PRODUCTION BOOKLET

NTS
NESPA TILED SPAS

PRECISION CRAFTED. BUILT TO LAST.

| 30 OSPREY (ZAHM)

530.534.9910 | JIM@TILEDSPAS.COM | NESPA.NET

2800 RICHTER AVE. SUITE C, OROVILLE CA 95966

Important Spa Information

Inportant - Keep This Booklet

Please retain this owner's manual in a safe location for future reference. This manual is specific to your NESPA spa and contains your spa's unique identification information, including the model number, serial number, equipment specifications, and warranty records. This information may be required when requesting technical support, warranty service, ordering replacement parts, or scheduling future maintenance.

In addition to your spa's identification records, this manual contains important operating instructions, startup procedures, maintenance recommendations, troubleshooting guides, and safety information that will help you properly operate and care for your spa throughout its service life.

Spa Model	2088
Spa Serial Number	ZAHM 09/26
Date Purchased	
Date Installed	
Spa Dealer’s Name	
Spa Dealer’s Phone #	
Spa Dealer’s Address	

Congratulations!

You’ve purchased a Nespa Tiled Spa. With a little preparation and care, your spa will give you many years of enjoyment. This booklet has been designed to provide you with all of the information you’ll need to ensure a safe, speedy, and trouble-free spa delivery and installation.

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Proposition 65 (FOR CALIFORNIA RESIDENTS ONLY)



RECOMMENDED MAINTENANCE

Please Note:

These are only recommended guidelines to care for a Nespa all tiled spa. Local codes may require additional procedures, therefore consult with a pool professional that is LA county Health Department ceritfied for more information on local codes and requirements.

SPA SURFACE

Your spa tile is acid resistant and frost-proof. The Tile does not absorb germs or algae. Tile does not stain and is very easy to clean. Color does not fade or loose its luster. All grouts are epoxy based and are extremely durable. To remove scum line use soft nylon brush and small amounts of biodegradable soaps. Do not use abrasive brushes or chemicals.

MAINTENANCE

A. CHEMICALS:

1) **It is important to maintain a chlorine residual of 2 PPM in the spa. That residual can be provided by chlorine or bromine.**
2) **It is recommended to use Bromine or dichlor (granular) forms of chlorine. If bromine Tabs are used we suggest floating or inline dispenser.**
3) **Never use acid to lower Ph in the tile spa.**
4) **Never use trichlor chlorine (1" or 3") tablets in the Nespa spas.**
5) **Never place tablets in skimmer basket.**

B. DRAINING THE SPA:

1) **It is recommended to drain the spa at least once every 2 months depending on bath load and water clarity.**
2) **The spa should be drained through valve exiting re-circulation pump in the spa equipment room or sump pump.**
3) **Note: Use caution to drain spa in the winter months or rainy season when water table is at its highest. It is possible for the spa to float due to hydraulic pressure from surrounding water table. We advise that you consult with your local spa specialist prior to draining the spa.**

C. SPA EQUIPMENT:

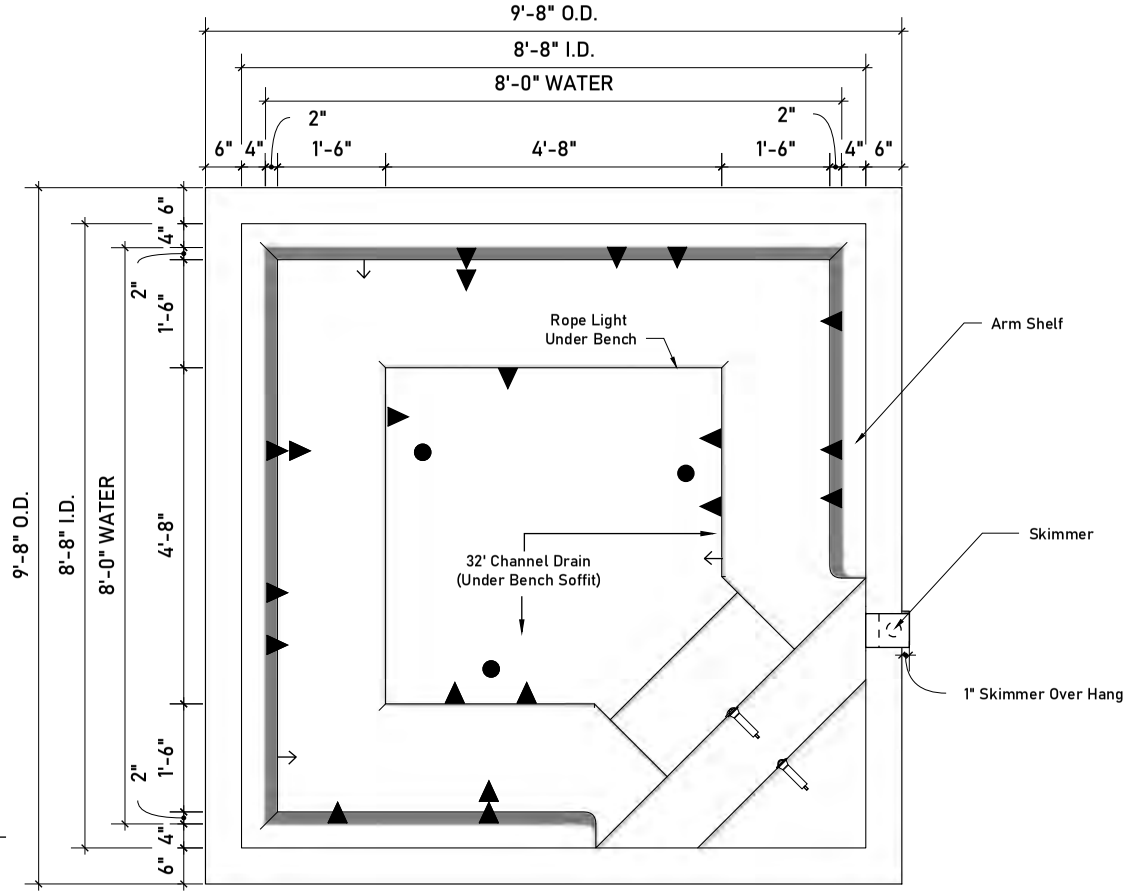
1) **Clean filter cartridge at least once every month, or when needed; i.e., if water clarity does not improve after several days.**
2) **Keep area free and clear from leaves and debris build-up.**
3) **Keep area free and clear from flooding.**

D. SPA LIGHT:

1) **Spa light has to be on GFCI circuit. It is controlled at spa side with ON/OFF.**

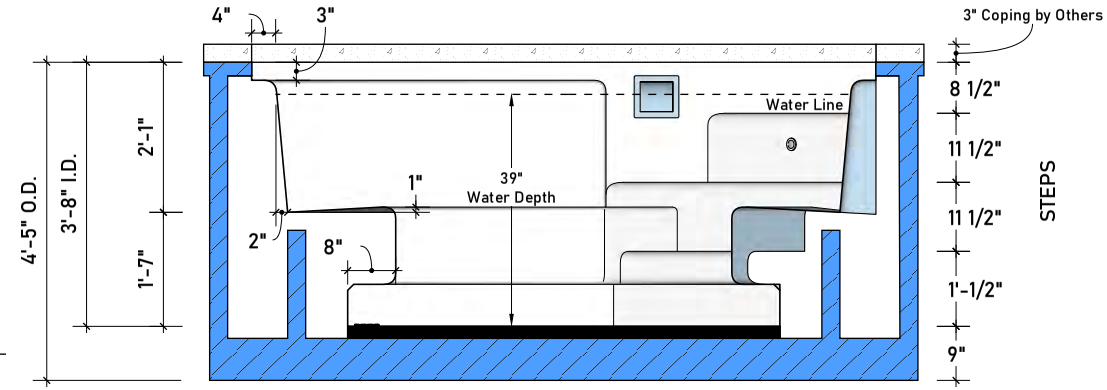
E. TILE SERVICING:

1) **Contact manufacture when servicing tile or grout. @ (530) 534-9910**



Plan View

Scale: 3/8" : 1'



Section 1

Scale: 3/8" : 1'

NESPA TILED SPAS

NESPA ENTERPRISES INC.
2800 Richter Ave, C
Oroville, CA 95966

SPA SPECIFICATION	
SHELL WEIGHT	2,500 Lbs.
WATER WEIGHT	9,984 Lbs.
TOTAL SHELL & WATER WEIGHT	12,484 Lbs.
WATER VOLUME	160 Cu. Ft
WATER GALLON	1,197 Gal.
SPA OVERALL DIMENSION	9'8" x 9'8" x 4'5"
SPA INSIDE DIMENSION	8'0" x 8'0" x 3'8"
WATER DEPTH	3'3"

SPA DATA		
ITEM	NAME	Qty.
	Spa Side	1
	Jet	26
	Return	3
	Fill	-
	Light	3
	Skimmer	1
	Suction	2
	Main drain	2
	Handrail	-

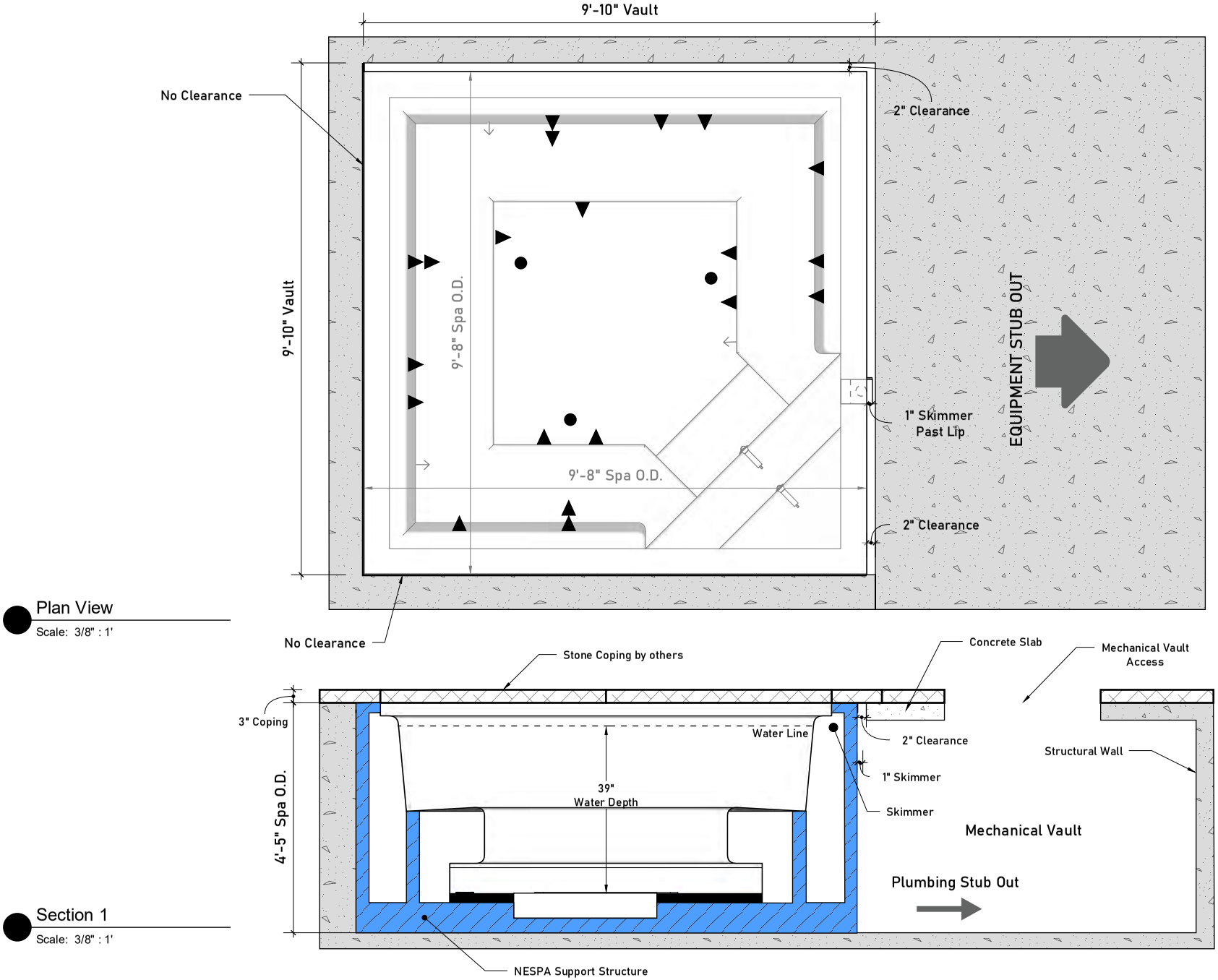
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SPA DETAIL

