

▶▶▶ Direct Strike Lightning Protection



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About

LYTECH Technologies provides a total solution from lightning protection and earthing systems to lightning and surge protection for electrical and electronic equipments.

Our lightning and earthing systems are manufactured strictly to the international standards such as IEC 62561 and IEC 62305, UL Standards and Singapore Code of Practice SS555 for lightning protection.

We control the quality of our products from raw materials to finished products to ensure top quality products are produced.

LYTECH Technologies provides a total solution for lightning protection from designing stage to supplying and installing a complete system. Our dedicated technical support team and sales team guarantee top quality service and select the most appropriate products to our customer's stringent demands.

LYTECH Technologies has participated in various mega projects in Singapore and around the South East Asia region.

▶▶▶ About LYTECH Technologies

LYTECH Technologies is a total solution provider for earthing, lightning and surge protection system in Asean.

Our Earthing and Lightning Protection System products (LYTECH) are manufactured to comply to **IEC 62561**, where the components have undergone **Salt Mist Test 60068-2-52:1996**, **severity 2 (72 hours exposure)**. Our dedication allows us to produce and customised products that cater to the demands of our customers.

Our lightning protection system design and lightning risk assessment reports complies to **IEC62305** / **SS555 standards**. Our design team is also capable to propose design based on **American (UL, API) and French (NFC) standards**. With our capabilities and technical know how, we can offer sophisticated and customer orientated technical support, meeting our customers stringent requirements.

We based our earthing design on **IEEE80** and we use CDEGS software to produce efficient and safe earthing system via the simulation of fault current discharge on step and touch voltages.

With our expertise, quality service, adequate stocking and short decision making process, we are well placed to cater to your needs to earthing, lightning and surge protection system requirements.

Total Solution to Earthing and Lightning Protection System

LYTECH Technologies offers a total solution to all your earthing and lightning protection issues. With our technical know-how on the latest standards (**IEC, UL, API, NFC IEEE80**), besides offering the most optimum design, we can produce customised products to suit your project requirements.

Lightning is one of nature's most destructive phenomena, and can cause massive damage and destruction if a structure is not adequately designed and equipped with proper earthing, lightning and surge protection system. Sever cases even involved injuries and even death to personals.

The secondary effect of lightning, called surge or transient overvoltages, can easily damage electronics housed within the structure.

A reliable lightning protection system design, as per IEC62305 / SS555, encompasses both structural lighting (part 3 - physical damage to structures and life hazard) and surge protection system (part 4 - electrical and electronic systems within structures), complete with lightning risk assessment report (part 2 - risk management).

Apart from applying international standards to the lightning protection system, the lightning protection system components has to be correctly installed, using quality products and fixings to ensure the effective dissipation of lightning energy safely to the ground. Apart from the professional implementation, the lightning protection system has to be inspected at various intervals to ensure its effectiveness.

LPS Level	Visual Inspection	Complete Inspection	Critical Facilities
1 & 11	1 year	2 years	1 year
III & IV	2 years	4 years	1 year



▶▶▶ About LYTECH Technologies

External Lightning Protection

The external lightning protection system is designed to protect a structure and the lives of people working within it, by directing the lightning energy in a safe manner to the earthing network. Using the Faraday Cage principle, the **LYTECH** range of quality lightning protection and earthing products ensures that safety and performance is not compromised.

Our products are tested under the following standards:

- IEC 62561-1-2012
 Lightning protection system components (LPSC) Part 1: Requirements for connection components
- IEC 62561-2-2012
 Lightning protection system components (LPSC) Part 2: Requirements for conductors and earth electrodes
- IEC 62561-4-2010
 Lightning protection system components (LPSC) Part 4: Requirements for conductor fasteners
- Salt Mist Test 60068-2-52:1996, severity 2 (72 hours exposure)

Earthing System

To ensure that our client always gets the most optimum design to meet the international standards, and their budget, we offer the following services:

- Lightning and surge protection system design and audit based on IEC62305 / SS555, UL, API, and NFC standards, complete with detailed drawings
- Soil resistivity and earth resistance test
- Training based on IEC62305 / SS555, and practical training on exothermic welding

Lightning Protection System Design

The earthing network ensures that lightning energy can be dissipated in a safe and efficient manner. Our range of LYTECH Exothermic Welding components provides a fast and easy way of creating good quality exothermic welding joints that can tolerate the fault current of all facilities.

Earthing System Design

Our design for earthing system is on **IEEE80** and we uses the CDEGS software for Finite Element Analysis (FEA) of fault current discharge for step and touch voltages. To design an earthing system, our engineers can conduct a site survey and soil resistivity test and together with the fault current details, we can construct a total design complete with detail report which will also include step and touch voltages values clearly indicated within the earth mat.



