



CROYDON HOUSE

The Croydon House is a modern environmental home with the following features:

1) Energy Efficiency

- Passive Solar design (Expected to use 30 – 50% of average house energy)
- Highly insulated, tight building fabric
- Double glazed plantation timber windows throughout
- Internal Mud brick double storey spine to minimise upstairs downstairs heat differential and act as a thermal reservoir and humidity regulator
- Ventilation designed to take advantage of prevailing winds, natural energy flows and stack effect
- Windows and eaves placed to allow winter sun onto thermal mass
- Airlock entry to buffer unwanted heat loss
- Louver vents to all exhaust fans (eliminates unwanted air leaks)
- Internal glass doors to allow control of internal heat flows
- Solar Hydronic heating and hot water system with instantaneous gas boost
- Energy efficient appliances

2) Efficient use of water (1/2 normal house use)

- 13500-litre Rainwater tank to run laundry, flush toilets, and water garden.
- Water efficient appliances throughout
- Australian native garden and hedge fence

3) Material Selection

- Recycled, Plantation or Salvaged timber used throughout. No virgin forest timbers used
- Construction materials chosen for Low embodied energy (triple blend recycled concrete slab, mud brick internal wall, & Ecoply cladding)

4) Health

- Easy to clean surfaces throughout - minimal carpeting
- Good extraction fans to limit moisture build-up and associated mould spores
- Radiant hydronic heating (minimises circulation of dust & dry air)