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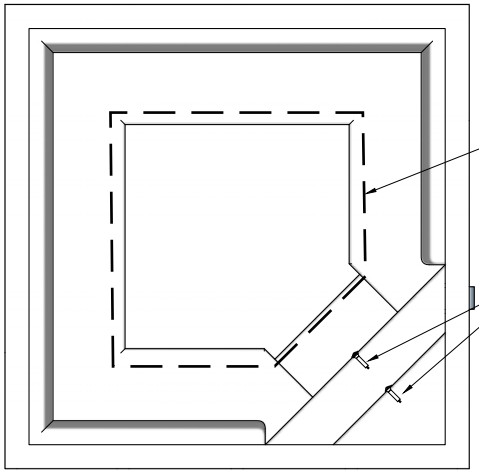
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ARCHITECTURE DETAIL

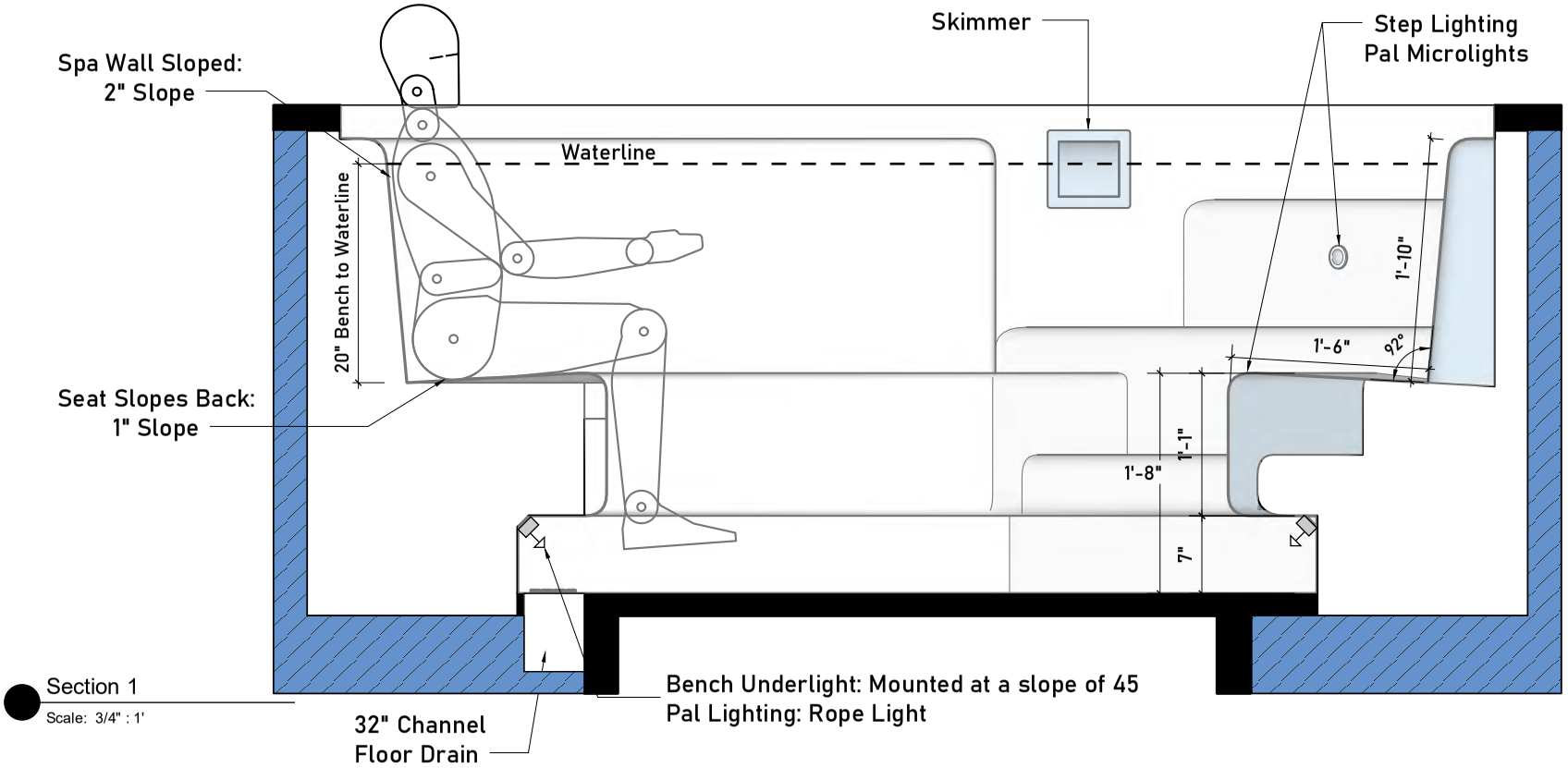
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LIGHTING LAYOUT:

Pal Lighting Rope Light
Location: Under bench
Downlight to spa floor

Pal Lighting Micro Light
Location: First & Second Step
Entrance lighting



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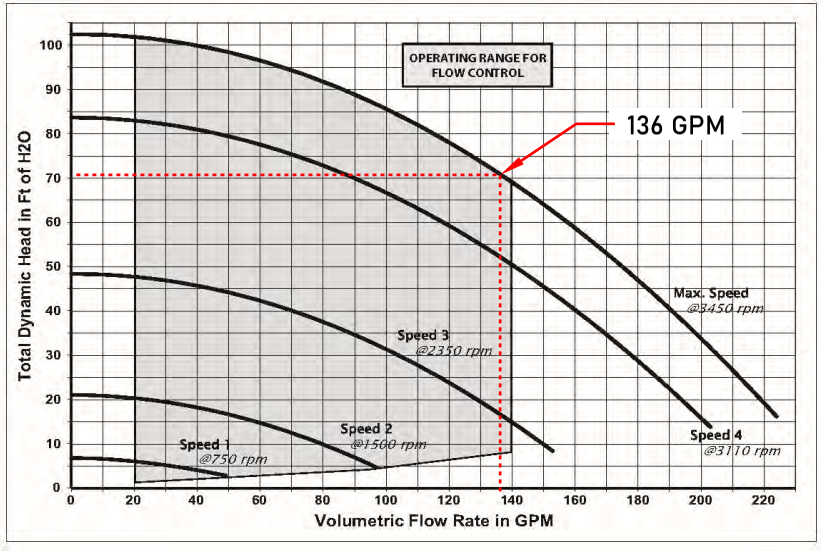
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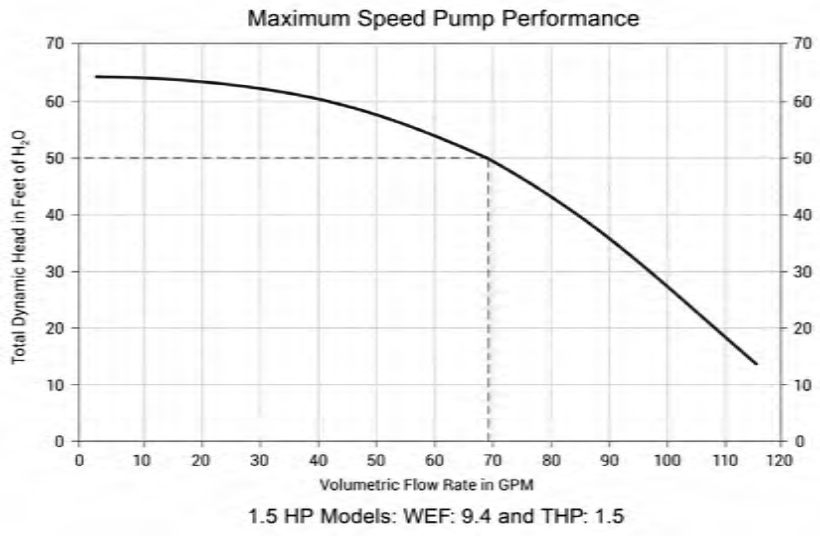
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SECTION

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PENTAIR INTELLIFO XF 3 HP



PENTAIR INTELLIFO 3 VSF 1.5 HP

EQUIPMENT (By Contractor)

ITEM	CODE	DESCRIPTION	MANUFACT	CATALOG NO.	QTY.
1	FP	INTELLIFLO 3 VSF 1.5 HP 70 GPM	PENTAIR	011066	1
2	F	PENTAIR 100 SF CARTRIDGE FILTER	PENTAIR	160316	1
3	BP	INTELLIFLO XF 3HP 136 GPM	PENTAIR	022056	2
4	H	HYDRONIC BOILER TITANIUM SHELL AND TUBE HEAT EXCHANGER	-	-	1
5	CPA	CONTROL PANEL INTELLICENTER I5P MODEL LOAD CENTER	PENTAIR	523125	1
6	ISC	PENTAIR INDOOR TOUCH CONTROL PANEL	PENTAIR	-	1
7	SC	PENTAIR IS4 SPA SIDE CONTROLLER	PENTAIR	45M2	1
8	OZ	DEL AOP 25	CMP	SEC-50-0	1
9	UL	PAL TRO MICRO LIGHT	PAL LIGHTING	-	2
10	UL1	PAL EVENGLOW ROPE LIGHT	PAL LIGHTING	-	1
11	EMS	EMERGENCY SHUTOFF SWITCH "MUSHROOM HEAD" RED	-	-	1

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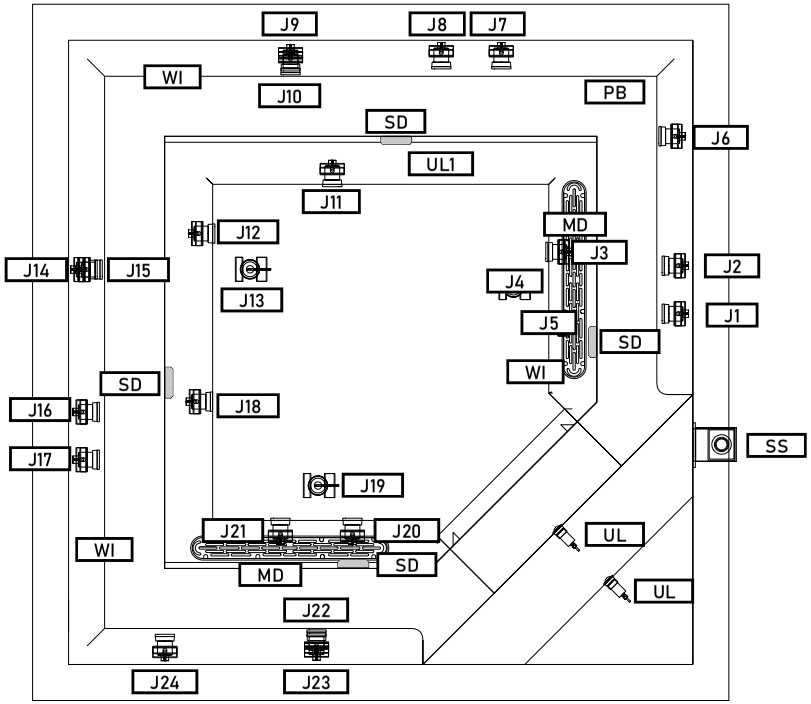
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EQUIPMENT

EQUIPMENT LIST					
ITEM	CODE	DESCRIPTION	MANUFACTURE	CATALOG NO.	QTY.
1	SS	FRONT ACCESS SKIMMER	WATERWAY	510-1500	1
2	MD	MAIN DRAIN: AQUASTAR 32CDFLxxx 32" CHANNEL DRAIN, Approved Flow Rate: Floor = 200 GPM Complies w/ ANSI / ASME A112.19.8 & NSF / ANSI 16-2011 - V.G.B.APPROVED	AQUASTAR	32CDFLxxx	2
3	SD	6" Round Hockey Puck Model: 6HPHAxxx Walls: 143 GPM Complies w/ ANSI / ASME A112.19.8 & ANSI / APSF-16	AQUASTAR	6HPHAxxx	4
4	J#	HYDRO JETS 1-1/2" WATER - 1-1/2" AIR Complies w/ ANSI / ASME A112.19.8 & ANSI / APSF-16 - UL APPROVED	HYDROAIR	10-5100	24
5	WI	INLET FITTINGS 1-1/2" WALL TYPE W/ EYEBALL COMPLIES W/ ANSI CODE ASME A112.19.8-07 UL APPROVED	HYDROAIR	10-3500	3
6	UL	PAL TREO MICRO LIGHTING	PAL LIGHTING	-	2
7	UL1	PAL EVENGLOW FLEX ROPE LIGHT	PAL LIGHTING	-	1
8	PB	POOL BOND	PERMA-CAST	PB-2008	1



