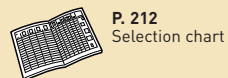


Cable management ceiling systems

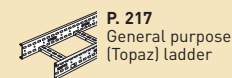
Swifts® cable ladder



P. 212
Selection chart



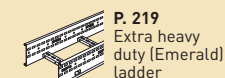
P. 216
Light duty (Opal) ladder



P. 217
General purpose (Topaz) ladder



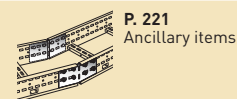
P. 218
Heavy duty (Sapphire) ladder



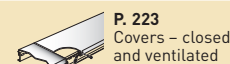
P. 219
Extra heavy duty (Emerald) ladder



P. 220
Supports

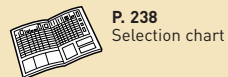


P. 221
Ancillary items

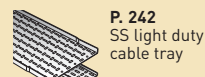


P. 223
Covers – closed and ventilated

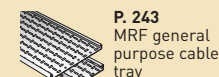
Swifts® cable tray



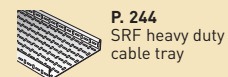
P. 238
Selection chart



P. 242
SS light duty cable tray



P. 243
MRF general purpose cable tray



P. 244
SRF heavy duty cable tray



P. 245
Supports

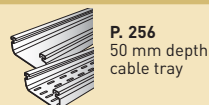


P. 246
Ancillary items

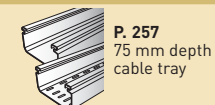
Swifts® PVC-U cable tray



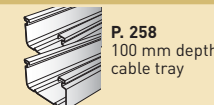
P. 254
Selection chart



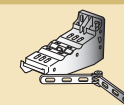
P. 256
50 mm depth cable tray



P. 257
75 mm depth cable tray



P. 258
100 mm depth cable tray



P. 259
Supports and accessories

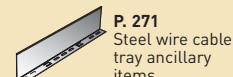
Swifts® SW steel wire cable tray



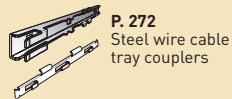
P. 268
Selection chart



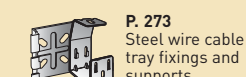
P. 270
Steel wire cable tray lengths



P. 271
Steel wire cable tray ancillary items



P. 272
Steel wire cable tray couplers



P. 273
Steel wire cable tray fixings and supports



P. 274
Profile brackets

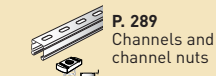


P. 275
Standard brackets



P. 276
Ancillary items

Swiftrack channel support



P. 289
Channels and channel nuts



P. 292
Framework brackets, clamps and accessories



P. 296
Cantilever arms



P. 297
Standard fixings and fastenings

Salamandre® distribution trunking



P. 304
Selection chart



P. 307
Standard trunking



P. 308
Standard trunking fittings

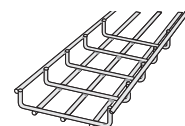


P. 310
Standard trunking accessories



P. 316
Lighting trunking

New in 2007



Swifts SW
steel wire cable tray
(p. 270)



Cable management ceiling systems

With its market leading Swifts brand, Legrand offers perfect solutions for cable management requirements in and around ceilings. From tried and tested reliability with cable tray and ladder, to cutting edge innovation with PVC-U tray and the brand new range of Swifts SW steel wire cable tray.



SWIFTS SW STEEL WIRE CABLE TRAY



With a large range of sizes and a choice of three different finishes, Swifts SW boasts an extensive array of innovative bracketry with simple slot-together installation.

SWIFTS STEEL CABLE TRAY

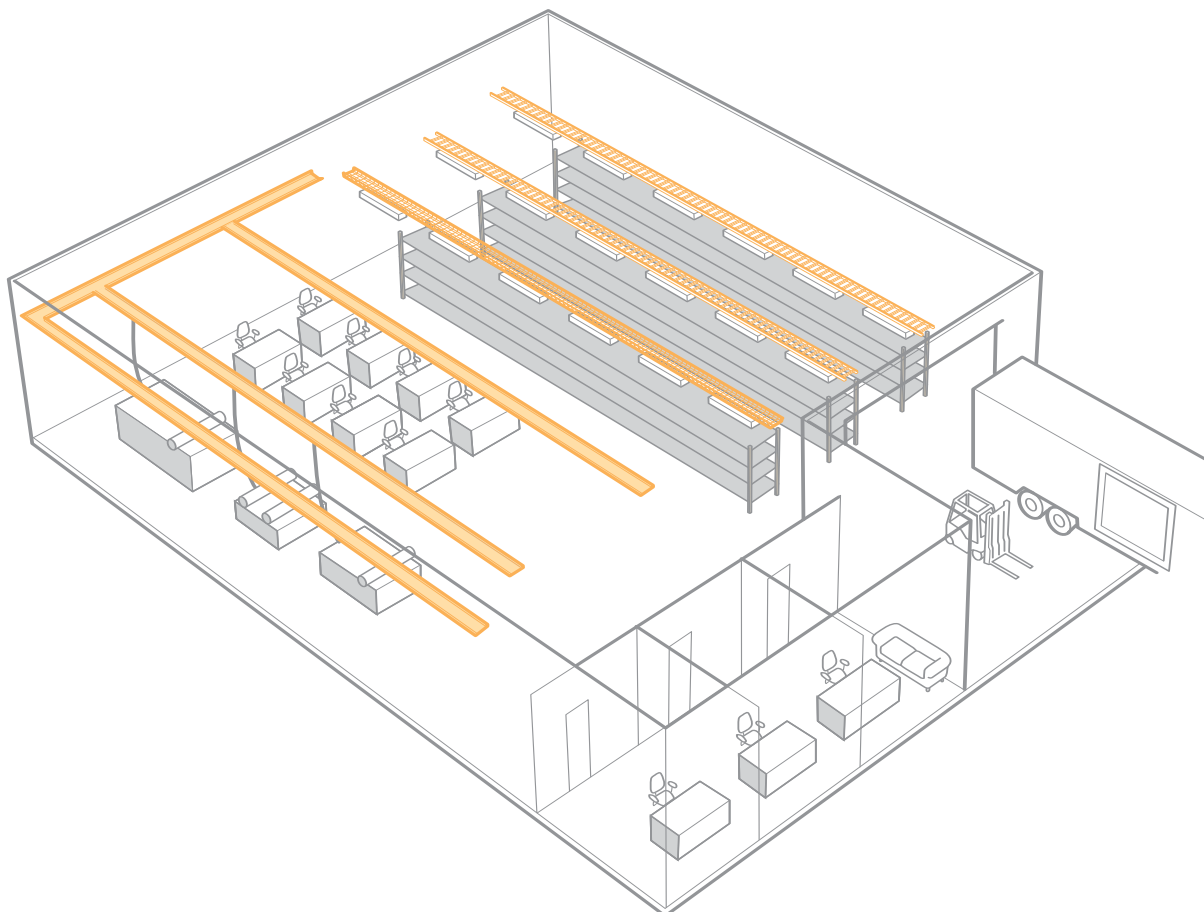


Available in different finishes to suit any environment, Swifts steel cable tray has integrated couplers on all fittings, saving time and money during installation.

SWIFTS PVC-U CABLE TRAY



Extra-strong and corrosion free, Swifts PVC-U cable tray has click-fit couplers for speedy installation and moulded bends and risers for a more professional finish.

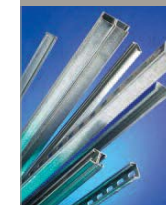


SWIFTS CABLE LADDER



Slotted rail cable ladder for large spans and heavy cable loads. With dome head bolts to prevent cable damage and a large variety of supports and accessories.

SWIFTRACK CHANNEL SUPPORT



The backbone of all supports, Swiftrack is a range of channel, brackets and fittings for cable management and building services support frameworks.

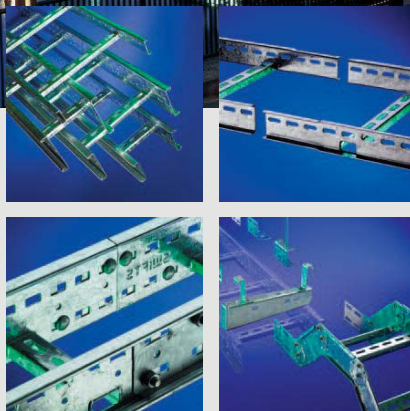
The ladder of success

This comprehensive system of slotted rail cable ladder incorporates all the installation features demanded by contractors and enables the coupling of lengths and accessories without the need for drilling.

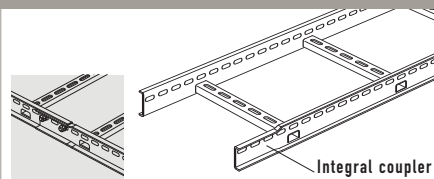


Swifts cable ladder is an established favourite in the UK and abroad... and with a wealth of innovative installation features, it remains the market leader.

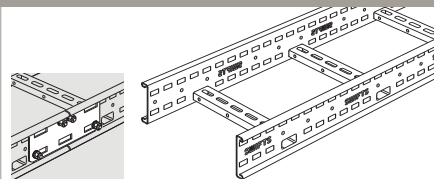
- Four unique ranges to choose from
- Integrated coupler on light duty range
- Dome-head bolts to prevent damage to cables
- Widest range of support systems available in the UK
- Alternative rung types
- Four finishes to suit different environments



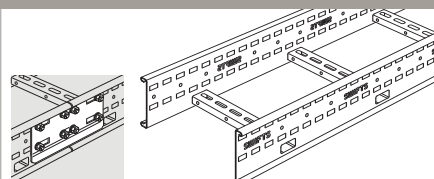
OPAL - LIGHT DUTY



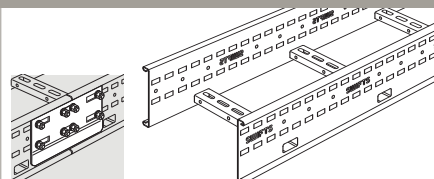
TOPAZ - GENERAL PURPOSE



SAPPHIRE - HEAVY DUTY



EMERALD - EXTRA HEAVY DUTY



Ordering Information

All Ladders, comply with BS EN 61537 : 2006
Cat. Nos. are generated by replacing the red letters in the product code with the relevant width, angle, radius, branch and finish (where needed). Examples are provided below and in the selection charts in the following pages

Light duty (Opal)

Standard widths :

150, 300, and 450 mm

Supplied with standard type 4 rungs

Key to selecting fittings (see selection chart p. 212)

Examples :

For a hot dip galvanised straight length, 450 mm wide :

Product code = OL 450 **F** – Cat. No. = OL 450 G

For a hot dip galvanised 90° flat bend with 300 mm radius,

450 mm wide :

Product code = OFB 450 **A r F** – Cat. No. = OFB 450 90 300 G.

Note :

Not available in **D** (deep galvanised) finish

Fittings only available in 300 mm radius

General purpose (Topaz)

Standard widths :

150, 300 and 600 mm

Supplied with standard type 1 rungs throughout unless otherwise specified.

Key to selecting fittings (see selection chart p. 212)

Examples :

For a hot dip galvanised straight length, 600 mm wide :

Product code = ZL 600 **F** – Cat. No. = ZL 600 G.

For a hot dip galvanised 90° flat bend with 300 mm radius,

600 mm wide :

Product code = ZFB 600 **A r F** – Cat. No. = ZFB 600 90 300 G

Heavy duty (Sapphire)

Standard widths :

150, 300, 450, 600, 750 and 900 mm

6 m lengths available to special order e.g. PL 600 G 6 M

Contact our Customer Service Department for details on 0845 605 4333

Supplied with standard type 1 rungs throughout unless otherwise specified

Key to selecting fittings (see selection chart p. 214)

Examples :

For a hot dip galvanised straight length, 600 mm wide :

Product code = PL 600 **F** – Cat. No. = PL 600 G

For a hot dip galvanised 90° flat bend with 300 mm radius,

600 mm wide :

Product code = PFB 600 **A r F** – Cat. No. = PFB 600 90 300 G

Extra heavy duty (Emerald)

Standard widths :

150, 300, 450, 600, 750 and 900 mm

6 m lengths available to special order e.g. EL 600 G 6 M

Contact our Customer Service Department for details on 0845 605 4333

Supplied with standard type 1 rungs throughout unless otherwise specified.

Key to selecting fittings (see selection chart p. 214)

Examples :

For a hot dip galvanised straight length, 600 mm wide :

Product code = EL 600 **F** – Cat. No. = EL 600 G

For a hot dip galvanised 90° flat bend with 300 mm radius,

600 mm wide :

Product code = EFB 600 **A r F** – Cat. No. = EFB 600 90 300 G

Note :

Light duty (Opal) is only available with type 4 rungs which cannot be inverted

FINISHES

Standard stocked finish :

G Hot dip galvanised after manufacture to BS EN ISO 1461.

Additional Finishes:

D Deep galvanised high silicon steel made from BS EN 10025 – 5 grade S355JOW.

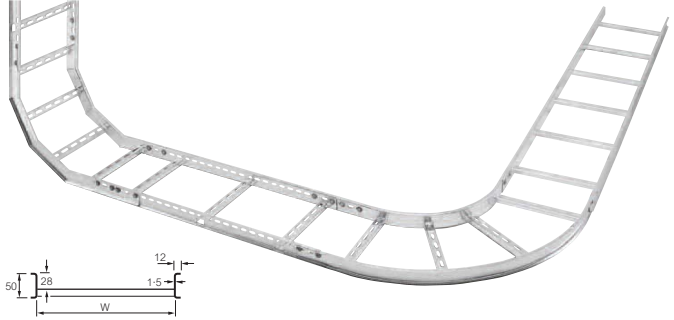
S Stainless steel to BS EN 10088 – 2 grade 1-4404 (equivalent to 316L31).



