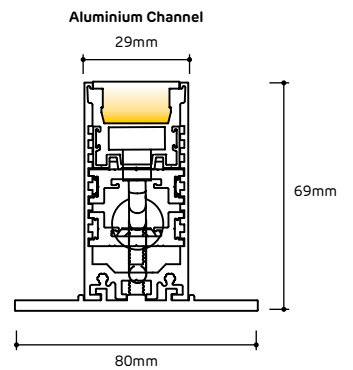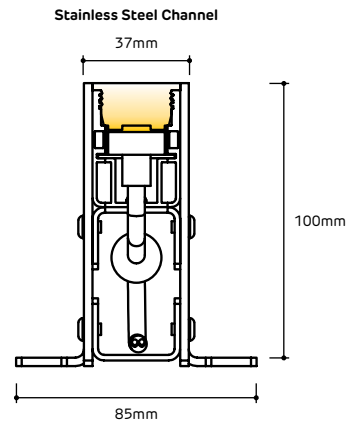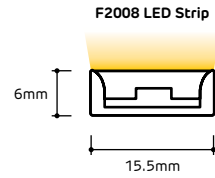
Stainless Steel Channel
37mm
100mm
85mm

Aluminium Channel
29mm
69mm
80mm
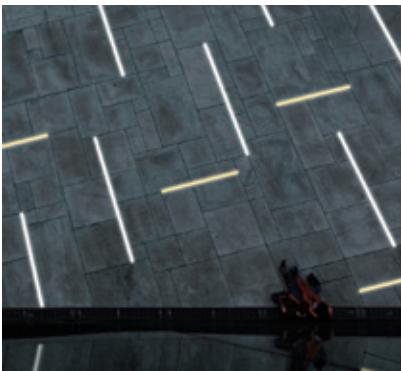
FloppyFlex F2008 is a flexible 24V LED neon strip controlled via DMX decoder. It features a rich, vibrant variable colour palette with RGB / RGBW or Dynamic White LEDs. A choice of 2mm or 3mm stainless steel In-Ground drive-over channels, or aluminium walk-over channels.

FEATURES

83.34 mm cuttable units

Super bright with homogenous lighting surface

Seamless colour mixing, beautiful dimming via FloppyDrive or DMX decoder

Wide range of accessories for joining, terminating, mounting, powering

Easy to use and install

Unlimited and unprecedented possibilities

APPLICATIONS

Installation, architectural, theme parks, place making, public squares, and scenic elements.

AVAILABLE CONNECTORS

Injection Molded Power Feed and End cap connectors, fully customizable for no-hassle installations. Silicone IP67.

RESISTANCE AND PROTECTIONS

Flame Resistant
UV Resistant
Solvents Resistant
Saltwater Resistant
IP67 Protection
IK08-10 Protection

CERTIFICATIONS

With factory-installed connectors. cULus Listed, CE, TUV and RoHS compliant and passes rigorous environmental, optical, mechanical, and electrical testing.

FloppyFlex® F2008 A

RGB
VARIABLE COLOUR LED NEON

FIREFLY LIGHTING
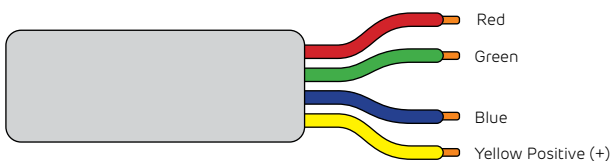**Phone** +61 7 3254 4333
Email sales@fireflylighting.com.au
Address 9/29 Links Ave North, Eagle Farm.
Brisbane QLD 4009 Australia
www.fireflylighting.com.au

Part Number	SLN-F2008A			
Type	Dimmable Variable Colour			
Colour	RGB			
Colour/CCT	**Red**	**Green**	**Blue**	**R+G+B**
Wavelength	618-624nm	522-528nm	468-474nm	-
Lumen/m	45	130	20	195
Beam Angle, Average (50%)	151.1°			
Number of Units Per Metre	12			
LED Quantity Per Unit	6			
LED Quantity Per Metre	84			
Base Color	White base standard			
Housing	Silicone			
Standard Lengths	204mm, 504mm, 1004mm			
Minimum Cutting Length	83.3mm			
Connectors & Hardware	Factory molded connectors / Stainless Steel mounting channels / Aluminium mounting channels			
Operating Voltage	24V DC			
Wiring	4-Wire			
Power Consumption	12 W/m			
Max Run Lengths	Single end feed	15 m Dynamic Operation		
		10 m Full Static Load		
	Double end feed	30 m Dynamic Operation		
		20 m Full Static Load		
Control	DMX-512/Ethernet via ProPlex BuckBoost System, DMX-512 via FloppyDrive 4X2 or DMX decoder			
Installation Temperature	-40 to 50 °C			
Operating Temperature	-40 to 55 °C			
Mounting Surface Temperature	85 °C Max.			
Storage Temperature	-40 to 60 °C			
Ingress Protection	IP67 with Factory Molded connectors			
Listing	UL2108 Class 2, CE-EMC, IS 10322			
Warranty	5 Years			

