

SALAMANDRE[®]

IP55 RATED DISTRIBUTION TRUNKING

PRODUCT TECHNICAL GUIDE



POWERED BY SPECIALISTS

 **legrand[®]**

Global strength built on local knowledge

Legrand is the global specialist in electrical and digital building infrastructures. Innovation is the driving force behind its development.

With an increasing investment in research and development (circa 5% of sales) and more than 3,700 active patents, the Legrand Group is focused on maintaining a high rate of new product launches that present innovative solutions to the market.

CORPORATE SOCIAL RESPONSIBILITY

Legrand's CSR roadmap is a natural extension to the governance and sustainable development approach in which the company has been engaged for many years. The CSR roadmap firmly asserts Legrand's ongoing commitment to sustainable development.

Respect human rights and communities
Ensure health, safety and well-being
Develop skills
Promote equal opportunity and diversity



Provide sustainable solutions
Ensure sustainable procurement
Act ethically

Mitigate climate change
Innovate for the circular economy
Prevent pollution





COMPLETE CABLE MANAGEMENT SOLUTIONS

Using its global strength and market leading position, Legrand has developed a complete range of cable management solutions, including:

- Swifts cable ladder
- Swifts cable tray
- Salamandre distribution and lighting trunking
- Cablofil steel wire cable tray
- Floor systems - including underfloor trunking, floor boxes, grommets and the Soluflex cavity floor system
- Perimeter systems
- PVC cable tray



INTRODUCTION

IP55 rated distribution trunking 02

PRODUCT AND TECHNICAL INFORMATION

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SALAMANDRE[®]

fit for longer
fit Salamandre IP55 rated

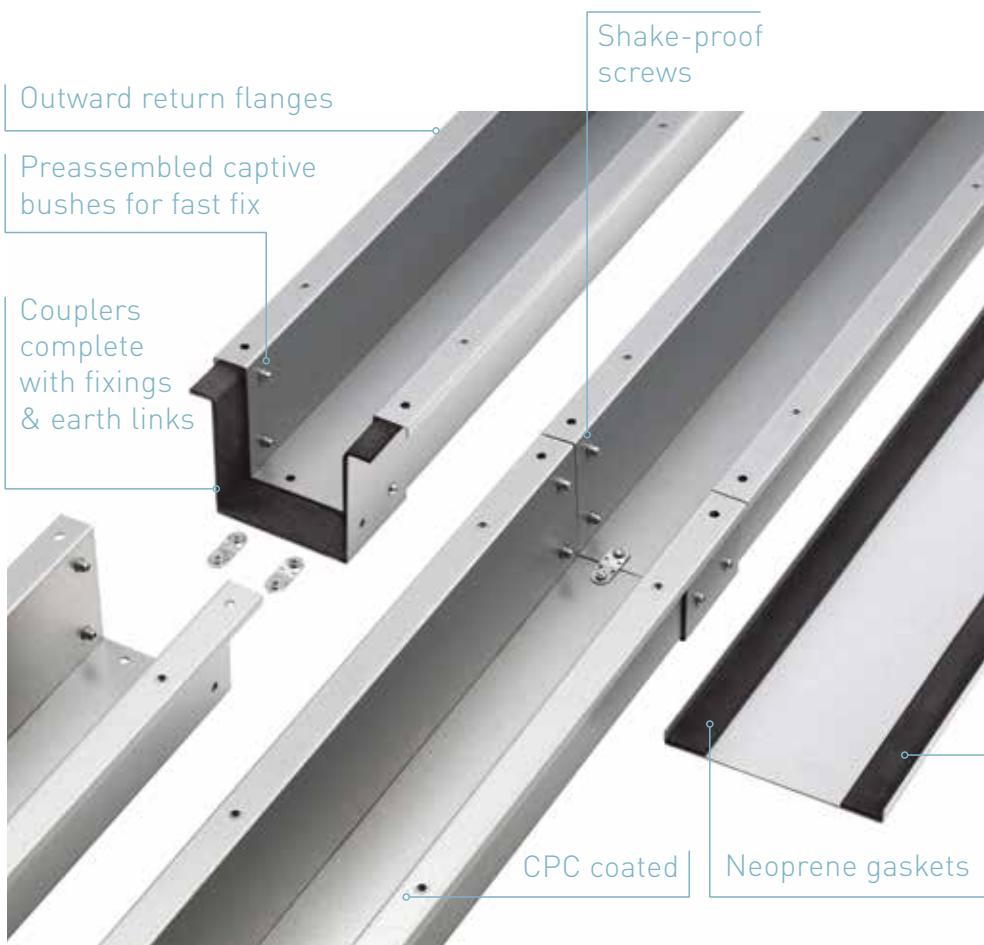
Legrand has launched Salamandre IP55 rated distribution trunking to answer growing demands for trunking systems that are suitable for more challenging environments.

CPC (clear powder coating) offers extended life expectancy over traditional pre-galvanised trunking systems and with the inclusion of neoprene gasketed trunking lids, our system can achieve an IP rating of IP55.



SALAMANDRE[®] ... MORE INNOVATIONS FOR MORE ENVIRONMENTS





PRODUCT RANGE FEATURES

- Outward return flanges offer greater strength
- Captive bushes for faster fixing of lids, couplers and accessories
- Lids and bodies supplied separately for effective materials management
- TORX®¹ security screws supplied as standard

¹ : TORX® is a registered trademark of Acument Intellectual Properties, LLC

INDEPENDENTLY TESTED FOR PEACE OF MIND

- Independently tested to an IP55 rating - offering greater cable protection than standard distribution trunking
- 672 hours performance achieved in salt spray test in Legrand laboratories - offering longer life expectancy in external environments
- Independently tested for resistance to fire to BS EN 50085-1:2005.



Salamandre® IP55 rated trunking

IP55 rated trunking range

TRUNKING			FITTINGS							
Size (mm)	Lengths	Lids	Top lid 90° bends – gusset	Top lid 90° bends – square	Inside lid 90° bends – gusset	Inside lid 90° bends – square	Outside lid 90° bends – gusset	Outside lid 90° bends – square	Top lid 45° bends	
1 COMPARTMENT										
50 x 50	WSTIP22	WSTIP2LID	WSTIP22AGL	WSTIP22ASL	WSTIP22BGL	WSTIP22BSL	WSTIP22CGL	WSTIP22CSL	WSTIP22AL	
75 x 50	WSTIP32	WSTIP3LID	WSTIP32AGL	WSTIP32ASL	WSTIP32BGL	WSTIP32BSL	WSTIP32CGL	WSTIP32CSL	WSTIP32AL	
100 x 50	WSTIP42	WSTIP4LID	WSTIP42AGL	WSTIP42ASL	WSTIP42BGL	WSTIP42BSL	WSTIP42CGL	WSTIP42CSL	WSTIP42AL	
100 x 75	WSTIP43	WSTIP4LID	WSTIP43AGL	WSTIP43ASL	WSTIP43BGL	WSTIP43BSL	WSTIP43CGL	WSTIP43CSL	WSTIP43AL	
100 x 100	WSTIP44	WSTIP4LID	WSTIP44AGL	WSTIP44ASL	WSTIP44BGL	WSTIP44BSL	WSTIP44CGL	WSTIP44CSL	WSTIP44AL	
150 x 50	WSTIP62	WSTIP6LID	WSTIP62AGL	WSTIP62ASL	WSTIP62BGL	WSTIP62BSL	WSTIP62CGL	WSTIP62CSL	WSTIP62AL	
150 x 75	WSTIP63	WSTIP6LID	WSTIP63AGL	WSTIP63ASL	WSTIP63BGL	WSTIP63BSL	WSTIP63CGL	WSTIP63CSL	WSTIP63AL	
150 x 100	WSTIP64	WSTIP6LID	WSTIP64AGL	WSTIP64ASL	WSTIP64BGL	WSTIP64BSL	WSTIP64CGL	WSTIP64CSL	WSTIP64AL	
150 x 150	WSTIP66	WSTIP6LID	WSTIP66AGL	WSTIP66ASL	WSTIP66BGL	WSTIP66BSL	WSTIP66CGL	WSTIP66CSL	WSTIP66AL	
225 x 50	WSTIP92	WSTIP9LID	WSTIP92AGL	WSTIP92ASL	WSTIP92BGL	WSTIP92BSL	WSTIP92CGL	WSTIP92CSL	WSTIP92AL	
225 x 75	WSTIP93	WSTIP9LID	WSTIP93AGL	WSTIP93ASL	WSTIP93BGL	WSTIP93BSL	WSTIP93CGL	WSTIP93CSL	WSTIP93AL	
225 x 100	WSTIP94	WSTIP9LID	WSTIP94AGL	WSTIP94ASL	WSTIP94BGL	WSTIP94BSL	WSTIP94CGL	WSTIP94CSL	WSTIP94AL	
225 x 150	WSTIP96	WSTIP9LID	WSTIP96AGL	WSTIP96ASL	WSTIP96BGL	WSTIP96BSL	WSTIP96CGL	WSTIP96CSL	WSTIP96AL	
225 x 225	WSTIP99	WSTIP9LID	WSTIP99AGL	WSTIP99ASL	WSTIP99BGL	WSTIP99BSL	WSTIP99CGL	WSTIP99CSL	WSTIP99AL	

