



Sunbather Automatic Security Blanket

Pool Builder's Instructions

Information and drawings included in this booklet are based on experience with a pool cover system and a mechanism that have been proven to work. The warranty provided by Sunbather is specific to the system and mechanism depicted in this booklet and not to variations which other specifiers might deem viable or appropriate. Dimensional information shown here should be strictly observed.

The pool cover system has specific detailed requirements. Any departure from the information contained within this document can only be by consultation with Sunbather Engineering staff and only if dimensioned drawings or sketches are provided to support the proposed amendments.

Note:

- 1) Sunbather requires a detailed plan view of the pool prior to acceptance of any job.***
- 2) Sunbather reserves the right to modify or change installation requirements as a natural consequence of product development.***

Pool Builder Checklist (with reference to the following pages):

- 1/ Have you formed a 100mm offset in the pool shell at the motor end of the roller mechanism ?**
- 2/ Have you made provision for a pool overflow at the same end ?**
- 3/ Are the cover pit dimensions adequate to accommodate the rolled up cover diameter: width and depth ?**
- 4/ Is the slot through which the cover emerges, 100mm *minimum* ?**
- 5/ Have you considered internal pool corners or projections which may foul the cover ? (speak to a Sunbather representative if in doubt)**
- 6/ Automatic water filling is a must: ours or yours.**
- 7/ Remote control by radio or C-Bus is disallowed for safety reasons.**
- 8/ If 50mm safety ledge is to be excluded from the pool shell, it cannot be considered as a "security cover": please inform client.**

Sunbather Automatic Security Blanket:

Installation requirements.

Security issues.

- 1/ The Sunbather Security Blanket does not replace the need for pool fencing.
- 2/ When correctly installed it will support the weight of small children. To do this it relies on the buoyancy of the blanket, the inclusion of a 50mm ledge cast into the pool shell to support the blanket edges and correct adjustment of the limit switches, which positions the blanket against the end of the pool when it is fully extended onto the pool.
Wide pool areas provide better support than narrow areas due to the greater total buoyancy generated by the interlocked slats. For this reason you should avoid short narrow pool entries or swim-outs when designing the pool.
- 3/ Provision of a key-lockable 3 position switch (open-stop-close) enables use of the blanket at the owners discretion. *It is recommended that this switch be located within view of the pool to prevent closure while people are in the pool and that remote switching devices (i.e. C-Bus or radio remote) are not used.*

Pool requirements (see Diagrams 1,2,3,4,5,6,7,8)

- 1/ Pool shape should be kept as simple as possible: rectangular is best. *The size and position of swimouts or step areas need to be approved by Sunbather prior to acceptance of the job. Pool width should not exceed 6.9 metres.* Internal 90° corners which have the potential to “snag” the blanket cannot be allowed and should be chamfered at 45°. Even skimmers positioned along the run of the pool can snag the cover: avoid this if possible. (refer to diagram 1 for pool design constraints)
- 2/ Pool sides must be straight and parallel from pool end to roller pit wall (within 5mm). *The blanket slats will be cut based on the narrowest measurement to achieve easy motion of the blanket across the pool.* It is therefore important to maintain parallel sides so that an unacceptable blanket fit does not occur.
- 3/ To achieve the “security” aspect of the blanket, the top sides of the pool shell must incorporate a 50mm minimum width safety ledge. This should be positioned at the same level as the top of the pit wall, that is, “40mm minimum” below water level. *Crucial to the security blanket operation is that it always be able to float.* A generous chamfer to the top rear corner of the pit wall will prevent any possibility of cover “snagging” (see Diagram 5 & 6). Make sure that skimmers are also positioned accurately with respect to this water level. With insufficient water above the pit wall and the skimmers drawing from the pit, it is possible to draw the water level in the pit down to a point at which the cover may snag on the pit wall during operation.
- 4/ Roller pit must wide enough and deep enough to accommodate blanket:
 - If pool length is up to 10 metres: pit must be 700mm wide, 1150mm deep *min.*
 - If pool length is 10-15 metres: pit must be 800mm wide, 1200mm deep *min.*
 - If pool length is 15-20 metres: pit must be 900mm wide, 1250mm deep *min.*
 - If pool length is 20-25 metres: pit must be 1000mm wide, 1300mm deep *min.*
- 5/ Cover pit endwalls should be *flat* and *vertical* to take motor and bearing mounts.

6/ The motor drive end of the pit should be displaced outwards 100mm to provide space for the drive train as per drawings. Motor drive can be at either end of the pit but will be either right or left hand. Diagrams 2 and 4 are left hand, diagram 3 is right hand.

7/ A minimum opening of 350mm, centrally located, is required along the entire length of the pit for service access. A removable grating (plastic) is best. Refer to diagrams 2,5 & 6.

8/ A 240V, 10 Amp power point is required at the plant and equipment location to plug the power supply/control box into (customer to arrange). This power supply/control box provides the 24Vdc supply to the motor compartment located above water level in the cover pit.