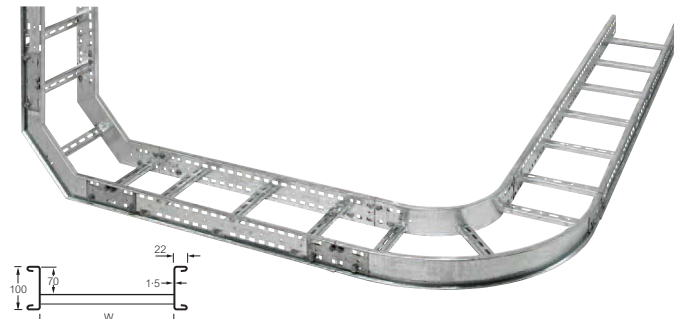
Sheared steel (particularly stainless steel) does have relatively sharp edges and protective gloves must be worn during handling

Swifts® cable ladder systems straight lengths and fittings

light duty (Opal) and general purpose (Topaz)

	LADDER		FITTINGS								FITTINGS			
	Widths (mm)	Straight lengths (3 m) F = finish	Coupler sets ⁽¹⁾ F = finish	Flat bends A = angle r = radius F = finish	Inside risers A = angle r = radius F = finish	Outside risers A = angle r = radius F = finish	Equal tees r = radius F = finish	4 way crosspieces r = radius F = finish			Straight reducers K = reduced width F = finish	Offset reducers (left hand) K = reduced width F = finish	Offset reducers (right hand) K = reduced width F = finish	
LIGHT DUTY (OPAL)	150	OL 150 F	OC F	OFB 150 A r F	OIR 150 A r F	OOR 150 A r F	OT 150 r R F	OX 150 r R F			-	-	-	Key : selecting light duty (Opal) fittings Replace the letters shown in red with your choice from the following options : A = Angle (°) : 90 or 45 F = Finish : G (hot dip galvanised after manufacture) K = Narrowed width when using a reducer (mm) : 150, 300 r = Radius (mm) : 300 – only 300 available in light duty (Opal) 
	300	OL 300 F	OC F	OFB 300 A r F	OIR 300 A r F	OOR 300 A r F	OT 300 r R F	OX 300 r R F			OSR 300 K F	OLR 300 K F	ORR 300 K F	
	450	OL 450 F	OC F	OFB 450 A r F	OIR 450 A r F	OOR 450 A r F	OT 450 r R F	OX 450 r R F			OSR 450 K F	OLR 450 K F	ORR 450 K F	

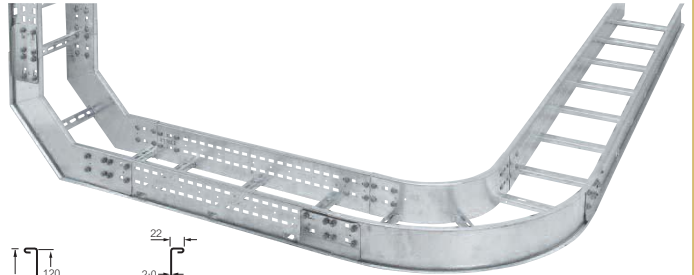
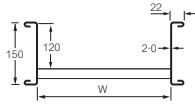
(1) Required only where ladder has been cut to length. When joining a cut length to an uncut length or an accessory only one coupler is required

	LADDER		FITTINGS								FITTINGS			
	Widths (mm)	Straight lengths (3 m) F = finish	Coupler sets F = finish	Flat bends A = angle r = radius F = finish	Inside risers A = angle r = radius F = finish	Outside risers A = angle r = radius F = finish	Equal tees r = radius F = finish	Unequal tees B = branch r = radius F = finish	4 way crosspieces r = radius F = finish		Straight reducers K = reduced width F = finish	Offset reducers (left hand) K = reduced width F = finish	Offset reducers (right hand) K = reduced width F = finish	
GENERAL PURPOSE (TOPAZ)	150	ZL 150 F	ZC F	ZFB 150 A r F	ZIR 150 A r F	ZOR 150 A r F	ZT 150 r R F	ZUT 150 B r R F	ZX 150 r R F		-	-	-	Key : selecting general purpose (Topaz) fittings Replace the letters shown in red with your choice from the following options : A = Angle (°) : 90 or 45 B = Branch width (mm) : 150, 300, 600 F = Finish : G (hot dip galvanised after manufacture) D = (deep galvanised), S (stainless steel) K = Narrowed width when using a reducer (mm) : 150, 300 r = Radius (mm) : 300, 600 
	300	ZL 300 F	ZC F	ZFB 300 A r F	ZIR 300 A r F	ZOR 300 A r F	ZT 300 r R F	ZUT 300 B r R F	ZX 300 r R F		ZSR 300 K F	ZLR 300 K F	ZRR 300 K F	
	600	ZL 600 F	ZC F	ZFB 600 A r F	ZIR 600 A r F	ZOR 600 A r F	ZT 600 r R F	ZUT 600 B r R F	ZX 600 r R F		ZSR 600 K F	ZLR 600 K F	ZRR 600 K F	

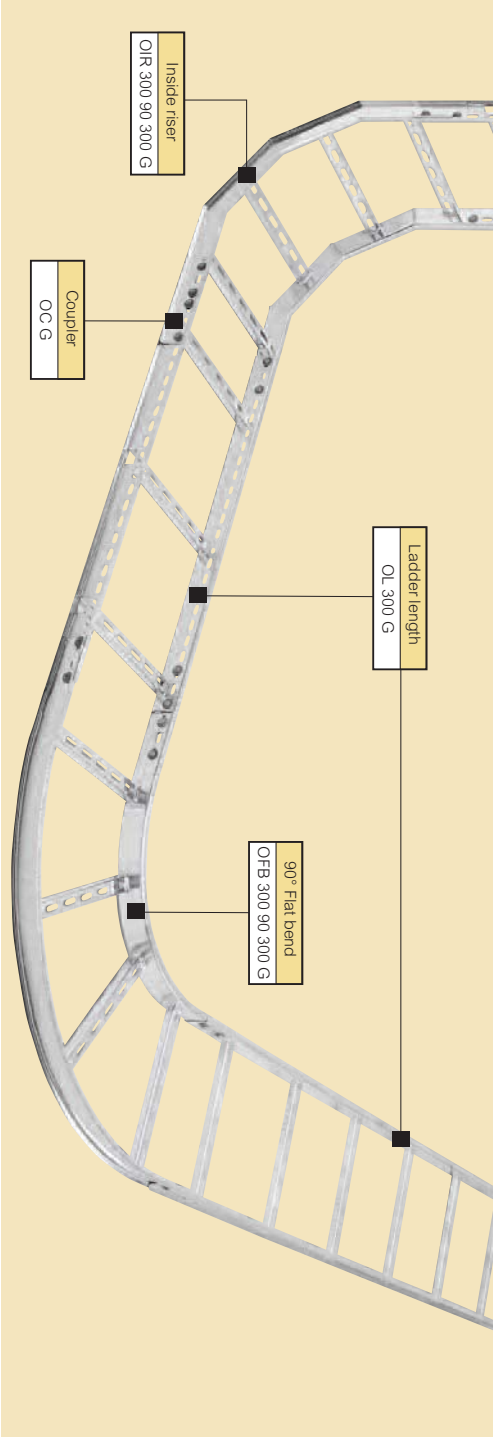
Swifts® cable ladder systems straight lengths and fittings

Heavy duty (Sapphire) and extra heavy duty (Emerald)

	LADDER		FITTINGS							FITTINGS			Key : selecting heavy duty (Sapphire) fittings Replace the letters shown in red with your choice from the following options : A = Angle (°) : 90 or 45 B = Branch width (mm) : 150, 300, 450, 600, 750, 900 F = Finish : G (hot dip galvanised after manufacture), D (deep galvanised), S (stainless steel), E (plastic coated) K = Narrowed width when using a reducer (mm) : 150, 300, 450, 600, 750 r = Radius (mm) : 300, 600	
	Widths (mm)	Straight lengths (3 and 6 m) F = finish	Coupler sets F = finish	Flat bends A = angle r = radius F = finish	Inside risers A = angle r = radius F = finish	Outside risers A = angle r = radius F = finish	Equal tees r = radius F = finish	Unequal tees B = branch r = radius F = finish	4 way crosspieces r = radius F = finish		Straight reducers K = reduced width F = finish	Offset reducers (left hand) K = reduced width F = finish		Offset reducers (right hand) K = reduced width F = finish
HEAVY DUTY (SAPPHIRE)	150	PL 150 F	PC F	PFB 150 A r F	PIR 150 A r F	POR 150 A r F	PT 150 r R F	PUT 150 B r R F	PX 150 r R F		–	–	–	 
	300	PL 300 F	PC F	PFB 300 A r F	PIR 300 A r F	POR 300 A r F	PT 300 r R F	PUT 300 B r R F	PX 300 r R F		PSR 300 K F	PLR 300 K F	PRR 300 K F	
	450	PL 450 F	PC F	PFB 450 A r F	PIR 450 A r F	POR 450 A r F	PT 450 r R F	PUT 450 B r R F	PX 450 r R F		PSR 450 K F	PLR 450 K F	PRR 450 K F	
	600	PL 600 F	PC F	PFB 600 A r F	PIR 600 A r F	POR 600 A r F	PT 600 r R F	PUT 600 B r R F	PX 600 r R F		PSR 600 K F	PLR 600 K F	PRR 600 K F	
	750	PL 750 F	PC F	PFB 750 A r F	PIR 750 A r F	POR 750 A r F	PT 750 r R F	PUT 750 B r R F	PX 750 r R F		PSR 750 K F	PLR 750 K F	PRR 750 K F	
	900	PL 900 F	PC F	PFB 900 A r F	PIR 900 A r F	POR 900 A r F	PT 900 r R F	PUT 900 B r R F	PX 900 r R F		PSR 900 K F	PLR 900 K F	PRR 900 K F	

	LADDER			FITTINGS							FITTINGS			Key : selecting extra heavy duty (Emerald) fittings Replace the letters shown in red with your choice from the following options : A = Angle (°) : 90 or 45 B = Branch width (mm) : 150, 300, 450, 600, 750, 900 F = Finish : G (hot dip galvanised after manufacture), D (deep galvanised), S (stainless steel) K = Narrowed width when using a reducer (mm) : 150, 300, 450, 600, 750 r = Radius (mm) : 300, 600
	Widths (mm)	Straight lengths (3 and 6 m) F = finish	Coupler sets F = finish	Flat bends A = angle r = radius F = finish	Inside risers A = angle r = radius F = finish	Outside risers A = angle r = radius F = finish	Equal tees r = radius F = finish	Unequal tees B = branch r = radius F = finish	4 way crosspieces r = radius F = finish		Straight reducers K = reduced width F = finish	Offset reducers (left hand) K = reduced width F = finish	Offset reducers (right hand) K = reduced width F = finish	
EXTRA HEAVY DUTY (EMERALD)	150	EL 150 F	EC F	EFB 150 A r F	EIR 150 A r F	EOR 150 A r F	ET 150 r R F	EUT 150 B r R F	EX 150 r R F		–	–	–	 
	300	EL 300 F	EC F	EFB 300 A r F	EIR 300 A r F	EOR 300 A r F	ET 300 r R F	EUT 300 B r R F	EX 300 r R F		ESR 300 K F	ELR 300 K F	ERR 300 K F	
	450	EL 450 F	EC F	EFB 450 A r F	EIR 450 A r F	EOR 450 A r F	ET 450 r R F	EUT 450 B r R F	EX 450 r R F		ESR 450 K F	ELR 450 K F	ERR 450 K F	
	600	EL 600 F	EC F	EFB 600 A r F	EIR 600 A r F	EOR 600 A r F	ET 600 r R F	EUT 600 B r R F	EX 600 r R F		ESR 600 K F	ELR 600 K F	ERR 600 K F	
	750	EL 750 F	EC F	EFB 750 A r F	EIR 750 A r F	EOR 750 A r F	ET 750 r R F	EUT 750 B r R F	EX 750 r R F		ESR 750 K F	ELR 750 K F	ERR 750 K F	
	900	EL 900 F	EC F	EFB 900 A r F	EIR 900 A r F	EOR 900 A r F	ET 900 r R F	EUT 900 B r R F	EX 900 r R F		ESR 900 K F	ELR 900 K F	ERR 900 K F	

Swifts® cable ladder systems
light duty (Opal)



Dimensions and technical information (p. 225)
Selection chart (p. 212–213)

Integral couplers on straight lengths and accessories enable joints to be made quickly and easily, thereby reducing installation time
Rung spacing : 300 mm between centres
Standard radius for accessories : 300 mm

Pack	Cat. Nos.
1	OL 150 F
1	OL 300 F
1	OL 450 F

Light duty (Opal) ladder
Straight lengths – 3 m

150 mm width
300 mm width
450 mm width

Fittings

Coupler sets

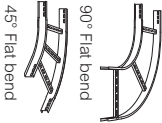
Supplied in pairs with fastenings
Required only where ladder has been cut to length.
When joining a cut length to an uncut length or an accessory only one coupler is required

Fastenings

Supplied in packs to couple five joints
Pack consists of :
M6 x 16 set screws 20 off
M6 nuts 20 off
M6 roofing washers 40 off
M6 shakeproof washers 20 off
All above fasteners can also be purchased individually in box quantities (see p. 224)

Hot dip galvanised fastening

Flat bends



90° Flat bend

45° Flat bend



90° Inside riser



45° Inside riser

1 OIR W A r F

Pack	Cat. Nos.
1	OOR W A r F

Fittings (continued)
Outside risers

90° Outside riser

45° Outside riser

Tees and crosspieces
All tees and crosspieces include R after radius to indicate radius and not width

Equal tees

1 OT W r F

4 way crosspieces

1 OX W r F

Straight reducers

1 OSR W K F

Offset reducers – left hand

1 OLR W K F

Offset reducers – right hand

1 ORR W K F

Key : selecting light duty (Opal) fittings. Replace the letters shown in red with your choice from the following options :

W = Widths (mm) : 150, 300, 450

A = Angle (°) : 90 or 45

F = Finish : G (hot dip galvanised after manufacture)

K = Narrowed width when using a reducer (mm) :

