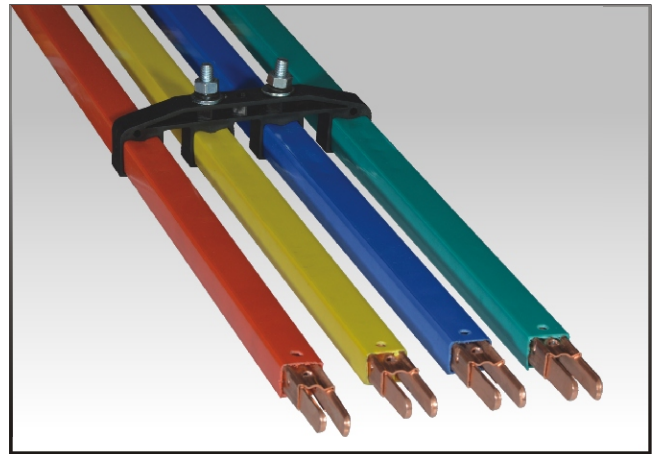
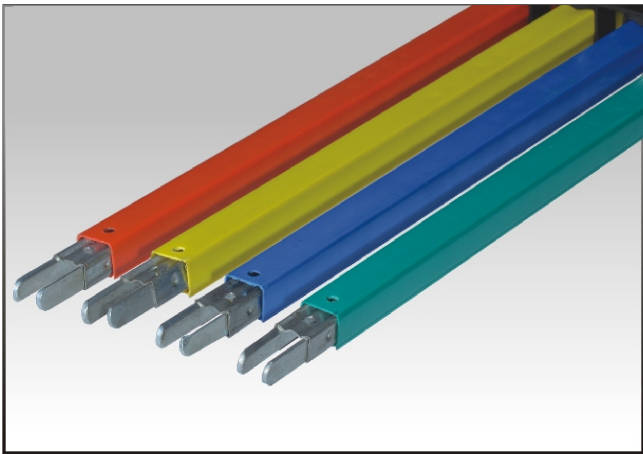




SafePower[®]

“M” Pin Type

GI Conductor Bar 60 Amps To 125 Amps
Copper Conductor Bar 160 Amps To 315 Amps















**INSTALLATION & MAINTENANCE
INSTRUCTIONS**

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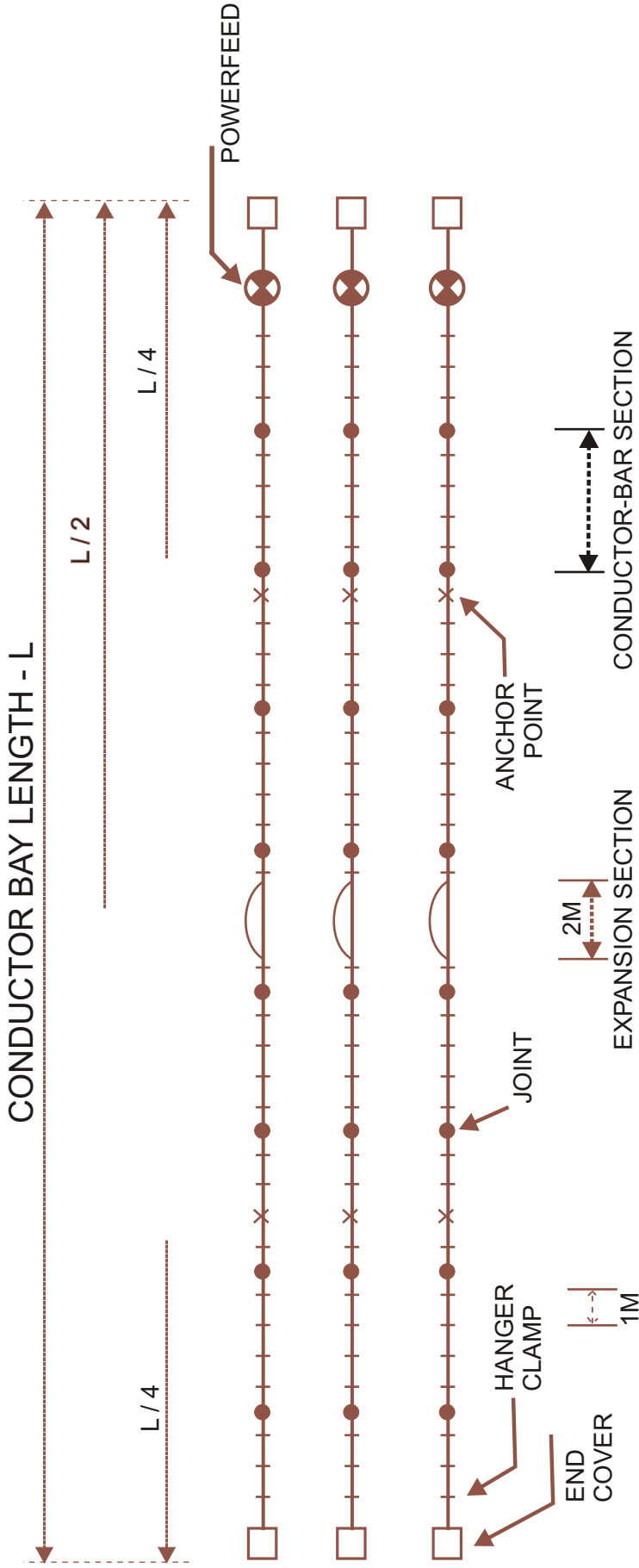
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CONDUCTOR SYSTEM NOMENCLATURE

	SINGLE CONDUCTOR.		HANGER CLAMP
	CONDUCTOR JOINT.		ANCHOR CLAMP
	EXPANSION SECTION.		POWERFEED.
	END CAP		COLLECTOR.
	ISOLATING SECTION ISOLATION - INSULATING MATERIAL.		ISOLATING SECTION. ISOLATION - AIR GAP
	ISOLATING SWITCH.		SWITCH FUSE.

TYPICAL 3 PHASE CONDUCTOR SYSTEM

METRES



SafePower		60	100	125	250	315
STANDARD CONDUCTOR LENGTH		4	4	4	4	4
EXPANSION SECTION LENGTH		2	2	2	2	2
MAXIMUM HANGER SPACING :	VERTICAL MOUNT	1	1	1	1	1
	HORZ. MOUNT	1	1	1	1	1
	CURVE SECTIONS	0.5	0.5	0.5	0.5	0.5
MAXIMUM SYSTEM LENGTH WITHOUT EXPANSION SECTION		200	200	200	150	150
* POWER FEED PREFERABLY AT CENTER. MULTI FEED REQD. FOR LONGER BAYS/HIGHER CURRENT INSTALLTION.						



INSTALLATION NOTES

1. TOOL KIT REQUIRED

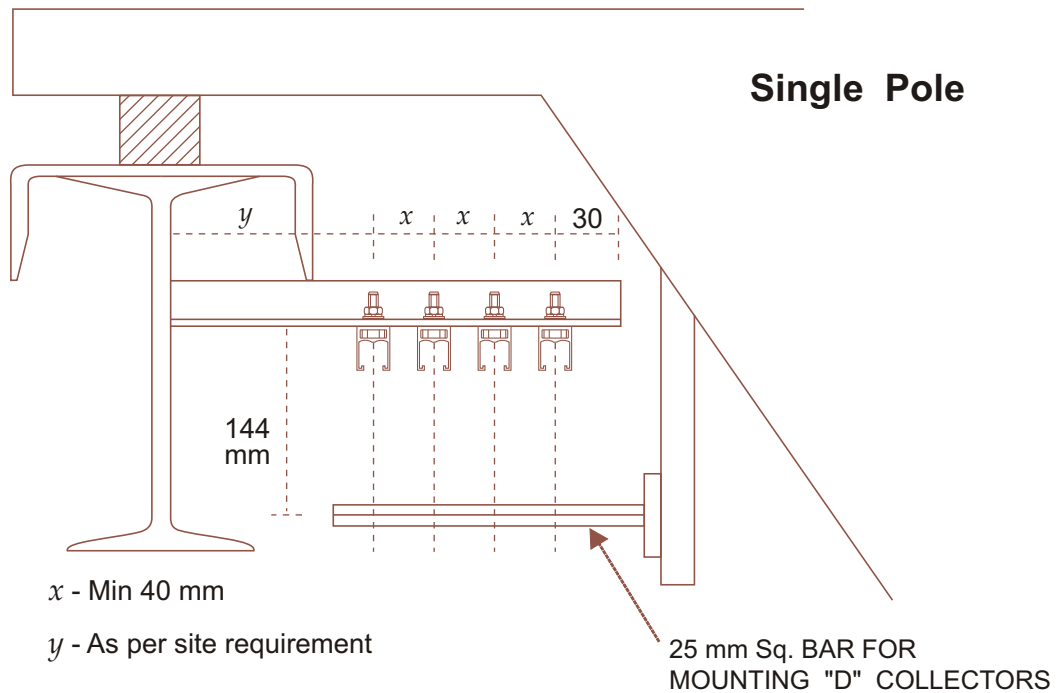
- i) JOINTING TOOL . Supplied with every installtion.
- ii) COLLECT OR MOUNTING GAUGE. Supplied with every installtion.
- iii) SCREW DRIVER - 6".
- iv) SPANNERS - 10/11 12/13 & 14/15
- v) CRIMPING TOOL FOR COPPER CONDUCTOR ONLY.