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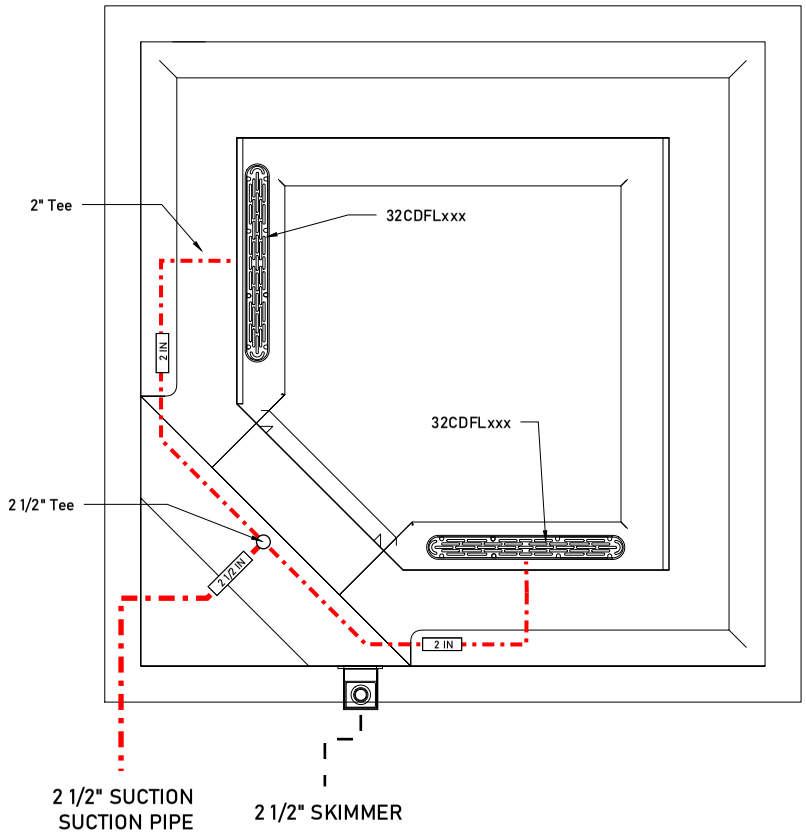
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WHITE GOODS

ALL SPA PLUMBING IN SCH 40 PVC



EQUIPMENT LIST		
ITEM	DESCRIPTION	MANUFACTURER
1	**FRONT ACCESS SKIMMER**	**WATERWAY**
2	**MAIN DRAIN: AQUASTAR 32CDFLxxx 32" CHANNEL DRAIN, Approved Flow Rate: Floor = 200 GPM Complies w/ ANSI / ASME A112.19.8 & NSF / ANSI 16-2011 - V.G.B.APPROVED**	**AQUASTAR**

Cover Model Number:
32CDFLxxx



SOFA Model No.	Pipe Size (Nominal)	Pipe Depth (Minimum)	Orientation (Wall / Floor)	Flow Rating (GPM)	Head Loss Curve
32CDFL-32f_A-2.5b_B2.98_C0.95_D0.2_E0.475_F16	2.5" (b)	2.98"	Floor (f)	110	A
32CDFL-32f_A-2x2b_B2.98_C.95_D.2_E.475_F16	2" x 2 (b)	2.98"	Floor (f)	120	B
32CDFL-32f_A-2x3b_B2.98_C.95_D.2_E.475_F16	2" x 3 (b)	2.98"	Floor (f)	150	C
32CDFL-32f_A-2.5x2b_B2.98_C0.95_D0.2_E0.475_F16	2.5" x 2(b)	2.98"	Floor (f)	150	D
32CDFL-32f_A-2.5x3b_B2.98_C0.95_D0.2_E0.475_F16	2.5" x 3(b)	2.98"	Floor (f)	200	E
32CDFL-32w_A-2.5b_B2.98_C0.95_D0.2_E0.475_F16	2.5"(b)	2.98"	Wall (w)	120	I
32CDFL-32w_A-2x2b_B2.98_C0.95_D0.2_E0.475_F16	2" x 2(b)	2.98"	Wall (w)	150	J

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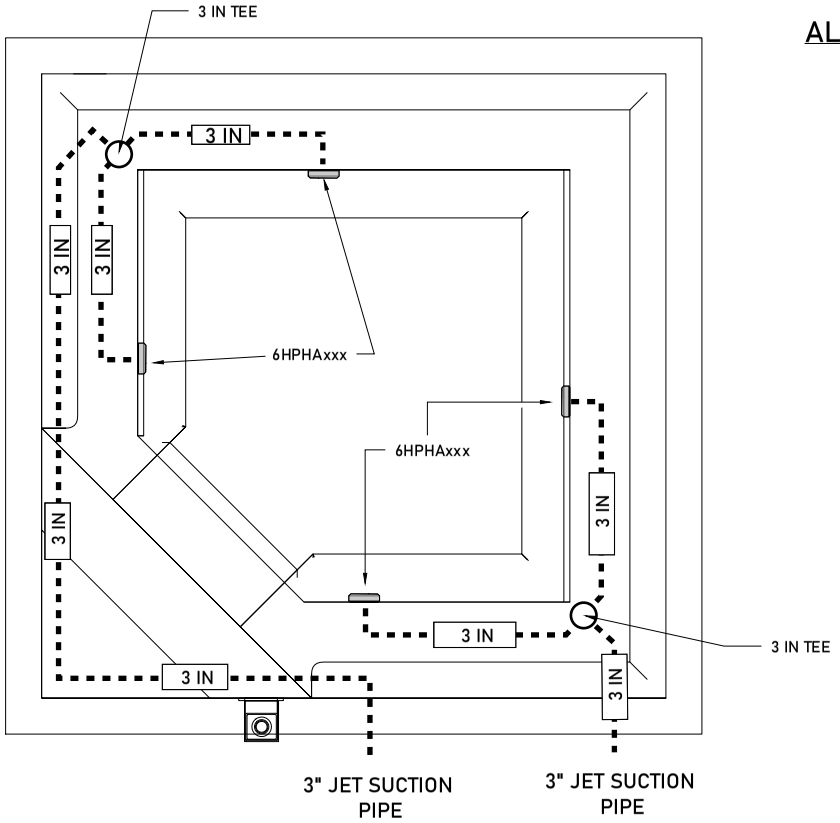
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FILTERSUCTION PLUMBING

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ALL SPA PLUMBING IN SCH 40 PVC

EQUIPMENT LIST		
ITEM	DESCRIPTION	MANUFACTURER
3	**6" Round Hockey Puck** **Model: 6HPHAxxx** **Walls: 143 GPM** Complies w/ ANSI / ASME A112.19.8 & ANSI / APSF-16	**AQUASTAR**

Cover Model Number:
6HPHAxxx



SOFA Model No.	(A) Pipe Size (Nominal)	(B) Pipe Depth (Minimum)	Orientation (Wall / Floor)	Flow Rating (GPM)	Head Loss Curve
6HPHA•615SI-6f_A-1.5b_B0_C0_D0_E2.4_F16	1.5" (b)	0"	Floor (f)	56	A
6HPHA•615T-6f_A-1.5b_B0_C0_D0_E2.3_F16	1.5" (b)	0"	Floor (f)	56	B
6HPHA•620T15S-6f_A-1.5b_B0_C0_D0_E1.8_F16	1.5" (b)	0"	Floor (f)	56	C
6HPHA•6E15T-6f_A-1.5b_B0_C0_D0_E2.3_F16	1.5" (b)	0"	Floor (f)	56	D
6HPHA•620SI-6f_A-2b_B0_C0_D0_E1.8_F16	2" (b)	0"	Floor (f)	96	E
6HPHA•625T20S-6f_A-2b_B0_C0_D0_E1.8_F16	2" (b)	0"	Floor (f)	96	F
6HPHA•6HA25T20S-6f_A-2b_B0_C0_D0_E1.8_F16	2" (b)	0"	Floor (f)	96	G
6HPHA•RND-6f_A-2b_B0_C0_D0_E1.8_F16	2" (b)	0"	Floor (f)	96	H
6HPHA•4HPAP•415SI-6f_A-1.5b_B0_C0_D0_E2.4_F16	1.5" (b)	0"	Floor (f)	56	I
6HPHA•4HPAP•415T-6f_A-1.5b_B0_C0_D0_E2.4_F16	1.5" (b)	0"	Floor (f)	56	J
6HPHA•4HPAP•420SI-6f_A-1.5b_B0_C0_D0_E2.4_F16	1.5" (b)	0"	Floor (f)	56	K
6HPHA•4HPAP•420T15S-6f_A-1.5b_B0_C0_D0_E2.4_F16	1.5" (b)	0"	Floor (f)	56	L
6HPHA•615SI-6w_A-1.5b_B0_C0_D0_E2.37_F16	1.5" (b)	0"	Wall (w)	104	M
6HPHA•615T-6w_A-1.5b_B0_C0_D0_E2.29_F16	1.5" (b)	0"	Wall (w)	104	N
6HPHA•620T15S-6w_A-1.5b_B0_C0_D0_E2.16_F16	1.5" (b)	0"	Wall (w)	104	O
6HPHA•6E15T-6w_A-1.5b_B0_C0_D0_E2.3_F16	1.5" (b)	0"	Wall (w)	104	P
6HPHA•620SI-6w_A-2b_B0_C0_D0_E2.15_F16	2" (b)	0"	Wall (w)	143	Q
6HPHA•625T20S-6w_A-2b_B0_C0_D0_E1.8_F16	2" (b)	0"	Wall (w)	143	R
6HPHA•6HA25T20S-6w_A-2b_B0_C0_D0_E1.8_F16	2" (b)	0"	Wall (w)	143	S
6HPHA•RND-6w_A-2b_B0_C0_D0_E1.81_F16	2" (b)	0"	Wall (w)	143	T
6HPHA•4HPAP•415SI-6w_A-1.5b_B0_C0_D0_E2.4_F16	1.5" (b)	0"	Wall (w)	56	U