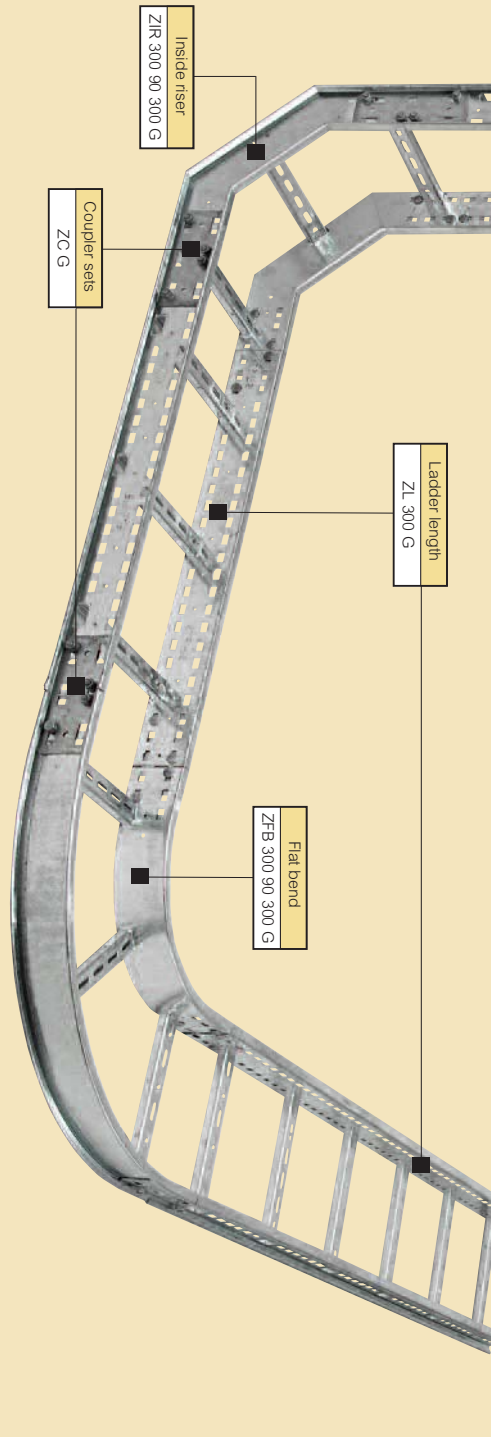
150, 300

r = Radius (mm) : 300

100, 225 and 600 mm widths, 30° and 60° bends and risers and unequal tees available to special order

Contact us on 0845 605 4333

Swifts® cable ladder systems
general purpose (Topaz)



Dimensions and technical information (p. 226–230)
Selection chart (p. 212–213)

Coupler sets and accessories are supplied complete with fastenings
Rung spacing : 300 mm between centres
Standard radius for accessories : 300 and 600 mm

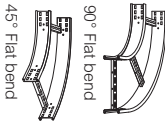
Pack	Cat. Nos.	
1	ZL 150F	General purpose (Topaz) ladder Straight lengths – 3 m 150 mm width 300 mm width 600 mm width
1	ZL 300F	
1	ZL 600F	

Fittings

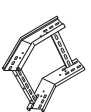
Coupler sets

Supplied in pairs, with fastenings (4 per coupler)
Use to couple straight lengths and accessories
Even when ladder is cut to length, the slots in the coupler will always align with slots in the ladder side rail
When bolting to cut ends adjust coupler to ensure 4 bolts can be inserted

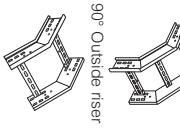
Flat bends



Inside risers



Outside risers



1	ZCF	
1	ZFBWArF	
1	ZIRWArF	
1	ZORWArF	

Pack	Cat. Nos.	
1	ZW+rF	Unequal tees Example : The ordering code for a hot dip galvanised unequal tee with a 300 main run (W) and a 150 branch (B) with a 600R radius : ZUT 300 150 600R G
1	ZUTWB+rF	
1	ZXW+rF	
1	ZSRWK F	Straight reducers
1	ZLRWK F	
1	ZRRWK F	
		Offset reducers – left hand
		Offset reducers – right hand

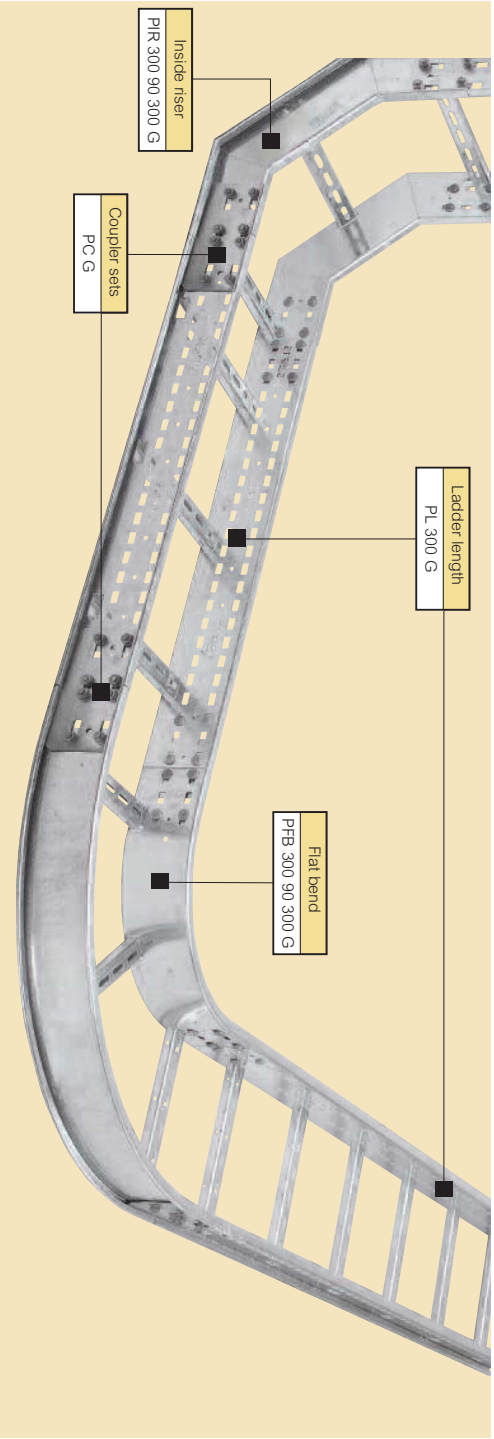
Key : selecting general purpose (Topaz) fittings. Replace the letters shown in **red** with your choice from the following options :

- W** = Widths (mm) : 150, 300, 600
- A** = Angle (°) : 90 or 45
- B** = Branch width (mm) : 150, 300, 600
- F** = Finish : **G** (hot dip galvanised after manufacture), **D** (deep galvanised), **S** (stainless steel)
- K** = Narrowed width when using a reducer (mm) : 150, 300
- r** = Radius (mm) : 300, 600

450, 750, 900 mm widths and 450, 750, 900 mm radii available to special order. 30° and 60° bends and risers and unequal tees available to special order. Other rung configurations available

Contact us on 0845 605 4333

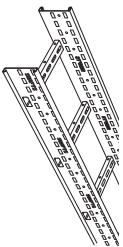
Swifts® cable ladder systems
heavy duty (Sapphire)



 **Dimensions and technical information (p. 226–230)**
Selection chart (p. 214–215)

Coupler sets and accessories are supplied complete with fastenings
Rung spacing : 300 mm between centres
Standard radius for accessories : 300 and 600 mm

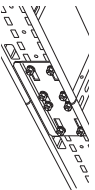
Pack	Cat. Nos.
1	PL 150F
1	PL 300F
1	PL 450F
1	PL 600F
1	PL 750F
1	PL 900F
Heavy duty (Sapphire) ladder Straight lengths – 3 m and 6 m 6 m lengths available on special request : eg PL 600 G 6m 150 mm width 300 mm width 450 mm width 600 mm width 750 mm width 900 mm width	



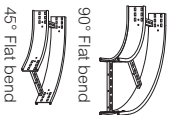
Fittings

Coupler sets

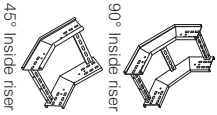
Supplied in pairs, with fastenings (8 per coupler). Use to couple straight lengths and accessories. Even when ladder is cut to length, the slots in the coupler will always align with slots in the ladder side rail
When bolting to cut ends adjust coupler to ensure 8 bolts can be inserted



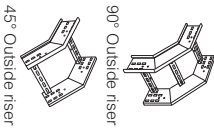
Flat bends

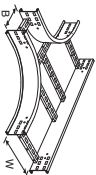
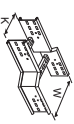
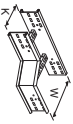
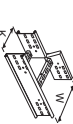


Inside risers



Outside risers

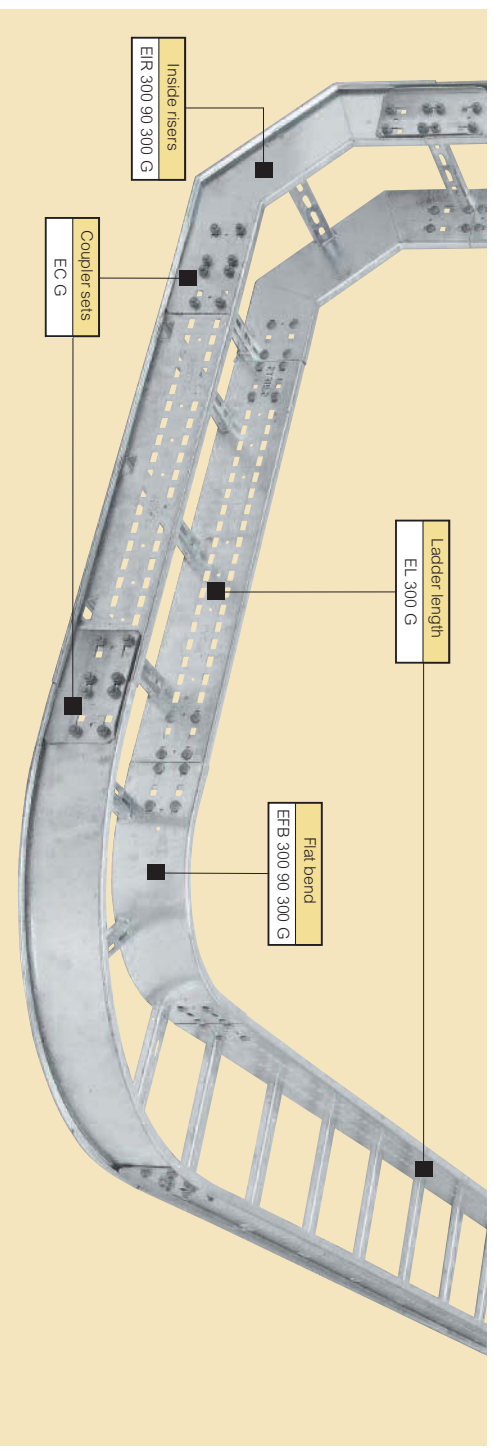


Pack	Cat. Nos.
1	PTWRF
1	PUTWBRF
Fittings (continued) Tees and crosspieces All equal and unequal tees and crosspieces include R after radius to indicate radius and not width Equal tees  Unequal tees Example : The ordering code for a hot dip galvanized unequal tee with a 300 main run (W) and a 150 branch (B) with a 600R radius : PUT 300 150 600R G  4 way crosspieces Crosspieces in larger width/ radius combinations are supplied in two identical halves with fastenings  Straight reducers  Offset reducers – left hand  Offset reducers – right hand 	

Key : selecting heavy duty (Sapphire) fittings. Replace the letters shown in **red** with your choice from the following options :
W = Widths : 150, 300, 450, 600, 750, 900
A = Angle (°) : 90 or 45
B = Branch width (mm) : 150, 300, 450, 600, 750, 900
F = Finish : G (hot dip galvanised after manufacture),
D (deep galvanised S (stainless steel), E (plastic coated)
K = Narrowed width when using a reducer (mm) : 150, 300, 450, 600, 750
r = Radius (mm) : 300, 600

	450, 750, 900 mm widths and 450, 750, 900 mm radi available to special order. 30° and 60° bends and risers and unequal tees available to special order. Other rung configurations available
Contact us on 0845 605 4333	

Swifts® cable ladder systems extra heavy duty (Emerald)



Dimensions and technical information (p. 226–230)
Selection chart (p. 214–215)

Coupler sets and accessories are supplied complete with fastenings
Rung spacing : 300 mm between centres
Standard radius for accessories : 300 and 600 mm

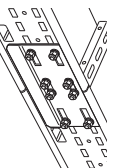
Pack	Cat. Nos.
1	Extra heavy duty (Emerald) ladder Straight lengths – 3 and 6 m 6 m lengths available on special request : eg EL 600 G 6m
1	EL 150F
1	EL 300F
1	EL 450F
1	EL 600F
1	EL 750F
1	EL 900F



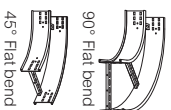
Fittings

Coupler sets

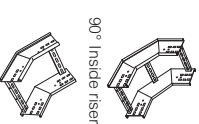
Supplied in pairs, with fastenings (8 per coupler). Use to couple straight lengths and accessories. Even when ladder is cut to length, the slots in the coupler will always align with slots in the ladder side rail.
When bolting to cut ends adjust coupler to ensure 8 bolts can be inserted



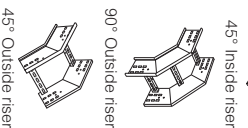
Flat bends



Inside risers



Outside risers



1	ECF
1	EFB WAF
1	EOR WAF

Fittings (continued)

Tees and crosspieces

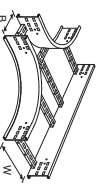
All equal and unequal tees and crosspieces include R after radius to indicate radius and not width

Equal tees



Unequal tees

Example :
The ordering code for a hot dip galvanised unequal tee with a 300 main run (W) and a 150 branch (B) with a 600R radius :
EUT 300 150 600R G

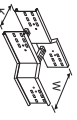


4 way crosspieces

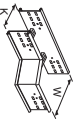
Crosspieces in larger width/ radius combinations are supplied in two identical halves with fastenings



