

ARTICLE 680

SWIMMING POOLS, HOT TUBS, AND FOUNTAINS

Introduction to Article 680—Swimming Pools, Hot Tubs, and Fountains

This article covers the installation of electrical wiring and equipment for swimming pools, hot tubs, spas, fountains, and hydromassage bathtubs. It is divided into eight parts which only apply to certain types of installations. Be very careful to determine which part(s) of this article apply as identified in the “General” section of each part so you can correctly apply the rules. Many of these rules are outside of the scope of this material, however, some of the topics we cover include the following:

- ▶ Bonding and Grounding
- ▶ Underwater Pool Luminaires
- ▶ Pool Light Junction Boxes, Transformers, or GFCI Enclosures
- ▶ Equipotential Bonding
- ▶ Hot Tubs
- ▶ Fountains

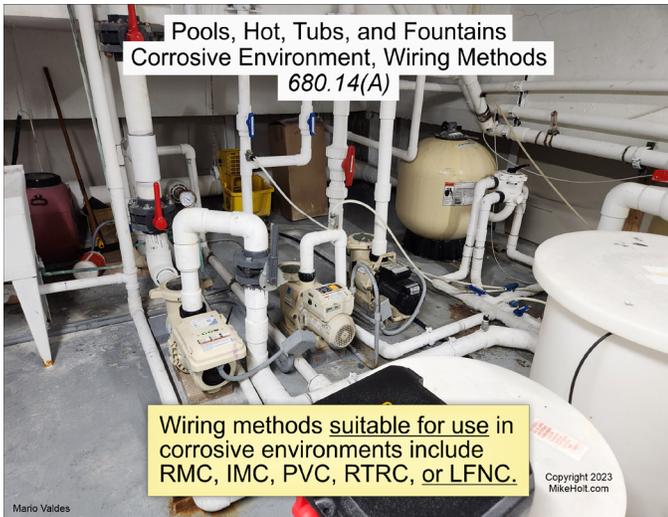
Article 680 consists of eight parts:

- ▶ Part I. General Requirements for Pools, Spas, Hot Tubs, and Fountains
- ▶ Part II. Permanently Installed Pools
- ▶ Part III. Storable Pools
- ▶ Part IV. Hot Tubs
- ▶ Part V. Fountains
- ▶ Part VI. Therapeutic Pools and Tubs (not covered)
- ▶ Part VII. Hydromassage Bathtubs
- ▶ Part VIII. Electrically Powered Pool Lifts (not covered)

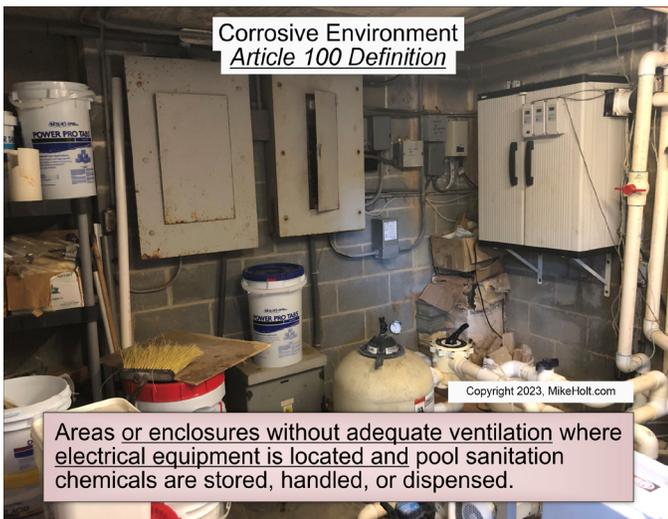
680.14 Corrosive Environment

(A) Wiring Methods. Wiring methods suitable for use in corrosive environments must be rigid metal conduit, intermediate metal conduit, rigid polyvinyl chloride conduit, reinforced thermosetting resin conduit, or liquidtight flexible nonmetallic conduit. ▶**Figure 680-21**

According to Article 100, a “Corrosive Environment” is areas or enclosures without adequate ventilation where electrical equipment is located and pool sanitation chemicals are stored, handled, or dispensed (Article 680). ▶**Figure 680-22**



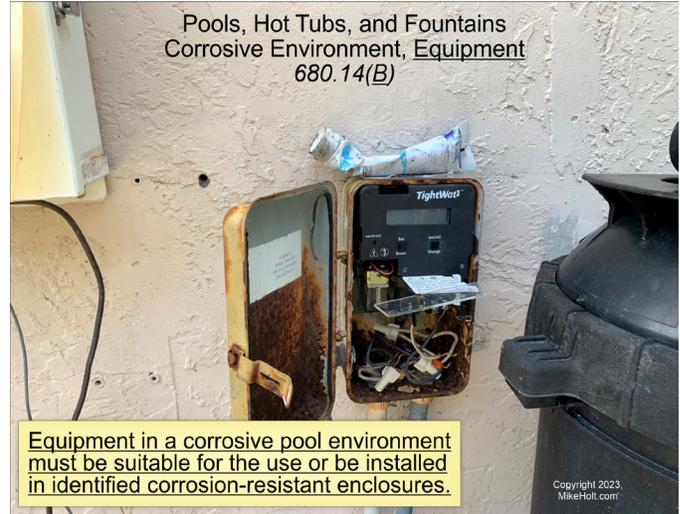
►Figure 680-21



►Figure 680-22

Note 1: Sanitation chemicals and pool water pose a risk of corrosion (gradually damaging or destroying materials) due to the presence of oxidizers (for example, calcium hypochlorite, sodium hypochlorite, bromine, and chlorinated isocyanurates) and chlorinating agents that release chlorine when dissolved in water.

(B) Equipment. Equipment in a corrosive pool environment must be suitable for the use or be installed in identified corrosion-resistant enclosures. Equipment listed for use in pools and hot tubs are considered suitable for use in a corrosive pool environment. ►Figure 680-23 and ►Figure 680-24



►Figure 680-23



►Figure 680-24