



atom

A large circular diagram of a pool filter. The outer ring contains several teardrop-shaped elements, with one element at the top having an upward-pointing arrow. The inner circle is filled with a grid of small circles, representing the filter media.

CONCRETE POOLS

EMC

INSTALLATION & OWNER'S MANUAL

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NOTICE



HORIZONTAL MOUNT ONLY
NOT INTENDED FOR OPERATION OUT OF WATER

READ THIS FIRST

Congratulations on your purchase of the **ATOM** underwater lighting system. All **ATOM** lights are manufactured by Spa Electrics in Australia from only the highest quality materials. For more information about Spa Electrics & our products, please visit www.spaelectrics.com.au

BEFORE YOU START:

- **ATOM** cables can be shortened to suit individual installation requirements. Spa Electrics recommends all cabling is protected by conduit and that a junction box (or similar) is incorporated into pool cabling design to avoid siphoning.
- Ensure that the lighting system is installed by a qualified person (e.g. registered pool builder and/or licensed electrician), in accordance with the most current edition and/or amendment of current AS/NZS 3000 Wiring Rules.
- For safe and proper installation, ensure that only those parts supplied with the system are used.
- Maximum installation depth for the **ATOM** light is 400mm (16") below water line (to top of light).
- All lights should be mounted in a location that is easily accessible without the need for entering or lowering the pool water.
- 700mm (28") cable has been supplied pre-assembled within niche assembly, and must remain stored within the Niche to ensure the light can be accessed above the waterline. (Maximum cable within niche - 1000mm (40") (up to 1.0mm²). See Page 16 for more information).

CLEANING

- Only use warm water and a soft brush or cloth to clean **ATOM** lights. **DO NOT** use detergents or spirits as this can damage the light and void your warranty.

USE OF PRODUCT

- **DO NOT** operate light unless completely submerged in water.
- Operating the light for at least 30 minutes every week is advised (all year round).
- **ATOM** lights are suited for both domestic and commercial installations and can be operated continuously (24/7) if required.
- Temperature range for installation, operation and servicing: +5°C ~ +40°C (+41°F ~ +104°F)

IMPORTANT NOTE



It is recommended that the ATOM lighting range is operated using a Spa Electrics LV25-12 or LV50-12 transformer.

- DO NOT use electronic or switch-mode power supplies with ATOM lights. These power supplies will damage the light and void your product warranty.
- Pool chemicals & PH levels: Due to corrosive nature of unbalanced pool chemicals, Spa Electronics strongly recommend that your pool water is balanced prior to installing your pool lights or any plastic or stainless steel components, and tested weekly to maintain these levels. PH levels should be maintained between 7.2 - 7.6 at all times to ensure the longevity of these components.
 - » Failure to do so can result in chemical damage to the light housing and pool fittings, including stainless steel components.
 - » Please note: Lights or components found to have excessive chemical damage will not be covered under our manufacturer's warranty policy.
- This light containers no user-serviceable parts; opening the light will void the product warranty.

TOOLS REQUIRED

- ✓ No. 2 Phillips screwdriver
- ✓ 13mm open-ended spanner
- ✓ Flat-blade screw driver (for light-head removal)

IMPORTANT NOTES



- The use of power tools for product assembly is **NOT** recommended as these devices can cause faults and damage to light components.
- The enclosed images are for illustrative purposes only. Appearances of parts and assemblies may vary from the enclosed illustrations.
- Please contact your reseller if you have any questions regarding the correct installation of this product.

PRODUCT SUPPORT & INFORMATION

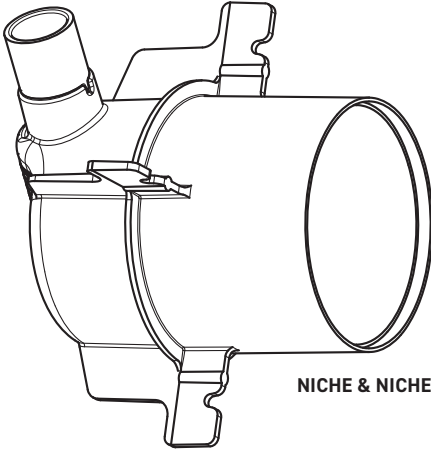
Phone: +61 03 9793 2299 (business hours)

Email: info@spaelectrics.com.au (SALES enquiries)

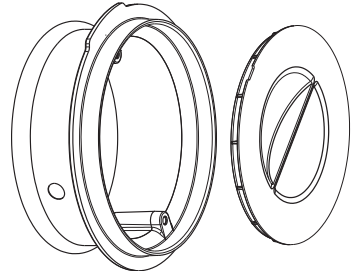
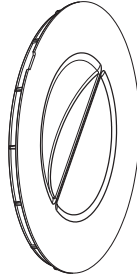
Email: tech@spaelectrics.com.au (TECHNICAL support enquiries)

Web: www.spaelectrics.com.au

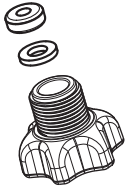
INCLUDED PARTS



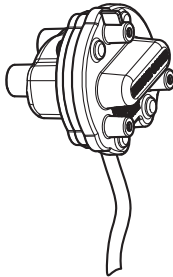
NICHE & NICHE CAP



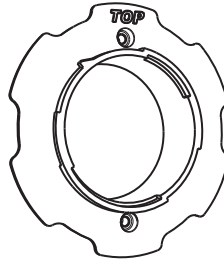
MOUNTING RING & MOUNTING RING CAP



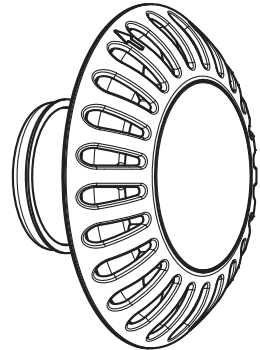
CABLE GLAND



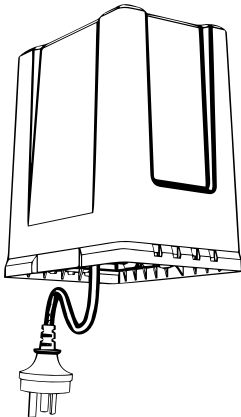
PLUG & CABLE



LOCKING RING
(INC. 2 X SCREWS)