Trunking lengths and lids are sold separately

Each trunking length is supplied with one coupler and required TORX®¹ head fixings and earth links

For all 2 compartment Cat. Nos. include 2C at the end of each product code shown above (except lids)

For all 3 compartment Cat. Nos. include 3C at the end of each product code shown above (except lids)

For 3 compartment products sizes 50 x 50 mm and 75 x 50 mm are not available

For all 2 and 3 compartment AGT (top lid tees – gusset), type A or type B cable exit configuration must be specified at time of order, (see p. 16)

1 : TORX® is a registered trademark of Acument Intellectual Properties LLC

FITTINGS						ACCESSORIES				
Inside lid 45° bends	Outside lid 45° bends	Top lid tees – gusset	Inside lid tees – gusset	Outside lid tees – gusset	Crossovers	Reducers	End caps	Flanges	Trunking couplers	
WSTIP22BL	WSTIP22CL	WSTIP22AGT	WSTIP22BGT	WSTIP22CGT	WSTIP22AGX	–	WSTIP22E	WSTIP22F	WSTIP22C	
WSTIP32BL	WSTIP32CL	WSTIP32AGT	WSTIP32BGT	WSTIP32CGT	WSTIP32AGX	WSTIP32 Z R	WSTIP32E	WSTIP32F	WSTIP32C	
WSTIP42BL	WSTIP42CL	WSTIP42AGT	WSTIP42BGT	WSTIP42CGT	WSTIP42AGX	WSTIP42 Z R	WSTIP42E	WSTIP42F	WSTIP42C	
WSTIP43BL	WSTIP43CL	WSTIP43AGT	WSTIP43BGT	WSTIP43CGT	WSTIP43AGX	WSTIP43 Z R	WSTIP43E	WSTIP43F	WSTIP43C	
WSTIP44BL	WSTIP44CL	WSTIP44AGT	WSTIP44BGT	WSTIP44CGT	WSTIP44AGX	WSTIP44 Z R	WSTIP44E	WSTIP44F	WSTIP44C	
WSTIP62BL	WSTIP62CL	WSTIP62AGT	WSTIP62BGT	WSTIP62CGT	WSTIP62AGX	WSTIP62 Z R	WSTIP62E	WSTIP62F	WSTIP62C	
WSTIP63BL	WSTIP63CL	WSTIP63AGT	WSTIP63BGT	WSTIP63CGT	WSTIP63AGX	WSTIP63 Z R	WSTIP63E	WSTIP63F	WSTIP63C	
WSTIP64BL	WSTIP64CL	WSTIP64AGT	WSTIP64BGT	WSTIP64CGT	WSTIP64AGX	WSTIP64 Z R	WSTIP64E	WSTIP64F	WSTIP64C	
WSTIP66BL	WSTIP66CL	WSTIP66AGT	WSTIP66BGT	WSTIP66CGT	WSTIP66AGX	WSTIP66 Z R	WSTIP66E	WSTIP66F	WSTIP66C	
WSTIP92BL	WSTIP92CL	WSTIP92AGT	WSTIP92BGT	WSTIP92CGT	WSTIP92AGX	WSTIP92 Z R	WSTIP92E	WSTIP92F	WSTIP92C	
WSTIP93BL	WSTIP93CL	WSTIP93AGT	WSTIP93BGT	WSTIP93CGT	WSTIP93AGX	WSTIP93 Z R	WSTIP93E	WSTIP93F	WSTIP93C	
WSTIP94BL	WSTIP94CL	WSTIP94AGT	WSTIP94BGT	WSTIP94CGT	WSTIP94AGX	WSTIP94 Z R	WSTIP94E	WSTIP94F	WSTIP94C	
WSTIP96BL	WSTIP96CL	WSTIP96AGT	WSTIP96BGT	WSTIP96CGT	WSTIP96AGX	WSTIP96 Z R	WSTIP96E	WSTIP96F	WSTIP96C	
WSTIP99BL	WSTIP99CL	WSTIP99AGT	WSTIP99BGT	WSTIP99CGT	WSTIP99AGX	WSTIP99 Z R	WSTIP99E	WSTIP99F	WSTIP99C	

Key : Z = trunking size code
 Replace Z with the relevant code (see p. 6)

Salamandre® IP55 rated distribution trunking

order information

■ IP rated trunking

IP rated trunking is IP55 rated according to IEC 60529
For IP55 fittings see p. 8-9

■ Trunking size codes

All IP55 rated trunking product codes are pre-fixed with **WSTIP**

Size (mm) width x depth	IP55 trunking
50 x 50	22
75 x 50	32
75 x 75	33
100 x 50	42
100 x 75	43
100 x 100	44
150 x 50	62
150 x 75	63
150 x 100	64
150 x 150	66
225 x 50	92
225 x 75	93
225 x 100	94
225 x 150	96
225 x 225	99

In the Cat. Nos. shown on p. 4-5,
replace **Z** with the relevant
standard trunking size code

■ Finishes

IP55 rated distribution trunking is made from steel with a CPC (clear powder coating)

■ Compartment options

WSTIP range of trunking is available in 1, 2 and 3 compartment options
See selection chart (p. 4-5) for options

Trunking and fittings are supplied with equal compartments as standard. For unequal compartments, details must be supplied at the time of order

3 compartment is available in width code 3 and above

■ Distribution trunking lengths

For 1 compartment trunking there is no need to change the Cat. No. Example : WSTIP44

For 2 compartment trunking, add **2C** to the end of the Cat. No. Example : WSTIP44**2C**

For 3 compartment trunking, add **3C** to the end of the Cat. No. Example : WSTIP44**3C**

■ Distribution trunking fittings

For 1 compartment trunking there is no need to change the Cat. No. Example : WSTIP44AGL

For 2 compartment trunking, add **2C** to the end of the Cat. No. Example : WSTIP44AGL**2C**

For 3 compartment trunking, add **3C** to the end of the Cat. No. Example : WSTIP44AGL**3C**

■ Multi-compartment tees – Top lid tees – gusset

2 and 3 compartment AGT (top lid tees – gusset) must be suffixed with either **A** or **B** to denote the cable exit configuration on the tee branch, Cat. No. Example : WSTIP44AGT**3CA**

Please refer to p. 16 to determine type **A** or type **B** for the cable exit configuration

