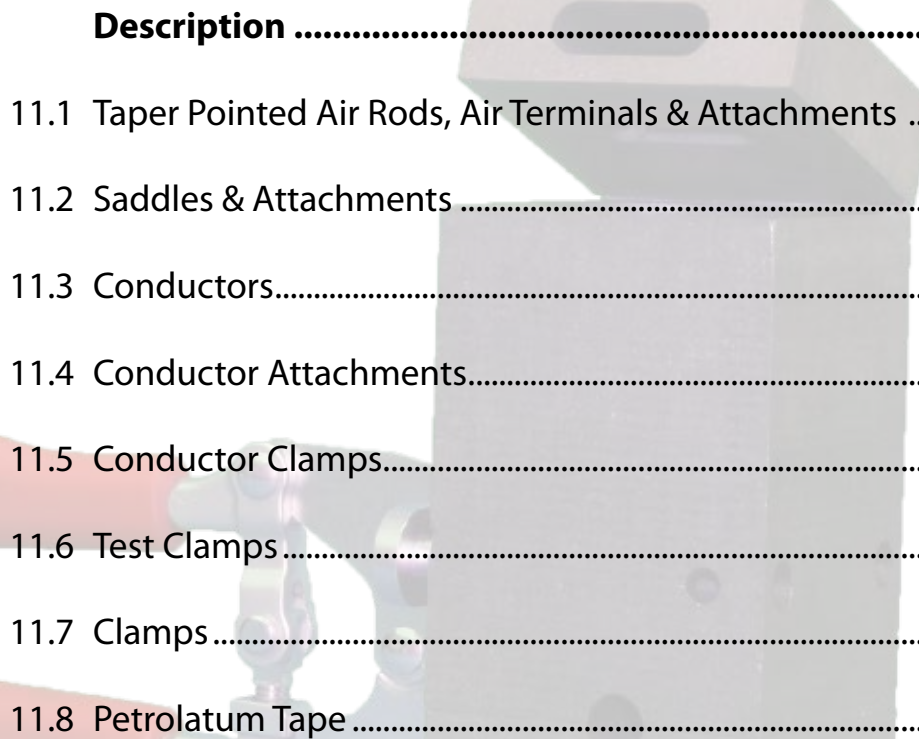


Section 11

Metric Lightning Protection Products



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METRIC TAPER POINTED AIR RODS

Section 11 - Metric
Lightning Protection Products

Taper Pointed Air Rods

Taper pointed air rods provide the strike point in a lightning protection system. They can be used with or without multipoints, however research indicates multiple points with taper rods offer more effectivity.



| Taper Pointed Air Rods | | | |
|------------------------|-----------------|--------------|----------|
| Catalog # | Rod Length (mm) | Rod Dia (mm) | Material |
| 38-7425-01 | 500 | 15 | Copper |
| 38-7425-00 | 1000 | 15 | Copper |
| 38-7425-24 | 1200 | 15 | Copper |
| 38-7425-05 | 1500 | 15 | Copper |
| 38-7425-03 | 2000 | 15 | Copper |

Air Terminal Base - Tape

These are used for attaching air rods onto flat roof surfaces and to accommodate tape for the protection system. The threads are suitable for air rods.



| Air Terminal Base - Tape | | |
|--------------------------|------------|--------------------------|
| Catalog # | Thread Dia | Max. Tape Conductor (mm) |
| 38-8061-01 | 16 mm | 30 x 6 |
| 38-8061-02 | 5/8" | 30 x 6 |
| 38-8061-03 | 3/4" | 30 x 6 |

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METRIC SADDLES & ATTACHMENTS

Flat Saddle

Type 'C'

These are used for fixing air rods onto flat roof surfaces and accommodate circular conductors and cables to the protection system. The threads are suitable for air rods.

