



## BASIX

BASIX is a web-based design tool that ensures each new residential dwelling design meets the NSW Government's targets of up to 40% reduction in water consumption and a 25% reduction in greenhouse gas emissions, compared with the average home, from the 1st of July 2004. These targets are expected to increase with time.

The rainwater tank sizing is based on your land area, roof area collected to the rainwater tank as opposed to your total roof area, and other water saving features you have installed, such as AAA rated devices, and indigenous plantings. The tank is required to have an overflow mechanism to drain when its full in the event we have excessive rainfall for a long period or if the occupants of the house are on holidays and the tank water is not being used. This overflow mechanism is designed based on each particular local council guidelines and hydraulic calculations.



The picture adjacent shows a typical rainwater tank only collecting part of a roof. The downpipe connects directly to the top of the tank. This is the most ideal installation. However, due to the Basix Tool penalizing collection of only part of a roof, most clients choose the entire roof area to drain to the tanks, other wise the tank size is increased in size to volumes that must be put underground.

The alternative is to install a 'charged' pipeline system to the tank, which is highly recommended to be designed by a hydraulic engineer, specialized in stormwater drainage to ensure the system functions correctly.

The box on the left of the tank is called a 'first flush diverter', which stops the initial roof runoff in a storm from entering the tank. They can also be installed at each individual downpipe.

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### **The most crucial questions that clients should know the answers to are as follows:**

#### **What information will be on my BASIX Certificate?**

If a proposal successfully meets the prescribed targets relating to water consumption, greenhouse gas emissions and thermal performance, the applicant can print a BASIX Certificate confirming that the proposed development will meet the Governments' sustainability requirements if it is carried out in accordance with the commitments made during the assessment. These commitments, along with information, which identifies and describes the proposal, will be shown on the BASIX Certificate.

The applicant is expected to use the information on the BASIX Certificate when preparing plans to accompany either a development application or an application for a complying development certificate.

## **Can I change my BASIX commitments before getting construction approval (DA development)?**

If changes are made to any of the BASIX commitments originally made, the applicant will need to return to the BASIX website and obtain an updated BASIX Certificate which is consistent with the amended proposal.

The extent of any changes to the proposal will dictate whether or not the applicant also needs to seek a modification to the development consent through an application under section 96 of the Environmental Planning and Assessment Act 1979. Changes, which alter the DA plans, are likely to require a consent to be modified under s96. This would include changes relating to things such as roof area, floor plan, or to any of the other BASIX commitments which are indicated on the plan.

An application to have the consent modified will not be necessary if a change to a BASIX commitment does not result in the proposal being inconsistent with the development consent. Whether or not this is the case will be considered when an applicant applies for a construction certificate.

## **Am I locked into my commitments once a construction certificate or complying development certificate has been issued?**

Once a construction certificate or complying development certificate has been issued the commitments in the BASIX Certificate submitted with the application are locked in.

A construction certificate is taken to be part of a development consent and an applicant is therefore bound by the plans and specifications approved by the certificate, including the BASIX commitments.

A complying development certificate also constitutes a development consent, and therefore an applicant is bound to comply with all plans, specifications and conditions identified by the certificate, including the BASIX commitments.

If an applicant wishes to change their BASIX commitments after obtaining a construction certificate or complying development certificate, they will need to obtain a new BASIX Certificate and then apply for a new construction or complying development certificate.

## **Will the BASIX commitments in my certificate be checked during construction?**

Like other development and building standards BASIX commitments will be checked for installation and operation as part of the certification of completed building works. The schedule of commitments accompanying the BASIX Certificate identifies the specific measures that will need to be checked or verified by the certifier.

As the plans and specifications used to obtain a construction certificate or complying development certificate list BASIX commitments there is an obligation on the applicant to ensure correct installation and operation. Failure to carry out a BASIX commitment is a breach of the development consent and could leave the applicant open to on the spot fines, the council not issuing an occupancy certificate or legal action by the council.

## **What sort of information should be kept to prove that my BASIX commitments have been met?**

Many BASIX commitments will involve the purchase and correct installation of building elements and materials. It is important to ensure that all receipts and certificates of installation are kept for the certifier to review during inspections.

## **What BASIX commitments need to be met so that I can move in to my house?**

An applicant cannot move into a house until an occupation certificate has been issued by the principal certifying authority. Before issuing an occupation certificate the certifier will need to check or verify that the BASIX commitments have been installed, and in some cases, operate correctly.

All BASIX commitments form part of the consent and must be complied with, however the most critical commitments must be specifically verified by the certifier. The BASIX Certificate will indicate which commitments these are.

Like any other development consent requirement, BASIX commitments can be enforced so the applicant has a responsibility to ensure that the commitments are carried out correctly.

The most crucial stormwater commitment is the amount of roof area being collected into the raintank and the size of the raintank. CLIENTS are responsible (not the builder) to ensure any future pool proposed that is larger than 40,000L has its Basix assessment co-ordinated with the house Basix. The most common problem is the house builder allocating your entire roof area for re-use for the house, and the pool Basix suggesting a portion of the roof is allocated for the pool, which cannot occur. Whatever roof area is allocated on the pool Basix must be deducted from the house Basix, so its doesn't exceed the actual roof going to the raintanks. The combined storage for both Basix assessments must be provided.

## **Do I have any ongoing obligations?**

BASIX commitments are checked before occupation to make sure they have been carried out. However, some types of measures will require ongoing maintenance to ensure they perform efficiently. Owners or occupiers should continue to monitor the performance of design measures and maintain them as necessary.

**Need further advice?**

**Want to make it Simple?**

Don't hesitate to call our office for all the assistance you need.