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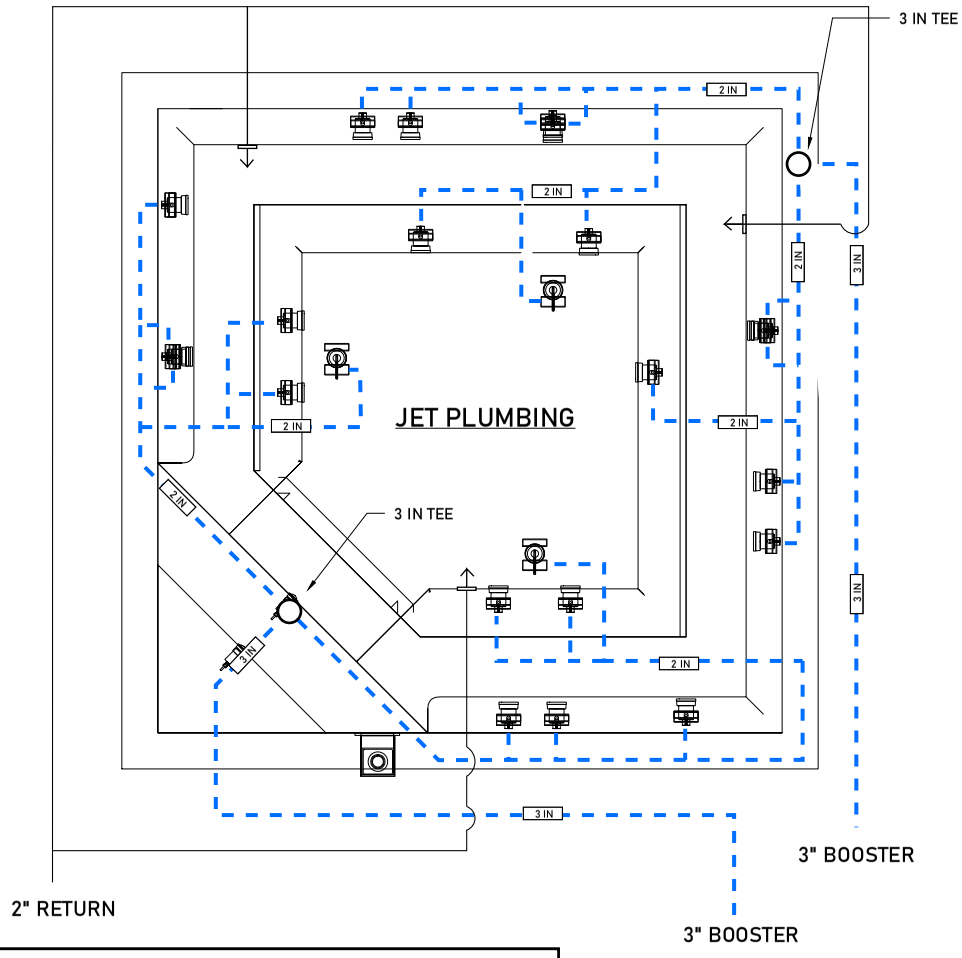
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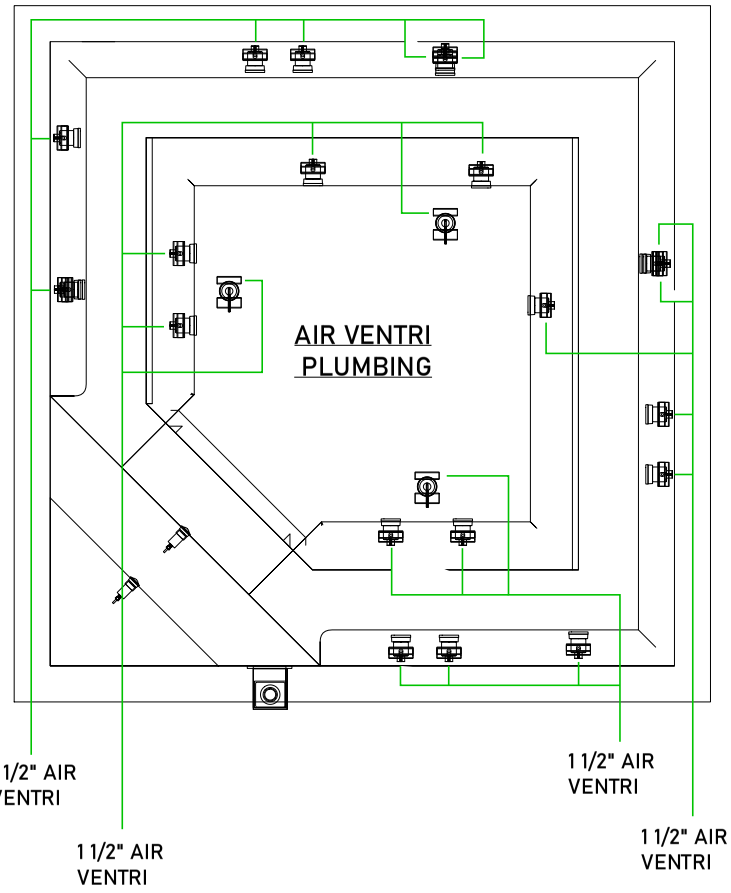
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JET SUCTION PLUMBING

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EQUIPMENT LIST		
ITEM	DESCRIPTION	MANUFACTURE
5	HYDRO JETS 1-1/2" WATER - 1-1/2" AIR Complies w/ ANSI / ASME A112.19.8 & ANSI / APSF-16 - UL APPROVED	HYDROAIR
6	INLET FITTINGS 1-1/2" WALL TYPE W/ EYEBALL COMPLIES W/ ANSI CODE ASME A112.19.8-07 UL APPROVED	HYDROAIR

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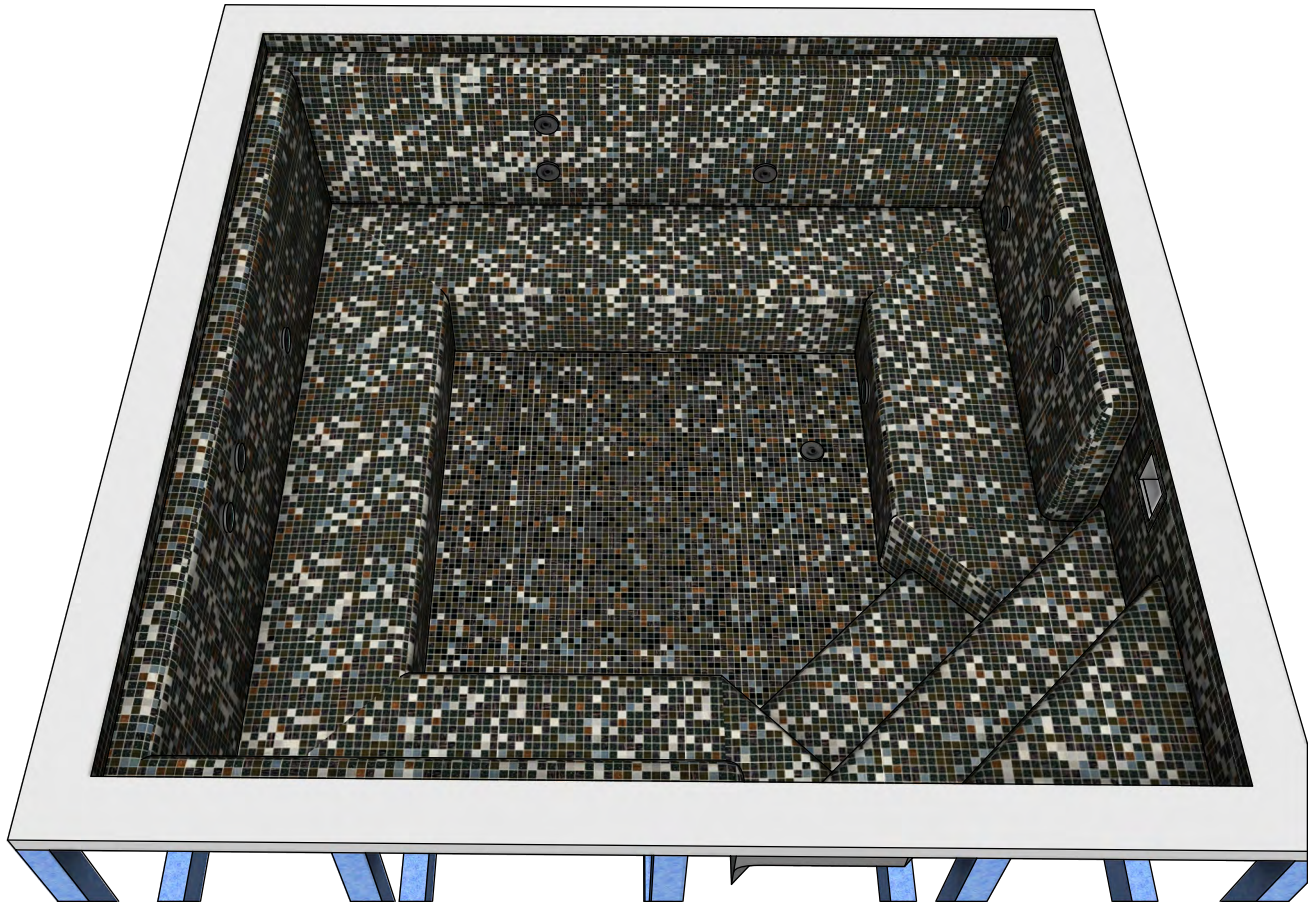
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JET & RETURN PLUMBING

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Disclaimer: This rendering is for illustration purposes only. Actual tile colors and finishes may vary from those shown due to lighting conditions and display settings.

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TILE SPECIFICATION

2088

ICC-ES PMG Product Certificate

PMG-1161

Effective Date: September 2025

This listing is subject to re-examination in one year.

www.icc-es-pmg.org | (800) 423-6587 | (562) 699-0543 *A Subsidiary of the International Code Council®*

CSI: DIVISION: 13 00 00 – SPECIAL CONSTRUCTION
Section: 13 17 00 – Tub and Pools

Product certification system:

The ICC-ES product certification system includes testing samples taken from the market or supplier's stock, or a combination of both, to verify compliance with applicable codes and standards. The system also involves factory inspections, and assessment and surveillance of the supplier's quality system.

Product: Spa Shell (Tile Lined FRP)

Listee: Nespa Enterprises, Inc.
2800 Richter Avenue, Suite C
Oroville, CA 95966
www.tiledspas.com

Compliance with the following codes:

2024, 2021, 2018, 2015, 2012 and 2009 *International Swimming Pool and Spa Code*™ (ISPSC)
2024, 2021, 2018, 2015, 2012 and 2009 *Uniform Swimming Pool, Spa and Hot Tub Code*® (USPSHTC)*

**Code is a copyrighted publication of the International Association of Plumbing and Mechanical Officials*

Compliance with the following standards:

IAPMO/ANSI Z124.7-2013(R2018), Prefabricated Plastic Spa Shells
ANSI/APSP/ICC-3 2014(R2023), Permanently Installed Residential Spas and Swim Spas

Identification:

Each unit of Spa Shell shall be marked with manufacturer's name or trademark and ICC-ES PMG mark of conformity. Marking shall be permanent and legible so as to be visible after installation. A label shall be permanently affixed to each unit in a visible location and shall include the manufacturer's name and/or trademark, and model designation. Units manufactured as "Shell Only" shall be so identified and labeled. Unit shall be permitted to be marked "IAPMO/ANSI Z124.7" signifying compliance with the standard.

Installation:

Each unit of Spa shell shall be installed in accordance with manufacturer's published installation instructions and applicable codes.

Listings are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the listing or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this listing, or as to any product covered by the listing.

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Legacy 16'	Legacy Serra 40G	Ten Ft. Round
Legacy 18'	Legacy Serra 40S	Therapy Pool
Legacy 20'	Legacy SQC 8' x 20'	Therapy Pool 1016-15W-CS
Legacy 40	Legacy SQC 10' x 20' 3S	Therapy Pool 1018-2W-CS
Legacy 6' x 9' CS	Legacy SQC 12' x 32'	Vallarta
Legacy 6.3' x 10.3' CS	Legacy SQC 12' x 32' SR0313909	WALDORF
Legacy 6.7' x 9.7'	Maxima	
Legacy 7-4' x 17-10' CS	Maxima II	
Legacy 7.5' x 10' CS	Mirage 9'	
2066	4588	5510
2077	4599	5512
2088	5077	5514
2099	5088	5516
2577	5099	5518
2588	5010	5520
2599	5012	5577
4077	5014	5588
4088	5016	5599
4099	5018	
4577	5020	

Tile lined, polyester resin reinforced fiberglass spa shells in various colors, sizes, and configurations. May or may not be provided with insulation. All units, whether factory or field assembled, are required to have suction fittings installed which are certified to ASME A112.19.8 or ANSI/APSP-16 for anti-hair and body entrapment. All units are listed for above or below ground installation and may be portable or permanent.

Conditions of listing:

1. NESPA's Spa Shell shall be installed in accordance with manufacturer's published installation instruction and applicable codes.
2. NESPA Spa Shell are under a quality control program with annual inspection by ICC-ES.

