



# AMERLITE® / AMERQUARTZ®

## VINYL LINER / FIBERGLASS LIGHT NICHE

### INSTALLATION INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS  
READ AND FOLLOW ALL INSTRUCTIONS  
SAVE THESE INSTRUCTIONS

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#### NOTE

For use with Pentair wet niche light fixtures 783XXX, 784XXX, 788XXX, and 789XXX.

#### 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.

#### WARNING

Before installing this product, read and follow all warning notices and instructions accompanying this niche. Failure to follow safety warnings and instructions can result in severe injury, death, and property damage.

Call (800) 831-7133 for additional free copies of these instructions.

#### IMPORTANT NOTICE



Attention Installer.

This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner/operator of this equipment.

**⚠ DANGER! Risk of Electrical Shock or Electrocution!**

This product must be installed by a licensed or certified electrician or a qualified pool serviceman 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. Always disconnect the power to the pool light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury to serviceman, pool users or others due to electrical shock. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL.

**⚠ WARNING — Important Safety Information for Pentair Niche and Light Installation**

- All Niche and Light installations must conform with all codes. If local codes mandate a cord seal, use Pentair plastic niches (P/N 79206600 and P/N 79206700).
- Under no circumstances replace lights by splicing wire under water or behind niche.

**⚠ WARNING — *RISK OF ELECTRIC SHOCK AND INJURY.*  
USE ONLY THE INSTALLATION METHOD SPECIFIED BELOW.**

**Important Safety Information for Fountain Fixture Installations**

Location of Luminaire Use	Pentair Fountain Fixture* (P/N 560000 – P/N 560001) (P/N 560002 – P/N 560003)	Required Installation Method
Swimming Pool or Spa	Wet-Niche Swimming Pool (or Spa) Luminaire (Light)	Fixture Housing (Forming Shell) ONLY. <b>DO NOT USE</b> Fountain Fixture Stand.
Fountain	Wet-Niche Submersible Swimming Pool (or Spa) Luminaire (Light)	Fixture Housing (Forming Shell) or Fountain Fixture Stand.

**(\*) Note:** Wet-niche luminaires complying with requirements for both uses may bear both the Listed Wet-Niche Swimming Pool (or Spa) Luminaire UL Mark and the Listed Wet-Niche Submersible Luminaire UL Mark. A luminaire not bearing the corresponding UL Listing Mark is not considered by UL to have been produced under UL's Listing and Follow-Up Service for the associated usage location.


## General Information - USA Only.

- A. 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 niche (fixture-housing) is installed.
- B. Some of the NEC requirements are listed below.
  - 1. The lighting circuit must have a Ground Fault Circuit Interrupter (GFCI), and have an appropriately rated circuit breaker.
  - 2. The junction box or the low voltage transformer shall be located at least eight (8) inches above the maximum water line and at least four (4) inches above the ground level or pool deck whichever provides the greater elevation. The junction box shall be no less than 48 inches from the inside wall of the pool, unless separated from the pool by a solid fence, wall or other permanent barrier. For more information, see NEC 680.24 code requirement. Also see Figure 1.
  - 3. The light fixture and all metal items within five (5) feet of the pool must be properly electrically bonded. For more information, see NEC 680.26 code requirement.
  - 4. The niche must be properly installed so the pilot screw hole is at the 12 o'clock position and 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

