

FRONT PANEL EXPRESS



NEMA Standards for Electrical Enclosures - What You Need to Know

NEMA, the association of electrical equipment and medical imaging manufacturers, consists of over 400 member companies and sets standards for electrical enclosures as well as nearly 600 other products. Each rating has different specifications meant to protect electrical components, property, and personnel from harm.



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Standards for Common Non-Hazardous Enclosures

Type 1 - The common standard for indoor commercial enclosures such as junction boxes and control switches, Type 1 electrical enclosures maintain only a small degree of protection against debris and damage.

Type 3R - This standard is meant for enclosures that will be used either indoors or outdoors, ensuring a basic level of protection against solid foreign objects and water, including ice accumulation.

Type 4 - These types of enclosures typically use closed-loop cooling systems to keep the enclosure clean and running efficiently. These standards dictate that the electrical enclosure must protect against moisture, weather conditions, and direct contact with pressure wash systems.

Type 4X - These include all specifications for the aforementioned Type 4 standards, but include standards for protection against corrosion.

Type 12 - Type 12 enclosures are air-tight, but don't necessarily include the same protection against water and moisture as Type 4 enclosures. These require closed-loop cooling systems and are designed for indoor use only.

For more information on building electrical enclosures to the various NEMA standards, [visit their website](#) or [contact Front Panel Express](#) today.

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