NESPA TILED SPAS

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CERTIFICATION

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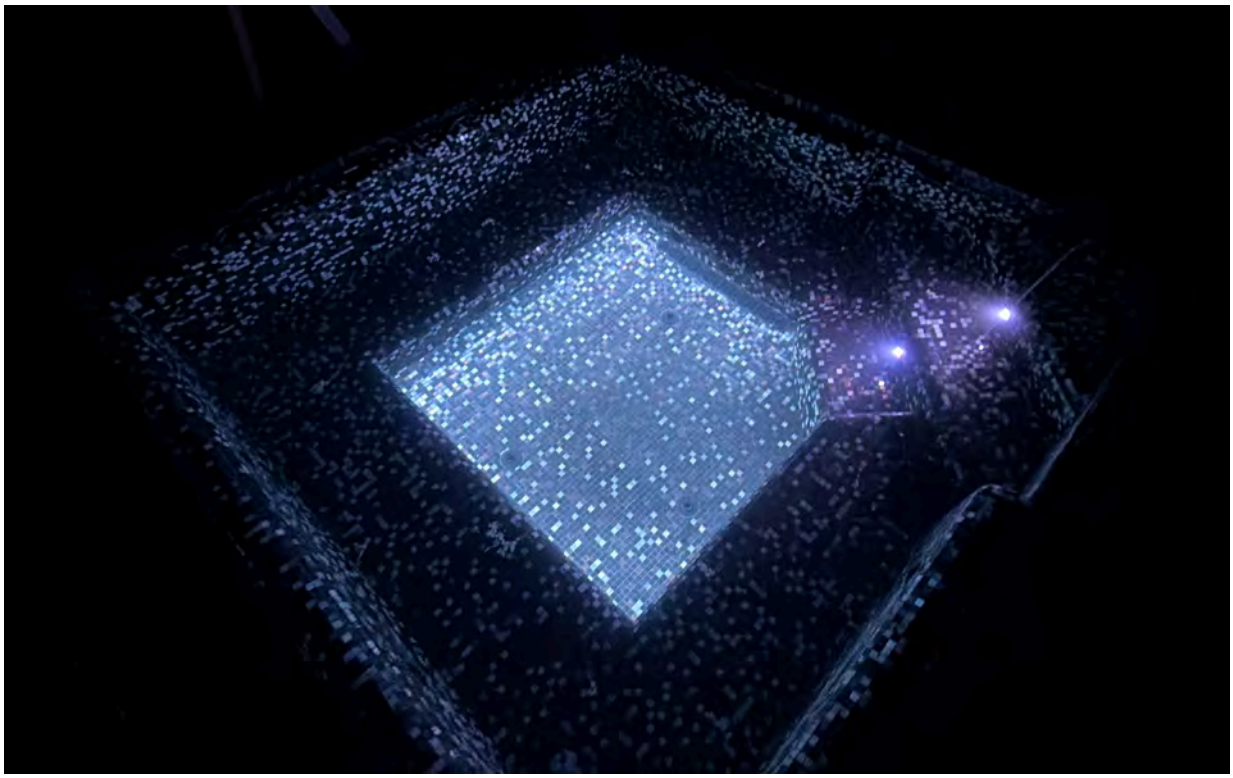
FINISHED TILE

DRAWN BY NESPA

PROJECT:
30 OSPREY

NESPA ENTERPRISES INC
.2800 Richter Ave, C
Oroville, CA 95966 (530)
534 - 9910



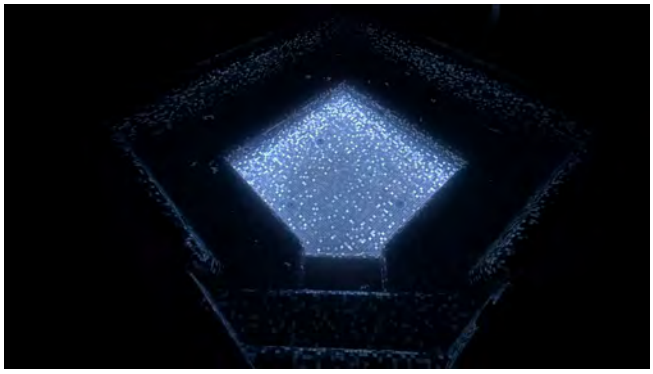
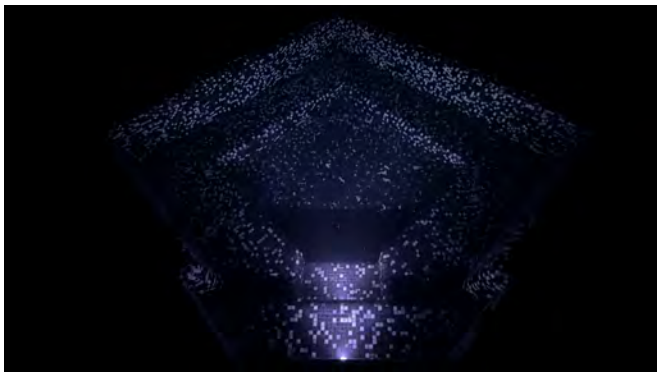
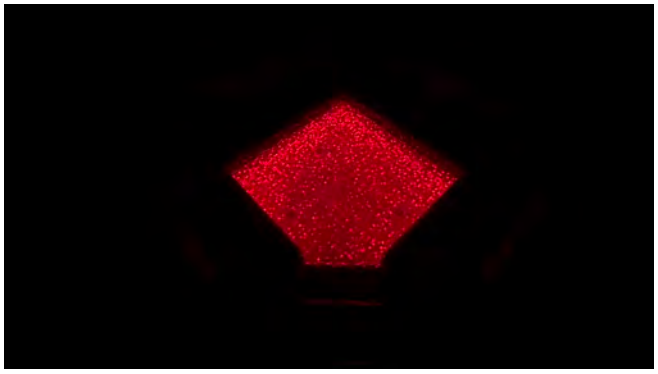
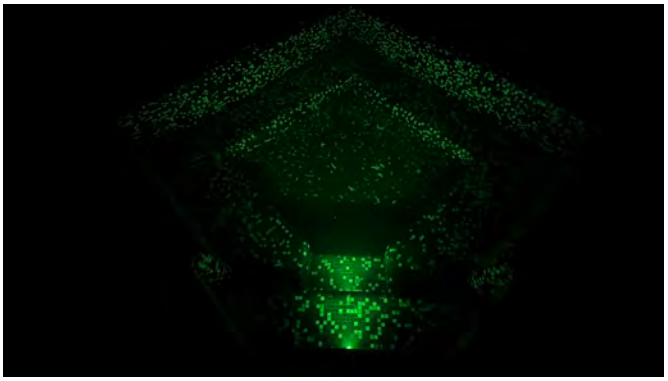
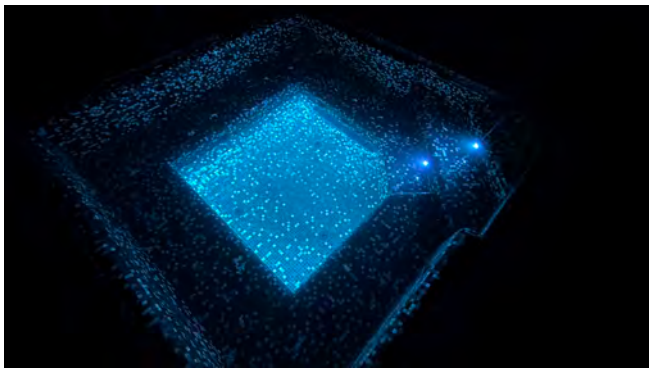
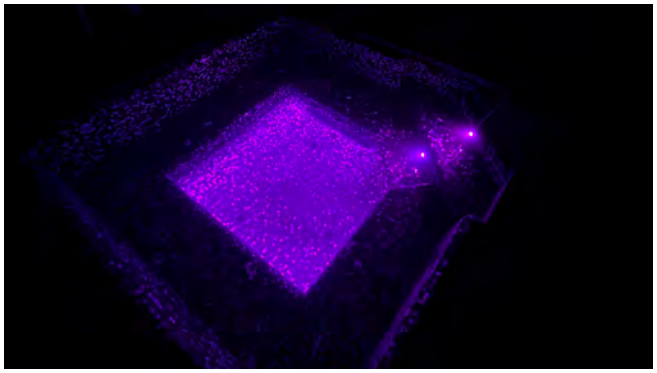
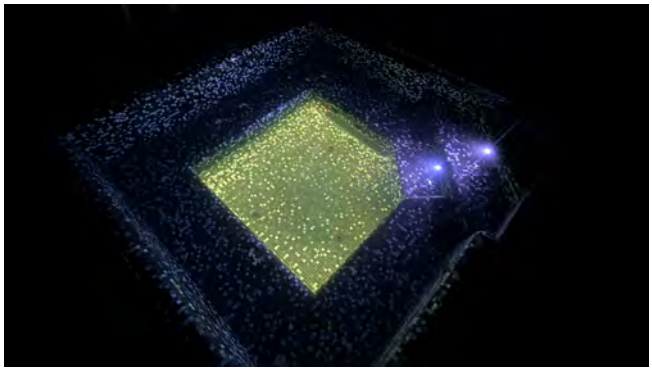
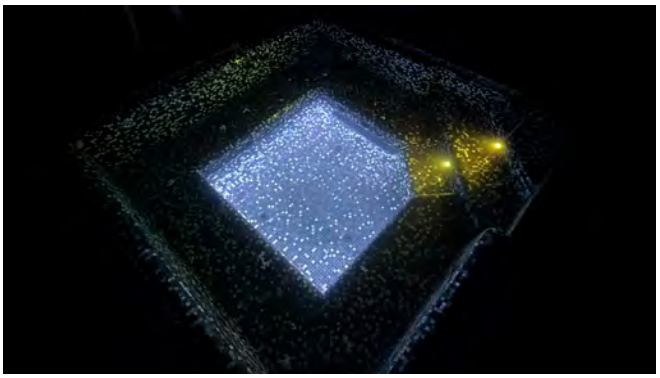


WATER/
EQUIPMENT
TEST

DRAWN BY NESPA

PROJECT:
30 OSPREY

NESPA
ENTERPRISES INC
.2800 Richter Ave, C
Oroville, CA 95966 (530)
534 - 9910

LIGHTING

DRAWN BY NESPA

PROJECT:
30 OSPREY

NESPA ENTERPRISES INC
.2800 Richter Ave, C
Oroville, CA 95966 (530)
534 - 9910

Project Name: 30 OSPREY (ZAHM RESIDENCE) Spa Model: 2088

Serial Number: ZAHM 09/26

The following testing certification records the inspections and quality control procedures completed prior to delivery of your NESPA vessel. Each spa undergoes a series of operational, structural, and handling tests to verify proper functionality, integrity, and installation readiness. This certification serves as documented confirmation that your spa has been thoroughly inspected and tested to meet NESPA quality standards, providing you with the confidence and reassurance that your vessel is fully prepared for safe and reliable operation.

Water Testing & Leak Inspection

Spa filled to designated waterline and held for a minimum of 24 hours to verify shell and plumbing integrity. During testing, periodic inspections are performed to check for leaks, water loss, or irregularities in all plumbing connections, fittings, and vessel components.

INSPECTOR: Edwing V. & Roger V. **INSPECTION DATE: 09/25/2026**

Equipment Inspection & Testing

All installed equipment is tested to verify proper operation and functionality. This includes pumps, heaters, control systems, lighting, circulation systems, and auxiliary components to ensure the spa operates as designed.

INSPECTOR: Edwing V. , Roger V. **INSPECTION DATE: 09/25/2026**

Pick-Up Testing

Spa is physically lifted from its designated pick-up points to verify structural balance, lifting stability, and installation readiness. This inspection helps identify potential handling, rigging, or installation issues prior to delivery and on-site placement.

INSPECTOR: Edwing V. , Roger V. **INSPECTION DATE: 09/30/2026**

NTS
NESPA TILED SPAS

SPA LIGHTING

PAL™ LIGHTING

DUAL ZONE LIGHTING SYSTEM

OPERATIONS MANUAL



PAL 65W MULTI COLOR DUAL ZONE REMOTE CONTROL TRANSFORMER & WI-FI 24VDC

MODEL: 64-PCR-2ZW-65

NTS
NESPA TILED SPAS

SPA LIGHTING

⚠ IMPORTANT INFORMATION

Improper installation carries the potential for electrical hazards, presenting a risk of severe or even fatal injuries to pool users, installers, or bystanders due to the threat of electrical shock, and may also result in property damage.

For your safety, it is imperative that this product be installed and maintained by a licensed and qualified contractor specializing in pool equipment, adhering to local regulations. The individual responsible for maintenance should possess extensive experience in pool equipment installation and upkeep to ensure precise adherence to the instructions outlined in this manual. Prior to installation, thorough comprehension, and compliance with all provided warning notices and instructions are crucial. Failure to do so may lead to property damage, personal injury, or loss of life. Any improper installation and/or operation may void the product's warranty and pose significant electrical hazards, potentially resulting in severe harm, property damage, or fatality. It is strictly advised not to modify this equipment. Installer, please be aware that this manual contains vital information concerning the installation, operation, and safe utilization of this product, which should be communicated to the equipment's owner/operator.

PREPARATION

This manual provides installation and operational instructions for the PAL Lighting PCR-1Z, PCR-2Z, PCR-1ZW, PCR-2ZW & PCR-1Z-SM Lighting Controllers.

Read the installation & operational manual before proceeding with the installation. Keep this manual for future reference.

