

Installation Instructions

FOR OUR ELECTRICAL TERMINAL BOXES (Tek Boxes)

See our website: www.rteckpacific.com for sales and information

Thank you for purchasing Rteck products. Quality and customer satisfaction are extremely important to us. The innovative design and quality of Rteck's Tek Boxes will give our customers a competitive advantage by decreasing their installation costs and minimising expensive plant downtime. Please ensure that our product is clean and in undamaged condition before installation. In the unlikely event that the product has been damaged in transit or is not in a satisfactory condition when received, please contact your wholesaler and return the product. They will replace it for you.

The basic fact sheets and specifications for our Tek Box are listed below:

1. IP66 Rated
Ingress Protection (6) = Dust Tight
(1st digit)
Degrees of Protection (6) = Protection against heavy seas or powerful jets of
(2nd digit) water
2. The thermoplastic polyester materials used for our Tek Box is very high quality and has the following specifications:
 - 2.1 Low water absorption
 - 2.2 High mechanical and thermal properties and outstanding electrical properties
 - 2.3 High impact strength (light weight)
 - 2.4 UV Rated
 - 2.5 Flame retardant added that complies with NZ/AU specifications
 - 2.6 Good chemical resistance to a variety of chemicals including aliphatic hydrocarbons, petrol, oils and greases. Dilute acids and bases, detergents and most aqueous salt solutions at ambient temperatures.
If you need more information go to our website.
3. O-Rings (box body lid) are very high quality and come from a silicon base product. See specifications.
 - 3.1 Temperature rating -40°C / +140°C continuous
 - 3.2 Tensile strength 1.2-1.3 mps
 - 3.3 Tear resistance 20/n/mn
4. Screws for the box lid are M4 stainless fitted into brass inserts. For IP66 test screws were torqued to 0.8n/m. Medium tightness for the correct sized screwdriver will achieve this.

INSTALLATION INSTRUCTIONS

The two large mounting tabs located on the middle sides of the box are specifically designed for:

1. Mounting on unistrut (M6 pan heads + M6 unistrut fixing nuts are ideal)
2. Mounting on flat bar (up to 80mm wide)
3. Mounting on angle irons (up to 80mm wide – 6.5mm clearance holes are provided for screw fixings (M6 pan heads are ideal)

The mountings on the box corners are for wall mounting or larger flat surfaces (6.5m clearance holes are provided for screw fixings. M6 pan heads or similar size are ideal).

Fixing dimensions are located on the back of the box if required.

25mm hole saw entries are provided for larger cabling. Please ensure that you use a sharp 25mm hole saw at high speed when cutting out.

IMPORTANT: These entries are not knock outs. (Holesaw only)

SCREENED CABLE APPLICATIONS

For screen Rteck slide in patented cable glands plates are provided in separate packages for usage as required.

IMPORTANT: We recommend that a small application of silicon grease is applied to the screw entries on metal screened cable glands before entry termination into our boxes. This particularly applies to installations in very wet conditions, assuming that the glands do not

have IP66 sealing washers.

Five different sets of 3mm metal cable gland plates are provided (*see list below*)

| | | |
|-------|-------------|--|
| Model | RTK DB 20-3 | Cable gland plate with 20mm tapped entries x 3 |
| Model | RTK DB 20-2 | Cable gland plate with 20mm tapped same side entries x 2 |
| Model | RTK DB 25-2 | Cable gland plate with 25mm tapped entries x 2 |
| Model | RTK DB 25-1 | Cable gland plate with 25mm tapped entry x 1 |
| Model | RTK DB 20-1 | Cable gland plate with 20mm tapped entry x 1 |

SPECIAL NOTE FOR CROSS PLATE CONNECTIONS

When connecting the cross plates, DB 25mm x 2 on top of DB 20mm x 3, please ensure that the 4mm x 8mm m/screw provided is used to locate into the bottom plate, securely fixing the earth strap connection to both plates.

LABELLING SYSTEM – Option

CONTENTS

Label cap with o-ring fitted. Fixing screws x 6. Screw cover buttons x 6.

INSTRUCTIONS

Use a good quality printer labeler and stick label on the raised label pad on the box lid.

Use screws provided and insert button screw caps, trimming off excess plastic with side cutters first.

NOTE: Ensure that the o-ring is located properly in its correct place.

Spare screws are located in retainer posts by the 25mm entry holes plus spare labeling screw cover caps located on the underneath side of the lid in special retaining plinths.

RTECK TIPS FOR BEST RESULTS

1. Important*: Silicon (RTV) can be applied to seal any top entry cable glanding where moisture/water or contaminants can enter through the cable glands, ideally gland entries ought to be bottom* or side entry. (Denso tape or amalgamating tape / lacquered can also be used to good effect).
2. Install boxes in positions where they are least likely to result in mechanical damage
3. Install boxes in positions that can be easily accessed for maintenance purposes
4. Ensure all terminations are clean and tight
5. Ensure that the labeling system has good information on it
6. Ensure that the correct fixings are used for the installation conditions
7. When installing screened cable glands apply silicon grease on the gland screw entries. This is particularly important in very wet installation conditions assuming that the cable glands do not have sealing washers and/or protective coverings.
8. When drilling cable entries out, ensure that you use a sharp hole saw that is the correct size on high speed. Due to the nature of the plastics material battery drills run at low speeds are not suitable.
9. Even although Rteck boxes are extremely robust, ensure cabling is adequately supported before termination entry into box to avoid heavy cable preload on entry points.