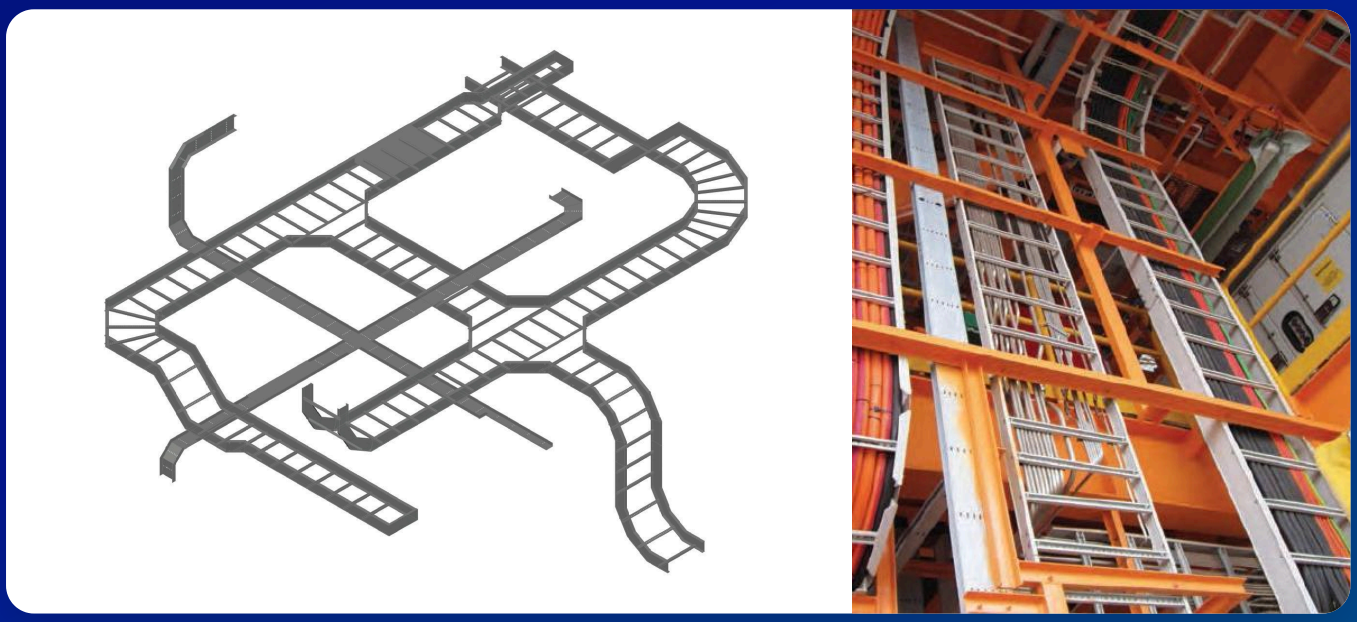
F1 COMPOSITES

PULTRUDED FRP · INDUSTRIAL CABLE SUPPORT

Pultruded FRP Cable Tray & Ladder.

Cable support systems for industrial, energy and infrastructure projects. Straight sections, covers and routing fittings in a choice of resin systems, with dimensions and configurations matched to the cable route.



150-900
MM · LADDER WIDTHS

50-400
MM · CT50 / CT80 WIDTHS

3 / 6 m
LADDER LENGTHS

300 mm
STANDARD RUNG SPACING

01 **Cable Ladder**
80 / 100 / 150 mm rail heights
Open-rung cable support · p.02

02 **Cable Tray**
50 / 80 / 110 mm rail heights
Tray sections and clip-on covers · p.03

Doris Li · Sales · Doris.li@f1composite.com · +86 138 8333 8993
Technical enquiries · f1frp2015@gmail.com

SERIES 01 · OPEN-RUNG SUPPORT

FRP Cable Ladder

Pultruded side rails and cross rungs provide open support for power and control cables. Select the section, width and rung arrangement for the cable load and support span.



STRAIGHT LADDER SECTION



H = rail height · d = working depth
Section schematic; not to scale.