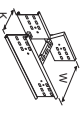
Straight reducers



Offset reducers – left hand



Offset reducers – right hand



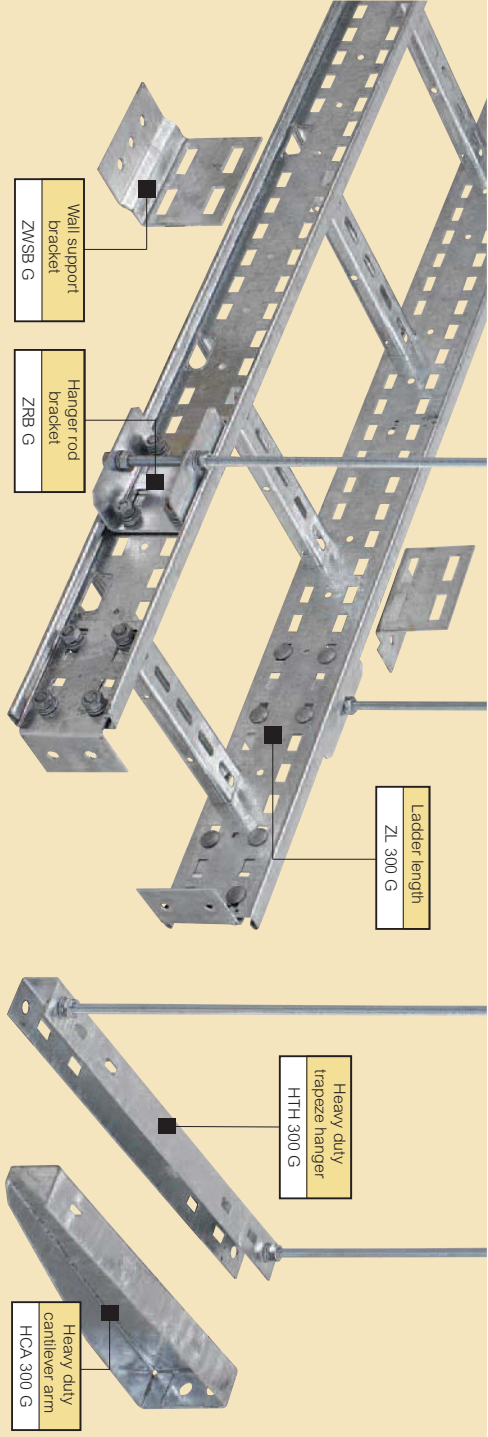
Pack	Cat. Nos.
1	ET WRF
1	EUT WBtRF
1	EX WtRF
1	ESR WK F
1	ELR WK F
1	ERR WK F

Key : selecting extra heavy duty (Emerald) fittings. Replace the letters shown in **red** with your choice from the following options :

W = Widths (mm) : 150, 300, 450, 600, 750, 900
A = Angle (°) : 90 or 45
B = Branch width (mm) : 150, 300, 450, 600, 750, 900
F = Finish : **G** (hot dip galvanised after manufacture), **D** (deep galvanised **S** (stainless steel))
K = Narrowed width when using a reducer (mm) : 150, 300, 450, 600, 750 **r** = Radius (mm) : 300, 600

450, 750, 900 mm widths and 450, 750, 900 mm radii available to special order. 30° and 60° bends and risers and unequal tees available to special order. Other rung configurations available

Contact us on 0845 605 4333



+ Dimensions and technical information (p. 231)

Supports

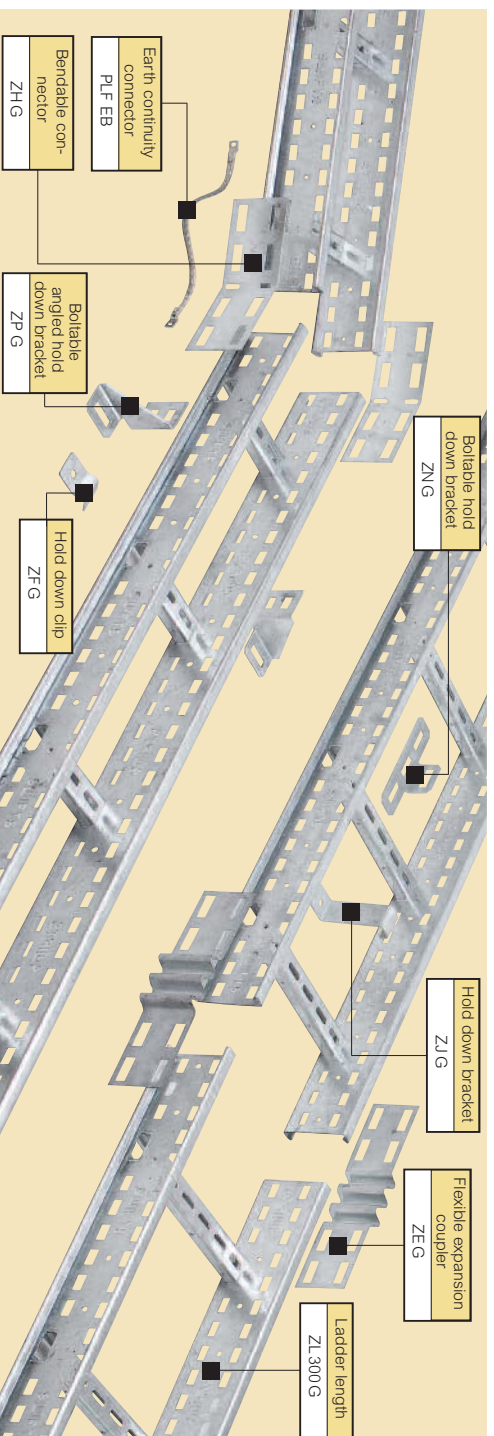
Pack	Cat. Nos.
1	HCA WF
For use with light duty (Opal), general purpose (Topaz), heavy duty (Sapphire) and extra heavy duty (Emerald) ladder	
Heavy duty cantilever arms	
Supplied singly without fastenings Use to fit horizontal runs of ladder to flat surfaces and Swifttrack channel All arms have slots in top flanges to accept ladder hold down brackets For light duty (Opal) ladder, use light duty cantilever arms, (see p. 245)	
1	HTH WF
Heavy duty trapeze hangers	
Supplied singly without fastenings Support horizontal runs of ladder from overhead structure Use M12 threaded rods For light duty (Opal) ladder use light duty trapeze hangers, (see p. 245)	
1	ORB F ZRB F PRB F ERB F
Hanger rod brackets	
When hanger rod brackets are fitted to ladder, covers can not be used Supplied in pairs with bracket to ladder fastenings Support horizontal runs of ladder from overhead structure Use M10 threaded rods, (see p. 247)	

Pack	Cat. Nos.
1	ZWSB F PWSB F EWSB F
General purpose (Topaz) Heavy duty (Sapphire) Extra heavy duty (Emerald)	
Wall support brackets	
Supplied in pairs with bracket to ladder fastenings Fit horizontal or vertical runs of ladder to vertical surfaces and Swifttrack channel	
1	OB F ZB F PB F EB F
90° end connectors	
Supplied in pairs with bracket to ladder fastening Fits ends of ladder to vertical surfaces	
1	Light duty (Opal) General purpose (Topaz) Heavy duty (Sapphire) Extra heavy duty (Emerald)

Key : selecting light duty (Opal), general purpose (Topaz), heavy duty (Sapphire) and extra heavy duty (Emerald) supports. Replace the letters shown in **red** with your choice from the following options :

W = Widths : **150, 300, 450, 600, 750, 900**
F = Finish : **G** (hot dip galvanised after manufacture), **D** (deep galvanised **S** (stainless steel), **E** (plastic coated)

Swifts® cable ladder systems ancillary items



 *Dimensions and technical information (p. 232–233)*

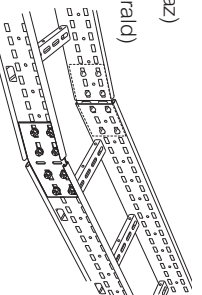
Ancillary items

Ancillary items (continued)

Bendable connectors

Supplied in pairs with fastenings
For fabricating accessories on site to make
up bends, reducers and compensate for
misalignment of straight lengths

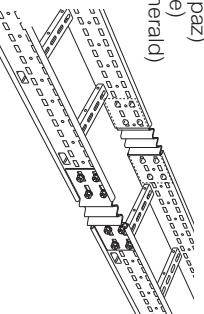
- 1 **OH F**
Light duty (Opal)
- 1 **ZH F**
General purpose (Topaz)
- 1 **PH F**
Heavy duty (Sapphire)
- 1 **EH F**
Extra heavy duty (Emerald)



Flexible expansion couplers

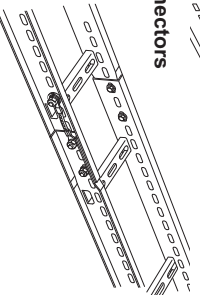
Supplied in pairs with fastenings
Provide a semi-flexible joint to compensate for
relative movement when spanning separate
structures or changes in ladder lengths due to
temperature variation

- 1 **OE F**
Light duty (Opal)
- 1 **ZE F**
General purpose (Topaz)
- 1 **PE F**
Heavy duty (Sapphire)
- 1 **EE F**
Extra heavy duty (Emerald)



Earth continuity connectors

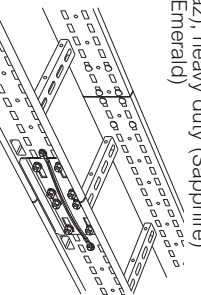
Light duty (Opal)
Use M6 x 12 mm
roofing nuts and bolts
Conductor area :
4 mm²



10

PLFEB

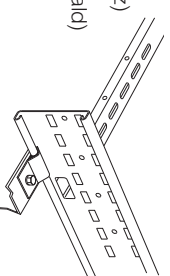
General purpose (Topaz), heavy duty (Sapphire)
and extra heavy duty (Emerald)
M6 brass fastenings
included in pack
Copper braid and
copper lugs both in
electroplated finish
Conductor area :
16 mm²



Pack

Cat. Nos.

- 1 **OF F**
Light duty (Opal)
- 1 **ZF F**
General purpose (Topaz)
- 1 **PF F**
Heavy duty (Sapphire)
- 1 **EF F**
Extra heavy duty (Emerald)



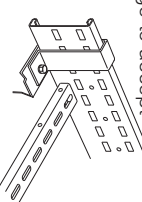
Hold down clip

Supplied singly without fastenings
Fits ladder to flat surfaces, Swifttrack channel or
heavy duty trapeze hangers which have slots in the
top flange to accept fastenings

- Light duty (Opal)
- General purpose (Topaz)
- Heavy duty (Sapphire)
- Extra heavy duty (Emerald)

Hold down bracket

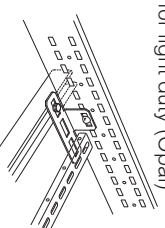
Supplied singly without fastenings
Fits ladder to flat surfaces, Swifttrack channel,
cantilever arms or heavy duty trapeze hangers
which have slots in the top flange to accept
fastenings



- Light duty (Opal)
- General purpose (Topaz)
- Heavy duty (Sapphire)
- Extra heavy duty (Emerald)

Boltable hold down bracket

Supplied singly with bracket to ladder fastening
steel support structure
Boltable hold down brackets for light duty (Opal)
are not available

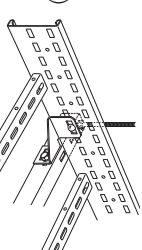


- General purpose (Topaz)
- Heavy duty (Sapphire)
- Extra heavy duty (Emerald)

- 1 **ZN F**
- 1 **PN F**
- 1 **EN F**

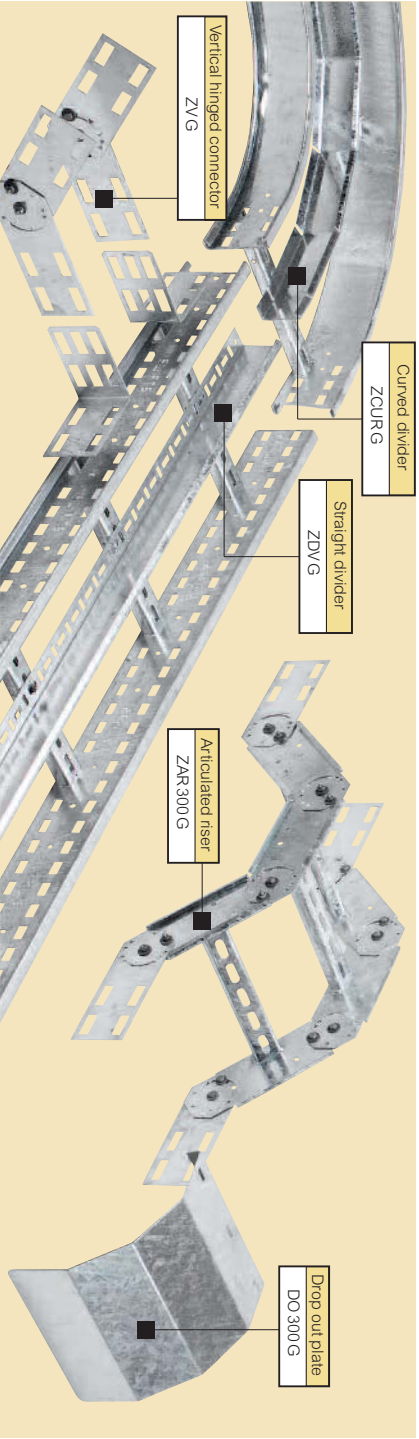
Boltable angled hold down brackets

Supplied in handed pairs with bracket to ladder
fastening
Fits ladder to heavy duty cantilever arms and
trapeze hangers which have slots in the side flange
to accept fastenings
Boltable angled hold down brackets for light duty
(Opal) are not available



- 1 **ZP F**
- 1 **PP F**
- 1 **EP F**

Swifts® cable ladder systems
ancillary items (continued)



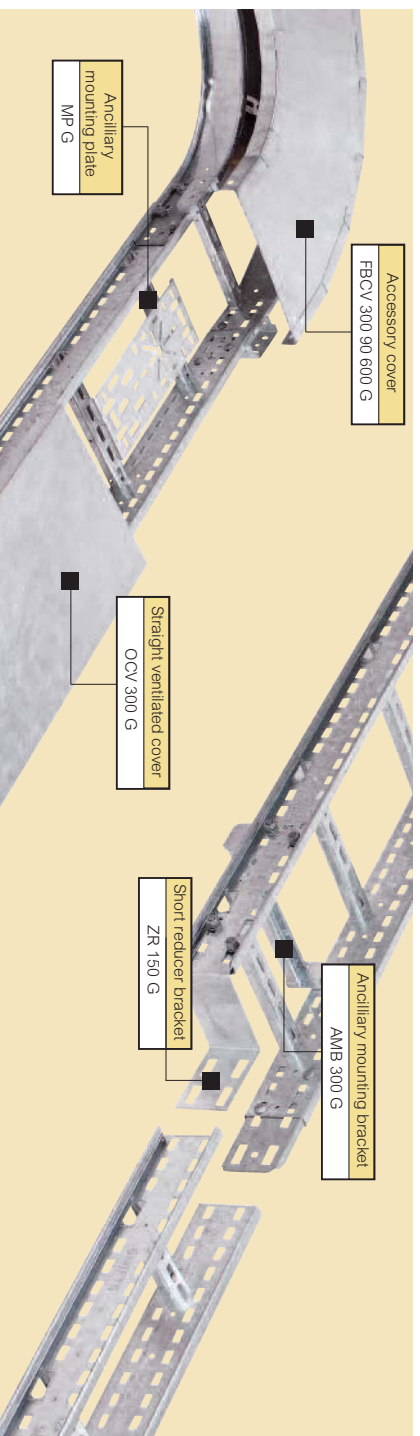
+ Dimensions and technical information (p. 233–234)