WIRE LEGEND

Red
Green
Blue
Yellow Positive (+)

FloppyFlex® F2008 E

RGBW
VARIABLE COLOUR LED NEON

FIREFLY LIGHTING
Phone +61 7 3254 4333
Email sales@fireflylighting.com.au
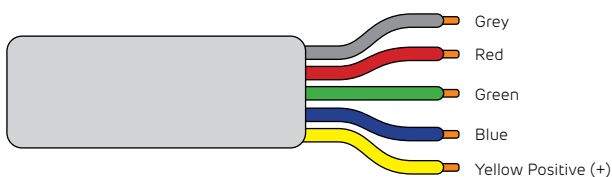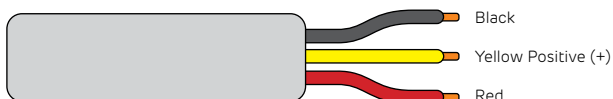**Address** 9/29 Links Ave North, Eagle Farm.
Brisbane QLD 4009 Australia
www.fireflylighting.com.au

Part Number	SLN-F2008E			
Type	Dimmable Variable Colour			
Colour	RGB			
Colour/CCT	**Red**	**Green**	**Blue**	**R+G+B**
Wavelength	618-624nm	522-528nm	468-474nm	2725 ± 145K
Lumen/m	45	130	20	115
Beam Angle, Average (50%)	151.1°			
Number of Units Per Metre	12			
LED Quantity Per Unit	6			
LED Quantity Per Metre	84			
Housing	Silicone			
Standard Lengths	204mm, 504mm, 1004mm			
Minimum Cutting Length	83.3mm			
Connectors & Hardware	Factory molded connectors / Stainless Steel mounting channels / Aluminium mounting channels			
Operating Voltage	24V DC			
Wiring	4-Wire			
Power Consumption	12 W/m			
Max Run Lengths	Single end feed	12 m Dynamic Operation		
		8 m Full Static Load		
	Double end feed	24 m Dynamic Operation		
		16 m Full Static Load		
Control	DMX-512/Ethernet via ProPlex BuckBoost System, DMX-512 via FloppyDrive 5X2 or DMX decoder			
Installation Temperature	-40 to 50°C			
Operating Temperature	-40 to 45 °C			
Mounting Surface Temperature	85 °C Max.			
Storage Temperature	-40 to 60 °C			
Ingress Protection	IP67 with Factory Molded connectors			
Listing	UL2108 Class 2, CE-EMC			
Warranty	5 Years			

WIRE LEGEND

Grey
Red
Green
Blue
Yellow Positive (+)

FloppyFlex® F2008 D

DYNAMIC WHITE
VARIABLE WHITE LED NEON

Part Number	SLN-F2008D			
Type	Dimmable Variable White			
Colour	Dynamic White 2200K-5700K			
Colour/CCT	**Warm White 2200K**	**Cool White 5700K**	**Warm White 2200K**	**Cool White 6500K**
CCT Tolerance	2238±102K	5669±355K	2238±102K	6669±355K
CRI	80	80	80	80
Lumen/m	130	130	170	180
Beam Angle, Average (50%)	147.9°			
Number of Units Per Metre	12			
LED Quantity Per Unit	6			
LED Quantity Per Metre	84			
Housing	Silicone			
Standard Lengths	204mm, 504mm, 1004mm			
Minimum Bend Diameter	120 mm			
Connectors & Hardware	Factory molded connectors / Stainless Steel mounting channels / Aluminium mounting channels			
Operating Voltage	24V DC			
Wiring	3-Wire			
Power Consumption	12 W/m			
Max Fixture Runs	Single end feed	30 m Dynamic Operation		
		15 m Full Static Load		
	Double end feed	60 m Dynamic Operation		
		30 m Full Static Load		
Control	DMX-512/Ethernet via ProPlex BuckBoost System, DMX-512 via FloppyDrive 3X2 or DMX decoder			
Installation Temperature	-40 to 50 °C			
Operating Temperature	-40 to 55 °C			
Mounting Surface Temperature	85 °C Max.			
Storage Temperature	-40 to 60 °C			
Ingress Protection	IP67 with Factory Molded connectors			
Listing	UL2108 Class 2, CE-EMC			
Warranty	5 Years			

