



Innovative Cable Management Systems



Top 100
Global
Innovator
2021

Clarivate™

Furukawa Electric:

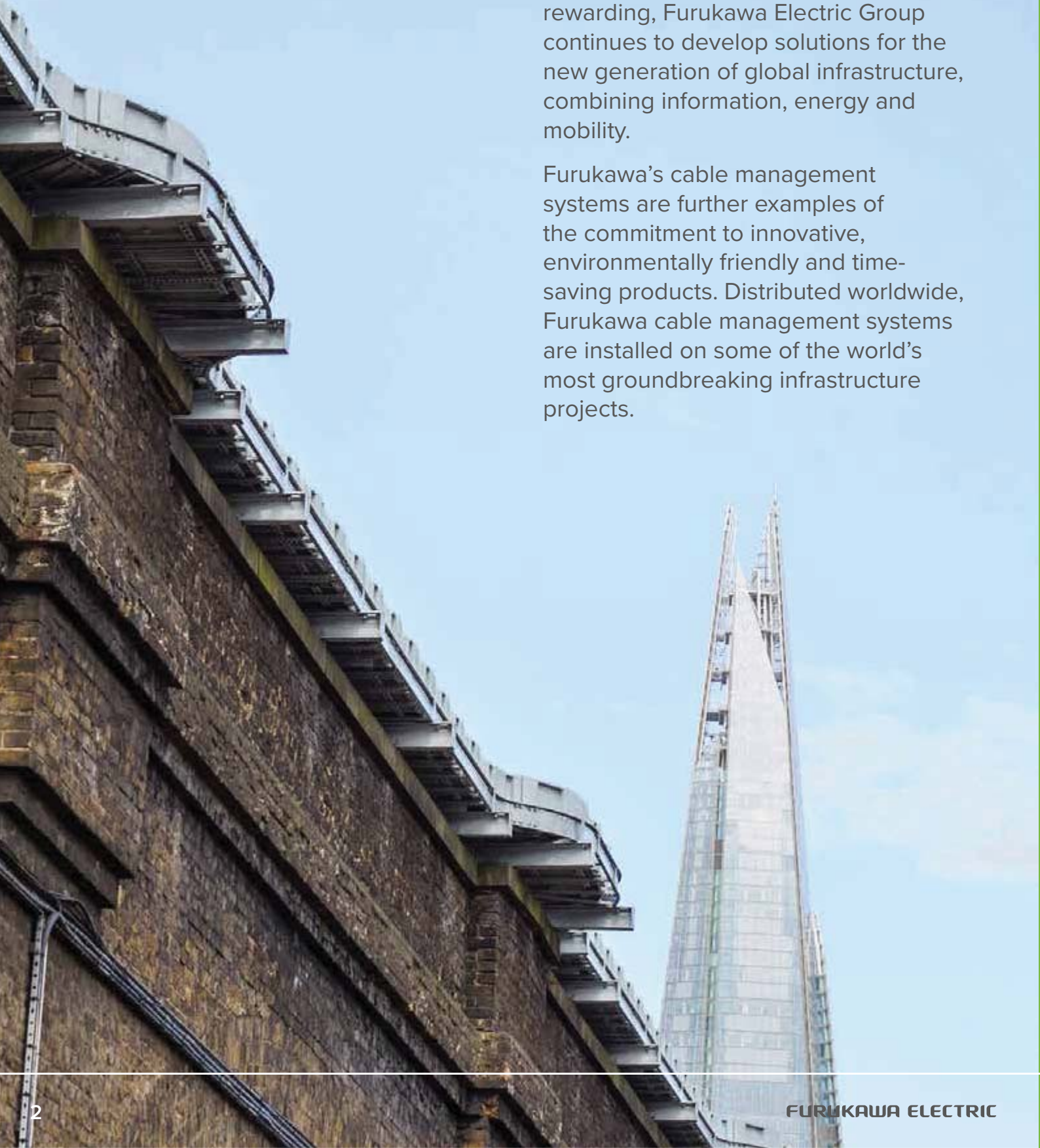
6X WINNERS

(2015, 2016, 2018,
2019, 2020, 2021)

Drawing on more than a century of expertise in the development and fabrication of advanced materials, Furukawa contributes to the realisation of a sustainable society through continuous technological innovation.