▶▶▶ About LYTECH Technologies

LYTECH Technologies Advantage

We offer a one stop shop concept by providing total solution to earthing and lightning system design, and we keep stock for all common items.

Our design complies to all relevant international standards.

Our experience in this field allows us to provide our clients with optimum design that meet the international standard, as well as best use of resources

With our manufacturing expertise and experience, we can offer our clients customised solutions and products to meet their needs.











Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that: Lytech Technologies Pte Ltd

51 Ubi Avenue 1

#05-22 Paya Ubi Industrial Building

Singapore 408933

Holds Certificate No: FM 665172

and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:

The design, manufacture & sales of lightning and earthing materials

For and on behalf of BSI:

Michael Lam - Managing Director Assurance, APAC

Original Registration Date: 2017-01-14 Latest Revision Date: 2022-12-15 Effective Date: 2023-01-14 Expiry Date: 2026-01-13

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...making excellence a habit."

This certificate was issued electronically and remains the property of BSI and is bound by the conditions of contract. An electronic certificate can be authenticated online.

Printed copies can be validated at www.bsi-global.com/ClientDirectory or telephone +(65)62700777.

Further clarifications regarding the scope of this certificate and the applicability of ISO 9001:2015 requirements may be obtained by consulting the organization. This certificate is valid only if provided original copies are in complete set.





Air Terminal





Made from 99.98% solid copper or aluminium. Various diameter and length of rods are available upon request.

Part No.	Rod Diameter (mm)	Thread Diameter (inch)	Length (mm)	Material
AT316-C	14.2	5/8	300	Copper
AT516-C	14.2	5/8	500	Copper
AT1016-C	14.2	5/8	1000	Copper
AT2016-C	14.2	5/8	2000	Copper
AT316-A	14.2	5/8	300	Aluminium
AT516-A	14.2	5/8	500	Aluminium
AT1016-A	14.2	5/8	1000	Aluminium
AT2016-A	14.2	5/8	2000	Aluminium

^{*}SS316 or 304 is available upon request.



Multiple PointMade from copper or aluminium.

Part No.	Thread Diameter (inch)	Conductor Type
MP16-C	5/8	Copper
MP16-A	5/8	Aluminium

Strike Pad





Part No.	Bolt Size	Material
SP01-C	M10	Copper
SP01-A	M10	Aluminium



*The standard threading is M10 and custom threading can be supplied upon request.

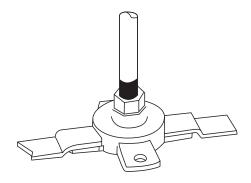
Air Terminal Base for Flat Conductor





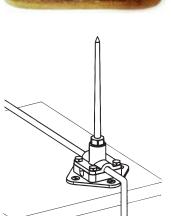
Made from copper or aluminium.

Part No.	Conductor Size (mm)	Thread Diameter (inch)	Conductor Type
TB16-C	25 x 3	5/8	Copper
TB16-A	25 x 3	5/8	Aluminium



Air Terminal Base for Circular Conductor





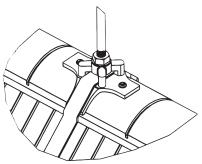
It is used to connect copper cable conductor.

Part No.	Conductor Size (mm)	Thread Diameter (inch)	Conductor Type
TBC5835-C	35	5/8	Copper
TBC5850-C	50	5/8	Copper
TBC5895-C	70 - 95	5/8	Copper
TBC58120-C	120	5/8	Copper

^{*}Other cable sizes are available upon request.

Ridge Saddle





Made from copper or aluminium.

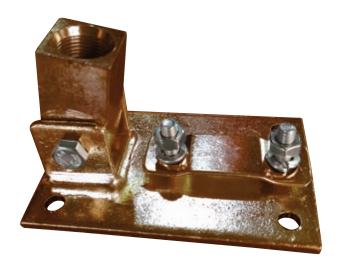
It is commonly used for mounting air terminal rod to

It is commonly used for mounting air terminal rod to ridges roof.

Part No.	Conductor Size (mm)	Thread Diameter (inch)	Conductor Type
RG16-C	30 x 6	5/8	Copper
RG16-A	30 x 6	5/8	Aluminium

Adjustable Air Terminal Base for Flat Conductor

Part No.	Conductor Size	Thread Diameter	Conductor
	(mm)	(inch)	Type
ATBC-16-253-C	25 x 3	5/8	Copper



Adjustable Air Terminal Base for Circular Conductor

It is used to connect copper cable conductor.

