

POOL GUIDE: IN-GROUND & ABOVE GROUND

This guide is not all inclusive and your project may require additional information.

Always reference the latest adopted State Building Code.



SWIMMING POOL – Any structure intended for swimming or recreational bathing that contains water more than 24 inches deep.

APPROVALS – (Some reviews can be done simultaneously within the departments)

Zoning Department – Reviews location of pool and verifies compliance with Town Zoning Regulations.

Engineering Department – Reviews site plan for elevation and water impact.

Health Department – Verifies no impact to septic pipes/equipment.

Fire Marshal – For Commercial projects only (Hotels/Motels) – pertains to egress.

Building Department – Reviews Building and Electrical Applications; verifies taxes have been paid.

Sewer Department – Recommend contacting your local Sewer Department.

DOCUMENTS:

1. **Site Plan** – A copy of the A-2 Survey for the property indicating the proposed location of the pool and equipment. Include distance measurements from property lines and structures. For pools not meeting the 48” barrier (fence) height, indicate on the site plan the barrier and gate location.
2. **Applications** – A **Building Application** and an **Electrical Application** is required for the installation of a Pool. Please include a copy of your Registration/License and Certificate of Insurance w/ Worker’s Compensation. Submittal documents shall include:

ABOVE GROUND POOL > 24”

- Installation Manual / Pool Plan
- Ladder specifications
- Alarm information (Pool & Door Alarms)
- Heater / Filter specifications (if applicable)
- Barrier / Gate specifications (if applicable)

INGROUND POOL

- Engineered Stamped & Signed Pool Plan
- Heater / Filter specifications (if applicable)
- Alarm information (Pool & Door Alarms)
- Barrier / Gate specifications or Pool Cover specifications.

INSPECTIONS - The following elements of the project will need to be inspected:

1. **ROUGH Inspection** of Pool and Electrical includes:

ABOVE GROUND POOL > 24”

- Trench open – conduit to pump
- Outlet and Timer
- #8 Cu. Bonding @ 4 points
- Convenience maintenance outlet
- Access Ladder & Barrier
- Pool Alarm / Door Alarm
- Electrical Panel – Circuit breaker
- 3’ Horizontal clearance of obstructions around pool
- Gas pipe & test to pool heater (if applicable)

INGROUND POOL

- Re-bar / Steel (before backfill)
- Bonding (before backfill)
- Convenience maintenance outlet
- Trench open, Conduit exposed
- Service Panel
- Lighting, potting, etc...
- Temp. Barrier
- Pool Alarm / Door Alarm
- 3’ Horizontal clearance of obstructions around pool
- Gas pipe & test to pool heater (if applicable)

2. **FINAL Inspection** of Pool and Electrical – Certificate of Approval issued with a Passed Final Inspection.

POOL DECK – Requires a separate Building/Zoning Permit and construction plans.

POOL INFORMATION

*The following may not be all inclusive of your project.
Always reference the latest adopted State Building Code.*

GENERAL/ENCLOSURE

1. Obtain all approvals (Zoning, Engineering, Tax Dept, Health Dept, Sewer Dept, Building Dept.. etc.)
2. Provide at least one means of egress (exit from the pool enclosure.)
3. Pool equipped with filtration system.
4. Barrier (fence, pool wall, etc.) shall not be less than 48" in height.
5. Openings shall not allow passage of a 4" sphere
6. No indentations/protrusions in solid barriers.
7. Horizontal rails less than 45" apart on inside of barrier; No greater than 1-3/4" vertical spacing.
8. Horizontal rails spaced greater than 45" vertical/pickets less than 4".
9. Maximum 2 1/4" square chain link mesh openings.
10. Maximum 1 3/4" diagonal openings (lattice, chain link w/slats, etc.)