In order to build a sustainable world and make life safe, peaceful and rewarding, Furukawa Electric Group continues to develop solutions for the new generation of global infrastructure, combining information, energy and mobility.

Furukawa's cable management systems are further examples of the commitment to innovative, environmentally friendly and time-saving products. Distributed worldwide, Furukawa cable management systems are installed on some of the world's most groundbreaking infrastructure projects.





GREEN TROUGH

A FURUKAWA ELECTRIC PRODUCT

The world's most versatile
cable trough system.
Available in 6 sizes.



4,000 tonnes of recycled household plastic waste is used to make Green Trough in one year. Equivalent to 268 million average-sized plastic bottles/containers.



For details on installation methods and handling of various parts, please refer to the installation instructions for each product.

ADVANTAGES OF GREEN TROUGH

Secure Lid

A variety of lid fixings are available to suit security and access requirements.

Versatile

Straights, bends, gradients and t-junctions all available in an extensive range of sizes, together with accessories and an elevated system.

Intuitive Joint

Joint system allows for obstacles to be avoided without the need for additional accessories. Units can deviate up to 5 degrees vertically and horizontally.



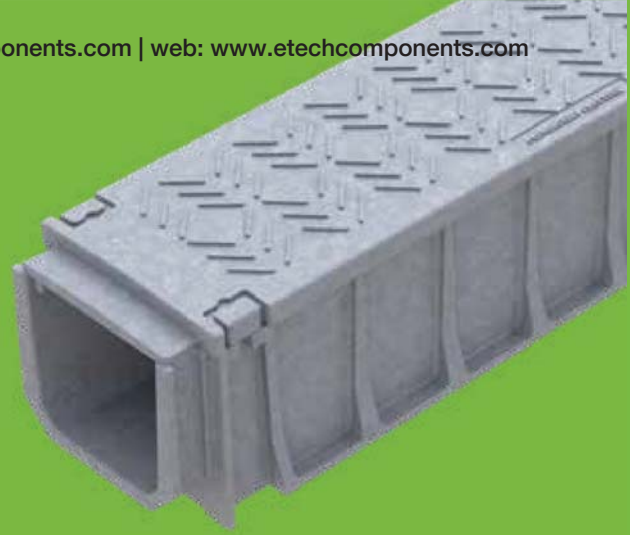
Load Bearing

Green Trough can withstand a vertical load of 10kN/m and is safe to walk on.



Extremely Durable

50+ year resistance to UV according to Furukawa's accelerated UV exposure test. Safe installation temperature range -40°C to 80°C. Green Trough's unique design allows for thermal expansion and contraction. Resistant to salt/snow melting agents and acid rain.



Impact Resistant

Green Trough sustains only superficial damage when dropped from a height of 0.7m. It can still be used even if dropped during installation as it will not crumble like concrete alternatives.

Lightweight

Approximately 70% lighter on average than conventional concrete alternatives. All Green Trough units are a 'one-man lift' for fast and safe installation.

Flame Resistant

Halogen free and complies with IEC 61084-1 'Non-flame propagating' standard. K1 according to DIN 53438.