9/ A 25mm underground electrical conduit is required to run the supply and control wiring between the power supply location and the motor end of the cover pit. The conduit can be let into the top of the pool shell by grinding a groove after the shell is poured as per diagram 2 or embedding it through the pool wall. It must enter the cover pit above water level and on centre.

10/ If the keyswitch is to be mounted in a location remote from the power supply box, a 20mm diameter conduit is must be run between the power supply box and the final location of the keyswitch.

11/ Provide pool overflow plumbed to waste at maximum pool level (see Diagram 2). *This is a warranty requirement.* (refer to diagram 3)

12/ Provide a pool water levelling facility to control water level within tolerances consistent with maintaining the floating position of the cover and preventing it from interfering with the top of the pit wall or the underside of the beam. *It is essential for operation of the blanket that it is always able to float. Inclusion of an automatic water leveller is a warranty requirement.*

13/ Provide a main drain connection to the cover pit to enable cleaning and service without dumping all pool water.

14/ With the use of the cover, chlorine use is greatly reduced so the sanitisation system employed should be able to vary the dose rate depending on chlorine demand; down to zero.

15/ Pool cleaning devices requiring use of a suction hose which moves around the pool while cleaning should not be used underneath the cover, as suction hoses can interfere with the cover as it is being rolled up: creating an expensive jam up.

Ordering Automatic Security Blanket

1/ An official order form outlining the specific requirements for the job must be completed before an order can be processed. A detailed plan view drawing of the pool must be provided to Sunbather prior to acceptance of any job.

2/ Allow 3-4 weeks lead time for supply ex-works.

3/ If installation is required, then a specific date nearing the time of pool completion must be stipulated to allow a reasonable response time.

Electrical Installation Requirements:

Refer to correct wiring diagram for model in question.

Specification: Model: SASB-WL
Input : 240Vac 50Hz 1.0A
Output: 24 Vdc 8.0A
IP 45

Warning:

- **Electrical installation should only be carried out by qualified personnel. Failure to do so will void warranty.**
- **Ensure power supply is safely isolated (i.e. unplugged from power point) before opening power supply cover and/or installing.**
- **Ensure 24Vdc motor compartment is securely mounted on the bracket provided, as per instructions relating to the roller mechanism installation, prior to connecting power.**
- **Do not transpose any wires within the power supply enclosure as damage will result if 240Vac and 24Vdc wiring is mis-connected.**
- **If damage occurs to the flexible 240Vac power cord or plug, it must be replaced with a spare part, available from Sunbather Pty Ltd. Specify Part No. 03SCPCORD. This should be fitted by a qualified person i.e. electrician or Sunbather service representative.**

1/ Ensure that the 240Vac to 24Vdc power supply is installed in a sheltered location free from vibration.

2/ Mount power supply enclosure by removing the lid and utilizing the internal punch-outs provided in conjunction with screws or screws and wall plugs as necessary.

Note: All fixtures should be sealed with silicone sealant to maintain the waterproof integrity of the enclosure before replacing the lid. All wiring should pass through the cable glands or adaptors provided in the bottom of the enclosure and be of sufficient capacity to carry the stipulated current.

3/ Extra low voltage power wire (from power supply to motor compartment) should be 2 core and generally 4.6mm² cable. If exceptionally long runs are contemplated (greater than 25m) this cable area may need to be upgraded. Refer to Sunbather for advice.

4/ Extra low voltage control wiring (from power supply to motor compartment) should be 6 pair screened and stranded computer cable.

5/ Both of the ELV power and control wires should be run together in a 25mm diameter electrical conduit, installed between the location of the power supply (generally in the plant & equipment area) and the cover pit. The conduit must be positioned on centre and above water level to prevent water entry. The conduit can be let into the top of the pool shell by grinding a groove after the shell is poured. Refer diagram 2.

6/ If the keyswitch for control of the blanket is to be remote from the power supply it will require 3 wires (1.0mm²) run in 20mm conduit to the switching location from the power supply.

Note: Sunbather will supply the appropriate wire if distances are specified.