PEDESTRIAN ACCESS GATES, DOOR ALARMS, OTHER GATES

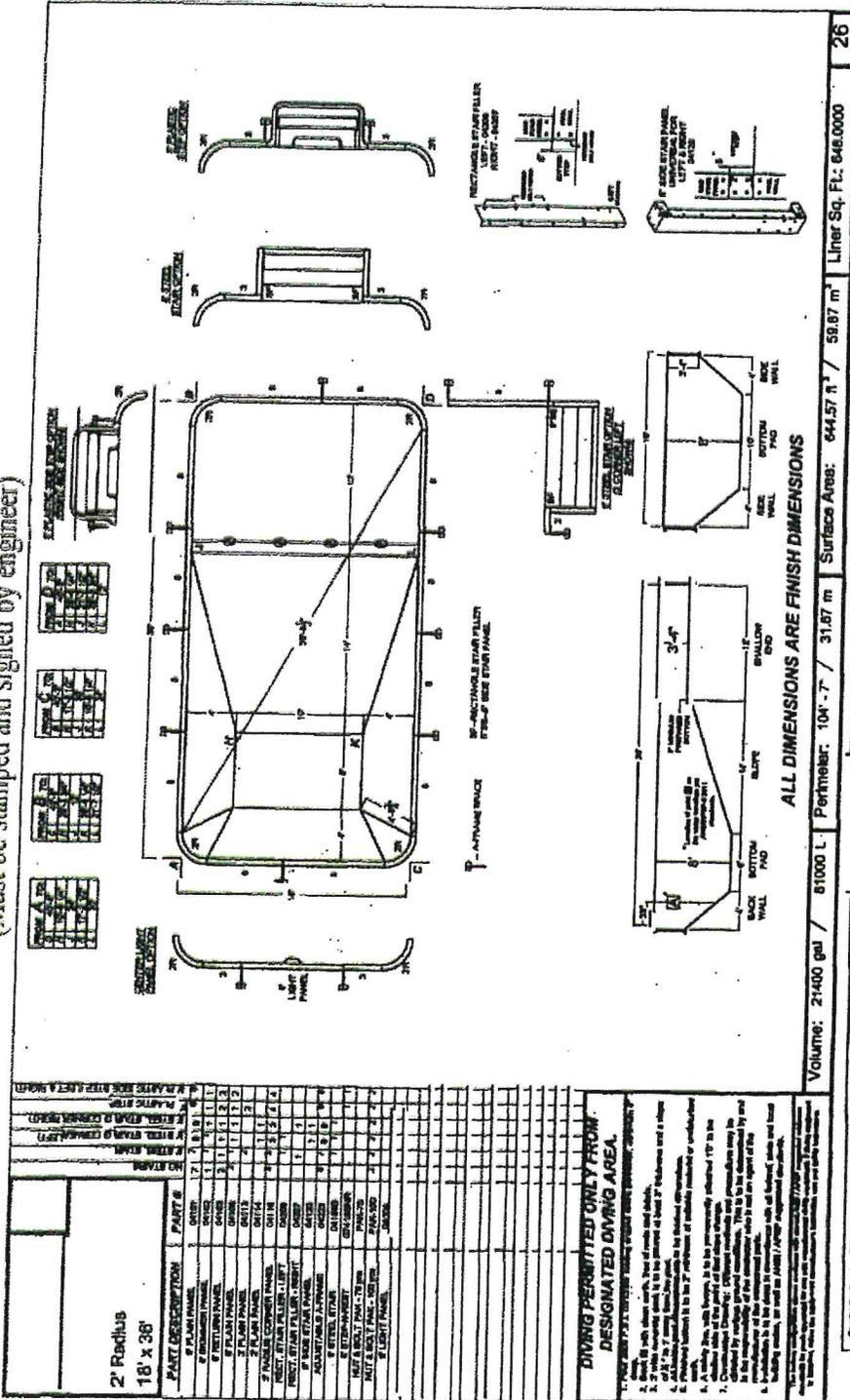
11. Pedestrian doors and gates shall open outward; away from the pool. No double swing.
12. Pedestrian access gates shall be self-closing/self-latching.
13. Doors and gate latches less than 54" above bottom of gate shall be inside gate and gate materials shall have openings 1/2" maximum within 18" of the latch, and the latch shall not be less than 3" below the top of gate.
14. Utility or service doors and gates not intended for pedestrian use, shall remain locked with not in use.
15. Double doors or gates shall have not fewer than one leaf secured in place and the adjacent leaf shall be secured with a self-latching device.
16. Alarms for doors leading directly into the pool area shall be listed and labeled in accordance with UL 2017.
17. Deactivation switches shall be located 54" minimum above floor.
18. Provide pool water alarm.

ELECTRICAL

19. At least one 125 v. convenience receptacle between 6' to 20' from pool walls and GFCI protected.
20. Pump receptacle minimum 6' from inside walls of the pool shall be GFCI and grounding type.
21. Pump receptacle grounding conductor not less than #12AWG; insulated (Romex not allowed outside of structure). 4 separate THWN insulated min #12AWG conductors.
22. All light fixtures 5'-10' from pool shall be GFCI.
23. Switches shall be not less than 5' horizontally from pool. *Exception:* when located behind a solid barrier.
24. Maximum pool equipment flex cord length is 3' (20A or less). *Exception:* for underwater lighting fixtures.
25. Wiring method type/burial depths:
 - a) Rigid metal conduit (RMC) not less than 6"
 - b) Intermediate metal conduit (IMC) not less than 6"
 - c) Rigid non-metallic conduit (NMC) not less than 18"
26. Bonding required; #8 AWG bare solid copper, for the following:
 - a) Structural reinforcing (rebar) of concrete pool.
 - b) Walls of bolted or welded metal pools.
 - c) All metallic parts of pool structure.
 - d) All fixed metal parts within 5' horizontally from pool edge.
 - e) All pump motors, filter casings and other metal electrical equipment associated with the pool.
 - f) Provide bonding grid with four uniformly spaced points of attachment. #8 bare solid copper conductor 18" to 24" from pool wall 4" to 6" below grade.
 - g) Pool water heaters as bonded/installed per manufacturer.
 - h) Pool water bond with conductive area 9 square inches in contact with pool water and be accessible.
27. Pool heaters – Provide an on/off switch. If gas, no continuously burning pilot lights.
28. Time clock for pool filter motor and pool heater.