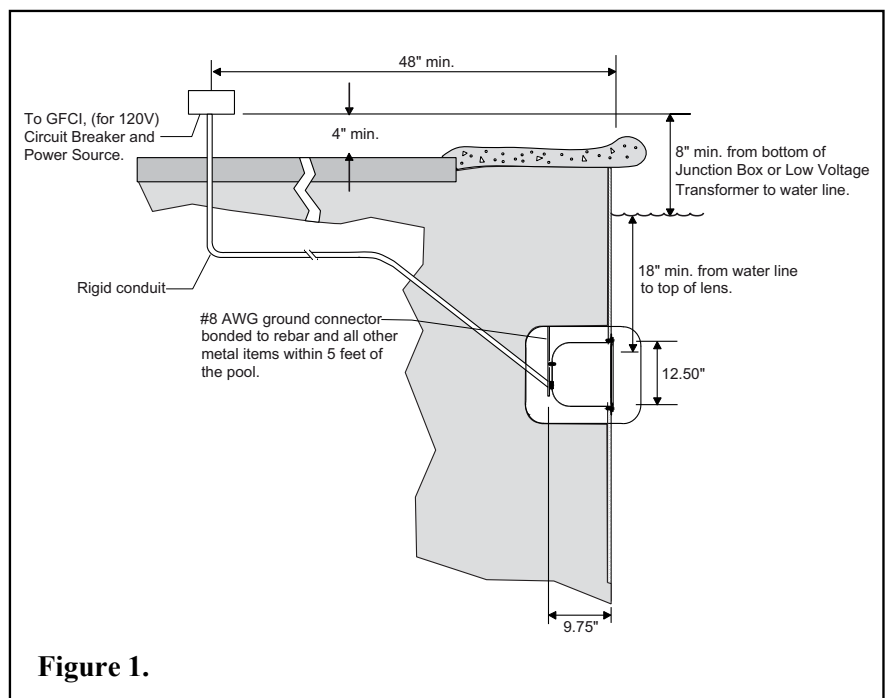
The required orientation of all Pentair lights is with the pilot screw at the 12 o'clock position. This is guaranteed by proper niche installation.

- 5. Bond the niche-fixture housing to all other metallic items within five (5) feet of the pool, using a No. 8 AWG bond wire. The Bond connection is located at the rear of the niche. See NEC 680.26 code. See Figure 1.
- C. Use only Pentair lighting fixtures in this niche to ensure proper bonding and grounding connections.

<b>⚡ DANGER</b>	
	<b>RISK OF ELECTRICAL SHOCK OR ELECTROCUTION</b>
For proper bonding and grounding connections, use only Pentair 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.	

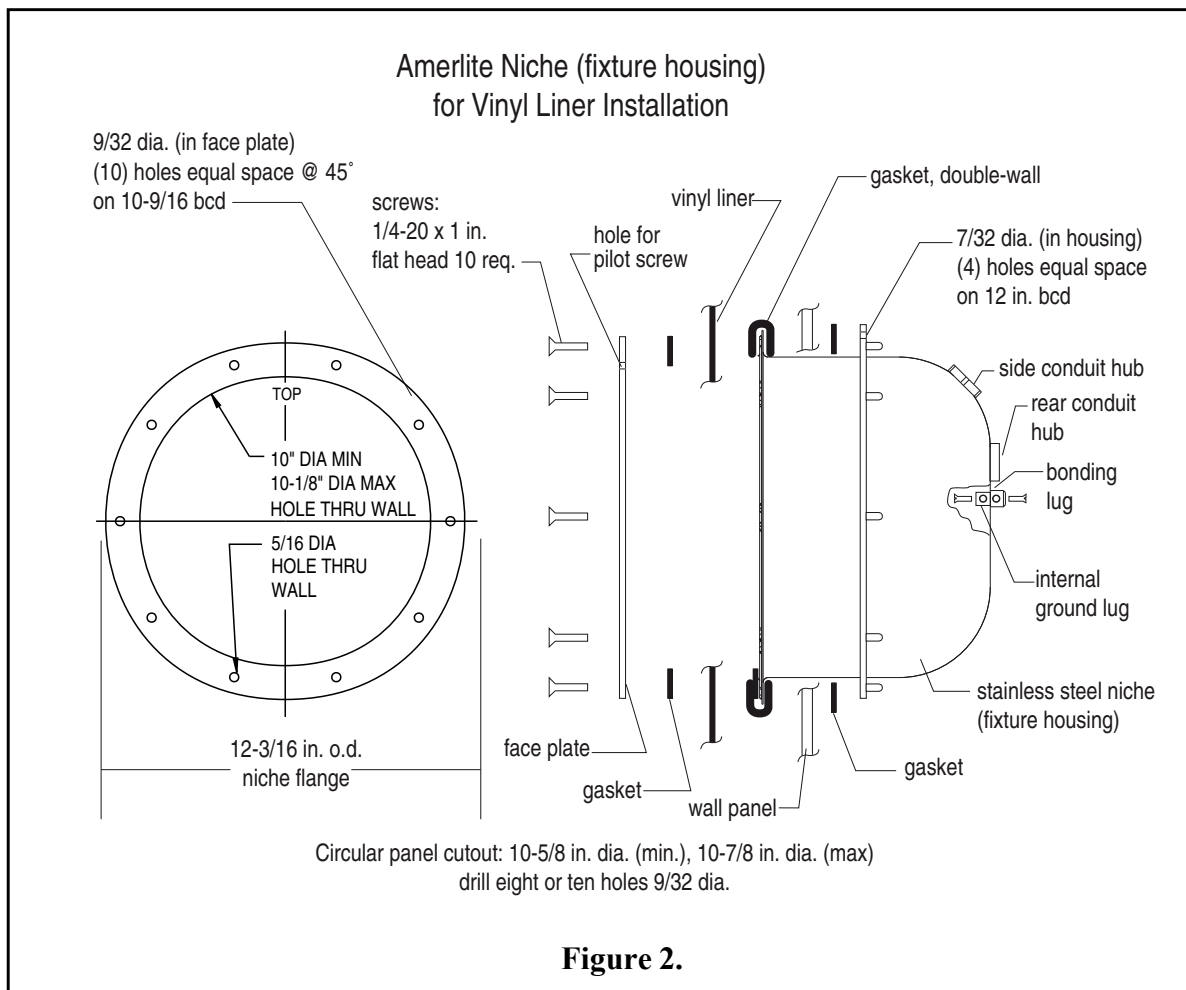
## Vinyl Liner Installation Instructions - USA Only).