Diagram 1a) - Pool Design Constraints

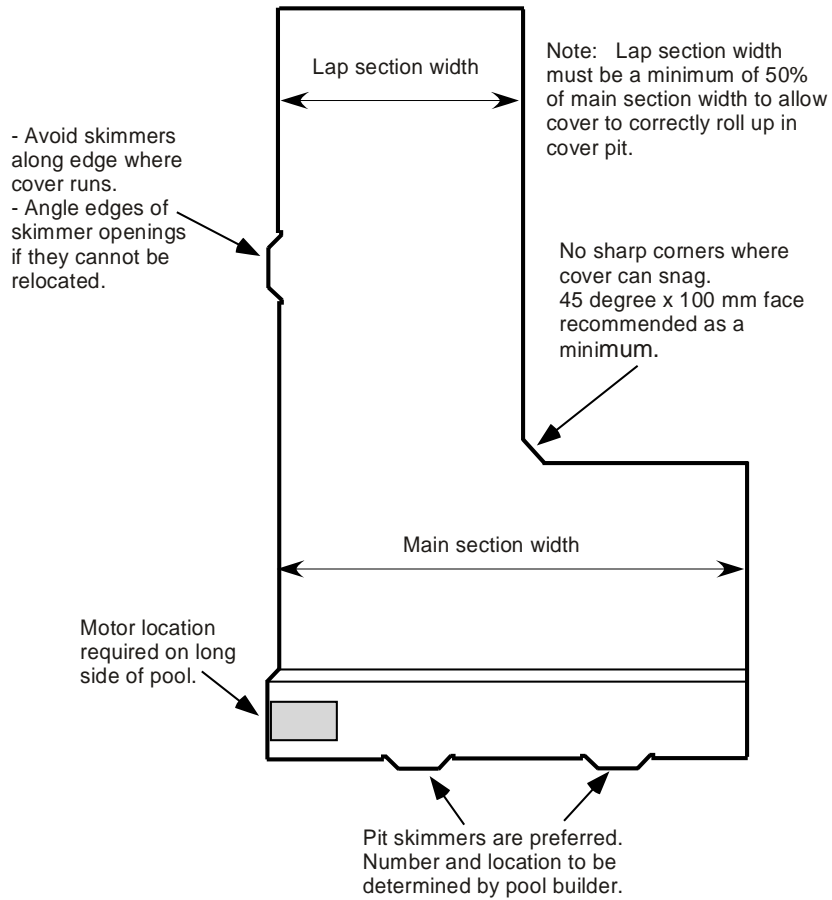


Diagram 1b) - Pool Design Constraints

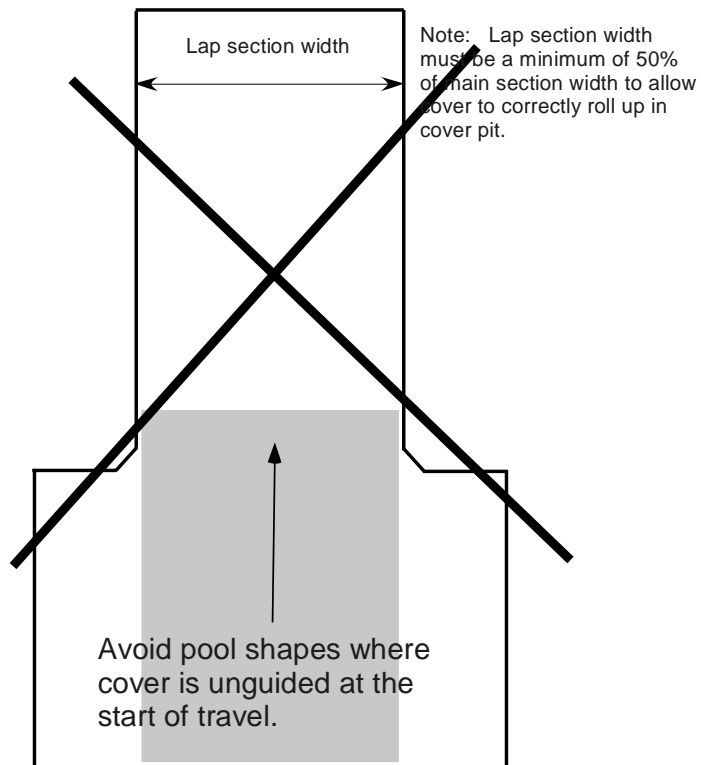


Diagram 1c) - Pool Design Constraints