SAMPLE - IN-GROUND POOL PLAN

(Must be stamped and signed by engineer)



PART DESCRIPTION	PART #	QTY	UNIT
1. PLANTER	1	1	EA
2. PLANTER	2	1	EA
3. PLANTER	3	1	EA
4. PLANTER	4	1	EA
5. PLANTER	5	1	EA
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DIVING PERMITTED ONLY FROM DESIGNATED DIVING AREA.

1. THE DIVING AREA IS TO BE DESIGNATED BY THE ENGINEER AND SHALL BE INDICATED BY A SIGN.

2. THE DIVING AREA SHALL BE AT LEAST 10' x 10' IN AREA AND SHALL BE AT LEAST 3' DEEP.

3. THE DIVING AREA SHALL BE AT LEAST 10' FROM ANY OTHER EQUIPMENT OR STRUCTURE.

4. THE DIVING AREA SHALL BE AT LEAST 10' FROM ANY WALL OR CORNER.

5. THE DIVING AREA SHALL BE AT LEAST 10' FROM ANY STAIRS OR LIFTS.

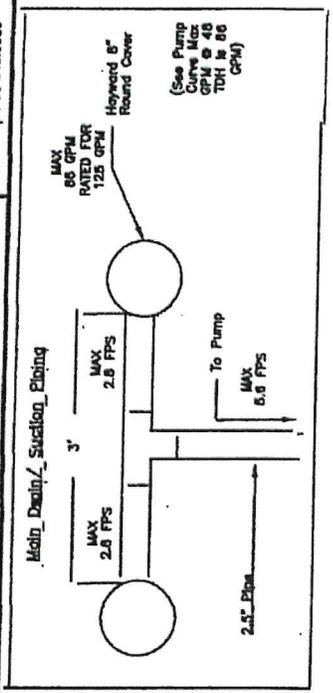
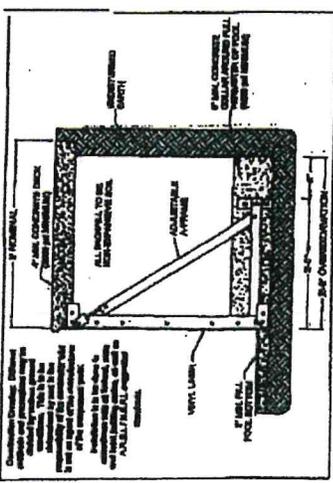
6. THE DIVING AREA SHALL BE AT LEAST 10' FROM ANY OTHER OBSTACLE.

7. THE DIVING AREA SHALL BE AT LEAST 10' FROM ANY OTHER EQUIPMENT OR STRUCTURE.

8. THE DIVING AREA SHALL BE AT LEAST 10' FROM ANY WALL OR CORNER.

9. THE DIVING AREA SHALL BE AT LEAST 10' FROM ANY STAIRS OR LIFTS.

10. THE DIVING AREA SHALL BE AT LEAST 10' FROM ANY OTHER OBSTACLE.

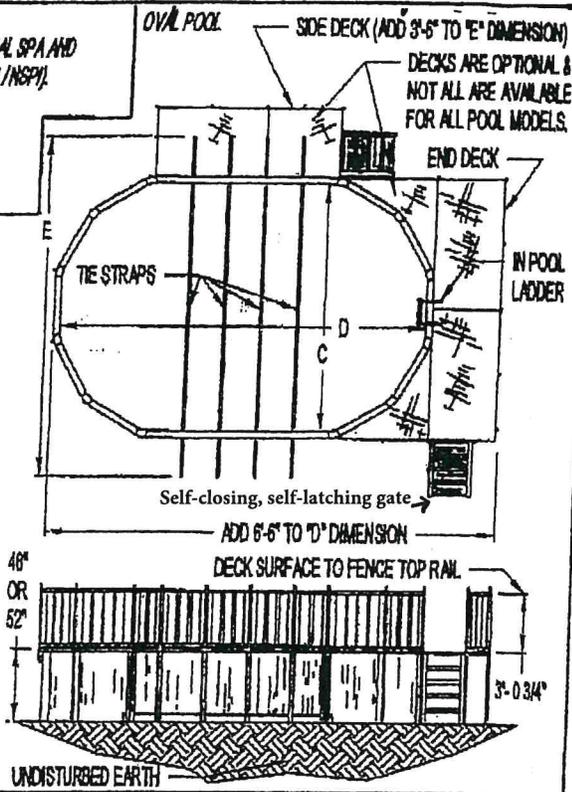
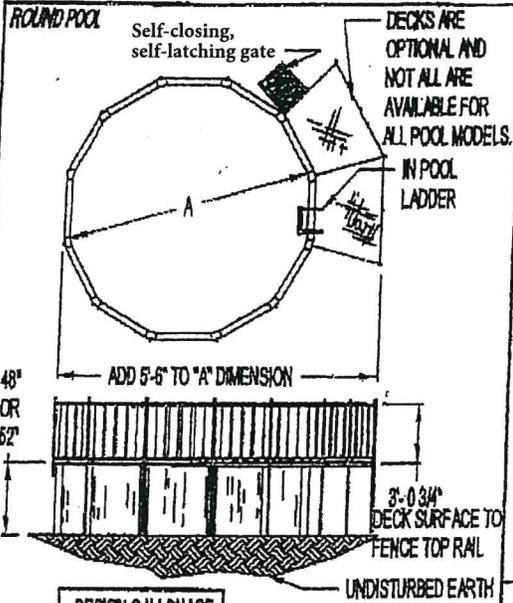