2. ATTENTIONOTTHE FOLLOWING WILL ENSUREA TROUBLE FREE SYSTEM

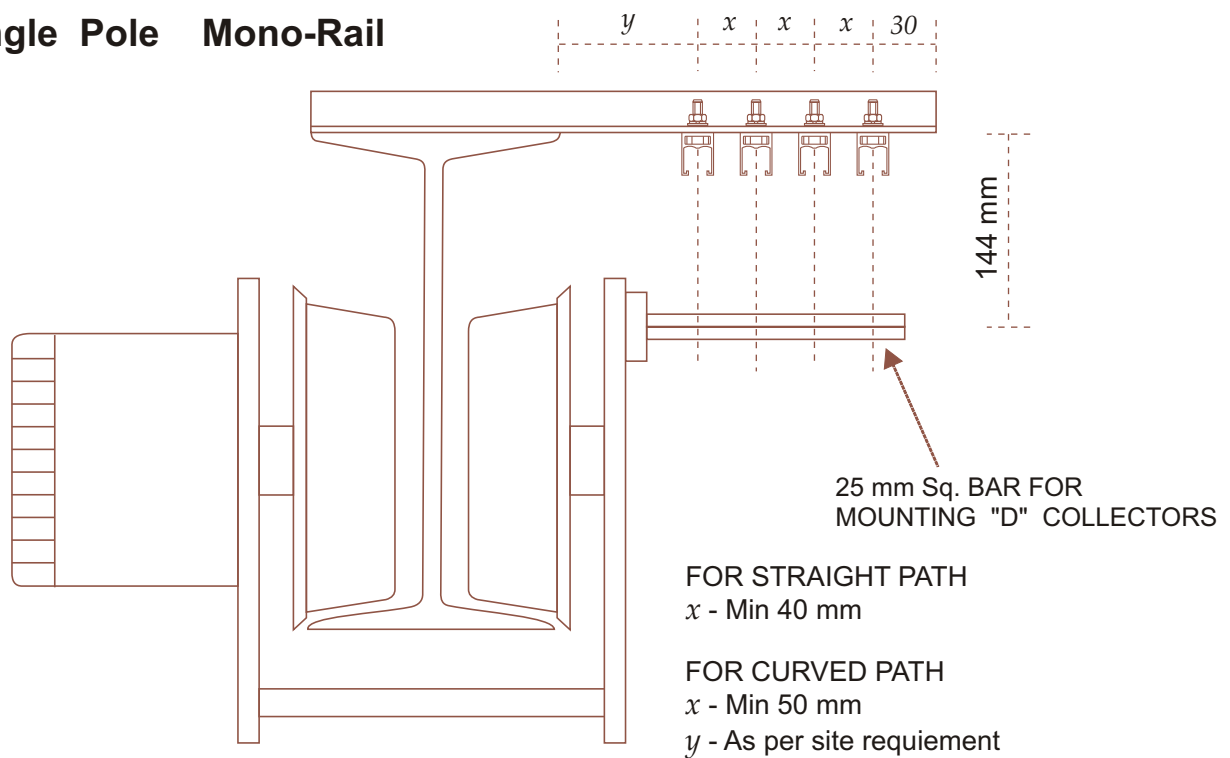
- i) CORRECT ALIGNMENT OF SUPPORT BRACKETS.
- ii) ENSURETHAT CONDUCTOR JOINTSARE NOT AGAINST HANGER CLAMPS.
- iii) WHEREVER POSSIBLE USE THE STANDARD BRACKET PITCH. THIS WILL AVOID CONDUCTOR JOINTS FOULING SUPPORT BRACKETS.
- iv) CORRECT ALIGNMENT OF COLLECTOR WITH CONDUCTOR BARS WITH THE USE OF COLLECTOR MOUNTING GAUGE.
- v) ENSURETHAT ALL POWER CABLE CONNECTIONSARE FLEXIBLE TO ALLOW FOR CONDUCTOR MOVEMENTDUE TO EXPANSION & CONTRACTION. MAINS CABLE PREFERABLY BE TERMINATED INA JUCTION BOX. SEPERATE FLEXIBLE LEADS FOR CONNECTION TO CONDUCTOR FEED POINTS.