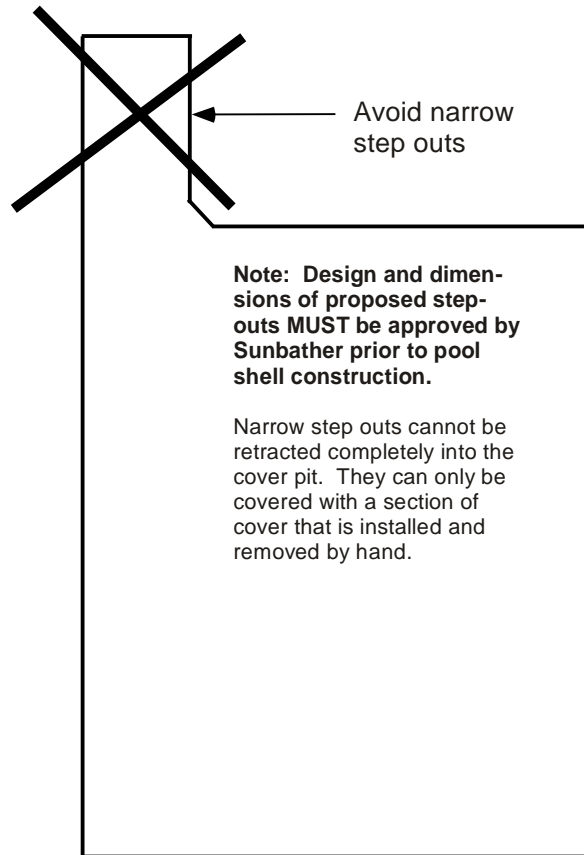


Diagram 1d) - Pool Design Constraints

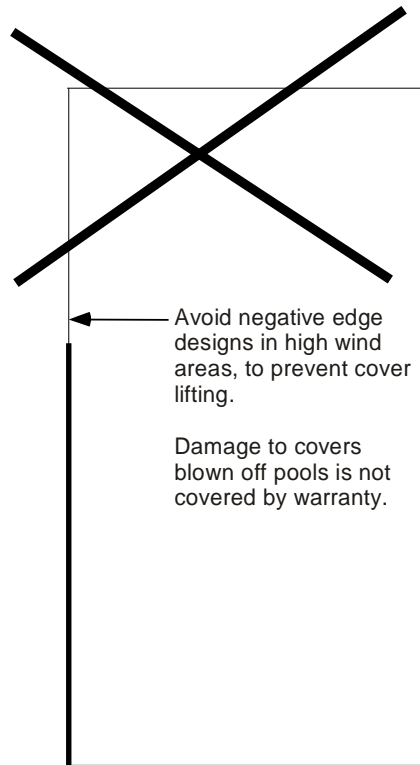


DIAGRAM 2. POOL SHELL PLAN VIEW

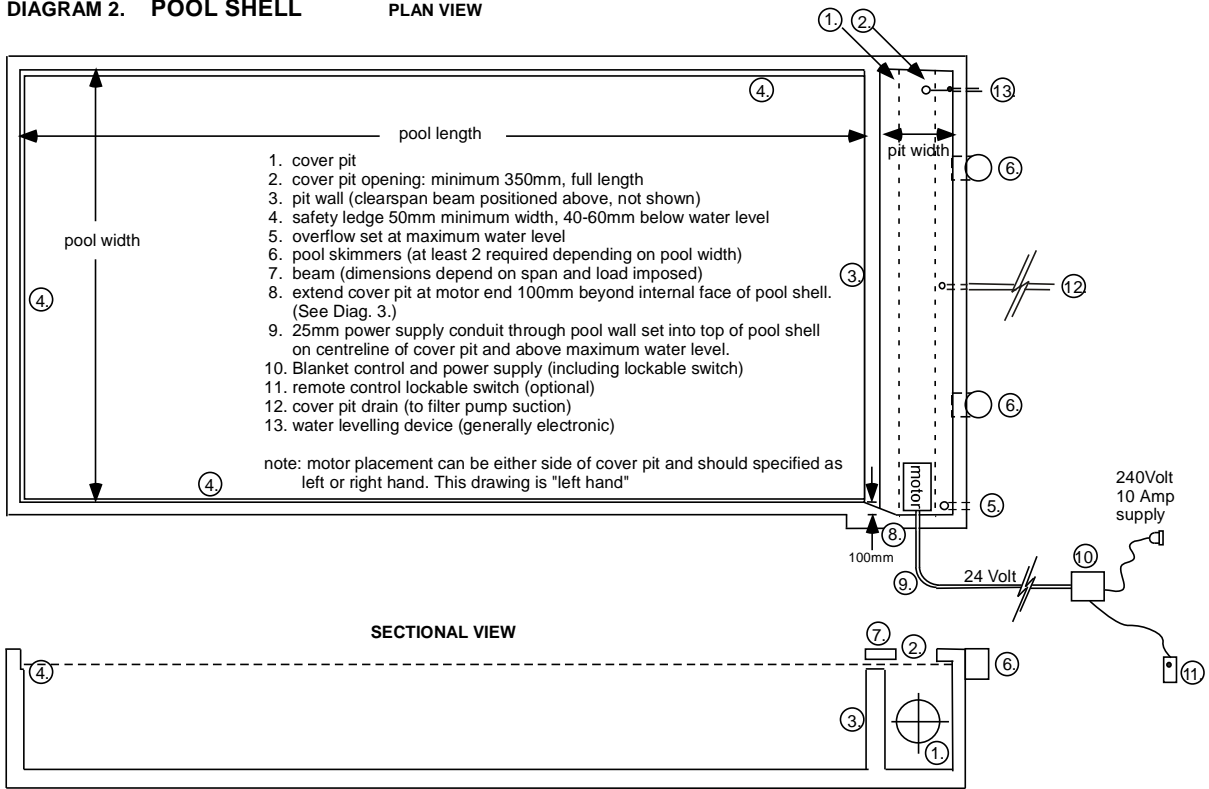


DIAGRAM 3. POOL SHELL (3D)

