

# **MARCH 2025 SNHD AQUATIC INDUSTRY MEETING**

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Aquatic Health Plan Review

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- Staff Introduction
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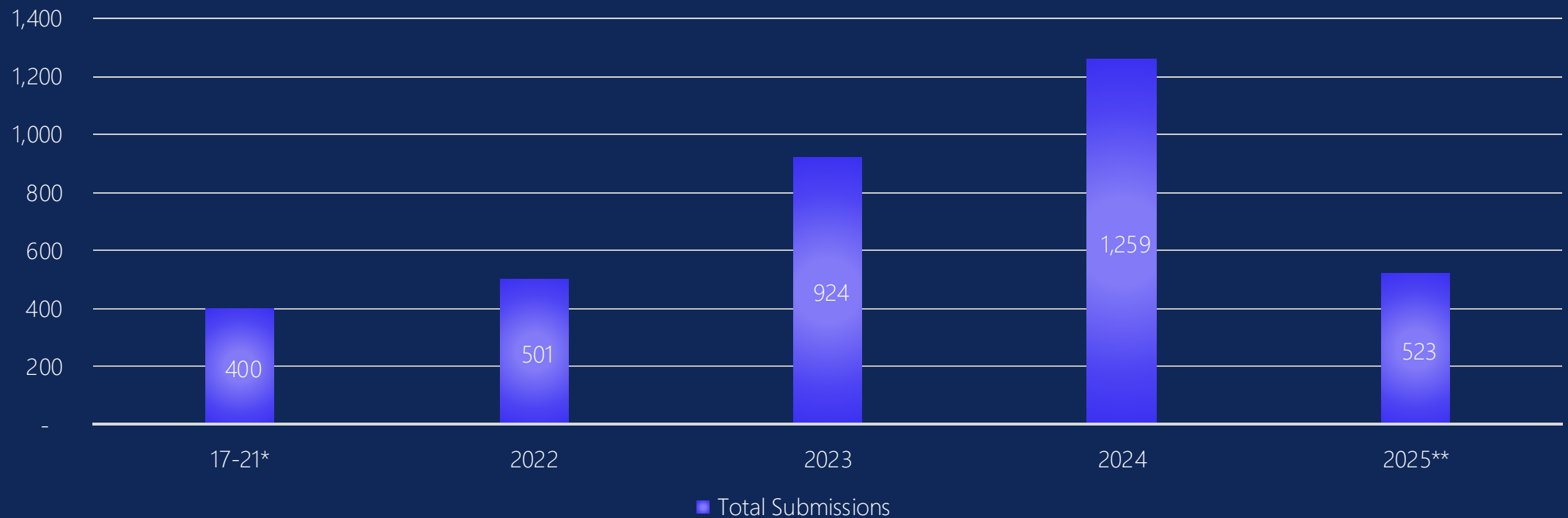
ANY REFERENCES TO SPECIFIC  
BRANDS OR PRODUCTS USED IN THESE  
PRESENTATIONS ARE USED AS  
EXAMPLES ONLY. SNHD DOES NOT  
ENDORSE OR RECOMMEND ANY  
PRODUCTS FOR USE IN AQUATIC  
VENUES.

# PLAN REVIEW WORKLOADS

- Continued increase in remodel submissions
- Expect long wait times between submission and review
- 4 – 6 weeks is typical



# REMODEL SUBMISSIONS



\*Average

\*\*Projects submitted between Jan 1 and Mar 31

# UPDATED REMODEL APPLICATION

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Key changes: Gauge readings, work start date/after the fact indication, remodel categories list

# SOFA INSTALL DOCUMENTATION

## **Mfr. documentation**

- Certificate of conformity/compliance
- Installation manual

## **SNHD documentation**

- SNHD form (coming soon)
- Photos at inspection

All documentation must be kept by the owner and available for review



## CERTIFICATE OF CONFORMITY

Blockable submerged suction outlet for single or multiple drain use  
for use on wall and floor with no sump required

The SDX2 High Flow Safety Drain is a 10" diameter frame and grate or bulkhead style drain fitting. It includes a back plate and cover that is affixed to a frame, a bulkhead or an existing drain sump. SDX2 Retro replaces most existing drain covers up to 10" in diameter.

