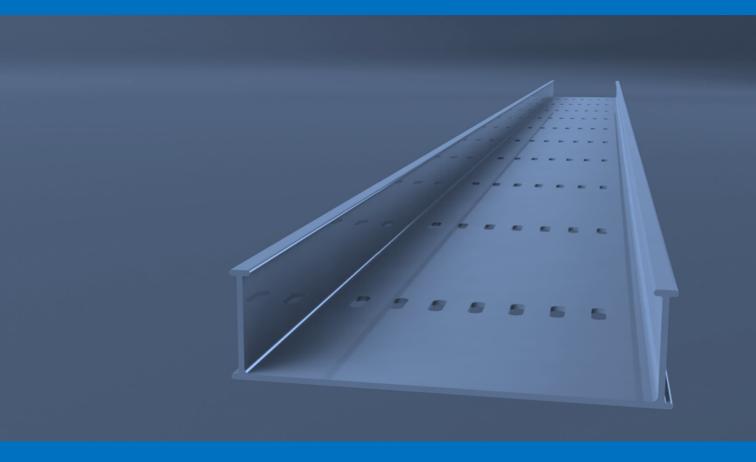
# **Captrad Cable Systems**



grp cable systems



### Captrad Ltd

Was established in 1999 based in Wigan in the North of England. Originally Captrad Ltd supplied Industrial Chemicals into various industries across the UK., and as time passed we were always looking for new business opportunities and thus this is how we have ended up supplying a wide range of Composite Products across the worCO.

As a result Captrad Ltd has tried to bring the whole composite solution under one umbrella. Thus we now have customers from a variety of industries from: Rail, Offshore, Constructions, Civils and Water, all being able to purchase quality products from one place ensuring continuity of service.

We have been able to set up a network of satellite offices around the worCO to help improve and maintain customer service levels.

# GRP Cable Systems

Captrad Cable Trays have been design and manufactured with the user in mind, whilst offering excellent performance ease of use. Our Cable Trays can be supplied in a variety of sizes along with a comprehensive array of fittings to cater for any project large or small.

Captrad Cable Trays can be supplied either as the tray or with the uniquely designed 'Click-fit-Lid'. All our trays are produced in 3mtr lengths and can easily be fabricated on/off site.

#### **Advantages**

CLrosion Resistant	Impact Resistant	
Strong & Lightweight	Click Fit Lid System	
Non-Conductive	Easy to fabricate	
Dimension Stability	UV Stability	
Excellent Working Temperatures		

#### Markets

Alternative Energy	Industrial
Rail/Underground	Off Shore
Marine	Construction
Chemical Plant	Water Industry











# GRP Cable Trays

GRP Cable Trays at a glance			
	Standard	Alternative	
Material	ISO Polyester Resin		
Fire Rating	Class 2 Fire Rated	Modar	
Length	3000mm	6000	
Width	50-300mm		
Туре	Slotted	Plain	
Fittings	All Stainless Steel		

#### **Specifications**

The cable trays are manufactured glass by the pultrusion process from isophthalic polyester thermosetting resin reinforced with E glass giving a high strength dimensionally accurate and thermally stable product. The pultruded sections fully comply with all the requirements of EN13706, grade E17 – Specification of pultruded profiles.

The standard polyester resin is a halogen free fire retardant grade satisfying the requirements of BS476 Pt7, Class 2 and ASTM E84 25 sec - Surface spread of flame. Higher grade fire retardant products can be manufactured to order including the high fire resistance, low smoke and low toxicity required by the London Underground (LUL). Cable Trays can also be made to order in the highly CLrosion resistant vinyl ester resin.

GRP cable trays are normally electrical non-conductive but for those applications with risk explosive atmospheres an anti-static version is available to order.

The cable tray is slotted along the length the cable tray also has a unique accepting slot that allows couplers to be inserted with ease insitu. All cable trays have a bespoke click fit lid.