SAMPLE - ABOVE GROUND POOL PLAN

(Or Installation Manual of Above Ground Pool)

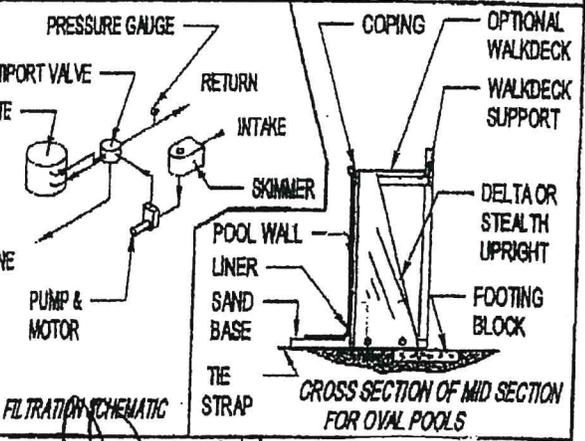
NOTE:

- 1) THIS IS A NON-DIVING POOL AS DEFINED IN THE CURRENT "ANSI / NATIONAL SPA AND POOL INSTITUTE" STANDARD FOR ABOVE GROUND SWIMMING POOLS. (ANSI / NSPI).
- 2) DECKS ARE DESIGNED TO WITHSTAND A LIVE LOAD OF 100 LB/FT².
- 3) FENCE WILL WITHSTAND A 200 LB. LOAD
- 4) ALL OPENINGS IN THE FENCE ARE LESS THEN 4"
- 5) PRODUCT MEETS OR EXCEEDS ALL REQUIREMENTS OF



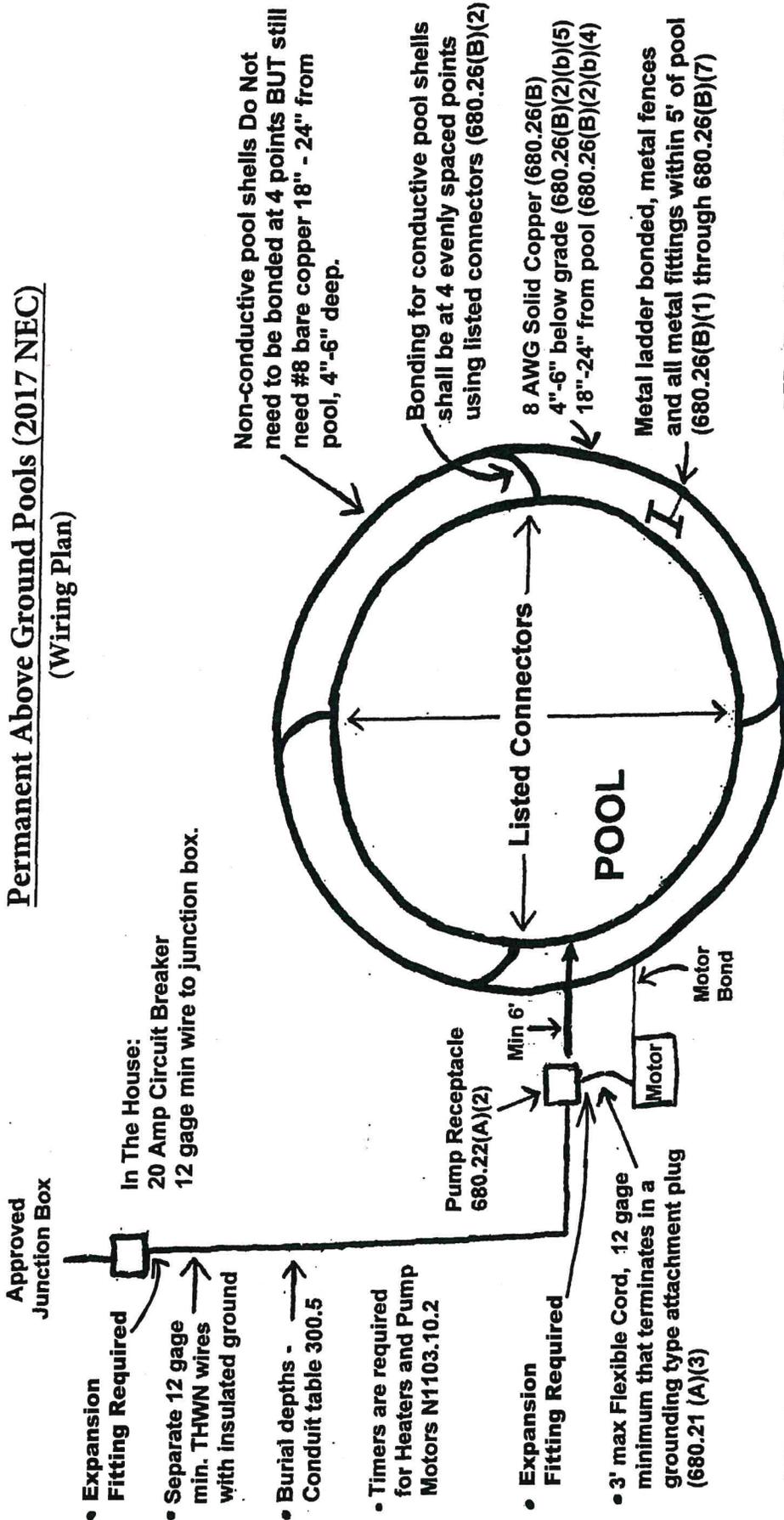
ROUND	DESIGN GALLONAGE		A	NOT ALL POOL SIZES ARE AVAILABLE ON ALL MODELS.
	48" GAL.	52" GAL.		
10'	2,350	2,550	10'-0"	
13'	3,650	4,000	12'-6"	
15'	5,300	5,750	15'-0"	
18'	7,600	8,250	18'-0"	
21'	10,350	11,250	21'-0"	
24'	13,550	14,650	24'-0"	
24' HOP.	15,150	18,300	24'-0"	
27'	17,150	18,550	27'-0"	
27' HOP.	19,900	23,100	27'-0"	
30'	21,150	22,900	30'-0"	