### SOFA SDX2 FLOW RATINGS

Flow Rating (GPM)	Pipe Size	Pipe Port Orientation	Drain Mounting Orientation
180	3"	Side	Floor
116	2.5"	Side	Floor
100	2"	Side	Floor
60	1.5"	Side	Floor
178	3"	Bottom	Floor
120	2.5"	Bottom	Floor
100	2"	Bottom	Floor
60	1.5"	Bottom	Floor
140	3"	Side	Wall
108	2.5"	Side	Wall
100	2"	Side	Wall
60	1.5"	Side	Wall
140	3"	Bottom	Wall
108	2.5"	Bottom	Wall
100	2"	Bottom	Wall
60	1.5"	Bottom	Wall

Manufacture date: \_\_\_\_\_

Install date: \_\_\_\_\_

Cover assembly replacement 5 years from installed date: \_\_\_\_\_

Mud ring/bulkhead assembly replacement  
25 years from installed date: \_\_\_\_\_

### PLACE OF MANUFACTURE:

Paramount Pool & Spa Systems  
295 E. Corporate Place  
Suite 100  
Chandler, AZ 85225 USA  
(480) 893-7607

### NAME OF THIRD PARTY LABORATORY:

IAPMO R&T LAB

### TEST RECORD DOCUMENTATION: IAPMO R&T

5001 E. Philadelphia Street  
Ontario, CA 91761  
(909) 472-4104  
Test Report - March 5, 2020

Paramount Engineering PDM  
Paramount Pool & Spa Systems  
295 E. Corporate Place  
Suite 100  
Chandler, AZ 85225 USA  
dconn@1paramount.com, 480-893-7607 ext. 255

### COMPLIANT WITH:

- VGB Pool and Spa Safety Act 2017
- ANSI/APSP/ICC-16-2017
- ANSI/APSP - 7 2006

### SDX2 Part Numbers:

Concrete XXX-182-2231-XX  
Vinyl XXX-172-2231-XX  
Fiberglass XXX-182-2231-XX  
Retro XXX-192-2231-XX



This product must be installed in accordance with all applicable federal, state and local codes, and Paramount's written instructions.

## GENERAL CERTIFICATE OF COMPLIANCE

**32" DIAMOND STRIP DRAIN - FIELD BUILT SUMPS: P/N 640-137x V**

Contents: 1

Part Number: **640-137x V**

Description: **Diamond Strip Drain - Field Built Sumps**

Size: **32"**

Open Area: **24 in<sup>2</sup>**

GPM @ 1.5 fps: **111**

Floor Flow Rate: **244 GPM (one port center)**

Floor Flow Rate: **320 GPM (two ports)**

Wall Flow Rate: **216 GPM (one port center)**

Wall Flow Rate: **216 GPM (two ports)**

For Date of Manufacture please see the manufacture mark on product



Date of Installation: \_\_\_\_\_

Name of Installer: \_\_\_\_\_

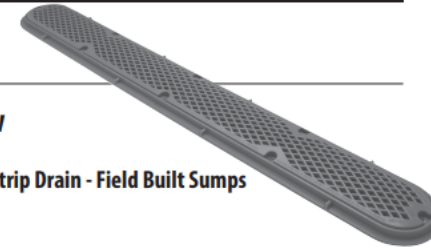
Signature of Installer: \_\_\_\_\_

This product has been tested to ANSI/ASME 112.19.8-2007 (ANSI/APSP - 16, 2017) per §1404 of the Virginia Graham Baker Pool and Spa Safety Act. Certified by NSF International, Inc., 729 N. Dixboro Rd., Ann Arbor, MI 48105, 734-769-8670 in February of 2021.

This product is certified to comply with §1404 of the Virginia Graham Baker (VGBA 2017) Pool and Spa Safety Act. A copy of the test results for the above may be found at [www.waterwayplastics.com](http://www.waterwayplastics.com) or go to [www.nsf.org](http://www.nsf.org).

The test results supporting the product certification are maintained by Ray Mirzaei, 2200 Sturgis, Rd, Oxnard, CA 93030  
Phone: 805-9810262 Email: [raym@waterwayplastics.com](mailto:raym@waterwayplastics.com)

This product is manufactured by Waterway Plastics, Oxnard, CA 93030 USA





**VGBA DRAIN COVER IDENTIFICATION INFORMATION**

**ATTENTION INSTALLER** - Please carefully cut along the dashed line and remove from instructions. Fill in the blank spaces below upon installing drain cover. Permanently post as near as feasible to the pump control and provide a copy of this information to the pool owner to be kept with other important pool-related documents.