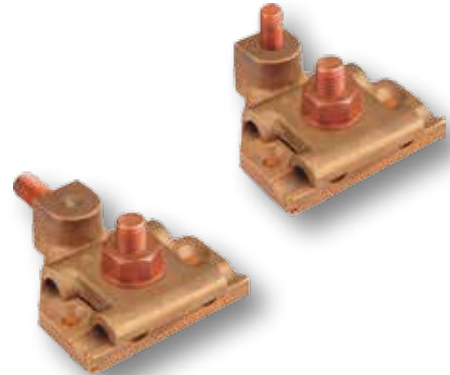
| Flat Saddle - Type 'C' | | | |
|------------------------|-----------------------------------|--------------|------------|
| Catalog # | Conductor Size (mm ²) | Rod Dia (mm) | Thread Dia |
| 38-8065-01 | 50 - 70 | 16 | 16 mm |
| 38-8065-02 | 95 | 16 | 16 mm |



Air Rod Base - Cable

These are used for attaching air rods Horizontally or Vertically and to accommodate circular conductors and cables to the protection system. The threads are suitable for air rods.

| Air Rod Base - Cable | | | |
|----------------------|------------|-----------------------------------|------------|
| Catalog # | Position | Conductor Size (mm ²) | Thread Dia |
| 38-8066-01 | Vertical | 8 | 10 mm |
| 38-8066-02 | Horizontal | 8 | 10 mm |



Rod Brackets - Side Mounting Bracket

Rod Brackets are mainly used where it is not possible to fit a saddle on the roof, so the air rod has to be fitted on the wall or to the side of the building or chimney. The Rod to Tape/Cable Coupling is used to secure air terminal to Tape or Cable.

| Rod Brackets - Side Mounting Bracket | |
|--------------------------------------|--------------|
| Catalog # | Rod Dia (mm) |
| 38-8067-01 | 15 - 20 |



METRIC SADDLES & ATTACHMENTS

Air Rod to Tape/Cable Coupling

These are used in conjunction with the Rod Brackets. The air rod is screwed into the threads provided and the Tape and Cable is secured by the Bolts provided. The threads are suitable for air rods.



| Air Rod to Tape/Cable Coupling | | | |
|--------------------------------|--------------|------------|-------------------------|
| Catalog # | Rod Dia (mm) | Thread Dia | Conductor Dia |
| 38-8068-01 | 15 | 16 mm | 3 x 25 mm |
| 38-8068-02 | 15 | 16 mm | 50 - 70 mm ² |
| 38-8068-03 | 15 | 16 mm | 95 mm ² |
| 38-8068-04 | 14.2 | 5/8" | 3 x 25 mm |
| 38-8068-05 | 14.2 | 5/8" | 50 - 70 mm ² |
| 38-8068-06 | 14.2 | 5/8" | 95 mm ² |
| 38-8068-07 | 17.2 | 3/4" | 3 x 25 mm |
| 38-8068-08 | 17.2 | 3/4" | 50 - 70 mm ² |
| 38-8068-09 | 17.2 | 3/4" | 95 mm ² |

Ridge Saddle

These are also air rod bases mainly used for attaching air rods to Ridges and to accommodate circular conductors and cables to the protection system. The threads are suitable for air rods.



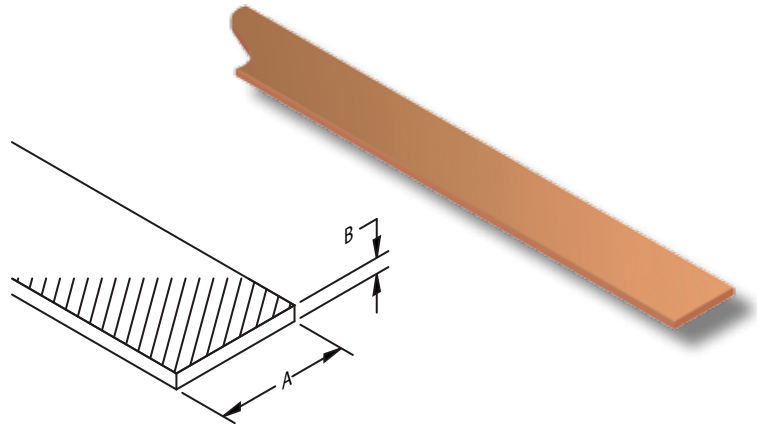
| Ridge Saddle | | | |
|--------------|--------------|------------|------------------------|
| Catalog # | Rod Dia (mm) | Thread Dia | Maximum Tape Size (mm) |
| 38-8070-01 | 15.0 | M16 | 30 x 6 |
| 38-8070-02 | 14.2 | 5/8" | 30 x 6 |
| 38-8070-03 | 17.2 | 3/4" | 30 x 6 |

METRIC CONDUCTORS

Hard Drawn Copper Bar

These are extruded from high grade Copper cathode of purity 99.99% purity. These are available in various sizes in standard length of 4 Mtr.