OVAL SIZES	48" GAL.	52" GAL.	C	D	E
13'x18'	5,950	6,400	12'-6"	18'-6"	17'-6"
13'x22'	7,050	7,600	12'-6"	21'-6"	17'-6"
13'x25'	8,200	8,850	12'-6"	24'-6"	17'-6"
15'x24'	9,350	10,100	15'-0"	24'-0"	20'-0"
15'x24' HOPPER	10,400	11,150	15'-0"	24'-0"	20'-0"
15'x30'	12,050	13,050	15'-0"	30'-0"	20'-0"
15'x30' HOPPER	13,250	14,250	15'-0"	30'-0"	20'-0"
18'x33'	15,700	17,000	18'-0"	33'-0"	23'-0"
18'x33' HOPPER	17,200	18,500	18'-0"	33'-0"	23'-0"



SAFARI, LEGEND, SUN MASTER, JUNGLE KING
 SOUTH BEACH, ULTIMA, RTN, SHURA
 MILLENNIUM, SUMMIT, CLASSIC, FESTIVAL, FAMILY DES
 SPEC020 | 11/20/04 | NTS | JJJ

Permanent Above Ground Pools (2017 NEC) (Wiring Plan)

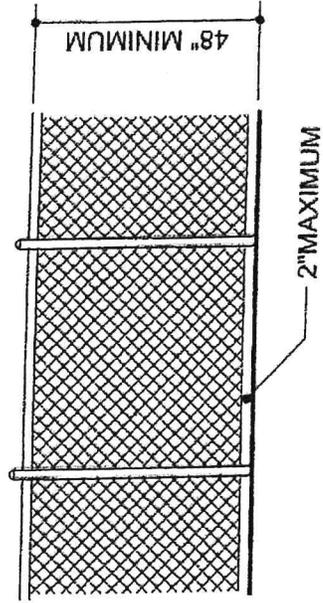


- Expansion Fitting Required
- Separate 12 gage min. THWN wires with insulated ground
- Burial depths - Conduit table 300.5
- Timers are required for Heaters and Pump Motors N1103.10.2
- Expansion Fitting Required
- 3' max Flexible Cord, 12 gage minimum that terminates in a grounding type attachment plug (680.21 (A)(3))

- 125 volt 15- or 20 ampere receptacle on general purpose branch circuit, more than 6' and less than 20' from inside wall of pool shall be GFCI protected (680.22(A)(1)(4))
- Note: Pool water: An intentional bond of a minimum conductive surface area of 9 sq.in. shall be installed in contact with the pool water. 680.26(c) and be accessible.