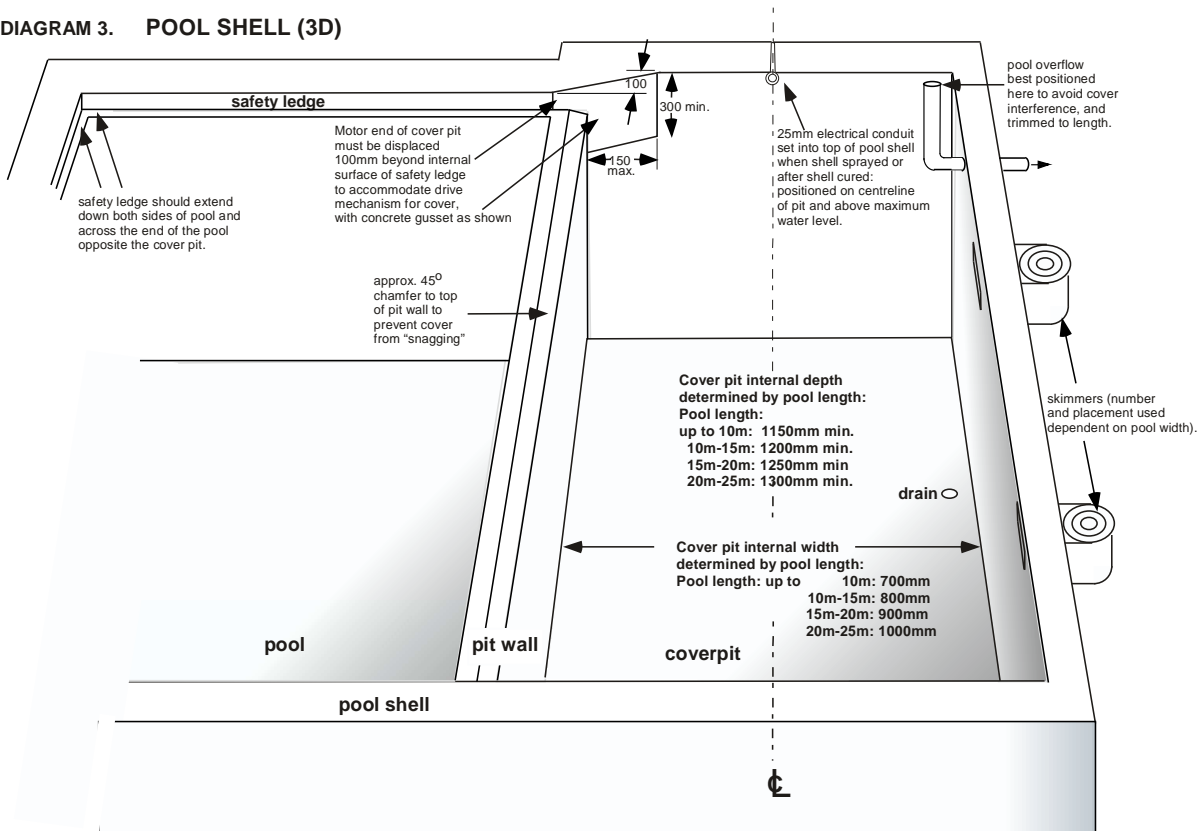


DIAGRAM 4. COVER PIT DETAILS: Motor end of pit (plan view)