Part No.	Conductor Size (mm)	Thread Diameter (inch)	Conductor Type
ATBC 5835-C	35	5/8	Copper
ATBC 5850-C	50	5/8	Copper
ATBC 5895-C	70-95	5/8	Copper
ATBC 58120-C	120	5/8	Copper

*Other cable sizes are available upon request.



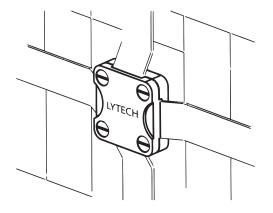
Direct Strike

Square Clamp









For Tape System

Made from copper or aluminium.

Part No.	Conductor Size (mm)	Conductor Type
SC253-C	25 x 3	Copper
SC506-C	50 x 6	Copper
SC253-A	25 x 3	Aluminium
SC506-A	50 x 6	Aluminium

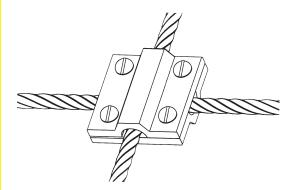
Square Clamp



Cable To Cable

For Circular Cable System.

Part No.	Conductor Size (mm)	Conductor Type
SCC35-C	35	Copper
SCC50-C	50	Copper
SCC95-C	70 - 95	Copper



Square Clamp

Cable To Tape



Part No.	Conductor Type	Size (mm)
SCCT253 / 70-C	Copper	25x3mm tape to 70mmsq cable
SCCT305 / 95-C	Copper	30x5mm tape to 95mmsq cable
SCCT506 / 70-C	Copper	50x6mm tape to 70mmsq cable
SCCT506 / 95-C	Copper	50x6mm tape to 95mmsq cable

B-Bond







Use for bonding tapes to steel structures.

Part No.	Bolt Size	Max Tape Width (mm)	Conductor Type
BB25-C	M10	26	Copper
BB25-A	M10	26	Aluminium

Tower Earth Bond





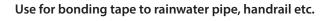
Made from copper.

The tower earth bond is suitable for tightening torque of 12Nm (as per IEC 62561-1). It is used for bonding copper cable to steel work. Clamps are available for flat tape system and circular cable system.

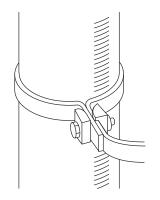
Part No.	Conductor Size (mm²)	Channel Thickness (mm)	Conductor Type
EB70-C	16 - 70	10	Copper
EB120-C	70 - 120	10	Copper

RWP Bond

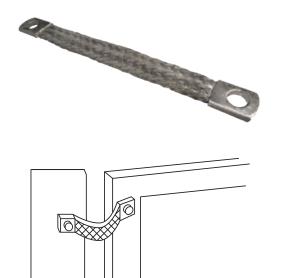




Part No.	Bolt Size	Max Tape Width (mm)	Conductor Type
RWP25-C	M10	26	Copper
RWP25-A	M10	26	Aluminium



Bonding



Our flexible copper braids are supplied as pre-cut with bonds at both ends for easy installation. This is usually used for earth bonding.

Tinned Flexible Copper Braid

Part No.	Center to Center Dist. of Fixing Hole (mm)	Braid Dimension (mm)	Hole Size (mm)
FCBT200-C	200	25 x 3.5	12
FCBT300-C	300	25 x 3.5	12
FCBT400-C	400	25 x 3.5	12

Safety Earthing Strap with Safety Tag



Made from stainless steel 304, it provides excellent corrosion protection and commonly used for earth bonding of small pipes. Customised length can be supplied for large pipe diameters.

Part No.	Length (mm)	Material
PES130-SS	130	SS304
PES200-SS	200	SS304

*SS316 is available upon request.



Test Link Box



The test link box is easy to install and is commonly used for test points where conductors are embedded within the structure.

Part No.	Length (mm)	Material
TLB-A	125 x 125 x 38	Aluminium

*SS304 is available upon request.

Direct Strike

Made from copper or aluminium. High quality PVC saddle is also available for fastening PVC covered conductor. Other conductor dimensions are available upon request.