LIGHT ASSEMBLY

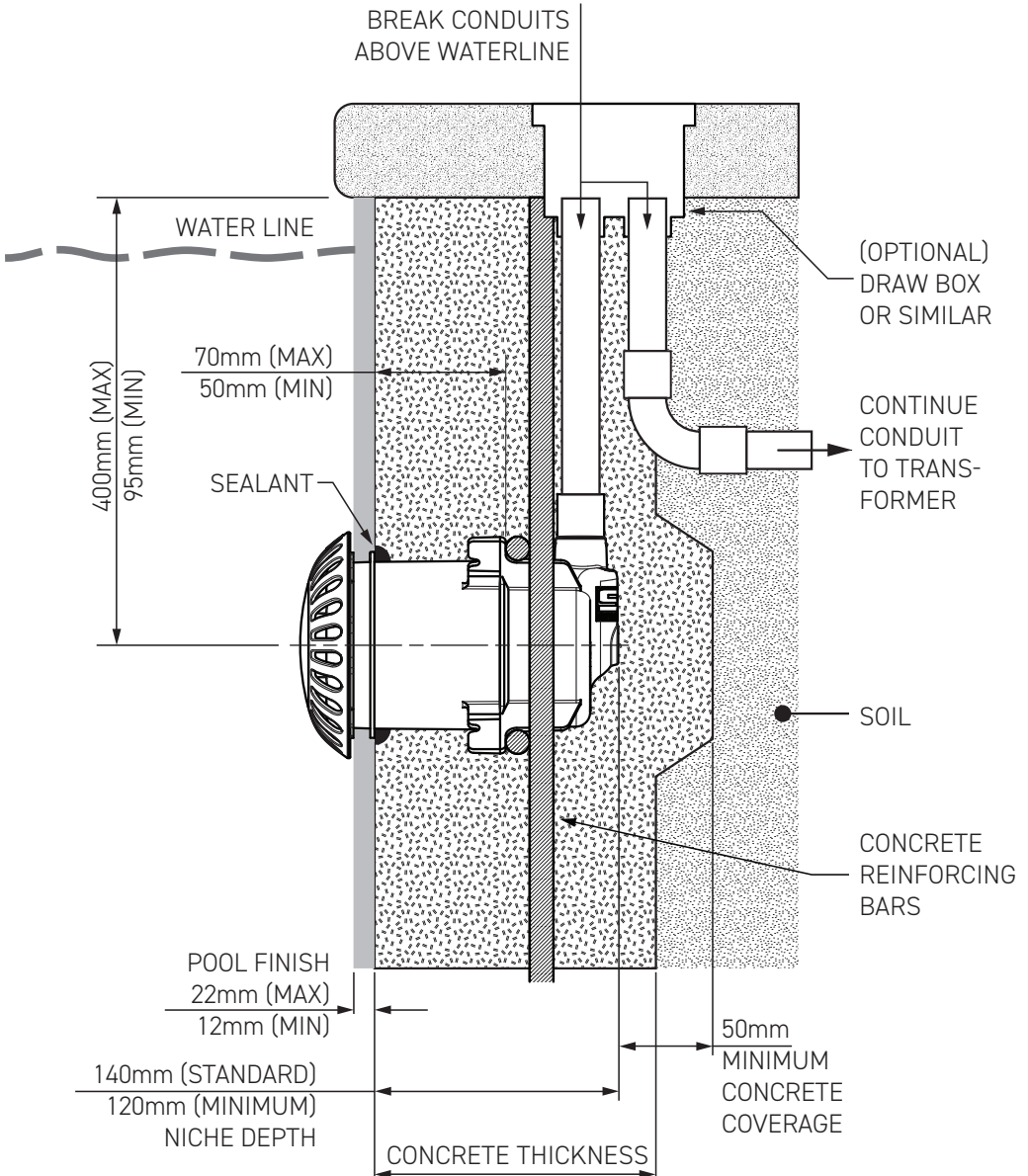


LV25-12 / LV50-12 DUAL / LV100Q-12
TRANSFORMERS
(INCLUDED IN SINGLE / DUAL / TRI OR QUAD LIGHT KITS)

FINISHED INSTALLATION

A

STANDARD WALL MOUNTING



B STEP MOUNTING

NOTE



ENSURE INSTALLED LIGHT IS **FULLY SUBMERGED** BELOW WATERLINE (ALLOWING FOR EVAPORATION)

BREAK CONDUITS ABOVE WATERLINE

(OPTIONAL) DRAW BOX OR SIMILAR

CONDUIT EXITS HORIZONTALLY FROM NICHE (SEE PAGE 12)

