



# TOP 20 ESD PRINCIPLES FOR 2-4 DWELLINGS

## ENVIRONMENTALLY SUSTAINABLE DESIGN KIT

Have you  
**CONSIDERED**  
the  
following?

City of Darebin  
**Planning**  
8470 8850  
[www.darebin.vic.gov.au](http://www.darebin.vic.gov.au)

### THE TOP 20 ESD PRINCIPLES FOR DEVELOPMENTS CONTAINING 2-4 DWELLINGS

1. Maximise natural ventilation by installing operable windows to all rooms and using windows that allow for the highest level of ventilation such a louvre and casement windows. Awning windows allow for the lowest level of ventilation and should be avoided. The type of window should be detailed on plans.
2. Ensure all rooms, including bedrooms, bathrooms and stairwells have a window for daylight.
3. If windows are not possible install skylights or daylight tubes.
4. Provide natural ventilation by maximising windows and provide details of the type of windows on the plans.
5. Avoid rooms with borrow light, battle axe windows and small light courts.
6. Maximise access to north sun for each dwelling with living rooms and kitchens on the north to maximise access to daylight and warmth for winter.
7. Minimise west facing windows to limit heat gain. If rooms must face west located garages, bath rooms and laundries on the west.
8. Minimise or eliminate dwellings that are south facing to reduce heat loss. If rooms must face south locate bedrooms, bathrooms, laundries and garages south, not living areas and install double glazing within these windows.
9. Install fixed shading to all north facing windows and glazed doors at an adequate size to shade effectively.
10. Install adjustable shading to east and west facing windows and glazed doors, particularly west facing windows.
11. Install solar hot water or heat pump hot water.
12. Install photo-voltaic (solar) panels for electricity to reduce utility bills and greenhouse gas emissions.
13. Install an external clothes line where it will receive a lot of sunlight.
14. Install appliances to within one star of the best available and provide details in the STEPS report. Refer to the WELS website for water appliances and [www.energyrating.gov.au](http://www.energyrating.gov.au) for the energy rating.

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15. Connect as many toilets as possible to water tanks to avoid using drinking water for flushing.
16. Reduce stormwater pollution and flow providing raingardens, swales, water tanks that are connected to toilets, maximising permeable surfaces and in ground media filtration systems.
17. Use third party certified timber and timber products from FSC or PEFC to avoid illegally logged and unsustainable timber.
18. Use recycled, sustainable, recyclable materials certified by ecospecifer or GECA.
19. Provide secure, undercover bike parking and if located in a garage provide space beyond the minimum garage dimensions so the bike parking is easy to access.
20. Minimise the number of waste and recycling collections to once a week by providing large bin rooms to reduce noise and air pollution.

