**Chapter 246-261 WAC**

**AQUATIC FACILITIES**

PART 2: DESIGN AND CONSTRUCTION STANDARDS

Subpart B: Materials and Equipment Standards

NEW SECTION

**WAC 246-261-402010** **Aquatic venues (2023 MAHC 4.2.1).** (1) **Construction material.** aquatic venues shall be constructed of reinforced concrete or impervious and structurally sound material(s), which provide a smooth, easily cleaned, watertight structure capable of withstanding the anticipated stresses/loads for full and empty conditions taking into consideration climatic, hydrostatic, seismic, and the integration of the aquatic venue with other structural conditions and as required by applicable codes.

(2) **Durability.** All materials shall be inert, nontoxic, resistant to corrosion, impervious, enduring, and resistant to damages related to environmental conditions of the installation region.

(3) **Areas subject to freezing.** Where located in areas subject to freezing, aquatic venues and appurtenances shall be designed to protect against damage due to freezing.

(4) **Competitive pools.** Competitive or lap pools may have lane markings and end wall targets installed in accordance with FINA, NCAA, USA Swimming, NFHS, or another recognized standard by AHJ.

(5) **Watertight.** aquatic venues shall be designed in such a way to maintain their ability to retain the designed amount of water.

(6) **Walls.** All vertical walls shall have a durable smooth finish suitable for regular scrubbing and cleaning at the waterline.

(a) **Daily cleaning.** The finish shall be able to withstand daily brushing, scrubbing, and cleaning of the surface in accordance with the manufacturer's recommendations.

(b) **Skimmer pools.** skimmer pools shall have a six-inch (152 mm) to 12-inch (305 mm) high waterline finish that meets the requirements of WAC 246-261-XXXXXX and 246-261-XXXXX.

(c) **Gutter/perimeter overflow systems.** Gutter or perimeter overflow systems shall have a minimum waterline finish height of two inches (51 mm) that meets the requirements of WAC 246-261-XXXXXX and 246-261-XXXXXX.

(d) **Dark colors.** If dark colors in excess of what is required in WAC 246-261-XXXXXX are used for the pool finish, these colors shall not extend more than 12 inches (305 mm) below the waterline.

(7) **Floors.** aquatic venue floors in areas less than five feet (1.5 m) deep shall have a slip-resistant finish in accordance with ANSI/APSP/ICC-1 2014.

(8) **Stainless steel, vinyl, PVC-P or PVC pools.** Stainless steel, vinyl, PVC-P, or PVC panel and liner pool finish systems shall be acceptable provided that the system is installed on top of approved materials and design requirements as listed within this section.

(9) **Not permitted.** Wood, sand, or earth shall not be permitted as an interior finish.

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NEW SECTION

**WAC 246-261-402020** **Indoor aquatic facility (2023 MAHC 4.2.2).** (1) **Relative humidity.** The interior finish of an indoor aquatic facility shall be designed for an indoor relative humidity as not less than 80 percent.

(2) **Condensation prevention.**

(a) **Cold weather.** indoor aquatic facility building envelope construction shall include a vapor-retarder/insulation arrangement to assist in preventing the condensation of water on inside pool room envelope building surfaces and within any wall, ceiling, glass, or floor structure under the coldest outdoor conditions based on the ASHRAE climate data for the project locale or nearest reporting city and the highest design indoor relative humidity.

(b) **Weather data.** The ASHRAE dehumidification weather data for the facility geographical location shall be used when calculating the effects of the ventilation air to the space it is being introduced. This shall be added to the evaporation load of all water surfaces, and occupant (includes spectators, swimmers, and nonswimmers on the deck) latent moisture when sizing the climate control equipment.

(c) **Paint or coating.** Where a paint or coating serves as the vapor retarder of an indoor aquatic facility, the paint or coating shall be applied so as to produce a permeability rating of 0.2 U.S. perm (11.4 ng·s-1·m-2·Pa-1) or less. All paints and coatings applied inside the air barrier of a facility shall meet the requirements of UL 2818-2013 through testing of products to CDPH/EHLB/Standard Method v1.1 or UL 2818-2013.

(d) **Application.** The paint or coating shall be applied according to the manufacturer's recommendations for use as a vapor retarder.

