OVERVIEW

Green Trough is an environmentally friendly cable management system, designed to aid in the installation of cable routes for a variety of applications.

The information contained in this document is intended as a guide to ensure safe and successful use of the Green Trough product.

For detailed data on the available sizes and accessories please see the Green Trough specification document available from Furukawa.
SAFETY NOTICE

Green Trough is lightweight compared to traditional concrete, however, care should be taken when handling the units.

Do not throw the units. Carry them by holding the base, not the lid. It is possible for the packing straps to break.

Avoid loads in excess of 4.9kN/500mm on Green Trough lids.

Take care when unloading pallets of Green Trough.

Keep away from high heat and ignition sources.

When manual processing Green Trough units ensure the correct cutting speed is used to avoid melting the plastic material.

When manually processing Green Trough will not create any fine dust but it is still advisable to wear safety glasses.
TYPICAL GREEN TROUGH UNIT

- Male end
- Female end
- Body
- Male end when manually adjusting length
- Lid
- Lid fixing (Screw, clasp or band)
ASSEMBLING GREEN TROUGH

1. Green Trough units feature strong interlocking flexible units. Simply connect the male end to the female end of the adjacent unit as illustrated in fig. 1.

2. Ensure there is no gap between the Green Trough units when installed. Ensuring there is no gap eliminates the risk of damage due to thermal contraction. The two ‘pips’ in the join are designed to crush in the event of thermal expansion (Fig. 2).

3. Attach the interlocking lids in the opposite direction to the installed base units. The lid fixing is at the female end and also holds the male end of the adjacent lid in place.

NOTES

Avoid leaving the bases installed for a long time without lids fitted.
Do not lay Green Trough on hot asphalt.
Ensure the bed or trench is as flat as possible prior to laying Green Trough to avoid any possible disconnection.
ASSEMBLING GREEN TROUGH ACCESSORIES

Green Trough accessories such as bends and T-junctions can be connected in either direction thanks to all female connections (Fig. 3) and included adapter consisting of 2 pieces (Fig. 4). Simply insert the adapter as illustrated (Fig. 5).
OPTIONAL DIVIDING WALL

Green Trough can be supplied with dividing walls and holders when cable separation is required. On Straight units the holder comes built-in to the bottom of the base unit. The dividing wall can simply be inserted into the desired slot(s) creating 2, 3 or 4 channels (Fig 6).

For accessories (non-straight units) it is necessary to use an optional divider holder which is placed into the units by the installer. Specially designed dividing walls for bends are inserted into the divider holder.

NOTES

The dividing wall can be cut to size on site using standard hand tools.
FIXING THE LID

CLASP TYPE
Push the clasps by hand until they snap into place.
To open the lid, simply use a flat head screwdriver.

Ensure there is at least 40mm space beside the trough lid once installed to ensure there is room for the clasp to open if required (Fig. 7).

SCREW TYPE
Use a 5mm hex tool to get the screws correctly seated and hand tight.
Tighten the screws to a maximum of 5.2 Nm using and electric drill or torque wrench.

NOTES
Ensure correct alignment of the lid hole and nut body in base before tightening the screw. Using a manual tool first ensure the fixing is not cress threaded.
Do not over tighten as this can damage the trough or fixing.
In areas with there is excessive vibration the lid fixing should be checked for tightness periodically.
Furukawa recommend installing Green Trough units directly onto the ground surface, or buried up to lid level as illustrated in Fig 8.

Green Trough can be completely buried, however, the loading capacity of Green Trough cannot be guaranteed with this method.
ADJUSTING THE LENGTH

The length of Green Trough units can be adjusted manually by the installer using a circular or manual saw. The user can create a new male end at 125mm intervals along the length of straight units.

1. Select the cut location depending on the length required
2. Cut the unit along the male side of the chosen rib, using the rib as a guide. The male end of the base unit is scrapped
3. Cut off the bottom corners of the newly cut base piece
4. Ensure that the newly processed base unit appears as pictured. This is your new male end connector
5. Insert the newly processed base unit into the female end of the adjacent complete unit
6. Cut off the male end of the lid so that the remaining female end piece is the same length as the newly processed base. Fix the female end lid piece to the base as usual

NOTES 90 and 135 straight units cannot be processed in this way and require manual modification on site.
30 DEGREE BENDS

Green Trough bend units can be adjusted manually on site to create 30 degree bend pieces. The units are designed to make this process quick and simple.

1. Cut the base of the bend unit at the predefined point, along the outer edge.
2. Adjust the lid to the same length.
3. This is your 30 degree bend which has exactly the same functionality as the pre-fabricated 45 degree bend unit.

NOTES

Currently 300B bend units cannot be processed in this way and require a more manual modification on site. From 2020 our new 300B bends will allow for simplified processing as outlined above.