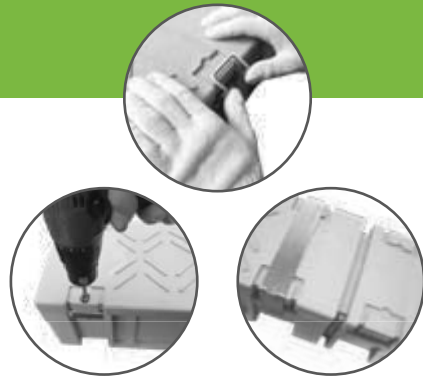
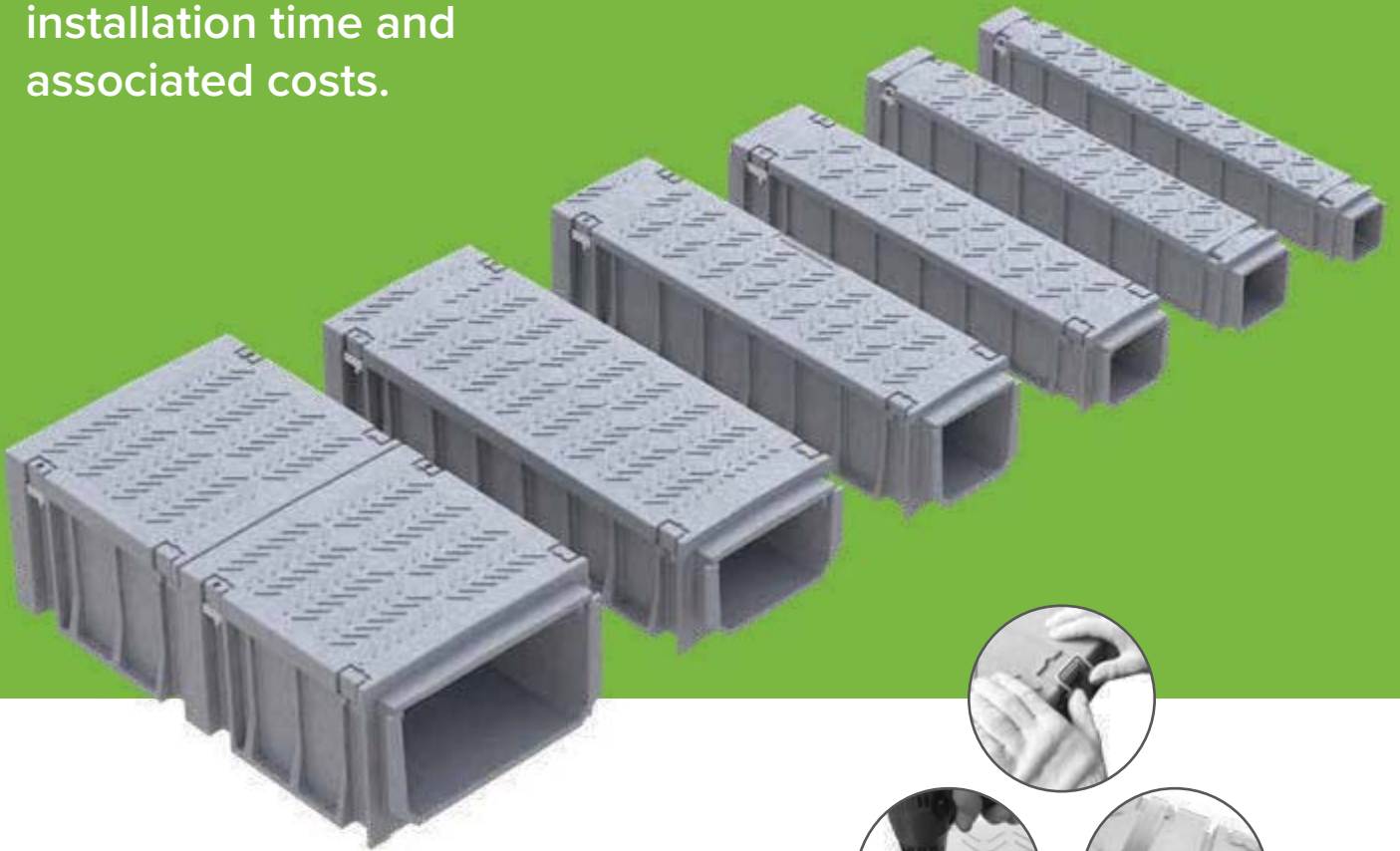


Adjustable

Most Green Trough units can be manually shortened whilst still retaining an interlocking connection. Units can be processed on site using basic hand tools, with no dust.