**Manufacturers Name:**  
AquaStar Pool Products Inc.

**Cover/Grate Part Number:**  
Please check the box ( ☒ ) of the cover being installed:

☐ A10RCFRxxx

**Service Life of the Cover Grate:**  
5 years from the date of installation

**Certified Suction Outlet Fitting Assembly (SOFA) Flow Ratings:**  
Please use the QR Code or Link to find the SOFA Specific flow rate for your configuration.

**SOFA Model #:** \_\_\_\_\_

**Orientation:** \_\_\_\_\_ (wall or floor) **SOFA Flow Rating:** \_\_\_\_\_ GPM

**Location of the Installed Suction Outlet Fitting Assembly:**  
Please describe the location of the suction outlet fitting assembly.

**Location:** \_\_\_\_\_

**Installation Date:** \_\_\_\_\_  
Please mark the month and year that the drain cover was installed below.

Month						Year					
1	2	3	4	5	6	21	22	23	24	25	26
7	8	9	10	11	12	27	28	29	30	31	32



**SOFA FLOW RATING**  
For SOFA flow rating please scan the QR code or visit [www.aquastarpoolproducts.com/flowcode](http://www.aquastarpoolproducts.com/flowcode)



**A Safe Drain is No Accident™**  
*VGBA Compliance Every Pool, Every Time*

**IMPORTANT SAFETY INFORMATION**  
**READ, FOLLOW, AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS**

This VGBA Suction outlet has an installation specific flow rating and this product **SHALL NOT** be installed on a pumping system that is capable of exceeding this limit, which varies based on the number and location of installed suction outlets. **READ** and **FOLLOW** the section of the included installation instructions explaining how to calculate the suction system flow ratings and that of the installed pumping system.

**WARNING!** This is a Blockable VGBA Suction Outlet that must **ONLY** be installed in a multiple VGBA Suction Outlet system or be installed in a suction system that also includes one or more of the following devices or systems designed to prevent suction entrapment.

**SAFETY VACUUM RELEASE SYSTEM** - A system that ceases operation of the pump, reverses the circulation flow, or otherwise releases the vacuum in a circulation system when a blockage is detected, that has been tested by an independent third party and found to conform to ASME/ANSI standard A112.19.17 or ASTM standard F2387.

**SUCTION-LIMITING VENT SYSTEM** - A circulation system that incorporates a tamper-resistant atmospheric vent that is hydraulically located between the suction outlet and the circulation pump, which allows air to enter the circulation system and release the vacuum within the system when the suction outlet is blocked and the circulation pump is operating.

**GRAVITY DRAINAGE SYSTEM** - A powered circulation system, which utilizes a collector tank hydraulically located between the pump and the suction outlet that is filled by the gravitationally induced flow of water from the suction outlet, and is vented to the atmosphere by a tamper-resistant opening.

**AUTOMATIC PUMP SHUT-OFF SYSTEM** - A system that is designed to sense blockage of the suction fitting and then turn-off the power to the pump, and subsequently release the vacuum in the circulation system when a blockage is detected.

**DRAIN DISABLEMENT**- A device or system that permanently stops the flow of water from a SOFA.

**THIS LABEL IS TO BE REMOVED BY THE INSTALLER ONLY**

# DOE DEDICATED PURPOSE POOL PUMP MOTORS

## 2021

- Pump minimum efficiency standards became effective for new pumps
- Eliminated most dedicated pumps with single speed motors
- Replacement motors still available

## 2025

- Most motors manufactured after Sept 28 must meet new efficiency standards
  - 1.15 THP to 5 THP motors – variable speed
  - <0.5 THP – 69% efficiency
  - 0.5 to 1.15 THP – variable speed, compliance required Sept 2027
- 3-phase motors are exempt

# WHAT DOES THIS MEAN?

- Increase in pump remodels if replacement motors are no longer available
- PLAN AHEAD



# THANK YOU

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Jeremy Harper

Environmental Health Supervisor

Aquatic Health Plan Review

[harper@snhd.org](mailto:harper@snhd.org)

# **Applying, Planning, & Scheduling with SNHD Aquatic Health Plan Review**

Aquatic Health Plan Review

Dominick Franchino

Senior Environmental Health Specialist



# APPLYING

- **When Applying for a New Construction, Major Remodel or Non Substantial Alteration (Minor Remodel)**

**Three Things are Key:**

- **Proof of ownership**
- **Application**
- **Contracted services form sign by the facility**