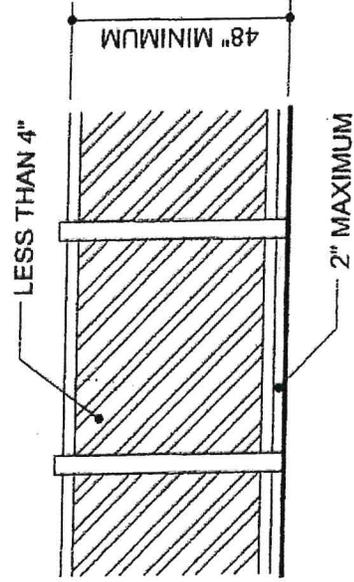
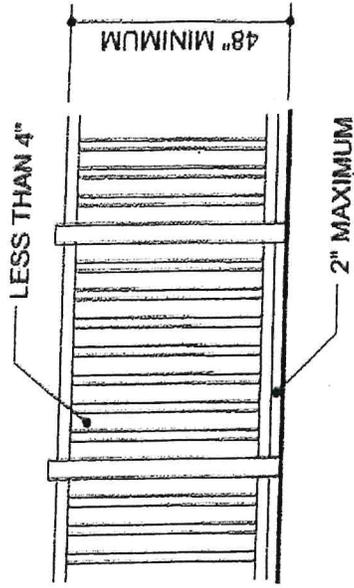
- DEF: Permanently Installed Swimming, Wading, and Therapeutic Pools. Those that are constructed in the ground or partially in the ground and all others capable of holding water in a depth greater than 42"; and all pools installed inside of a building, regardless of water depth, whether or not served by electrical circuits of any nature.
- DEF: Storable Swimming, Wading, or Immersion Pools, or Storable/Portable Spas and Hot Tubs. Those that are intended to be stored when not in use, constructed