TYPE OF INSTALLATIONS

HORIZONTAL MOUNTING



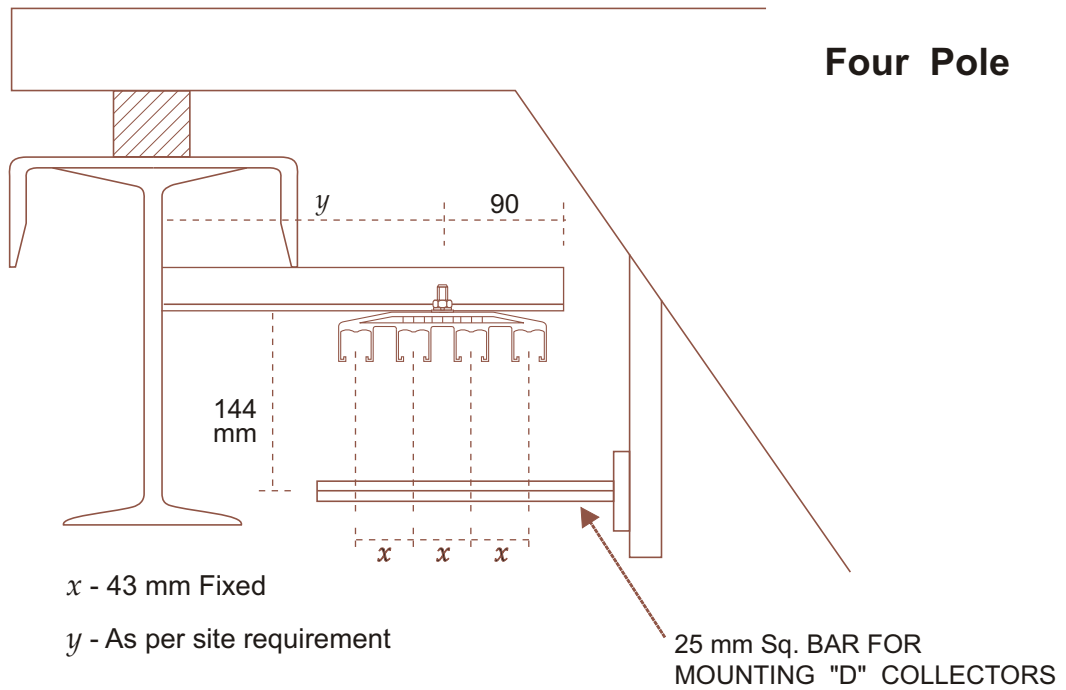
Single Pole Mono-Rail



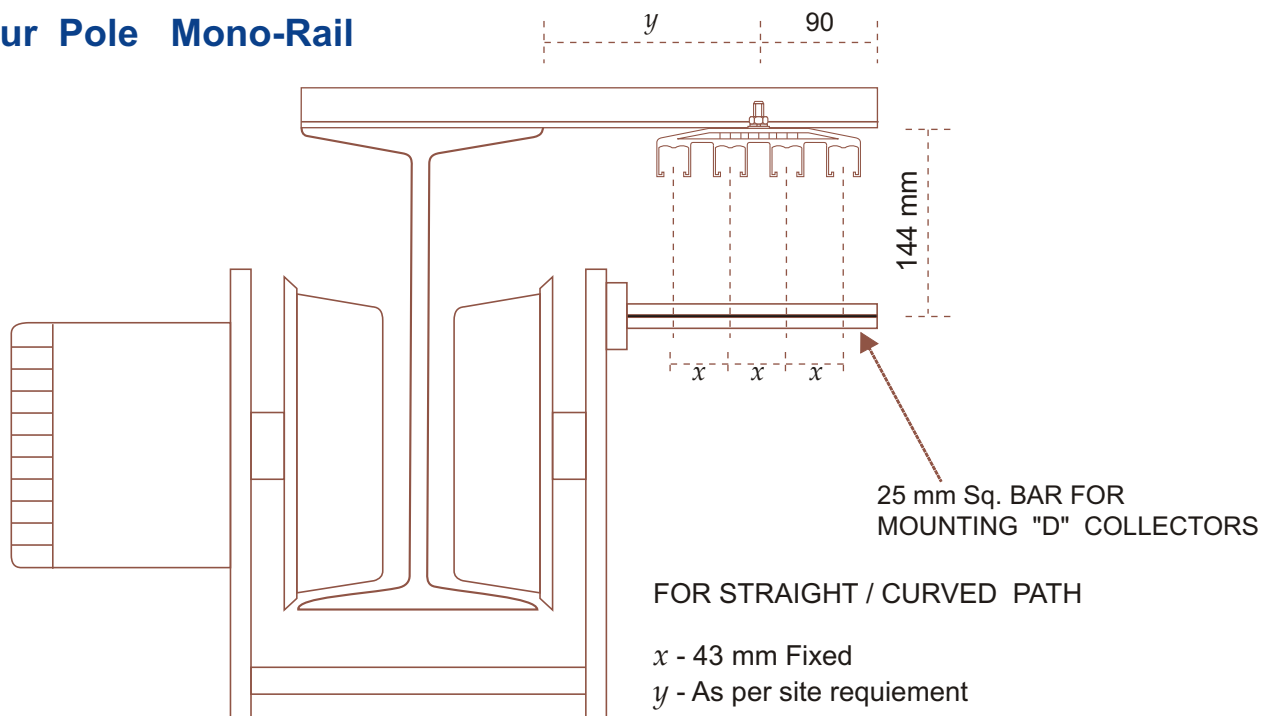
ALL ILLUSTRATIONS WITH "D" TYPE COLLECTOR

TYPE OF INSTALLATIONS

HORIZONTAL MOUNTING

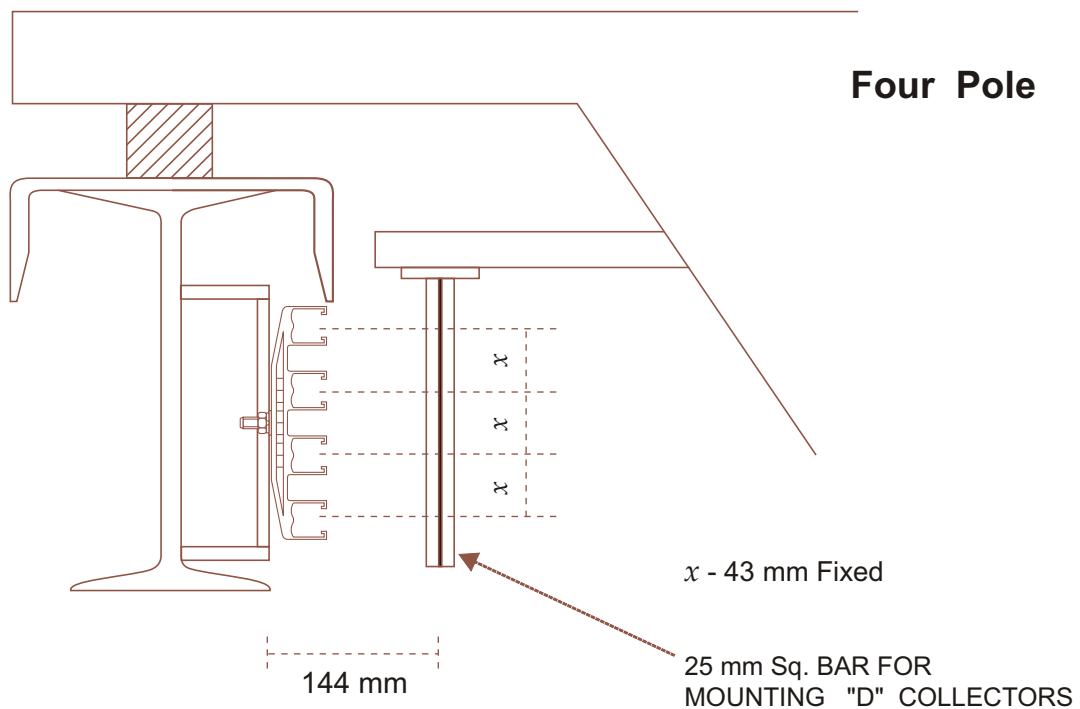
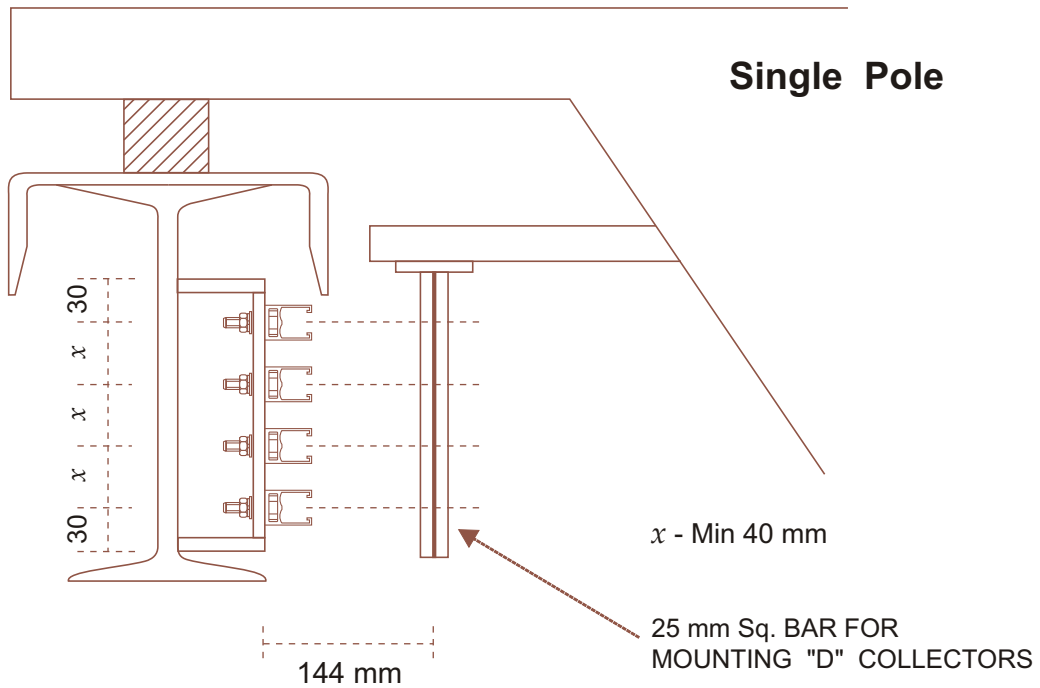


Four Pole Mono-Rail



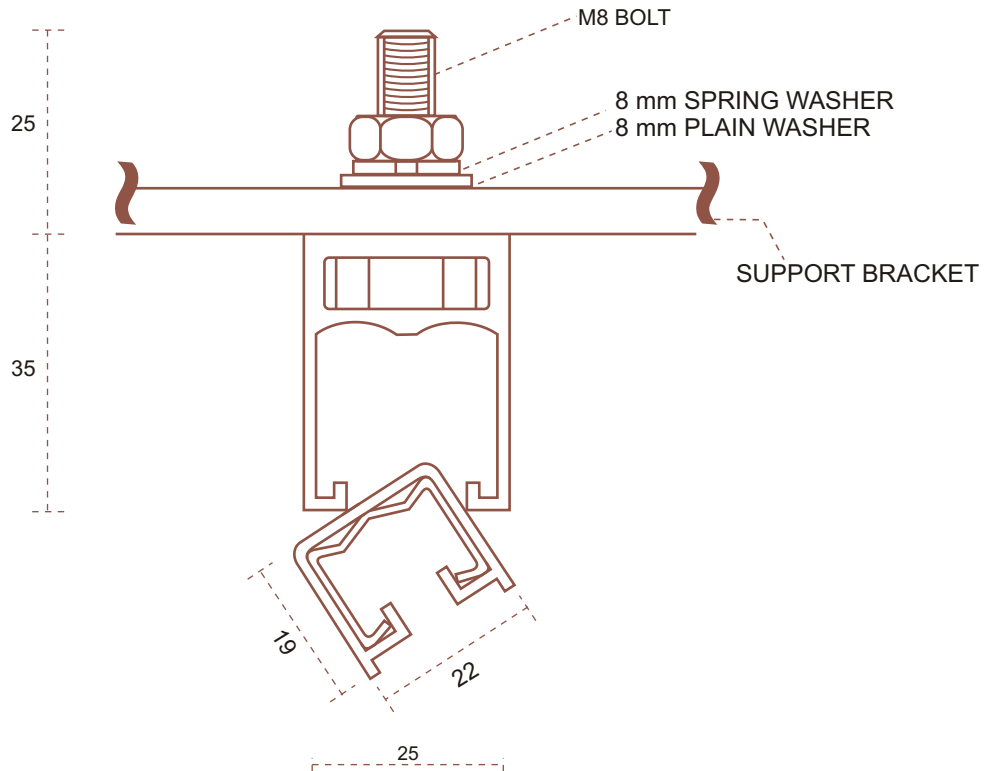
ALL ILLUSTRATIONS WITH "D" TYPE COLLECTOR

