



### **Preparation and Installation:**

1. We recommend any Client to contact your local Council. It is Important to establish Councils requirements and expectations, as these can vary from one Council to another. Any pool will need to be registered with Council.

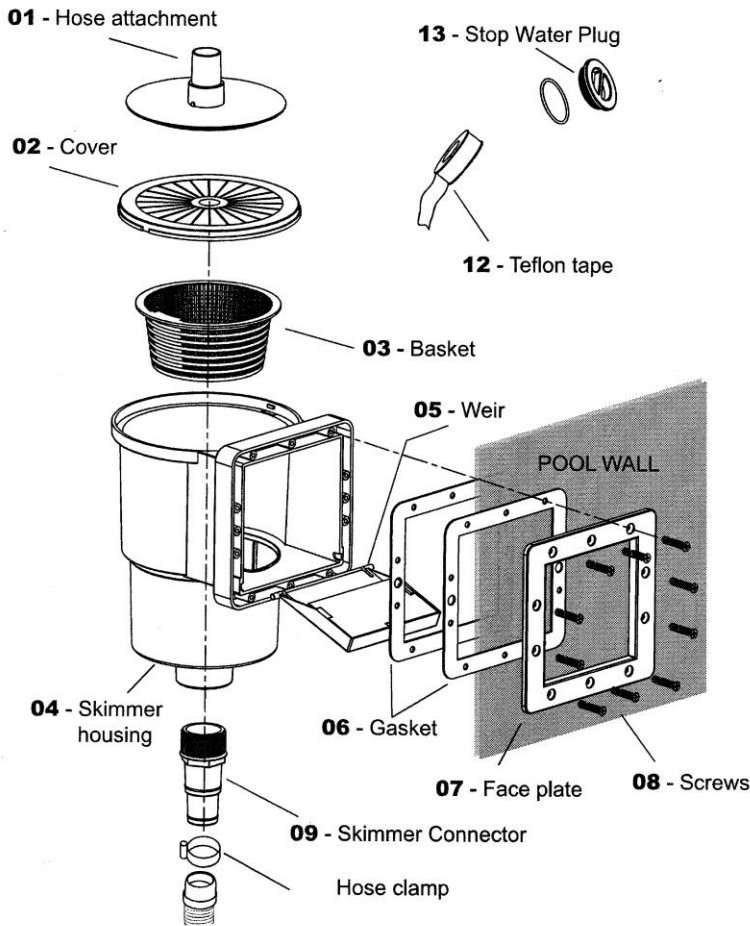
Likely your council may require either some or all of the following:

- Pool Fencing
- Backwash to be routed to a specific place, like sewer in some cases.
- Pool registration
- CPR and Safety Signage as required.
- In Some Areas a development Application will be required

**This is not an Exhaustive List/guide, Your Council is the Authority. Any Guidance Provided by Duraplas or its representatives is not a replacement or substitute for the direct advice from any given authority.**

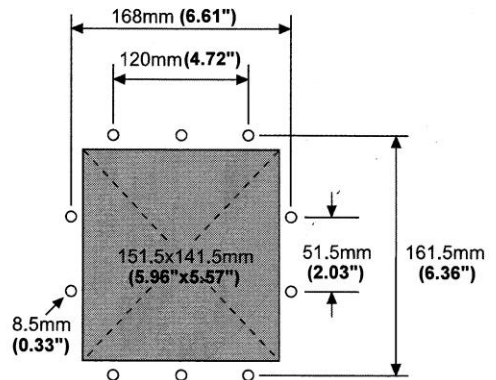
2. Prepare the site and install the Aussie Plunge Pool shell in accordance with the Duraplas installation sheet (Refer Pages 7 and 8).
3. Install the skimmer box and return fitting as per the 'Leaf Skimmer Instruction Manual'. The skimmer hole is Cut by us at Factory, affixing the to this hole as per the instruction manual.
4. Install the Pool pump and sand filter by following the step-by-step instructions provided. You will require 15kg of Quartz sand with a particle size of 0.4 – 0.8. This sand is available from Bunnings or your local pool shop. Install the sand as per the instructions supplied.  
The image overleaf will help show where to connect the hoses. **Ensure all hoses are free of debris prior to connection, stray debris (such as, gravel from the base) ingested into the system will not be covered under warranty.**
5. Ensure the required safety fences are installed correctly, any gates catches are child proof and operate correctly and that your pool complies with all your local council safety requirements. Ensure that your pool is registered as required and a CPR safety sign is fixed to the fence.
6. Fill your new Aussie Plunge Pool with water and check all hoses for leaks. Chlorinate your pool as required and regularly test the water. A test kit and chlorine are available from Bunnings or your local pool shop.
7. Enjoy many hours of fun and relaxation in your Aussie Plunge Pool.

# POOL INLET, OUTLET AND LEAF SKIMMER PARTS



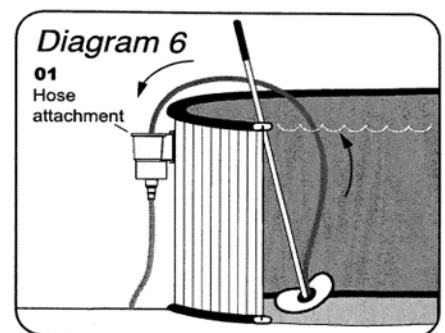
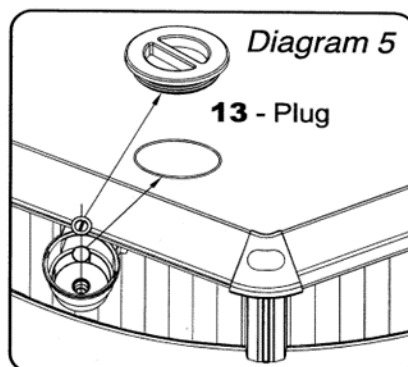
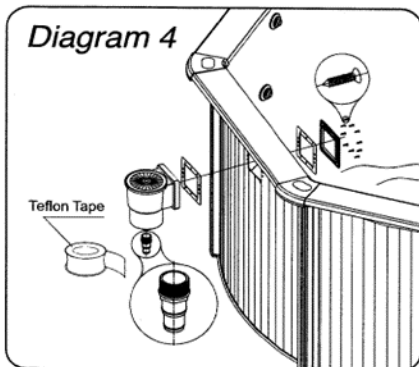
Item	Part No.	Description	Quantity
01	P6774	Hose Attachment	1
02	P6775	Cover	1
03	P6776	Basket	1
04	P6777	Skimmer Housing	1
05	P6778	Weir	1
06	P6779	Gasket	2
07	P6780	Face Plate Cover	1
08	P6781	Screw ST5.5x25	10
09	P6782	Skimmer Connector	1
10	P6763	Outlet Connector Kit	1
11	P6784	Inlet Connector Kit	1
12	P6785	Teflon Tape	1
13	P6813	Stop Water Plug	3