WIRE LEGEND

Black
Yellow Positive (+)
Red

FloppyFlex® F2008 B

SINGLE COLOUR

Part Number	SLN-F2008B-22	SLN-F2008B-27	SLN-F2008B-30	SLN-F2008B-35	SLN-F2008B-40	SLN-F2008B-57
Type	Dimmable Fixed White					
Colour/CCT	2200K	2700K	3000K	3500K	4000K	5700K
CCT Tolerance	2000±10K	2300±110K	2500±120K	3045±175K	4265±245K	4200±275K
CRI	80					
Lumen/m	280	325	345	355	355	345
Cutting Increments	83.34mm					
Number of Units Per Metre	12					
LED Quantity Per Unit	7					
LED Quantity Per Metre	84					
Base Colour	Transperant					
Housing	Silicone					
Standard Lengths	204mm, 504mm, 1004mm					
Minimum Bend Diameter	120 mm					
Connectors & Hardware	Factory molded connectors / Stainless Steel mounting channels / Aluminium mounting channels					
Operating Voltage	24V DC					
Wiring	2-Wire					
Power Consumption	12 W/m					
Max Fixture Runs	Single end feed	15 m Full Static Load				
	Double end feed	30 m Full Static Load				
Control	DMX-512/Ethernet via ProPlex BuckBoost System, DMX-512 via FloppyDrive 3X2 or DMX decoder					
Installation Temperature	≥ -40°C					
Operating Temperature	-40 to 55 °C					
Mounting Surface Temperature	85 °C Max.					
Storage Temperature	-40 to 60 °C					
Ingress Protection	IP68 with Factory Molded connectors					
Listing	UL2108 Class 2, CE-EMC					
Warranty	5 Years					

WIRE LEGEND

Black

Red Positive (+)

FloppyFlex® F2008 A/E/D
DRIVERS

Mean Well 24 VDC LED Drivers

- High efficiency 24VDC LED drivers in DIN Rail and stand-alone with multiple wattage configurations
- IP-rated units available
- Fixed or dimmable output. Dimming available via 1-10VDC, 10V PWM signal, resistance, or built-in potentiometer

FloppyDrive DIN Rail Mount

- DMX dimming for 24V LED Tapes, Neons, and other low voltage systems of all types. Perfect for FloppyFlex
- Two 24V 2-, 3-, 4-, or 5-wire outputs
- Addressing, monitoring and reporting of all functions, via RDM
- 1200Hz flicker-free refresh rate
- Pluggable Terminal Block (PTB) screw terminals for bare-wire, installation flexibility

  More information and full specification sheets at https://tmb.com/proplex-floppydrives

L-TECH 4 channel DMX Decoder

- DMX dimming for 24V LED Tapes, Neons, and other low voltage systems of all types. Perfect for FloppyFlex
- One 24V 5-wire output
- Addressing via RDM or built in DIP switches
- Pluggable Terminal Block (PTB) screw terminals for bare-wire, installation flexibility
- Realises 0-100% dimming or different lighting effects.
- Works with DIM, CT, RGB, RGBW LEDs

L-TECH 3 channel DMX Decoder

- DMX dimming for 24V LED Tapes, Neons, and other low voltage systems of all types. Perfect for FloppyFlex
- One 24V 4-wire output
- Addressing via RDM or built in DIP switches
- Pluggable Terminal Block (PTB) screw terminals for bare-wire, installation flexibility
- Realises 0-100% dimming or different lighting effects.
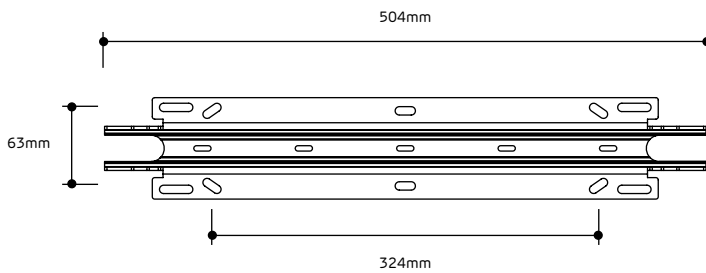- Works with DIM, CT, RGB LEDs
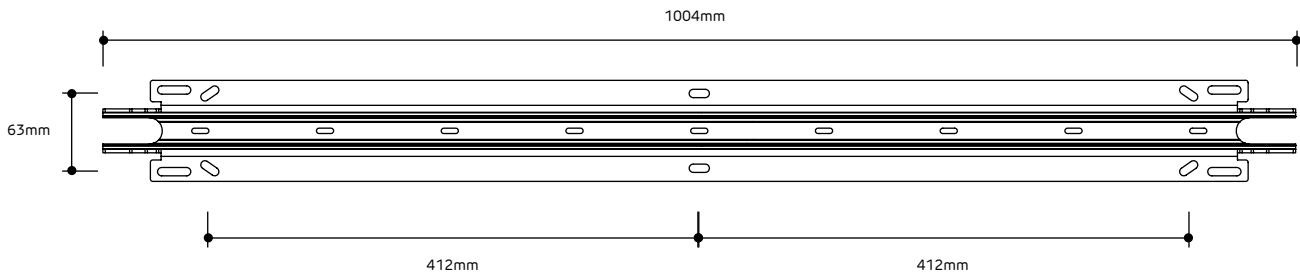
FloppyFlex® F2008

