



# Cable entry seals

FOR TELECOM APPLICATIONS

**We Seal Your World™**



# Peace of mind

Safety and reliability are crucial qualities for maximized uptime in all types of telecom networks, mobile as well as fixed-line. With Roxtec's entry seals installed you can forget your worries and turn your focus to other important issues.

## Reliable and efficient

Roxtec cable entry seals have been designed for maximum customer benefit both in terms of reliable protection and simplicity in use. The result is an efficient solution that is easy to use for a wide range of applications where it provides long-term operational reliability.

## Getting out of jeopardy

Certified protection through Roxtec helps minimize the influence from hazards induced by humidity, rain, dust, sand, electromagnetic disturbance (RFI/EMI) and fire. The capacity of a Roxtec cable entry seal also includes the ability to prevent disturbance to equipment from snakes, bees, rats or other types of vermin.

## Installer's dream

Roxtec Multidiameter™, our adaptability solution based on sealing modules with removable layers, makes it easy to seal a whole range of different sizes of cable. Whenever changes to an



installation are needed, it is easy to open up the entry seal to add further cables. Maintenance is performed without disturbance to the functionality of the telecom network.

With both world class safety and operational reliability, thousands of Roxtec customers around the world now consider cable sealing one less concern.

- Long-term durable solution
- Protection including firestop
- Easy installation and maintenance
- Multidiameter™ by Roxtec

# Fast roll-out



## **Fits your project**

The cable entry solutions from Roxtec are simple and flexible to install and use in the roll-out of sites. Roxtec frames and sealing modules can be integrated at any time during the site construction. This allows the shelters or buildings to be safely sealed before they are equipped with cables and electronics. More over, the Roxtec entry seals improve space management.

## **Only one part number**

We supply our customers with smart kit solutions, flexible enough to handle a wide variety of cable configurations. The Roxtec kit solutions, with one part number, make planning, purchasing and installation a lot easier. The Roxtec solution for adaptability, Multidiameter™, provides capacity for additional installations and reduces future maintenance costs.

A kit installation can always be finished on site since the modules themselves compensate for any surprises or last-minute changes. Everyone in the project, from design to maintenance, will benefit.

# Sites are always upgraded



## Easy to add equipment and more operators

Sooner or later any telecom equipment and its cables will get changed, added or removed. A constant development of new technology and the addition of more operators to shared sites mean challenges through new needs. Roxtec provides a smart way for the future.

## Built-in spare capacity

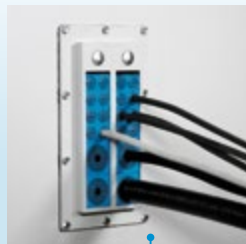
Whenever more cables or pipes need to be installed in the future, our unique sealing technology is ready. Multidiameter™ allows any previously unused seal in a frame to be adapted to fit the new cables or pipes. The amount of spare capacity can be decided from the start, allowing additional cables and pipes later at no additional cost.

- No downtime during service
- Easy to open and close
- Handles a wide range of cables

# Roxtec for maximum uptime in your networks

Shown here are examples of applications where Roxtec adds value and helps protect telecom infrastructure.