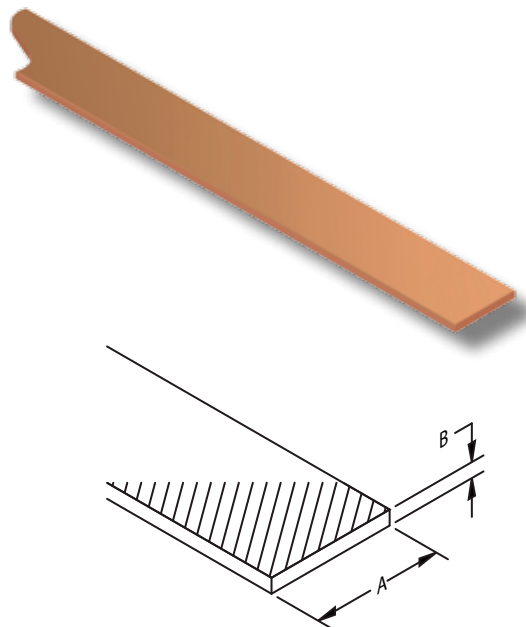
| Hard Drawn Copper Bar | |
|-----------------------|---------------------------|
| Catalog # | Conductor Size (A x B) mm |
| 38-8071-01 | 25 x 3 |
| 38-8071-02 | 25 x 6 |
| 38-8071-03 | 38 x 6 |
| 38-8071-04 | 50 x 6 |
| 38-8071-05 | 50 x 10 |
| 38-8071-06 | 75 x 6 |
| 38-8071-07 | 100 x 6 |



Bare Copper Tape

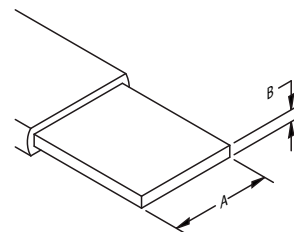
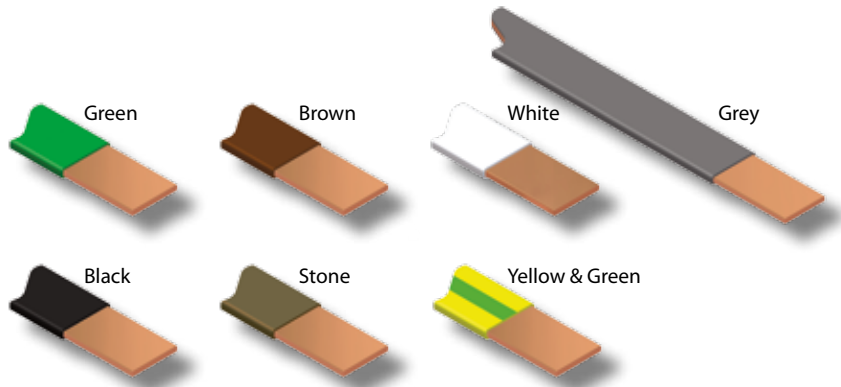
The main component of any Earthing or Lightning Protection System is the actual conductor. thermOweld's Bare Copper Tape is manufactured from the finest quality cathodes with a purity of 99.99%. These Tapes are annealed for ease of use with radiused edges and are oxygen free (oxygen 5ppm). The KA Rating is based on the recommendations of BS: 7430 with an initial temp. of 30° and a maximum of 250°. C.

| Bare Copper Tape | |
|------------------|---------------------------|
| Catalog # | Conductor Size (A x B) mm |
| 38-8072-01 | 12.5 x 1.5 |
| 38-8072-02 | 12.5 x 3 |
| 38-8072-03 | 20 x 1.5 |
| 38-8072-04 | 20 x 3 |
| 38-8072-05 | 25 x 1.5 |
| 38-8072-06 | 25 x 3 |
| 38-8072-07 | 25 x 4 |
| 38-8072-08 | 25 x 6 |
| 38-8072-09 | 30 x 2 |
| 38-8072-10 | 30 x 3 |
| 38-8072-11 | 30 x 4 |
| 38-8072-12 | 30 x 5 |
| 38-8072-13 | 31 x 3 |
| 38-8072-14 | 31 x 6 |
| 38-8072-15 | 38 x 3 |
| 38-8072-16 | 38 x 5 |
| 38-8072-17 | 38 x 6 |
| 38-8072-18 | 40 x 3 |
| 38-8072-19 | 40 x 4 |
| 38-8072-20 | 40 x 5 |
| 38-8072-21 | 40 x 6 |
| 38-8072-22 | 50 x 3 |
| 38-8072-23 | 50 x 4 |
| 38-8072-24 | 50 x 6 |



• Sold by the coil.