■ Lid fixings

Standard WSTIP lids are supplied with TORX®¹ screw fixings

■ Fittings

The chart below details each element required to correctly order a fitting

E.g. **WSTIP33AGX2C** = 75 x 75 top lid gusset crossover 2 compartment

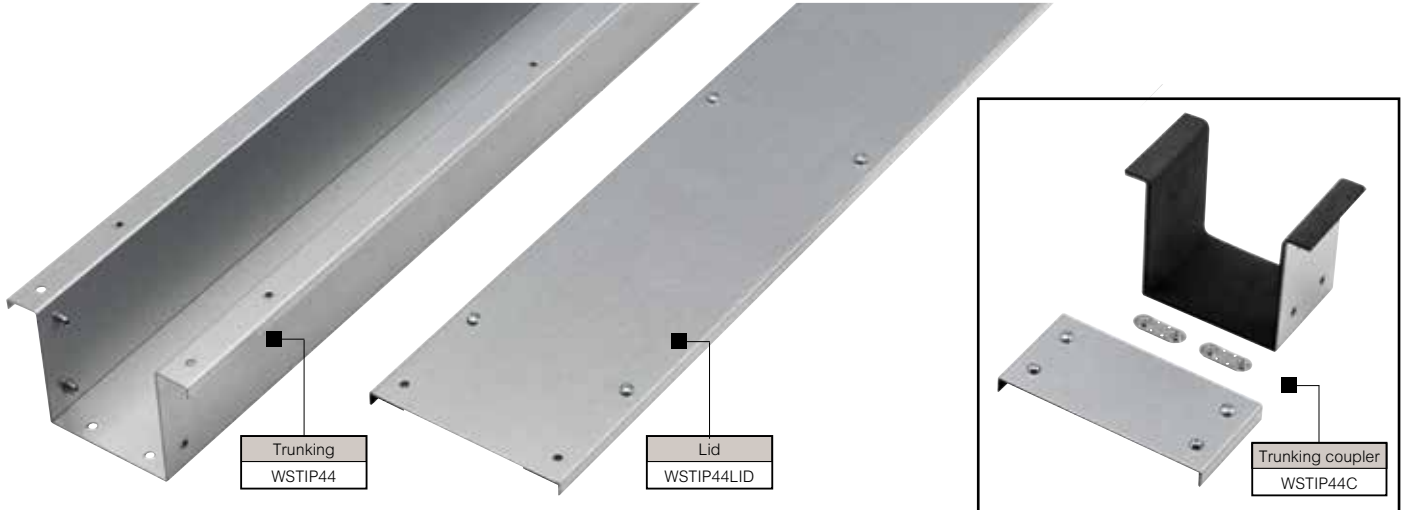
Range	Width	Height	Cover position	Gusset / Square	Function	Compartment
WSTIP	2 = 50 mm	2 = 50 mm	A = Top	G = Gusset	L = Bend	2C = 2 Compartment 3C = 3 Compartment
	3 = 75 mm	3 = 75 mm	B = Internal	S = Square	T = Tee	
	4 = 100 mm	4 = 100 mm	C = External		X = Crossover	
	6 = 150 mm	6 = 150 mm				
	9 = 225 mm	9 = 225 mm				

1 : TORX® is a registered trademark of Acument Intellectual Properties LLC

All dimensions (mm) are nominal

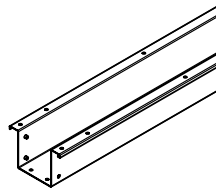
Salamandre® IP55 rated distribution trunking

lengths, lids and couplers

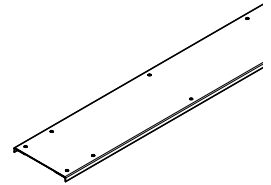


Selection chart (p. 4-5)
 Order information (p. 6)
 Standards and quality assessment (p. 11)
 Dimensions and technical information (p. 12-17)

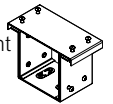
Pack	Cat. Nos.	Trunking lengths – 2 m	
		Manufactured to BS EN 50085-2-1 Each length is supplied with one coupler and required TORX® ¹ fixings Lids sold separately (see opposite) Trunking manufactured with captive bushes for faster assembly For more order information details (p. 6)	
		Single compartment	
		Also available in multi-compartment options (see p. 6)	
		Width (mm)	Depth (mm)
1	WSTIP22	50	50
1	WSTIP32	75	50
1	WSTIP33	75	75
1	WSTIP42	100	50
1	WSTIP43	100	75
1	WSTIP44	100	100
1	WSTIP62	150	50
1	WSTIP63	150	75
1	WSTIP64	150	100
1	WSTIP66	150	150
1	WSTIP92	225	50
1	WSTIP93	225	75
1	WSTIP94	225	100
1	WSTIP96	225	150
1	WSTIP99	225	225



Pack	Cat. Nos.	Lids – 2 m
		Spare lids
		Lids supplied with required TORX® ¹ fixings
1	WSTIP2LID	50 mm wide
1	WSTIP3LID	75 mm wide
1	WSTIP4LID	100 mm wide
1	WSTIP6LID	150 mm wide
1	WSTIP9LID	225 mm wide



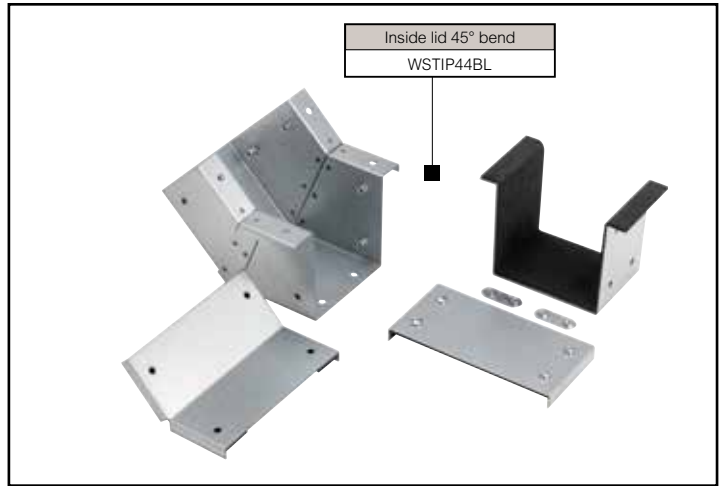
Pack	Cat. Nos.	Accessories
1	WSTIP Z C	Trunking couplers
		Couplers supplied with required TORX® ¹ fixings, earth links and cover to achieve IP55 rating Couplers ordered separately are also supplied with the relevant fixings and earth links



NOTE : all couplers supplied with relevant earth links

¹ : TORX® is a registered trademark of Acument Intellectual Properties LLC

Key : Z = trunking size code
 Replace Z with the relevant code (see p. 6)



Selection chart (p. 4-5)
 Order information (p. 6)
 Standards and quality assessment (p. 11)
 Dimensions and technical information (p. 12-17)

Pack	Cat. Nos.	Fittings
		90° bends All bends are supplied with lids, couplers and fixings
		Top lid 90° bends – gusset
1	WSTIP Z AGL	1 compartment
1	WSTIP Z AGL2C	2 compartment
1	WSTIP Z AGL3C	3 compartment
		Top lid 90° bends – square
1	WSTIP Z ASL	1 compartment
1	WSTIP Z ASL2C	2 compartment
1	WSTIP Z ASL3C	3 compartment
		Inside lid 90° bends – gusset
1	WSTIP Z BGL	1 compartment
1	WSTIP Z BGL2C	2 compartment
1	WSTIP Z BGL3C	3 compartment
		Inside lid 90° bends – square
1	WSTIP Z BSL	1 compartment
1	WSTIP Z BSL2C	2 compartment
1	WSTIP Z BSL3C	3 compartment
		Outside lid 90° bends – gusset
1	WSTIP Z CGL	1 compartment
1	WSTIP Z CGL2C	2 compartment
1	WSTIP Z CGL3C	3 compartment
		Outside lid 90° bends – square
1	WSTIP Z CSL	1 compartment
1	WSTIP Z CSL2C	2 compartment
1	WSTIP Z CSL3C	3 compartment