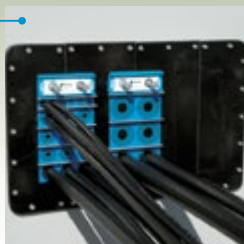
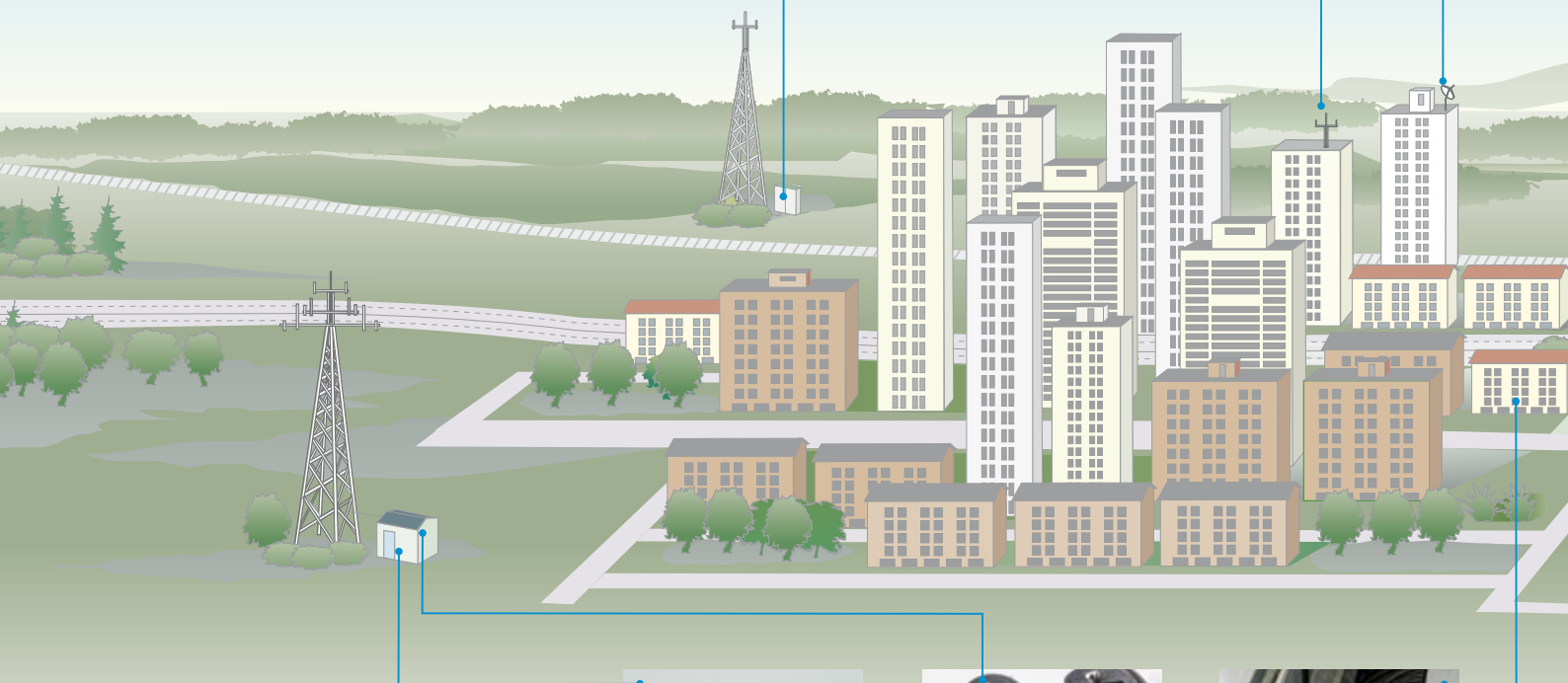
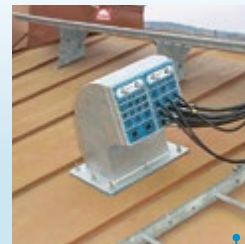
**Outdoor cabinet:** Sealing of cables passing from outside to inside of a cabinet.