## Cut Out



## Leaf Skimmer Installation

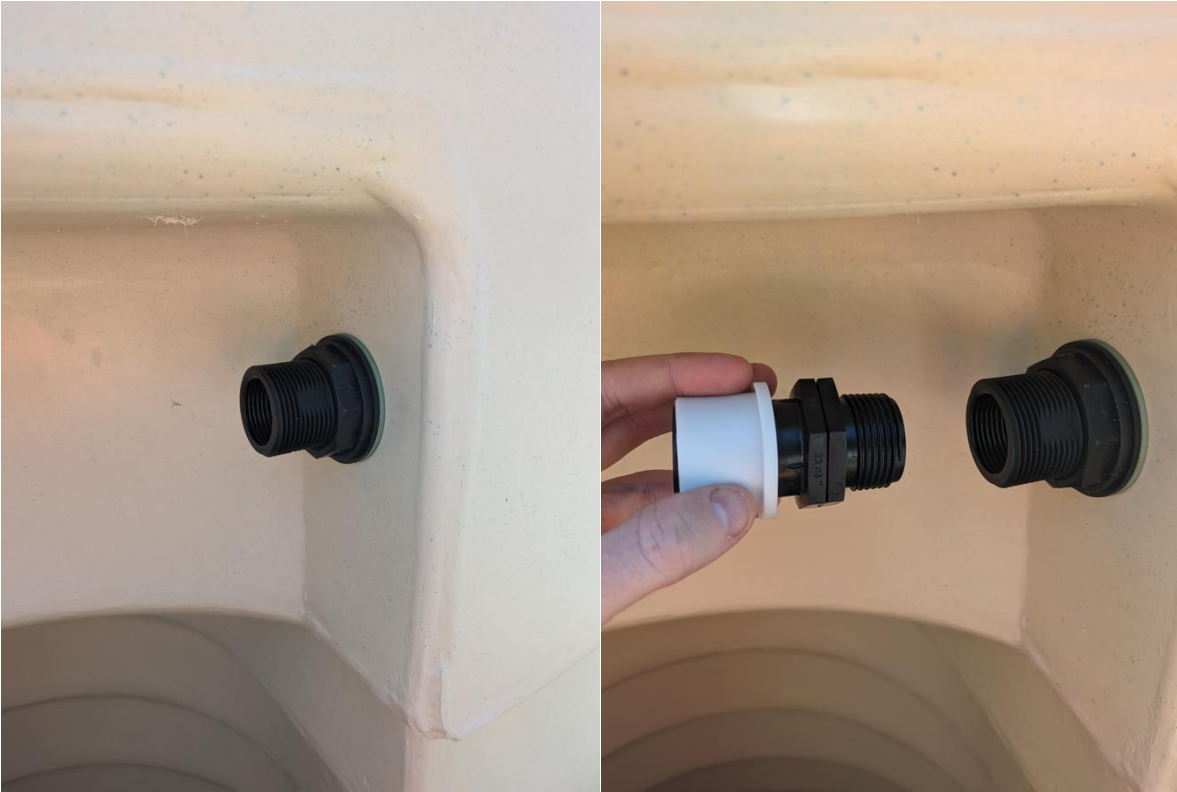
1. Fill the pool with water between 3-6cm (1"-2") below the position of the Skimmer Hole. (See diagram 1)
2. From outside the pool wall, place the gasket (P6779) and skimmer housing (P6777) against the pool wall in line with the hole. (See diagram 4)
3. From inside the pool wall, place the gasket (P6779) and faceplate (P6780) against the pool wall in line with the hole. Push the screws carefully through the pool but do not securely tighten them until all the screws are in place. Ensure that the housing and inside faceplate are correctly aligned and tighten the screws into position but do not over tighten as you may damage the screws and / or the pool wall. Ensure that the gasket is not pinched or damaged. Do not create multiple holes as this will cause damage to the pool. Carefully trim off any protruding parts of the liner inside the connections after installation but do not trim off too much.
4. Screw the plug to the inside of the skimmer housing (P6777) to stop water flowing. (See diagram 5) When using the filtration system, please unscrew and remove the plug to allow water to flow to the filter pump.
5. Place the basket (P6776) into the skimmer housing (P6777) and fix the cover (P6775). Coat the Teflon tape (P6785) to the threading of the Skimmer Connector (P6782) and then connect it to the skimmer housing (P6777). (See diagram 4)
6. Clip the weir (P6778) to the front of the pool skimmer housing (P6777) if not already assembled.
7. Make sure the skimmer is sealed to the pool wall and no water is leaking.
8. Connect the filtration system to the pool. Follow the Sand Filter Manual for assembly requirements before operating.
9. The hose attachment (P6774) can be used to connect pool cleaning kits and Vacuums. (See diagram 6)
10. Finish off by checking and tightening all fittings but do not over tighten to avoid damage to the liner and pool wall.



2

Return Line Nozzle is pre-installed in pool prior to delivery.

The treaded adaptor is packed with the skimmer box.



# Pool Pump and filter instructions:



You bought a technical device, the handling is easy and simple, but requires the observance of certain precautions. We therefore ask you to read the following instructions carefully!  
For the operation of the filter system, you need a skimmer (surface skimmer). Either an integrated skimmer (built into the pool wall) or a suspended skimmer (attachment to the poolwall).



## Positioning

The installation area you set between the skimmer and the inlet nozzle so, that there is an adequate safety margin to the pelvic wall. We recommend putting the filter system in addition on base plates (for example: washed concrete slabs etc.). These have to be installed with the spirit level.

Under no circumstances you may put your filter system in a trough or directly into the grass (flood danger or risk of overheating of the filter pump).

If you have sunk your pool partially or completely, so it makes sense to place the filter pump in a filter slot, which should connect directly to the pelvis.

Is your filter pump housed in a filter slot, so it has to be insured, that the filter slot can't be slooded. For this purpose you should bring in a roller-burnishing (crushed rock) in the range of the filter slot, so that the surrounding- and rainwater can seep away. It would be ideal if there is a direct connection to the drain in the sump of the filter shaft (or sludge pump, with automatic floating switch).

It is important to ensure that the filter slot should never be airtight, because this may cause damage, due to condensation water, on the filter pump. The size of the filter shaft should be selected so that work can be performed on the filter system.

The necessary accessories such as hoses, hose clamps and filter sand (not included) are offered gladly from your pool dealer.



## Assembly of the filter system (Illustration 1)

Assemble the filter system at the location where the pump finally will be (the subsequent transport there would be too burdensome!).

The filter pump consists of the following parts:

1. Pump
2. valve
3. Seal (O-Ring)
4. clamping ring
5. vessel
6. Standpipe with connector for filter finger
7. Filter finger
8. Drain plug
9. Centralizer (cover for standpipe)
10. Base plate
11. Pressure hose



## Filter vessel

1. The standpipe including connector for filter finger is inserted into the boiler (Illustration 2) to introduce and connect the small filter finger with the connecting element for the filter finger by screwing. (depending on the model) (Illustration 3)
2. The standpipe with the connector for filter finger turn off on the bottom of the boiler (finger filter must already be installed), make sure that the standpipe is located on the bottom of the boiler in the middle and that the drain plug was screwed.
3. Now put the centralizer on the tank opening, while centering the standpipe. (Illustration 4)

4. Fill in the filter quartz sand up to a high of about  $\frac{3}{4}$  of the bowlheight. (right grit 0,4mm - 0,8mm, Quantity: depending on filter size) (Illustration 4)

5. Then mount the top of the boiler or the valve head and the boiler seal on the tank top of the filter vessel. Before you do this, it is necessary to clean again and wash off any sand or accumulated debris. The connection of the top of the boiler or the head valve with the filter vessel is carried out by the clamping ring. The clamping ring is screwed with the clamping ring screw and the collet nut. (Illustration 5 & 6)

6. Finally, mount the pump fittings on the valve head. Seal the pump fittings sufficiently by using teflon tape.

7. The pressure gauge (if included) is screwed to the side of the 6-way valve and sealed. The existing vent plug should be removed first. Illustration 9



## Pump hose connections (Illustration 7)

1. **Skimmers:** Connection from skimmer to the front connector of the filter pump.
2. **Pressure line:** Connection going from the upper area of the top of the filter pump to the connector with the designation "PUMP" at the 6-way valve.
3. **Return line:** Connection from the 6 way valve with the designation "RETURN" to the connection at the inlet nozzle (pool). Secure all connections with hose clamps.
4. **Backwash:** Connection „WASTE“ (Empty) in the channel. Connections are made with special pool hoses and hose clamps!



## Commissioning of the filter system

1. Before you go in operation with the filter system, it must be insured that the filter system stands outside the basin and in the level lower than the water level of the pool is, and the hose connections are properly connected and secured.
2. The swimming pool must be filled with water, according to the instructions of your pool dealer. The water must flow towards the filter pump. Now the filter pump is vented. If available, open slightly the preliminary filter of the filter pump until water flows from the prefilter top. (transparent cover with screw connection on the top of the filter pump) For non self-priming pumps, it is necessary that the water level is above the filter pump.
3. Place the handle on the 6 - way valve to the Backwash position. Only now the filter pump is taken in operation. Backwashing about 2 - 3 minutes to perform. Then turn the filter pump off again and put the handle on the valve head in the RINSE position. Rinsing for 30 seconds. Thereafter, the filter pump is switched off again and the handle set to the position FILTER. The backwashing and rinse water you best pipe in the channel.
4. Turn the filter pump back on. The filter system is in normal filter operation. We recommend a filter run time of 2 x 4 - 5 hours per day. If you clean the bottom of your pool with a pool vacuum cleaner, this is also done in the position filter. After each floor-cleaning or when the pressure on the pressure gauge if available (by 2 - 3 ticks) rises, backwashing is required.
5. After BACKWASHING always a REFLUSHING with a duration of approximately 30 seconds is required. This causes the reduction of the sand in the filter vessel.
6. If you clean your pool with a pool vacuum cleaner, this can also be done with the 6-way valve in the position DRAINING to remove impurities from the pool (eg: algae), which otherwise go back through the filter sand. In doing so, the water which is extracted from the ground, will be directly pumped through the backwash line into the open air. After this process, the water level of the pool is supplemented accordingly.