GREEN TROUGH PRODUCTS

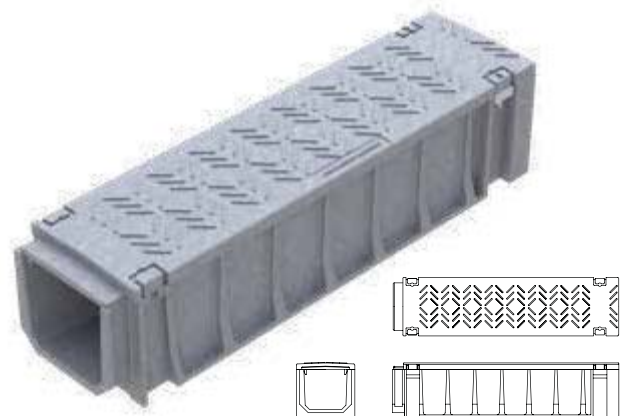
A market leading range of cable troughs and accessories, to reduce installation time and associated costs.

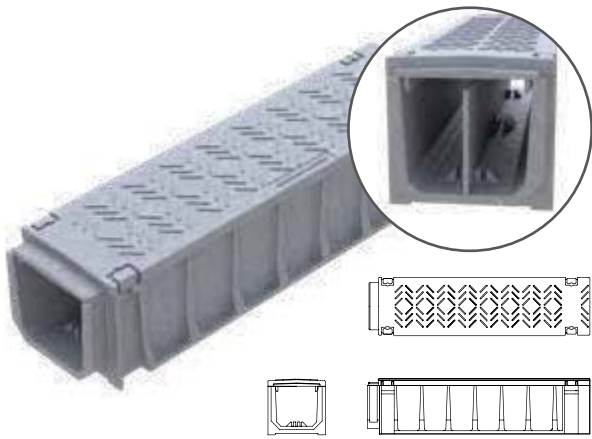


Each Green Trough series is available with a clasp, screw or band type lid fixing, to suit a variety of installations.

STRAIGHT (Standard)

Series	mm					Total Weight
	Width (Internal)	Width (External)	Height (Internal)	Height (External)	Length	
G90	90	120	100	136	1000	7
G135	135	170	125	170	1000	10
150B	160	210	135	190	1000	13
200B	200	270	185	255	1000	21
300B	300	390	175	265	1000	29
430C	450	540	255	360	500	24





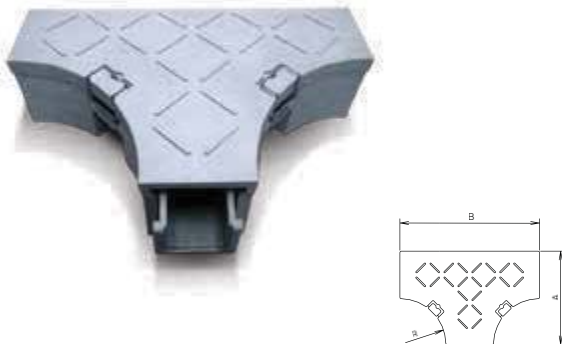
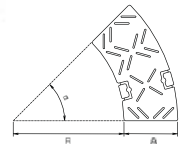
(With Divider Holders)

Series	mm				Length	kg
	Width (Internal)	Width (External)	Height (Internal)	Height (External)		
G135	135	170	125	170	1000	10
150B	160	210	135	190	1000	13
200B	200	270	185	255	1000	21
300B	300	390	175	265	1000	29
430C	450	540	255	360	500	24