**Roof-top site:** Cable seal through the outer wall of the building for antenna cables.



**Radio link:** Roof-top cable seal handling antenna cables through the roof construction.



**3G base station shelter:** Sealing of feeders through the wall.

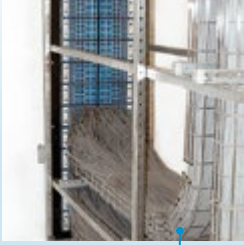


**Base station shelter:** Round sealing solution for openings in port hole plates.



**Communication centers:** Sealing fiber optics and cables in floors and outer walls.

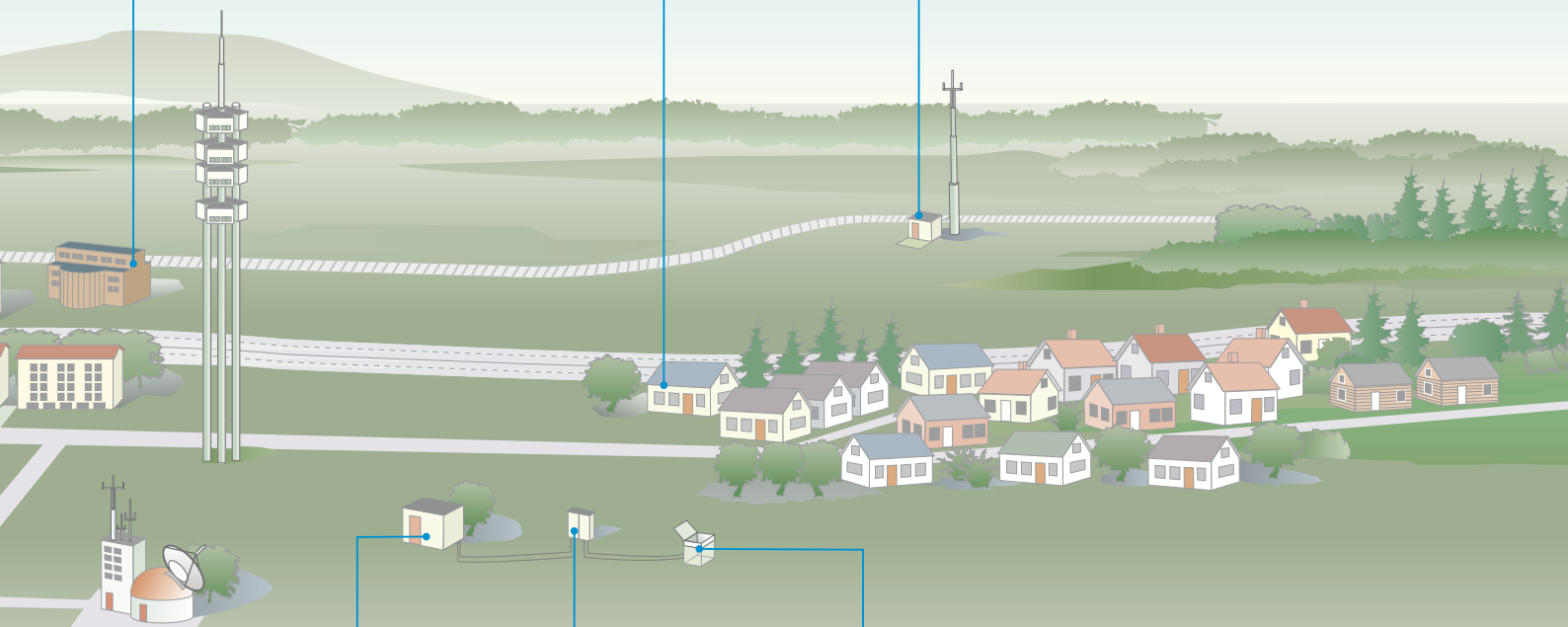
**Switch station:** Cable seals through floors and walls in the switch station.



**Buildings:** Feeding of single cables into buildings.



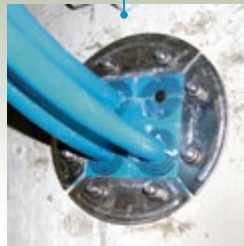
**Railway:** Sealing of cables for GSM-R through floor and wall of shelter.



**FTTH:** Conduits for fiber optics sealed in the foundation of network shelter.

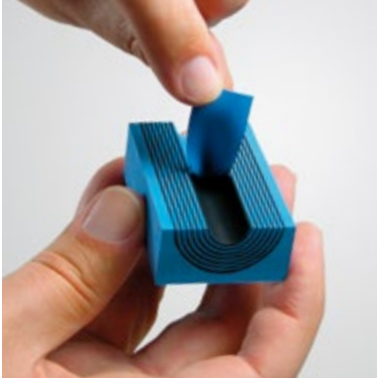


**Cabinets:** Cable entry solution to seal cables in outdoor cabinets.



**Manhole:** Sealing of power cables in vaults below ground.

# A truly flexible system



## Multidiameter™

The smart adaptability of the technology makes installation of cables and pipes easy and safe. Each Roxtec module has removable layers that enable a perfect fit to different dimensions of cable or pipe. Just peel of a few layers and the seal fits the desired size of a cable or pipe.

## Space management

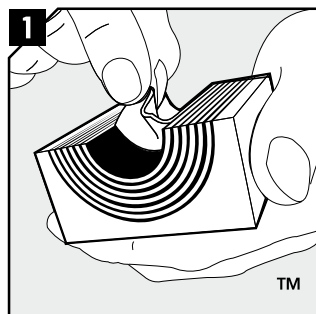
Thanks to the design and the modular build of a Roxtec entry seal, cables are neatly organized as they pass through the opening. A small but proper distance between each cable creates high area efficiency. It also allows for a good overview and easy maintenance.