Filtration systems may not run dry (without water)!

The water takes the cooling – in case of dry running there is no warranty replacement!



With every switching of the 6-way valve the filter pump must be turned off!



Filter run time (2 x 4 – 5 hours a day) and the regular backwashing (2 – 3 minutes) at least 1 x per week as well as the floorcleaning are the basic requirement for maintained swimming pool water!

Repairs on the pump should only be performed by trained and qualified, professional technicians.



Specifications:

All models:

6-way valve, filter pump TÜV / GS, filter vessel, connection Ø 32/38 mm, base plate

Model	300
Flow rate:	3,8 m <sup>3</sup> /h at 0,4 bar working pressure
Connection:	230 V, max. 200 W
Amount of Sand:	max. 20 kg
Pool size:	max. 19 m <sup>3</sup>
Filter pump:	without prefilter, not selfpriming
Modell	310
Flow rate:	4,5 m <sup>3</sup> /h at 0,4 bar working pressure
Connection:	230 V, max. 250 W
Amount of Sand:	max. 20 kg
Pool size:	max. 22 m <sup>3</sup>
Filter pump:	with prefilter, not selfpriming
Model	400
Flow rate:	6,6 m <sup>3</sup> /h at 0,4 bar working pressure
Connection:	230 V, max.550 W
Amount of Sand:	max. 25 kg
Pool size:	max. 28 m <sup>3</sup>
Filter pump:	with prefilter, selfpriming



### Floorcleaning (Illustration 8)

Floorcleaning is done in position filtering (on the valve). The pool-floor vacuum cleaner has to be connected with the pool-floor vacuum cleaner hose directly to the skimmer. Until the pool-floor vacuum cleaner is connected and ready for operation, the filter pump must be switched off.

**Important:** The pool-floor vacuum cleaner hose must fully be filled with water so that the pump does not filter air, only then the pump can be switched on. Will air get into the filter system, the filter pump is to turn off and the vacuum cleaner must be vented again.

Now move slowly and smoothly (speeding can stir up dirt) with your vacuum cleaning brush on the bottom of the pool.

For filter systems without prefilter a skimmer with a strainer basket is beneficial!



### Problem treatment

Cause of Problems	Solution
Sand contaminated with dirt	Backwashing (cleaning of the sand)
Pump sucks air (Bubbles at the inlet)	defective hoses, tighten hose clamps
Skimmer or pump gets too little water	Check water level and increase if necessary, check the intake for dirt accumulation
Skimmer basket contaminated	Cleaning of the skimmer basket
Prefilter basket of the filter pump contaminated	Cleaning of the prefilter basket



### To Winterize the System

At the end of the swimming season, the filter system and the hoses must be removed and emptied.

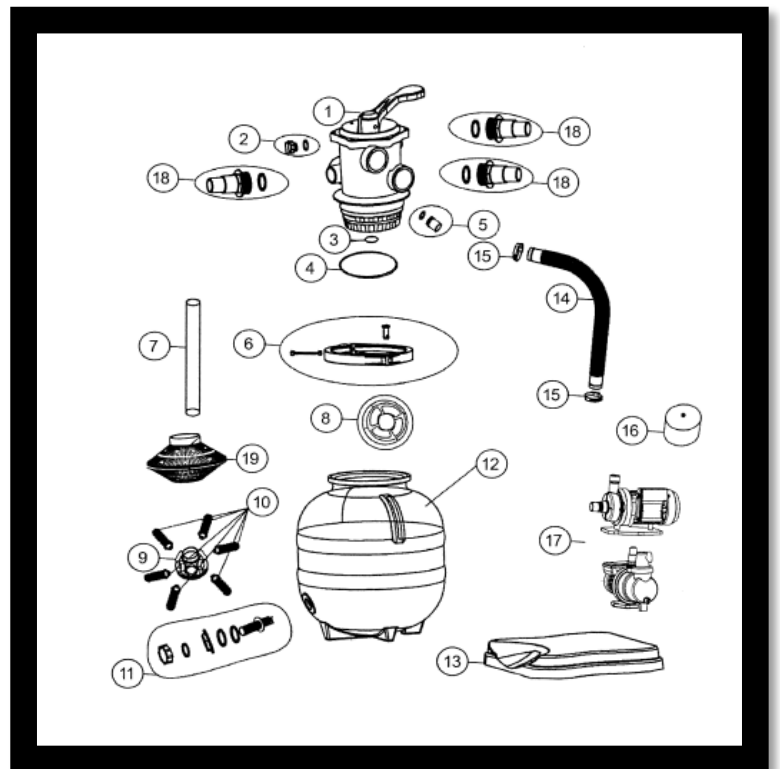
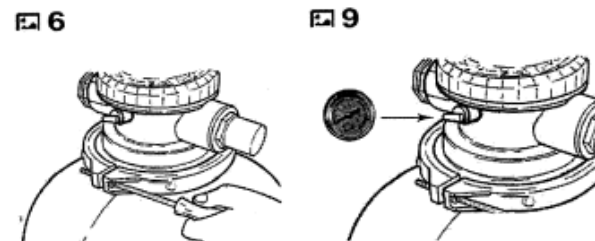
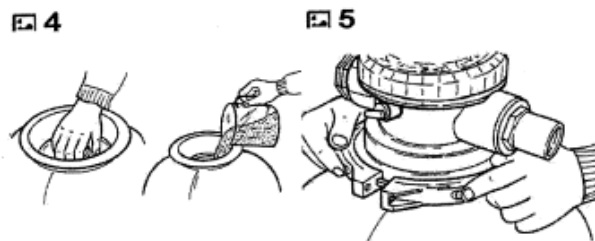
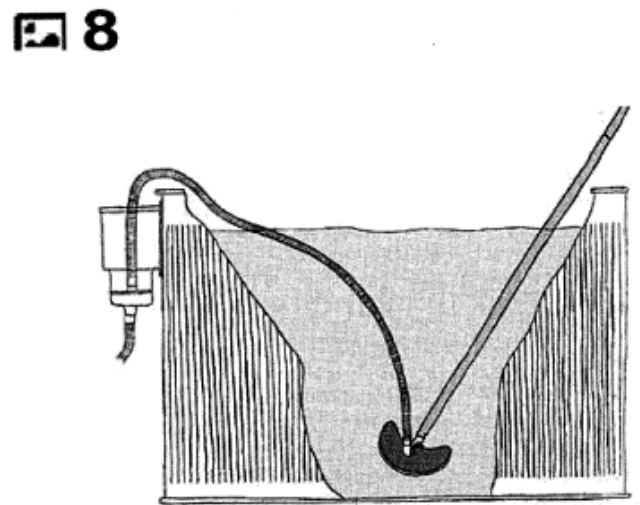
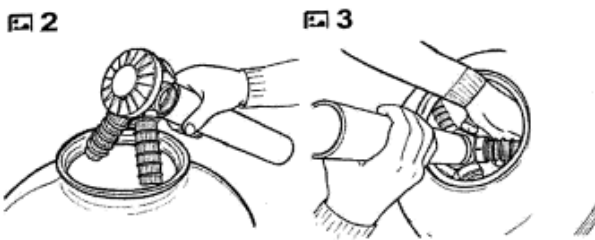
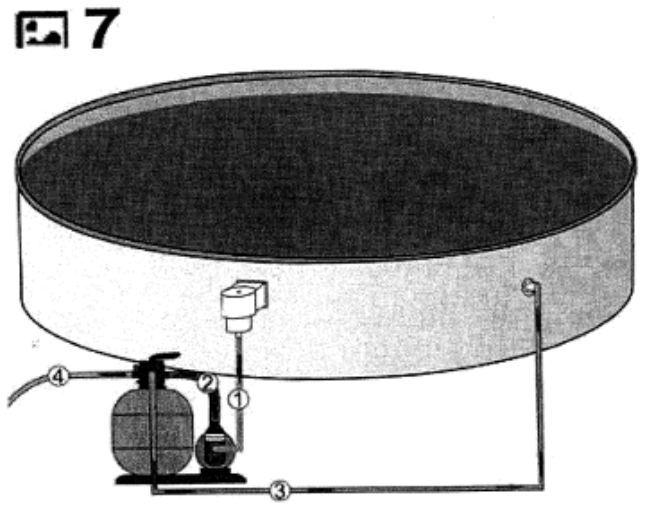
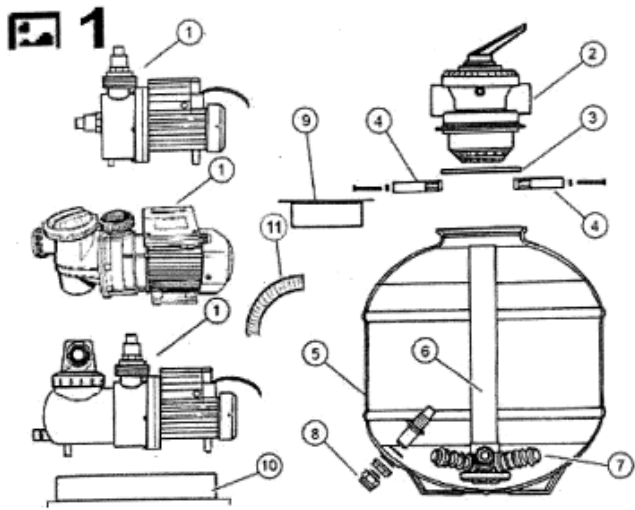
This is done when the filter vessel as well as the filter pump by opening the drain plug. Open the filter vessel and empty the filter sand. Verify that the filter sand is still in reasonable condition (not glued or clumped) and clean it.