METRIC CONDUCTORS



PVC Covered Tape

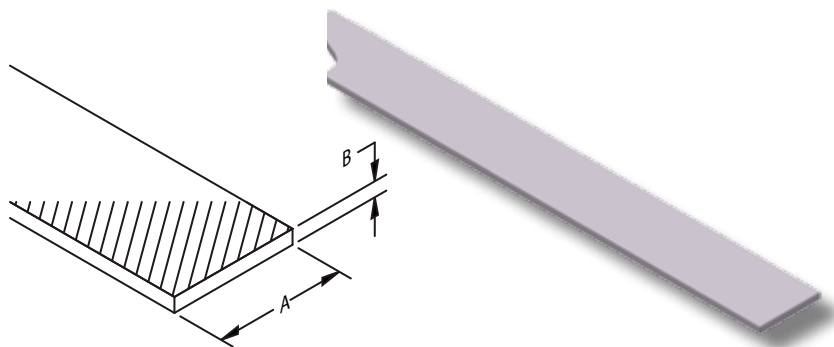
PVC Covered Copper Tapes are similar to the Bare Copper Tapes but covered with PVC for aesthetic purpose to blend the down conductor into the building.

| PVC Covered Tape | | | | | | | |
|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------------|---------------------------|
| Catalog # (Grey) | Catalog # (Green) | Catalog # (Brown) | Catalog # (White) | Catalog # (Black) | Catalog # (Stone) | Catalog # (Yellow/Green) | Conductor Size (A x B) mm |
| 38-8073-01 | 38-8073-02 | 38-8073-03 | 38-8073-04 | 38-8073-05 | 38-8073-06 | 38-8073-07 | 25 x 3 |
| 38-8073-21 | 38-8073-22 | 38-8073-23 | 38-8073-24 | 38-8073-25 | 38-8073-26 | 38-8073-27 | 25 x 6 |
| 38-8073-31 | 38-8073-32 | 38-8073-33 | 38-8073-34 | 38-8073-35 | 38-8073-36 | 38-8073-37 | 50 x 3 |
| 38-8073-41 | 38-8073-42 | 38-8073-43 | 38-8073-44 | 38-8073-45 | 38-8073-46 | 38-8073-47 | 50 x 6 |

• Sold by the coil.

Tinned Copper Tape

Bare Copper Tape is annealed and tinned for easy use and extend the life of the conductor.

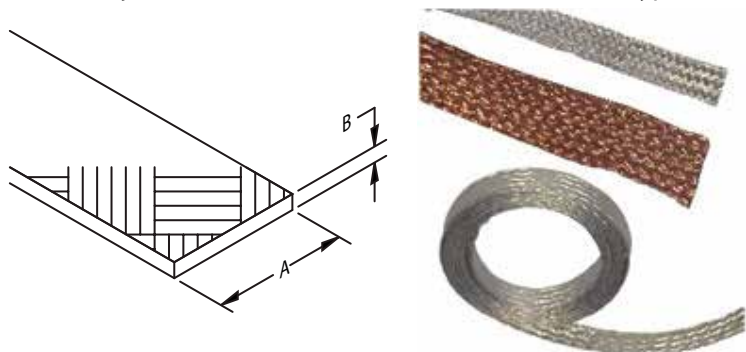


| Tinned Copper Tape | |
|--------------------|---------------------------|
| Catalog # | Conductor Size (A x B) mm |
| 38-8074-01 | 25 x 3 |
| 38-8074-02 | 25 x 6 |
| 38-8074-03 | 30 x 5 |
| 38-8074-04 | 50 x 6 |

• Sold by the coil.