CONTINUE CONDUIT TO TRANSFORMER

SOIL

50mm MINIMUM CONCRETE COVERAGE

CONCRETE REINFORCING BARS

CONCRETE THICKNESS

WATER LINE

SEALANT

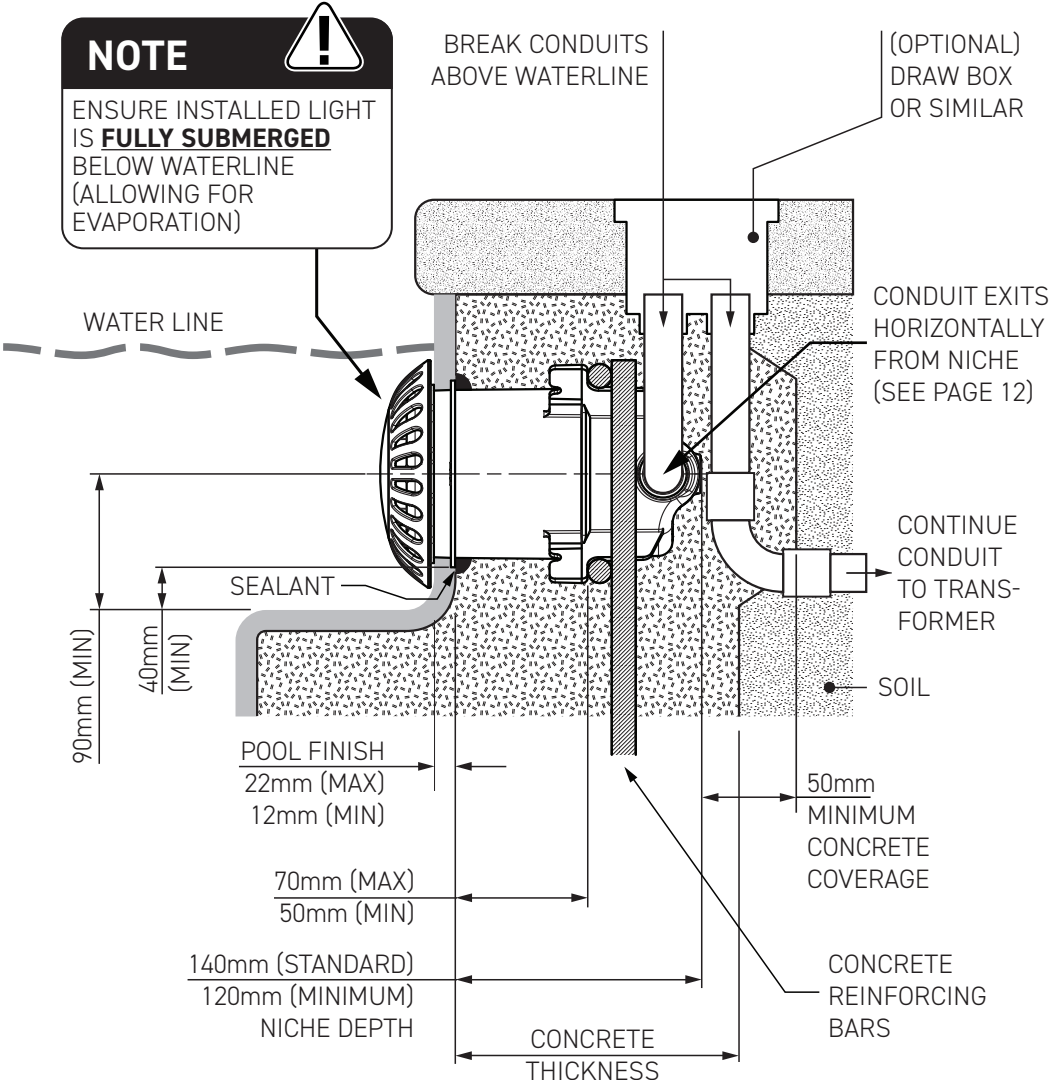
POOL FINISH
22mm (MAX)
12mm (MIN)

70mm (MAX)
50mm (MIN)

140mm (STANDARD)
120mm (MINIMUM)
NICHE DEPTH

90mm (MIN)

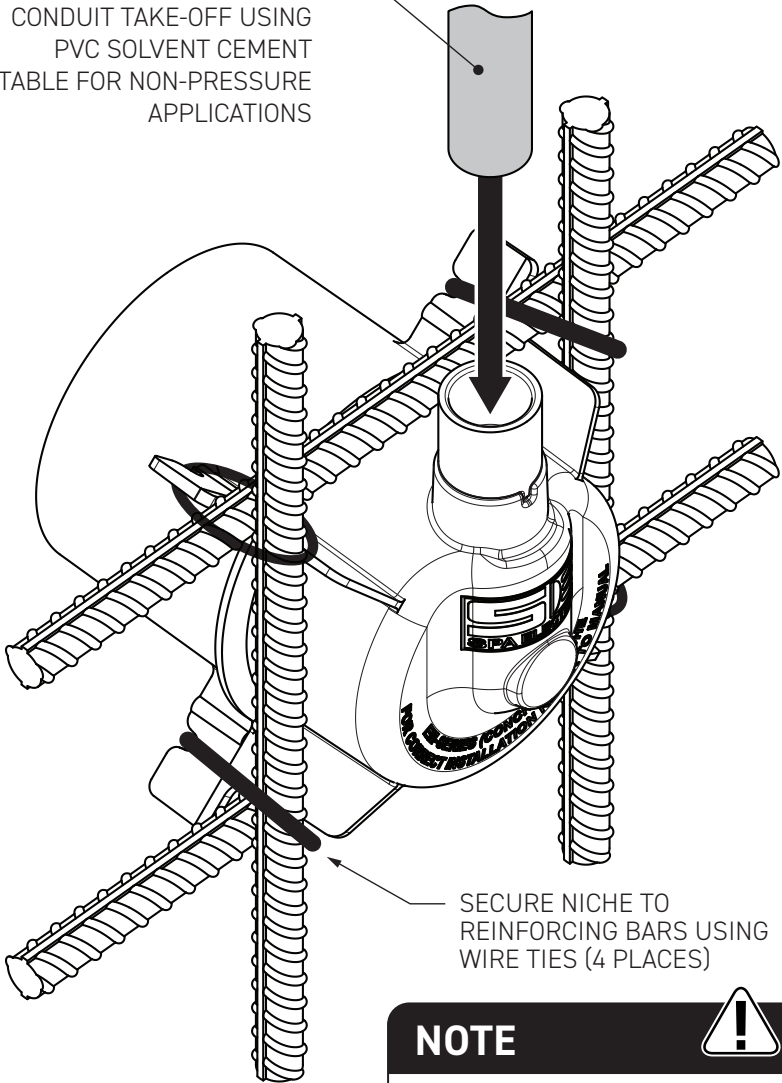
40mm (MIN)



INSTALLATION PROCEDURE

1A VERTICAL CONDUIT INSTALLATION

20mm CONDUIT GLUED INTO
CONDUIT TAKE-OFF USING
PVC SOLVENT CEMENT
SUITABLE FOR NON-PRESSURE
APPLICATIONS



SECURE NICHE TO
REINFORCING BARS USING
WIRE TIES (4 PLACES)