Filter systems located outdoors must be located in a frost-free room in the winter.



### Care instructions

Visible contaminants are removed through the filtration system. This is not true for algae, bacteria and other microorganisms, which are also a constant threat to clear, clean and healthy pool water. For their prevention or removal, special water treatment is available, properly and permanently dosed, guarantee for swimmers any kind of harassment and ensure proper hygienic bath water.





**SCOPE & GENERAL:**

1. THESE DRAWINGS APPLY TO NORMAL DOMESTIC POOLS ASSOCIATED WITH RESIDENTIAL CLASS 1A BUILDINGS. THE POOL HAS BEEN DESIGNED TO IMPORTANCE LEVEL 1 IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE.
2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH DURAPLAS INDUSTRIES PTY LTD INSTALLATION MANUALS AND INSTRUCTIONS.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
4. STRUCTURAL DRAWINGS ARE FOR THE FOLLOWING POOL SIZES:  
+ CIRCULAR POOLS - 2470 DIA, 2900 DIA & 3380 DIA
5. NO ALLOWANCE HAS BEEN MADE IN THE DESIGN OF THE POOL OR THE COPING SLAB FOR LOADINGS FROM OTHER STRUCTURES. ANY EXTERNAL DECKS, STRUCTURES AND ADDITIONAL COPING SLABS MUST BE FOUNDED CLEAR OF THE POOL, BE SELF SUPPORTING AND ARE NOT TO APPLY LOADS TO THE POOL OR THE COPING SLABS AS SHOWN.
6. UNLESS APPROVED BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER, EXCAVATIONS SHALL NOT EXTEND BELOW A LINE DIPPING AT 45 DEGREES AND AWAY FROM THE NEAREST UNDERSIDE CORNER OF ANY FOOTINGS. IF IN DOUBT - ASK!
7. WHERE EXCAVATION WORK IS TO BE CARRIED OUT ADJACENT TO EXISTING FOOTINGS, THE EXACT LEVEL OF THE UNDERSIDE OF THE FOOTINGS SHALL BE OBTAINED BY TEST PITS PRIOR TO EXCAVATION.
8. POOLS ARE NOT TO BE LOCATED WITHIN THE ZONE OF INFLUENCE OF ANY RETAINING WALLS. IF THE POOL IS TO BE LOCATED AT THE TOP OR THE BASE OF AN EXISTING RETAINING WALL ADVICE SHOULD BE SOUGHT FROM A SUITABLY QUALIFIED STRUCTURAL ENGINEER PRIOR TO ANY WORK COMMENCING. FAILURE TO DO SO MAY COMPROMISE THE STABILITY OF THE RETAINING WALL.

**POLYETHYLENE SHELL CONSTRUCTION:**

1. ALL POOL FABRICATION TO BE IN ACCORDANCE WITH AS/NZS 4766. MAXIMUM DESIGN SOIL PRESSURE ON INSTALLED EMPTY POOL = 8 kPa/m EQUIVALENT FLUID PRESSURE.
2. THE MAIN DRAINS TO BE FITTED WITH A HYDROSTATIC VALVE THAT OPERATES WHEN MAXIMUM DIFFERENTIAL OF 30mm OF WATER EXISTS ACROSS THE BOTTOM OF THE POOL.

**GEOTECHNICAL & SITE NOTES:**

1. SUPPORTING SOIL TO BE SIMILAR UNDISTURBED SOUND NATURAL GROUND OR APPROVED FILL COMPACTED IN UNIFORM LAYERS. ALLOWABLE BEARING CAPACITY BELOW FLOOR AND COPING TO BE UNIFORM AND NOT LESS THAN 100kPa.
2. DETAILS APPLY TO NORMAL DOMESTIC POOLS WHERE THE PLASTICITY INDEX OF SOIL WITHIN ONE METRE DOES NOT EXCEED 60%, OR SITE IS CLASSED AS 'S', 'M' OR 'H1'.
3. FOR SITES OF HIGHER PLASTICITY OR CLASSIFIED AS 'H2', 'E' OR 'P', A QUANTITATIVE SOIL TEST MUST BE CARRIED OUT AND THE RESULTS, SITE LEVEL DETAILS AND POOL PLAN REFERRED TO THE ENGINEER BEFORE THIS DRAWING IS SUBMITTED FOR APPROVAL.
4. POOLS THAT ARE TO BE FOUNDED IN SOILS OF VERY HIGH PLASTICITY, WHERE MATERIAL IS WATER-LOGGED, ON FILL, OR IN POTENTIALLY UNSTABLE SITE CONDITIONS, MAY REQUIRE A SPECIAL DESIGN. SUB-SOIL DRAINAGE MAY BE REQUIRED AROUND POOL ON STEEP SLOPING SITES. REFER TO A STRUCTURAL ENGINEER.
5. THESE DRAWINGS APPLY TO MODERATELY SLOPING SITES WHERE THE SLOPING SURFACE IS GENERALLY UNIFORM AND SLOPE MEASUREMENTS DO NOT EXCEED 8.5 DEGREES (APPROX 1V:6.5H).
6. ALL SITE PREPARATION - EARTHWORKS, DRAINAGE & TERMITE RISK MANAGEMENT - TO COMPLY WITH PART 3.1 OF THE NATIONAL CONSTRUCTION CODE.
7. THE OWNER IS ADVISED OF THE NEED FOR CAUTION IN LOCATING POTENTIALLY LARGE TREES ADJACENT TO THE POOL.

**CONCRETE CONCOURSE:**

1. ALL CONCRETE WORK TO BE IN ACCORDANCE WITH AS3600.
2. CONCRETE STRENGTH GRADE N25 MPa  
MAX AGGREGATE SIZE 20mm  
SLUMP 80mm +/- 15mm (AT POINT OF DISCHARGE)
3. CONCRETE TO BE THOROUGHLY COMPACTED DURING PLACING AND CURED BY AN APPROVED METHOD.
4. REINFORCEMENT STEEL TO BE IN ACCORDANCE WITH AS4671.
5. REINFORCEMENT SHOWN AS S12 SHALL BE 12mm DIA BAR GRADE D250N.
6. REINFORCEMENT SHALL BE FIXED AND SUPPORTED TO OBTAIN CORRECT COVER TO BARS. LAP TO BE 500mm MIN. LAPS TO BE STAGGERED IN ADJACENT BARS.
7. ENSURE S12 BARS ARE PERMANENTLY AND SECURELY FIXED TO THE POOL BRICK TIES BEFORE CONCRETE IS PLACED.

