

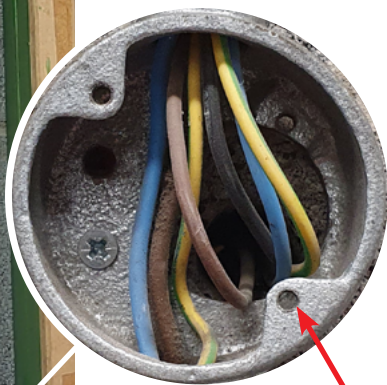
A Guide to Cable Entry Types

CONDUIT

An electrical conduit is a metal or plastic tube which is used to route and protect electrical wiring in a building or structure when wiring cannot be concealed within a wall cavity or ceiling void i.e. a carpark or stairwell with solid walls and ceilings.

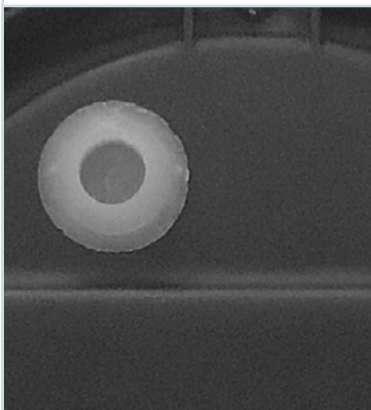
Most conduit is rigid, but flexible conduit is used for some purposes.

An example junction box, also known as a BESA box or conduit junction box.



BESA compatible fittings will have mounting holes which correspond with those on a BESA box, seen in the images here.

GROMMET CABLE ENTRY



A grommet is a flexible opening found on a product which allows an electrical cable to be passed through it. It acts as both a protective gasket to stop any sharp edges from damaging the cable, and also supports the level of ingress protection (IP) of the product.



An example of this can be found on Eterna's BHPIRCS oval wall-mounted bulkhead.

20MM HOLE KNOCKOUT

A knockout or conduit entry bush are areas on a product which can be drilled in order to feed with an electrical power supply. The connection can be made by a couple of different methods.



The conduit mounting capability of a product is usually noted in the list of product features, or usually it can be seen as circular markings in the product housing. See examples in the images above.



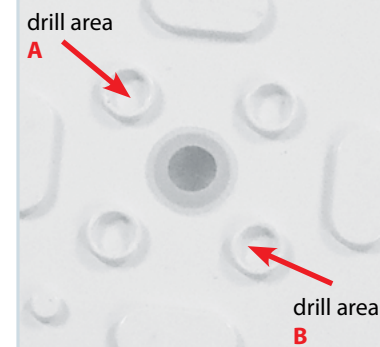
A "knockout" requires a hole to be made by drilling into the product, then the electrical cable can be fed into the product so the connection can be made. A TRS gland accessory should be used to protect the cable from damage, and to maintain the IP protection of the fitting.

A CONDUIT ENTRY BUSH



Another method of making the electrical connection is via a conduit adapter, so the electrical cable can be mounted within a protective conduit tube. The hole will still require drilling out to permit the connection to pass through the wall of the product.

BESA BOX MOUNTING



A product with BESA mounting compatibility is general noted in the product's list of features, but can otherwise be spotted on the back of the product; an arrangement of 4 circular bosses positioned around a gland.



The circular bosses require drilling in order to secure the BESA box mounting plate to the product.

The electrical cable can then feed through the conduit, then through the product's grommet cable entry where the electrical connection is made. Once wired, the fitting can be securely mounted directly to the surface-mounted BESA junction box.

Take a look at Eterna's range of TRS glands here:
www.etera-lighting.co.uk/product-category/accessories/trs-glands-adaptable-boxes-acc/

