

# DEFECT OF THE MONTH

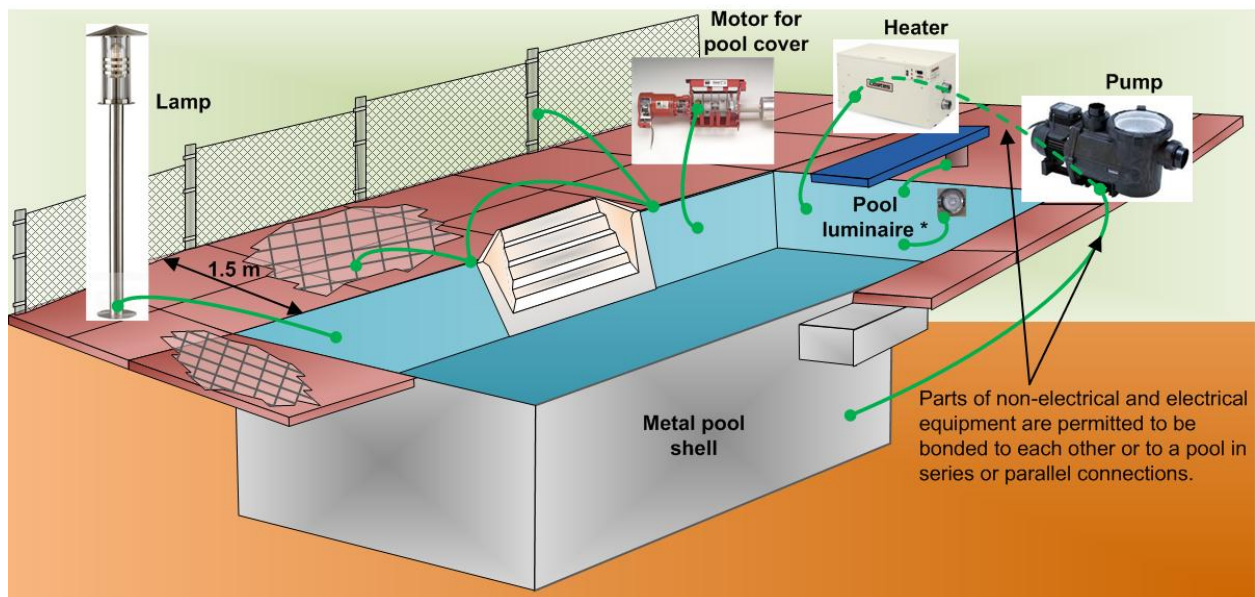
May 2017

Bonding of non-current-carrying metal parts of pools



Over the past year, ESA Inspectors have identified over 500 defects regarding missing bonding of non-current-carrying metal parts of swimming pools. Missing bonding may create an electric shock hazard that could lead to Electric Shock Drowning (ESD).

**Rule 68-058** of the Ontario Electrical Safety Code (OESC) requires all metal parts of the pool and of other non-electrical equipment associated with the pool to be bonded together and to non-current-carrying metal parts of electrical equipment. This includes piping, pool reinforcing steel, ladders, diving board supports and fences within 1.5 m of the pool. The Rule also applies to decorative-type pool luminaires and lighting equipment not located in a forming shell, metal screens of shields for underwater speakers, conduit and junction boxes by a copper bonding conductor.



The required bonding for swimming pools is important to create equipotential surface, and eliminate any potential difference in the body of water. For more information on OESC requirements for swimming pool bonding, please refer to Bulletin 68-7-\* (<http://www.esasafe.com/assets/files/esasafe/pdf/Bulletins/68-7-10.pdf>)