**INSTALLATION NOTES:**

1. INSTALLATION TO BE IN ACCORDANCE WITH DURAPLAS INDUSTRIES PTY LTD INSTALLATION MANUAL AND INSTRUCTIONS.
2. IT IS IMPERITIVE WHEN ANY PART OF THE POOL IS INSTALLED BELOW FINISHED GROUND THAT THE POOL WALL MUST BE MAINTAINED IN A STABLE CONDITION BY CAREFULLY PLACED SUBSOIL DRAINAGE AND PREPARED BACKFILL.
3. FOR INGROUND INSTALLATION PROVIDE A CONTINUOUS AGRICULTURAL DRAIN PIPE TO BASE OF POOL. DRAINAGE TO BE SLOPED TO A FREE DRAINING OUTLET.
4. WHERE THE POOLS ARE INSTALLED WHOLLY IN FLAT GROUND WITH NO REASONABLE POSSIBILITY OF GRAVITY DRAINAGE, THE AGRICULTURAL PIPE SYSTEM SHOULD BE BROUGHT TO AN UPSTAND PIPE WITH A SURFACE GRATE FOR INSPECTION OF THE GROUND WATER LEVEL PRIOR TO EMPTYING THE POOL. THIS UPSTAND PIPE CAN ALSO BE USED TO LOWER THE EXTERNAL GROUND WATER LOCALLY BY MEANS OF SUCTION PUMPS IF DESIRED. REFER TO THE LOCAL AUTHORITY.
5. EXCAVATION FOR THE POOL SHALL ALLOW A MINIMUM OF 100mm CLEARANCE ON ALL WALLS AND 50 mm BENEATH THE POOL.
6. THE BASE OF THE EXCAVATION SHALL BE FINISHED SOUND AND FREE OF ANY LOOSE MATERIAL PRIOR TO PLACEMENT OF BEDDING.
7. MINIMUM OF 50mm BEDDING SHALL BE PLACED IN THE BOTTOM OF THE EXCAVATION CONFORMING TO THE SHAPE OF THE POOL BOTTOM. THE BEDDING SHALL BE FREE DRAINING CRUSHER DUST OR APPROVED EQUIVALENT.
8. THE POOL SHALL BE BEDDED AND LEVELLED TO WITHIN A GRADE NOT GREATER THAN 1 IN 700 OVER THE LENGTH AND WIDTH OF THE POOL.
9. BACKFILLING SHALL BE 1 CEMENT : 8 SAND WITH ONLY SUFFICIENT WATER TO HOLD MIX TOGETHER. CAREFULLY PLACE BACKFILL BEHIND POOL WALLS WITHOUT CAUSING THE POOL WALLS TO DEFORM OR LEAVING CAVITIES BEHIND THE POOL WALL.
10. INSTALLATION OF SKIMMER BOX:  
+ CUT THE HOLE FOR THE SKIMMER IN THE WALL OF THE POOL.  
+ PLACE SEAL ON OUTER WALL AND FIT BOX.  
+ PLACE SEAL ON INNER WALL AND FIT FACE PLATE.  
+ INSTALL APPROX 14 SELF-TAPPING SCREWS TO FIX PLATE AND BOX IN PLACE.  
+ SET SKIMMER BOX IN CONCRETE.
11. ALL POOL FILTRATION TO BE IN ACCORDANCE WITH AS/NZS 1839.
12. FILTER TO BE CONNECTED TO SKIMMER BOX AND WATER RETURN PORTS WITH 25mm PIPE & CLAMPS PROVIDED. FIT UP TO HYDROSTATIC VALVE.
13. DURING CONSTRUCTION THE OWNER SHALL BE RESPONSIBLE FOR MAINTAINING THE PART BUILT STRUCTURE IN A STABLE CONDITION.

**POOL EMPTYING:**

1. HYDROSTATIC LOADING ON THE POOL BOTTOM HAS BEEN MINIMISED BY THE 50mm BEDDING WHICH ALLOWS GROUNDWATER TO FLOW TO THE HYDROSTATIC VALVE.
2. THE POOL OWNER IS TO NOTIFY THE MANUFACTURER BEFORE ATTEMPTING TO LOWER THE WATER LEVEL MORE THAN 150mm BELOW THE COPING LEVEL. IF THE MANUFACTURER IS NOT NOTIFIED, NO RESPONSIBILITY FOR DAMAGES TO THE POOL WILL BE ACCEPTED BY THE MANUFACTURE OR ENGINEER.
3. THE OWNER IS ADVISED NOT TO LOWER THE WATER LEVEL OF THE POOL IN THE EVENT OF FLOODING OR IF THERE IS A RISE IN THE WATER TABLE LEVEL. UNDER THESE CONDITIONS THE POOL MUST REMAIN FULL.

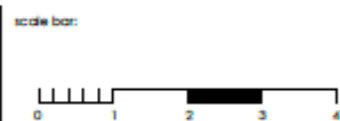
**LOCAL AUTHORITY REQUIREMENTS:**

1. IT IS THE OWNER'S RESPONSIBILITY TO ENSURE THAT ALL RELEVANT DOCUMENTATION HAS BEEN LODGED AND APPROVED BY THE LOCAL AUTHORITY PRIOR TO ANY WORK COMMENCING.
2. IT IS THE OWNER'S RESPONSIBILITY TO LOCATE ALL RELEVANT INFRASTRUCTURE AND ENSURE COMPLIANCE WITH THE RELEVANT DEVELOPMENT CODE AND/OR THE LOCAL AUTHORITY'S BOS AND BOSW POLICIES.
3. EXISTING STRUCTURES, RETAINING WALLS OR SLOPING BANKS ADJACENT TO POOL LOCATION ARE TO BE ASSESSED FOR STABILITY AS REQUIRED BY CERTIFYING AUTHORITY.
4. PLUMBING, DRAINAGE, ELECTRICAL AND SECURITY FENCING ASPECTS TO BE INSTALLED IN ACCORDANCE WITH ALL STATUTORY AND LOCAL AUTHORITY REQUIREMENTS, INCLUDING THE INSTALLATION OF AN ACCESS LADDER.
5. FENCING TO COMPLY WITH BCA. REFER TO AS1926 FOR SWIMMING POOL SAFETY AND LOCAL AUTHORITY REQUIREMENTS.
6. DETAILS OF FILTRATION UNIT SIZE AND TYPE, TYPE OF CHLORINATION AND PUMP CAPACITY ARE SHOWN IN THE MANUFACTURER'S BROCHURE.

LEGEND:	
GL	GROUND LINE - 100 kPa MINIMUM ALLOWABLE BEARING PRESSURE
EGL	EXISTING GROUND LINE

**IMPORTANT NOTE – BEFOR BACKFILLING AGAINST POOL, FILL POOL WITH WATER TO ACCOUNT FOR FLEX**

issue	amendment	date
A	FOR APPROVAL	01/08/22



KNG DESIGN



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project:  
**DURAPLAS  
POLYETHYLENE POOLS**  
21018

project stage:  
**FOR APPROVAL**

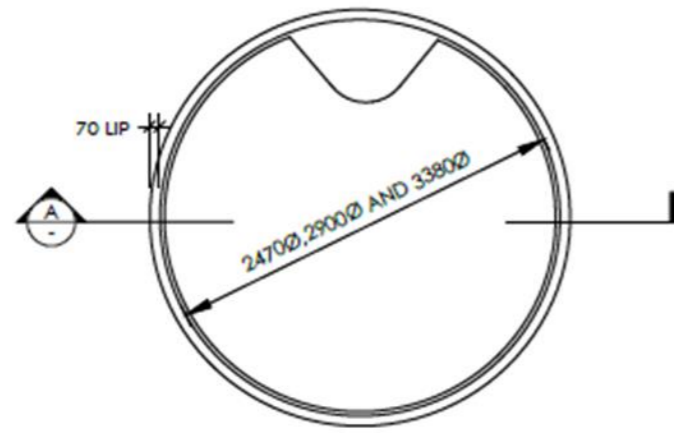
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INSTALLATION NOTES