(3) **Perforated interior-finish material.** Where a perforated interior-finish material is used in an indoor aquatic facility, as for acoustic effects, the perforated material shall not be considered to be a vapor retarder unless it has a listed permeability rating less than 0.2 U.S. perm (11.4 ng·s-1·m-2·Pa-1).

(4) **Equipment rooms.** For equipment rooms, see WAC 246-261-XXXXXX.

(5) **Chemical storage spaces.** For chemical storage spaces, see WAC 246-261-XXXXXX.

(6) **Indoor aquatic facility air pressure.** indoor aquatic facility air pressure shall be relative to the areas external to it (such as adjacent indoor spaces or adjacent outdoor spaces). The aquatic facility air handling system design, construction, and installation shall comply with the ASHRAE 2019 negative pressure recommendations as outlined in the ASHRAE Applications Handbook on Indoor Pool Design and the ASHRAE Standard 62.1, Ventilation for Acceptable Indoor Air Quality, and all applicable local, state, territorial, federal, and tribal laws and additional requirements as stated in WAC 246-261-XXXXXX.

(a) **Chemical storage space air pressure.** air handling system design for chemical storage spaces shall conform to the International Mechanical Code, and either the International Fire Code or the NFPA 1 Fire Code, and all applicable local, state, territorial, federal, and tribal laws.

(b) **Not interconnected**. This chemical storage space air handling system shall not be interconnected with the indoor aquatic facility's air handling system.

(7) **Air ducts.** Where air ducts are required, they shall be resistant to corrosion from the airborne chemicals. Any system duct work located in an area not being conditioned shall be insulated on the exterior of the duct with a mold-resistant material where the surface temperature of the duct is capable of being less than the airstream temperature within the duct.

(8) **Filters.** Filters for outdoor air intake shall be rated moisture resistant.

(9) **Corrosion resistant.** indoor aquatic facility doors shall either be constructed of corrosion-resistant materials or have a covering or coating to withstand humid and corrosive environments.

(10) **Uncontrolled condensation.** indoor aquatic facility doors which may be exposed to temperatures below indoor aquatic facility air dew point shall have thermal breaks, insulation, and/or glazing as necessary to minimize the risk of uncontrolled condensation. Other doors shall be acceptable, subject to approval by the AHJ, where heating systems are so arranged as to maintain such doors above the maximum design dew point of the indoor aquatic facility air.

(11) **Biological contaminants.** indoor aquatic facility doors and door-frame construction shall not contribute to the growth of biological contaminants.

(12) **Air leakage.** indoor aquatic facility doors and/or door frames shall be equipped with seals and/or gaskets to minimize air leakage when the door is closed.

(13) **Automatic door closer.** All pedestrian doors around the indoor aquatic facility perimeter shall be equipped with an automatic door closer capable of closing the door completely without human assistance and a self-latching device designed to engage and keep the door closed without human assistance. Door closers shall be able to close the door against the specified difference in air pressure between the indoor aquatic facility and other interior spaces.

(14) **Frames.** indoor aquatic facility window frames shall be constructed of suitable materials or shall have a suitable covering or coating to withstand the expected atmosphere.

(15) **Biological contaminants.** indoor aquatic facility window frames shall be constructed of materials that do not contribute to the growth of biological contaminants.

(16) **Thermal breaks.** indoor aquatic facility window frames shall have thermal breaks or be otherwise constructed to minimize the risk of uncontrolled condensation.

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NEW SECTION

**WAC 246-261-403010** **Equipment standards (2023 MAHC 4.3.1).** (1) **Accredited standards.** Where applicable, all equipment used or proposed for use in aquatic facilities governed under this chapter shall be:

(a) Of a proven design and construction; and

(b) certified, listed, and labeled to a specific standard for the specified equipment use by an ANSI-accredited certification organization.

(2) **No standards.** Where standards do not exist, technical documentation shall be submitted to the AHJ to demonstrate acceptability for use in aquatic facilities.

(3) **Suitable for intent.** All equipment and materials used or proposed for use in aquatic facilities shall be suitable for their intended use and be installed in accordance with this chapter, as certified, listed, and labeled to a specific standard by an ANSI-accredited certification organization where applicable, and as specified by the manufacturer.

(4) **Proof of acceptability.** The AHJ shall have the authority to require tests, as proof of acceptability.

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