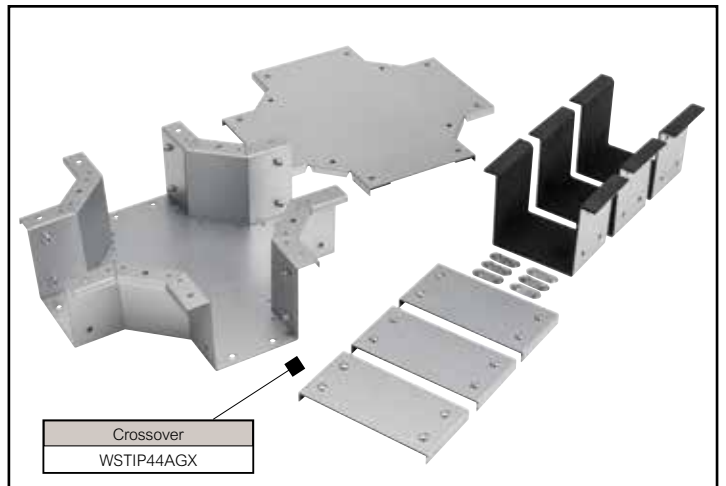
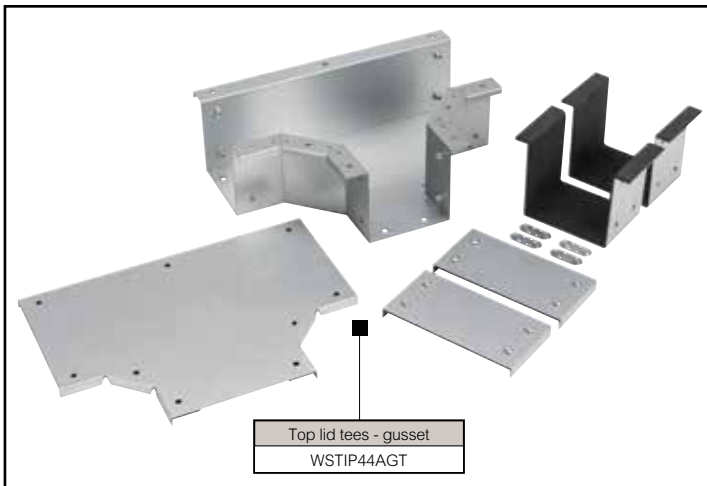
Pack	Cat. Nos.	Fittings (continued)
		45° bends All bends are supplied with lids, couplers and fixings
		Top lid 45° bends
1	WSTIP Z AL	1 compartment
1	WSTIP Z AL2C	2 compartment
1	WSTIP Z AL3C	3 compartment
		Inside lid 45° bends
1	WSTIP Z BL	1 compartment
1	WSTIP Z BL2C	2 compartment
1	WSTIP Z BL3C	3 compartment
		Outside lid 45° bends
1	WSTIP Z CL	1 compartment
1	WSTIP Z CL2C	2 compartment
1	WSTIP Z CL3C	3 compartment
		Flange
1	WSTIP Z F	
		End cap
1	WSTIP Z E	

NOTE : 3 compartment is not available in 50 mm wide sizes

Key : Z = trunking size code
 Replace Z with the relevant code (see p. 6)

Salamandre® IP55 rated distribution trunking

fittings (continued)



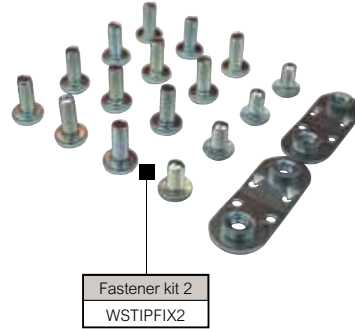
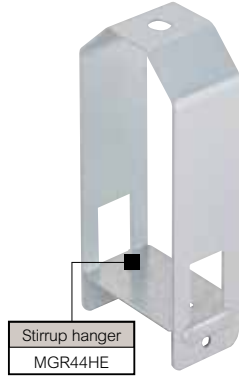
- Selection chart (p. 4-5)
- Order information (p. 6)
- Standards and quality assessment (p. 11)
- Dimensions and technical information (p. 12-17)

Pack	Cat. Nos.	Fittings (continued)
		Tees All top lid, inside lid and outside lid tees are supplied with lids, couplers and fixings All 2 and 3 compartment fittings are supplied with preassembled dividers and crossovers Bridge flyovers reduce the cable capacity by 50% except on offset products which give full cable capacity Inside and outside lid tees – square, available to special order Contact us on +44 (0) 345 605 4333
1	WSTIP Z AGT	Top lid tees – gusset 1 compartment
1	WSTIP Z AGT2C K	2 compartment
1	WSTIP Z AGT3C K	3 compartment
1	WSTIP Z BGT	Inside lid tees – gusset 1 compartment
1	WSTIP Z BGT2C	2 compartment
1	WSTIP Z BGT3C	3 compartment
1	WSTIP Z CGT	Outside lid tees – gusset 1 compartment
1	WSTIP Z CGT2C	2 compartment
1	WSTIP Z CGT3C	3 compartment

Pack	Cat. Nos.	Fittings (continued)
		Crossovers All crossovers are supplied with lids, couplers and fixings All 2 and 3 compartment crossovers include a bridge flyover complete with fixing brackets and screws Bridge flyovers reduce the cable capacity by 50% except on offset products which give full cable capacity
1	WSTIP Z AGX	1 compartment
1	WSTIP Z AGX2C	2 compartment
1	WSTIP Z AGX3C	3 compartment
1	WSTIP Z Z R	Reducers Supplied with lids, lid fixings and coupler screws The larger trunking size uses standard coupler (not supplied) for joining to reducer (Cat. No. WSTIP Z C see p. 7)

Key :
Z = trunking size code
 Replace **Z** with the relevant code, see p. 6
K = top lid tees – gusset
 2 and 3 compartment AGT (top lid tees – gusset) must be suffixed with either A or B to denote the cable exit configuration on the tee branch i.e. Cat. No. WSTIP44AGT3CA
 For more information on cable exit configurations, see p. 16

PRODUCT IMAGES ARE ONLY ILLUSTRATIVE



Order information (p. 6)
Standards and quality assessment (p. 11)
Dimensions and technical information (p. 12-17)

Pack	Cat. Nos.	Accessories
1	MGR44H F	Stirrup hangers Hole for M10 rod It is suggested to order finish E (powder coated) and specify CPC (clear powder coating) 100 mm wide x 100 mm max. depth For use with IP55 trunking 50 mm width
1	MGR66H F	150 mm wide x 150 mm max. depth For use with IP55 trunking 75 mm and 100 mm widths
1	MGR99H F	225 mm wide x 225 mm max. depth For use with IP55 trunking 150 mm width
1	MGR1212H F	225 mm wide x 225 mm max. depth For use with IP55 trunking 225 mm width
10	MGR44OH F	Overhead hangers For use with IP55 trunking It is suggested to order finish E (powder coated) and specify CPC (clear powder coating) For use with IP55 trunking 50 mm width
10	MGR66OH F	For use with IP55 trunking 75 mm and 100 mm widths
1	T206	PVC edging strip For fitting on to top edge of divider 10 m strip

Pack	Cat. Nos	Fasteners and tools
1	WSTIPFIX1	Spare fixing kits Supplied with coupler – 50 mm and 75 mm - M5 x 10 mm tamperproof screws x 6 - M5 x 16 mm tamperproof screws x 4 - earth link x 1
1	WSTIPFIX2	Supplied with coupler – 100 mm, 150 mm and 225 mm - M5 x 10 mm tamperproof screws x 12 - M5 x 16 mm tamperproof screws x 4 - earth link x 2
1	WSTIPFIX3	Supplied with trunking lids - M5 x 12 mm tamperproof screws x 14
1	TX25	Tools TORX® ¹ head screwdriver
10	TX25BIT	TORX® ¹ head 25 bit

Key :
 For finishes available for stirrup and overhead hangers
F = Finish **PG** (pre-galvanised)
 G (hot dip galvanised after manufacture)
 E (powder coated)

1 : TORX® is a registered trademark of Acument Intellectual Properties LLC

Salamandre® IP55 rated distribution trunking

standards and quality assessment

■ Distribution trunking classification

Legrand's steel distribution trunking was previously made to BS 4678 Part 1. This is now an obsolete standard and has been replaced by the latest BS European standard BS EN 50085-2-1