**Submit to [aquatic@snhd.org](mailto:aquatic@snhd.org)**

**Note: forms are found at [snhd.org](http://snhd.org)**





# **APPLYING GIVE IT TIME**

**Processing prior to invoice can be 1  
week or more**

**Once invoice is paid an intake date and  
inspector will be assigned**



# INTAKE DATE

**Minor Remodels will be reviewed on the date assigned  
(current wait times are 4-6 weeks)**

**New Construction Initial Reviews and Major Remodels are 30 business days  
(does not include holidays or weekends)**

**Note: resubmitted plans fall under the same timelines**



# **Submittals**

**Remember to submit all forms, specifications, and plans to complete review.**

**Incomplete applications will be returned**

**Missing documents will slow review**

**NOTE: Must be submitted by a A-10 contractor, Engineer, or Architect**

# EXAMPLES

**SOFA remodels require completed suction outlet fitting assembly worksheet**

**New Construction reviews require pool plans, as well as, building plans, egress plans, all equipment specification sheets, lifeguard plans, and hydraulics**

**Major remodel submittals include almost as much documentation as new construction submittals related to scope of work**



# Resubmit

**New construction and major remodel resubmitted plans are up to 30 business days for each additional intake and are scheduled by the assigned inspector**

**Remodels maybe rejected for additional information or documentation. Work with your inspector to complete this review**



# Approved Plan

## What is next?



"NO!

Try not!

**DO or DO NOT,**

There is no try."

# Inspections

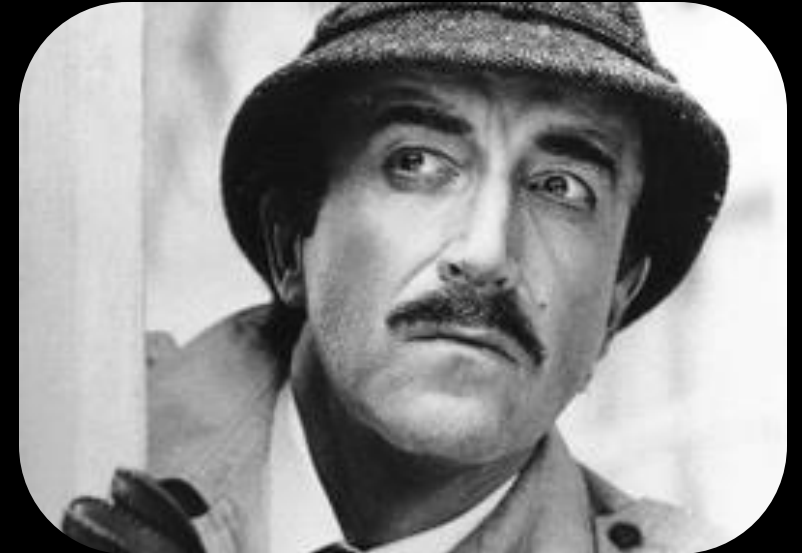
**Remodel Inspections based on scope of work.**

