

DEMOLITION - easy guide to waste reduction

This EASY GUIDE provides demolition firms, building owners, and builders and developers top tips for reducing waste when buildings have reached the end of their desired life or are undergoing renovations.

Most buildings have materials that still have some useful life and most items recovered from existing buildings can be reused or recycled into useable materials. Careful and selective dismantling and separation for reuse and recycling maximises the amount of materials recovered from buildings and reduces the volume of waste disposed to landfill and cleanfill.



Deconstructing the Northern Roller Mill Building, Auckland (Ward Demolition)

10 top tips for waste reduction during demolition

1. Have a plan for the project to make the most from the salvage of building parts and materials. Use the [REBRI Deconstruction Waste Plan](#).
2. Undertake an initial assessment of the site and create an inventory of all the types and quantities of materials to be salvaged, recycled or disposed of. Consider what could be reused on the site, such as concrete as recycled aggregate base course.
3. Can the building be relocated? This would mean very little waste is created.
4. Find markets for materials prior to the project starting. Refer to the Yellow Pages, industry directories (www.ronz.org.nz, www.wasteexchange.org.nz) or trade magazines and web sites.
5. Ensure the project manager or client schedules enough time for dismantling. Explain the difference in cost, environmental benefit, etc during the tender phase.
6. Mark out waste storage areas before dismantling begins to make the process smoother and help reduce damage to salvaged materials.
7. Dismantle buildings into components in the reverse order to construction.
 - Do the soft strip of interiors manually, to reduce damage.
 - Keep latches, hinges, framing, etc with the relevant building parts.
8. Separate the materials on site or 'at source', to reduce the cost and time of handling materials. Store material types separately ie. metal, concrete, timber etc.
9. Ensure safe and dry storage of salvaged items and careful removal from the site to reduce damage and contamination that could devalue the materials.
10. Market your services and the salvaged items to encourage the building industry to increase the use of second hand materials. Use the Yellow Pages, industry directories (www.ronz.org.nz, www.wasteexchange.org.nz) or trade magazines and web sites.

The waste issue

The construction and demolition (C&D) industry is one of the largest waste producing industries in New Zealand. C&D waste may represent up to **50% of waste to landfills** and the majority of waste to 'cleanfill' or C&D dumps in New Zealand (according to the NZ Waste Strategy from the Ministry for the Environment). That's a lot of waste to bury in the ground.

Not only is this a waste of good resources, it is also filling up valuable landfill and cleanfill space, and contributing to serious environmental impacts such as air and water pollution.



Salvaging wooden flooring (Ward Demolition)

Benefits of reducing waste through deconstruction

Reducing waste is not just good for the environment. Businesses that reduce waste through deconstruction may also experience the following benefits:

- Earning revenue from salvaged building parts and recycled materials.
- Reduced waste disposal costs.
- A high level of client satisfaction could enhance the company's image and encourage repeat business.
- The training required for deconstruction can help to attract and retain employees who are keen to develop skills.
- Reduced risks from hazardous materials due to more careful dismantling techniques..
- Winning contracts for projects that specify REBRI waste reduction procedures.

Want more information on how to maximise salvage and reduce waste during demolition? See the REBRI GUIDE for Waste Reduction – demolition, available at www.rebri.org.nz.



Salvage of insulation, old St Martins New World, Christchurch

What is REBRI?

REBRI stands for **R**esource **E**fficiency in the **B**uilding and **R**elated **I**ndustries, and started in 1995 as a collaborative effort between Auckland councils and the Building Research Association of New Zealand (BRANZ) to undertake research and raise awareness of the issues of waste and the efficient use of resources in C&D projects. A consortium of councils, BRANZ, Recycling Operators of New Zealand and the Ministry for the Environment, with assistance from Winstone Wallboards Limited and industry representatives, extended the initiative in 2003 to undertake more research and develop national waste reduction guidelines.