3MM STAINLESS STEEL CHANNEL

2mm Steel Channel

37mm

100mm

85mm
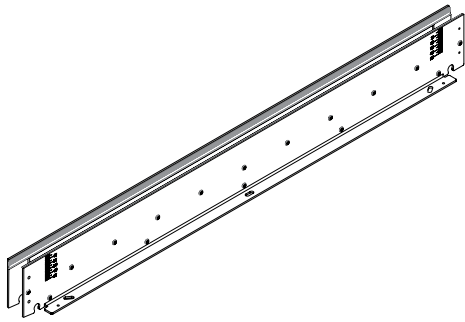
Product Code: LNCH-F2008-IG3-05

504mm

63mm

324mm

Product Code: LNCH-F2008-IG3-1

1004mm

63mm

412mm

412mm
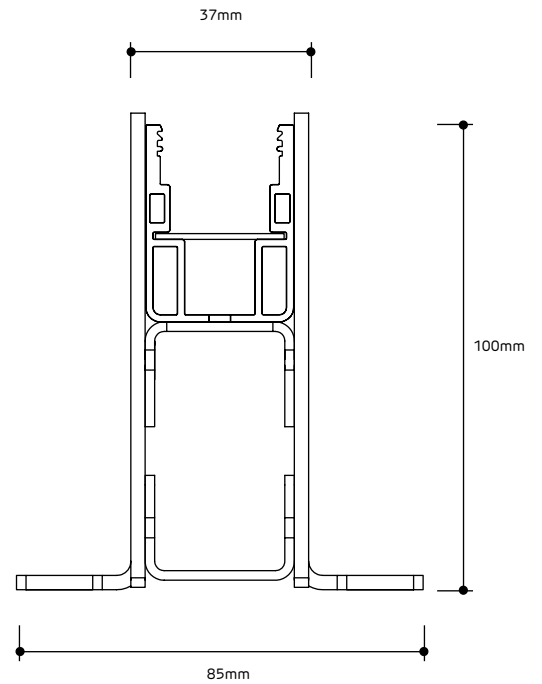
3mm Stainless Steel In-Ground Channel can be used to securely house FloppyFlex F2008. 3mm thick 316 Stainless Steel construction holds the FloppyFlex neon firmly in extreme pressure conditions with an IK10 rating. Suitable for both drive-over and walk-over applications.
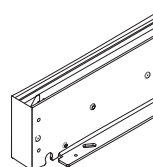
3mm Stainless Steel	
Housing Material	3mm thick 316 Stainless Steel
Max Static Load	10000kg/0.5m
Usage	Drive-over or walk over
IP rating	IP67
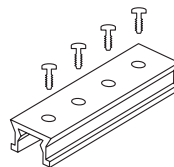
Joining Bracket

Each length of In-Ground channel can be extended up to the maximum length of the FloppyFlex F2008. 2 x Joining Brackets are required for each additional length required. Product Code: **LNCH-IG/JB**
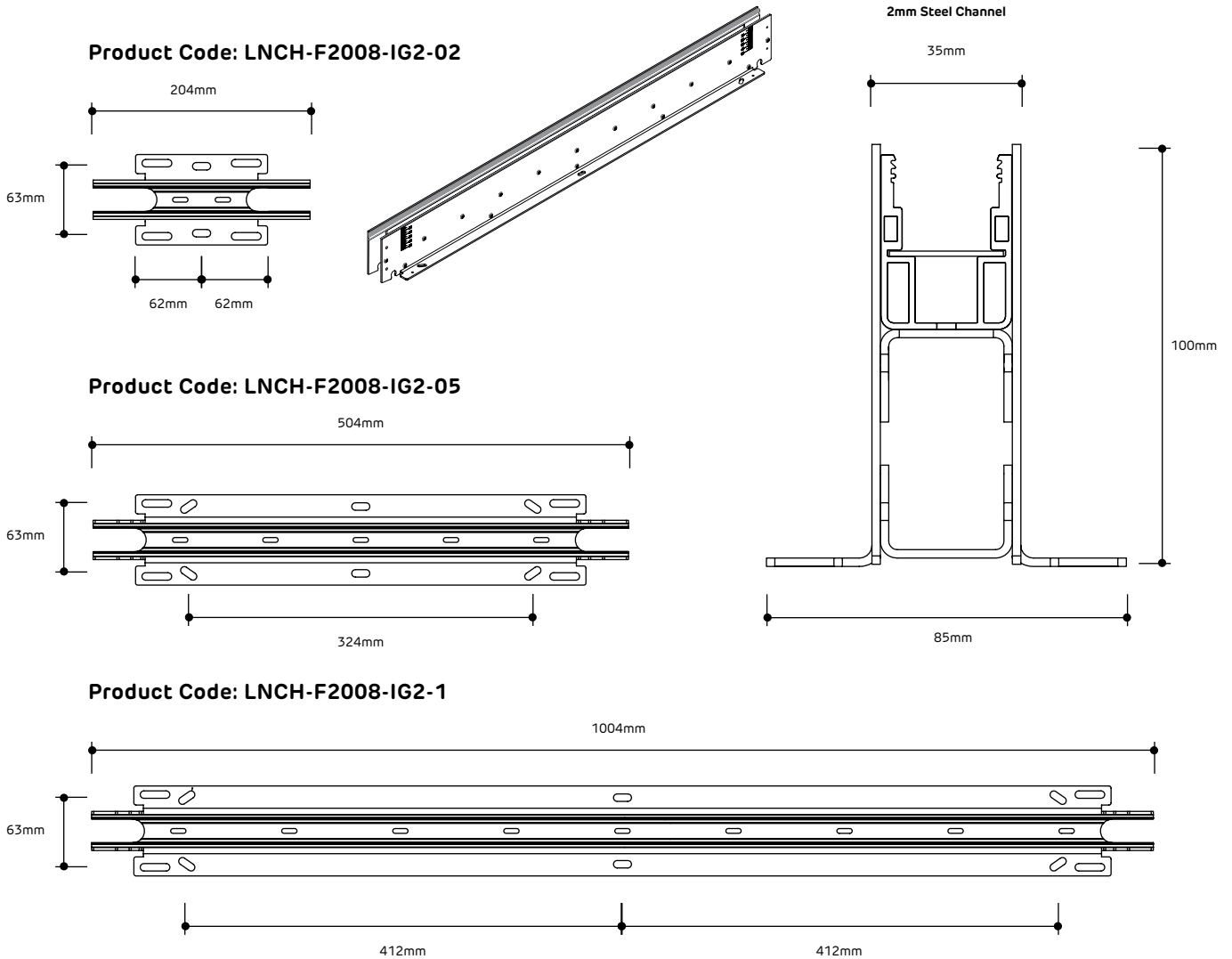
End Cap

