Installing a PowPak™ Module Inside a Junction Box

In some applications, such as in a Chicago plenum space or when the EcoSystem® link wiring will be run according to Class 1 methods, the PowPak™ module can be installed inside a 4 in x 4 in junction box. The following application note uses the PowPak™ EcoSystem® Dimming Module as an example, but the installation instructions apply to all PowPak™ units.

Step One

A) Remove the label tab by tearing at the perforation.

B) Lift the flexible antenna on the PowPak™ module from the cutout on the right side of the antenna trough.

C) Extend the antenna out from the left side of the PowPak™ as indicated.

Step Two

Mount the PowPak™ module inside a 4 in x 4 in junction box with the mounting nipple protruding into an adjoining junction box as shown. Route the antenna wire out of the closest knockout and seal the knockout with a grommet or cable gland according to the local electrical code.
Step Three (if required)

Follow this step if your local regulations do not allow polymeric materials in the plenum space, such as the City of Chicago. Otherwise, proceed to Step 4.

A) Mark the antenna wire insulation where the wire first enters the plenum space.

B) Pull the antenna wire back through the grommet/gland. Using an 18 AWG wire stripper, strip the antenna wire back an extra 1/8 in (3.17 mm) beyond the mark made in Step A. Reinstall as shown and confirm that there is no antenna wire insulation exposed in the plenum space.

**NOTE:** The cable gland must be made of a fire retardant material.

Step Four

Make the power wiring connection in Box A and the low-voltage wiring connections in Box B. Run wiring from boxes to fixtures through conduit if required.

Step Five

Install the junction box lids and gaskets as required by the local electrical code. Extend the antenna out from the junction box, avoiding any contact with metal objects. For optimal RF performance, position the antenna as far away from metal objects as possible.