NOTE

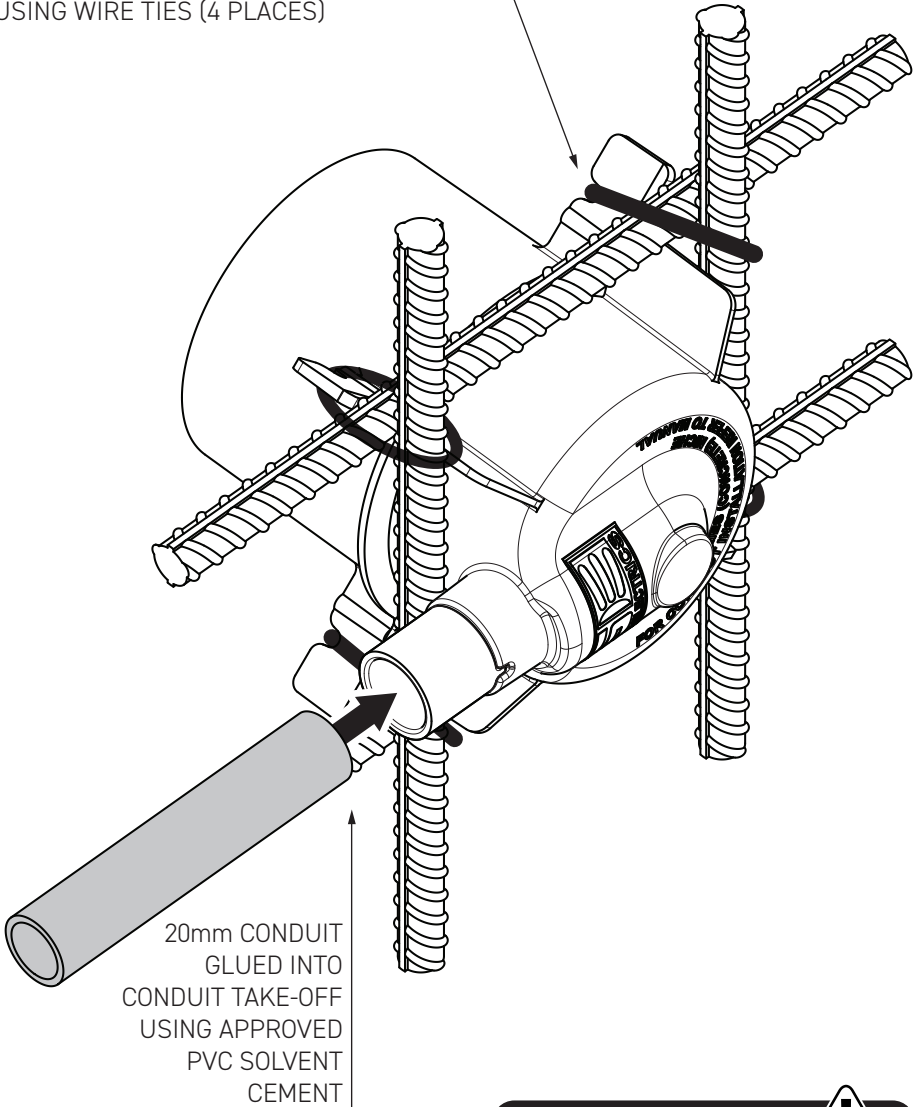


REFER TO PAGES **8-10** FOR
ALTERNATIVE INSTALLATION
CONFIGURATIONS

1B

HORIZONTAL CONDUIT INSTALLATION

SECURE NICHE TO REINFORCING BARS
USING WIRE TIES (4 PLACES)




NOTE




REFER TO PAGES **8-10** FOR
ALTERNATIVE INSTALLATION
CONFIGURATIONS

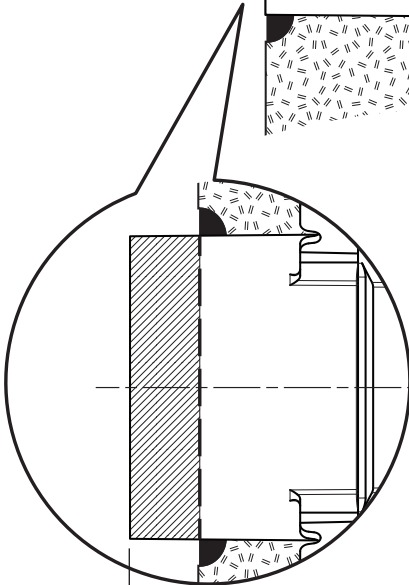
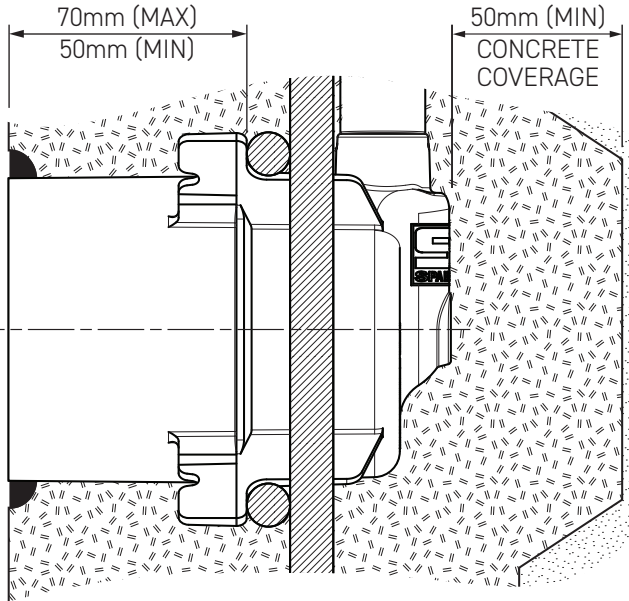
2