*Dividers sold separately

45 DEGREE BEND UNITS

Series	mm		degrees	mm		kg
	A	a	R	Weight		
G90	120	45	350	2		
G135	170	45	350	4		
150B	210	45	350	5		
200B	270	45	350	8		
300B	390	45	350	13		
430C	540	45	350	19		

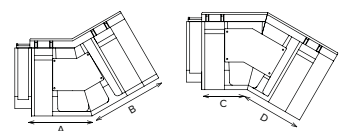


T-JUNCTION UNITS

Series	mm			kg
	A	B	R	
G90	360	600	190	6
G135	385	600	165	8
150B	355	500	145	9
200B	385	500	115	13
300B	495	600	105	21
430C	635	730	80	32

GRADIENT UNITS (Up or Down)

Series	mm		kg		mm		kg	
	A (Up)	B (Up)	Weight (Up)	C (Down)	D (Down)	Weight (Down)		
G90	300	350	4	250	300	4		
G135	300	350	7	250	300	7		
150B	300	350	8	250	300	8		
200B	200	250	10	150	200	11		
300B	200	250	13	150	200	14		
430C	200	250	17	100	150	18		



SECTORS

Green Trough is approved for numerous applications worldwide

Green Trough's extensive product range together with its excellent mechanical properties make it ideal for a wide range of installations and cable types.



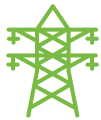
INDUSTRIAL



RAIL/LIGHT RAIL



RENEWABLE ENERGY



POWER UTILITY



TRANSPORTATION

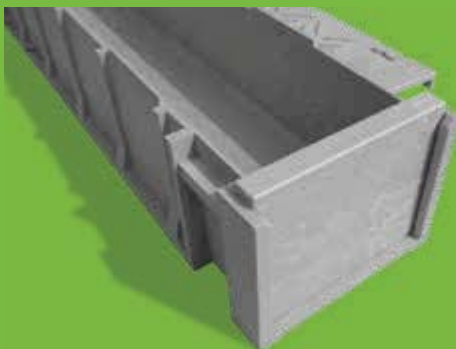


+ MORE

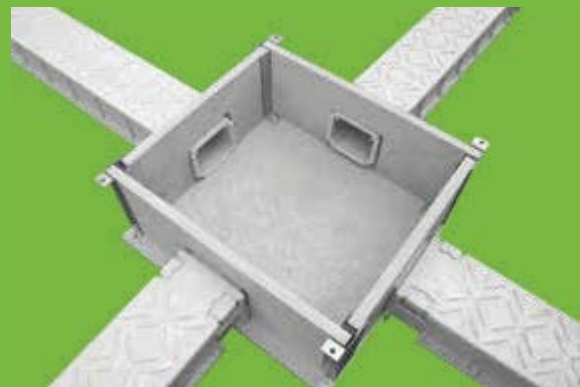


OTHER ACCESSORIES

END PLATE



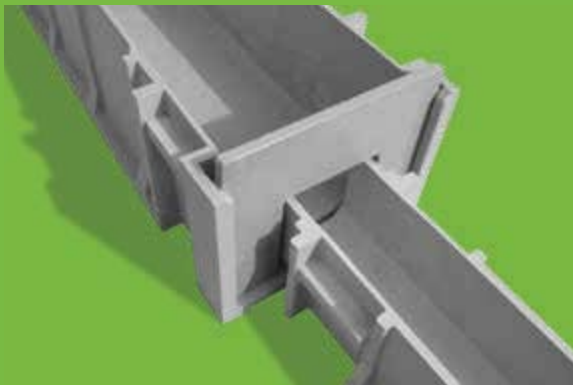
JUNCTION BOX





An extensive range of products and solutions for various types of construction sites and applications.