#### Cable Tray (without cover) distributed load in Kg over the span

SPAN (M)	1	1.5	2	2.5	3
DEFLECTION (MM)	5	7.5	10	12.5	15
Tray	UD	UDL in Kg at this span for deflection limited to span /200			
100x50	231	103	58	37	26
150x50	247	110	62	39	27
200x50	271	121	68	43	30
300x50	294	131	74	47	33

# **GRP Cable Trays – Product Codes**

#### **Product** Width Height Kg/mtr GRPCT10050/3 100mm 50mm 1.34 GRPCT15050/3 150mm 50mm 1.67 GRPCT20050/3 200mm 50mm 1.96 GRPCT30050/3 300mm 50mm 2.55

Product	Width	Products	Kg/each
GRPCTCO100/3	100mm	Cover	0.91
GRPCTCO150/3	150mm	Cover	1.22
GRPCTCO200/3	200mm	Cover	1.53
GRPCTCO100/3	100mm	Cover	0.91

#### **Product** Width Height Kg/each GRPCTFB90/100 100mm 50mm 0.70 GRPCTFB90/150 150mm 50mm 0.85 GRPCTFB90/200 200mm 50mm 1.15 GRPCTFB90/300 300mm 50mm 1.75

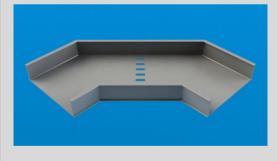
Product	Width	Height	Kg/each
GRPCTFB45/100	100mm	50mm	0.70
GRPCTFB45/150	150mm	50mm	0.85
GRPCTFB45/200	200mm	50mm	1.15
GRPCTFB45/300	300mm	50mm	1.75

# Tray & Lid



### **Bends**

Cable Tray 90° Bend



Cable Tray 45° Bend



#### **Product** Width Height Kg/each GRPCTEXTR90/100 100mm 50mm 0.53 GRPCTEXTR90/150 150mm 50mm 0.64 GRPCTEXTR90/200 200mm 50mm 0.86

300mm

50mm

1.31

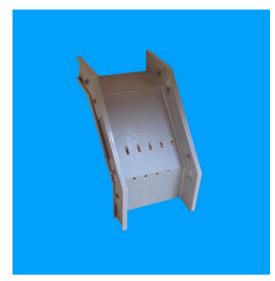
GRPCTEXTR90/300

Product	Width	Height	Kg/each
GRPCTEXTR45/100	100mm	50mm	0.49
GRPCTEXTR45/150	150mm	50mm	0.58
GRPCTEXTR45/200	200mm	50mm	0.75
GRPCTEXTR45/300	300mm	50mm	1.25

Product	Width	Height	Kg/each
GRPCTINTR90/100	100mm	50mm	0.53
GRPCTINTR90/150	150mm	50mm	0.64
GRPCTINTR90/200	200mm	50mm	0.86
GRPCTINTR90/300	300mm	50mm	1.31

Product	Width	Height	Kg/each
GRPCTINTR45/100	100mm	50mm	0.53
GRPCTINTR45/150	150mm	50mm	0.64
GRPCTINTR45/200	200mm	50mm	0.86
GRPCTINTR45/300	300mm	50mm	1.31

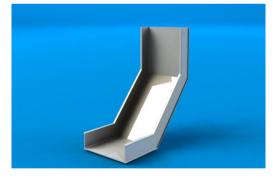
## **External Risers**



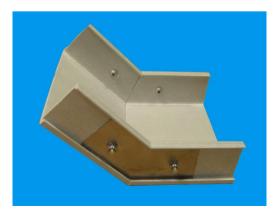
Cable Tray 90° Ext Riser (& 45°)

## **Internal Risers**

Cable Tray 90° Int Riser



Cable Tray 45° Int Riser



# T-Piece

Product	Width	Height	Kg/each
GRPEQT-50-100	100mm	50mm	0.53
GRPEQT-50-150	150mm	50mm	0.64
GRPEQT-50-200	200mm	50mm	0.86
GRPEQT-50-300	300mm	50mm	1.31