Each continuous length of In-Ground channel requires 2 x End Caps to be fitted to ensure there's no concrete ingress. Product Code: **LNCH-IG/EC**

FloppyFlex® F2008

2MM STAINLESS STEEL CHANNEL

Product Code: LNCH-F2008-IG2-02

204mm
63mm
62mm   62mm

2mm Steel Channel

35mm
100mm
85mm

Product Code: LNCH-F2008-IG2-05

504mm
63mm
324mm

Product Code: LNCH-F2008-IG2-1

1004mm
63mm
412mm   412mm

2mm Stainless Steel In-Ground Channel can be used to securely house FloppyFlex F2008. 2mm thick 316 Stainless Steel construction holds the FloppyFlex neon firmly in extreme pressure conditions with an IK10 rating. Suitable for both car only drive-over and walk-over applications.
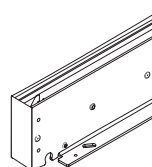
2mm Stainless Steel	
Housing Material	2mm thick 316 Stainless Steel
Max Static Load	8000kg/0.5m
Usage	Car only Drive-over or walk over
IP rating	IP67
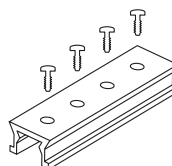
Joining Bracket

Each length of In-Ground channel can be extended up to the maximum length of the FloppyFlex F2008. 2 x Joining Brackets are required for each additional length required. Product Code: **LNCH-IG/JB**
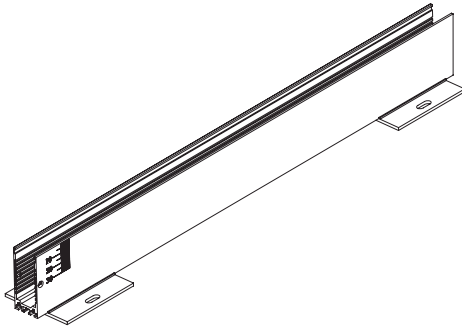
End Cap

Each continuous length of In-Ground channel requires 2 x End Caps to be fitted to ensure there's no concrete ingress. Product Code: **LNCH-IG/EC**
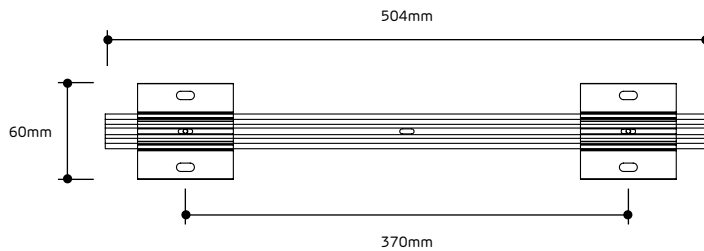
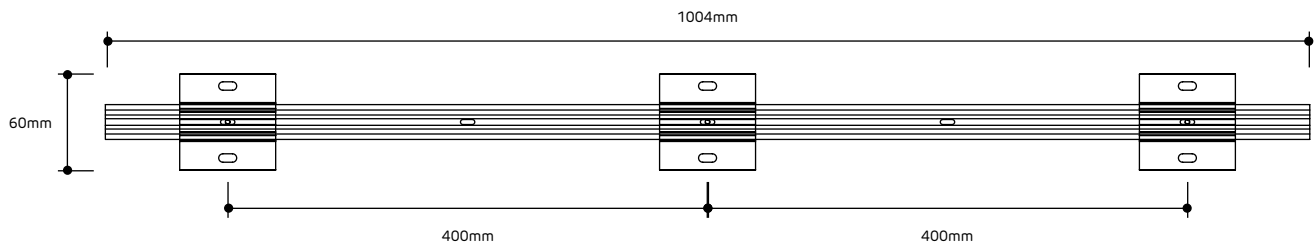# FloppyFlex® F2008