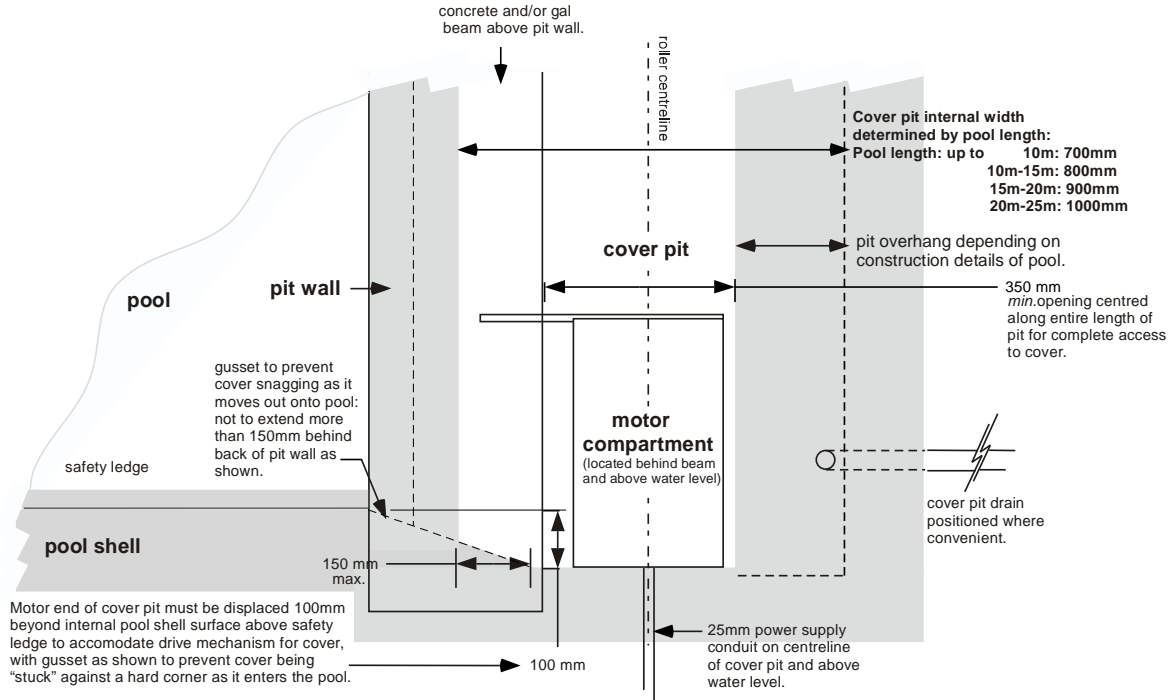


DIAGRAM 5. RAISED BEAM OVER PIT

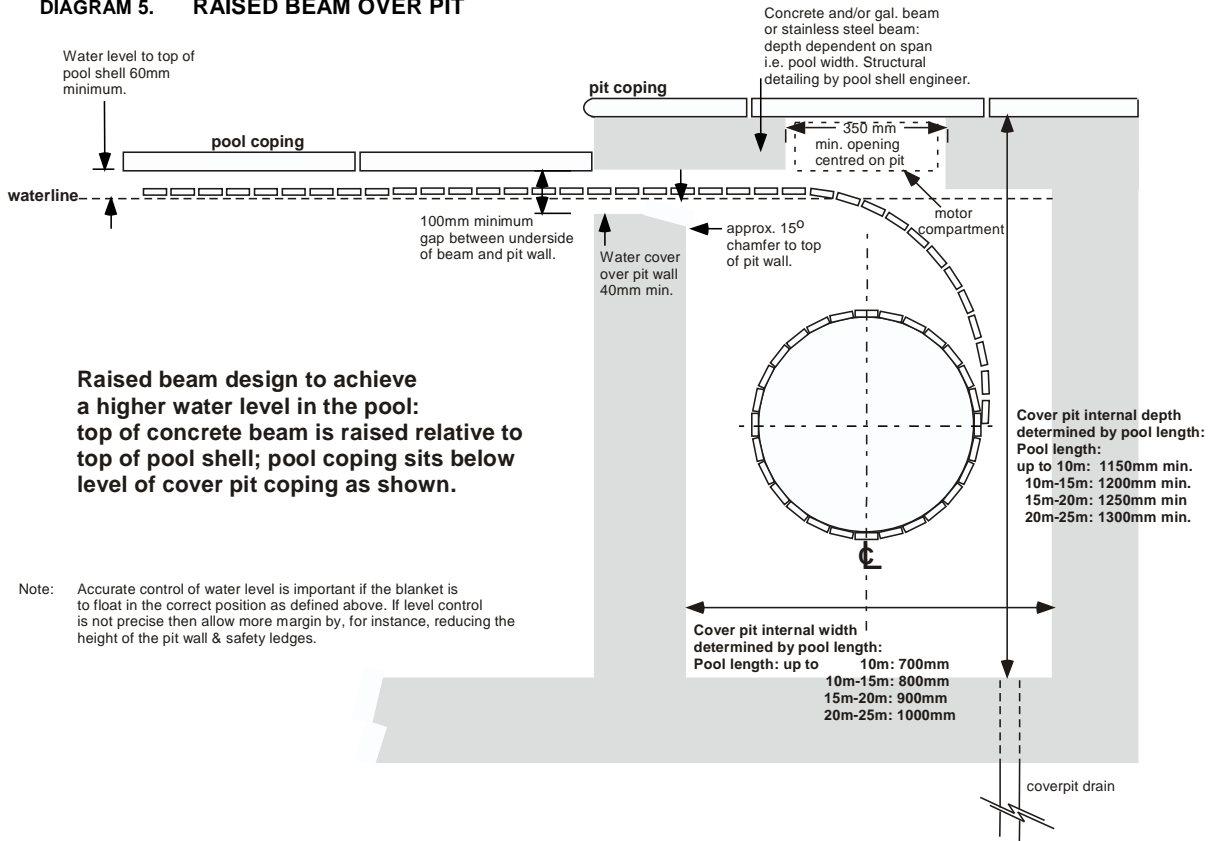


DIAGRAM 6. FLUSH BEAM OVER PIT

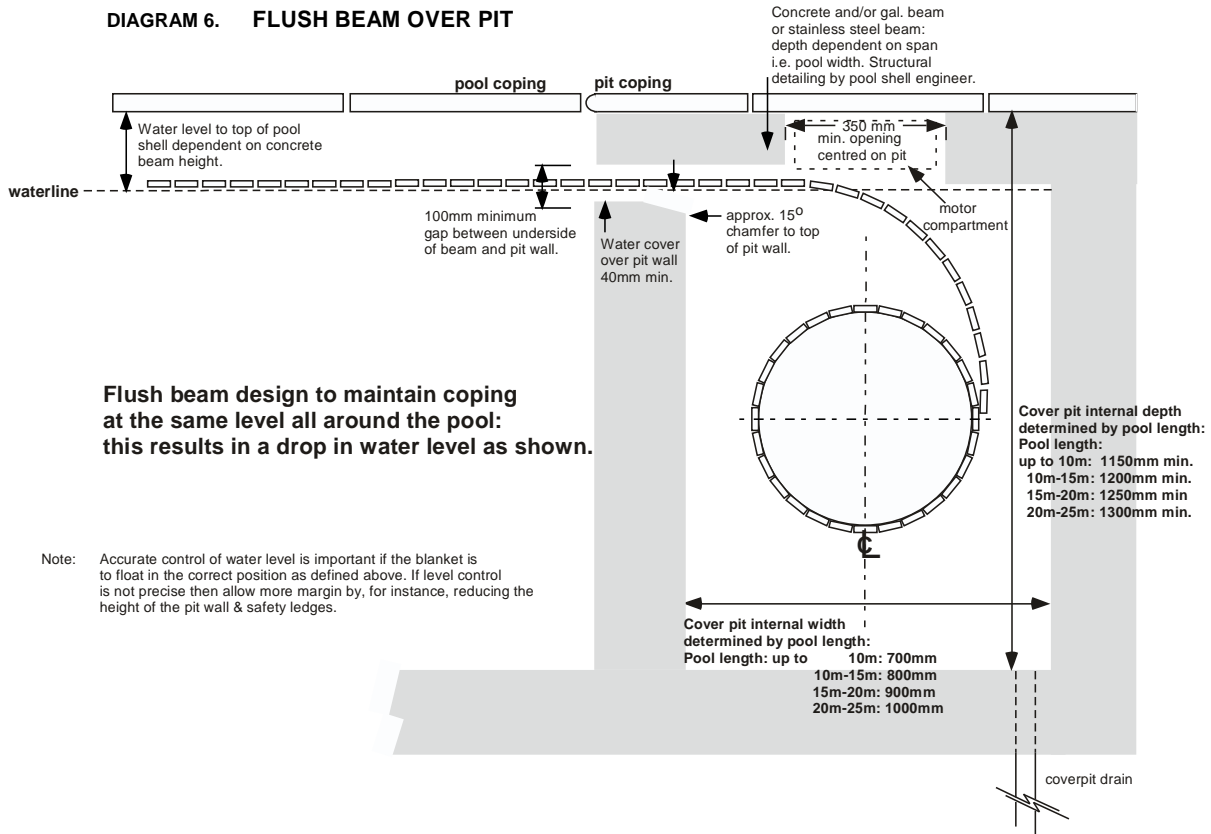
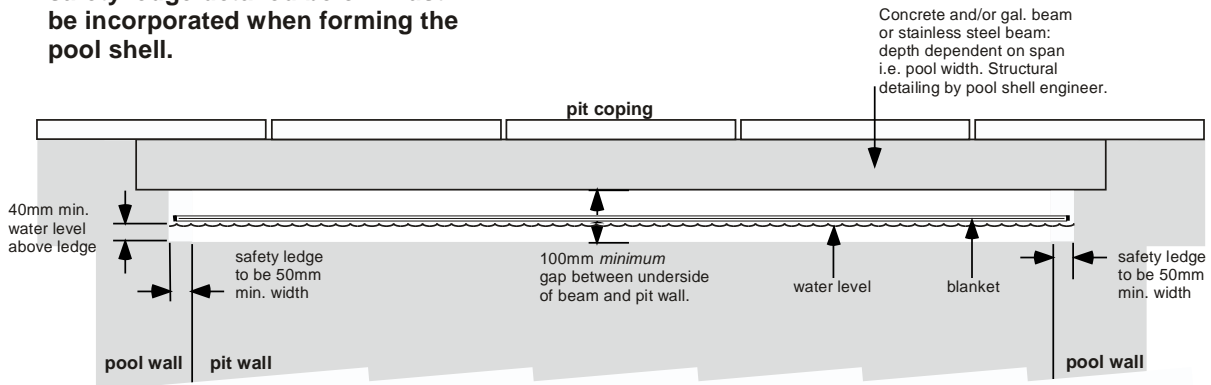