Ancillary items (continued)

Pack	Cat. Nos.		Pack	Cat. Nos.	
		Straight dividers – 3.0 m			Ancillary items (continued)
1 1 1	ZDV PDV EDV	Supplied with fastenings General purpose (Topaz) Heavy duty (Sapphire) Extra heavy duty (Emerald)			Dropout plate
		Curved dividers – 1.0 m	1	DO	Supplied with fastenings Use to provide local support for cables as they exit a cable ladder run between rungs
1 1 1	ZCUR PCUR ECUR	Supplied with fastenings Drill on site to suit rung position General purpose (Topaz) Heavy duty (Sapphire) Extra heavy duty (Emerald)			Rail-to-rail dropout brackets
		Vertical hinged connectors	1	M	Supplied in pairs with fastenings Use to attach a vertical run of ladder or tray beneath a horizontal main ladder run
1 1 1	ZV PV EV	Supplied in sets comprising four plates and fastenings Use with straight lengths to form risers or solve minor misalignment problems on site When used with tee bracket, vertical hinged connectors can offset tee branch General purpose (Topaz) Heavy duty (Sapphire) Extra heavy duty (Emerald)			All except light duty (Opal)
		Articulated risers			For ladder to ladder connection
1 1 1	ZAR PAR EAR	Set comprises three ladder sections and the necessary vertical hinged connectors with fastenings Use to form risers or solve most misalignment problems on site General purpose (Topaz) Heavy duty (Sapphire) Extra heavy duty (Emerald)			or Tray to ladder connection

Key : selecting ancillary items. Replace the letters shown in **red** with your choice from the following options :
W = Widths (mm) : **100, 150, 225, 300, 450, 600, 750, 900**
Note : see p. 212-215 for specific width and finish options

Swifts® cable ladder systems ancillary items (continued) and covers



Dimensions and technical information (p. 234–235)

Ancillary items (continued)

Pack	Cat. Nos.		Pack	Cat. Nos.	
		Short reducer brackets Supplied singly with fastenings Use to form a reducer on site Straight reducer – use in pairs Offset reducer – use singly with straight coupler 	1	–	Supplied with brackets and fastenings Covers for both closed and ventilated installations are common (except when using inside and outside risers, see below) 600 mm wide and above are overlap jointed and dimpled for rigidity Straight covers – 300 m Add CV before the width of your completed straight cover Cat. No. and remove the ref ZL, PL or EL Example : For a heavy duty (Sapphire) 300 wide hot dip galvanised Cover code = CV 300 G Accessory covers (except risers) Example : Product code = PFB 300 90 600 G Cover code = FB CV 300 90 600 G For cover code remove first letter (Z, P or E) add CV before number reference Inside riser closed covers General purpose (Topaz) Heavy duty (Sapphire) Extra heavy duty (Emerald) Inside riser ventilated covers General purpose (Topaz) Heavy duty (Sapphire) Extra heavy duty (Emerald) Outside riser closed covers General purpose (Topaz) Heavy duty (Sapphire) Extra heavy duty (Emerald) Outside riser ventilated covers General purpose (Topaz) Heavy duty (Sapphire) Extra heavy duty (Emerald)
1	ZR Y F PR Y F ER Y F	General purpose (Topaz) Heavy duty (Sapphire) Extra heavy duty (Emerald) Ancillary mounting bracket Supplied singly with bracket to ladder fastenings 	1	–	ZIRC WArF PIRC WArF EIRC WArF ZIRV WArF PIRV WArF EIRV WArF ZORC WArF PORC WArF EORC WArF ZORV WArF PORV WArF EORV WArF
1	OAMB W F AMB W F	Light duty (Opal) All except light duty (Opal) Ancillary mounting plate Supplied singly with bracket to ladder fastenings All ladder types For rung mounting or Side rail mounting – not suitable for light duty (Opal) 	1	1	General purpose (Topaz) Heavy duty (Sapphire) Extra heavy duty (Emerald) Outside riser closed covers General purpose (Topaz) Heavy duty (Sapphire) Extra heavy duty (Emerald) Outside riser ventilated covers General purpose (Topaz) Heavy duty (Sapphire) Extra heavy duty (Emerald)
1	MP F		1	1	

Key : selecting for ancillary items and covers. Replace the letters shown in **red** with your choice from the following options :

W = Widths : **100, 150, 225, 300, 450, 600, 750, 900**
Y = Ladder width reduction **A** = Angle (°) : **90** or **45**
B = Branch width (mm) : **100, 150, 225, 300, 450, 600, 750, 900**
F = Finish : **G** (hot dip galvanised after manufacture), **D** (deep galvanised **S** (stainless steel), **E** (plastic coated)
K = Narrowed width when using a reducer (mm) : **150, 300, 450, 600, 750**
r = Radius (mm) : **300, 600**
Note : see p. 212–215 for specific width and finish options



Pack	Cat. Nos.	Fasteners		
Hexagon head setscrews				
200 200 200 200 200 200 200 200 200 200 100 100 100 100 100 100	SS0616		Electroplated zinc	
	SS0620		M6 x 16	
	SS0625		M6 x 20	
	SS0630		M6 x 25	
	SS1016		M6 x 30	
	SS1020		M10 x 16	
	SS1025		M10 x 20	
	SS1030		M10 x 25	
	SS1035		M10 x 30	
	SS1040		M10 x 35	
	SS1045		M10 x 40	
	SS1050		M10 x 45	
	SS1060		M10 x 50	
	SS1220		M10 x 60	
	SS1225		M12 x 20	
	SS1230		M12 x 25	
200 200 200 200	SS1235	M12 x 30		
	SS1240	M12 x 35		
	SS1250	M12 x 40		
	SS1250	M12 x 50		
Hot dip galvanised				
200 200 200 200	SSG0616		M6 x 16	
	SSG0620		M6 x 20	
	SSG0625		M6 x 25	
	SSG0630		M6 x 30	
100 100 100 100 100 100		Stainless steel	M6 x 20	
		M6 x 25		
		M10 x 16		
		M10 x 25		
		M10 x 40		
		M12 x 25		
Flat washers				
500 500 500 500	FW06		Electroplated zinc	
	FW08		M6	
	FW10		M8	
	FW12		M10	
100 100 100 100		Stainless steel	M12	
		M6		
		M8		
		M10		
400 400 400 400	SW06		Shakeproof washers	
	SW08			Electroplated zinc
	SW10			M6
	SW12			M8
200 200 200 200	SS0616		M6 x 16	
	SS0620		M6 x 20	
	SS0625		M6 x 25	
	SSG0630		M6 x 30	
100 100 100 100 100 100		Stainless steel	M6 x 20	
		M6 x 25		
		M10 x 16		
		M10 x 25		
		M10 x 40		
		M12 x 25		
Flat washers				
500 500 500 500	FW06		Electroplated zinc	
	FW08		M6	
	FW10		M8	
	FW12		M10	
100 100 100 100		Stainless steel	M12	
		M6		
		M8		
		M10		
400 400 400 400	SW06		Shakeproof washers	
	SW08			Electroplated zinc
	SW10			M6
	SW12			M8
200 200 200 200	SS0616		M6 x 16	
	SS0620		M6 x 20	
	SS0625		M6 x 25	
	SSG0630		M6 x 30	
100 100 100 100 100 100		Stainless steel	M6 x 20	
		M6 x 25		
		M10 x 16		
		M10 x 25		
		M10 x 40		
		M12 x 25		
Flat washers				
500 500 500 500	FW06		Electroplated zinc	
	FW08		M6	
	FW10		M8	
	FW12		M10	
100 100 100 100		Stainless steel	M12	
		M6		
		M8		
		M10		
400 400 400 400	SW06		Shakeproof washers	
	SW08			Electroplated zinc
	SW10			M6
	SW12			M8
200 200 200 200	SS0616		M6 x 16	
	SS0620		M6 x 20	
	SS0625		M6 x 25	
	SSG0630		M6 x 30	
100 100 100 100 100 100		Stainless steel	M6 x 20	
		M6 x 25		
		M10 x 16		
		M10 x 25		
		M10 x 40		
		M12 x 25		
Flat washers				
500 500 500 500	FW06		Electroplated zinc	
	FW08		M6	
	FW10		M8	
	FW12		M10	
100 100 100 100		Stainless steel	M12	
		M6		
		M8		
		M10		
400 400 400 400	SW06		Shakeproof washers	
	SW08			Electroplated zinc
	SW10			M6
	SW12			M8
200 200 200 200	SS0616		M6 x 16	
	SS0620		M6 x 20	
	SS0625		M6 x 25	
	SSG0630		M6 x 30	
100 100 100 100 100 100		Stainless steel	M6 x 20	
		M6 x 25		
		M10 x 16		
		M10 x 25		
		M10 x 40		
		M12 x 25		
Flat washers				
500 500 500 500	FW06		Electroplated zinc	
	FW08		M6	
	FW10		M8	
	FW12		M10	
100 100 100 100		Stainless steel	M12	
		M6		
		M8		
		M10		
400 400 400 400	SW06		Shakeproof washers	
	SW08			Electroplated zinc
	SW10			M6
	SW12			M8
200 200 200 200	SS0616		M6 x 16	
	SS0620		M6 x 20	
	SS0625		M6 x 25	
	SSG0630		M6 x 30	
100 100 100 100 100 100		Stainless steel	M6 x 20	
		M6 x 25		
		M10 x 16		
		M10 x 25		
		M10 x 40		
		M12 x 25		
Flat washers				
500 500 500 500	FW06		Electroplated zinc	
	FW08		M6	
	FW10		M8	
	FW12		M10	
100 100 100 100		Stainless steel	M12	
		M6		
		M8		
		M10		
400 400 400 400	SW06		Shakeproof washers	
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200 200 200 200	SS0616		M6 x 16	
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	SS0625		M6 x 25	
	SSG0630		M6 x 30	
100 100 100 100 100 100		Stainless steel	M6 x 20	
		M6 x 25		
		M10 x 16		
		M10 x 25		
		M10 x 40		
		M12 x 25		
Flat washers				
500 500 500 500	FW06		Electroplated zinc	
	FW08		M6	
	FW10		M8	
	FW12		M10	
100 100 100 100		Stainless steel	M12	
		M6		
		M8		
		M10		
400 400 400 400	SW06		Shakeproof washers	
	SW08			Electroplated zinc
	SW10			M6
	SW12			M8
200 200 200 200	SS0616		M6 x 16	
	SS0620		M6 x 20	
	SS0625		M6 x 25	
	SSG0630		M6 x 30	
100 100 100 100 100 100		Stainless steel	M6 x 20	
		M6 x 25		
		M10 x 16		
		M10 x 25		
		M10 x 40		
		M12 x 25		
Flat washers				
500 500 500 500	FW06		Electroplated zinc	
	FW08		M6	
	FW10		M8	
	FW12		M10	
100 100 100 100		Stainless steel	M12	
		M6		
		M8		
		M10		
400 400 400 400	SW06		Shakeproof washers	
	SW08			Electroplated zinc
	SW10			M6
	SW12			M8
200 200 200 200	SS0616		M6 x 16	
	SS0620		M6 x 20	
	SS0625		M6 x 25	
	SSG0630		M6 x 30	
100 100 100 100 100 100		Stainless steel	M6 x 20	
		M6 x 25		
		M10 x 16		
		M10 x 25		
		M10 x 40		
		M12 x 25		
Flat washers				
500 500 500 500	FW06		Electroplated zinc	
	FW08		M6	
	FW10		M8	
	FW12		M10	
100 100 100 100		Stainless steel	M12	
		M6		
		M8		
		M10		
400 400 400 400	SW06		Shakeproof washers	
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	SW12			M8
200 200 200 200	SS0616		M6 x 16	
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	SS0625		M6 x 25	
	SSG0630		M6 x 30	
100 100 100 100 100 100		Stainless steel	M6 x 20	
		M6 x 25		
		M10 x 16		
		M10 x 25		
		M10 x 40		
		M12 x 25		
Flat washers				
500 500 500 500	FW06		Electroplated zinc	
	FW08		M6	
	FW10		M8	
	FW12		M10	
100 100 100 100		Stainless steel	M12	
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400 400 400 400	SW06		Shakeproof washers	
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	SS0620		M6 x 20	
	SS0625		M6 x 25	
	SSG0630		M6 x 30	
100 100 100 100 100 100		Stainless steel	M6 x 20	
		M6 x 25		
		M10 x 16		
		M10 x 25		
		M10 x 40		
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Flat washers				
500 500 500 500	FW06		Electroplated zinc	
	FW08		M6	
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	FW12		M10	
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500 500 500 500	FW06		Electroplated zinc	
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	FW12		M10	
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		M10 x 40		
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400 400 400 400	SW06		Shakeproof washers	
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	SSG0630		M6 x 30	
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		M6 x 25		
		M10 x 16		
		M10 x 25		
		M10 x 40		
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Flat washers				
500 500 500 500	FW06		Electroplated zinc	
	FW08		M6	
	FW10		M8	
	FW12		M10	
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		M10		
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100 100 100 100 100 100		Stainless steel	M6 x 20	
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		M10 x 25		
		M10 x 40		
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Flat washers				
500 500 500 500	FW06		Electroplated zinc	
	FW08		M6	
	FW10		M8	
	FW12		M10	
100 100 100 100		Stainless steel	M12	
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Flat washers				
500 500 500 500	FW06		Electroplated zinc	
	FW08		M6	
	FW10		M8	
	FW12		M10	
100 100 100 100		Stainless steel	M12	
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	SW10			M6
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		M10 x 40		
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500 500 500 500	FW06		Electroplated zinc	
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400 400 400 400	SW06		Shakeproof washers	
	SW08			Electroplated zinc
	SW10			M6
	SW12			M8
200 200 200 200	SS0616		M6 x 16	
	SS			

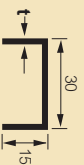
Swifts® cable ladder system

dimensions – light duty (0pa1)

■ Rung details

Pitch chart shown below

TYPE 4	Type 4 rung length	Rung thickness (t)	ACCESSORY WIDTH	RUNG PITCH A
	Up to 300	1.0	150	49.0
	Above 300	1.5	300	49.5
			450	49.7



■ Coupler sets

Supplied in pairs with fastenings

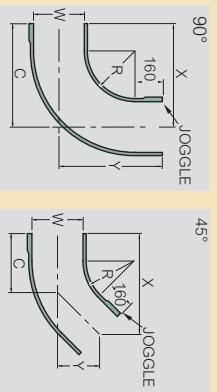
Required only where ladder has been cut to length
When joining a cut length to an uncut length or an accessory only one coupler is required.