ALUMINIUM CHANNEL

Aluminium Channel

29mm

69mm

80mm

Product Code: LNCH-F2008-IGA-05

504mm

60mm

370mm

Product Code: LNCH-F2008-IGA-1

1004mm

60mm

400mm

400mm
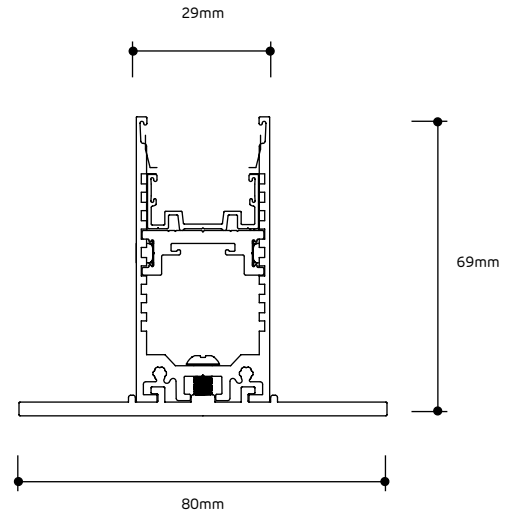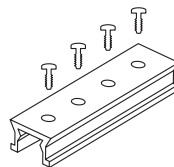
Aluminium In-Ground Channel can be used to securely house FloppyFlex F2008. 6063 Aluminium Alloy construction holds the FloppyFlex neon firmly in extreme pressure conditions with an IK10 rating. Suitable for walk-over applications.

Aluminium	
Housing Material	6063 Aluminium Alloy
Max Static Load	1000kg/0.5m
Usage	Walk over only
IP rating	IP67

Joining Bracket
Each length of In-Ground channel can be extended up to the maximum length of the FloppyFlex F2008. 2 x Joining Brackets are required for each additional length required. Product Code: **LNCH-IG/JB**
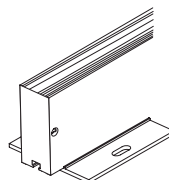
End Cap
Each continuous length of In-Ground channel requires 2 x End Caps to be fitted to ensure there's no concrete ingress. Product Code: **LNCH-IG/EC**
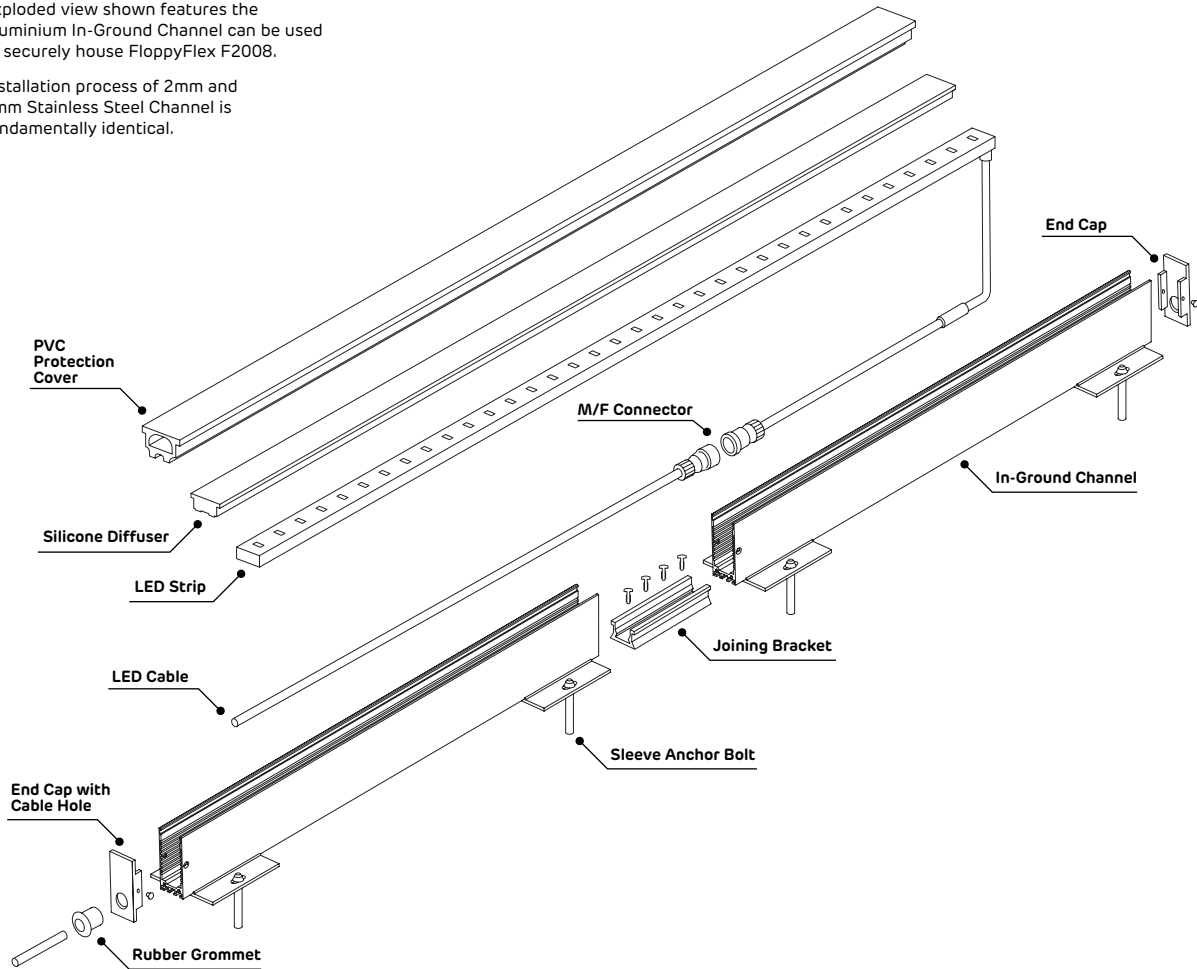
FloppyFlex® F2008