TYPE OF INSTALLATIONS VERTICAL MOUNTING

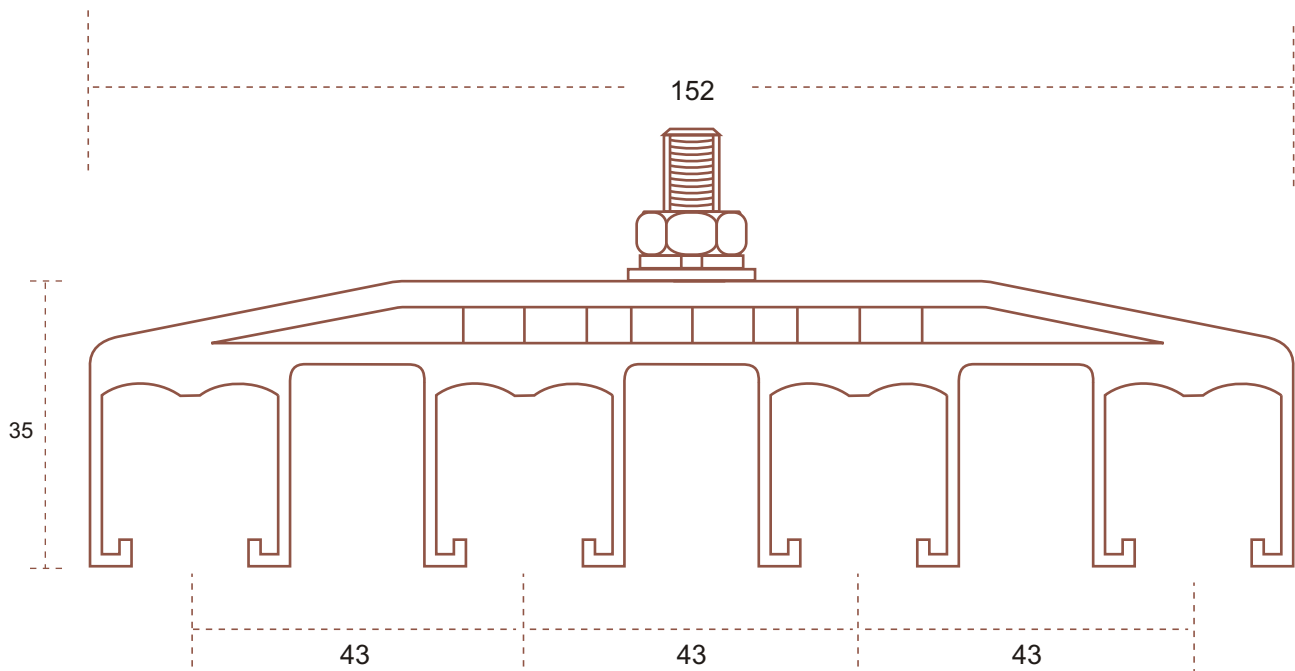


FITTING CONDUCTOR INTO HANGER CLAMPS

Single Pole



Four Pole

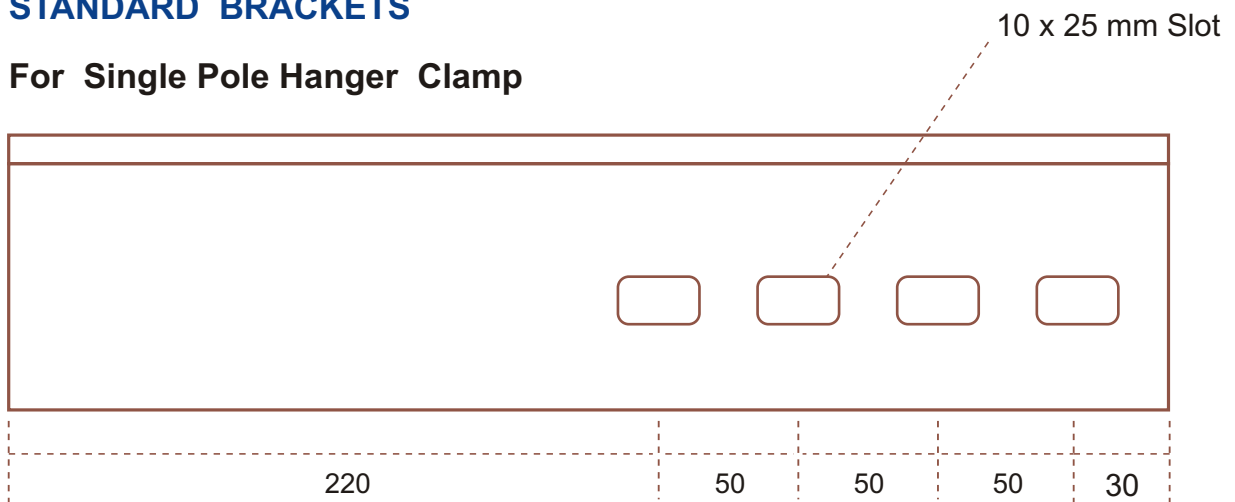




HANGER CLAMP SUPPORT

STANDARD BRACKETS

For Single Pole Hanger Clamp



FIX SUPPORT BRACKETS AT THE CORRECT PITCH.

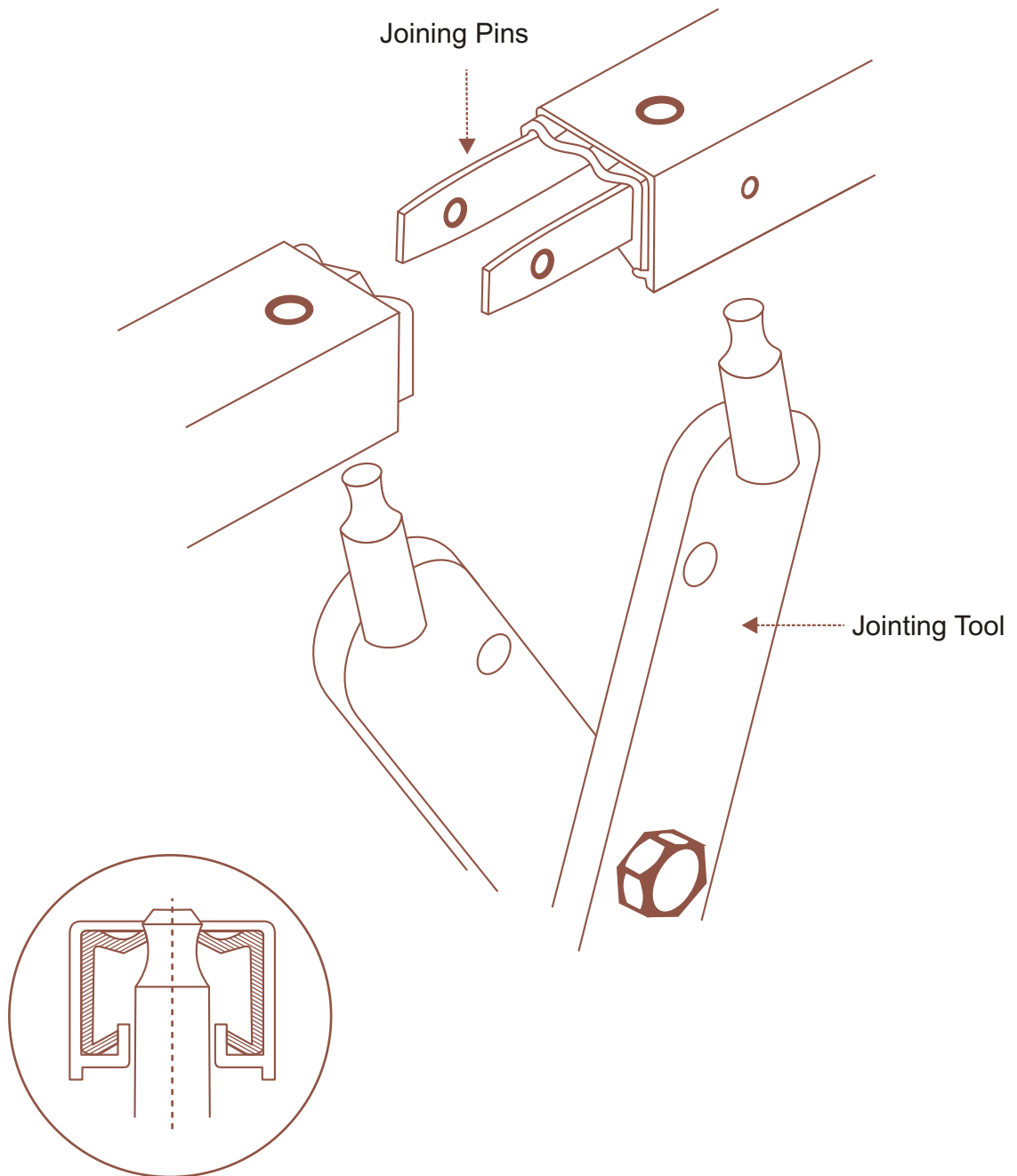
USE PLUMB LINE AND ENSURE ALIGNMENT - 9 mm DIA HOLE REQUIRED FOR HANGER CLAMP MOUNTING. 10 X 18 MM SLOT IS RECOMMENDED FOR EASE OF ALIGNMENT.