## Easy retrofit

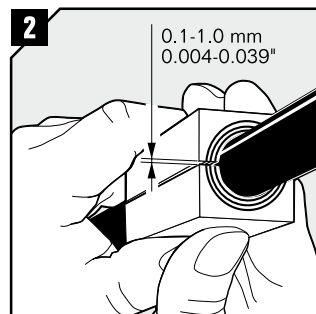
More and more coax cables need to run into shelters and cabinets. Roxtec retrofit frame solutions replace the traditional cable seals, such as port panels. The advantage is that you can run two to three times as many cables through an existing opening without ever having to shut the system down.

## Basic steps

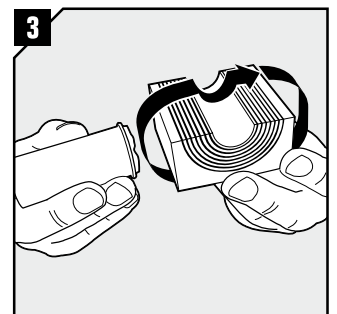
in the assembly of a modular-based Roxtec sealing solution



1 Adapt modules, which are to hold cables or pipes, by peeling off layers until you reach the gap seen in pic. 2. The halves may not differ by more than one layer.

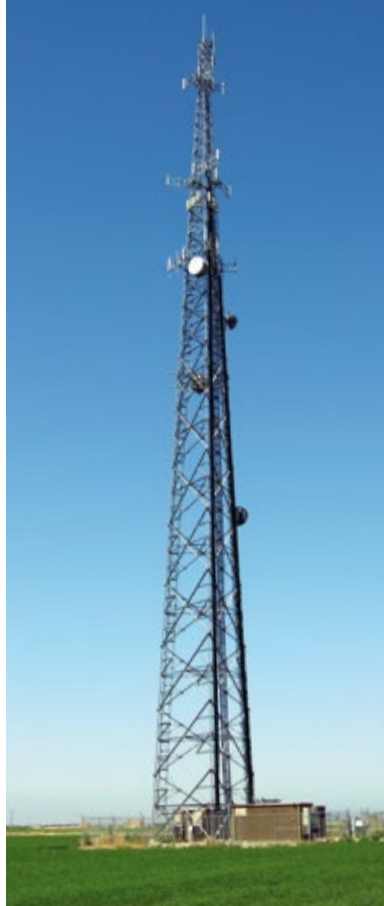


2 Achieve a 0.1-1.0 mm gap between the two halves when held against the cable/pipe.



3 Lubricate all modules for the frame thoroughly, both the inside and the outside surfaces.



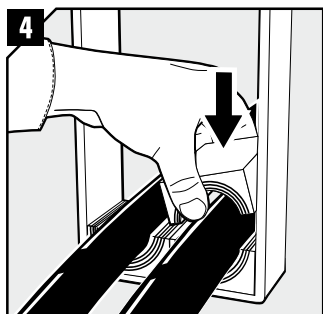


### Both mobile and fixed-line telecom

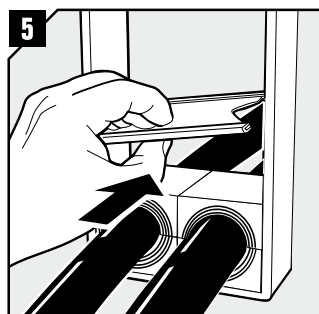
A benefit with Roxtec is that it is just as easy to use in mobile networks as in fixed-line systems. Regardless of the need for fast roll-out in mobile applications or safety in vaults and buildings, Roxtec provides outstanding reliability.

### Cables and fibers

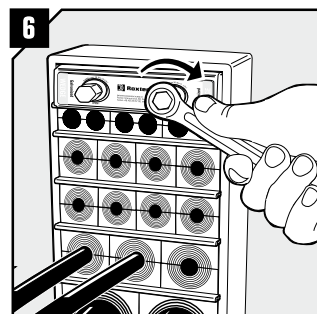
In terms of routed items Roxtec handles traditional cables and feeders just as well as new technologies, including fiber optics. This provides further benefits, when old and new solutions often need to be installed side by side.



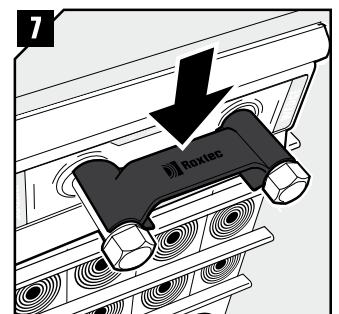
Insert the modules according to your installation plan (transit plan). It is recommended to seal cables/pipes at the bottom of the frame and put spare modules on top.