Flexible Copper Braids

Flexible Copper Braids are suitable for earth bonding of fences, gates, doors, etc., where flexibility is required or the bond is subject to movements. Other materials, sizes and types of braid can be made to order.



| Flexible Copper Braids | | |
|------------------------|-------------------------|-------------------------|
| Catalog # | Overall Size (A x B) mm | Size (mm ²) |
| 38-8080-01 | 12 x 1 | 6 |
| 38-8080-02 | 15 x 1.5 | 10 |
| 38-8080-03 | 19 x 2.5 | 16 |
| 38-8080-04 | 25 x 3.5 | 35 |
| 38-8080-05 | 32 x 6 | 70 |

Section 11 - Metric Lightning Protection Products INTERNATIONAL METRIC INTERNATIONAL METRIC INTERNATIONAL METRIC INTERNATIONAL METRIC INTERNATIONAL METRIC

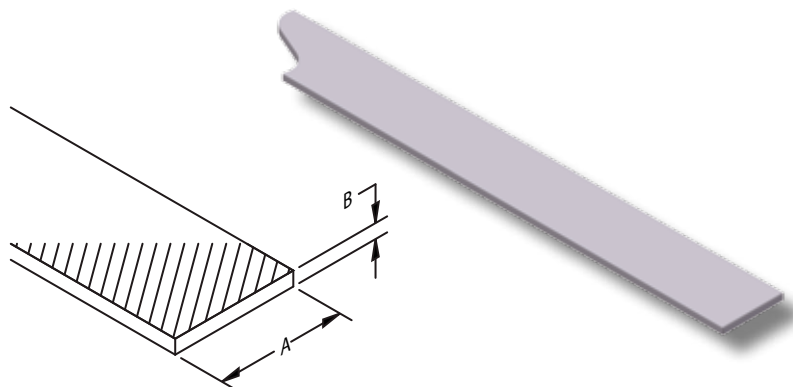
METRIC CONDUCTORS

Bare Aluminum Tape

These Bare Aluminum Tapes are made of high grade aluminum which can be used in lightning protection applications as an economical alternate to copper tapes. The tapes are annealed for ease of use with radiused edges.

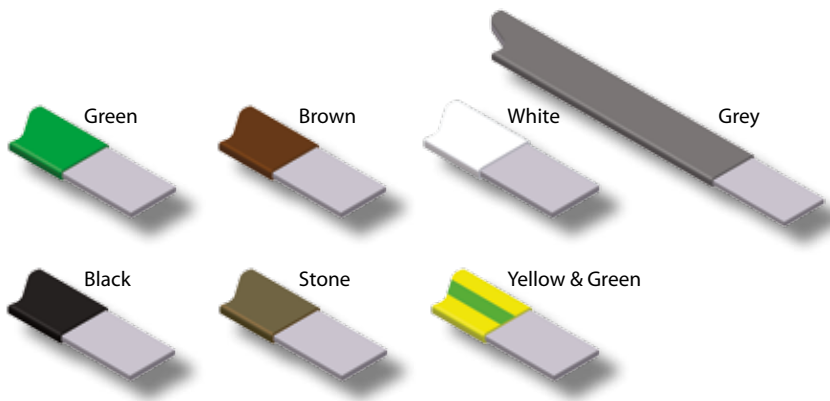
| Bare Aluminum Tape | |
|--------------------|---------------------------|
| Catalog # | Conductor Size (A x B) mm |
| 38-8075-01 | 25 x 3 |
| 38-8075-02 | 25 x 6 |
| 38-8075-03 | 30 x 5 |
| 38-8075-04 | 50 x 6 |

- Sold by the coil.