NICHE & CONCRETE DETAILS

NOTE 



SCALLOP
CONCRETE AROUND
NICHE PERIMETER
AND FILL WITH
SEALANT

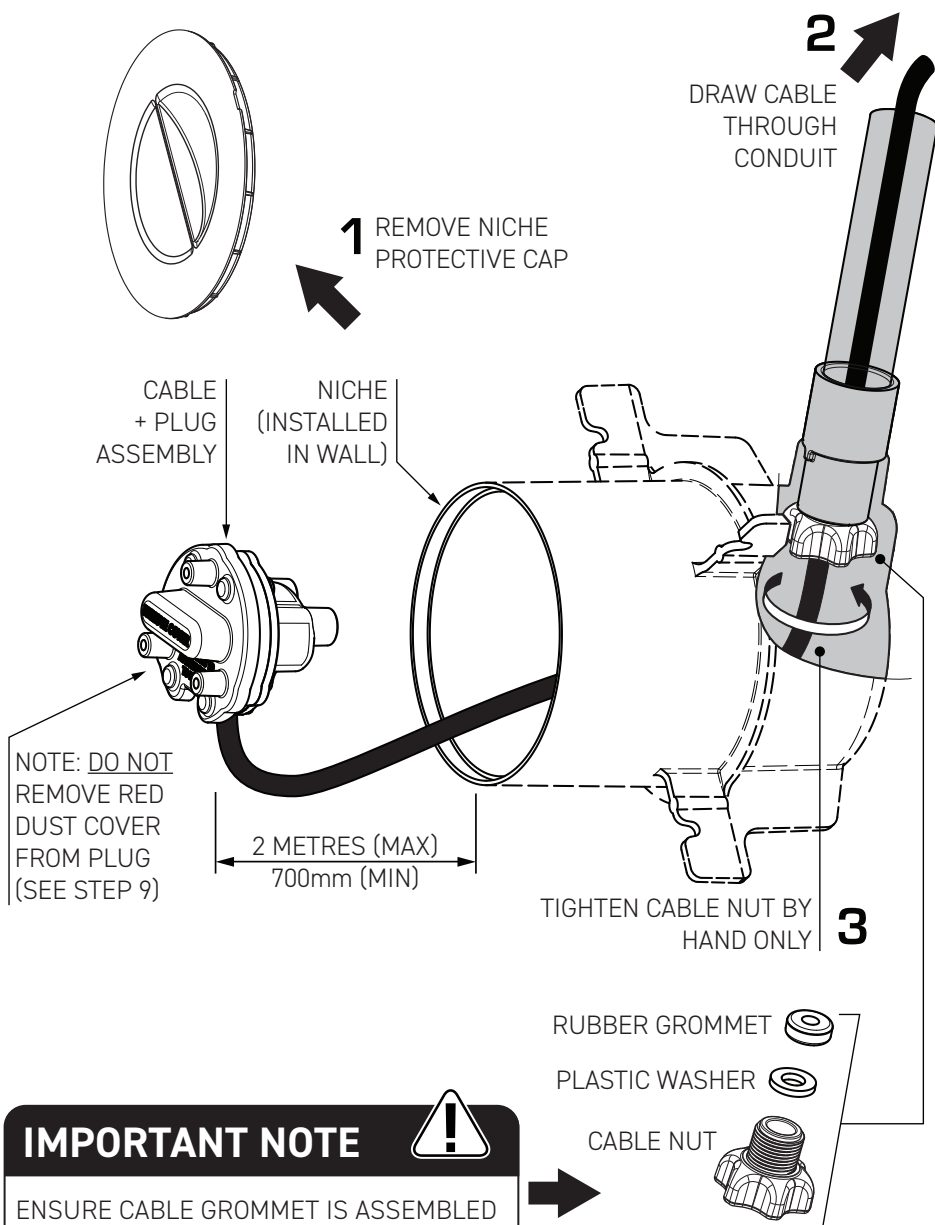


20mm
(MAX)

NICHE PROTRUDING?
NICHE CAN BE TRIMMED
A MAXIMUM OF 20mm
IF IT PROTRUDES
FORWARD OF FINISHED
CONCRETE SURFACE

3

INSTALL CABLE & PLUG INTO NICHE



IMPORTANT NOTE



ENSURE CABLE GROMMET IS ASSEMBLED AS SHOWN.

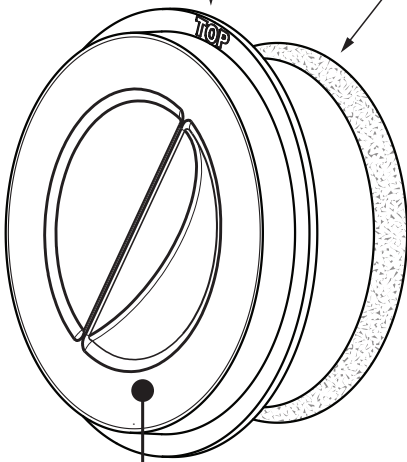
4

INSTALL MOUNTING RING INTO NICHE

NOTE 
ENSURE "TOP" IS POSITIONED CORRECTLY

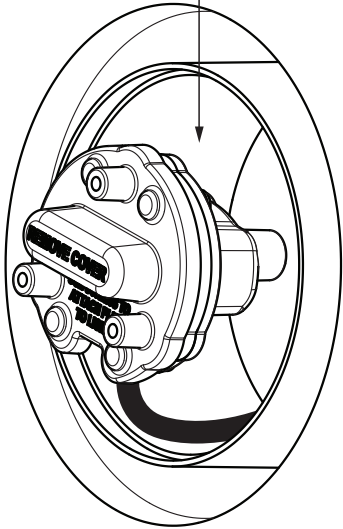
1 COIL PLUG & CABLE INSIDE NICHE

2 APPLY PVC SOLVENT CEMENT TO MOUNTING RING



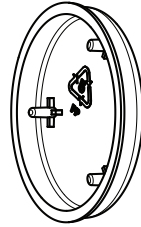
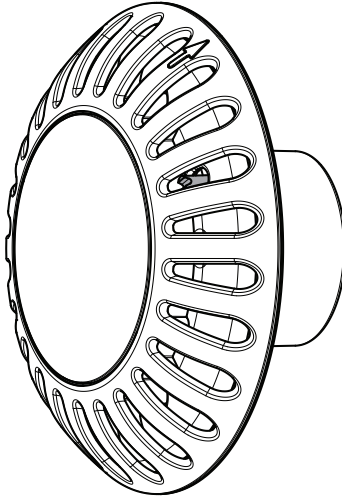
NOTE 
ENSURE PROTECTIVE CAP REMAINS IN MOUNTING RING (UNTIL STEP 7)