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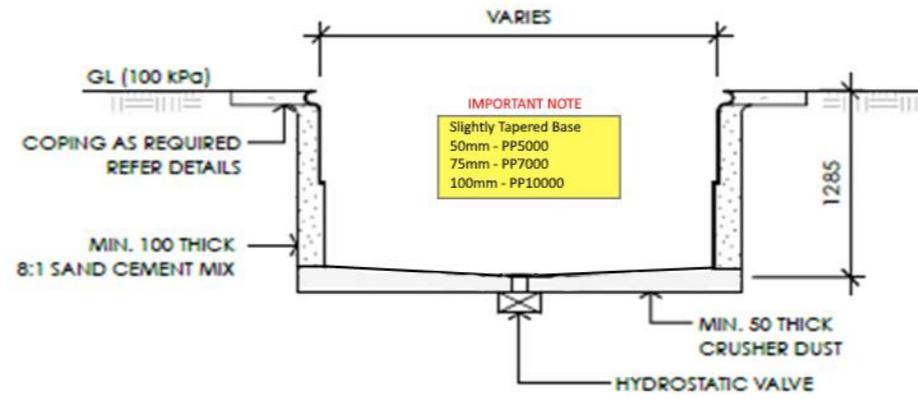


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**A**

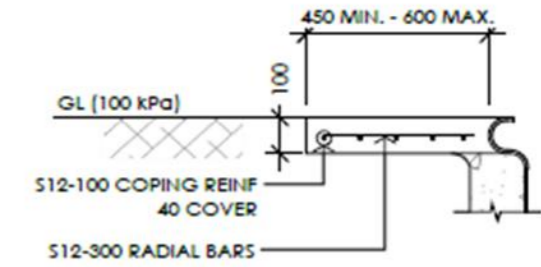




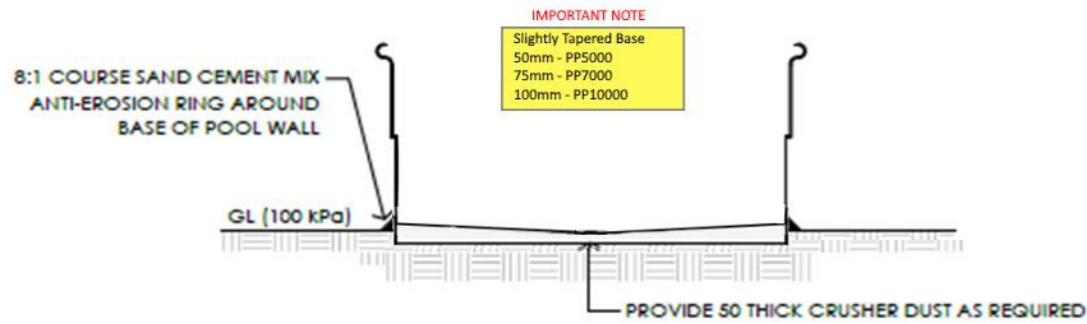
TYPICAL POLYETHYLENE POOL PLAN  
1:50



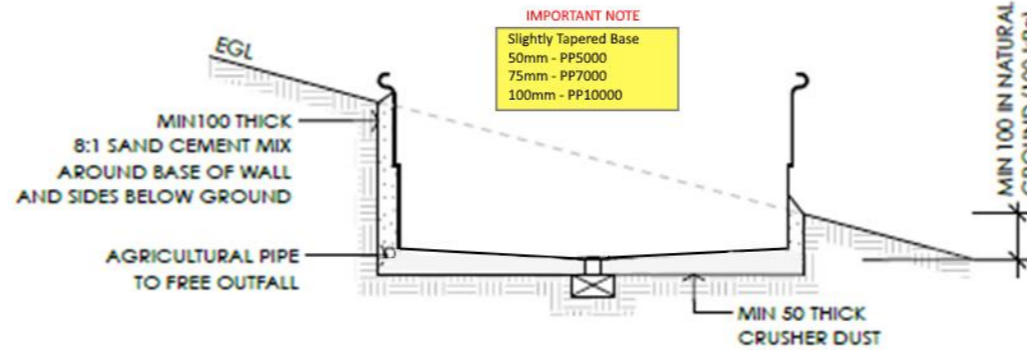
WHOLLY IN GROUND OPTION - SECTION A  
1:50