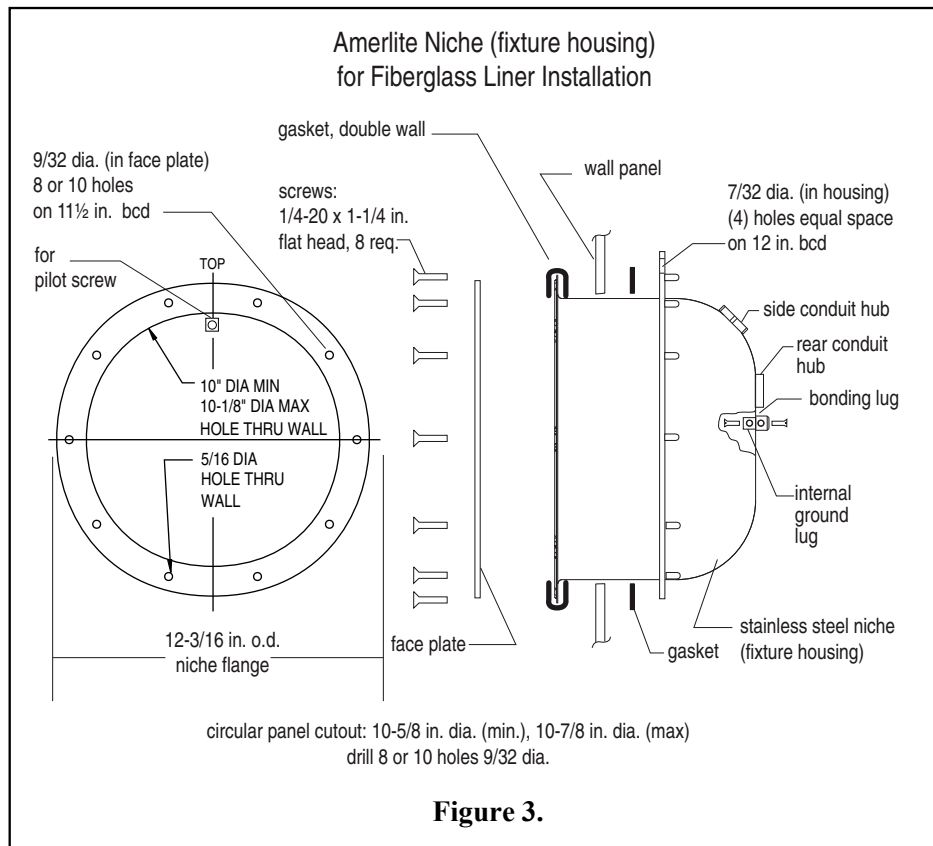
- A. Punch or drill a large hole in the panel (maximum diameter of 10-7/8", minimum diameter of 10-5/8") in the desired location on the pool wall.
- B. Punch or drill two 1/4 in. diameter holes on an 11 1/2 in. diameter around the large panel hole. Ensure that the holes are at the 12 o'clock (top) and 6 o'clock (bottom) position, which is 180 deg. from each other.
- C. For hole placement guide refer to the Amerlite Niche Template, p/n 620002.
- D. Punch or drill the 5/16 in. dia. holes on an 11 1/2 in. dia. around the large panel hole.
- E. Place the double wall gasket around the flange of the niche. Make sure the front of the gasket is on the front of the niche, vinyl liner side; see Figure 2 on page 4.