JOINT PLATE/REDUCER



ELEVATED BRIDGE



GREEN TROUGH VEHICLE RATED

Green Trough Vehicle Rated combines our trusted Green Trough product with a high strength lid capable of carrying the weight of large vehicles. Designed and tested to exceed industry standards, with an unmatched strength to weight ratio. Green Trough Vehicle Rated reduces installation cost and is the safer cable trench choice.

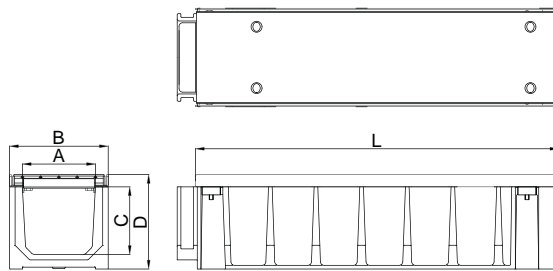
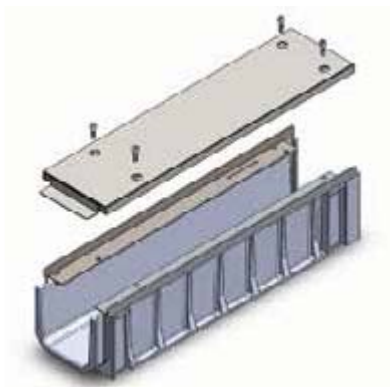
Green Trough Vehicle Rated is manufactured using a galvanized zig zag grating process that combines recycled polymer with an advanced reinforcement, creating a strong, lightweight cover that is durable under demanding loads and can be removed without heavy lifting equipment.



ADVANTAGES

- Strong (H20, HS20)
- 2-4 Degrees of Flexibility
- Connects to standard Green Trough
- Flame Resistant
- Interlocking lids
- Simple installation and access

SPECIFICATIONS



Series	Dimension (mm)					Weight (kg)		
	A	B	C	D	L	Base	Lid	Total
200B	200	270	185	259	1000	20	17	37
300B	300	390	175	267	1000	26	30	56
430C	450	540	255	363	500	20	23	43