on or above the ground and are capable of holding water to a maximum depth of 42", or a pool, spa, or hot tub constructed on or above the ground with nonmetallic, molded polymeric walls or inflatable fabric walls regardless of dimension.

This list does not contain all of the requirements associated with swimming pools. It is to be used only as a guide and should be used in conjunction with all applicable codes, standards and local rules associated with Permanent Above Ground Swimming Pools.

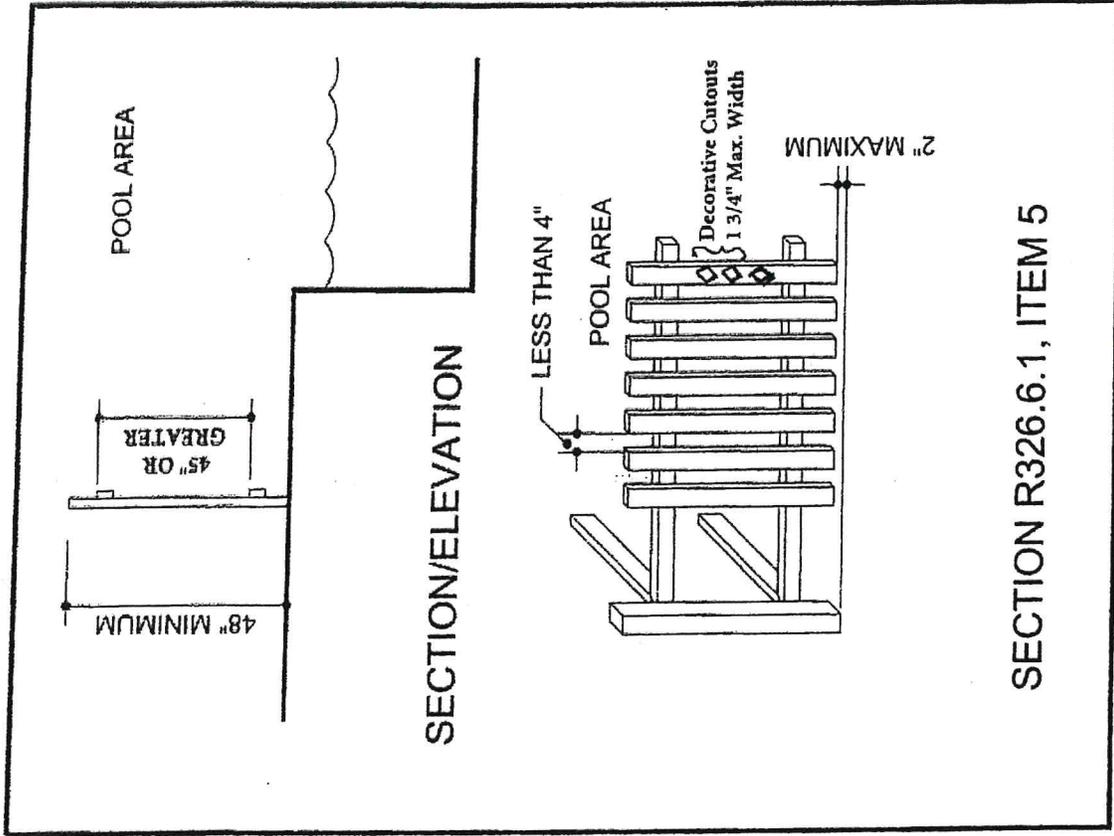
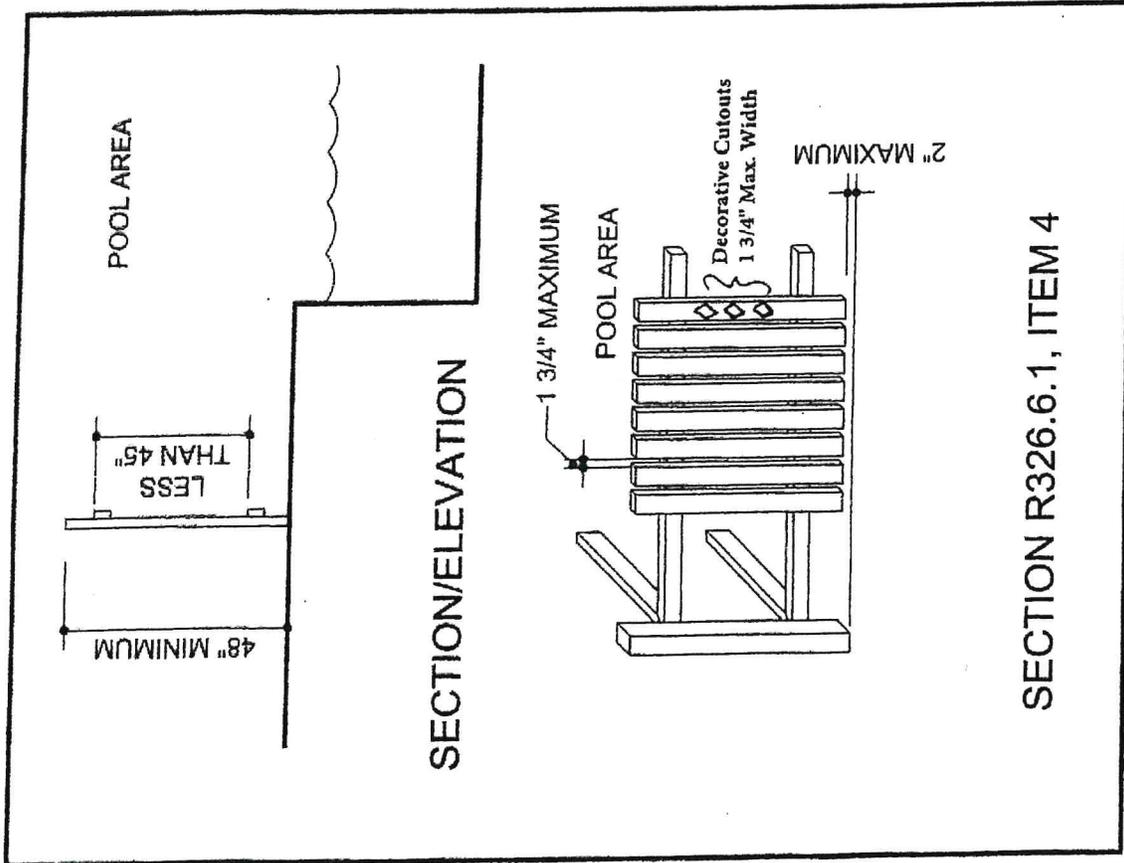


