

CODE TOPICS

2017 FBC 6th ED SECTION 454.1 PUBLIC SWIMMING POOLS

COMMERCIAL POOL NIGHT SWIMMING

TOPIC BACKGROUND

Commercial/public swimming pools may be open only DAWN to DUSK, unless the Health Department Operating permit is issued or modified to allow NIGHT swimming. The process usually requires a lighting contractor that can propose light products and mounts acceptable to the owner and then produce a photometrics design plan showing the required light levels would be met by these selected products. The fact is, underwater lighting is NOT required, but if you want NIGHT swimming and don't want it "lit like a tennis court", adequate underwater lighting is needed.

WHAT THE CODE SAYS

- Section 454.1.4.2- Outdoor pool/spa lighting shall provide a minimum 3 foot-candles (FC) of illumination at the pool water surface and at least the 4 feet of perimeter deck, as long as there is a minimum ½ watt per square foot of evenly distributed underwater lighting. If no or inadequate underwater lighting is provided, the overhead lighting must be minimum 15 FC.
- Indoor pool/spa shall have minimum 0.8 watt per SF underwater lighting and a minimum 10 FC of overhead lighting at the pool water surface and 4 feet perimeter deck area.
- Interactive Water Features (IWF) shall have a minimum 6 FC of overhead light on the IWF and 4 ft of perimeter deck.
- Zero Entry features at pool shall have a minimum 6 FC of overhead light in the areas less than 3 feet water depth and the 4 feet of perimeter deck.

REQUIRED AT PLAN REVIEW

- Verify the underwater lights meet the ½ watt per SF, either by specified incandescent light wattage or manufacturer equivalent wattage for LED lights.
- Verify the proposed light locations are likely to provide distributed underwater lighting.
- Since the NIGHT swimming certification happens from as-built condition with after dark light level testing, new commercial pool construction permit plans will show DAWN to DUSK on the required "Pool Rules Sign".
- Typically the overhead lighting installations would be completed by a separate contractor and separate permit, either during the initial pool construction or some time after.

REQUIRED DURING INSPECTION

Underwater pool lighting:

Inspections at Pool Steel, Pool Deck and Final should all verify the light locations, bonding and installations according to plans.

Overhead pool lighting:

- With a calibrated instrument, collect light measurements every 10 feet of perimeter deck and over the water surface at every 100 SF. Mark the readings on a pool and deck plan, demonstrating compliance.
- Attached that as-built photometrics plan to the Health Department form with appropriate certification.