3 FIRMLY PUSH MOUNTING RING INTO NICHE

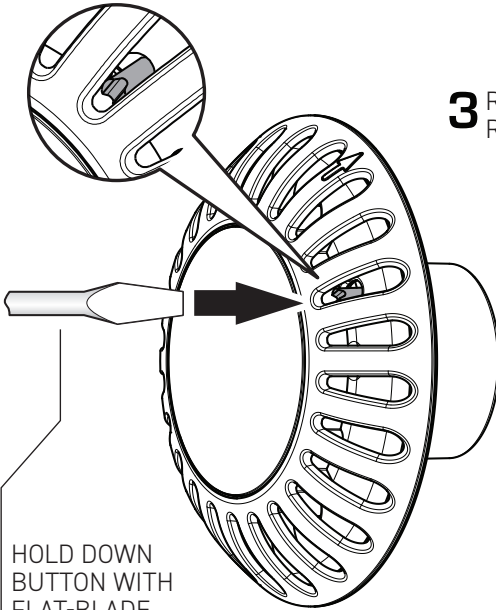


6

REMOVE LOCKING RING

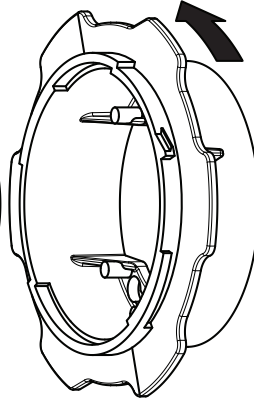


1 REMOVE
DUST CUP



2 HOLD DOWN
BUTTON WITH
FLAT-BLADE

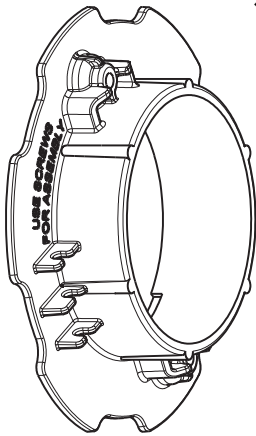
3 ROTATE ANTI-CLOCKWISE &
RELEASE LOCKING RING



4
REMOVE
LOCKING RING

7

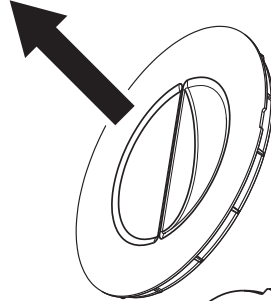
ASSEMBLE LOCKING RING TO MOUNTING RING



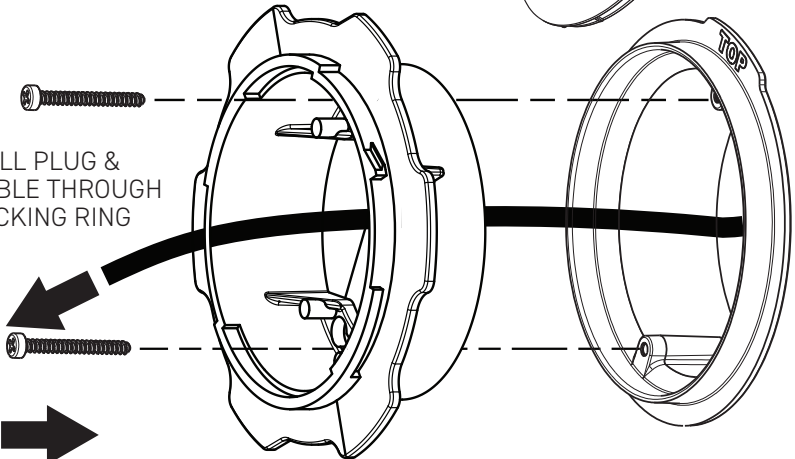
1 REMOVE MOUNTING SCREWS FROM REAR OF LOCKING RING



2 REMOVE PROTECTIVE CAP FROM MOUNTING RING



3 PULL PLUG & CABLE THROUGH LOCKING RING



4 ASSEMBLE LOCKING RING WITH MOUNTING RING USING MOUNTING SCREWS PROVIDED

8

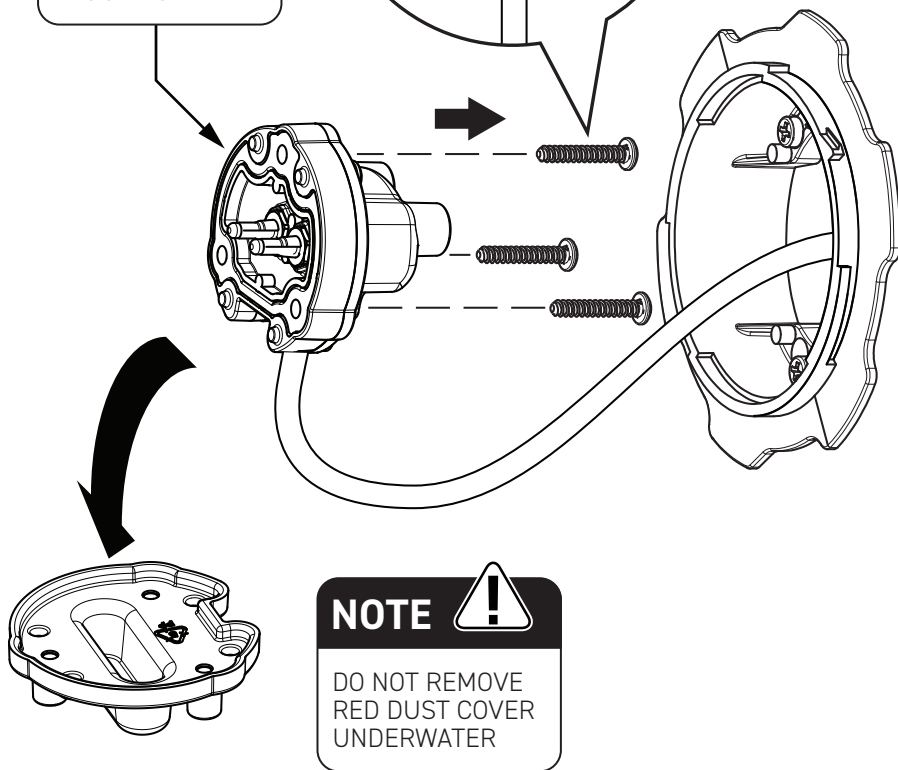
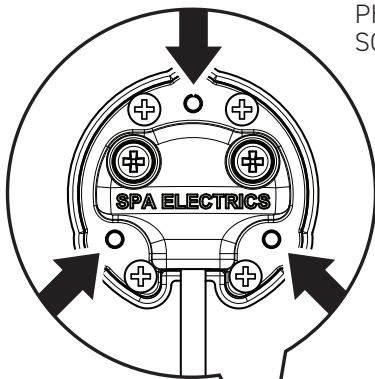
REMOVE PLUG DUST COVER