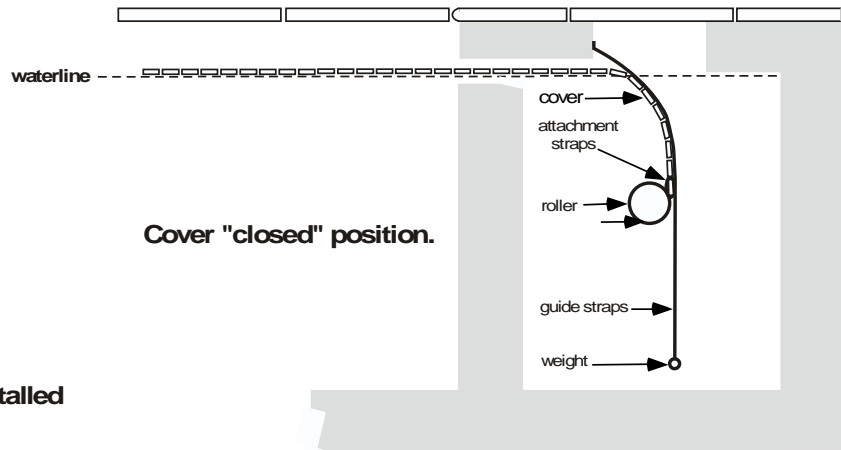


DIAGRAM 7. POOL SAFETY LEDGE DETAILS

To take advantage of the security benefit offered by the blanket the safety ledge detailed below must be incorporated when forming the pool shell.