FIT HANGER CLAMP FIRST. **CHECK** - HANGER CLAMPS OF DIFFERENT PHASES ARE PARALLEL TO EACH OTHER AND ALSO PARALLEL TO RAILS. **USE PLUMB LINE FOR CHECKING AND ALIGNING BEFORE FINAL TIGHTENING.**

THEN INSERT CONDUCTOR AS PER SKETCH ON PAGE 7.

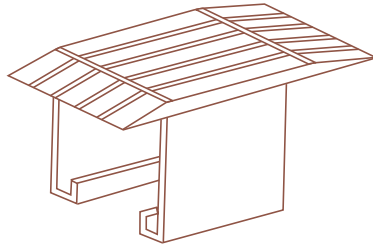
SafePower CAN SUPPLY CUSTOM MADE SUPPORT BRACKETS.

JOINING CONDUCTOR LENGTHS

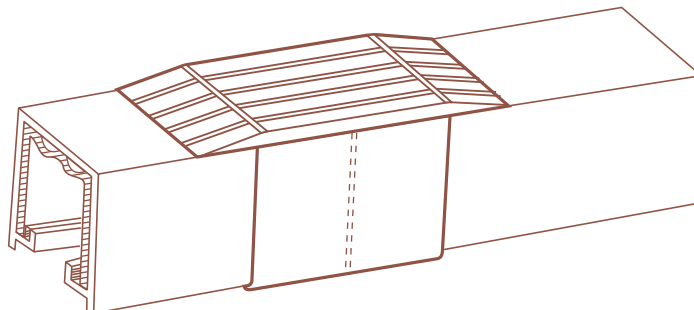
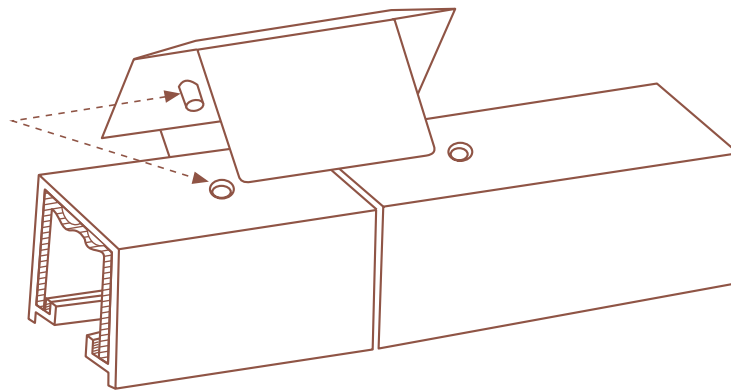


ENSURE JOINTING TOOL ENGAGES IN JOINT HOLE PROPERLY AS SHOWN

JOINT COVER FITTING

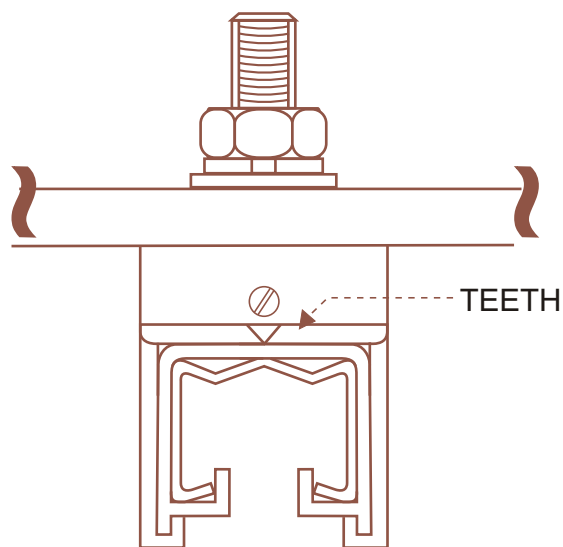


LOCATE THE
PIN IN THE
HOLE





ANCHOR CLAMP ASSEMBLY



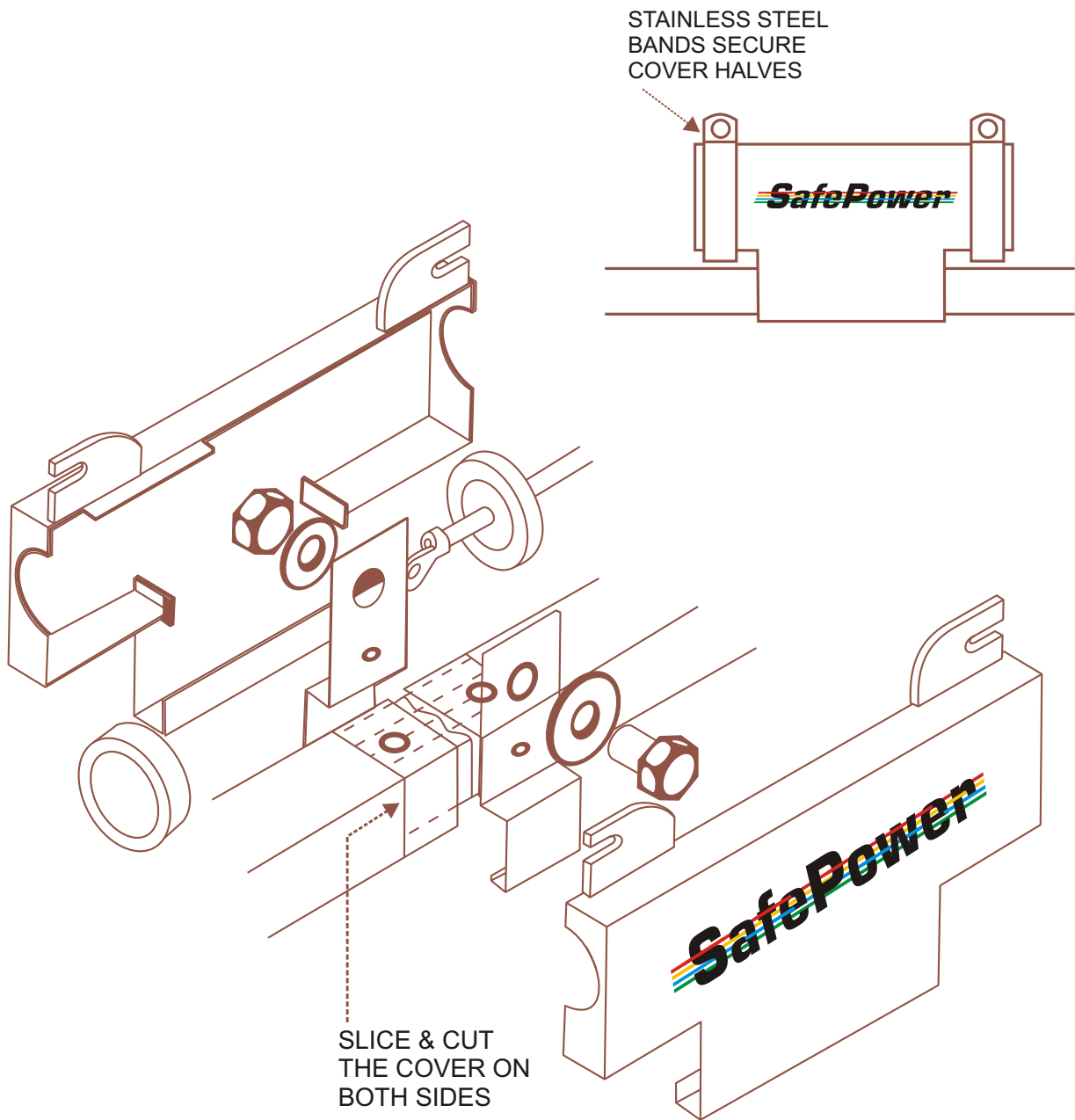
AFTER FITTING CONDUCTOR TIGHTEN THE NUT TO FORCE THE TEETH OF THE CLAMP INTO THE INSULATION.