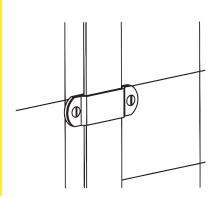
Conductor Saddle - Flat Conductor





Standard Tape Clip

Part No.	Conductor Size (mm)	Conductor Type	Description
TC253-C	25 x 3	Copper	w/ Base
TC253-A	25 x 3	Alumimium	w / Base



Conductor Saddle - Flat Conductor





DC Tape Clip

Part No.	Conductor Size (mm)	Conductor Type
DCT253-C	25 x 3	Copper
DCT506-C	50 x 6	Copper
DCT253-A	25 x 3	Aluminium
DCT506-A	50 x 6	Aluminium

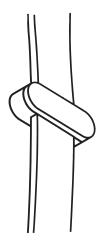


Conductor Saddle - Flat Conductor



PVC DC Tape Saddle for PVC Tape Conductor

Part No.	Conductor Size (mm)	Colour	Material
DCP253-P-B	25 x 3	Brown	PVC



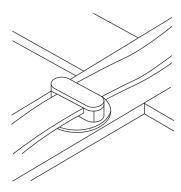
Conductor Saddle - Flat Conductor



Glue Down DC Tape Clip

Part No.	Conductor Size (mm)	Colour	Material
GDTC253-P-G	25 x 3	Grey	PVC

*Other colors available upon request.



L-SP-250 Surface primer -250 ml spray applicator (estimated application of approx 500 clips)



Cleaning solution -500 ml spray applicator For cleaning lacquered roofing membranes

Conductor Saddle - Flat Conductor

LYTECH Outdoor Self Adhesive Saddle with 3M™ VHB™ technology. It is being used together with our standard tape saddle. Custom made configuration with other type of saddle or clamp is available upon request.



Product Description

VHB+ is a conformable, very high bond acrylic foam tape which has added performance for bonding to plasticised vinyl due to a specially formulated adhesive which resists plasticiser migration. In addition this core adhesive composition makes the product well suited to many paints and primers.

Its improved conformability also allows more complete bond contact area when bonding rigid or irregular materials. The product has somewhat lower peel, tensile and shear performance than other VHB tape products due to its inherent softness. 4941's principal advantages are that it provides a more uniform seal on irregular surfaces, and invisible bonds under a transparent surface it offers a more aesthetically pleasing bond. 4941 is suitable for many interior and exterior industrial applications.



Standard Tape Clip with 3M™ VHB™

Part No.	Conductor Size (mm)	Conductor Type
TC253-C-VHB	25 x 3	Copper
TC506-C-VHB	50 x 6	Copper
TC253-A-VHB	25 x 3	Aluminium



DC Conductor Saddle - Flat Conductor with 3M™VHB™

Part No.	Conductor Size (mm)	Conductor Type
DCT253-C-VHB	25 x 3	Copper
DCT256-C-VHB	25 x 3	Copper
DCT506-C-VHB	50 x 6	Copper
DCT305-C-VHB	30 x 5	Copper
DCT253-A-VHB	25 x 3	Aluminium



Part No.	Pack Size
LY3M-94-0.5PINT	1/2 PINT

*Larger pack size available upon request.

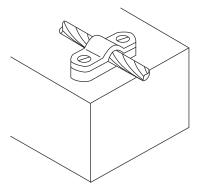


Conductor Saddle - Circular Conductor



DC Circular Cable Saddle

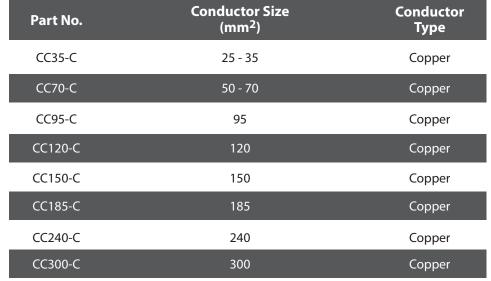
Part No.	Conductor Size (mm²)	Conductor Type
DCC50-C	50	Copper
DCC70-C	70	Copper
DCC95-C	95	Copper

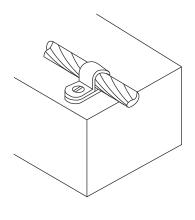


Conductor Saddle - Circular Conductor



One Hole Cable Clip





▶▶▶ Direct Strike

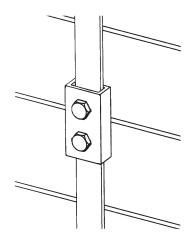
Test Clamp





Oblong Test Clamp for Tape System

Part No.	Max Conductor Size (mm)	Conductor Type
OTC253-C	26 x 8	Copper



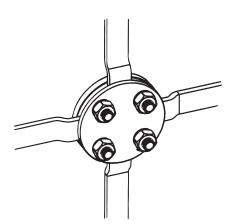
Test Clamp





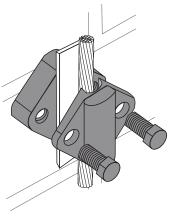
Round Test Clamp for Tape System

Part No.	Max Conductor Size (mm)	Conductor Type
RTC2612-C	26 x 12	Copper



Test Clamp



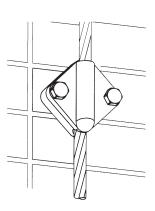


Cable To Tape

Part No.	Conductor Type	Size (mm)
CTCT-253/120-C	Copper	25x3mm tape to 120mmsq cable
CTCT-253/185-C	Copper	25x3mm tape to 185mmsq cable

