

# Environmental ratings for enclosures based on "NEMA" Type designations

<b>Enclosure Type Designation</b>	<b>Intended Use and Description</b>
1	Indoor use primarily to provide a degree of protection against limited amounts of falling dirt.
2	Indoor use primarily to provide a degree of protection against limited amounts of falling water and dirt.
3	Outdoor use primarily to provide a degree of protection against rain, sleet, wind blown dust and damage from external ice formation.
3R	Outdoor use primarily to provide a degree of protection against rain, sleet, and damage from external ice formation.
3S	Outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust and to provide for operation of external mechanisms when ice laden.
4	Indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, hose-directed water and damage from external ice formation.
4X	Indoor or outdoor use primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, hose-directed water, and damage from external ice formation.
5	Indoor use primarily to provide a degree of protection against settling airborne dust, falling dirt, and dripping noncorrosive liquids.
6	Indoor or outdoor use primarily to provide a degree of protection against hose-directed water, and the entry of water during occasional temporary submersion at a limited depth and damage from external ice formation.
6P	Indoor or outdoor use primarily to provide a degree of protection against hose-directed water, the entry of water during prolonged submersion at a limited depth and damage from external ice formation.
7	Indoor use in locations classified as Class I, Division 1, Groups A, B, C or D hazardous locations as defined in the National Electric Code (NFPA 70) (Commonly referred to as explosion-proof).
8	Indoor or outdoor use in locations classified as Class I, Division 2, Groups A, B, C or D hazardous locations as defined in the National Electric Code (NFPA 70) (commonly referred to as oil immersed).
9	Indoor use in locations classified as Class II, Division 1, Groups E, F and G hazardous locations as defined in the National Electric Code (NFPA 70) (commonly referred to as dust-ignition proof).
10	Intended to meet the applicable requirements of the Mine Safety and Health Administration (MSHA).
12 and 12K	Indoor use primarily to provide a degree of protection against circulating dust, falling dirt, and dripping noncorrosive liquids.
13	Indoor use primarily to provide a degree of protection against dust, spraying of water, oil, and noncorrosive coolant.

Underwriters Laboratories Inc. can provide testing and certification services to verify and document conformity of products for any of the above "Types" in accordance with:

1. ANSI/UL50, *Enclosures for Electrical Equipment* for Types 1, 2, 3, 3R, 3S, 4, 4X, 5, 6, 6P, 12, 12K and 13.
2. ANSI/UL698, *Industrial Control Equipment for Use in Hazardous (Classified) Locations* and other related standards for Types 7, 8 and 9.
3. c.) ANSI/NEMA250, *Enclosures for Electrical Equipment (1000 Volts Maximum)* for Types 1, 2, 3, 3R, 3S, 4, 4X, 5, 6, 6P, 7, 8, 9, 12, 12K and 13. Z