

INSTALLATION OF CONDUIT

The selections of conduit and fittings must comply with NZ Electricity Regulations, 1993. The following information is provided as a guide only.

Marley conduit and fittings are suitable for use in underground installations and industrial applications where impact resistance is required. They are not recommended where they are likely to be subjected to SEVERE mechanical abuse. Installation should be made in conjunction with the New Zealand and/or Australian Electrical Code of Practice.

FIXING

Where conduits are to be surface mounted, secure to the building fabric with correct size saddles or conduit clips using zinc plated or stainless steel screws into wood or masonry anchors. Galvanised or stainless steel screws may be preferred in exterior or corrosive environments while galvanised nails may be used for securing saddles in most interior applications. Conduit saddles should generally be provided close to all joints and at not more than one metre centres.

Where conduits are to be embedded in concrete the conduit should be secured from being displaced during pouring and vibrating by securing to formwork or reinforcing.

BENDING

Marley High Impact Conduit under 25mm diameter can be easily bent cold by inserting the correct size of bending spring. To make bending easier the conduit can be heated by briskly rubbing the area to be bent. It is advisable to bend slightly beyond the angle required and then ease back to the desired position. This relieves stress and reduces the tendency for the conduit to straighten after bending. There is a risk of kinking and damage to the bending spring if the conduit is bent too fast. Having completed the bend it should not be forced backwards as this can result in damage to both the conduit and the bending spring.

For bending larger conduit, warm the conduit by immersing it in boiling water or exposing it to a radiant heat source. It is advisable to make a slow bend around a suitable former and retain the conduit in position until it is set. The minimum radius for all diameters should not be less than 6 times the conduit diameter. See table below.

Minimum Conduit O.D. mm	Radius (mm)
20	120
25	150
32	200
40	240
50	300

JOINING

Marley PVC conduit and fittings are easily joined with Marley Solvent Cement by adhering to the following four steps:

1. Cut conduit to length with a fine toothed hacksaw or pipe cutters and remove all swarf and burrs, from both OD and ID.
2. Remove all dirt and grease with a clean cloth dipped in Methylated Spirits, or Marley Primer.
3. Coat the socket and then the spigot sparingly with Marley Clear solvent cement and push together immediately.
4. Push together firmly to evenly spread the solvent cement, wipe off any excess solvent immediately. Do not handle the joint for approximately 5 minutes and allow 10 hours of drying time before testing or rough handling.

On large bore conduits it may be found that Marley Gold Solvent Cement (gap fill cement) is desirable.