ONLY ONE SET FOR INSTALLATION.

EXPANSION ASSEMBLY - ONE ON EITHER SIDE.

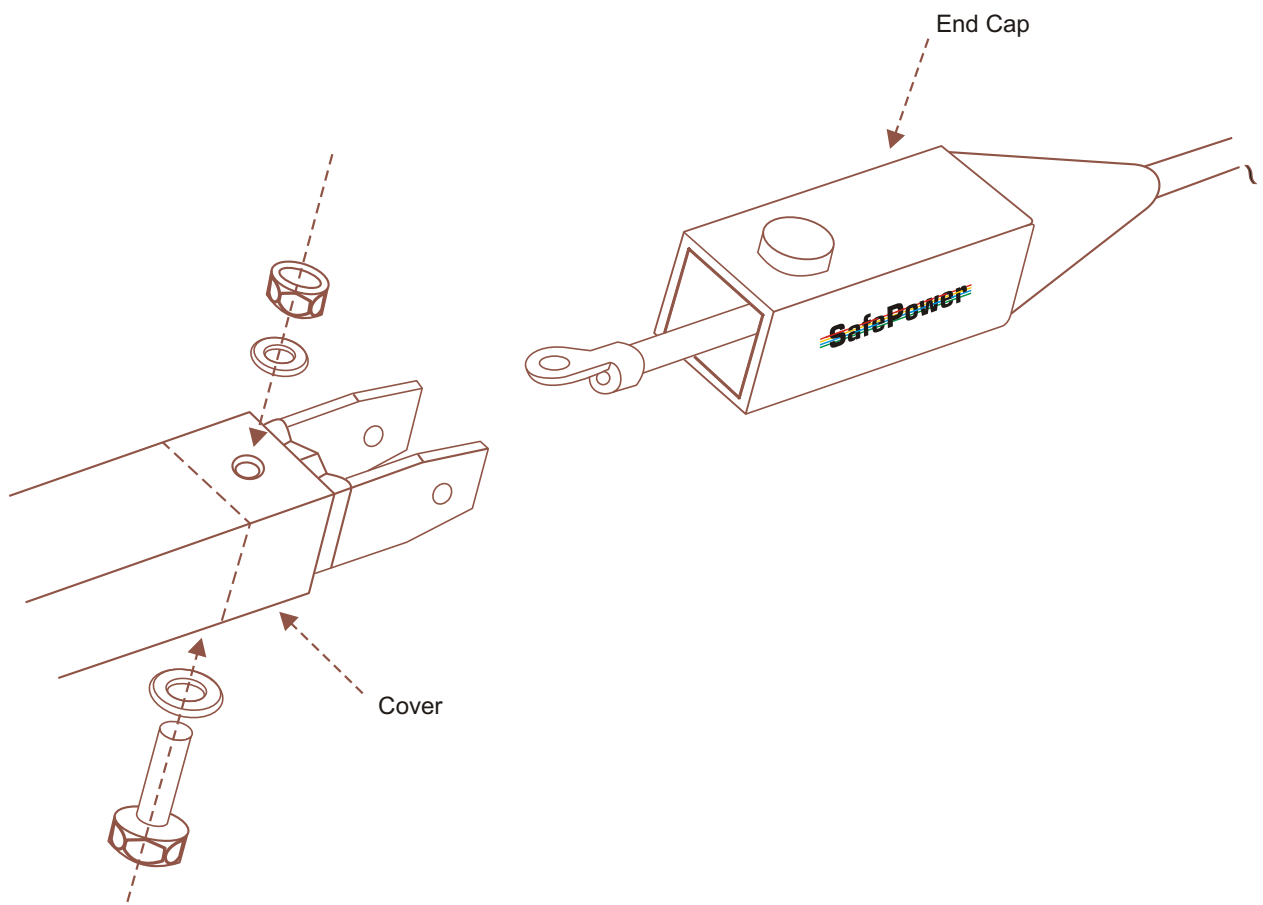


CENTER POWER FEED ASSEMBLY



30 mm CUT REQUIRED IN COVER FOR PLACING JUMPERS FOR TERMINATION.

END CAP AND END POWER FEED ASSEMBLY

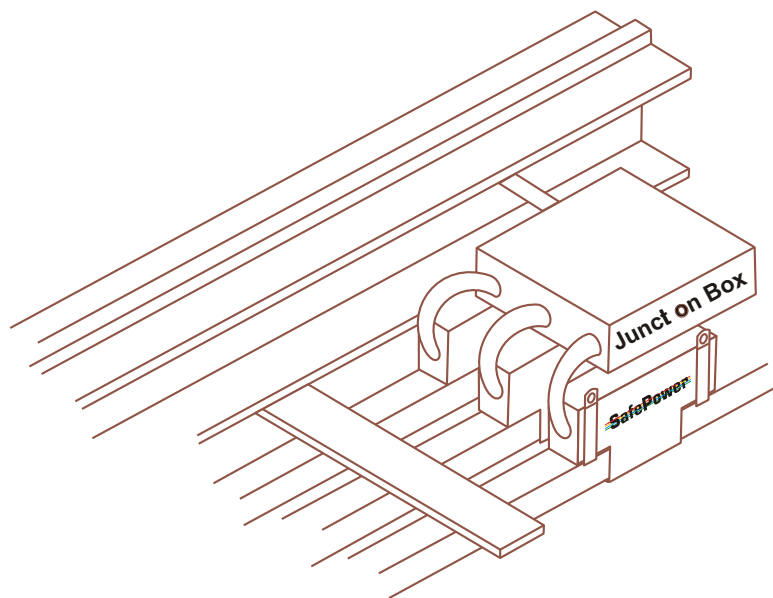
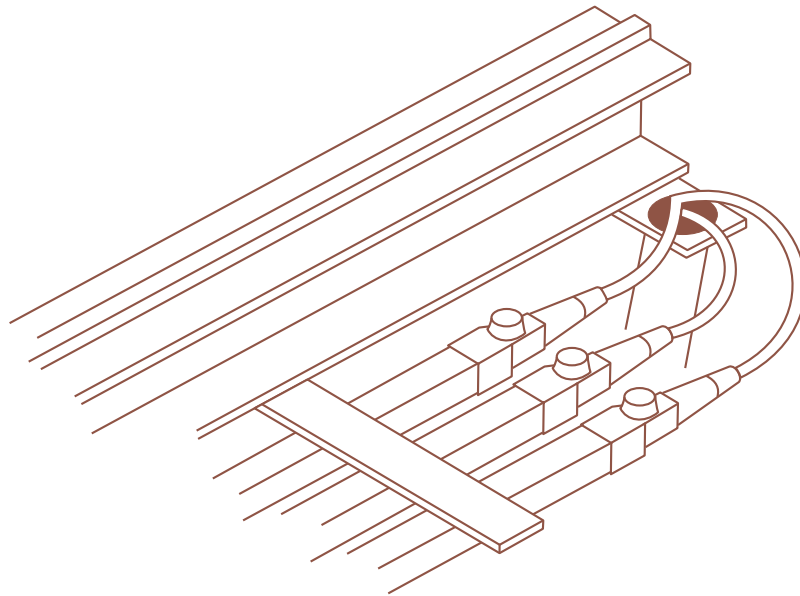


FOR END POWER FEED SLICE & CUT THE COVER.

SAME CAP FOR BOTH ENDS. SLIT END FOR WIRE ENTRY.