# Reducer



Product	Width	Height	Kg/each
GRPCTRED/150100	100mm	50mm	0.53
GRPCTRED/200150	150mm	50mm	0.64
GRPCTRED/300200	200mm	50mm	0.86

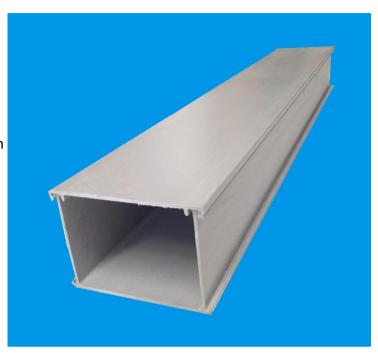
# **GRP Cable Troughs 150x110**

Captrad Cable Ducting have been designed and manufactured with the user in mind, whilst offering excellent performance ease of use.

Captrad Cable Troughs can be supplied either as the Trough or with the uniquely designed 'Click-fit-Lid'. All our troughs are produced in 3mtr lengths and can easily be fabricated on/off site.



CLrosion Resistant	Impact Resistant	Dimension Stability
Strong & Light weight	Click Fit Lid System	UV Stability
Non-Conductive	Easy to fabricate	Excellent working temps



#### **Specifications**

The cable trays are manufactured glass by the pultrusion process from isophthalic polyester thermosetting resin reinforced with E glass giving a high strength dimensionally accurate and thermally stable product. The pultruded sections fully comply with all the requirements of EN13706, grade E17 – Specification of pultruded profiles.

The standard polyester resin is a halogen free fire retardant grade satisfying the requirements of BS476 Pt7, Class 2 and ASTM E84 25 sec - Surface spread of flame. Higher grade fire retardant products can be manufactured to order including the high fire resistance, low smoke and low toxicity required by the London Underground (LUL).

Cable Troughs can also be made to order in the highly CLrosion resistant vinyl ester resin.

GRP cable troughs are normally electrical non-conductive but for those applications with risk explosive atmospheres an anti-static version is available to order.

Our cable trays have been by Birse Rail at Liverpool Sandhills Lane NWR, Winwick Junction Winwick, Tamworth

# GRP Cable Ladders

GRP Cable Trays at a glance				
	Standard	Alternative		
Material	ISO Polyester Resin			
Fire Rating	Class 2 Fire Rated	Modar		
Length	3000mm	6000mm		
Width	150mm – 1000mm			
Height	100mm	150mm		
Fittings	All Stainless Steel			



GRP Cable Ladders are supplied from stock in a range of standard sizes which allows them to accommodate almost all projects. Our ladders systems are designed to utilize space and to give cable protection. The design of the side profile combines great strength with light weight. All of Captrad Cable Systems ladders have been designed to improve load-bearing capabilities. We are able to produce GRP Cable Ladders to a variety of sizes and special resin systems to match any working environment. We can also supply cable ladders dividers and lids if required. There are many advantages to using our GRP Cable Ladders:

- Light weight and easy to use
- Excellent UV stability and fire properties
- Various sizes available in the ladder profile
- Available in various resin systems offering excellent CLrosion resistance
- Ladders are produced to NEMA standards
- Excellent strength properties under high loads

#### Kg/mtr **Product** Width Height GRPCL100300/3 2.92 300mm 100mm GRPCL100450/3 450mm 100mm 3.21 GRPCL100600/3 600mm 100mm 3.50 GRPCL100700/3 700mm 100mm 3.68

#### **Product** Width Height Kg/each GRPCL90EB 100-300 300mm 100mm 3.02 GRPCL90EB100-450 450mm 100mm 3.68 GRPCL90EB100-600 600mm 100mm 4.35 GRPCL90EB100-700 700mm 100mm 4.90

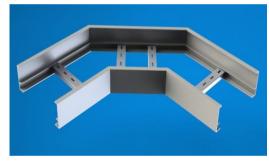
Product	Width	Height	Kg/each
GRPCL45EB100-300	300mm	100mm	2.14
GRPCL45EB100-450	450mm	100mm	2.44
GRPCL45EB100-600	600mm	100mm	2.93
GRPCL45EB100-700	700mm	100mm	3.13