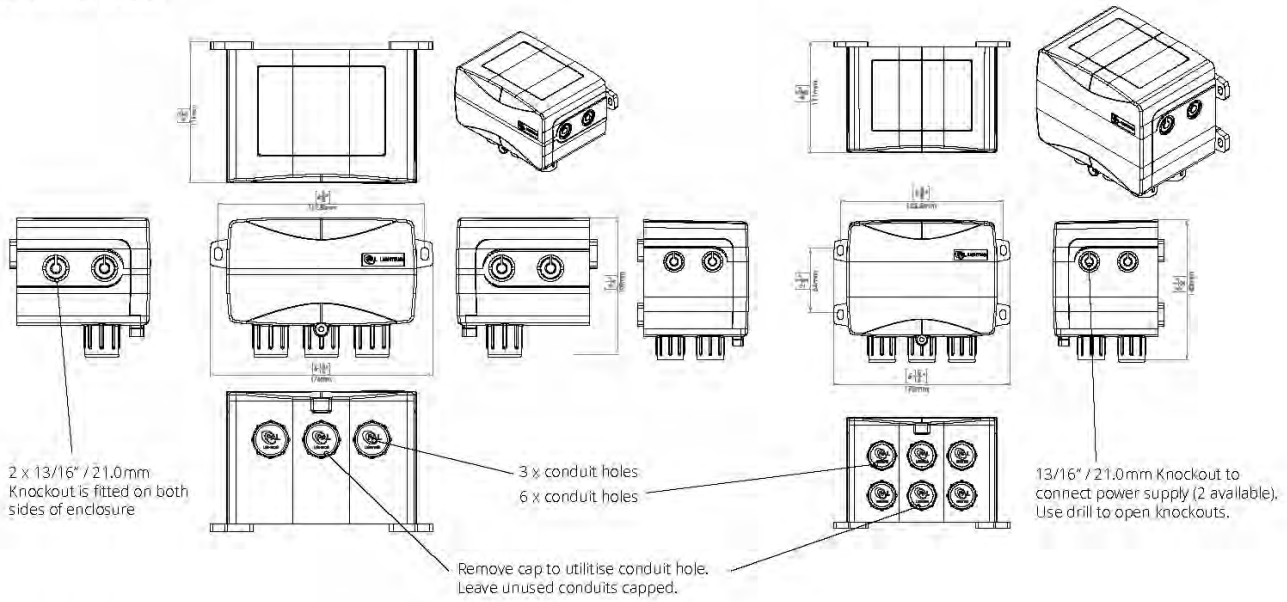
IMPORTANT NOTICE

No bonding is required from this Class 2 power supply to the UL Listed PAL Pool Light fixtures as they are made of an all-plastic construction and comply with the NEC article 680 requirements.

HARDWARE INSTALLATION

HARDWARE INSTALLATION INSTRUCTIONS FOR RGB LIGHTING CONTROLLERS

1. The PCR -1Z-SM/PCR-1Z/PCR-2Z Class 2 Power Supply is a weatherproof construction (IP65) and should be mounted on a flat surface using the mounting legs on the enclosure with appropriate fixtures for the mounting substrate and in a suitable position to suit the intended location of the PAL 4 Wire LED Pool Lights and installed to comply with all the requirements of the National Electrical Code (NEC) and all relevant local codes and ordinances.



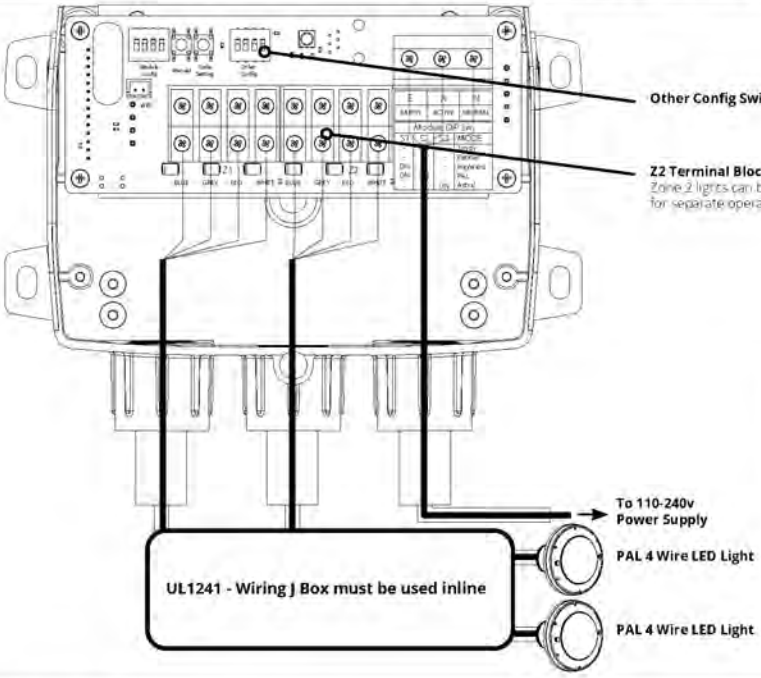
Knockout Instructions
It is recommended that the cover is fitted and the cover screws tight when the knockouts are being removed.

When removing the knock outs place a flat blade screwdriver with a 3/16" (4mm) blade as shown and a light hit with a hammer to the head of the screw driver will allow the Knockout to be removed.

Alternatively drill location points are located in the centre of each Knock out to allow the use of a hole saw to remove the knockouts.

4

INSTALLATION INSTRUCTIONS FOR PCR-2Z RGB OUTDOOR DRIVER



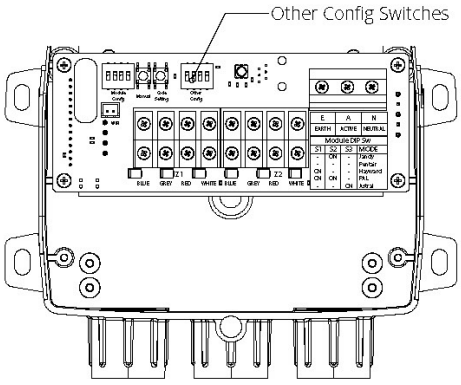
Note 1:
The PCR-1Z is suitable for PAL 4 wire lights.

Note 2:
Knock outs are provided in the enclosure to connect up to 2 x PAL 4 wire UL Listed Pool Lights.

Note 3:
An unlimited number of drivers can be controlled by one transmitter.

Note 4:
A maximum number of 4 x Transmitters can be coded to an individual PCR-1Z

ZONE SETTINGS - PCR 2Z ONLY



Switch 3	Switch 4	Mode
OFF	OFF	6000K
ON	OFF	5000K
OFF	ON	4000K
ON	ON	3000K

Other Config Operation

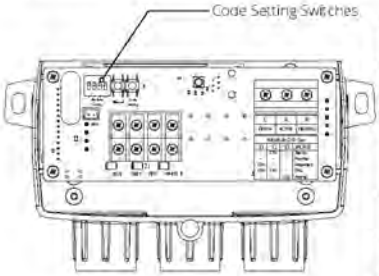
- Must turn off power before making DIP switch selection.
- Dip Switch 2: Toggles between 1 and 2 zone operation
- Dip Switch 1: When in single zone mode, this switch selects whether the driver operates entirely as Z1 or Z2 on the remote.
- Dip Switches 3 & 4 change the approximate color temperature of mixed white lights.

Switch 1	Operation
ON	Zone 2
OFF	Zone 1

Switch 2	Operation
ON	Single Zone Operation
OFF	Two Zone Operation

SPA LIGHTING

CLONING SETTINGS (V2 PCR-1Z-SM, PCR-1Z & PCR-2Z AUTOMATION)

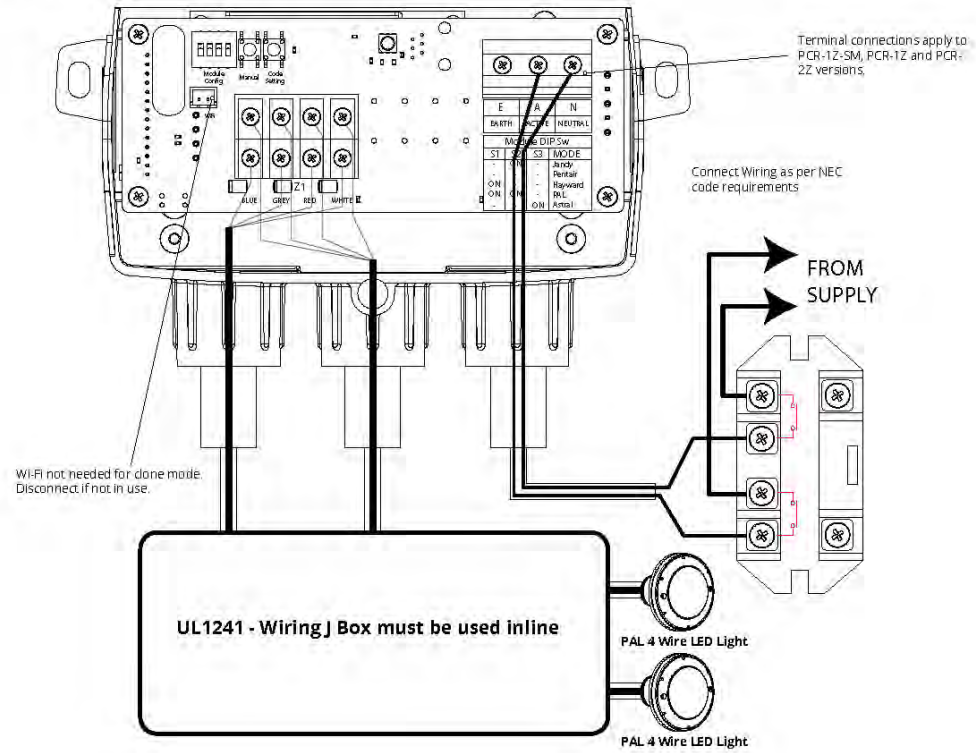


Switch 1	Switch 2	Switch 3	Switch 4	Mode
OFF	ON	OFF	ON	Jandy
OFF	OFF	OFF	ON	PENTAIR
ON	OFF	OFF	ON	HAYWARD
ON	ON	OFF	ON	PAL
OFF	OFF	ON	ON	ASTRALPOOL

Note:

- Must turn off power before making DIP switch selection.
- When synching PAL lights to other OEM lights, static colors will match but color change mode timing may vary.
- If the PAL Lights are to be used with Automation, do not use the handheld remote control and disconnect the WiFi module from the board if so equipped.
- If the Automation does not turn the PAL lights on or off and there is power to the driver, press the Z1 button one time to turn on the PAL Driver.
- Note that the PAL features of infinite color selection and dimmability are not available while in Cloned mode.