**Figure 1.**

- F. Insert the niche through the large panel hole from inside the pool.
- G. Align the two retainer screw holes on the niche, (180 degrees from each other top and bottom), with the holes made in the wall panel.
- H. Insert the two fillister head retainer screws through the niche and wall panel.
- I. Fasten the back-up ring and the gasket with all of the holes the same size to the back of the wall panel by tightening the two fillister head retaining screws.
- J. Install the vinyl liner in the pool \*.
- K. Align the gasket with the holes and two larger holes with the brass chrome sealing ring \*.
  - 1. Fasten the gasket tightly to the niche with the 1/4-20 X 1 in. screws provided.
  - 2. Ensure the two countersinks on the back of the sealing ring, (top and bottom) line up with the heads of the retainer screws.
  - 3. Ensure that the large holes on this gasket are placed over the heads of the retainer screws.
  - 4. Ensure that the pilot screw is at the center top.
- L. Cut out the vinyl liner along the inside edges of the sealing ring \*.
  - \* Note, these steps are not necessary for installations without a vinyl liner.
- M. 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. Seal the wire/lug connection with a listed sealant such as Pentair P/N 60028300 or equivalent, to protect the connection from possible pool water corrosion. See figure 2. See NEC 680.23 code requirement.
- N. Bond the niche-fixture housing to all other metallic items within five (5) feet of the pool, using a No. 8 AWG wire. Bond connection is located at the rear of the niche. See NEC 680.26 code requirement.

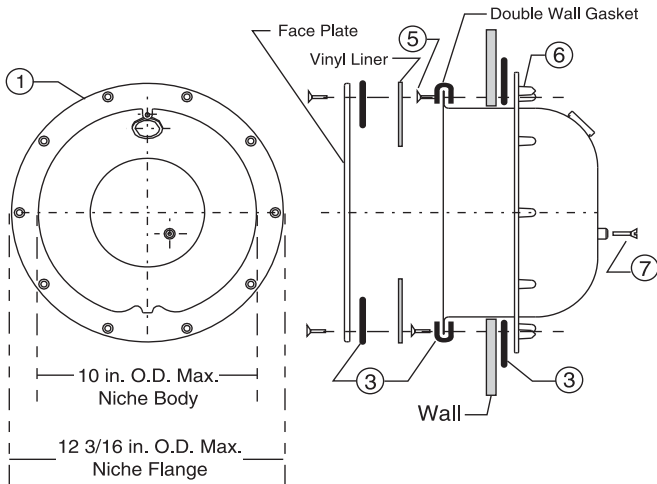




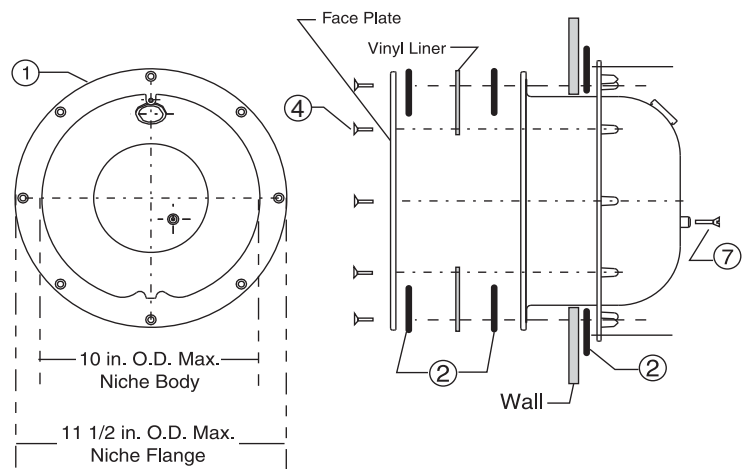
### Fiberglass Pool Wall Installation Instructions - USA Only.