KEY SPECIFICATIONS

Width range	150-900 mm
Standard lengths	3 / 6 m
Rung spacing	300 mm; alternatives on request
Rung fasteners	Stainless steel; FRP bolts on request
Configuration	Kit-form and rung-adaptor options

DIMENSIONAL SERIES

Rail height H	Working depth d	Length	Rung spacing
80 mm	50 mm	3 / 6 m	300 mm
100 mm	70 mm	3 / 6 m	300 mm
150 mm	120 mm	3 / 6 m	300 mm

150 mm rails are available in more than one section construction. Confirm the selected profile, width and load/span rating together; equal rail heights do not imply equal load capacity.

3	150-900	300	3 / 6
RAIL HEIGHT OPTIONS	WIDTH RANGE · MM	RUNG SPACING · MM	STANDARD LENGTH · M

MATERIAL OPTIONS · CABLE LADDER

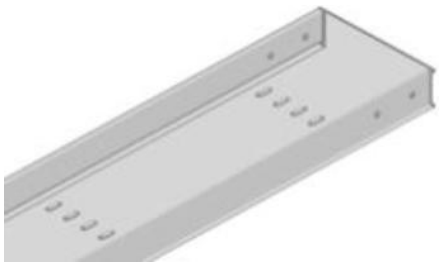
Polyester · Vinyl ester · Acrylic

Select resin and surface requirements for the service environment. Antistatic polyester and specified fire or smoke performance require a defined formulation and supporting test documentation. See material selection on page 5.

SERIES 02 · TRAY & COVER SYSTEM

FRP Cable Tray

Pultruded trays support cable runs on a continuous base, with perforated configurations and clip-on covers. Select the section and width for the cable layout and installation.



PERFORATED TRAY SECTION



H = rail height · d = working depth
Section schematic; not to scale.

KEY SPECIFICATIONS

Height series	CT50 / CT80 / CT110
CT50 / CT80 widths	50 / 100 / 150 / 200 / 300 / 400 mm
Standard length	3 m; alternatives on request
Connections	FRP / stainless-steel bolts
Cover option	Matching clip-on cover

DIMENSIONAL SERIES

Series	Rail height H	Working depth d	Standard length
CT50	50 mm	48 mm	3 m
CT80	80 mm	78 mm	3 m
CT110	110 mm	108 mm	3 m

The listed 50-400 mm widths apply to CT50 and CT80. CT110 width options, cover compatibility and any alternative lengths are confirmed at quotation.

50-400	3	3 m	Clip-on
CT50 / CT80 WIDTHS · MM	HEIGHT SERIES	STANDARD TRAY LENGTH	MATCHING COVER OPTION

TRAY & COVER · CONFIGURATION NOTE

Base support + matched covers + fittings

Specify base perforations, cable retention needs, cover sections and retention hardware. **Working depth is a geometric dimension**; allowable cable fill and load capacity must be checked for the selected installation.

SYSTEM COMPONENTS · DIRECTION & CONNECTION

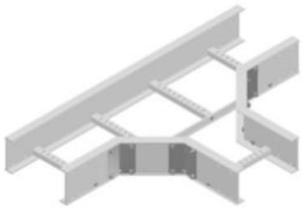
Fittings for the Complete Route

Coordinate straight lengths with bends, risers, branches, reducers and connection hardware. Fittings are selected as part of the tray or ladder system, with dimensions matched to the route.



Horizontal bends

Ladder bends for changes in route direction.



Ladder junctions

Cross and branch arrangements for intersecting routes.



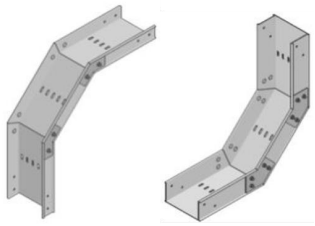
Width transitions

Reducer configurations to connect different route widths.



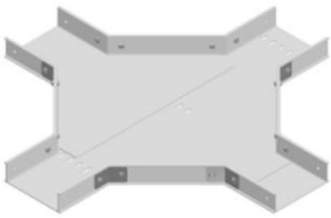
Tray bends

Tray sections for horizontal direction changes.