## **Cable Ladders**



### **Bends**

Cable Ladder Flat Elbow 90



Cable Ladder Flat Elbow 45



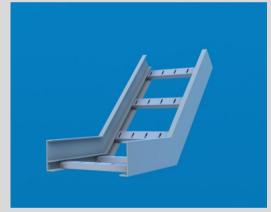
# Internal Risers

Cable Ladder Int Riser 90

Cabic	Lauuci	1110	MISCI	20

Product	Width	Height	Kg/each
GRPCL90INTR100-300	300mm	100mm	2.18
GRPCL90INTR100-450	450mm	100mm	2.44
GRPCL90INTR100-600	600mm	100mm	2.70
GRPCL90INTR100-700	700mm	100mm	2.86

Cable Ladder Int Riser 45



Product	Width	Height	Kg/each
GRPCL45INTR100-300	300mm	100mm	2.00
GRPCL45INTR100-450	450mm	100mm	2.26
GRPCL45INTR100-600	600mm	100mm	2.52
GRPCL45INTR100-700	700mm	100mm	2.68

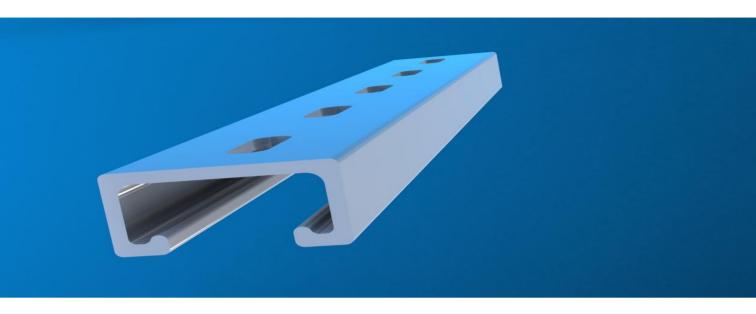
T - Piece

Cable Ladder T-Piece



Product	Width	Height	Kg/each
GRPCLTP100-300	300mm	100mm	3.92
GRPCLTP100-450	450mm	100mm	4.26
GRPCLTP100-600	600mm	100mm	4.26
GRPCLTP100-700	700mm	100mm	7.12

## **GRP Uni Strut Profiles**



#### **GRP Uni-Strut type profile**

#### **Product description**

The 41x41x3.2mm mm grp uni-strut profile is made by the pultrusion process giving a section that is structurally strong and dimensionally consistent. The uni-strut profile matches the steel strut so that it takes the same shaped nuts, with and without springs that are widely available for the steel strut. The profile meets all the requirements of EN 13706 – Specification of grp profiles – Grade E17 and is manufactured under ISO 9000 registered quality control system.

The profile is stocked in 6m lengths, colour grey.

We also have the half strut available at 41mm x 25mm x 3mm

#### **Applications**

The strut profile is electrically non-conductive and resistant to CLrosion by water, salt and most chemicals. Typical applications include:

Support frames for cabinets hoCOing electrical switchgear, process control instruments, etc

Support for electrical cable trays and ladders

Support for pipes, conduits, etc

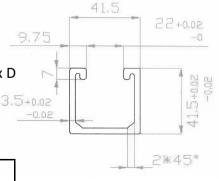
#### **Mechanical Properties**

Full section modulus =19GPa measured by the method- EN 13706, Annex D Moment of inertia lxx = 130,000mm4

Bolt pull out strength with Zebidee nut - 2000N

Concentrated Load at centre of span. Deflection limited to span/200

	Span mm				
	1000 1500 2000 2500				
Load kg	150	65	38	25	



## **Captrad Cable Systems**

A Division of Captrad Ltd 6a Gratton Place East Gillibrands Skelmersdale WN8 9UE ENGLAND

Tel: +44 (0)1695 280510 Fax: +44 (0)1695 732566

sales@captradcablesystems.co.uk www.captradcablesystems.co.uk www.captrad.com