Test Clamp





Circular Cable System

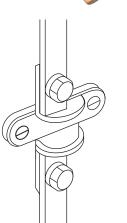
Part No.	Conductor Size (mm ²)	Conductor Type
CTC50-C	50	Copper
CTC70-C	70	Copper
CTC95-C	95	Copper

▶▶▶ Direct Strike

Test Clamp







Bi-metallic Connector for Aluminium to Copper Tape System

Part No.	Conductor Size (mm ²)	Conductor Type
BMC253-AC	25 x 3	Aluminium / Copper



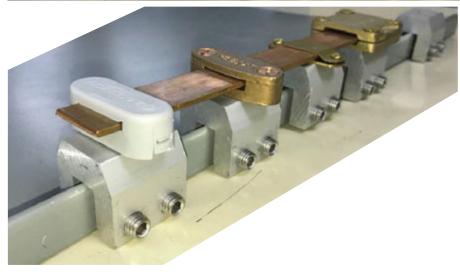
Special Clamp for Roof Application



Roof clamps are easy to install and universal to use on most type of metallic roof to mount conductor saddle or clamps without the need of drilling.

Part No.	Max Ridge Thickness (mm)	Threading (mm)	Application
RC-M6-A	14	M6	To be use with other saddle and clamps





▶▶▶ Conductors

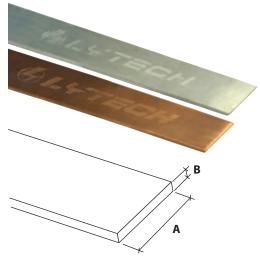




Conductors

Flat Tape





Please note that weight/meter is subjected to manufacturing tolerance.

Our flat tape conductor consists of 2 main choices of material, soft annealed copper tape of minimum 99.98% copper purity & aluminium tape.

Bare Copper Tape

,	Part No.	Conductor Size (AxB) (mm)	Standard Coil Size (m)	Weight Per Metre (Kg)
	FT253-C	25 x 3	50	0.67
	FT506-C	50 x 6	20	2.68
	FT5005-C	50x0.5	150	0.22

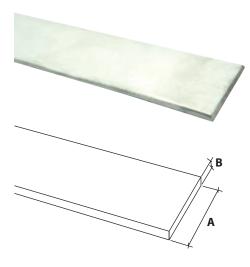
^{*}Other sizes are available upon request.

Bare Aluminium Tape

Part No.	Conductor Size (AxB) (mm)	Standard Coil Size (m)	Weight Per Metre (Kg)
FT253-A	25 x 3	100	0.21

^{*}Other sizes are available upon request.

Flat Tape



Our soft annealed copper tape is manufactured with minimum 99.98% copper purity and Tinned copper tape provides an additional protection against corrosion.

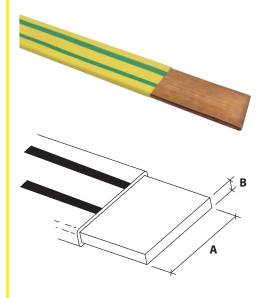
Tinned Copper Tape

Part No.	Conductor Size (AxB) (mm)	Standard Coil Size (m)	Weight Per Metre (Kg)
FT253-CT	25 x 3	50	0.67
FT506-CT	50 x 6	20	2.68

^{*}Other sizes are available upon request.

^{*}Please note that weight / meter is subjected to manufacturing tolerance.





PVC (Green / Yellow) Copper Tape

Part No.	Conductor Size (AxB) (mm)	Standard Coil Size (m)
FTP253-C (G/Y)	25 x 3	25

PVC (Green / Yellow) Aluminium Tape

Part No.	Conductor Size Standard Coil Siz (AxB) (mm) (m)	
FTP253-A (G/Y)	25 x 3	25

^{*}Other sizes and colours are available upon request.

Flat Bar



Our hard drawn high conductivity copper bar meets the IEC standards. Tinned copper bar is available upon request.

Hard Drawn Copper Bar

Part No.	Conductor Size (mm²)	Standard Length	Weight Per Metre (Kg)
CB253-C	25x3	3	0.67
CB506-C	50x6	3	2.68

^{*}Other sizes are available upon request.

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