**-Piping, Pre Plaster, Final**

**Note: SOFA remodels can be two inspections if gauge readings are needed**

**New Construction and Major Remodel inspections are as followed:**

**Excavation / Piping  
Pre Plaster  
Final**





# Inspections

**You can pay for an  
expedited inspection**

**but**

**You can not get an  
expedited plan review**



# Inspections



**Inspection are  
scheduled a minimum  
of 72 hrs from initial  
request**

# QUESTIONS?





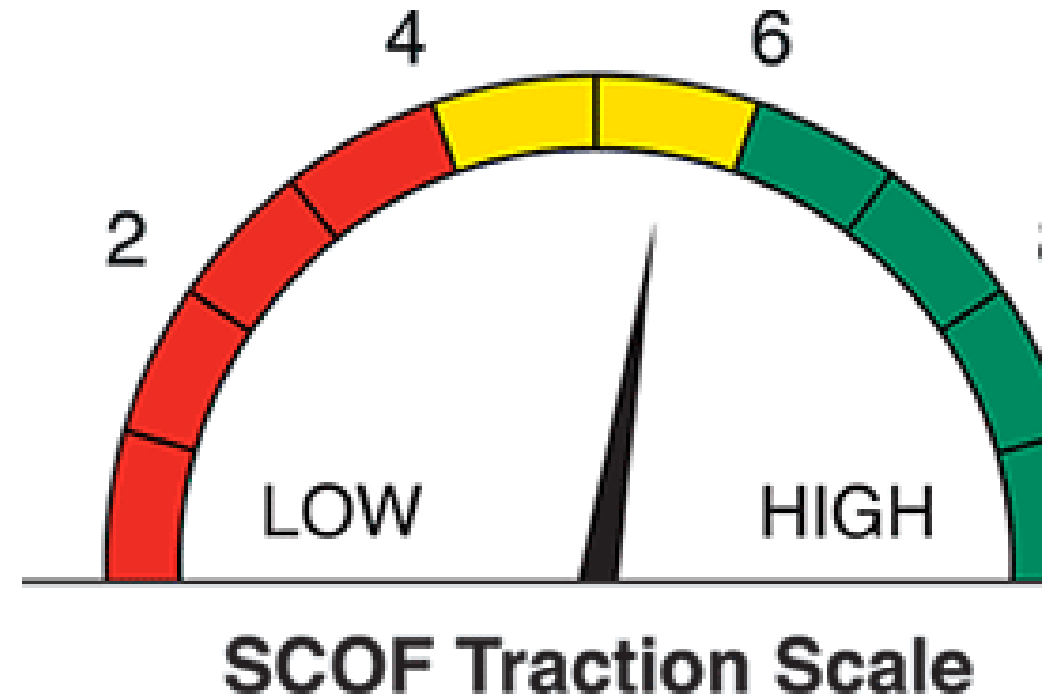


Presented by Yuzhen Feng

# Aquatic Venue Color and Finish Requirements

# DCoF: Dynamic Coefficient of Friction

- DYNAMIC COEFFICIENT OF FRICTION” means the friction resistance between two objects when one is already in motion.



## 2-201.6 AQUATIC VENUE floors

- All surfaces required to be slip-resistant shall be constructed with slip-resistant materials having a minimum DYNAMIC COEFFICIENT OF FRICTION at least equal to the requirements of ANSI A137.1-2012 of 0.42 as measured by DCOF AcuTest
- 2-3015.1; 2-201.6; 2-601.4; 2-803.1
- 2-201.8 Wood, porous stone, loose pebbles, or earth shall not be permitted as an interior finish.
- Higher DCOF=greater traction=MORE SAFE!



# 2-3010 Color and Finish

- 2-3010.1

Floors and walls below the water line shall be white or light pastel in color such that from the AQUATIC VENUE DECK a BATHER is visible on the AQUATIC VENUE floor and

(A) The following items can be identified:

- (1) Algae growth, debris or dirt within the AQUATIC VENUE;
- (2) Cracks in the surface finish of the AQUATIC VENUE; and
- (3) Suction outlets in accordance with Section 2-301.2.

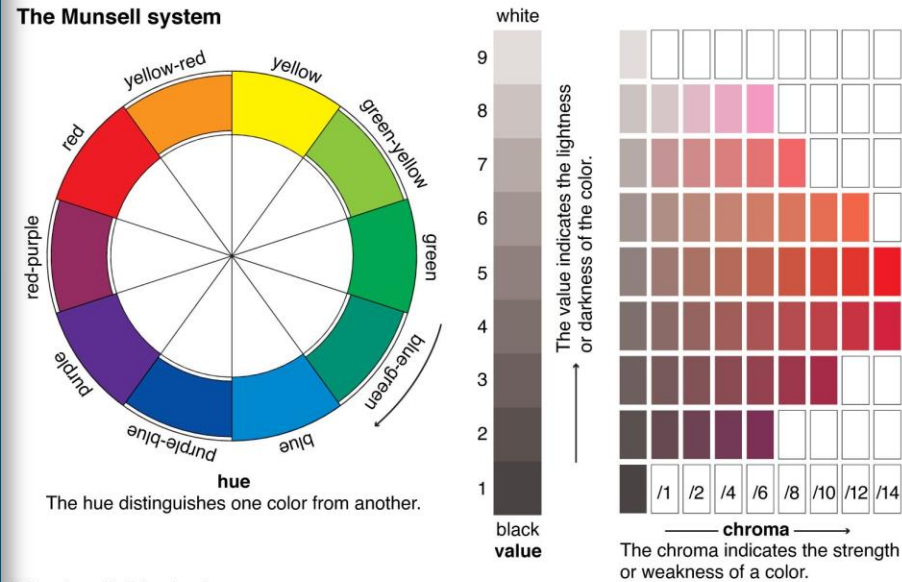
(B) The finish shall be at least 6.5 on the Munsell color value scale.