Classification to BS EN 50085-1 : 2005 and BS EN 50085-2-1 : 2006

- Clause 6.2 According to resistance to impact for installation and application : impact 5.0J
- Clause 6.3 According to temperatures given in tables 1, 2 and 3 :

	Min.	Max.
1. Storage and transport	- 25°C	-
2. Installation	- 15°C	-
3. Application	-	+ 60°C

- Clause 6.4 According to resistance to flame propagation : non-flame propagating
- Clause 6.5 According to electrical continuity characteristic : CTS with electrical continuity (maximum linear impedance 1.0 milliohms per metre)
- Clause 6.6 According to electrical insulating characteristic : CTS without electrical insulating characteristic
- Clause 6.7 According to degree of protection provided by enclosure according to BS EN 60529 : 1991 : IP55
- Clause 6.9 According to system access cover retention : CTS access cover which can only be opened with a tool
- Clause 6.10 According to electrically protective separation : CTS without internal protective partition
- Clause 6.101 According to position when surface mounted : CTS surface mounted on wall
CTS surface mounted on ceiling
(CTS mounted away from the wall or ceiling using fixing devices
Declare cover mounted upwards 2.0 metre hanger centres)
- Clause 6.103 According to the functions provided : Type 2 CTS (distribution)

■ Quality assessment and trade association memberships

Legrand offers a vast range of fully integrated cable management products to meet the demands of today's commercial and industrial installations. Designed and manufactured to the highest standards at our Scarborough and Consett sites

Quality and environmental assessment

Legrand Electric Limited holds ISO 9001 : 2015 Quality Assessment Registrations from Bureau Veritas

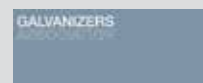
The Salamandre range is manufactured at Legrand sites that are accredited to ISO 14001 : 2015 Environmental Management System



Trade association memberships

Legrand Electric Limited is a member of the following trade associations :

- BEAMA
- Galvanizers Association (GA)
- Energy Industries Council (EIC)
- First Point Assessment (FPAL)



Registered
Reg no. 10042065

Salamandre® IP55 rated distribution trunking

trunking size, capacity and weights

■ Selecting the size of trunking required

- The cable trunking capacity guide shown below can be used for the initial size calculation. This table is based on the maximum number of cables of a given size that can be physically accommodated within the trunking. In an actual installation, however, consideration must be given to a number of other factors:
1. Where cables cross each other such as in a tee or crossover, extra space will be required
 2. Depending upon the type of installation, future wiring needs could well require spare trunking capacity
 3. Larger cables, in particular, do not lie neatly and flatly. Consideration must be given to the practicality of laying cable within a trunking compartment
 4. The cable trunking capacity guide can be used for each compartment within multi-compartment trunking
 5. A 50% reduction in capacity will apply at tees and crossovers unless offset fittings are used

■ Cable trunking capacity guide

For each size of cable, multiply the number to be installed by the common factor. Add together the results of these calculations for all cable sizes. The correct trunking size must have a capacity factor equal to or greater than this total

Example :

$$24 \times 16 \text{ mm}^2 \text{ stranded @ factor } 47.8 = 1147.2$$

$$20 \times 2.5 \text{ mm}^2 \text{ solid @ factor } 11.9 = \underline{238.0}$$

$$1385.2$$

Minimum trunking size required in this example =
75 x 50 (trunking capacity factor 1555)

Cable sizes and factors

Size (mm ²) (nom.)	Common cable factor
Solid	
1.5	8.0
2.5	11.9
Stranded	
1.5	8.6
2.5	12.6
4.0	16.6
6.0	21.2
10.0	35.3
16.0	47.8
25.0	73.9
35.0	93.3
50.0	128.7
70.0	167.4

Trunking sizes and capacity factors

Size (mm)	Trunking capacity factor
50 x 50	1037
75 x 50	1555
75 x 75	2371
100 x 50	2091
100 x 75	3189
100 x 100	4252
150 x 50	3091
150 x 75	4742
150 x 100	6394
150 x 150	9697
225 x 50	4671
225 x 75	7114
225 x 100	9298
225 x 150	14652
225 x 225	21766

■ IP55 rated trunking weights

The approximate weights given are for CPC (clear powder coating) finish, in kilograms (nominal) and subject to material thickness tolerance

Product	Size (mm)														
	50 x 50	75 x 50	75 x 75	100 x 50	100 x 75	100 x 100	150 x 50	150 x 75	150 x 100	150 x 150	225 x 50	225 x 75	225 x 100	225 x 150	225 x 225
1 compartment trunking length per metre including coupler	2.04	2.24	2.76	3.46	2.99	3.46	3.02	3.52	3.94	4.87	3.76	4.23	4.69	5.61	7.00
2 compartment trunking length per metre including coupler	2.58	2.78	3.52	3.99	3.75	4.43	3.55	4.27	4.92	6.29	4.29	4.98	5.66	7.03	9.09
3 compartment trunking length per metre including coupler	-	3.31	4.27	4.53	4.50	5.41	4.09	5.03	5.89	7.71	4.83	5.74	6.64	8.45	11.17
Trunking lids per metre	1.16	1.41	1.41	1.61	1.61	1.61	2.05	2.05	2.05	2.05	2.75	2.75	2.75	2.75	2.75
Top bends – 1 compartment	1.37	1.62	1.82	1.91	2.07	2.28	2.70	2.98	3.11	3.54	3.82	4.06	4.30	4.77	5.50
Top bends – 2 compartment	1.49	1.75	2.01	2.05	2.27	2.55	2.86	3.22	3.42	3.99	4.02	4.34	4.67	5.28	6.30
Top bends – 3 compartment	-	1.88	1.82	2.20	2.48	2.81	3.03	3.45	3.73	4.44	4.21	4.63	5.04	5.85	7.10
Top tees – 1 compartment	1.67	2.12	2.35	2.44	2.63	2.84	3.10	3.39	3.53	3.96	3.92	4.15	4.38	4.81	5.53
Top tees – 2 compartment	1.91	2.40	2.73	2.76	3.06	3.37	3.52	3.93	4.18	4.85	4.49	4.87	5.24	5.96	7.11
Top tees – 3 compartment	-	2.62	2.35	3.01	3.40	3.80	3.81	4.33	4.69	5.57	4.88	5.38	5.88	6.84	8.37
Crossovers – 1 compartment	2.10	2.38	2.63	2.72	2.93	3.17	3.44	3.73	3.87	4.32	4.37	4.60	4.81	5.22	5.90
Crossovers – 2 compartment	2.44	2.78	3.15	3.19	3.53	3.90	4.07	4.51	4.80	5.55	5.28	5.69	6.08	6.86	8.09
Crossovers – 3 compartment	-	3.09	3.70	3.54	4.01	4.51	4.50	5.09	5.53	6.57	5.85	6.44	7.01	8.13	9.88

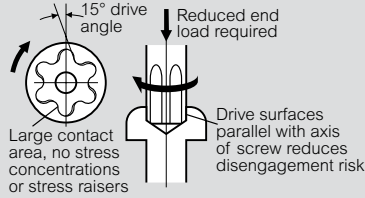
All dimensions (mm) are nominal

Salamandre® IP55 rated distribution trunking

installation of components and drilling information with dimensions

■ Lid fixing details

Tamperproof screw fixings
Screws are M5 with efficient high torque TORX®¹ recess and rounded end to prevent cable damage
Manufactured to BS 4183 and BS 3643 from low carbon mild steel, zinc plated and clear passivated. A special TORX®¹ screwdriver is needed (supplied separately p. 10)
Trunking lids are supplied separately with TORX®¹ screws bagged separately