■ Flat bends

To assist in the installation of a complete cable ladder run following a centre-line drawing (usually CAD generated), the following pages contain C, X, Y and length dimensions where appropriate, and also diagrams to explain the dimensions

The dimensions help to ensure that accessories are correctly positioned in line with the drawing and make it possible to accurately calculate the installed length of intermediate straight sections. This allows the sections to be cut to length and pre-assembled, making installation in elevated or restricted areas much simpler

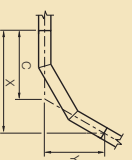
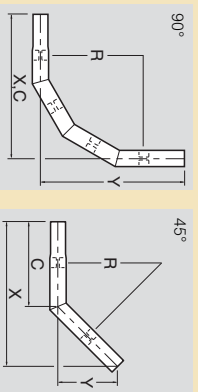
C = length of the centre-line from each 'end' of the accessory to the point at which the centre-lines intersect



Width (W)	Radius (R)	X	90° Y	C	X	45° Y	C
150	300	534	534	534	537	223	315
300	300	609	609	609	590	244	346
450	300	684	684	684	643	266	377

■ Risers

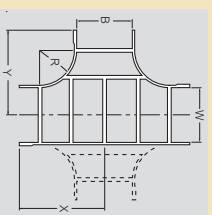
Dimensions shown are identical for both inside and outside risers



Width	Radius (R)	X	90° Y	C	X	45° Y	C
All	300	450	450	450	443	183.5	260

All dimensions (mm)

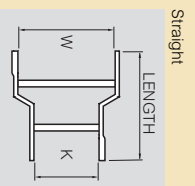
■ Equal tees and 4 way crosspieces



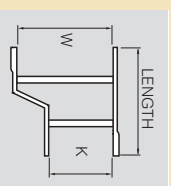
Width (B)	Radius (R)	Equal tees Width (W) X/Y
150	300	534
300	300	609
450	300	684

Equal tee and 4 way crosspiece

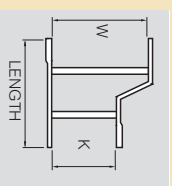
■ Reducers



Straight



Offset right hand



Offset left hand

Width (W)	Width (K)	Straight reducer length	Offset reducer length
300	100	450	450
	150	450	450
	225	400	450
450	100	450	550
	150	450	500
	225	450	500
	300	450	450

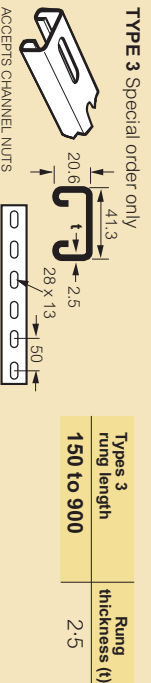
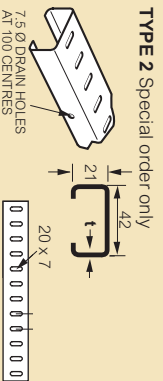
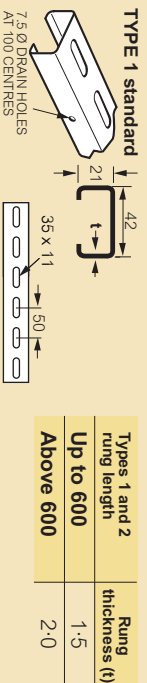
All dimensions (mm)

Swifts® cable ladder system

dimensions – general purpose (Topaz), heavy duty (Sapphire) and extra heavy duty (Emerald)

■ Rung details

Types 2 and 3 are only available to special order
Type 3 is not available in deep galvanised finish
Types 1, 2 and 3 can be inverted and supplied in any combination to special order



■ Coupler sets

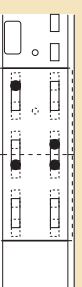
General purpose (Topaz)

Supplied in pairs, with fastenings (4 per coupler). Use to couple straight lengths and accessories
Even when ladder is cut to length, the slots in the coupler will always align with slots in the ladder side rail
When bolting to cut ends adjust coupler to ensure 4 bolts can be inserted

Coupling details
Straight length to : straight length, risers and reducers



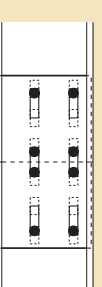
Straight length to : flat bends, tees and 4-way crosspiece



Heavy duty (Sapphire) and extra heavy duty (Emerald)

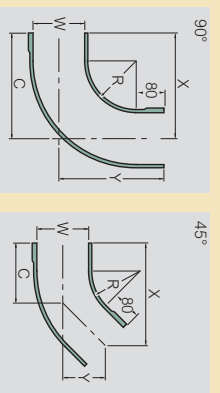
Supplied in pairs, with fastenings (8 per coupler)
Use to couple straight lengths and accessories
Even when ladder is cut to length, the slots in the coupler will always align with slots in the ladder side rail
When bolting to cut ends adjust coupler to ensure 8 bolts can be inserted

Coupling details
Straight length to : straight length and all accessories



■ Flat bends

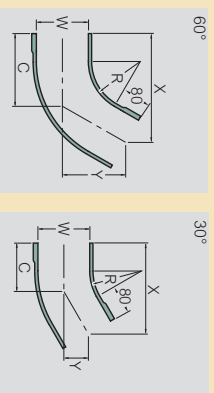
X = length of accessory from each 'end' of centre-line
Y = length from each 'end' of the accessory to the point at which the centre-lines intersect
C = length of the centre-line from each 'end' of the accessory to the point at which the centre-lines intersect



All dimensions (mm)

Note :

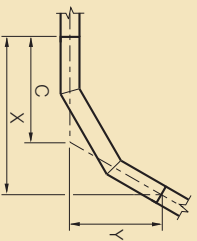
60° and 30° bends can be supplied to special order only



Width (W)	Radius (R)	X	90° Y	C	X	45° Y	C
150	300	453	453	453	400	166	235
	450	603	603	603	506	210	297
	600	753	753	753	612	254	359
	750	903	903	903	719	298	421
300	900	1053	1053	1053	825	342	483
	300	528	528	528	453	188	266
	450	678	678	678	559	233	328
	600	828	828	828	665	276	390
450	750	978	978	978	772	320	452
	900	1128	1128	1128	878	364	514
	300	603	603	603	506	210	297
	450	753	753	753	612	254	359
600	600	903	903	903	719	298	421
	750	1053	1053	1053	825	342	483
	900	1203	1203	1203	931	385	545
	300	678	678	678	559	232	328
750	450	828	828	828	665	276	390
	600	978	978	978	772	320	452
	750	1128	1128	1128	878	364	514
	900	1278	1278	1278	984	407	576
900	300	753	753	753	612	254	359
	450	903	903	903	719	298	421
	600	1053	1053	1053	825	342	483
	750	1203	1203	1203	931	385	545
900	900	1353	1353	1353	1037	429	607
	300	828	828	828	665	276	390
	450	978	978	978	772	320	452
	600	1128	1128	1128	878	364	514
900	750	1278	1278	1278	984	407	576
	900	1428	1428	1428	1090	451	638

All dimensions (mm)

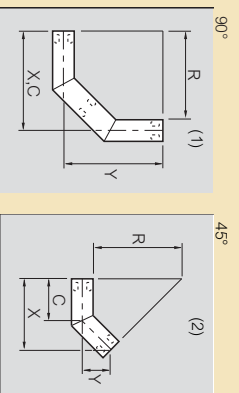
■ Risers



X = length of accessory from each 'end' of centre-line
Y = length from each 'end' of the accessory to the point at which the centre-lines intersect
C = length of the centre-line from each 'end' of the accessory to the point at which the centre-lines intersect
Dimensions shown are identical for both inside and outside risers

General purpose (Topaz)

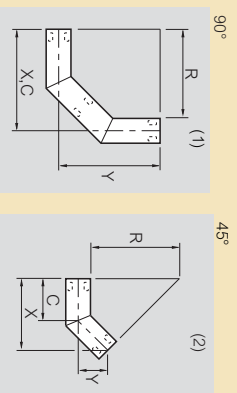
All dimensions (mm)



Width (W)	Radius (R)	X	Y	90° C	X	Y	45° C
300	350	350	350	247	103	145	
450	500	500	500	354	146	207	
All							
600	650	650	650	460	190	269	
750	800	800	800	566	234	331	
900	950	950	950	673	278	394	

Heavy duty (Sapphire)

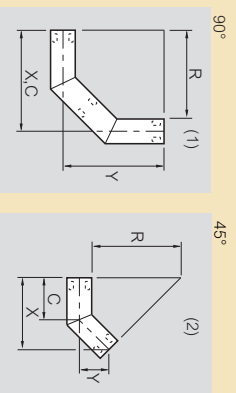
All dimensions (mm)



Width (W)	Radius (R)	X	Y	90° C	X	Y	45° C
300	363	363	363	256	106	150	
450	513	513	513	362	150	212	
All							
600	663	663	663	468	194	274	
750	813	813	813	575	238	337	
900	963	963	963	681	282	399	

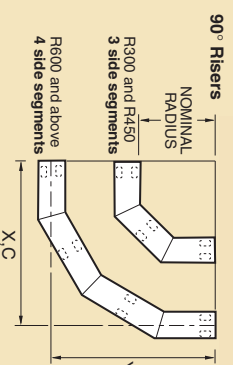
Extra heavy duty (Emerald)

All dimensions (mm)

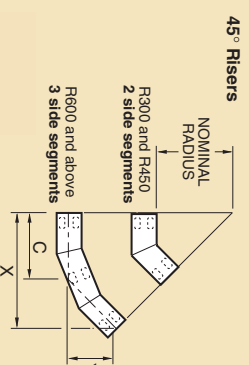


Width (W)	Radius (R)	X	Y	90° C	X	Y	45° C
300	375	375	375	265	110	155	
450	525	525	525	371	154	217	
All							
600	675	675	675	477	198	280	
750	825	825	825	583	242	342	
900	975	975	975	689	286	404	

■ Risers (continued)



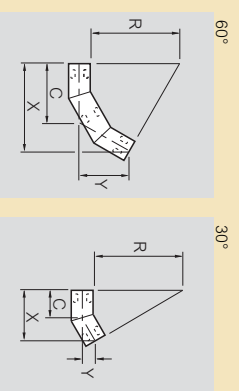
(1) 90° risers, 600R and above have 4 side segments



(2) 45° risers, 600R and above have 3 side segments

Note :

60° and 30° risers can be supplied to special order only



All dimensions (mm)

Swifts® cable ladder systems
dimensions – general purpose (Topaz), heavy duty (Sapphire) and extra heavy duty (Emerald)

■ **Tees and unequal tees**

X and Y dimensions are given to assist in the installation of a complete cable ladder run following a centre-line drawing

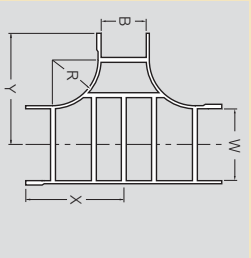
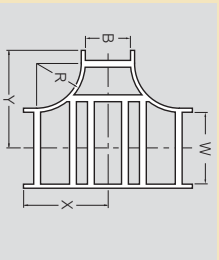
(usually CAD generated)

X = length of accessory from each 'end' of centre-line

Y = length from each 'end' of the accessory to the point at which the centre-lines intersect

For dimensions, see table below

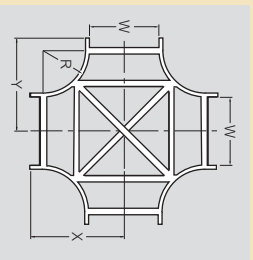
Unequal tees



Equal tees

Branch (B)	Radius (R)	Width (W)		UNEQUAL TEES		Width (W)		Width (W)		Width (W)		Width (W)		Width (W)	
		150	300	450	600	750	900	X	Y	X	Y	X	Y	X	Y
150	300	–	–	453	528	453	603	453	678	453	753	453	828		
	450	–	–	603	678	603	753	603	828	603	903	603	978		
	600	–	–	753	828	753	903	753	978	753	1053	753	1128		
	750 ⁽¹⁾	–	–	903	978	903	1053	903	1128	903	1203	903	1278		
	900 ⁽¹⁾	–	–	1053	1128	1053	1203	1053	1278	1053	1353	1053	1428		
300	300	528	453	–	–	528	603	528	678	528	753	528	828		
	450	678	603	–	–	678	753	678	828	678	903	678	978		
	600	828	753	–	–	828	903	828	978	828	1053	828	1128		
	750 ⁽¹⁾	978	903	–	–	978	1053	978	1128	978	1203	978	1278		
	900 ⁽¹⁾	1128	1053	–	–	1128	1203	1128	1278	1128	1353	1128	1428		
450	300	603	453	603	528	–	–	603	678	603	753	603	828		
	450	753	603	753	678	–	–	753	828	753	903	753	978		
	600 ⁽¹⁾	903	753	903	828	–	–	903	978	903	1053	903	1128		
	750 ⁽¹⁾	1053	903	1053	978	–	–	1053	1128	1053	1203	1053	1278		
	900 ⁽¹⁾	1203	1053	1203	1128	–	–	1203	1278	1203	1353	1203	1428		
600	300	678	453	678	528	678	603	–	–	678	753	678	828		
	450	828	603	828	678	828	753	–	–	828	903	828	978		
	600 ⁽¹⁾	978	753	978	828	978	903	–	–	978	1053	978	1128		
	750 ⁽¹⁾	1128	903	1128	978	1128	1053	–	–	1128	1203	1128	1278		
	900 ⁽¹⁾	1278	1053	1278	1128	1278	1203	–	–	1278	1353	1278	1428		
750	300	753	453	753	528	753	602	753	678	–	–	753	828		
	450 ⁽¹⁾	903	603	903	678	903	753	903	828	–	–	903	978		
	600 ⁽¹⁾	1053	753	1053	828	1053	903	1053	978	–	–	1053	1128		
	750 ⁽¹⁾	1203	903	1203	978	1203	1053	1203	1128	–	–	1203	1278		
	900 ⁽¹⁾	1353	1053	1353	1128	1353	1203	1353	1278	–	–	1353	1428		
900	300	828	453	828	528	828	603	828	678	828	753	–	–		
	450 ⁽¹⁾	978	603	978	678	978	753	978	828	978	903	–	–		
	600 ⁽¹⁾	1128	753	1128	828	1128	903	1128	978	1128	1053	–	–		
	750 ⁽¹⁾	1278	903	1278	978	1278	1053	1278	1128	1278	1203	–	–		
	900 ⁽¹⁾	1428	1053	1428	1128	1428	1203	1428	1278	1428	1353	–	–		
All dimensions (mm)															
(1) Supplied in 2 parts for assembly on site															
		Width (W)		EQUAL TEES		Width (W)		Width (W)		Width (W)		Width (W)		Width (W)	
150		300													
		450													
		600													
		750 ⁽¹⁾													
		900 ⁽¹⁾													
300		300													
		450													
		600													
		750 ⁽¹⁾													
		900 ⁽¹⁾													
450		300													
		450													
		600 ⁽¹⁾													
		750 ⁽¹⁾													
		900 ⁽¹⁾													
600		300													
		450													
		600 ⁽¹⁾													
		750 ⁽¹⁾													
		900 ⁽¹⁾													
750		300													
		450 ⁽¹⁾													
		600 ⁽¹⁾													
		750 ⁽¹⁾													
		900 ⁽¹⁾													
900		300													
		450 ⁽¹⁾													
		600 ⁽¹⁾													
		750 ⁽¹⁾													
		900 ⁽¹⁾													