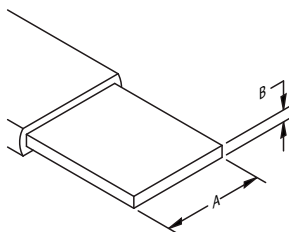
PVC Covered Aluminum Tape

These are similar to Bare Aluminum Tapes but covered with 1mm thick PVC sleeve.



| PVC Covered Aluminum Tape | | | | | | | |
|---------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------------|---------------------------|
| Catalog # (Grey) | Catalog # (Green) | Catalog # (Brown) | Catalog # (White) | Catalog # (Black) | Catalog # (Stone) | Catalog # (Yellow/Green) | Conductor Size (A x B) mm |
| 38-8076-01 | 38-8076-02 | 38-8076-03 | 38-8076-04 | 38-8076-05 | 38-8076-06 | 38-8076-07 | 25 x 3 |
| 38-8076-21 | 38-8076-22 | 38-8076-23 | 38-8076-24 | 38-8076-25 | 38-8076-26 | 38-8076-27 | 25 x 6 |
| 38-8076-31 | 38-8076-32 | 38-8076-33 | 38-8076-34 | 38-8076-35 | 38-8076-36 | 38-8076-37 | 50 x 3 |
| 38-8076-41 | 38-8076-42 | 38-8076-43 | 38-8076-44 | 38-8076-45 | 38-8076-46 | 38-8076-47 | 50 x 6 |

- Sold by the coil.

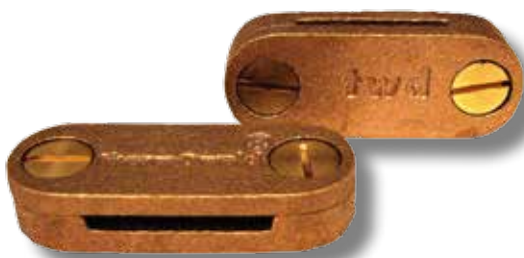


METRIC CONDUCTOR ATTACHMENTS

Section 11 - Metric
Lightning Protection Products

DC Tape Clip

Metallic DC Clips are used to secure the flat conductor to the building. It is recommended to use DC Clips at 1 Mtr. distance. The Tape fits into the clip and is secured by two countersunk screws. These clips can be fastened to the building by recommended csk woodscrew 1 1/2" x No 10 plugs.



| DC Tape Clip | |
|--------------|-------------------|
| Catalog # | Conductor Size mm |
| 38-8083-01 | 25 x 3 |
| 38-8083-02 | 25 x 6 |
| 38-8083-03 | 30 x 2 |
| 38-8083-04 | 31 x 3 |
| 38-8083-05 | 31 x 6 |
| 38-8083-06 | 38 x 3 |
| 38-8083-07 | 38 x 6 |
| 38-8083-08 | 50 x 3 |
| 38-8083-09 | 50 x 6 |

Back Plate Hold Fast Stem

These are used where the tape is to be secured away from the building surface and these are used with appropriate DC Clips.



| Back Plate Hold Fast Stem |
|---------------------------|
| Catalog # |
| 38-8084-01 |

Glazing Bar Hold Fast

Glazing Bar Hold Fast can be used to secure DC Clip onto any projection or extension like steel frames, girders, angles, window frames, etc...



| Glazing Bar Hold Fast | |
|-----------------------|---------------------------|
| Catalog # (Black) | Maximum Glazing Bar Width |
| 38-8085-01 | 12 mm |

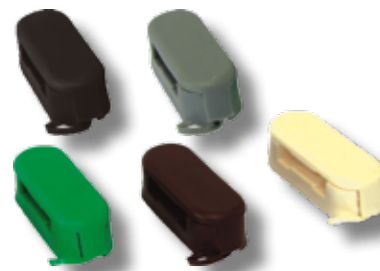
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METRIC CONDUCTOR ATTACHMENTS

Non Metallic DC Tape Clip

Non-Metallic DC Tape clips are made from high grade polypropylene and are UV stabilized to prevent degradation or breaking in cold weather. The two piece design with a connection link will ensure no lost or dropped lids, the unique locking design provides easy installation and rigid pull off loads. These are made in six colors to match the PVC covered tapes, and can also be used for bare copper tapes.

| Non Metallic DC Tape Clip | | | | | |
|---------------------------|---------------------|----------------------|----------------------|---------------------------------|--------------|
| Catalog # (Black) | Catalog # (Grey) | Catalog # (Stone) | Catalog # (Brown) | Conductor Size (A x B) mm | Tape Type |
| 38-8086-11 | 38-8086-12 | 38-8086-13 | 38-8086-14 | 25 x 3 | Bare Copper |
| 38-8086-21 | 38-8086-22 | 38-8086-23 | 38-8086-24 | 25 x 6 | Bare Copper |
| 38-8086-31 | 38-8086-32 | 38-8086-33 | 38-8086-34 | 25 x 3 | PVC Covered |