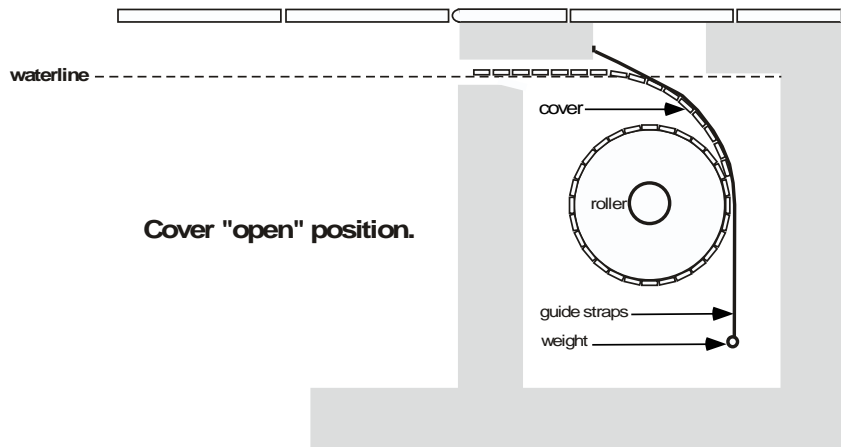
- Note:
1. The safety ledge should be formed along each side and across the end of the pool opposite the cover pit. It should be formed at the same level as the top of the pit wall with water level of 40mm minimum above it.
 2. Accurate control of water level is important if the blanket is to float in the correct position as defined above. If level control is not precise then allow more margin by, for instance, reducing the height of the pit wall and safety ledges.



Cover "closed" position.

DIAGRAM 8.

General arrangement as installed



Cover "open" position.

Sunbather Automatic Security Blanket Warranty:

SUBJECT TO WHAT IS SET OUT BELOW, Sunbather warrant that all goods supplied and installed by us shall be of merchantable quality and reasonably fit for the purpose for which they were designed and the services shall be skilfully performed.

We do not warrant that goods supplied will last indefinitely. Furthermore the system will require regular inspection, maintenance, servicing and eventual repair or replacement.

This warranty covers the repair or replacement of any faulty Sunbather component, and we may, at our sole discretion, elect to either repair or replace any such faulty components.

- All claims must be made direct to Sunbather Pty Ltd.
- All warranty claims must be accompanied by proof of purchase.

Terms & Conditions of warranty:

The blanket itself is comprised of PVC slats and is warranted against defects in extrusion quality and workmanship for a period of five (5) years from date of purchase (invoice date).

This warranty will not cover damage due to exceptional circumstances such as falling trees or people jumping on the blanket. Nor does it cover the damage caused by spilling chemicals onto the pool cover. Chemicals must be administered with the blanket retracted (“open”) and such chemicals introduced at the opposite end of the pool to allow adequate dilution.

The stainless steel roller mechanism including the roller itself and all stainless steel components are warranted for a period of five (5) years.

Blanket attachment straps and guide straps as depicted in the “Owners Instructions” are warranted for two (2) years and should be inspected annually.

Electrical components including the power supply, motor and switch gear are warranted for a period of two (2) years. This does not include flooding of the motor compartment due to absence or failure of automatic pool levelling systems or absence or blockage of pool overflow pipework. Provision of automatic water levelling and overflow are installation requirements for the blanket: see information booklet on installation requirements.

In the maintenance of the product, Sunbather may use new or equivalent to new parts, assemblies or products for equal or improved quality. All defective parts, assemblies, and products become the property of Sunbather.

Exclusions:

These warranties shall not apply to any defect, failure or damage caused by improper use or improper or inadequate maintenance and care. Sunbather shall not be obligated under these warranties:

- a) to repair damage resulting from attempts by personnel other than Sunbather representatives to install, repair or service the product unless directed by a Sunbather representative,
- b) to repair damage, malfunction, or degradation of performance resulting from:
 - improper use
 - incorrect water chemical balances being beyond reasonable limits
 - the owner/operators failure to maintain water levels at the correct position by use of automatic water levelling and overflow as per installation requirements: effecting cover operation or flooding the motor compartment.
 - failure to perform pool maintenance and cleaning.

Ordinary wear and tear is not covered by this warranty.

Any service identified in the above list and provided by Sunbather at the Customer’s request shall be invoiced to Customer at Sunbather’s then current rates for parts, labour and travel.