



APPLICATION NOTE

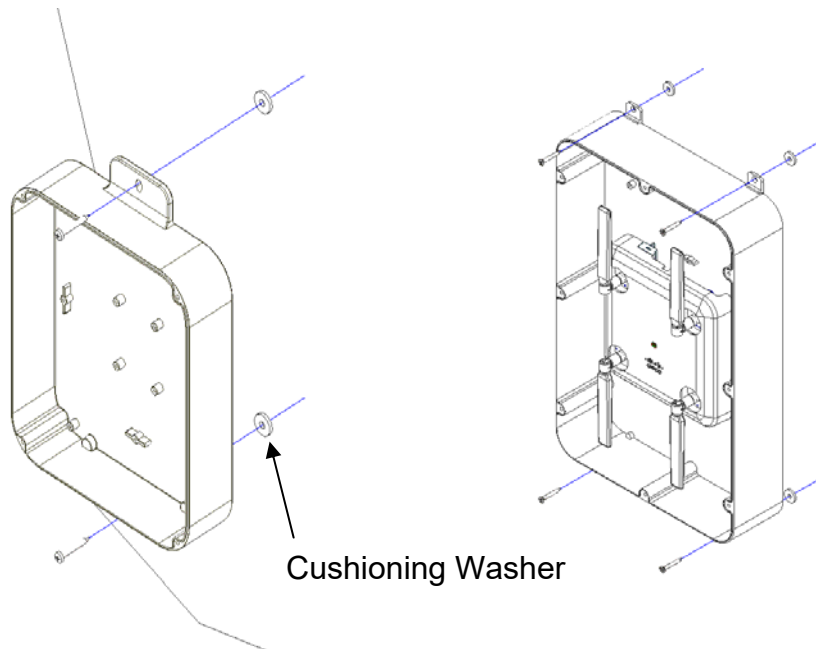
Installation Tips for Oberon Models 1020, 1021, and 3010 NEMA 4 Wireless Access Point enclosures

Introduction

Oberon's Model 1020 and 1021 wireless access point enclosures are designed with a unique "Skybar™" cover which discriminates these products aesthetically from standard industrial NEMA 4 boxes. These products are designed to be as small and unobtrusive as possible so that they can be located precisely where they are needed. Sometimes this is beneath seating in stadiums and auditoriums. Other times, it may be in architecturally sensitive outdoor venues. The Skybar™ cover imparts strength and a little extra room for larger wireless access points. In order to maintain the compact size and shape, these products are designed with a precision engineered gasket. In order to maintain the NEMA 4 (water resistant) rating, some extra precautions should be observed when installing the 1020 or 1021.

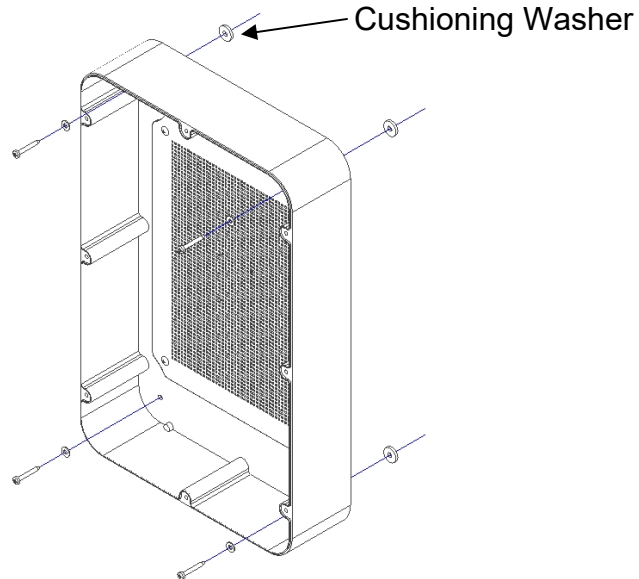
Installation on Uneven Surfaces

When mounting Oberon's Models 1020 or 1021, select a surface that is as smooth and level as possible. Oberon includes four cushioning washers with each product which can be used to lift the enclosure about 1/8" above uneven mounting surfaces and irregularities. This can help to keep the enclosure from flexing during installation, which can prevent the enclosure from sealing properly. Place the cushioning washers between the mounting tabs or feet and the wall when installing as shown in the figure. When fastening to a wall, use wall anchors suited for the wall material or construction, and tighten to the same torque on all sides.



