

# NEW AGE ENCLOSURES

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## Best practices for selecting an off-the-shelf enclosure

### *"When form should lead function"*

By Randall Dennis, President, New Age Enclosures

In today's market, electrical engineers and marketing personnel are faced with a growing selection of off-the-shelf enclosures. This may sound like a nice problem to have because choices are good. Right? But this may be a problem if it is not addressed early in the process.

This has not changed the "**when form should lead function**" selection process recommended by New Age president Randall Dennis. Typically when selecting an enclosure for a new application, it is standard practice for the development team to develop their board and then consider the design and shape of the enclosure. After all, form follows function, right? Mr. Dennis recommends reversing that process when developing a program they know will run in lower volumes and require an off-the-shelf enclosure.

The simple solution is to select the enclosure earlier in the process. Dennis stated, "If the design team feels this is putting the cart before the horse, let's at least suggest to them to allow the horse to stand side by side with the cart." He understands this can be uncomfortable due to our natural resistance to change. The engineers may have previously worked on different, higher volume programs that provided the comfort of designing the PCB first with a budget to build a custom enclosure. But with standard enclosure products, they may run into the fact that the required size and shape does not exist.

### **Best practices to selecting an off-the-shelf enclosure**

Identify the program requirements (i.e. we are developing a transceiver that will be outside and requires its own power source).

Initiate a web search on sites such as [New Age Enclosures](#) to determine which manufacturer provides an enclosure that meets the requirements such as NEMA compliant. Because this application will be used outdoors, it will inevitably require a mounting method so the search should include a method to attach the unit to a wall, pole or other substrate.

During the search, the development team finds out that there may be very few enclosures meeting their requirements. Finding this out early in the process will help prevent many of the headaches, time delays and cost overruns. This process can lead to selection of the most cost-effective solution.

With an enclosure in hand, the designer can proceed with the PCB development knowing they have an affordable, in-stock solution. In following these steps, the designers are able to quickly establish the PCB footprint and mounting hole locations. Sizing a PCB to fit an enclosure is far less expensive than designing an enclosure to fit the PCB.

This process should lead to satisfied engineers and marketing personnel because they all had an opportunity to have a voice in the selection process, as opposed to being stuck with an enclosure because it was the only box that fit the board.

The marketing staff is then able to work on finalizing the outside appearance of their end product. Companies like New Age Enclosures are able to print the company's logo or other artwork directly onto the case for a true Market-ready© product.

For additional information on this subject or products visit [NewAgeEnclosures.com](http://NewAgeEnclosures.com) or contact:

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