HOW TO USE



1
Install the trough body so that the top surface is level with the ground.

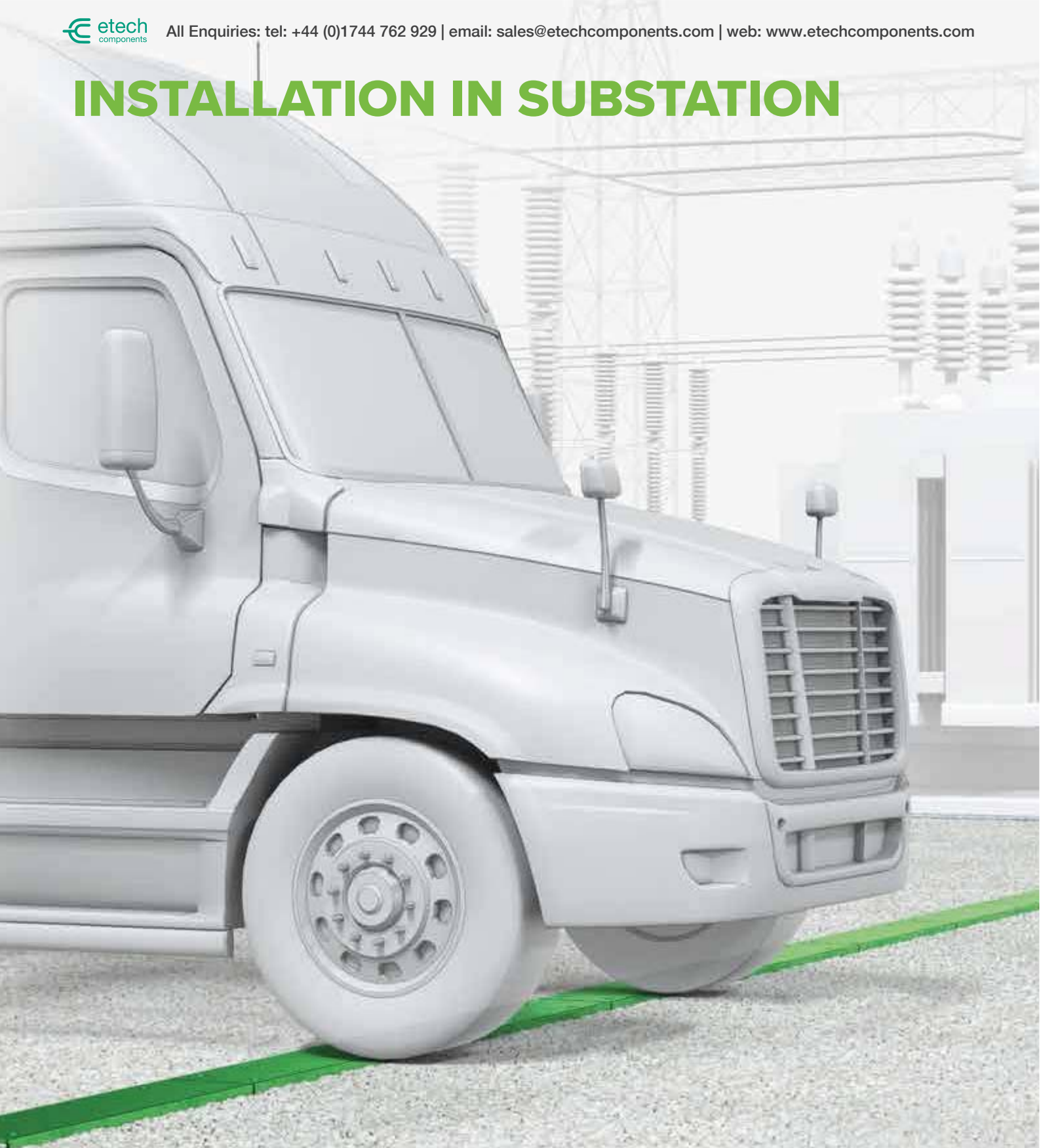


2
The lid can be installed by 2 people. Use a manhole lifter to position the lid in the trough body.



3
Secure in place with included bolts.

INSTALLATION IN SUBSTATION



- 3 times lighter than concrete trough
- Safer to transport, with fewer breakages
- Easier and cheaper to install on-site

Compared to equivalent concrete troughing systems, Green Trough Vehicle Rated is 3 times lighter

	Green Trough Vehicle Rated	Concrete Trough
Body	20kg	70kg
Lid	23kg	36kg
Combined	43kg	106kg

*Size is based on 430C

Green Trough Cable Management Systems

Green Trough vehicle rated and standard Green Trough can be used in-line without modification.

GREEN TROUGH

STRAIGHT (Standard)

	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	kg (lbs)
Size	Width (Internal)	Width (External)	Height (Internal)	Height (External)	Length	Total Weight
G90	90 (3.5)	120 (4.7)	100 (3.9)	136 (5.4)	1000 (39.4)	7 (15.4)
G135	135 (5.3)	170 (6.7)	125 (4.9)	170 (6.7)	1000 (39.4)	10 (22.0)
150B	160 (6.3)	210 (8.3)	135 (5.3)	190 (7.5)	1000 (39.4)	13 (28.7)
200B	200 (7.9)	270 (10.6)	185 (7.3)	255 (10.0)	1000 (39.4)	21 (46.3)
300B	300 (11.8)	390 (15.4)	175 (6.9)	265 (10.4)	1000 (39.4)	29 (63.9)
430C	450 (17.7)	540 (21.3)	255 (10.0)	360 (14.2)	500 (19.7)	24 (52.9)

STRAIGHT (With Divider Holders)