REMOVE DUST COVER FROM PLUG USING PHILLIPS-HEAD (NO.2) SCREW-DRIVER

NOTE



ENSURE SEAL IS SEATED FLAT IN PLUG BASE



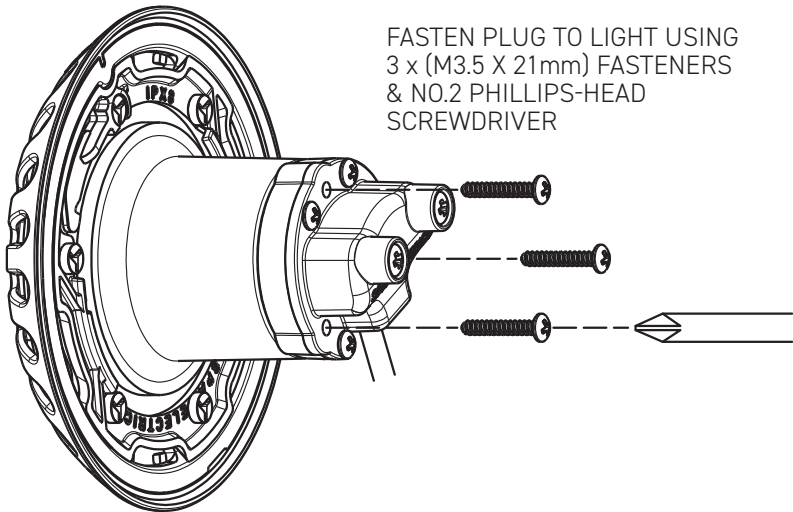
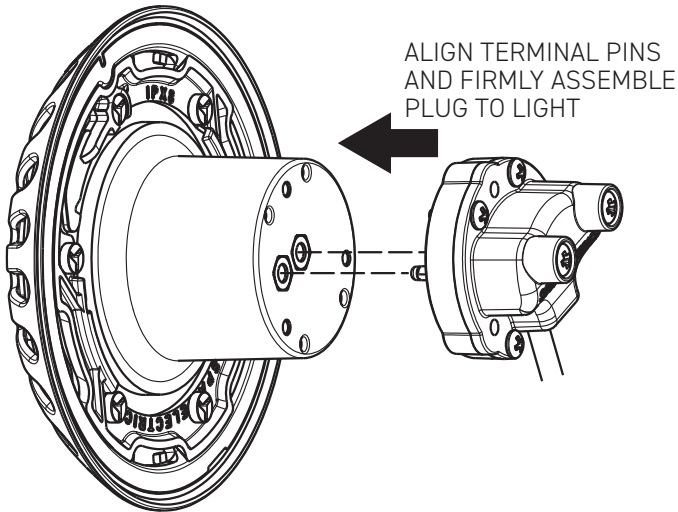
NOTE



DO NOT REMOVE RED DUST COVER UNDERWATER

9

ASSEMBLE PLUG TO LIGHT

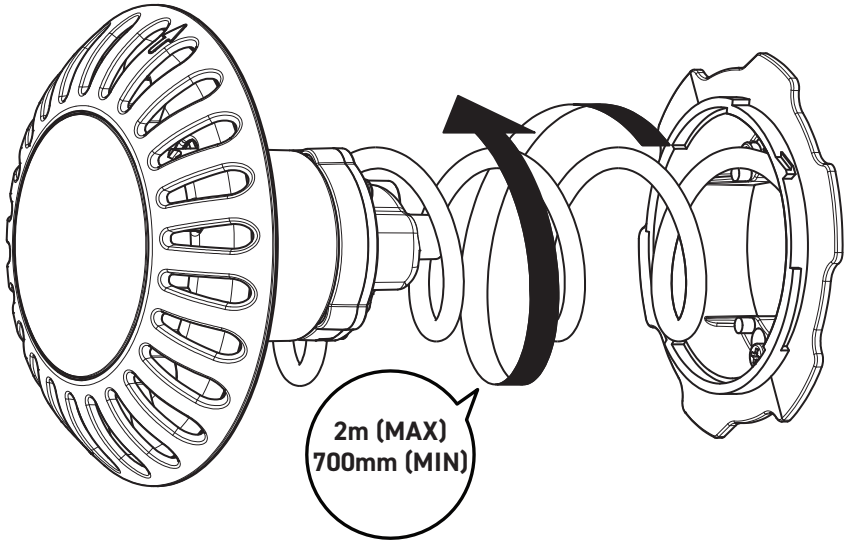
**IMPORTANT NOTES**

- DO NOT OVERTIGHTEN SCREWS
- DO NOT USE POWER-TOOLS
- DO NOT ADD SEALANTS OR GREASES
- ENSURE ALL SURFACES ARE CLEAN AND DRY
- **DO NOT ASSEMBLE UNDERWATER**