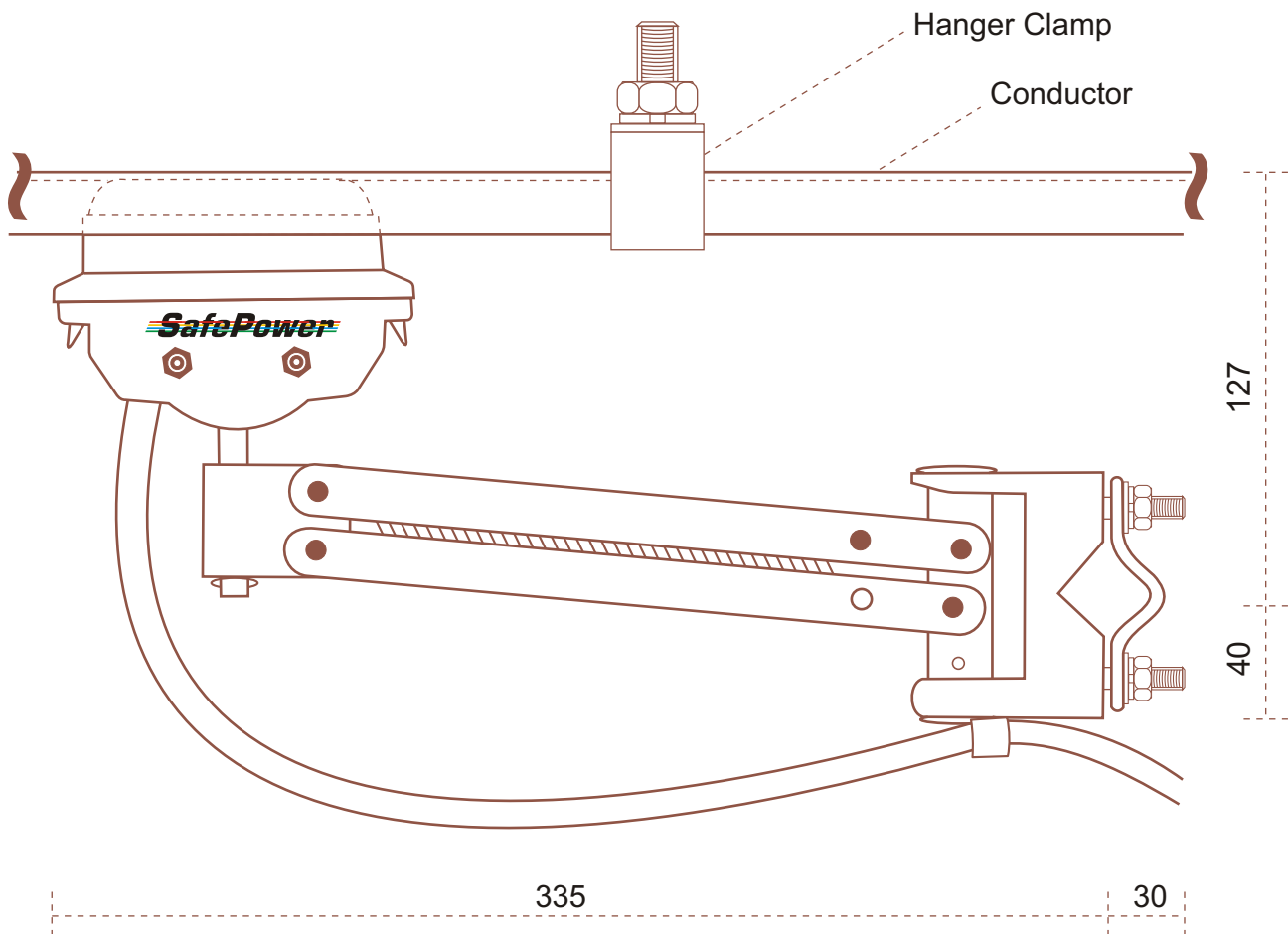


TYPICAL POWER CABLE CONNECTION



ALWAYS ALLOW SUFFICIENT SLACK CABLE FOR EXPANSION AND CONTRACTION OF CONDUCTORS.

MOUNTING DETAILS FOR 60Amp To 125 Amp

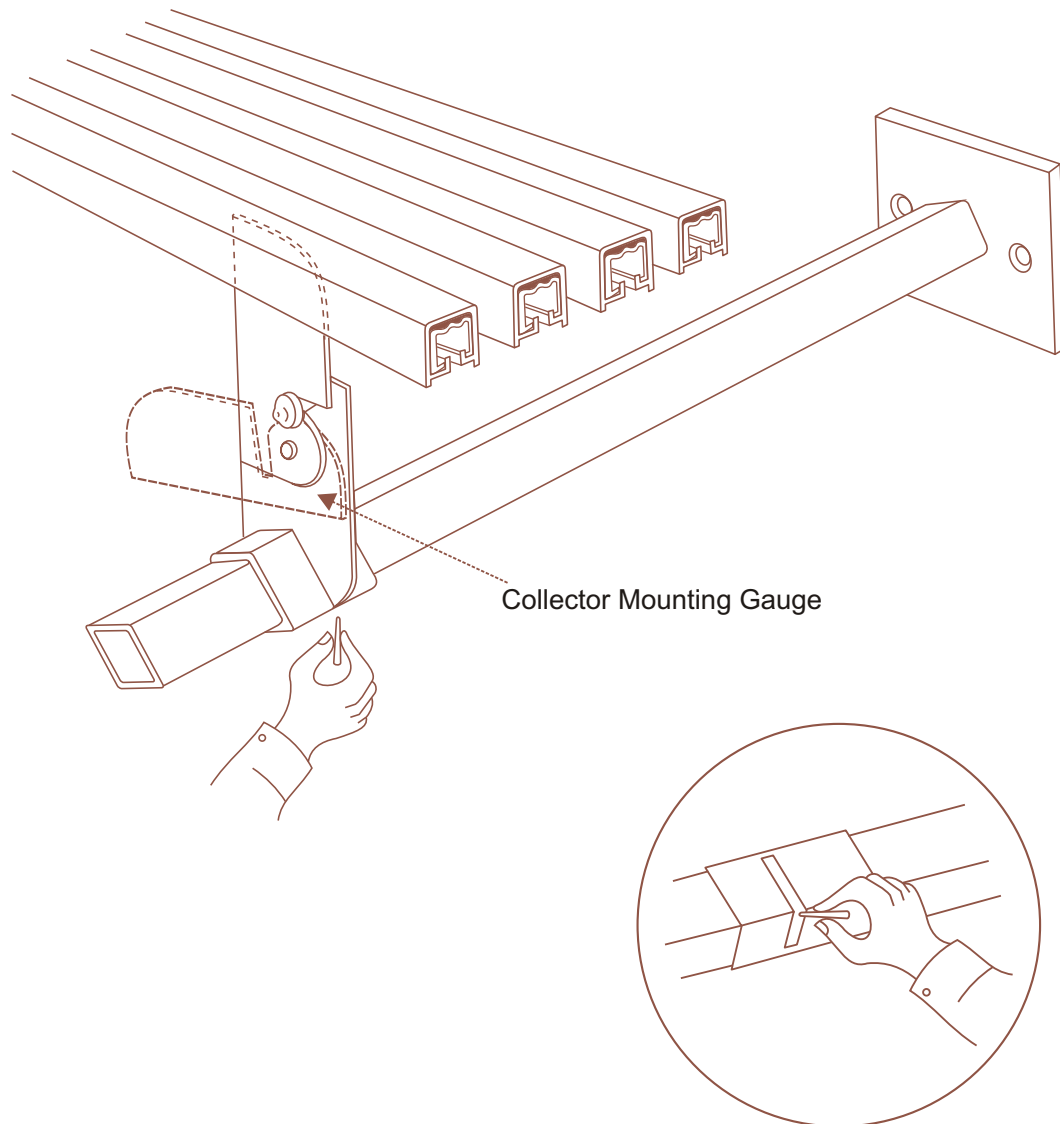


COLLECTORS MUST BE MOUNTED ON 19 mm SQUARE BAR.

FOR THE CORRECT SETTING HEIGHT,
USE COLLECTOR MOUNTING GAUGE. REF PAGE 20.