AUTOMATION DEDICATED LIGHT OUTPUT RELAY FOR CLONE MODE



PCZ TRANSMITTER REMOTE

PAL TOUCH PCZ-2 TRANSMITTER HAND HELD REMOTE



ON/OFF

COLOR WHEEL
Can select any color from the color wheel.
Can select Brightness (B) on any selected color

OPERATIONAL RED LED
Flashes when any remote operation is initiated

BRIGHTNESS (UP/DOWN)
5 Brightness Settings (100%, 80%, 60%, 40%, 20%)

ZONE (UP/DOWN)
Zone selection (not applicable to single zone controllers)

MODE SELECTION (UP/DOWN)
1. White - Can change Brightness (B) [Default]
2. Color Change - Can change Brightness (B) & Speed (S)
   Red, Amber, Green, Aqua, Blue, Purple, White with initial setting of 2 second delay. This time can be increased to 4, 6, 8 or 10 Sec by pressing (S -)
3. Disco - Can change Brightness (B)
4. White Gradual Change - Can change Brightness (B) & Speed (S)
5. Blue Gradual Change - Can change Brightness (B) & Speed (S)
6. Green Gradual Change - Can change Brightness (B) & Speed (S)
7. Red Gradual Change - Can change Brightness (B) & Speed (S)

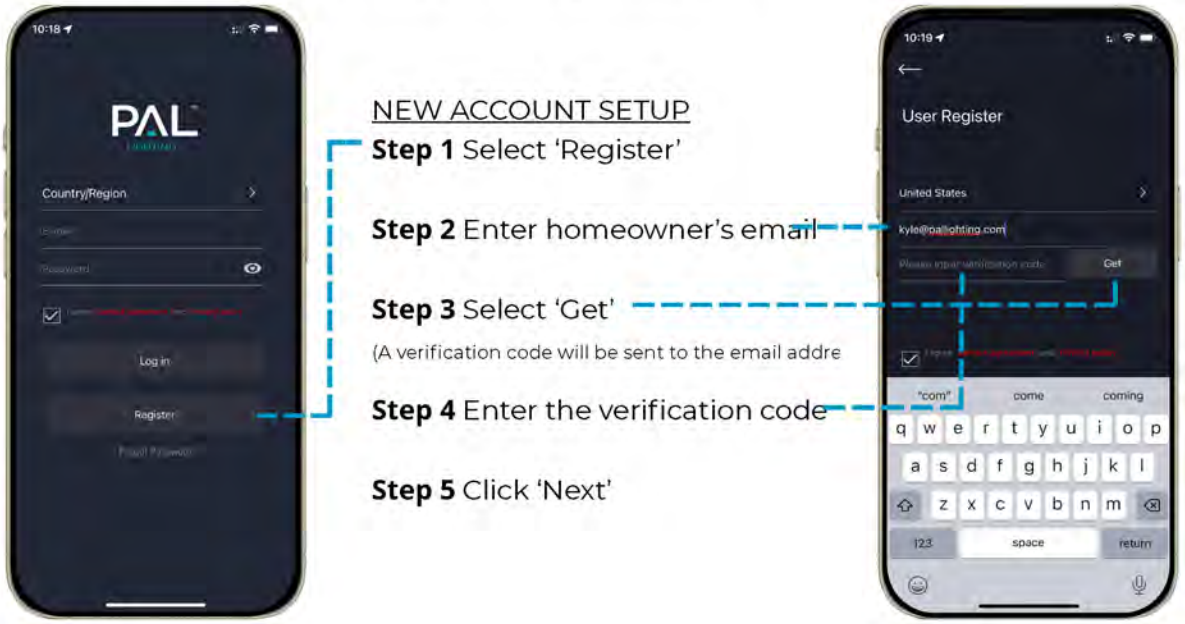
FEATURES
1. Matching Code - Apply power to the receiver. Then press Z_1 once within 5 seconds. The output light will flash white 3 times if matching is successful.
2. Clearing Code - Apply power to the receiver. Hold down Z_1 for 3 seconds. The output light will flash 6 times if clearing the code is successful. After successfully clearing the existing code a new code will have to be applied by following the matching code procedure above.
3. 1 Transmitter (PCZ-2) can operate an unlimited number of Receivers (PCR-1Z)
4. 1 Receiver (PCR-1Z) can be controlled by a maximum of 4 Transmitters (PCZ-2)
5. Touching the color wheel will reset any Mode selection.
6. Memory Feature - Remembers color selection after being switched off.
7. Once the transmitter and receiver are successfully coded the receiver will remember the code if powered off.

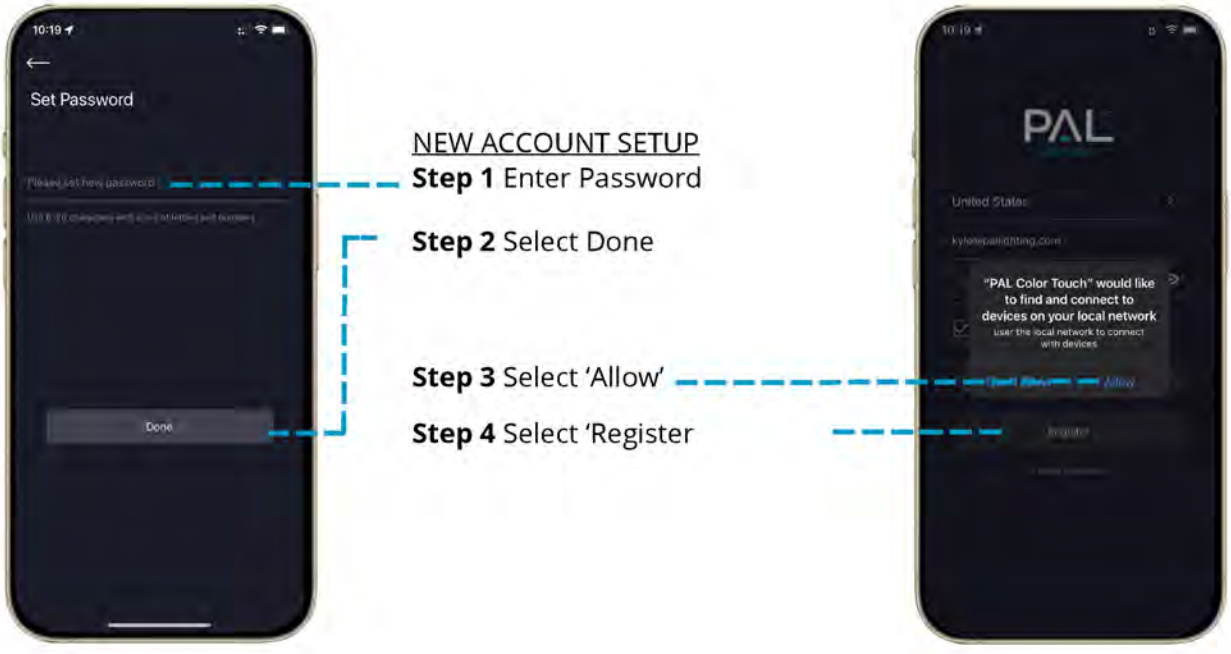
SETTING UP YOUR COLOR TOUCH APP

PCR-1ZW / PCR-2ZW WIFI ONLY

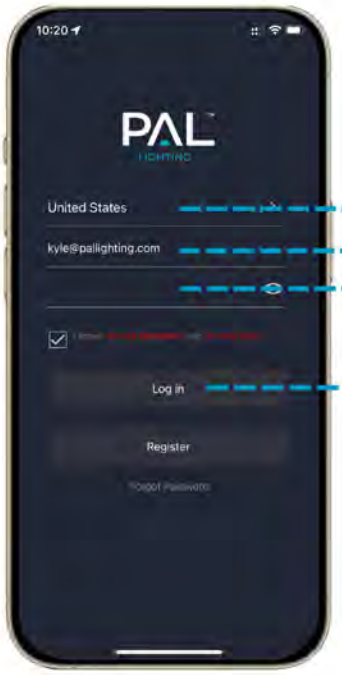
Creating a New Login

1. If you have not already done so, create an account.
2. If you have not already done so, accept all permissions.





SPA LIGHTING



LOGGING IN

Step 1 Select Country

Step 2 Done

Step 3 Enter Password

Step 4 Select 'Login'

Connecting to a New Driver



Step 1 Select 'Allow'

Step 2 Select '+'



SPA LIGHTING



Step 1 Select 'Allow'



Step 1 Select 'Allow'

Step 2 Hold 'Reset' button for 3 seconds until light starts to flash



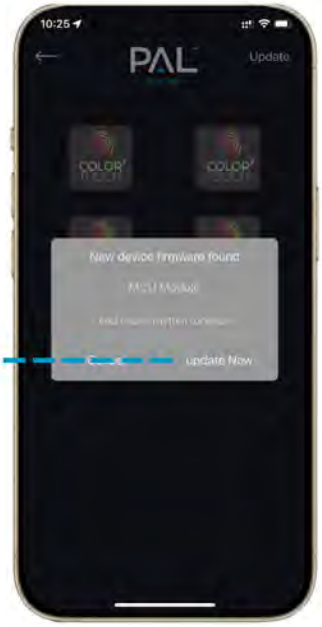
SPA LIGHTING

Updating the App



Step 1 Select Driver

Step 2 Select 'Update Now' (if necessary)



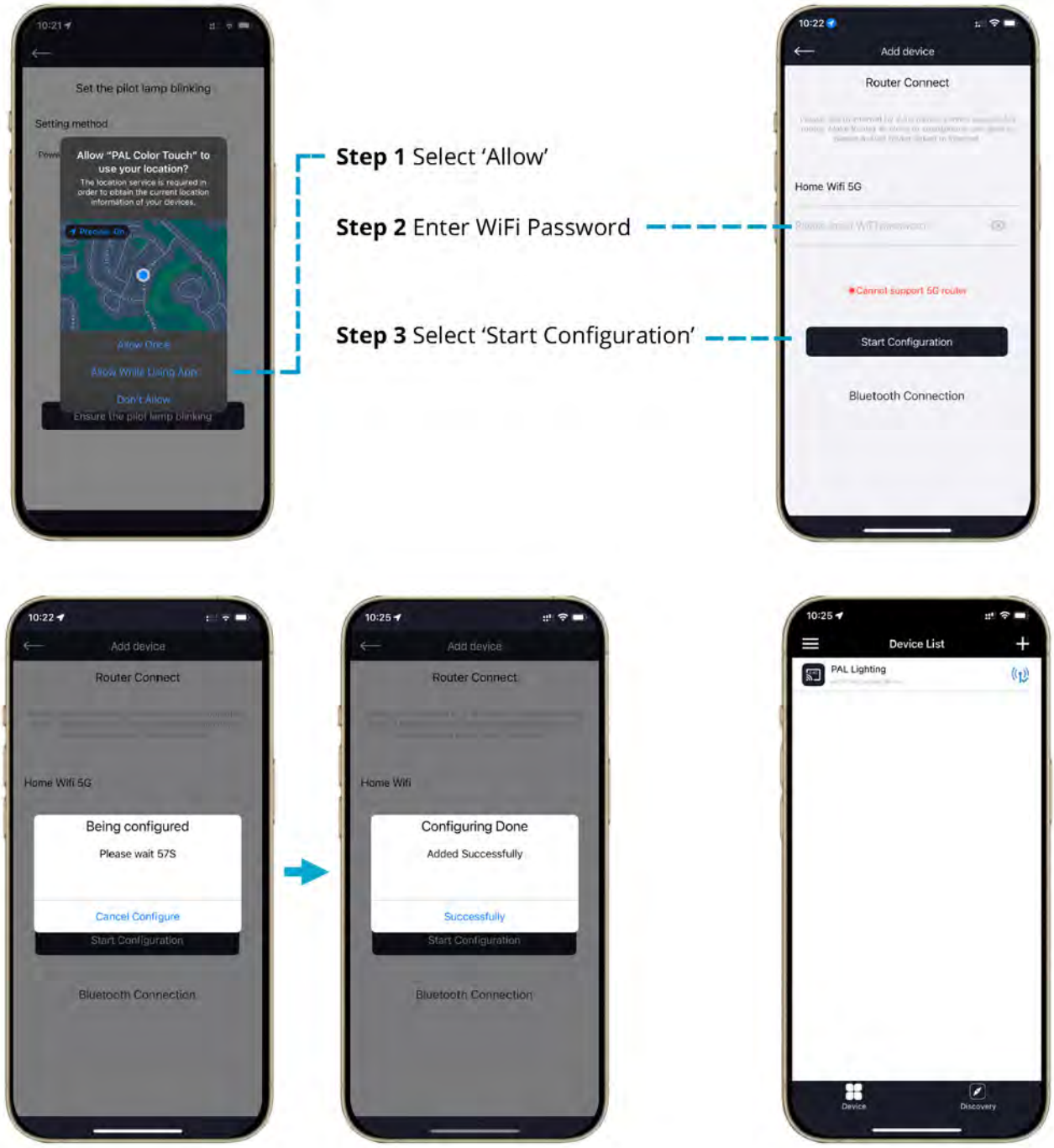
Updating the Color Touch App



Select Update



Setting Up a New Driver



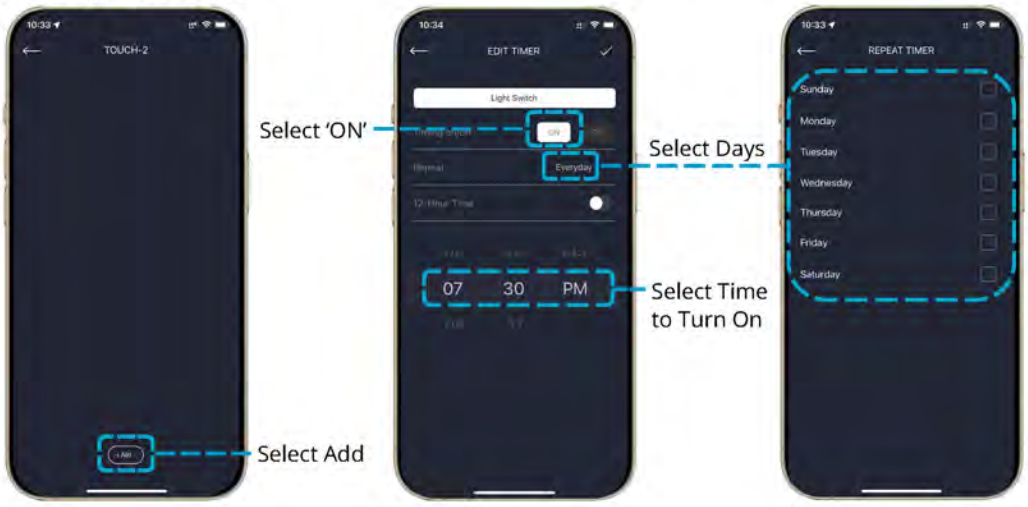
Operating the Color Touch App



Changing Zone Names



Creating Schedules





Coding a 1Z & 2Z Driver with a Standalone Wi-Fi Module

1. Connect the Wi-Fi Module to the Driver
   - o Ensure the Wi-Fi module is properly connected to the driver.
2. Download the PAL Color Touch App
   - o Go to your app store and download the PAL Color Touch app.
3. Connect to Wi-Fi
   - o Open the PAL Color Touch app and connect your device to the Wi-Fi network.
4. Add the Driver
   - o In the app, tap the "+" button in the top right corner.
   - o Select "2.4g" from the list of options.
   - o The PAL driver should appear; select it to connect.
5. Link the Driver
   - o Open the app and navigate to "Touch 2."
   - o Tap the "Link" button in the top right corner.
6. Configure the Transformer
   - o On the transformer, press the "Code Setting" button.
   - o Press the "Link" button on the bottom left of the transformer three times.

