



Government  
of South Australia

# Construction and demolition materials

## Zero Waste SA

**Commercial and housing building projects are big business in South Australia. In many urban areas, suburbs and towns, we can see new houses, housing developments, office blocks, factories being built. Renovation and urban renewal projects are just as common. And these projects all generate waste.**

About 1000 houses are demolished in Adelaide each year, and the level of urban regeneration means that this is likely to increase. Each averaged sized house demolished makes about 150 to 250 tonnes of waste. About 4 tonnes of waste is generated during construction of an average sized house.

The four major recyclers of building materials in Adelaide process around 975,000 tonnes of material, mainly concrete and asphalt, each year. They and other firms capture a significant proportion of the 'waste' material.

But the construction and demolition industry still contributes about 40% of all landfill waste. Valuable and recyclable items such as timber, bricks, and fittings and fixings, are being thrown on the dump.

From a business, and increased profits, point of view, minimising this waste makes sense.



Everyone involved in the industry can make a difference in managing building and construction waste:

- clients
- householders
- business
- government
- architects or designers
- builders
- project managers
- contractors.

## What can we do?

We can all minimise construction waste by following the 3Rs - reduce, reuse, recycle.

### Reduce

Builders can reduce waste by:

- using standard size and prefabricated building materials for timber, plasterboard and bricks to reduce waste from offcuts and costs for handling and disposal
- preparing a waste minimisation plan as part of their contract (and reporting back)
- using secondhand or recycled materials
- salvaging as much material as possible from the demolished structure for the new one.

### Reuse

Unwanted building materials, fixtures and fittings, and heritage items such as old fireplaces and windows can be sold at specialist or general secondhand or salvage outlets.

### Recycle

Recycling waste can generate substantial savings in building and construction.

#### In South Australia:

- residents can put out material for pick up in kerbside hard waste collection schemes run by local councils (check with your council whether they provide this service and about the type and amount of material that can be collected)
- building contractors can separate waste streams at the construction site and take construction and demolition waste to recycling firms in preference to landfill.

MATERIAL	REUSE AND RECYCLING
Masonry, concrete, construction aggregate	Pavements, roads, carparks, driveways, shoulder aggregate, pipe bedding, erosion control, landscaping
Bricks, tiles	Salvaged and resold
Timber	Floorboards, reconstituted panelboards, doors, furniture, fencing, mulch
Glass	Crushed for compaction fill
Insulation material	Housing insulation
Metals	Remelted into secondary materials for structural steel, roofing, piping etc
Trees, organic material	Compost
Plastics	Secondary materials for playgrounds, park benches etc
Paper, cardboard	Mulch, compost, animal bedding, newsprint, egg cartons, packaging
Fittings (baths, toilets, sinks)	Salvaged and resold

Use Zero Waste's Recycling Information Directory [www.zerowaste.sa.gov.au/rid.php](http://www.zerowaste.sa.gov.au/rid.php) to find information about recycling services in your area.

### Further information

[www.ecorecycle.vic.gov.au](http://www.ecorecycle.vic.gov.au) has links to information for developers, architects, designers, builders and local government on waste minimisation strategies, contracts and recycling guides for the industry. It also has useful information on waste minimisation plans.

#### Zero Waste SA

The goal of Zero Waste SA is to eliminate waste or its disposal in landfill by encouraging South Australians to:

- reduce their consumption of resources
- reuse and recycle materials.
- Visit Zero Waste SA's website at [www.zerowaste.sa.gov.au](http://www.zerowaste.sa.gov.au)

For more information about strategies and tips for managing waste in South Australia check the other fact sheets in this series at [www.zerowaste.sa.gov.au/factsheets.php](http://www.zerowaste.sa.gov.au/factsheets.php)

**Sources** Environment Australia. 2003. The WasteWise construction program, Year Book Australia 2003. Australian Bureau of Statistics, Canberra. Nolan-ITU. 2001. Barriers and opportunities to re-use and recycling of clean fill and building and demolition waste. Nolan-ITU, Melbourne. Nolan-ITU. 1999. Waste generation and recycling in the residential demolition sector. Nolan-ITU, Sydney.