- A. Drill the holes, and cut-out a large circle in the wall panel section as per circular panel cut-out information, refer to the Amerlite Niche Template, p/n 620002.
- B. Place the double wall gasket around the flange of the niche. Make sure the front of the gasket is on the front of the niche, vinyl liner side; see Figure 3.
- C. Support the niche on the rear side of the pool wall. Align the brass-chrome face plate, and the second gasket to the holes on the pool side of the fiberglass wall.
  1. Ensure that the pilot screw hole is at the center-top when putting the face plate in-place.
  2. Fasten the face plate and the gasket tightly to the light niche with the (8) 1/4-20 X 1 1/4 in. flat head screws provided.
  3. Each screw should be inserted and tightened through (in proper order); the face plate, the face plate gasket, the fiberglass wall panel, the niche gasket, the niche flange, and finally into the threaded boss.
  4. 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. Seal the wire/lug connection with a listed sealant such as Pentair P/N 60028300 or equivalent, to protect the connection from possible pool water corrosion. See figure 3. See NEC 680.23 code requirement.
  5. Bond the niche-fixture housing to all other metallic items within five (5) feet of the pool, using a No. 8 AWG wire. Bond connection is located at the rear of the niche. See NEC 680.26 code requirement.

## Replacement Parts



Standard 10 Hole Pattern  
for vinyl or fiberglass



American 8 Hole Pattern

Item	P/N	Description	Item	P/N	Description
1	79200100	Liner-sealing ring Pentair's 8 hole	6	79201100	Backup ring, std. 10 hole pattern
1	79200200	Liner-sealing ring std. 10 hole	7	98204400	Screw, grounding 10-24 X 1/2 in.
2	79200300	Gasket, set, Pentair's 8 hole		79211600	Conversion-type mounting ring, brass
3	79200700	Gasket, set, std. 10 hole pattern, w/ double wall gasket		79205100	Screw kit, niche, Pentair's 8 hole
4	98202600	Screw, sealing 1/4-20 X 1 in. phillips flat head		79205200	Screw kit, niche, Pentair's 8 hole, extra long
4	98202700	Screw, sealing 1/4-20 X 1-1/4 in. phillips flat head		79205400	Screw kit, niche, 10 hole, w/o double wall gasket
5	98204200	Screw, retainer, Fillister head, 12-24 X 3/4 in.		79226300	Screw kit, niche, 10 hole w/ double wall gasket
				79200400	Gasket, set, std. 10 hole, w/o double wall gasket

### Installation Information - Canada Only.

- A. Ensure that the electrical system of your pool conforms with the following requirements of the Canadian Electrical Code (CEC), and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the light and (fixture-housing) is installed.
- B. Some of the CEC requirements are listed below.
  1. The lighting circuit must have a Ground Fault Circuit Interrupter (GFCI), and have an appropriately rated circuit breaker.
  2. The GFCI or a transformer must be located at least 3 m or more from the edge of the pool, see \*NOTE and Figure 3.
  3. The junction/deck box must be sealed to the conduit to prevent water from getting into the box, see Figure 4.
  4. The light fixture and all metal items within 3 m of the pool must be properly electrically bonded.

### NOTE

Different rules apply to Fountain Light installations, consult the Canadian Electrical Code.

## Installation Information - Canada Only (Continued)

- The niche must be properly installed so the pilot screw hole is at the 12 o'clock position and that the center line of the Underwater Light's lens is at a maximum depth of 600 mm below the surface of the water in the pool, see Figure 4.

### NOTE

The required orientation of all Pentair lights is with the pilot screw at the 12 o'clock position. This is guaranteed by proper niche installation.