# Munsell color value scale

- Munsell color system organizes colors based on three dimensions: hue (the color itself), value (lightness/darkness), and chroma (saturation/purity).
- The value scale: ranging from 0 (black) to 10 (white)

The Munsell system



© Encyclopædia Britannica, Inc.



# 2-3010 Color and Finish

## 2-3010.1 Continued

(C) An exception shall be made for the following AQUATIC VENUE components:

- (1) Competitive lane markings;
- (2) Dedicated competitive diving well floors;
- (3) Step or bench edge markings;
- (4) Water line tiles;
- (5) WAVE POOL and SURF POOL depth change indicator tiles; or
- (6) Other APPROVED designs.

(D) Munsell color values less than 6.5 or designs such as rock formations may be permitted by the HEALTH AUTHORITY as long as it does not exceed 12 inches below the water surface

# Plaster samples

- Decof and Munsell exercise

DCOF Data*	NPT Brand	Pool Finish Type	Color
0.73	StoneScapes	Pebble	White - Regular
0.71	StoneScapes	Pebble	White - Mini
0.7	QuartzScapes	Natural Quartz	Ivory
0.69	QuartzScapes	Natural Quartz	Commercial
0.67	StoneScapes	Pebble, glass bead (25%)	Aqua White - TOG: Puerto Rico Blend
0.66	StoneScapes	Pebble, glass bead (25%)	Aqua Cool - TOG: Puerto Rico Blend
0.65	ColorScapes	Colored Quartz	Commercial
0.24	JewelScapes	Glass Bead (100%)	Spring Water

\* Average of three measurements



Listed in descending order according to LRV Dry Value.		Dry				Munsell Value *	Wet				Munsell Value *
NPT Brand	NPT Color	CIE Values			LRV		CIE Values			LRV	
		L*	a*	b*			L*	a*	b*		
QuartzScapes	Sky Blue	83.30	-0.10	4.10	62.80	8.2	72.30	-0.30	6.40	44.10	7.1
StoneScapes	Aqua Cool	83.67	-0.55	3.16	63.44	8.2	73.33	-0.96	5.07	45.71	7.2
QuartzScapes	Blue	82.85	-0.34	2.49	61.88	8.2	71.24	-0.68	3.28	42.54	7.0
PolishedScapes	Surfside	82.40	0.20	6.10	62.10	8.2	78.30	0.30	7.00	53.70	7.7
JewelScapes	Cyrstal	82.94	0.17	6.07	62.10	8.2	78.29	0.29	7.04	53.70	7.7
JewelScapes	Playa Blanca	82.42	-1.22	2.73	61.10	8.10	70.99	-4.72	0.57	42.19	6.92
JewelScapes	Sky Blue	82.12	-3.38	0.74	60.52	8.08	67.68	-14.78	-2.65	37.56	6.58
QuartzScapes	Mariner Blue	82.56	-0.39	6.25	61.30	8.1	73.58	-0.94	6.98	46.10	7.2
JewelScapes	Tranquility	81.75	-1.70	4.05	59.90	8.1	72.72	-2.20	6.38	44.80	7.1
ColorScapes	Commercial White	82.17	0.28	5.03	60.60	8.1	78.22	0.16	5.28	53.60	7.7
StoneScapes	Aqua Cool Mini	82.14	-0.31	3.26	60.60	8.1	73.29	-0.47	5.15	45.60	7.2
QuartzScapes	Super Blue	81.92	-0.69	3.66	60.01	8.1	72.01	-1.38	4.32	43.70	7.1
QuartzScapes	Cliff's Blue	81.30	-2.1	2.10	59.10	8.0	72.90	-3.1	-1.7	45.00	7.1
StoneScapes	White Mini	80.06	-1.11	4.72	56.80	7.9	70.05	-1.43	6.26	40.84	6.8
JewelScapes	Peyto Reflective	80.80	-0.70	0.10	58.10	7.9	72.80	-1.00	-0.70	45.10	7.1
JewelScapes	Sea Mist PRB	80.52	-8.60	-1.54	57.61	7.90	54.31	-8.06	-9.50	22.33	5.24
JewelScapes	Sky Blue IR	80.29	-2.53	-0.09	57.22	7.90	68.65	-13.83	-2.20	38.87	6.66
JewelScapes	Sea Mist PRB IR	80.08	-7.84	-1.24	56.84	7.86	44.89	-4.14	-9.53	14.49	4.32



# Exceptions?

2-3010.2 The HEALTH AUTHORITY may grant a WAIVER to the color requirements of these Regulations for Munsell color values less than 6.5. Competitive or lap POOLS may have lane markings and end wall targets installed in accordance with FINA, NCAA, USA Swimming, NFSHSA, or other recognized standards.