■ 4 way crosspieces

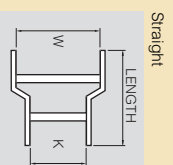


Width (W)	CROSSPIECE	
	Radius (R)	X/Y
150	300	454
	450	604
	600	754
	750 ⁽¹⁾	904
300	900 ⁽¹⁾	1054
	300	529
	450	679
	600	829
450	750 ⁽¹⁾	979
	900 ⁽¹⁾	1129
	300	604
	450	754
600	600 ⁽¹⁾	904
	750 ⁽¹⁾	1054
	900 ⁽¹⁾	1204
	300	679
750	450	829
	600 ⁽¹⁾	979
	750 ⁽¹⁾	1129
	900 ⁽¹⁾	1279
900	300	754
	450 ⁽¹⁾	904
	600 ⁽¹⁾	1054
	750 ⁽¹⁾	1204
900	900 ⁽¹⁾	1354
	300	829
	450 ⁽¹⁾	979
	600 ⁽¹⁾	1129
900	750 ⁽¹⁾	1279
	900 ⁽¹⁾	1429

(1) Supplied in 2 parts for assembly on site

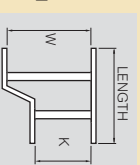
All dimensions (mm)

■ Reducers

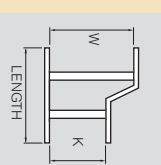


Offset

RH –
right hand



LH –
left hand



Width (W)	Width (K)	Straight		Offset	
		length	length	length	length
300	150	450	450	450	450
	150	450	500	500	500
450	300	450	450	450	450
	150	500	500	550	550
600	300	450	450	500	500
	450	450	450	500	500
750	150	500	600	600	600
	300	500	550	550	550
900	450	500	550	550	550
	600	450	500	500	500
900	750	450	450	450	450

All dimensions (mm)

When viewing reducer from the widest width end the cranked side shown indicates a RH or LH

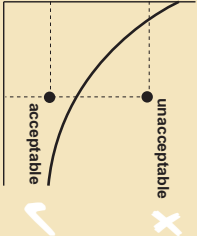
■ Loading graphs

The loads shown on all graphs are the safe recommended maximum loads that can be applied and must include wind, snow and any other external forces in addition to the cable load

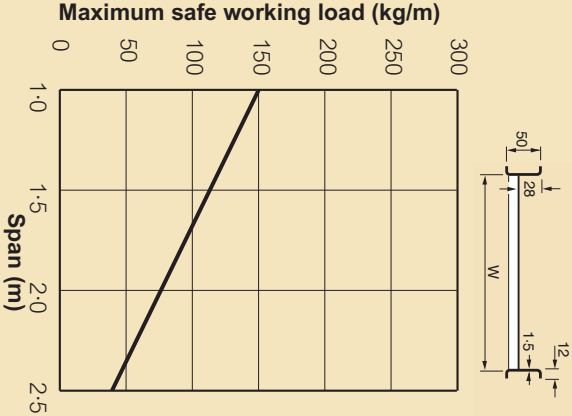
The graphs show the maximum load for ladder installed at a support spacing within its recommended range

When the graph line is above the intersection of the required load and span lines, the support equipment is suitable for use within those load and span conditions

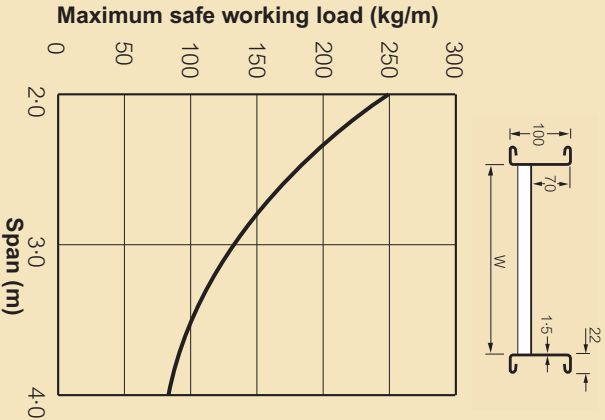
Example



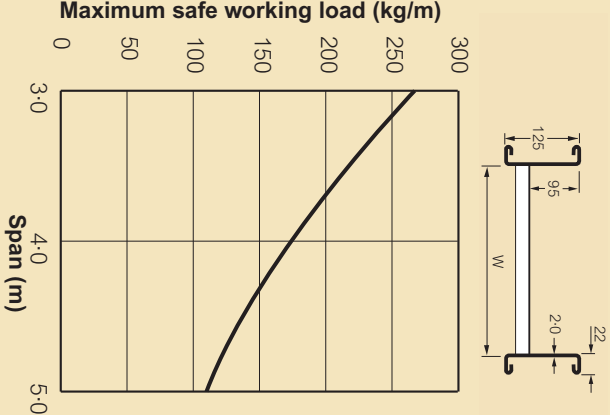
Light duty (Opal)



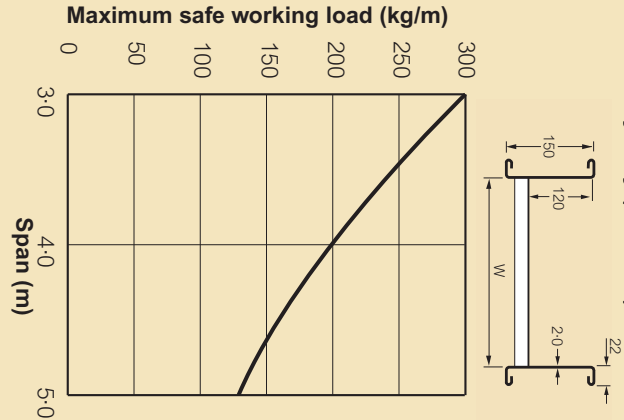
General purpose (Topaz)



Heavy duty (Sapphire)



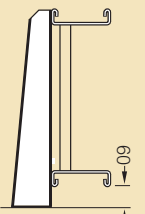
Extra heavy duty (Emerald)



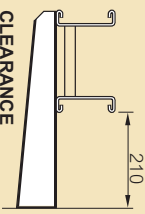
Swifts® cable ladder systems supports

Heavy duty cantilever arms

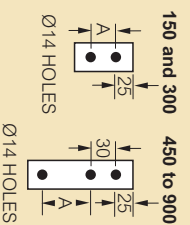
Supplied singly without fastenings
Fit horizontal runs of ladder to flat surfaces and Switrack channel
All arms have slots in top and side flanges to accept brackets
Use hold down brackets



NORMAL INSTALLATION
Arm = ladder width



CLEARANCE INSTALLATION
Arm = 1 size greater than ladder width



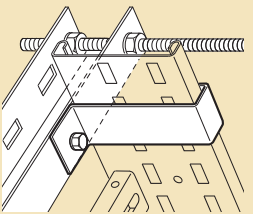
Ø14 HOLES

Cat. Nos.	A	L	SWL, kgf ⁽¹⁾ surface ⁽²⁾ Switrack
HCA 150 F	30	250	300
HCA 300 F	30	400	350
HCA 450 F	45	550	400
HCA 600 F	95	700	500
HCA 750 F	145	850	600
HCA 900 F	195	1000	700

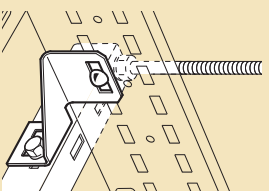
(1) Per cantilever arm for load uniformly distributed across the complete arm, when ladder fixed to arm using Swifts' hold down brackets
Safety factor : 2
(2) Solid surface is RSJ or concrete

Heavy duty trapeze hangers

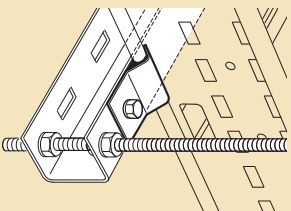
Supplied singly without fastenings
Support horizontal runs of ladder from overhead structure
Use M12 threaded rods



Hold down bracket

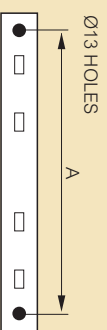


Bolted angled hold down bracket



Hold down clip

Trapeze hanger to threaded rod fixing



TYPE 1

TYPE 2

TYPE 3

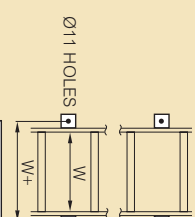
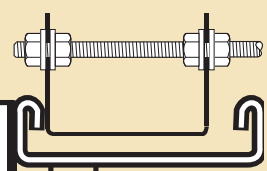
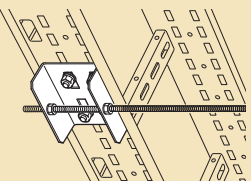
Cat. Nos.	A	Type 1	SWL, kgf ⁽³⁾ Type 2	Type 3
HTH 150 F	310	400	240	120
HTH 300 F	460	400	240	120
HTH 450 F	610	400	240	120
HTH 600 F	760	500	300	150
HTH 750 F	910	500	300	150
HTH 900 F	1060	500	300	150

(3) Per trapeze hanger for load uniformly distributed across complete hanger. Safety factor : 2

All dimensions (mm)

Hanger rod brackets

Supplied in pairs with bracket to ladder fastenings
Support horizontal runs of ladder from overhead structure
Use M10 threaded rods



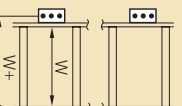
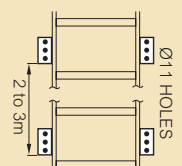
ORB	W+46
ZRB	W+66
PRB	W+66
ERB	W+66

Safe working loads

Contact us on 0845 605 4333

Wall support brackets

Supplied in pairs with bracket to ladder fastenings
Fit horizontal or vertical runs of ladder to vertical surfaces and Switrack channel



ZWSB	W+106
PWSB	W+106

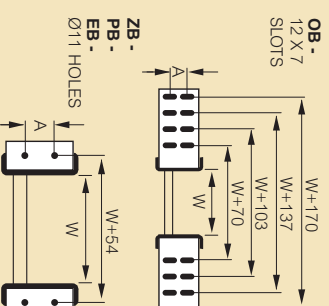
Safe working loads

Contact us on 0845 605 4333

90° end connectors

Supplied in pairs with bracket
to ladder fastenings
Fit ends of ladder to vertical surfaces

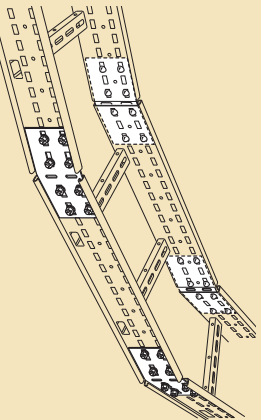
A	
OB F	16
ZB F	50
PB F	75
EB F	75



All dimensions (mm)

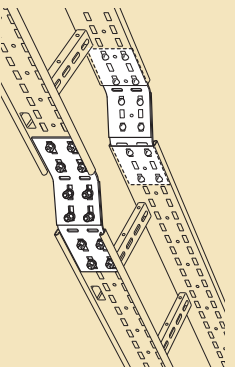
■ Bendable connectors

Supplied in pairs with fastenings
Light duty (Opal) bendable connectors must be fitted to the inside of the ladder side rails

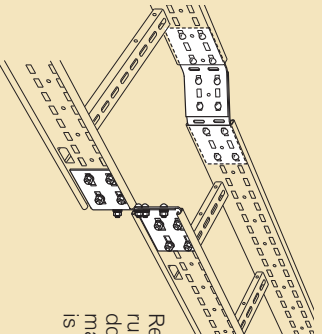


Fabricating accessories on site from cut lengths of cable ladder e.g. a long articulated bend

Correcting minor mis-alignment problems

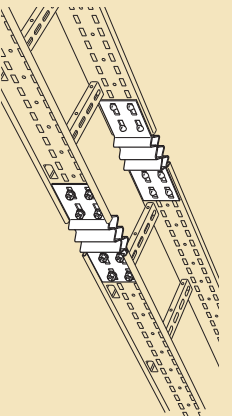


Reducing width of a run to the next size down when a properly manufactured reducer is not available



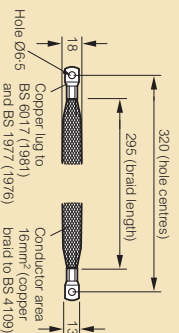
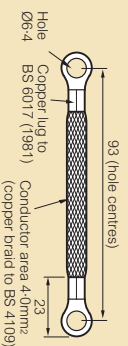
■ Flexible expansion couplers