	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	kg (lbs)
Size	Width (Internal)	Width (External)	Height (Internal)	Height (External)	Length	Total Weight
G135	135 (5.3)	170 (6.7)	125 (4.9)	170 (6.7)	1000 (39.4)	10 (22)
150B	160 (6.3)	210 (8.3)	135 (5.3)	190 (7.5)	1000 (39.4)	13 (28.7)
200B	200 (7.9)	270 (10.6)	185 (7.3)	255 (10.0)	1000 (39.4)	21 (46.3)
300B	300 (11.8)	390 (15.4)	175 (6.9)	265 (10.4)	1000 (39.4)	29 (63.9)
430C	450 (17.7)	540 (21.3)	255 (10.0)	360 (14.2)	500 (19.7)	24 (52.9)

45 DEGREE BEND UNITS

	mm (inch)	degrees	mm (inch)	kg (lbs)
Size	A	a	R	Weight
G90	120 (4.7)	45	350 (13.8)	2 (4.4)
G135	170 (6.7)	45	350 (13.8)	4 (8.8)
150B	210 (8.3)	45	350 (13.8)	5 (11.0)
200B	270 (10.6)	45	350 (13.8)	8 (17.6)
300B	390 (15.4)	45	350 (13.8)	13 (28.7)
430C	540 (21.3)	45	350 (13.8)	19 (41.9)

T-JUNCTION UNITS

	mm (inch)	mm (inch)	mm (inch)	kg (lbs)
Size	A	B	R	Weight
G90	360 (14.2)	600 (23.6)	190 (7.5)	6 (13.2)
G135	385 (15.2)	600 (23.6)	165 (6.5)	8 (17.6)
150B	355 (14.0)	500 (19.7)	145 (5.7)	9 (19.8)
200B	385 (15.2)	500 (19.7)	115 (4.5)	13 (28.7)
300B	495 (19.5)	600 (23.6)	105 (4.1)	21 (46.3)
430C	635 (25.0)	730 (28.7)	80 (3.1)	32 (70.5)

GRADIENT UNITS (up or down)

	mm (inch)	mm (inch)	kg (lbs)	mm (inch)	mm (inch)	kg (lbs)
Size	A (Up)	B (Up)	Weight (Up)	C (Down)	D (Down)	Weight (Down)
G90	300 (11.8)	350 (13.8)	4 (8.8)	250 (9.8)	300 (11.8)	4 (8.8)
G135	300 (11.8)	350 (13.8)	7 (15.4)	250 (9.8)	300 (11.8)	7 (15.4)
150B	300 (11.8)	350 (13.8)	8 (17.6)	250 (9.8)	300 (11.8)	8 (17.6)
200B	200 (7.9)	250 (9.8)	10 (22.0)	150 (5.9)	200 (7.9)	11 (24.3)
300B	200 (7.9)	250 (9.8)	13 (28.7)	150 (5.9)	200 (7.9)	14 (30.9)
430C	200 (7.9)	250 (9.8)	17 (37.5)	100 (3.9)	150 (5.9)	18 (39.7)

GREEN TROUGH VEHICLE RATED

	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	kg (lbs)	kg (lbs)	kg (lbs)
	A	B	C	D	L	Base	Lid	Total
200B	200 (7.9)	270 (10.6)	185 (7.3)	259 (10.2)	1000 (39.4)	20 (44.1)	17 (37.5)	37 (81.6)
300B	300 (11.8)	390 (15.4)	175 (6.9)	267 (10.5)	1000 (39.4)	26 (57.3)	30 (66.1)	56 (123.5)
430C	450 (17.7)	540 (21.3)	255 (10.0)	363 (14.3)	500 (19.7)	20 (44.1)	23 (50.7)	43 (94.8)

	kg (lbs)	kg (lbs)
	Green Trough Vehicle Rated	Concrete Trough
Body	20 (44.1)	70 (154.3)
Lid	23 (50.7)	36 (79.4)
Combined	43 (94.8)	106 (233.7)