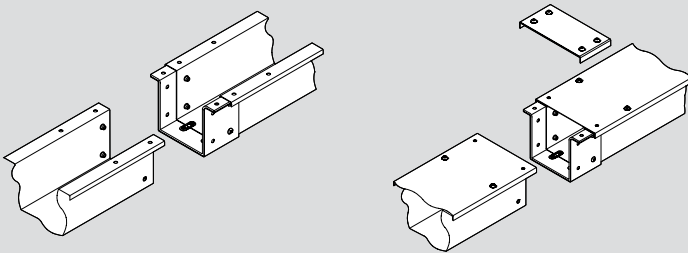


1 : TORX® is a registered trademark of Acument Intellectual Properties LLC

■ Coupling details

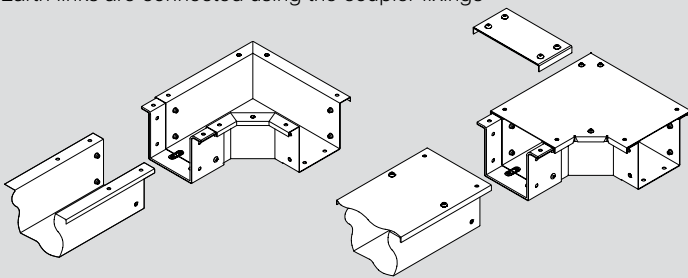
Length to length

Each trunking length is supplied with a coupler and the required number of fixing screws
To connect, simply slide the coupler on to one end of the trunking length, align the fixing holes and fix in place using the screws provided. Repeat for the second trunking length. When ready to fix the lids, ensure the cover strap supplied with the coupler is fixed over the lids
Earth links are connected using the coupler fixings



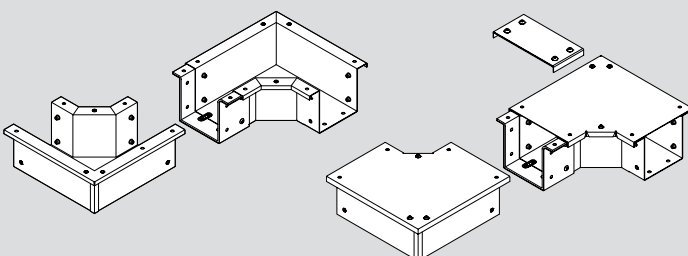
Fitting to length

Standard IP55 fittings are supplied with required number of couplers and fixing screws (1 coupler per bend, 2 couplers per tee and 3 couplers per crossover). To connect, simply slide the coupler on to one open side of the fitting, align the fixing holes and fix in place using the screws provided. Repeat the process for fixing to the trunking length. When ready to fix the lids, ensure the cover strap supplied with the coupler is fixed over the lids
Earth links are connected using the coupler fixings



Fitting to fitting

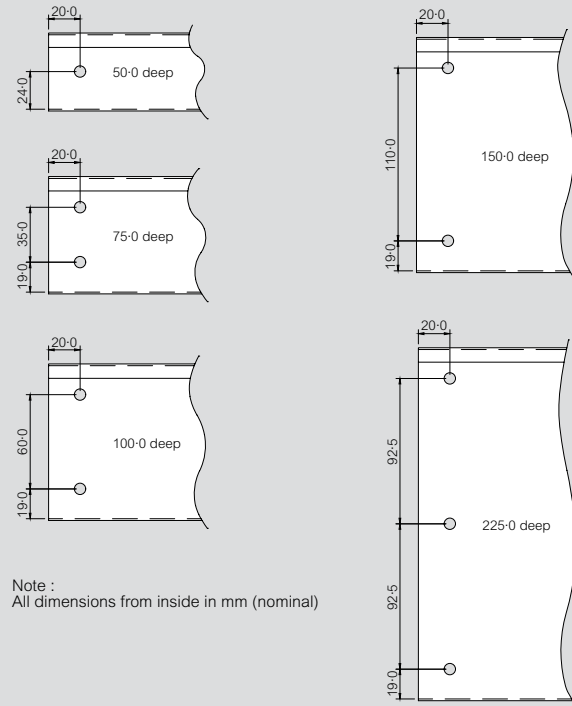
Standard IP55 fittings are supplied with required number of couplers and fixing screws (1 coupler per bend, 2 couplers per tee and 3 couplers per crossover). To connect, simply slide the coupler on to one open side of the fitting, align the fixing holes and fix in place using the screws provided. Repeat the process for fixing accessory to the uncoupled end. When ready to fix the lids, ensure the cover strap supplied with the coupler is fixed over the lids
Earth links are connected using the coupler fixings



All dimensions (mm) are nominal

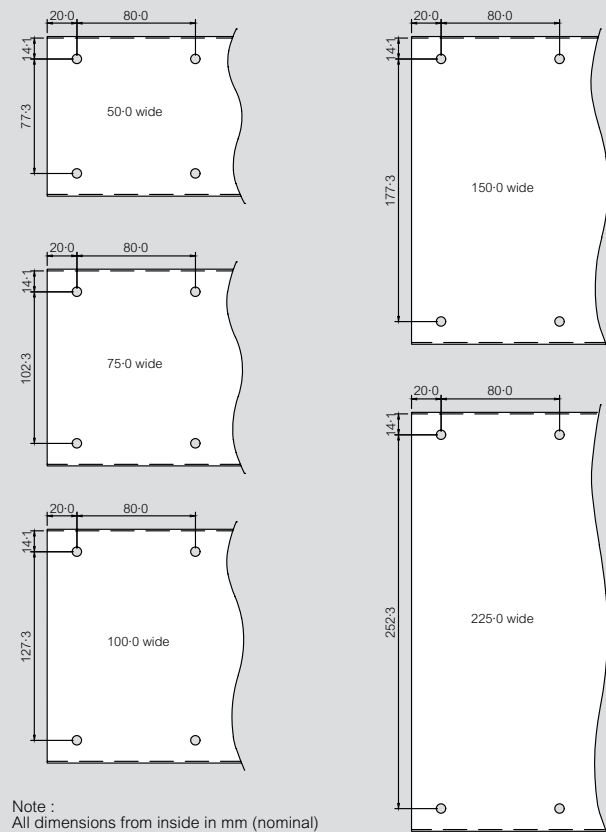
■ Hole positions for cut lengths

Drill clearance holes in cut length for M5 screws in positions shown below



Note :
All dimensions from inside in mm (nominal)

■ Hole positions for lids cut to length



Note :
All dimensions from inside in mm (nominal)

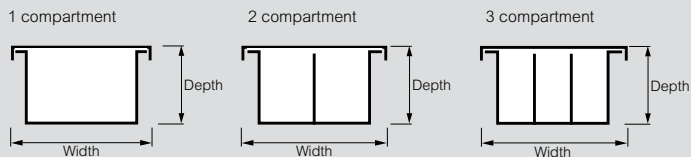
Salamandre® IP55 rated distribution trunking

technical information

■ Trunking lengths

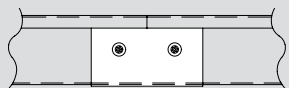
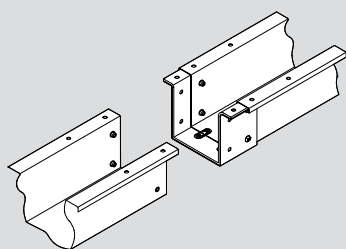
Each trunking length is supplied with one coupler and required TORX®1 fixings

For trunking sizes and size codes (see p. 6)

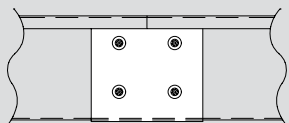


Trunking and fittings are supplied with equal compartments as standard. For unequal compartments, details must be supplied at time of order for this non-standard product

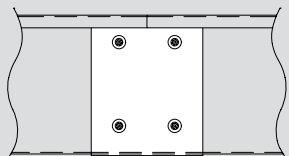
■ Trunking coupler



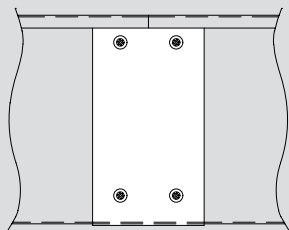
50 mm deep
4 sidewall screws,
2 base screws
and 1 earth link
per coupler