Following these steps should help you set up the driver and connect it using the PAL Color Touch app.

TILE REPAIR INSTRUCTIONS

Use these instructions when replacing damaged tile on a NESPA fiberglass spa shell.

REQUIRED TOOLS

- Angle grinder with a diamond tile-cutting blade (for large-format tile)
- Scraper tool or putty knife
- Chisel
- Hammer
- Silicone gun
- Grout float
- Sponges
- Acetone
- Painter's tape, if needed for vertical surfaces

CAUTION: Wear appropriate eye, hand, hearing, and respiratory protection. While cutting or removing tile, be careful not to cut, chip, puncture, or otherwise damage the fiberglass shell beneath the tile.

TILE APPLICATION

1. Remove the broken tile.
For large-format tile, use a handheld angle grinder equipped with a diamond tile-cutting blade to cut the damaged tile into smaller sections that can be handled comfortably. Using a hammer and chisel, carefully break and peel away each section. Work slowly and carefully to avoid cutting into or damaging the fiberglass beneath the tile.

2. Clean the fiberglass surface.
Use a putty knife or scraper to remove all remaining tile fragments, debris, old silicone, and residue from the fiberglass. The repair area must be clean, dry, and free of loose material before the replacement tile is installed.

3. Apply tile only to a clean, dry fiberglass surface.

4. Apply silicone to the fiberglass surface.
Apply a generous amount of silicone to the fiberglass surface. Use a tile comb to spread the silicone evenly, making sure the entire repair surface is fully covered.

5. Apply silicone to the back of the replacement tile.
Apply a layer of silicone to the back of the tile and spread it evenly with the tile brush. Make sure the entire back surface of the tile is fully covered.

6. Adhere the tile to the fiberglass surface.
Apply firm, even pressure to the tile using a slight back-and-forth motion. This helps collapse the silicone ridges, remove trapped air, and establish full contact between the tile and fiberglass surface. Verify that the tile is level and properly aligned with the surrounding tile. Do not apply excessive pressure or remove too much silicone from behind the tile. Use tape to hold the tile in place when applying tile to a vertical surface. Use 1/8" spacers to get even spacing between tile.

7. Allow the silicone to set before applying grout.
Allow a minimum of 1 hour for smaller tile. For larger tile, allow a minimum of 3 to 4 hours. Consider the tile size, position, and repair conditions before proceeding.

APPLYING GROUT

1. Clean the area to be grouted.
Carefully use a utility knife or narrow scraper to remove any excess silicone from between the tiles. Keep each grout joint clear, clean, and uniform so the grout can be properly applied. Remove all dust and moisture to help ensure proper adhesion, use acetone when possible; warm water may be used if needed.

2. Use the pre-weighed grout materials.

3. Note that the containers hold different volumes.
After mixing, apply the grout to the desired area within 15 minutes.

4. Mix Part A with Part B, the color catalyst.
If the repair requires a large bucket, do not mix all of the material at once. Work in small quantities. For the first application, mix approximately 25% of the color catalyst with 25% of the base.

5. Mix until the color is consistent.

6. Apply the grout.
Apply with a grout float and wipe the surface clean with a wet sponge. After approximately 1 hour, clean the remaining film with acetone when possible.

7. Allow the grout to cure.
Wait at least 24 hours before adding water to the spa.

Questions?
Call Jim Milligan at (530) 534-9910
Email: Jim@TiledSpas.com | Website: www.tiledspas.com

STANDARD NESPA
IN-GROUND INSTALLATION
INSTRUCTIONS
SET-UP AND EXCAVATION

Prerequisites: Before installing your Nespa spa. You may be required to acquire a permit from your local State, County, and City building dept and or Health department. (Commercial jobs need Health Dept. Approval). Your spa installation must comply with the most current codes. **(Uniform Swimming Pool, Spas & Hot Tub Code 2006 (USPC 2006).**

Spa drawings: Request from Nespa a current spa specific construction detail, plan and section, spa plumbing detail.

Delivery Access: Clearly determine the method of getting the spa to jobsite and into the hole. This may require the use of a crane, forklift, hoist, backhoe and/or manpower etc.

1) The following instructions are general guidelines and may not apply to your specific jobsite conditions. When excavating for your spa remember to provide for plumbing and light connection clearances. In order to determine how to excavate for your spa or swim spa, measure spas outside dimension (O.D.) and add minimum 3" to all sides. This 3" clearance is to accommodate jet and suction plumbing. This 3"clearance can change or be reduced upon request. Note: skimmer location, this area may have to be larger than 3", if commercial 22".

2) **Freeze Climates**- If the spa is place into a vault (typical of freeze climates) a standard 18" or more of clearance minimum from spa perimeter should be provided. This dead air space is for possible future access to spa plumbing in case of a freeze. Area drain is mandatory. **Ask your local installer** for his experienced opinion. Do not hesitate to call us because we want to be sure that your installation progresses as smoothly as possible. If you have questions call us. (888) 479-4677.

2) **Hole depth** is determined by spa's outside height dimension. This height may vary depending if spa has skids or no skids. The spa lip may be finished or non- finished. How is the perimeter deck elevation transitioning to the spa? Focus on the finish surrounding deck elevations, thickness of the finish material on spa upper horizontal lip, equal to lip or under the spa lip. This material can be tile, stone, concrete or brick.

3) **Preplumb** the spa before it goes into the hole. If there are needs for electrical , bonding or control conduits run them as well before dropping in hole. Connect bond wire to niche would be best.

4) Spa should sit on level 3 ½" thick reinforced concrete pad. Sweep debris off pad prior to dropping in hole.

5) **Install spa** into the hole on top of concrete pad. Use the Eye bolts provided for crane, forklift etc. rigging. Do not hold onto pipes. Use caution with suction and jet plumbing when lowering into hole. DO NOT STRESS FITTINGS! Fill Spa with water and check for leaks prior to backfill.

6) **Check site reference** points for proper spa positioning (i.e., squaring to house, garage, etc.).

7) **Shim to level spa**. Shim with non-compression able material. Re square to house, or ref. point.

8) **Dry pack** with cement the gaps that have been created when shimming spa level.

9) **Connect pipes to tees** if spa is preplumb. Installers properly support your new plumbing from stressing spas preplumb fittings. After electrical conduit and bond wire is connected to light niche, water test spa before back filling with sand.
   NOTE: **All Nespa products are water tested prior to leaving factory.**

ELECTRICAL:

1) All electrical connections to spa or equipment should comply with the most recent national electrical code (NEC), state and local codes.
2) Connect electrical conduit to light niche. This work should be done or reviewed by a licensed electrician.
3) To install spa light you will need to include inside the PVC conduit to the light niche a solid #8 coated copper wire. (If you are use brass conduit, internal bond wire is not required.) This bond wire should be pulled with the light cord at the same time. This bond wire needs to be attached to the internal bonding lug of the light niche. An approved encapsulate should be applied to bond wire connection in niche.
4) An external #8 copper wire shall be connected to the external bonding lug on the rear of the light niche. This copper wire can then be used for additional bonding requirements (i.e., handrails or any other metallic object within 5' of the spa.

PLUMBING:

1) **When plumbing a Nespa it is important to properly size the plumbing. We highly recommend that you follow the pump manufacturer's pipe sizing requirements and Uniform Swimming Pool, Spas & Hot Tub Code 2006 (USPC 2006). This code book is available at www.IAPMO.org or (909) 472 4100.**
2) The jet air venturi should be a Hartford loop design adjacent to spa shell and air entry point can be located next to spa or remotely at equipment.
3) Fill spa with water and test the system for leaks PRIOR to backfilling with sand.

SAND BACK FILL:

1) **With water in spa, back-fill around spa perimeter with dry plaster sand and wet wash with hydraulic attachment to hose. Let set for one hour and hydraulic dry again. Be sure water level in spa is at the highest level. Any questions please call us. (888) 479-4677.**
2) **If spa is free standing on elevated deck or a structure, it is important to fill spa with water and load area prior to installing coping or perimeter decking. If spa is installed in a vault situation a area drain is needed.**

NESPA ENTERPRISES, Inc. LIMITED WARRANTY

This LIMITED WARRANTY covering NESPA products is extended to the ORIGINAL PURCHASER-USER BY NESPA ENTERPRISES Inc.(NESPA), 2800 Richter Ave. Unit C California 95966.

NESPA products are thoroughly inspected and tested prior to factory shipment. NESPA warrants to the ORIGINAL PURCHASER-USER that NESPA Spas and Swim Spas will be free of defect in workmanship, accessories and parts, provided said accessories and parts were manufactured by NESPA. NESPA, under this LIMITED WARRANTY, warrants only that its Spas and Swim Spas shall be structurally sound, shall retain their shape, and shall retain water for the warranty period. NESPA warrants the adhesion of tile to fiberglass for a period of three (3) years and structural soundness for ten (10) years. NESPA warrants epoxy grout adhesion for a period of three years. If any such defects appear and are reported within the warranty period, NESPA shall repair or replace such defective parts without charge if an inspection proves the claim.

The provisions of the LIMITED WARRANTY shall not apply to tile cracked, split, chipped or damaged after the product has left the factory, nor damage to tile caused by freezing nor to damage, defect, malfunction or failure to conform with the above warranty provisions where the damage, defect, malfunction or failure to conform was caused during shipment or by distributor or by unreasonable use by ORIGINAL PURCHASER-USER including improper water balance and improper sand pack or support.

This LIMITED WARRANTY shall not apply to any plumbing, equipment, or installation of spas and Swim Spas and shall not apply to any alterations made to or upon NESPA products except alterations made by NESPA employees or NESPA authorized representatives.

This LIMITED WARRANTY is expressly in lieu of all other warranties expressed or implied including the warranties of merchantability and fitness for use and all other obligations or liabilities on NESPA'S part, and NESPA neither assumes nor authorizes any other person to assume for NESPA any other liability in connection with the sale of this NESPA product. This LIMITED WARRANTY shall not apply to this NESPA product or any part thereof which has been subject to accident, negligence, alteration, abuse or misuse. NESPA makes no warranty whatsoever with respect to accessories or parts not manufactured by NESPA.

The term "ORIGINAL PURCHASER-USER" as used in this LIMITED WARRANTY shall be deemed to mean that person for whom the NESPA product is originally installed.

The LIMITED WARRANTY provided herein and the obligations and liabilities of NESPA hereunder are exclusive and are in lieu of, and buyer and original PURCHASE-USER hereby waive all other remedies, warranties, guarantees or liabilities, expressed or implied, arising by law or otherwise (including without limitation and obligations of NESPA with respect to fitness, merchantability, and consequential damages) or whether or not occasioned by NESPA'S negligence.
This LIMITED WARRANTY shall not be extended, altered or varied except by a written instrument signed by NESPA and original PURCHASER-USER.

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