Oberon Model 1020-00 and 1021-00 enclosures use cushioning washers when wall mounting

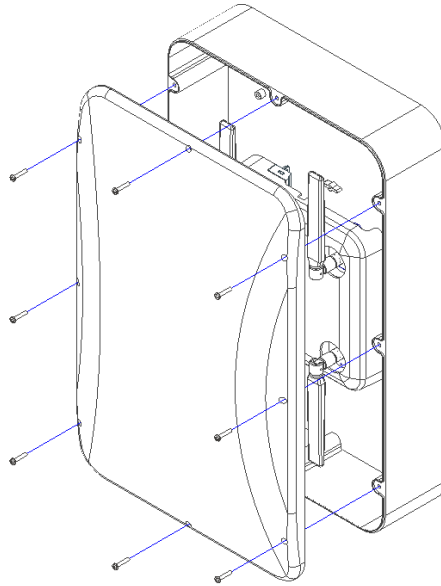
If the wall is smooth and flat, the Model 1020 and 1021 enclosures may be mounted flush on the surface by fastening through the back side of the base. The cushioning washers also double as sealing washers for this installation. Four holes must be drilled through the back of the enclosure to fasten the unit with appropriate anchors and the cushioning washers. If the surface is not smooth, the enclosure may flex during installation. This will prevent the cover from sealing properly. Use the cushioning washers between the wall and box, and tighten wall fastening hardware to the same torque, to help to keep the box from flexing. |



Oberon Model 1021-00 enclosure with inside mounting hardware, exterior cushioning washer

Proper Lid Tightening

Oberon's Models 1020 and 1021 have precision engineered gaskets that are effective at maintaining NEMA 4 water ingress prevention if installed properly. Installers must use the provided M4 x 0.7 x 20mm captive cover screws. If they are misplaced or not included, contact Oberon for replacements. Using improper screws will prevent the lid from tightening down on the gasket, thus causing sealing issues. Fasten the screws evenly around the enclosure to 8 in-lbs to seal the cover properly. If the enclosure is warped or flexing, the gasket will not align properly with the base and can cause leaking. Also, if the gasket sealing edge is crushed, the water tightness of the enclosure may be compromised. Both enclosures include a set of both Phillips and Torx screws for tamper resistance.



Oberon Model 1021-00 enclosure with screw on cover

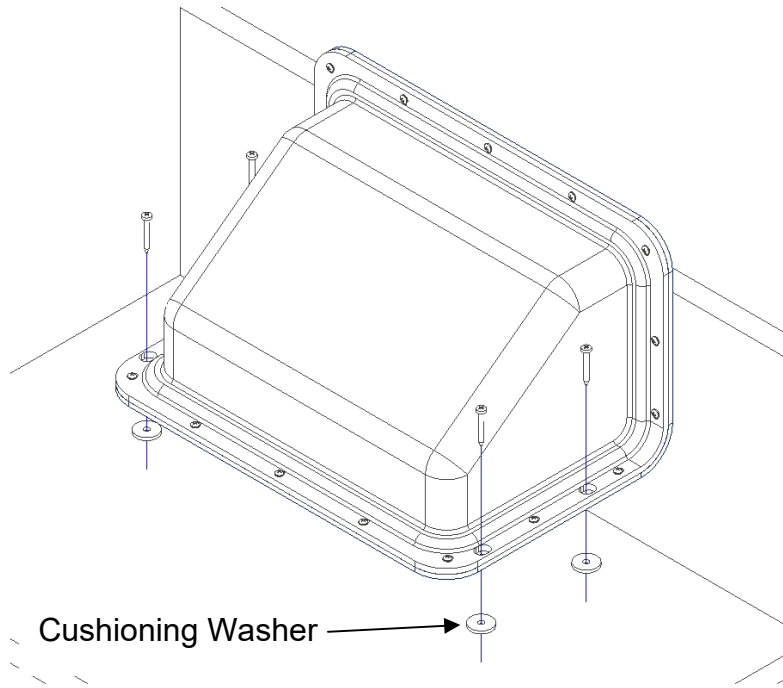
Cable Egress and NEMA 4

The Models 1020 and 1021 are easily drill for cable pass through and installing accessories. The most important step during installation is to ensure connectors are properly sealed to maintain the NEMA 4 rating. Water tight conduit such as Anamet Sealtite® coupled with a cable gland or other sealing connector may be used to prevent fluid from entering the enclosure.

A pressure equalizing vent such as a GORE® Vent may be help reduce condensation. The GORE® Vent allows air pressure equalization between inside and outside the enclosure, yet restricts the passage of water vapor from outside to inside. This can help to reduce condensation.

Model 3010 Installation on Uneven Surfaces

Oberon's Model 3010 incorporates a sturdy Aluminum back panel that fastens down to a surface. As with the Models 1020 and 1021, choose a surface that is smooth and level for installation. Four cushioning washers are provided with each product to lift the back panel about 1/8" above the potentially uneven or irregular surface. Fastening the back panel without the cushioning washers on an uneven surface may cause bending and flexing. If the panel is bent, the cover holes will no longer align properly to the panel hardware, and the gasket will not seal flat along the plane surface. When fastening to a surface, use wall anchors suited for the wall material or construction, and tighten to the same torque on all sides.



Oberon Model 3010 enclosure with screw on cover. Use cushioning washers on irregular surfaces