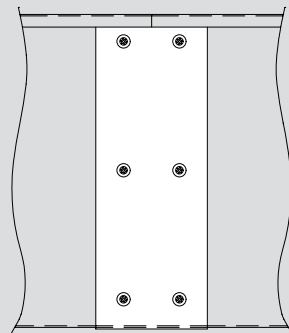
75 mm deep
8 sidewall screws,
2 base screws
and 1 earth link
per coupler



100 mm deep
8 sidewall screws,
4 base screws
and 2 earth links
per coupler



150 mm deep
8 sidewall screws,
4 base screws
and 2 earth links
per coupler

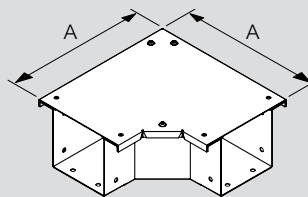


225 mm deep
12 sidewall screws,
6 base screws
and 3 earth links
per coupler

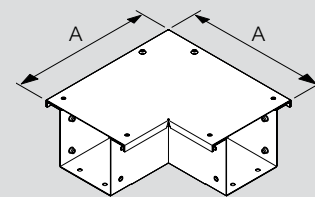
Supplied with required TORX®1 fixings

■ 90° bends)

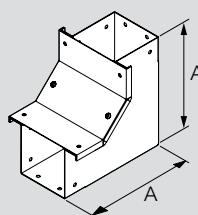
AGL top lid 90° bend – gusset



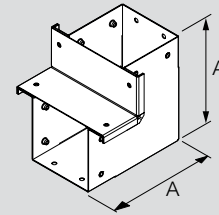
ASL top lid 90° bend – square



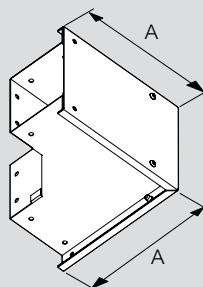
BGL inside lid 90° bend – gusset



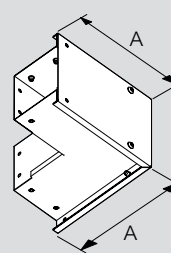
BSL inside lid 90° bend – square



CGL outside lid 90° bend – gusset



CSL outside lid 90° bend – square



Width and depth refer to trunking sizes
Dimensions are identical for single and multi-compartment

Depth (mm)	A (dim. mm)					
	AGL	ASL	BGL	BSL	CGL	CSL
50 x 50	166	166	165	165	165	166
75 x 50	188	190	165	165	165	166
75 x 75	188	190	190	190	190	191
100 x 50	216	215	165	165	165	166
100 x 75	216	215	190	190	190	191
100 x 100	216	215	215	215	215	216
150 x 50	266	265	165	165	165	166
150 x 75	266	265	190	190	190	191
150 x 100	266	265	215	215	215	216
150 x 150	266	265	265	265	265	266
225 x 50	341	340	340	165	165	166
225 x 75	341	340	265	190	190	191
225 x 100	341	340	290	215	215	216
225 x 150	341	340	340	265	265	266
225 x 225	341	340	340	340	340	341

All dimensions (mm) are nominal

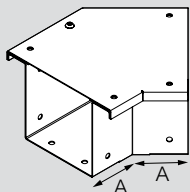
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Salamandre® IP55 rated distribution trunking

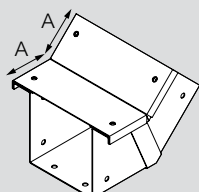
technical information

■ 45° bends

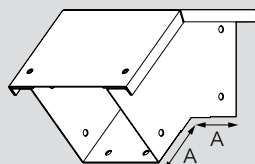
AL top lid 45° bend



BL inside lid 45° bend



CL outside lid 45° bend

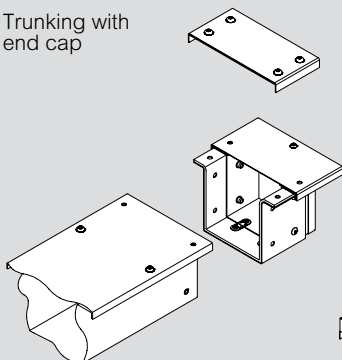


Depth (mm)	A (dim. mm)	
	AL / BL / CL	
50 x 50	112	
75 x 50	112	
75 x 75	112	
100 x 50	112	
100 x 75	112	
100 x 100	112	
150 x 50	112	
150 x 75	112	
150 x 100	112	
150 x 150	112	
225 x 50	112	
225 x 75	112	
225 x 100	112	
225 x 150	112	
225 x 225	112	

Dimensions are identical for single and multi-compartment

■ End caps and flanges

Trunking with end cap

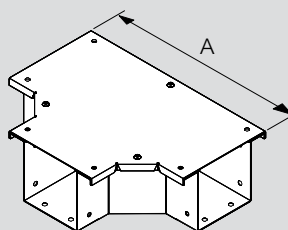


Trunking with flange coupler

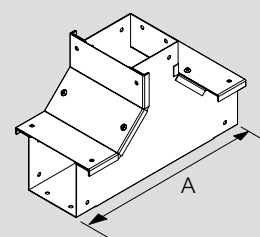
All dimensions (mm) are nominal

■ Tees

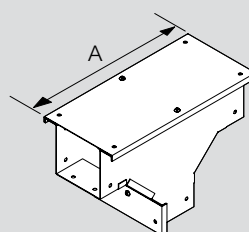
AGT top lid tee – gusset



BGT inside lid tee – gusset



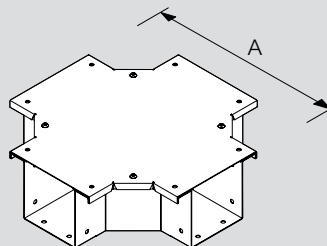
CGT outside lid tee – gusset



Depth (mm)	A (dim. mm)		
	AGT	BGT	CGT
50 x 50	282	283	283
75 x 50	307	283	283
75 x 75	307	308	308
100 x 50	332	283	283
100 x 75	332	308	308
100 x 100	332	333	333
150 x 50	382	283	283
150 x 75	382	308	308
150 x 100	382	333	333
150 x 150	382	383	383
225 x 50	457	283	283
225 x 75	457	308	308
225 x 100	457	333	333
225 x 150	457	383	383
225 x 225	457	458	458

■ Crossovers

AGX crossover



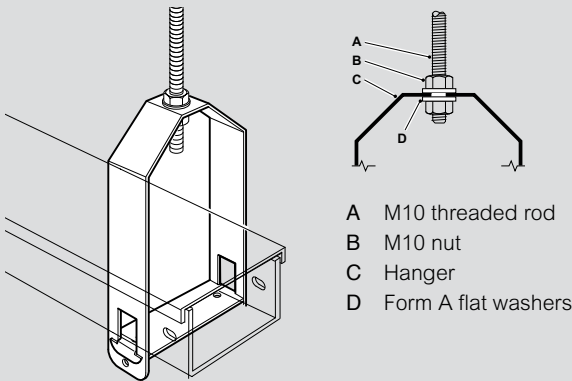
Dimensions are identical for single and multi-compartment

Depth (mm)	A (dim. mm)	
	AGX	
50 x 50	282	
75 x 50	307	
75 x 75	307	
100 x 50	332	
100 x 75	332	
100 x 100	332	
150 x 50	382	
150 x 75	266	
150 x 100	266	
150 x 150	266	
225 x 50	341	
225 x 75	341	
225 x 100	341	
225 x 150	341	
225 x 225	341	

Salamandre® IP55 rated distribution trunking

technical information

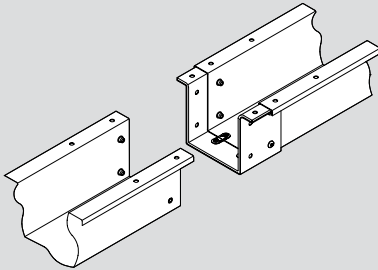
■ Stirrup hangers



- A M10 threaded rod
- B M10 nut
- C Hanger
- D Form A flat washers

■ Trunking coupler

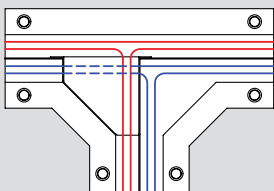
Coupler supplied with required fixings and cover strap



