



# CODE TOPICS

2020 FBC 7<sup>th</sup> ED, SECTION 454.2 RESIDENTIAL POOLS

## FINAL EQUIP PIPING REQUIRED

### TOPIC BACKGROUND

There are two pieces of pool piping often missing in the final plumb at the equipment. These are requirements of the energy code. Those two pieces of pipe that are required are 18" of pipe between the filter and heater for future solar heating connection AND 4 pipe diameters of straight pipe at the pump suction inlet.

### WHAT THE CODE SAYS

What ANSI 15 "Residential Swimming Pool and Spa Energy Efficiency" says:

**5.5.2** For pool filtration pumps, a length of straight pipe that is at least 4 pipe diameters shall be installed before the pump.

**5.5.3** Solar heating. At least 18 inches (457 mm) of horizontal or vertical pipe shall be installed between the filter and the heater or dedicated suction and return lines, or built-in or built-up connections shall be installed to allow for the future addition of solar heating equipment.

### REQUIRED AT PLAN REVIEW

Specific callouts should be viewed on the contractor plan or the Engineering Standards. These requirements are already shown on our Standard Engineering sheets S1 and S2.

### REQUIRED DURING INSPECTION

ANSI 15 requires TWO things related to equipment piping arrangements. There needs to be FOUR pipe diameters of straight pipe on pump suction connection, to reduce turbulence entering the pump that affects its efficiency. That's 8" of pipe in front of the pump strainer when 2" suction pipe is used, or 10" if 2.5" pipe is used, and so on. Also, there needs to be 18" of STRAIGHT pipe after the filter and before the heater, for future solar heater connection. This could be horizontal, vertical or an angle between.

Don't forget that DIRECTIONAL INLETS are also required.

Disclaimer: This is offered as summary and guidance on code requirements. This does not authorize a code violation.

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