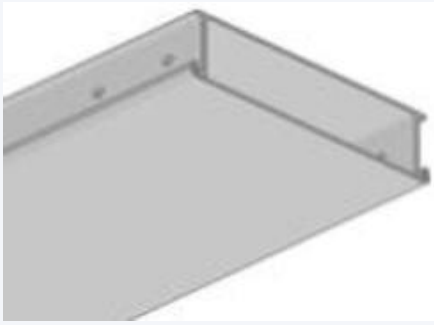
Vertical transitions

Inside and outside transitions between elevations.



Tray junctions

Cross and tee arrangements for branching cable runs.



Covers & connection hardware

Match straight and fitting covers to the chosen tray. Specify splice plates, joint hardware, fastener material and support interfaces as part of the system schedule.

DETAILING NOTE

State the required bend radius and cable support arrangement at each change of direction. **Confirm fitting dimensions and adjacent supports** before the route is released for manufacture. Images show representative configurations, not dimensional drawings.

SERVICE ENVIRONMENT · RESIN & FINISH

Match the System to the Duty

Select the resin, fire and smoke requirements, surface properties and connection materials for the actual environment. The route geometry and the material specification should be reviewed together.



Reference application: multi-level cable routing.



Reference application: overhead cable support.

Oil & gas / petrochemical

Define chemical exposure, temperature and the project fire specification before choosing the resin and hardware.

CHEMICAL & FIRE REQUIREMENTS

Wind energy

Coordinate cable routes, service access and the exposure conditions for the intended installation.

ROUTE & EXPOSURE

Transport & traffic

Match cable support, cover arrangement and fixing details to the installation and maintenance access.

CABLE & SUPPORT LAYOUT

Tunnels & infrastructure

Set project-specific flame, smoke and material requirements for enclosed or exposed cable routes.

FIRE & SMOKE CRITERIA

RESIN & COLOUR OPTIONS

Option	Selection basis
Polyester	Define environmental exposure and required fire performance.
Vinyl ester	Review chemical type, concentration and service temperature.
Acrylic	Specify the required fire / smoke results and test method.
Antistatic polyester	Define resistance limits and required verification for the project.

STANDARD COLOUR REFERENCES

RAL 7047 · Light grey / RAL 9004 · Black

Light grey is the listed reference for polyester, vinyl ester and acrylic systems. **Black is the listed antistatic polyester option.** Colour alone does not establish electrical, fire or chemical performance.

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FROM CABLE SCHEDULE TO SYSTEM SELECTION

Specify the Cable Route

Send a route drawing and cable schedule so that sections, materials, fittings and performance requirements can be reviewed as one package.

01

Cable & loading

Cable types, diameters, mass per metre, fill allowance and any specified additional loads.

02

Dimensions & supports

Tray or ladder, width, working depth, route length, support spacing and fixing arrangement.

03

Service environment

Indoor / outdoor location, chemical exposure, temperature range and fire / smoke / antistatic requirements.

04

Fittings & supply scope

Bends, radii, risers, tees, crosses, reducers, covers, fasteners, quantities and delivery destination.

PERFORMANCE & DOCUMENTATION TO CONFIRM

SYSTEM TESTS	Specify the applicable system standard and acceptance criteria, such as IEC 61537:2023 for cable tray and ladder systems.
LOAD / SPAN	Request the rating for the selected section, width, support span, joint position, temperature and deflection limit.
MATERIAL TESTS	Identify the required fire, smoke, chemical resistance or electrical tests and the reports for the selected formulation.
FINAL DRAWINGS	Confirm profile dimensions, route fittings, connection hardware, cover retention and installation details before supply.

INSTALLATION BASIS

Allow for thermal movement, temperature effects on capacity and the installation environment. Follow the approved support and fixing details. **These systems support cables; they are not access ladders or walkways.**

Dimensions shown are catalogue options for selection. Availability, tolerances, performance ratings and supporting documentation are confirmed with the quotation and approved project specification. Referencing a test standard does not state product certification.

F1 COMPOSITES

FRP cable support systems
Tray · Ladder · Covers · Routing fittings
f1composite.com · Chongqing, China

Doris Li · Sales
Doris.li@f1composite.com
+86 138 8333 8993
Technical · f1frp2015@gmail.com

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