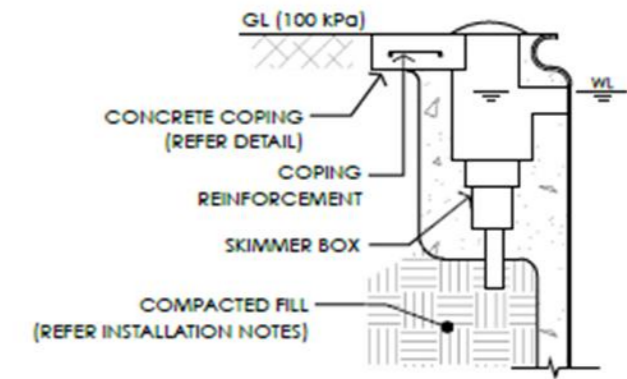
IN-GROUND COPING DETAIL  
1:20



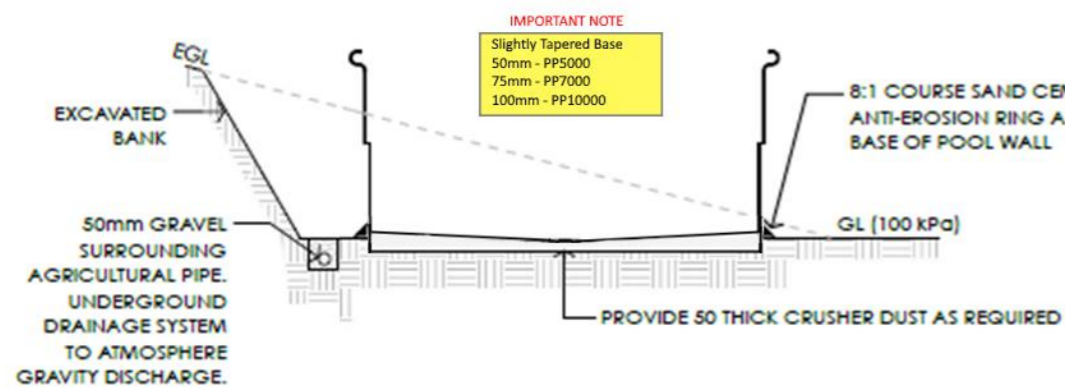
ABOVE GROUND OPTION 1  
1:50



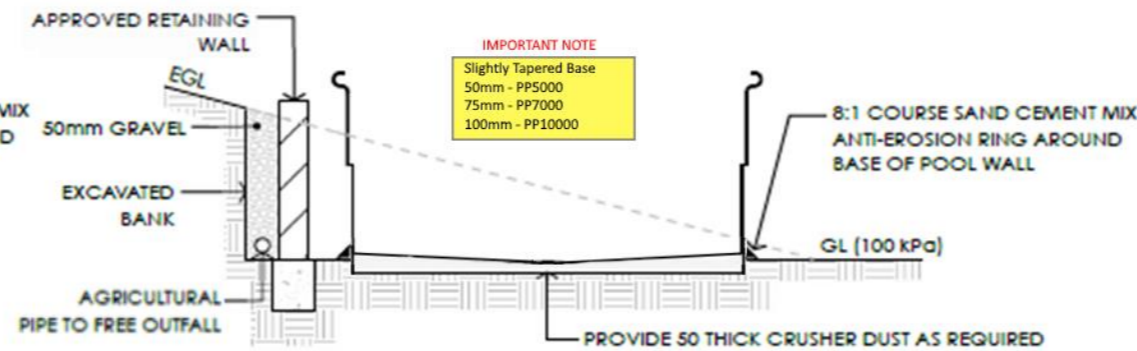
ABOVE GROUND OPTION 2  
1:50



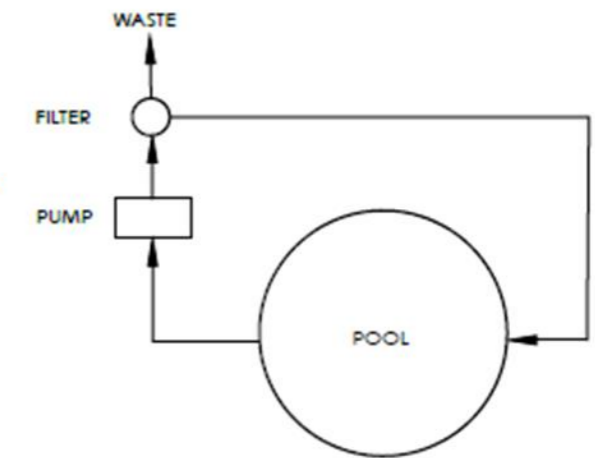
IN-GROUND SKIMMER BOX DETAIL  
1:20



ABOVE GROUND OPTION 3  
1:50



ABOVE GROUND OPTION 4  
1:50



PLUMBING DIAGRAM  
NTS

IMPORTANT NOTE—BEFORE BACKFILLING AGAINST POOL, FILL POOL WITH WATER TO ACCOUNT FOR FLEX

Issue	Comment/Action	Date
A	FOR APPROVAL	01/08/22
B	SECTIONS REVERSED	08/11/22



KNG DESIGN



client:  
project: DURAPLAS POLYETHYLENE POOLS  
21018

project stage:  
FOR APPROVAL

drawing title:  
TYPICAL POLYETHYLENE SWIMMING POOL  
INSTALLATION PLAN, SECTIONS & DETAILS

date: 2022  
scale: AS SHOWN  
sheet: A3  
drawing number: 21018\_02

drawn: SM  
check: KNG  
verified: KNG  
issue: B



## Optional Hydrostatic Valve Assembly

For Inground Installations, an optional hydrostatic valve is recommended.

Installed at time of pool installation onsite – 58mm hole saw.



# NSW Documentation:

KNG DESIGN

STRUCTURAL DESIGN & ENGINEERING

01 August 2022

ABN 92 652 692 147

PO Box 757  
Toowong DC Qld

E: mail@kngdesign.com.au  
M: 0415 204 465  
W: kngdesign.com.au

John Fleming  
DURAPLAS  
9 Robb Street  
ALSTONVILLE NSW 2477

Dear John

## **STRUCTURAL DESIGN CERTIFICATE - DURAPLAS POLYETHYLENE POOLS**

This is to certify that:

The structural engineering components of this project as shown on KNG Design drawing numbers:

- + 21018\_01
- + 21018\_02

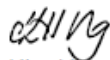
were designed by a practicing structural engineer in accordance with the relevant Australian Standards, National Construction Code (NCC) and accepted engineering practice and principles including:

- + Structure Importance Level 1 to the NCC
- + AS/NZS 1170
- + AS 3600

In carrying out the design we exercised the degree of skill, care and diligence normally exercised by Consulting Engineers in similar circumstances.

This certificate does not relieve other parties of their responsibilities for the works.

Regards



Kim Hines-Ng  
Structural Engineer  
MIEAust | NER | RPEQ (7440)  
VIC (PE0001177) | TAS (455297630)

# QLD Form 15



## Form 15

### Compliance certificate for building design or specification

This form is to be used by an appointed competent person for the purposes of section 10 of the *Building Act 1975* and sections 73 and 77 of the *Building Regulation 2021* (Design-specification certificate) stating that an aspect of building work or specification will, if installed or carried out as stated in this form, comply with the building assessment provisions.

Additional explanatory information is included in the Appendix at the end of this form.

#### 1. Property description

This section need only be completed if details of street address and property description are applicable.

E.g. in the case of (standard/generic) pool design/shell manufacture and/or patio and carport systems this section may not be applicable.

The description must identify all land the subject of the application.

The lot and plan details (e.g. SP/RP) are shown on title documents or a rates notice.

If the plan is not registered by title, provide previous lot and plan details.

Street address	NOT APPLICABLE		
		Suburb/locality	
State	QLD	Postcode	
Lot and plan details ( <i>attach list if necessary</i> )			
-			
Local government area the land is situated in			
NOT APPLICABLE			

#### 2. Description of aspect/s certified

Clearly describe the extent of work covered by this certificate, e.g. all structural aspects of the steel roof beams.

The extent of work covered by this certificate is the structural elements as detailed on the referenced documentation, including:

- + DURAPLAS POLYETHYLENE POOLS – STRUCTURAL INSTALLATION

#### 3. Basis of certification

Detail the basis for giving the certificate and the extent to which tests, specifications, rules, standards, codes of practice and other publications were relied upon.



We certify that we have taken reasonable care to design the structural elements in accordance with the National Construction Code (NCC), relevant Australian Standards and accepted engineering principles, including:

- + STRUCTURE IMPORTANCE LEVEL 1 TO THE NCC
- + AS1170
- + AS3600

#### 4. Reference documentation

Clearly identify any relevant documentation, e.g. numbered structural engineering plans.

KNG DESIGN DRAWING NOS:

- + 21018\_01
- + 21018\_02

#### 5. Building certifier reference number and building development approval number

Building certifier reference number		Building development application number (if available)	
-------------------------------------	--	--	--

#### 6. Appointed competent person details

Under Part 6 of the Building Regulation a person must be assessed as a competent for the type of work (design-specification) by the relevant building certifier.

Name (in full)	KIM HINES-NG		
Company name (if applicable)	KNG DESIGN PTY LTD		
Contact person	KIM HINES-NG		
Business phone number	0415 204 465	Mobile	0415 204 465
Email address	kim@kngdesign.com.au		
Postal address	PO BOX 757		
		Suburb/locality	TOOWONG DC
State	QLD	Postcode	4066
Licence class or registration type (if applicable)	ENGINEER		

Licence or registration number (if applicable)	RPEQ 7440
---	-----------

### 9. Signature of appointed competent person

This certificate must be signed by the individual assessed and appointed by the building certifier as competent to give design-specification help.

Signature		Date	1/08/2022
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### LOCAL GOVERNMENT USE ONLY

Date received	Click or tap to enter a date.	Reference number/s	
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### Appendix – explanatory information

**IMPORTANT NOTE:** it is an offence for a competent person to give a building certifier a document, including this form, that the person knows or reasonably suspects, is false or misleading.

**Who can complete this certificate?** (sections 10 of the *Building Act 1975* (Building Act) and 73 of Building Regulation 2021 (BR 2021))

A building certifier can accept from a competent person (design – specifications) a certificate stating that the competent person has assessed the building design or specification for the aspect of building work, and it will, if installed or carried out under the certificate, comply with the building assessment provisions, including any relevant standards and codes.

Schedule 10 of the BR 2021 defines *building design or specification* as any material, system, method of building or other thing related to the design of or specifications for building work.

For a competent person to meet the regulation requirements (section 77 of the BR 2021) they must substantially complete all sections of this form, including information, such as the design of a particular material, system, method of building or that a building element complies with the Building Code of Australia or a provision of the Queensland Development Code. It is also important that the details of the relevant reference documents are included, for example, the applicable Australian Standards or other technical provisions that may be applicable to the subject work.

**What is the purpose of this form?** (section 10 of the *Building Act 1975*)

The information in this form informs the building certifier’s decision making when they are assessing a building development application and issuing the building development approval for the building work the subject of the certificate (form).

**When is this form not required?**

The assessment of some building applications will be entirely within the expertise of the relevant building certifier and therefore they may not seek the help of a competent person. In these instances, this form is not required.

**Is a manufacturer or supplier required under the BR 2021 to complete and sign this Form 15, if requested?**

**No.** A manufacturer or supplier of building materials is not required to complete and give this form or any aspect and inspection certificates if requested by a construction contractor, builder, appointed competent person, or a building certifier.

However, a manufacturer or supplier may give the construction contractor, builder, competent person or the building certifier evidence of suitability such as a manufacturers statement for an aspect or material that it is compliant with the relevant reference documents in the BCA i.e. the applicable Australian Standard/s.

**What if there is not enough space for all the supporting material/documents?**

Items 2, 3 and 4 requires the competent person to clearly identify the extent of the assessment that was undertaken for aspect/s of work identified in this form.

For instance, there is provision for material such as specifications, standards, codes or other relevant publications to be referenced in the form. However, if the space in the form is not sufficient to accommodate all of this material, you can create and refer to additional material in an addendum or attachment to the form.

The form is also available in a Microsoft Word version, that you can download and edit to include additional material in the relevant parts of the form. **Note:** that editing the form in the Microsoft Word version may cause the relevant boxes to expand and

increase the length of the document. This is acceptable and does not change the approved form, provided the section text (description on the left-hand side of the page) is not altered.