Tape Clip

These are used to mount tape flush with the building surface. These are attached using two screws and plugs.

| Tape Clip | | |
|------------|---------------------------|----------|
| Catalog # | Conductor Size (mm) | Material |
| 38-8087-01 | 25 x 3 | Copper |
| 38-8087-02 | 25 x 6 | Copper |
| 38-8087-03 | 50 x 3 | Copper |
| 38-8087-04 | 50 x 6 | Copper |



Bimetallic Connector - Tape to Tape

Bimetallic Connectors are used to connect Aluminum Tape to Copper Tape, in order to prevent dissimilar contact and avoid galvanic action. It is recommended to use Aluminum Copper Bimetallic connectors.

| Bi-Metallic Connector - Tape to Tape | |
|--------------------------------------|--------------------------|
| Catalog # (Black) | Tape Size (mm) |
| 38-8088-01 | 25 x 3 - Cu to 25 x 3 Al |
| 38-8088-02 | 25 x 3 - Cu to 25 x 3 Al |
| 38-8088-03 | 25 x 3 - 25 x 3 |



METRIC CONDUCTOR ATTACHMENTS

Square Tape Clamp

Square tape / Junction Clamps are used for crossing over tapes or T joints. These clamp can also be used to make straight through joints in a network of Tapes. These clamps can be fastened to the building by recommended csk woodscrew 1 1/2" x No 10 Plugs.



| Square Tape Clamp | |
|-------------------|---------------------|
| Catalog # | Conductor Size (mm) |
| 38-8089-01 | 25 x 3 |
| 38-8089-02 | 25 x 6 |
| 38-8089-03 | 30 x 2 |
| 38-8089-04 | 31 x 3 |
| 38-8089-05 | 31 x 6 |
| 38-8089-06 | 38 x 3 |
| 38-8089-07 | 38 x 6 |
| 38-8089-08 | 50 x 3 |
| 38-8089-09 | 50 x 6 |

Oblong Test or Junction Clamp

Oblong Test / Junction Clamps are used for straight through tape joints and for disconnecting the earthing or Lightning protection system for testing purposes. The tapes can be overlapped and secured by two bolts.



| Oblong Test or Junction Clamp | |
|-------------------------------|---------------------|
| Catalog # | Conductor Size (mm) |
| 38-8090-01 | 25 x 3 |
| 38-8090-02 | 25 x 6 |
| 38-8090-03 | 31 x 3 |
| 38-8090-04 | 31 x 6 |
| 38-8090-05 | 38 x 3 |
| 38-8090-06 | 38 x 6 |
| 38-8090-07 | 50 x 3 |
| 38-8090-08 | 50 x 6 |

METRIC CONDUCTOR ATTACHMENTS

Heavy Duty Cast Cable Saddle

Heavy Duty Cast Cable Saddles can be used in many applications. They can be used as a support for 10mm dia. Air rod or as a Heavy duty Clip for Round conductors. They can also be used in conjunction with Glazing bar holdfast and Back plate holdfast stem.

| Joining Clamp | |
|---------------|-----------------------------------|
| Catalog # | Conductor Size (mm ²) |
| 38-8101-01 | 50 |
| 38-8101-02 | 70 |
| 38-8101-03 | 120 |



One Hole Clip

One Hole Clips can be used for attaching Cables and round conductors. They are supplied in open position for easy installation.

| One Hole Clip | |
|---------------|-----------------------------------|
| Catalog # | Conductor Size (mm ²) |
| 38-8102-01 | 25 |
| 38-8102-02 | 35 |
| 38-8102-03 | 50 |
| 38-8102-04 | 70 |
| 38-8102-05 | 95 |
| 38-8102-06 | 120 |
| 38-8102-07 | 150 |
| 38-8102-08 | 185 |
| 38-8102-09 | 240 |
| 38-8102-10 | 300 |



METRIC CONDUCTOR CLAMPS

Section 11 - Metric
Lightning Protection Products

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Square Conductor Clamp

These clamps are suitable for forming cross or tee jointing.



| Square Conductor Clamp | |
|------------------------|---------------------|
| Catalog # | Conductor Size (mm) |
| 38-8097-01 | 8 Dia or 35 - 50 sq |