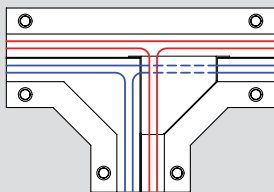
■ Multi-compartment tees

Approximately 50% of cable capacity is lost when using multi-compartment tees

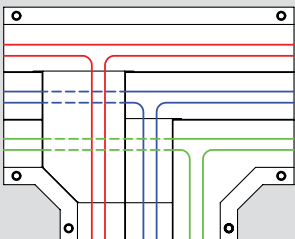
Examples of cable exit configurations :



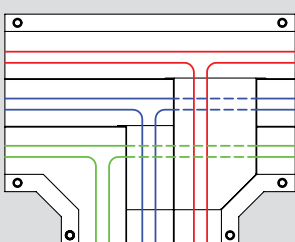
2 compartment type A



2 compartment type B



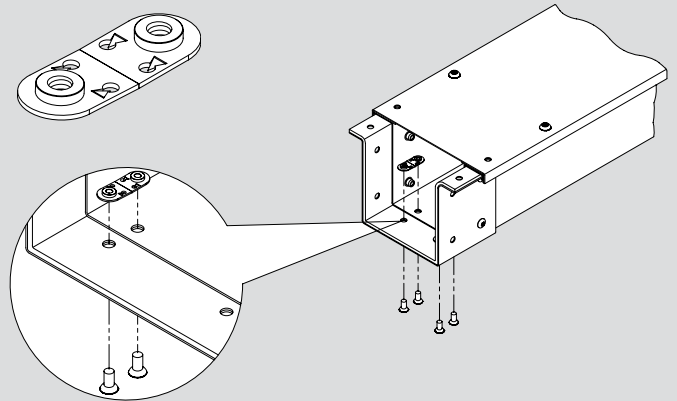
3 compartment type A



3 compartment type B

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■ Earth link



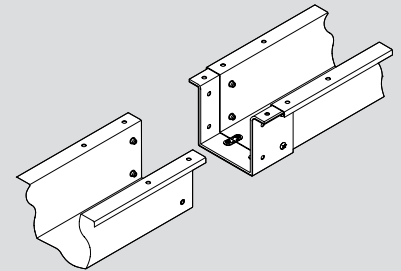
All couplers are supplied with required number of earth links and TORX®¹ fixing screws

An M5 screw and nut are needed for fixing the earth link

■ Earth bonding

Cable trunking and ducting systems are designed to carry single insulated cables, and such systems must therefore provide the secondary protection required by the Wiring Regulations. This means trunking and ducting systems

must be earth bonded together, and then connected to a suitable earth point. Salamandre trunking is designed to provide such earth bonding, provided that the system is fully assembled with all manufacturer's original components, including fixings, and that all fixings are fully tightened. This is achieved by a combination of serrations under the head of the fixing screws and the internal barbs on the fixing bars



■ Electromagnetic Compatibility (EMC)

Cable trunking and ducting systems are considered passive under normal conditions in respect of electromagnetic influences. The installation of current carrying cables may cause emissions and these cables may also be influenced by electromagnetic signals from elsewhere, but the degree of influence will depend on the nature of the installation and the apparatus connected to the system. Specific information relating to the details of cable separation required according to the type of signal, and further information on the subject of EMC, is provided in the relevant Standards and Regulations. However as a basic principle, if power and signal cables are run in separate compartments of a metal trunking system, then the metal segregation will significantly reduce the possibility of one circuit having undesirable effect influence upon another.

■ Supporting cable trunking systems

The coupler between all types of cable trunking lengths is to provide electrical and mechanical connection between the lengths; it does not provide a load bearing connection between lengths. Consequently each length must be fully supported so that there is no significant bending force applied to the coupler.

Each individual length of trunking is strong enough to carry the maximum number of cables that can be physically fitted into the trunking whilst still being able to correctly fit the cover without applying force. All supports must therefore be designed to carry each length individually without relying on the coupler.

All dimensions (mm) are nominal

Protection classifications

Protection against solid bodies and liquids : Index of protection - IP xx

Degree of protection of enclosures of electrical equipment in accordance with standards IEC 60529, BS EN 60529
Up to 1 000 V $\overline{\text{I}}$ and 1 500 V =

1 st digit: protection against solid bodies		Additional letter IP XX (ABCD): protection against direct contact resulting from the access to hazardous current-carrying parts		2 nd digit: protection against liquids			
IP	tests	IP	tests	protection	IP	tests	protection
0	No protection				0		No protection
1	Protected against solid bodies larger than 50 mm	A	The back of the hand remains remote from dangerous parts		1	Protected against vertically-falling drops of water (condensation)	
2	Protected against solid bodies larger than 12.5 mm	B	The dangerous parts can not be touched when introducing a finger		2	Protected against drops of water falling at up to 15° from the vertical	
3	Protected against solid bodies larger than 2.5 mm	C	The dangerous parts can not be touched when introducing a tool (eg a screwdriver)		3	Protected against drops of rain water at up to 60° from the vertical	
4	Protected against solid bodies larger than 1 mm				4	Protected against projections of water from all directions	
5	Protected against dust (no harmful deposit)	D	The dangerous parts cannot be touched when introducing a wire		5	Protected against jets of water from all directions	
6	Completely protected against dust				6	Protected against jets of water of similar force to heavy seas	
					7	Protected against the effects of immersion	
					8	Protected against prolonged effects of immersion under pressure	

Protection against mechanical impact : Index of protection - IK

According to standards IEC 62262 and BS EN 62262

IK	Tests	Impact energy (in Joules)
IK 00		0
IK 01	0.2 kg, 75 mm	0.15
IK 02	0.2 kg, 100 mm	0.2
IK 03	0.2 kg, 175 mm	0.35
IK 04	0.2 kg, 250 mm	0.5
IK 05	0.2 kg, 350 mm	0.7
IK 06	0.5 kg, 200 mm	1
IK 07	0.5 kg, 400 mm	2
IK 08	1.7 kg, 295 mm	5
IK 09	5 kg, 200 mm	10
IK 10	5 kg, 400 mm	20

(1) A product previously classed as IP xx-7 can be assumed to fulfill the conditions of an IP xx - IK 08

This table can be used to ascertain the resistance of a product to an impact given in Joules from the IK code (graduated from 00 to 10). It can also be used to ascertain the correspondence with the old IP code 3rd digit and the corresponding external "Ag" conditions.

The contents of the Protection Classifications charts are for guidance only. If you have any doubt as to the interpretation of the information contained therein, please refer either to the standard itself or contact Legrand.

Health and Safety at Work, etc. Act. 1974

Statement to Purchasers and Prospective Purchasers

1. Section 6 of this Act provides that manufacturers, designers, importers or suppliers of articles for use at work have a duty to ensure so far as is reasonably practical, that the article will be safe and without risk to health when properly used. An article is not regarded as being 'properly used' if it is used without regard to any relevant information or advice relating to its use made available by the manufacturer, designer, importer or supplier.

2. With regard to these provisions the following is given as a guide to the information which is readily available to you. This information relates to those products detailed in our catalogue(s) or associated literature or may be obtained by specific request to the Company.

3. All products should be installed and maintained in accordance with good engineering practice and relevant British or

other applicable standards, regulations for the installation of equipment by the Institute of Electrical Engineers or any other applicable Codes of Practice.

Health and Safety at Work Act

The Electricity at Work Regulations, 1989

1. All installations and maintenance should be carried out within the provision of the above Act and by persons so qualified as defined in the Act.

2. Information and advice on the suitability of our products can be obtained from Legrand Electric Limited on specific request.

For information concerning wiring device standards outside the UK contact :

BSI

Customer Services

09:00 to 17:00 – Monday to Friday

Tel : +44 (0) 20 8996 9001

Fax : +44 (0) 20 8996 7001

Email : cservices@bsi-global.com

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Please consult our current price list

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