INSTALLATION GUIDE

Components

Exploded view shown features the Aluminium In-Ground Channel can be used to securely house FloppyFlex F2008.

Installation process of 2mm and 3mm Stainless Steel Channel is fundamentally identical.

End Cap

PVC Protection Cover

M/F Connector

In-Ground Channel

Silicone Diffuser

LED Strip

Joining Bracket

LED Cable

Sleeve Anchor Bolt

End Cap with Cable Hole

Rubber Grommet

- LED Cable runs through Conduit and enters channel through rubber gromet.
- M/F connection is made after concrete is poured and LED strip is laid into channel.
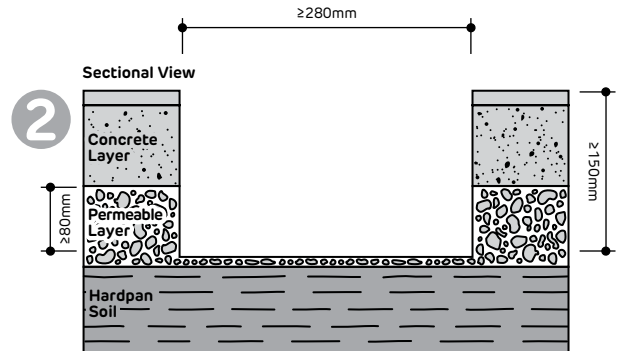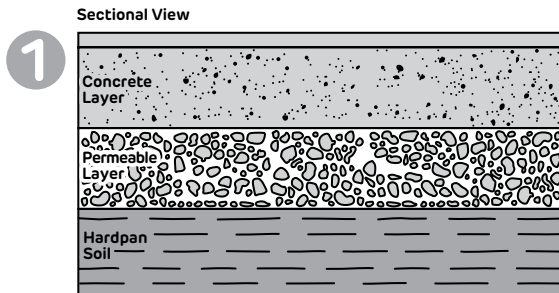
Note

- Ensure there is no electrical connection made prior to installation.
- Ensure the fixture and conduit system is grounded in accordance with Australian electrical codes.
- For optimal light output, keep the fixture surface free and clear from dirt, dust, plants, leaves or any other obstruction.
- The In-Ground channel is suitable for concrete, brick, pavers and masonry installations.
- The In-Ground channel is not suitable for any underwater environments. Adequate drainage is required.

- Avoid placement in gully or where water pools and stagnates.
- Do not cut Leader LED cable or cable attached to F2008 LED strip to ensure fixture retains its IP rating.
- The dimensions in the below installation guide are to be used as a guide only. Please adjust as required based on your foundation structure.
- The top of the In-Ground channel should align with the finished ground level after installation.
- Ensure there is adequate permeable layer to ensure water can drain appropriately.
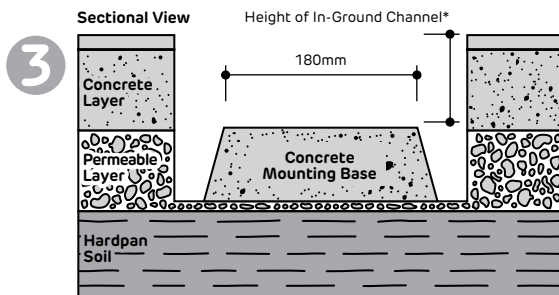
FloppyFlex® F2008

INSTALLATION GUIDE

FIREFLY LIGHTING
Phone +61 7 3254 4333
Email sales@fireflylighting.com.au
Address 9/29 Links Ave North, Eagle Farm.
Brisbane QLD 4009 Australia
www.fireflylighting.com.au

1

Sectional View

Concrete Layer
Permeable Layer
Hardpan Soil

2

≥280mm

Sectional View

≥150mm
≥80mm

Concrete Layer
Permeable Layer
Hardpan Soil

Permeable layer to be ≥100mm to ensure good drainage.