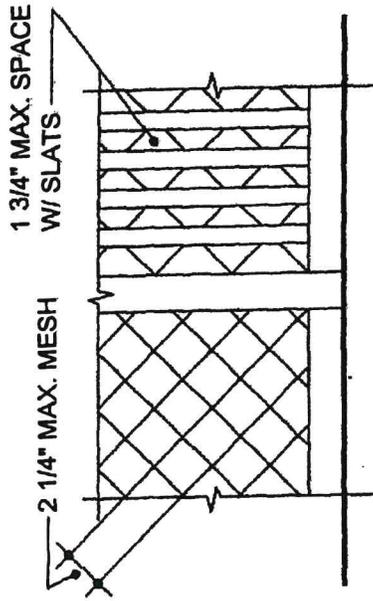
MEASURED OUTSIDE OF THE POOL ENCLOSURE

SECTION R326.6.1, ITEM 1



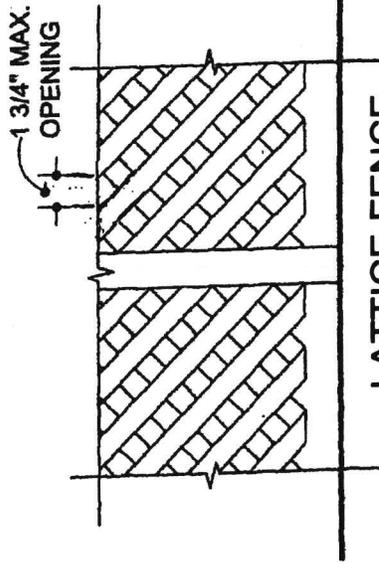
SECTION R326.6.1, ITEM 2





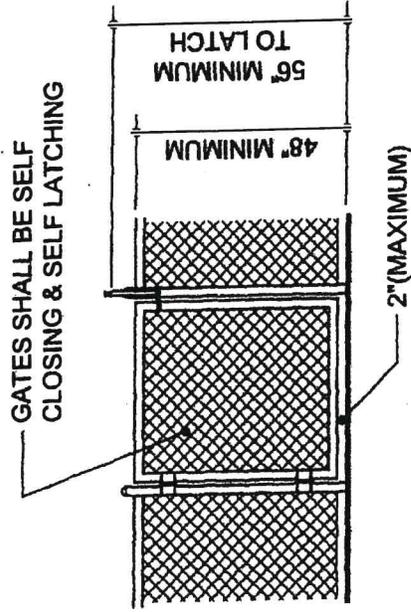
CHAIN LINK FENCE

SECTION R326.6.1, ITEM 6



LATTICE FENCE

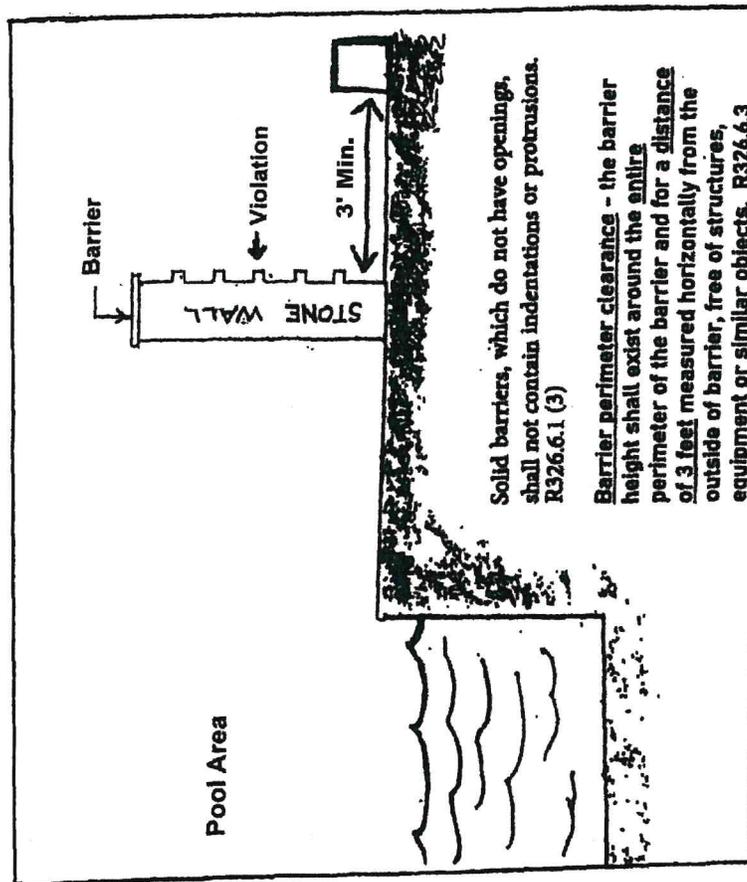
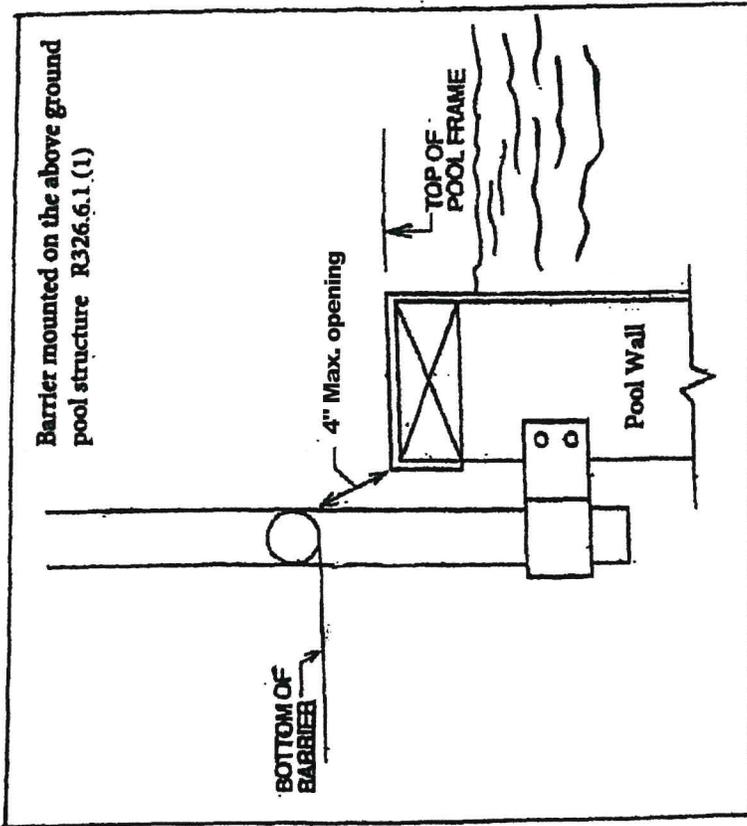
SECTION R326.6.1, ITEM 7



ELEVATION

PEDESTRIAN ACCESS GATE

SECTION R326.6.1, ITEM 8



ALARM INFORMATION

POOL ALARM R326.6.6

- Device that emits a sound of at least 50 decibels when a person or an object within 15 pounds or more enters the water in a swimming pool.

DOOR ALARM R326.6.1 (9)

- Where a wall of a dwelling serves as part of the barrier, one of the following shall be met:
 - (9.1) Pool shall be equipped with a powered safety cover in compliance with ASTM F1346;
 - (9.2) Doors with direct access shall be equipped with an alarm that produces an audible warning. Alarm shall be listed and labeled in accordance with UL 2017 and shall be located at least 54 inches above threshold of door;
 - or
 - (9.3) Other means such as self-closing doors with self-latching devices, shall be acceptable as long as degree of protection afforded is not less than the protection by item 9.1 or 9.2.