Supplied in pairs with fastenings
Provide a semi-flexible joint to compensate for relative movement when spanning separate structures or changes in ladder lengths due to temperature variation.
Mounting pairs of couplers back-to-back, except for light duty (Opal), will increase the stiffness of each joint



■ Earth continuity connectors

Light duty (Opal)
Use M6 fastenings
Copper braid and copper lugs, both in electrotinne finish



General purpose (Topaz), heavy duty (Sapphire) and extra heavy duty (Emerald)
M6 brass fastenings included in pack
Copper braid and copper lugs, both in electrotinne finish

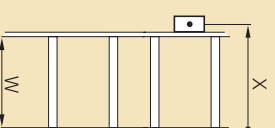
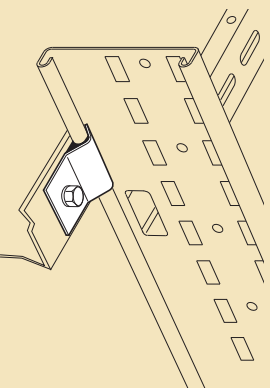
■ Hold down clip

Fits ladder to flat surfaces. Swifttrack channel or heavy duty trapeze hangers which have slots in the top flange to accept fastenings
Supplied singly without fastenings
OF F use M6; ZF F, PF F, EF F use M10
Insulated hold down clips are available for stainless steel ladder, contact us on 0845 605 4333

All Swifts' supports are provided with correctly positioned fixing holes to accept hold down clips without drilling. The table below gives the fixing hole spacing required when attaching hold down clips to other supports

Cat. Nos.	Centre distance between fixing holes X
OF F	W + 35
ZF F	W + 95
PF F	W + 95
EF F	W + 95

W = ladder width



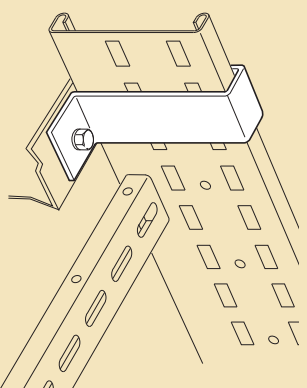
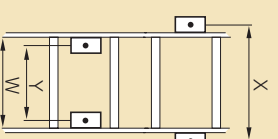
■ Hold down bracket

Fits ladder to flat surfaces. Swifttrack channel, cantilever arms or heavy duty trapeze hangers which have slots in the top flange to accept fastenings
Supplied singly without fastenings
Insulated hold down brackets are available for stainless steel ladder, contact us on 0845 605 4333

All Swifts' supports are provided with correctly positioned fixing holes to accept hold down brackets without drilling. The table below gives the fixing hole spacing required when attaching hold down bracket to other supports

Cat. Nos.	Centre distance between fixing holes inside ladder Y	outside ladder X
OJ F	W - 38	W + 62
ZJ F	W - 44	W + 80
PJ F	W - 44	W + 80
EJ F	W - 44	W + 80

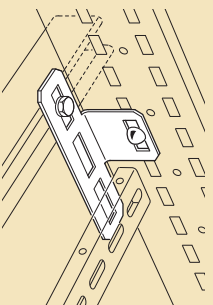
W = ladder width



■ Boltable brackets

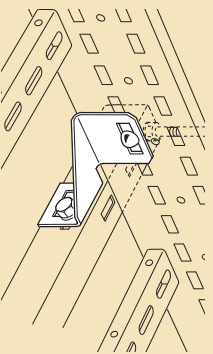
Boltable hold down bracket

Supplied singly with bracket to ladder fastening.
Fit ladder to Swiftrack channel in fabricated steel support structure.
Bracket to support fastening : M12



Boltable angled hold down brackets

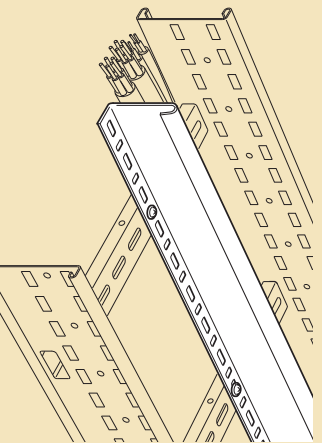
Supplied in handed pairs with bracket to ladder fastening.
Fit ladder to heavy duty cantilever arms and trapeze hangers which have slots in the side flange to accept fastenings.
Bracket to support fastening : M10



■ Dividers

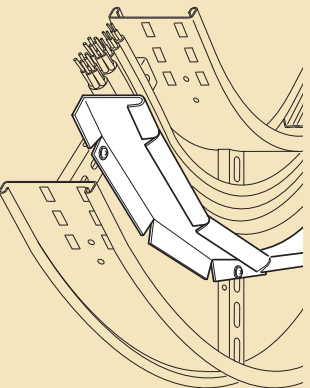
Straight divider

Supplied with fastenings



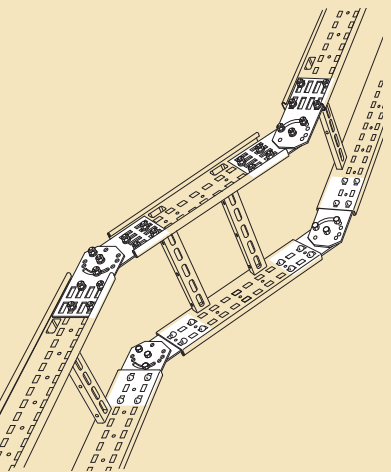
Curved divider

Supplied with fastenings
Drill on site to fit



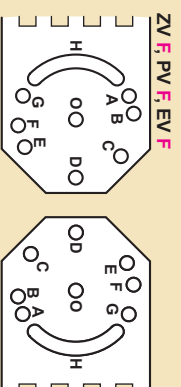
■ Vertical hinged connectors

Supplied in sets comprising four plates and fastenings.
Use with straight lengths to form risers or solve minor misalignment problems on site



■ Vertical hinged connectors

Connect together to form pre-set angles or pre-assemble for adjustment on site using the holes / slots given below



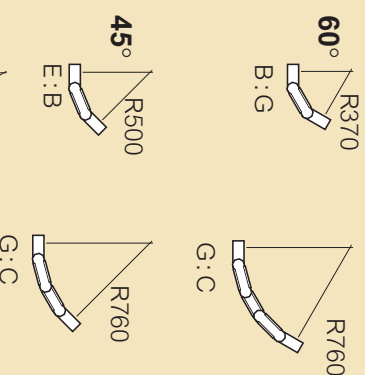
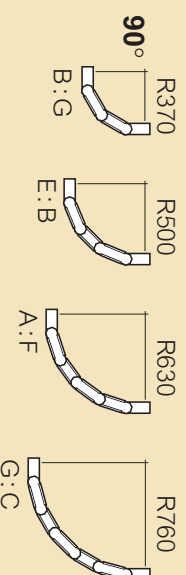
Cat. Nos.	15°	18°	22.5°	30°	45°
ZV F, PV F, EV F	G : C	A : F	E : B	B : G	F : C

■ Articulated risers

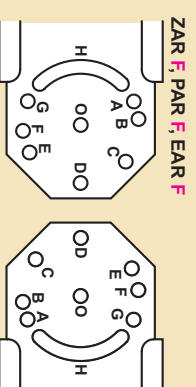
Set comprises three ladder sections and the necessary vertical hinged connectors with fastenings
Use to form risers or solve most misalignment problems on site

Sections required for a given angle

R = radius



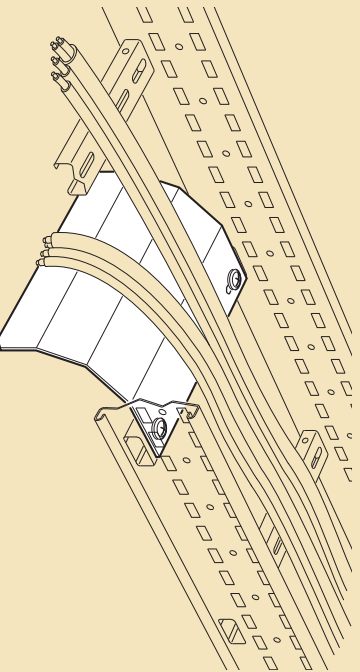
Connect together to form pre-set angles or pre-assemble for adjustment on site using the holes / slots shown



Cat. Nos.	15°	18°	22.5°	30°	45°
ZAR F, PAR F, EAR F	G : C	A : F	E : B	B : G	F : C

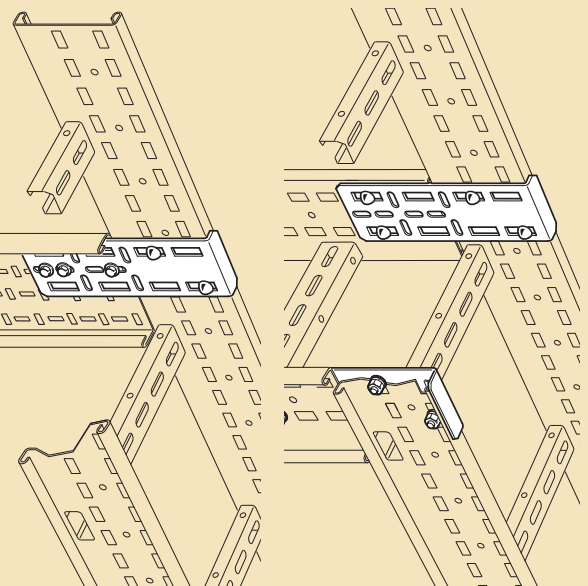
■ Dropout plate

Supplied with fastenings
Use to provide local support for
cables as they exit a cable ladder
run between rungs



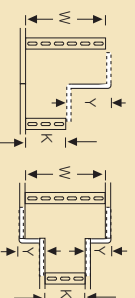
■ Rail-to-rail dropout brackets

Supplied in pairs with fastenings
Use to attach a vertical run of ladder or tray beneath a horizontal main
ladder run



■ Short reducer brackets

Supplied singly with fastenings
Use to form a reducer on site
Straight reducer
– use in pairs
Offset reducer
– use singly with straight coupler



Use the following calculations to establish ladder width reduction
This measurement (Y), can then be inserted into relevant Cat. Nos. to
show bracket size required (see p. 223)

Offset reducer

$$Y = W - K$$

Straight reducer

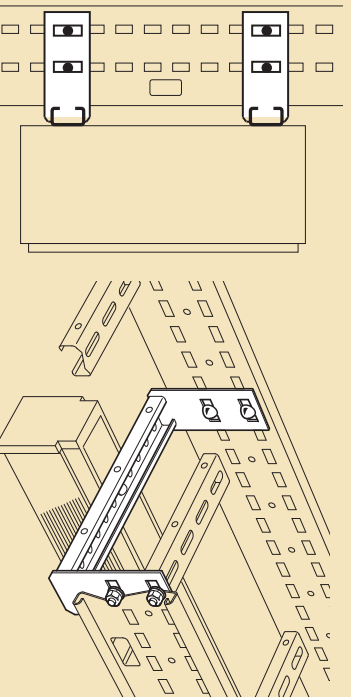
$$Y = \frac{W - K}{2}$$

W = main ladder mm
K = reduced ladder mm

Short reducer brackets can also be used to convert an equal tee into
an unequal tee

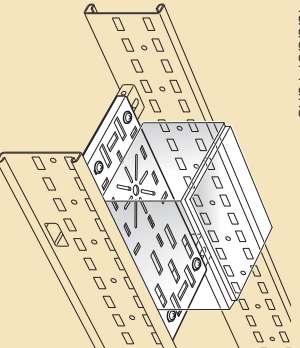
■ Ancillary mounting bracket

Supplied singly with bracket to ladder fastening
Slots for M6 fastenings are provided for mounting ancillary items

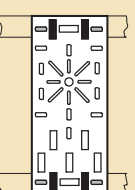


■ Ancillary mounting plate

Supplied singly with plate to ladder fastenings
Use to mount small lightweight items of ancillary equipment to cable
ladder runs



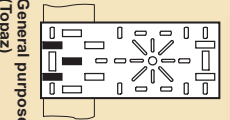
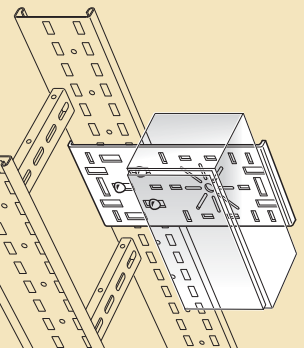
RUNG MOUNTING
(Plan view)



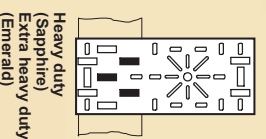
■ with type 1 rung
□ with type 2 rung

General purpose (Topaz)

SIDE RAIL MOUNTING
(Side view)



General purpose (Topaz)



**Heavy duty (Sapphire)
Extra heavy duty (Emerald)**

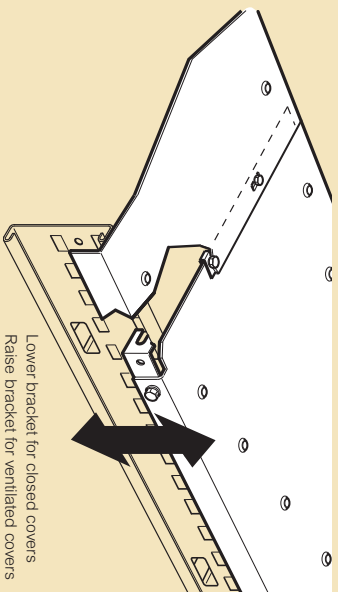
■ Covers for Topaz, Sapphire and Emerald ladder

General purpose (Topaz), heavy duty (Sapphire) and extra heavy duty (Emerald) use the same covers and closed/ventilated brackets

Cover bracket is adjustable for closed ventilated covers
600 mm wide covers and above are overlap jointed and dimpled for rigidity

Note :

Covers for light duty (Opal) ladder are available only to special order
Contact us on 0845 605 4333



■ Threaded rods

Threaded rod connectors

Cat. Nos.	Size
RC06	M6
RC08	M8
RC10	M10
RC12	M12

Maximum load for connector

Cat. Nos.	Size	SWL (kgf)
TR06	M6	91
TR08	M8	165
TR10	M10	262
TR12	M12	381