LIGHT ASSEMBLY

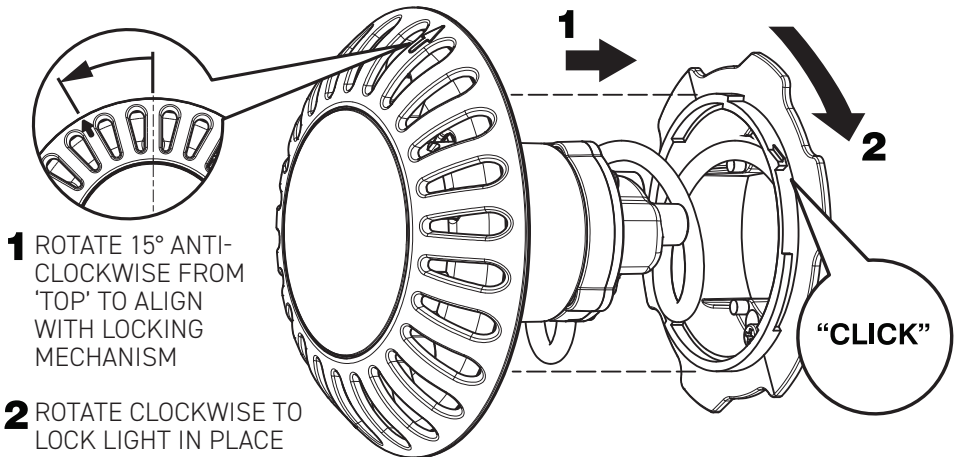
1

COIL CABLE INSIDE NICHE



2

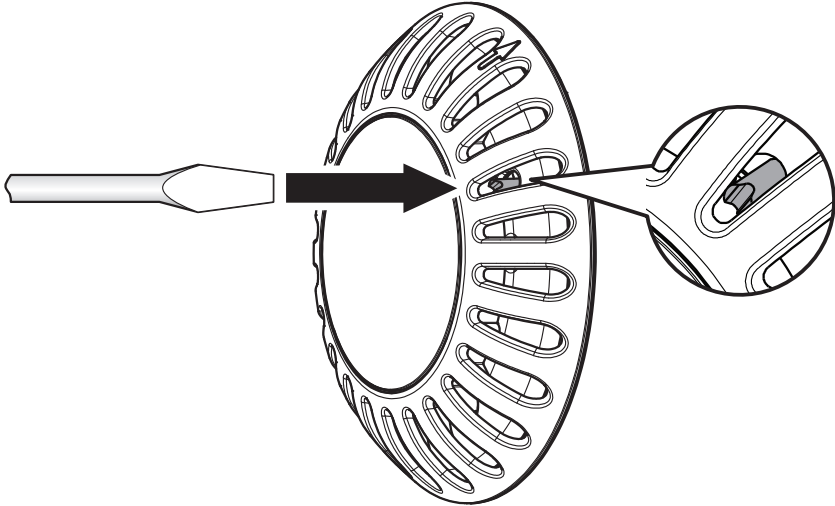
INSERT LIGHT INTO LOCKING RING



LIGHT REMOVAL

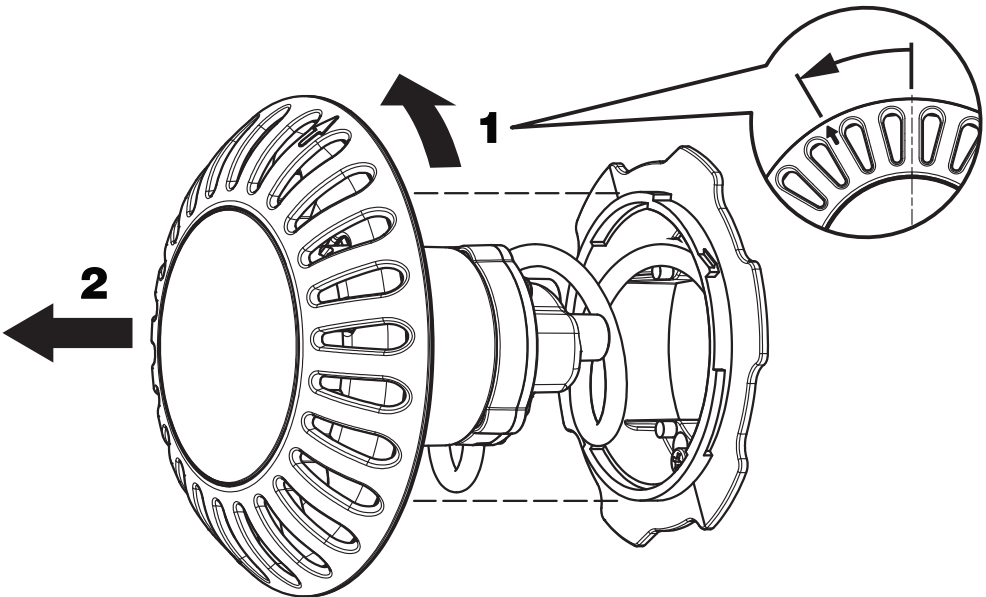
1

PUSH DOWN BUTTON WITH FLAT BLADE & HOLD



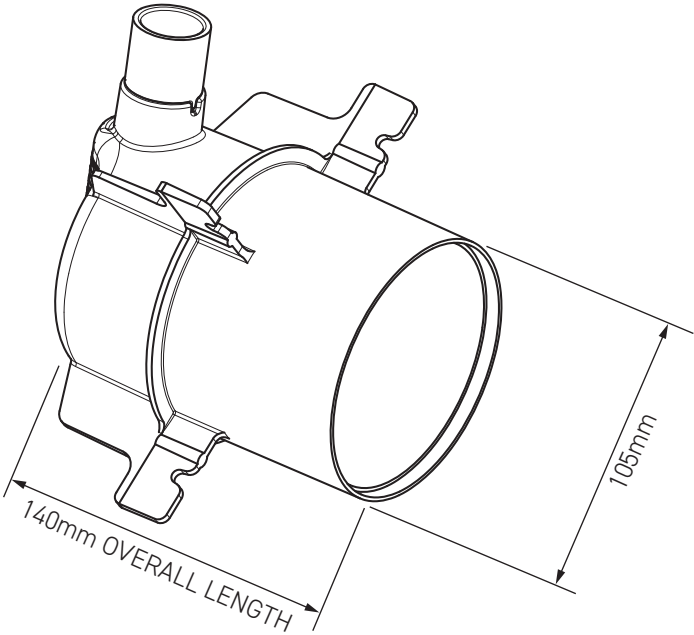
2

ROTATE ANTI-CLOCKWISE & RELEASE FROM LOCKING RING

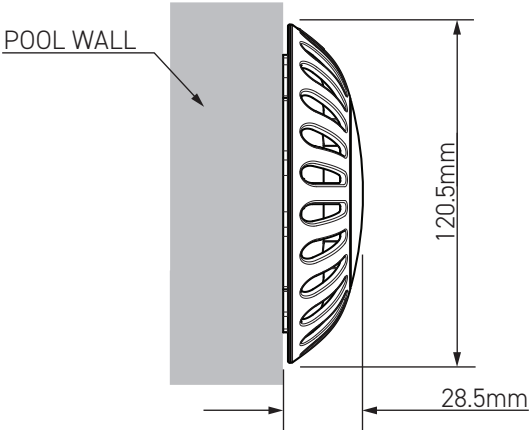


KEY DIMENSIONS

A NICHE



B INSTALLED LIGHT



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