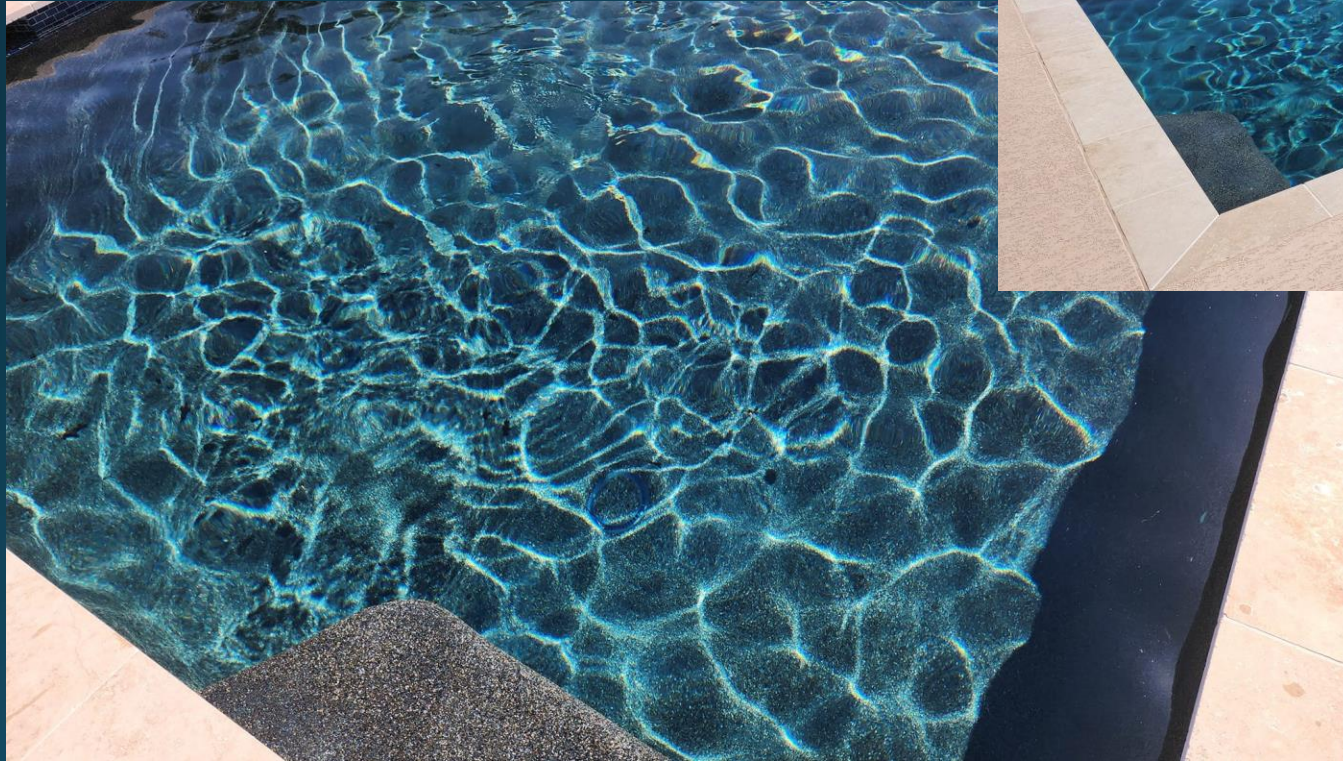
2-3010.3 Any graphics, color, or finish incorporated into the construction of an AQUATIC VENUE floor or walls must not prevent the detection of a BATHER in distress, algae growth, sediment, or other objects in the AQUATIC VENUE. Permission in writing from the HEALTH AUTHORITY for the use of any graphics shall be obtained before the graphics are used

# Bad example





# Bad example



# Summary

- Slip resistance: DCOF value of at least 0.42 or more.
- Color: Munsell color value of at least 6.5
- No black pebbles or really dark spots mistaken for algae.
- No crazy designs.
- The simple the better.