- Be sure the niche is properly electrically bonded via the No. 6 AWG ground connector located at the rear of the niche.
- C. Use only Pentair lighting fixtures in this niche to ensure proper bonding and grounding connections.

## **⚡ DANGER**

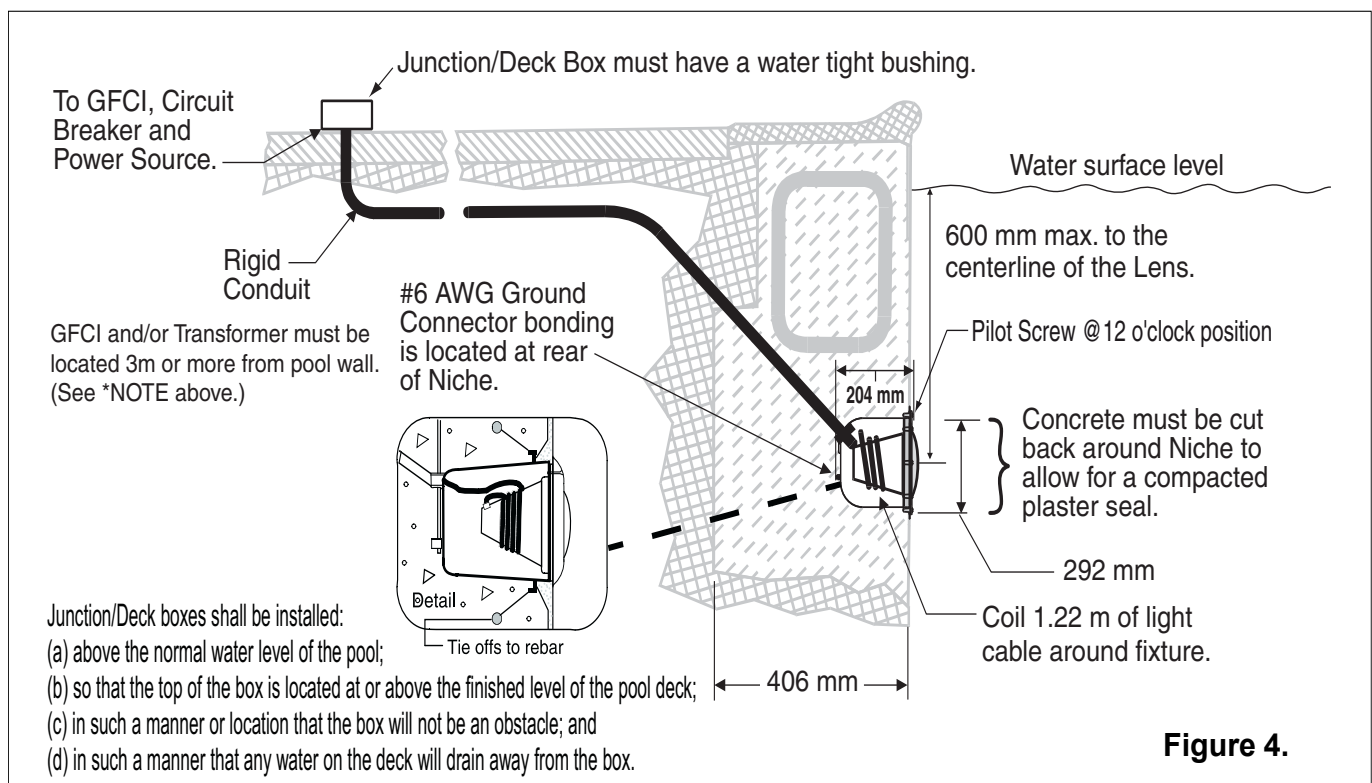


### RISK OF ELECTRICAL SHOCK OR ELECTROCUTION

For proper bonding and grounding connections, use only Pentair 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.

### \*NOTE

Very specific exceptions allowed as defined in the Canadian Electrical Code.