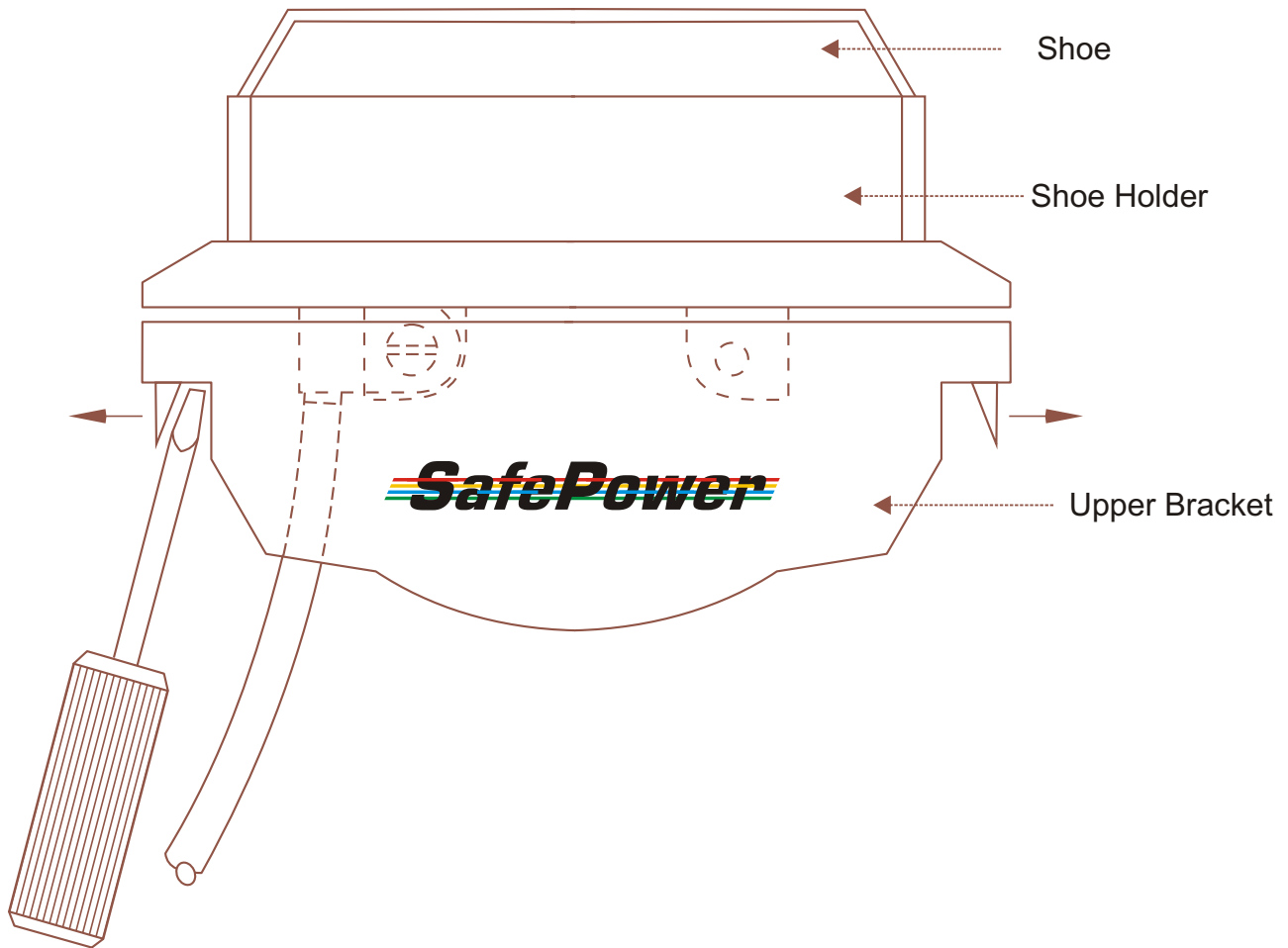
**IT IS IMPORTANT TO MAINTAIN CORRECT VERTICAL
AND LATERAL ALIGNMENT WITH THE CONDUCTOR.**

INSTALLING OF CURRENT COLLECTOR



- 1) ADJUST THE HEIGHT OF THE SQUARE BAR.
- 2) MARK LOCATION OF EACH PHASE AND MOUNT COLLECTORS ON POSITION.

REPLACEMENT OF COLLECTOR CONTACT SHOE AND SHOE HOLDER

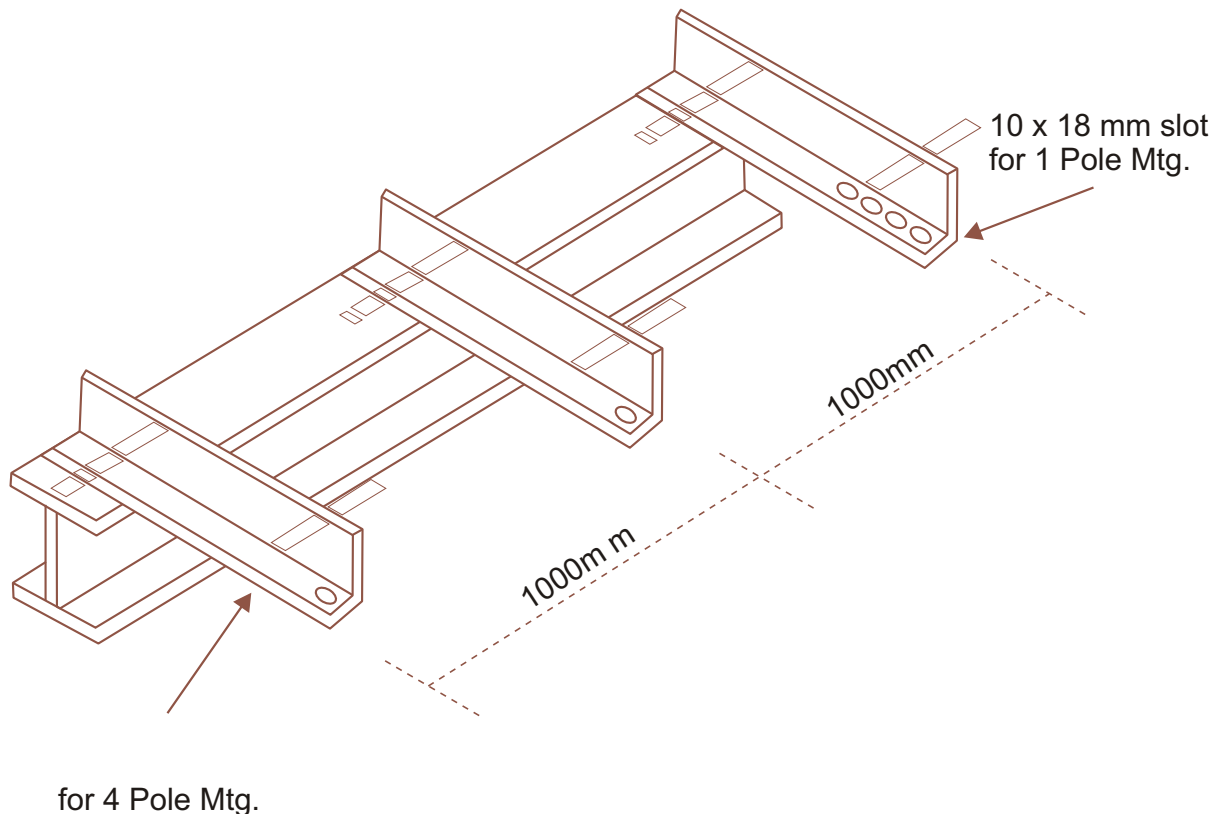


NOTE :

COLLECTOR CONTACT SHOE AND SHOE HOLDER ARE SUPPLIED AS REPLACEMENT PART.

1. LEVER LUGS IN DIRECTION SHOWN.
2. LIFT SHOE AND HOLDER.
3. DISCONNECT CABLE.
4. REVERSE PROCEDURE TO FIT NEW SHOE.

SUPPORT BRACKET INSTALLATION



1. LOCATE AND SECURE SUPPORT BRACKETS AT THE RECOMMENDED SPACING.
(NOTE : LOCATE SUPPORT BRACKET AT A SPACING THAT IS DIVISIBLE INTO THE CONDUCTOR BAR LENGTHS. THIS WILL ALWAYS ENSURE THAT THE JOINT POSITIONS DO NOT INTERFERE WITH THE SUPPORT BRACKETS).
2. ENSURE OF ALL BRACKETS ARE ALIGNED IN HORIZONTAL AND VERTICAL PLANE.
HANGER SUPPORT BRACKETS COME COMPLETE WITH ALL NECESSARY MOUNTING HOLES.



SYSTEM MAINTENANCE

1. CONTACT SHOES SHOULD BE CHECKED FOR WEAR ON A MONTHLY BASIS UNTIL A WEAR PATTERN CAN BE ESTABLISHED. FAILURE TO REPLACE WORN OUT CONTACT SHOES WILL RESULT IN DAMAGE TO THE CONDUCTOR, AND REDUCE SUBSEQUENT CONTACT SHOE LIFE.
2. WHEN CHECKING FOR CONTACT SHOE WEAR, ALSO CHECK THAT ALL COLLECTOR PIVOT POINTS ARE FREE, AND GENERALLY CHECK ALIGNMENT OF THE COLLECTOR TO THE CONDUCTORS.
3. CHECK CONDUCTOR SYSTEM FOR ANY MECHANICAL DAMAGE AND CLEAN THE SYSTEM ESPECIALLY FOR CONDUCTIVE DUST.



Our Product Range		Application
GI Conductor Bar (Pin Joint)	60 amps to 125 Amps.	Eot Cranes Electric Hoists, Straigh / Curved Monorails, Electric Trollies Amusement Drive Material Handling Applications
GI Conductor Bar (Bolted Joint)	80 amps to 125 Amps.	
Copper Conductor Bar (Pin Joint)	160 amps to 315 Amps.	
Copper Conductor Bar (Bolted Joint)	160 amps to 400 Amps.	
Aluminium With SS Conductor Bar	200 to 315 Amps.	

