# Large Plastic Niche - Fixture Housing Installation Procedures

# IMPORTANT SAFETY INSTRUCTIONS READ AND FOLLOW ALL INSTRUCTIONS

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#### **NOTE**

For use with Pentair Pool Products wet niche light fixtures 784XXX, 788XXX, and 789XXX.



# **A** DANGER

### RISK OF ELECTRICAL SHOCK OR ELECTROCUTION

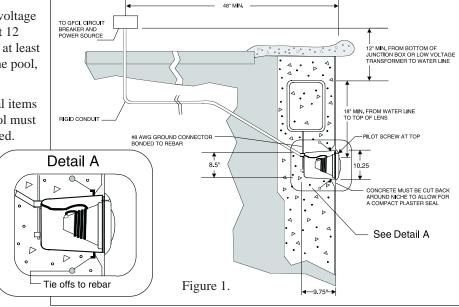
This niche - fixture housing must be installed by a licensed or certified electrician in accordance with the National Electrical Code and all applicable local codes and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock, and may also cause damage to property. Read and follow the specific instructions below. Call (800) 831-7133 for additional free copies of these instructions.

#### A. General Information.

- 1. Ensure that the electrical system of your pool conforms with the following requirements of the National Electrical Code (NEC), and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the Large Plastic Niche (fixture-housing) is installed.
- 2. Some of the NEC requirements are listed below.

a. The lighting circuit must have a Ground Fault Circuit Interrupter (GFCI), and have an appropriately rated circuit breaker.

- b. The junction box or the low voltage transformer is located at least 12 inches above water level and at least 48 inches from the edge of the pool, see Figure 1.
- c. The light fixture and all metal items within five (5) feet of the pool must be properly electrically bonded.
- d. The niche must be properly installed so that the top edge of the Underwater Light's lens is at least 18 inches below the surface of the water in the pool, see Figure 1.



#### NOTE

This requirement, item A.2.d may be less than 18" if the fixture is installed in an area of the swimming pool that is not used for swimming and the lens is adequately guarded to keep any person from coming in contact with the lens. Consult your local codes and ordinances and the National Electrical Code (NEC).

- e. The niche is properly electrically bonded and grounded via the NO. 8 AWG ground connector located at the rear of the niche, see Figure 1.
- 3. Use only Pentair Pool Products lighting fixtures in this niche to ensure proper bonding and grounding connections.



## **A DANGER**

## RISK OF ELECTRICAL SHOCK OR ELECTROCUTION

For proper bonding and grounding connections, use only Pentair Pool Products Underwater Light Fixtures with this niche-fixture housing. Failure to do so could create an electrical hazard which would result in death or serious injury to pool users, installers and others.

#### B. Concrete/Gunite Pool Installation.

- 1. Locate position on vertical wall where light is to be installed. The top of the light lens must be a minimum of 18" below normal water level.
- 2. Connect conduit to the niche using a recommended PVC solvent, such as Weld•On 710.
  - a. The Large Plastic Niche is provided with 45 deg. and 1 in. to 3/4 in. adapters for PVC conduit.
- 3. Secure niche to rebar with tie wires. Orient the niche so that the pilot screw receptacle is located at the top of the niche.
- 4. Connect bonding wire from rebar and bonding grid to the bonding lug at the rear of the niche.
- 5. Bond the niche-fixture housing to all other metallic items within 5 feet of the pool, using a No. 8 AWG bond wire. Bond connection is located at the rear of the niche.
- 6. If non-metallic conduit is used a No. 8 AWG bonding/grounding wire must be installed through the conduit from the junction box to the bonding/grounding lug inside the niche. The connection inside the niche must be sealed with a listed sealant such as 3M Scotchcast 2135.
- 7. Support conduit to hold the Large Plastic Niche at the proper distance in front of rebar so that the front of mounting ring is flush with the desired finish surface.
- 8. If pool surface is to be plastered, you must allow proper concrete cut-back for plaster thickness. Finished concrete surface must be cut-back behind the niche flange, see Detail A of Figure 1. Finished area surrounding niche must be flat and flush with the front face of the niche. This ensures a snug fit between light and wall.

## SAVE THESE INSTRUCTIONS.