**Appointed competent person (design or specification) – (sections 34 and 36 of the BR 2021)**

A building certifier must assess and decide to appoint an individual as a competent person before they can, as a competent person, give design-specification help. The building certifier is required to keep detailed records about what was considered when appointing a competent person.

A building certifier must be satisfied that an individual is competent to give the type of inspection help having regard to the individual's experience, qualifications and skills and if required by law to hold a licence or registration, that the individual is appropriately registered or licensed.

An individual is appointed as competent to give design-specification help on or from a particular day. The building certifier can also decide an individual is a competent person (design-specification) and a competent person (inspection) at the same time or for the same systems or components of the work.

For further information about assessment of someone as a competent person refer to the **Guideline for the assessment of competent persons**.

**PRIVACY NOTICE**

The Department of Energy and Public Works is collecting personal information as required under the *Building Act 1975*. This information may be stored by the Department, and will be used for administration, compliance, statistical research and evaluation of building laws. Your personal information will be disclosed to other government agencies, local government authorities and third parties for purposes relating to administering and monitoring compliance with the *Building Act 1975*. Personal information will otherwise only be disclosed to third parties with your consent or unless authorised or required by law.



# SA Documentation:

KNG DESIGN

STRUCTURAL DESIGN & ENGINEERING

01 August 2022

ABN 92 652 692 147

PO Box 757  
Toowong DC Qld

E: mail@kngdesign.com.au  
M: 0415 204 465  
W: kngdesign.com.au

John Fleming  
DURAPLAS  
9 Robb Street  
ALSTONVILLE NSW 2477

Dear John

## **STRUCTURAL DESIGN CERTIFICATE - DURAPLAS POLYETHYLENE POOLS**

This is to certify that:

The structural engineering components of this project as shown on KNG Design drawing numbers:

- + 21018\_01
- + 21018\_02

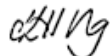
were designed by a practicing structural engineer in accordance with the relevant Australian Standards, National Construction Code (NCC) and accepted engineering practice and principles including:

- + Structure Importance Level 1 to the NCC
- + AS/NZS 1170
- + AS 3600

In carrying out the design we exercised the degree of skill, care and diligence normally exercised by Consulting Engineers in similar circumstances.

This certificate does not relieve other parties of their responsibilities for the works.

Regards



Kim Hines-Ng  
Structural Engineer  
MIEAust | NER | RPEQ (7440)  
VIC (PE0001177) | TAS (455297630)

# VIC Documentation:

**Building Act 1993**  
*Section 238(1)(a)*  
**Building Regulations 2018**  
*Regulation 126*

## CERTIFICATE OF COMPLIANCE FOR PROPOSED BUILDING WORK

**This certificate is issued to:** Relevant building surveyor

Postal address: N/A

Postcode:

Email:

**This certificate is issued in relation to the proposed building work at:**

Address of: Victoria Statewide

Postcode:

### **Nature of proposed building work**

Construction of a new Duraplas Polyethylene Pool

Storeys contained: N/A

Rise in storeys (for Class 2-9 building only): N/A

Effective height: N/A

Type of construction: N/A

Version of BCA/NCC applicable to certificate: NCC 2019 Volume 2 Amendment 1

### **Building classification**

Domestic Swimming Pool                      10B

**Prescribed class of building work for which this certificate is issued:**

Structural matter – Duraplas Polyethylene Pool

### **Documents setting out the design that is certified by this certificate**

Document no.	Document date	Type of document (e.g. drawings, computations, specifications, calculations etc.)	Number of pages	Prepared by
21018_01 to 02	01/08/2022	DRAWINGS	2	KNG DESIGN

### Performance solution

A performance solution forms part of the design certified by this certificate. The performance solution complies with the following performance requirements of the NCC

Relevant performance requirement	Details of performance solution required by regulation 124
N/A	N/A

The design certified by this certificate complies with the following provisions of Building Act 1993, Building Regulations 2018 or National Construction Code

Act, Regulation or NCC	Section, Regulation, Part, Performance Requirement or other provision
Australian Standards	AS/NZS 1170 (SET) AS 3600
NCC 2019	Volume Two

I have checked the structural aspects of the design, set out in the documents listed above. I have taken reasonable care to check the structural elements are designed in accordance with the NCC, relevant Australian Standards and accepted engineering principles.

I certify that the design set out in the documents listed above complies with the provisions set out above.

I believe that I hold the required skills, experience and knowledge to issue this certificate and can demonstrate this if requested to do so.

### Endorsed building engineer

Full Name: Kim Hines-Ng

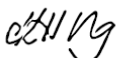
Address: PO Box 757, Toowong DC QLD 4066

Email: kim@kngdesign.com.au

Endorsed building engineer area of engineering: Civil

Endorsed building engineer registration no.: PE0001177

Date of issue of certificate: 01/08/2022

Signature: 



# TASMANIA DOCUMENTATION

## CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94  
Section 106  
Section 129  
Section 155

Form **35**

To:  Owner name  
 Address  
  Suburb/postcode

### Designer details:

Name:  Category:   
 Business name:  Phone No:   
 Business address:   
  Fax No:   
 Licence No:  Email address:

### Details of the proposed work:

**Owner/Applicant**  Designer's project reference No.   
**Address:**  Lot No:   
   
**Type of work:** Building work  Plumbing work  (X all applicable)

### Description of work:

(new building / alteration / addition / repair / removal / re-erection / water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)

### Description of the Design Work (Scope, limitations or exclusions): (X all applicable certificates)

Certificate Type:	Certificate	Responsible Practitioner
	<input type="checkbox"/> Building design	Architect or Building Designer
	<input type="checkbox"/> Structural design	Engineer or Civil Designer
	<input type="checkbox"/> Fire Safety design	Fire Engineer
	<input type="checkbox"/> Civil design	Civil Engineer or Civil Designer
	<input type="checkbox"/> Hydraulic design	Building Services Designer
	<input type="checkbox"/> Fire service design	Building Services Designer
	<input type="checkbox"/> Electrical design	Building Services Designer
	<input type="checkbox"/> Mechanical design	Building Service Designer
	<input type="checkbox"/> Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	<input type="checkbox"/> Other (specify)	

Deemed-to-Satisfy:  Performance Solution:  (X the appropriate box)

Other details:

### Design documents provided:

The following documents are provided with this Certificate –

*Document description:*

Drawing numbers: 21018_01 TO 02	Prepared by: KNG DESIGN	Date: 01/08/2022
Schedules: REFER DRAWINGS	Prepared by:	Date:
Specifications: REFER DRAWINGS	Prepared by:	Date:
Computations: -	Prepared by: -	Date: -
Performance solution proposals: N/A	Prepared by:	Date:
Test reports: N/A	Prepared by:	Date:

**Standards, codes or guidelines relied on in design process:**

AUSTRALIAN STANDARD – AS1170 (Set); AS3600  
NCC 2019, VOLUME 2

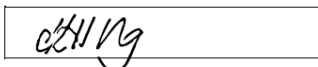
**Any other relevant documentation:**

**Attribution as designer:**

I KIM HINES-NG ..... am responsible for the design of that part of the work as described in this certificate;

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2016* and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	KIM HINES-NG		01/08/2022
Licence No:	455297630		

**Assessment of Certifiable Works: (TasWater)**

**Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.**

**If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.**

**TasWater must then be contacted to determine if the proposed works are Certifiable Works.**

**I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:**

- The works will not increase the demand for water supplied by TasWater
- The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure
- The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- The works will not damage or interfere with TasWater's works
- The works will not adversely affect TasWater's operations
- The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
- I have checked the LISTMap to confirm the location of TasWater infrastructure
- If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater.

**Certification:**

I ..... being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008*, that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: [www.taswater.com.au](http://www.taswater.com.au)

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	<input type="text"/>	<input type="text"/>	<input type="text"/>

# WA Documentation:

KNG DESIGN

STRUCTURAL DESIGN & ENGINEERING

01 August 2022

ABN 92 652 692 147

PO Box 757  
Toowong DC Qld

E: mail@kngdesign.com.au  
M: 0415 204 465  
W: kngdesign.com.au

John Fleming  
DURAPLAS  
9 Robb Street  
ALSTONVILLE NSW 2477

Dear John

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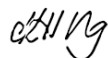
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Kim Hines-Ng  
Structural Engineer  
MIEAust | NER | RPEQ (7440)  
VIC (PE0001177) | TAS (455297630)