3

Sectional View

Height of In-Ground Channel*
180mm

Concrete Layer
Permeable Layer
Hardpan Soil

Concrete Mounting Base

Depth measured from surface to top of Concrete Mounting Base should be the height of the chosen In-Ground Channel. Refer pages 7-9 for measurements.

4

Sectional View

Sleeve Anchor Bolt

Concrete Layer
Permeable Layer
Hardpan Soil
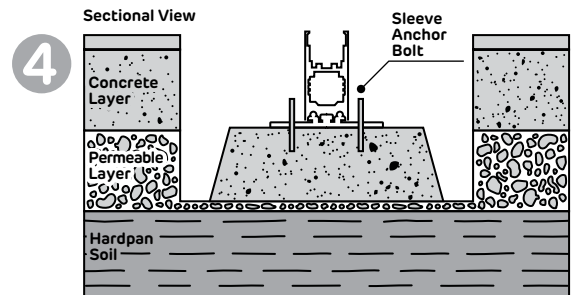
Use the sleeve anchor bolts to secure the housing to the concrete mounting base. Ensure conduit is run to cable hole and the power feed LED cable is securely inside the channel ready for attachment to F2008 LED strip after concrete has been poured.

5

PVC Protection Cover

Sectional View

Permeable Fill ≥30mm

Concrete Layer
Permeable Layer
Hardpan Soil
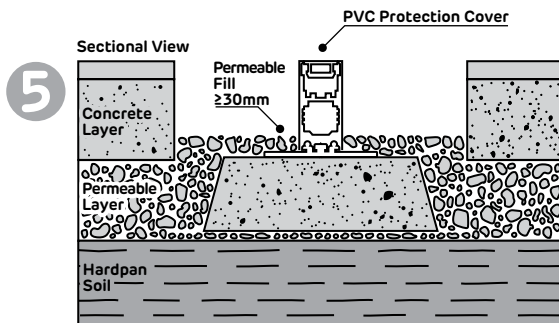
Seal the top of the housings with the PVC protection cover before pouring additional fills to ensure the inside of the channel is kept clean. Add ≥30mm of Permeable fill to ensure adequate drainage.

6

Sectional View

Concrete Layer
Permeable Layer
Hardpan Soil
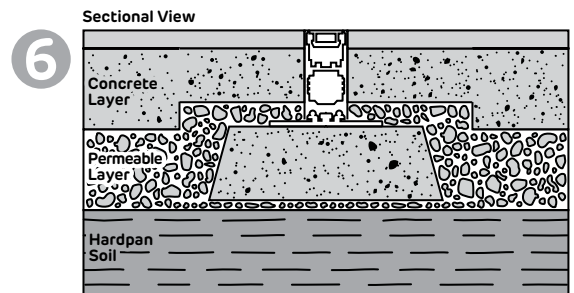
Pour concrete as required as per engineering specifications. Add finishing layer (tile, pebbelcrete etc.) as required.

7

Sectional View

Concrete Layer
Permeable Layer
Hardpan Soil
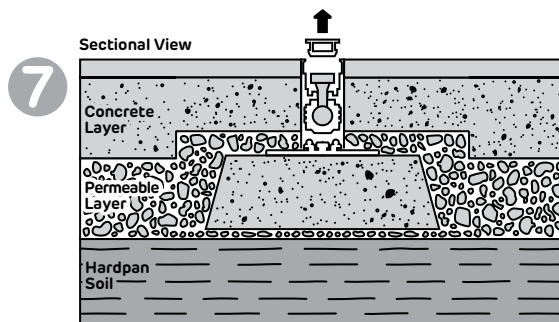
Remove PVC protection cover. Recycle as required. Lay F2008 LED strip into the channel and connect to the power feed LED cable. Check all wiring, and power up for a test cycle.

8

Sectional View

Concrete Layer
Permeable Layer
Hardpan Soil
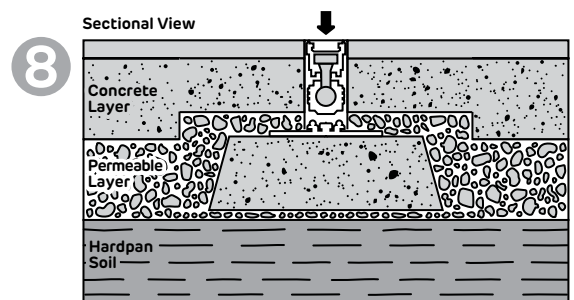
After adequate testing, seal the In Ground channel with opaque silicone diffuser.

Note: Not To Scale