Insert a stayplate on top of every finished row of modules.



Insert the Roxtec Wedge and tighten the screws until full stop.



Attach the Wedge Clip to the wedge bolts to check that the wedge is properly tightened.

# We support you globally



## Local support for your site team

Roxtec is much more than a supplier. Our staff around the world play an active role in helping customers find the optimum solution. Our knowledge, acquired through many years of work in the field, means we can guide you to solutions that suit your needs and applications.

## Talk to our technicians

Our extensive R&D resources, with a design department and a technical center with test and fire labs, enable us to continuously develop and improve solutions.

## We help ensure quality

People often come and go in telecom projects during the installation phase. Thanks to the support and documentation provided by Roxtec it is easy to make the transfer of knowledge to the installers on site to ensure a high level of quality assurance.



## Roxtec Transit Designer™

Our free, web-based tool simplifies product selection according to needs and requirements and improves the entire process of designing, purchasing and installing cable and pipe transits. It is available on [www.roxtec.com](http://www.roxtec.com).

## Installation training

We also provide product installation training through our sales staff and technicians. We are there to support and train you on site.

## Website for installers

On our global website we have collected useful information designed for staff involved in assembly and installation of the Roxtec sealing system. Instructions and videos can be viewed online or downloaded for free.

# Available on your market

All our sealing solutions are available through our extensive network of local suppliers. This means direct support and fast deliveries from local stocks in more than 70 markets.



## Among our telecom customers you find:

Aircell, AT&T, Bharti, China Mobile, China Telecom, Dishnet, Ericsson, Ghana Telecom, GrameenPhone Ltd, Huawei, Hutchison, Idea, Mobinil, Motorola, Nokia Siemens Networks, Orange, Reliance, Sprint/Nextel, TATA Indicom, Tele2, Telecom Italia Mobile TIM, Telefonica, Telenor, Telia Sonera, T-Mobile, VimpelCom, VIVO, Vodafone.



## Local presence worldwide

Roxtec is the world-leading provider of flexible sealing solutions for cable and pipe penetrations. Our adaptability solution, Multidiameter™, is based on modules with removable layers. It seals perfectly, regardless of the dimension of the cable or pipe. We are present all over the world in order to ensure product availability as well as quick support and supply.

**Sweden**, Roxtec International AB, HQ  
**Argentina**, INGIAR Representaciones SRL  
**Australia**, Roxtec Australia Ltd  
**Belgium**, Roxtec b.v.b.a./s.p.r.l  
**Brazil**, Roxtec Latin América Ltda  
**Chile**, FACOR Ltda  
**China**, Roxtec Sealing System (Shanghai) Co. Ltd  
**Croatia**, Roxtec d.o.o.  
**Czech Republic**, Roxtec CZ s.r.o  
**Denmark**, Roxtec Denmark ApS  
**Finland**, Roxtec Finland Oy  
**France**, Roxtec France SAS  
**Germany**, Roxtec GmbH  
**Hungary**, Glob-Prot Trade and Service Ltd  
**India**, Roxtec India Pvt Ltd  
**Israel**, C&P Co. Ltd  
**Italy**, Roxtec Italia S.r.l  
**Japan**, Roxtec Japan K.K  
**Lithuania**, SWELBALT UAB  
**Mexico**, Roxtec de México, S.A. de C.V  
**Nigeria**, Structured Resource Business Ltd  
**The Netherlands**, Roxtec BV  
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**Peru**, Synixtor S.A.C  
**Poland**, Pionet Sp.zo.o  
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**Romania**, Roxtec RO s.r.l.  
**Singapore/Indonesia**, Roxtec Singapore PTE Ltd  
**South Africa**, Roxtec Africa (PTY) Ltd  
**South Korea**, Roxtec Korea Ltd  
**Spain**, Roxtec Sistemas Pasamuros S.L  
**Switzerland**, Agro AG  
**Turkey**, Roxtec Yalıtım Çözümleri San. ve Tic. Ltd. Şti.  
**UAE**, Roxtec Middle East F.Z.E  
**UK/Ireland**, Roxtec Ltd,  
**USA/Canada**, Roxtec Inc  
**Venezuela**, Grupo ES Escorihuela Somes, C.A

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