Square Conductor Clamp

Square Conductor Clamps are used for forming straight, Through, Cross or T Joints in Cables and round conductors.



| Square Conductor Clamp | |
|------------------------|-----------------------------------|
| Catalog # | Conductor Size (mm ²) |
| 38-8103-01 | 35 - 50 |
| 38-8103-02 | 70 - 90 |

Bi Metallic Connectors - Cable to Cable

Bi- Metallic Connectors are used to connect Aluminum Lightning Protection system to Copper earthing network. In order to prevent dissimilar contact and avoid galvanic action, it is always recommended to use Aluminum Copper Bi-Metallic connectors. The cable can be connected directly into the connector.



| Bi Metallic Connectors - Cable to Cable | |
|---|---------------------|
| Catalog # | Conductor Size (mm) |
| 38-8094-01 | 8 Dia or 35 - 50 sq |

METRIC TEST CLAMPS

Plate Type Test Clamp

Plate Type Test Clamps are used as T or straight through joints of tapes. These Test clamps can also be used as disconnecting joints between the down conductors and the earthing system. The clamp is also suitable in heavy duty applications up to 26 x 12 Tape connections.

| Plate Type Test Clamp | |
|-----------------------|---------------------------|
| Catalog # (Black) | Conductor Size (mm) |
| 38-8091-01 | 26 x 12 |



Screw Down Test Clamp

These Clamps provide easy access to copper tapes for inspection or testing. The heavy duty lid easily screws on/off the base. Due to easy operation, these are not suitable near the ground or within easy reach of the public for security reasons.

| Screw Down Test Clamp | |
|-----------------------|--------------------------------|
| Catalog # | Max. Conductor Size (mm) |
| 38-8092-01 | 26 x 8 |



Test Clamp

Test Clamps are for end to end joints of circular conductors.

| Test Clamp | |
|------------|---|
| Catalog # | Conductor Size (mm ²) |
| 38-8100-01 | 35 |
| 38-8100-02 | 50 - 70 |
| 38-8100-03 | 95 |



Interface Test and Junction Clamp

Junction Clamps are suitable to form straight through joints of Copper Tape to circular conductor or cable for disconnecting or test purposes.

| Interface Test and Junction Clamp | | |
|-----------------------------------|---------------------------|-----------------------|
| Catalog # | Conductor Size (mm) | Tape Width (mm) |
| 38-8096-01 | 8 Dia or 35 - 50 sq | 25 |



METRIC CLAMPS

Multi Purpose Clamps

Multi Purpose Clamps are suitable for crossing over Tapes and Cables. These clamps are used to make straight through and T joints in a continuous network.



| Multi Purpose Clamps | | |
|----------------------|----------------------|----------------|
| Catalog # | Conductor Size (mm) | Tape Size (mm) |
| 38-8093-01 | 8 Dia or 35 - 50 sq | 25 x 3 |
| 38-8093-02 | 10 Dia or 70 - 90 sq | 25 x 3 |

Jointing Clamp

Jointing Clamps are used for forming straight through joints of circular conductors.



| Jointing Clamp | |
|----------------|---------------------|
| Catalog # | Conductor Size (mm) |
| 38-8099-01 | 8 Dia or 35 - 50 sq |

Tee Clamp

Tee Clamps are suitable for forming tee joints of circular conductors.



| Tee Clamp | |
|------------|---------------------|
| Catalog # | Conductor Size (mm) |
| 38-8098-01 | 8 Dia or 35 - 50 sq |

Rebar Clamp

Rebar clamps are suitable for bonding circular conductors to reinforced bars, steam pipes, hand rails, etc..



| Rebar Clamp | | |
|-------------|---------------------|----------------|
| Catalog # | Conductor Size (mm) | Rebar Dia (mm) |
| 38-8105-01 | 8 Dia or 35 - 50 sq | 8 - 18 |
| 38-8105-02 | 8 Dia or 35 - 50 sq | 18 - 38 |

METRIC PETROLATUM TAPE

Petrolatum Tape

This is a waterproof tape for wrapping joints to provide protection against corrosion.

| Petrolatum Tape | |
|-----------------|-----------------|
| Catalog # | Pack |
| 38-8106-01 | 50mm x 10m Roll |