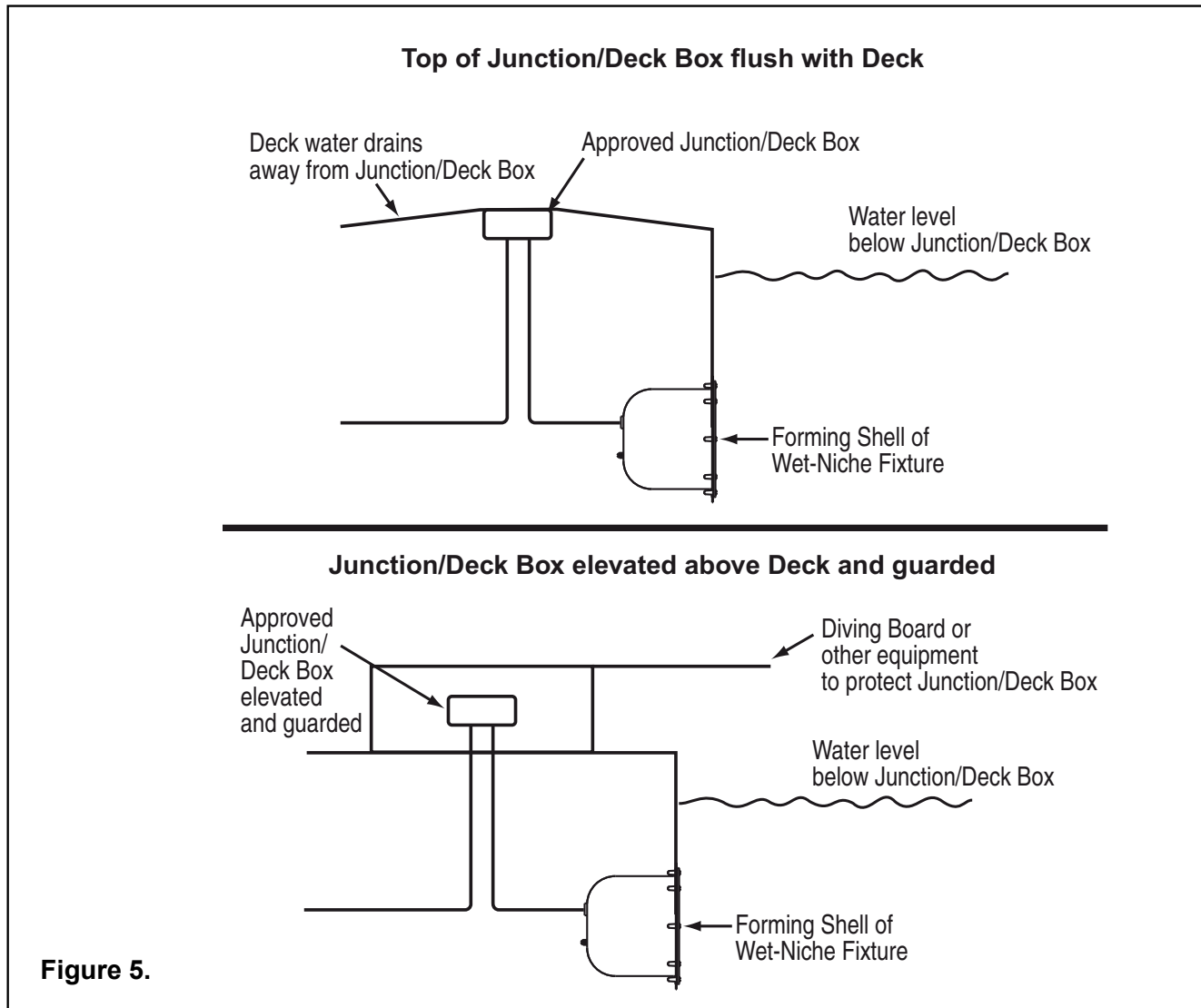


**Figure 4.**

## Junction/Deck Box Location Information - Canada Only.

### A. Junction/Deck boxes shall be installed:

- (a) above the normal water level of the pool;
- (b) so that the top of the box is located at or above the finished level of the pool deck;
- (c) in such a manner or location that the box will not be an obstacle; and
- (d) in such a manner that any water on the deck will drain away from the box (See Figure 5).



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