Plan and conduct a house deconstruction

Deconstruction makes good business sense

Deconstruction means taking apart a building so that the maximum amount of materials can be sold at a profit, re-used or recycled for free or at reduced rates, minimising costly disposal and landfill charges.

Selective deconstruction means using deconstruction only when economically viable.

Planning a deconstruction project

The steps below are a guide to deciding the best approach to deconstruction. In addition to using the guide, we recommend you:

- Contact relevant authorities (WorkCover NSW, NSW Fair Trading, local government and the Department of Environment, Climate Change and Water NSW) to find out about your health, safety and environmental obligations in relation to waste management.
- Find your local and best value re-sale and recycling options.

The planning process involves 5 quick steps

- 1 **Site survey:** find out the condition, quantity and type of materials that can be re-used, sold or recycled, and how much room on-site you might need while deconstruction takes place.
- 2 Environmental health and compliance: Record in your project plan how materials and waste will be managed and include all relevant details in the Development Control Plan or Waste Management Plan required by the local authority. Make sure you and your staff comply with WorkCover regulations and local council controls, especially when handling and disposing of materials containing asbestos.
- **3 Organisational plan:** Outline the steps, stages, labour and machinery involved in the deconstruction, and the times that machinery and equipment is needed to manage costs effectively.
- **4 Site plan:** Allocate sufficient space for materials separation and storage and make staff aware of the site plan.
- 5 Materials management plan: Use this as a guide to show staff which materials are to be sold, re-used, recycled or disposed, who is responsible for collection and transport of each material, and the estimated time for the project. This plan should also identify the buyers, recyclers or landfill operators found for each material and include a log for tracking the quantities and final destination of each material.

Plan to ensure cost-effectiveness and good environmental outcomes.







Safety is everybody's responsibility; implement robust health and safety controls.



Materials index

The list below shows different materials and how they can be re-used or recycled. Consider these applications when planning a deconstruction project.

ltem	Re-use or sell	Recycle	Dispose
Wood (lumber, timber, flooring)	Timbers, large dimension lumber, plywood, flooring, moulding, lumber longer than 3m	Unpainted and untreated wood unfit for re-use, off-cuts	Painted, treated or rotting timber
Windows and doors	Windows and doors in good condition	Metal frames, screens, unpainted or untreated wood	Glass, unusable painted or treated wood
Cabinets	Entire cabinets (replace doors in poor condition)	Untreated or unpainted wood	Painted or finished wood
Plumbing products	Sinks, tubs, taps, PVC pipes in good condition	Metal pipes, toilets (porcelain and metal), taps with lead content	PVC and other plastic piping unfit for re-use, toilet seats
Plasterboard	Plasterboard in good condition	All other uncontaminated plasterboard	Contaminated (asbestos or lead), rotten plasterboard
Electrical products	All if in good working order (including light fittings, heaters, air conditioners)	Metals (fixtures, conduits), wiring	Ceramic and plastic parts
Bricks and concrete	Any bricks that are in good order and not too contaminated with mortar	All bricks and concrete	Do not dispose – all can be recovered
Non-wood floor covering (carpets, tiles, etc)	All good condition, removed intact	All flooring types	Vinyl, stained or heavily soiled carpets
Roofing materials (tiles, sheet steel)	All products if in good condition	Metal materials, terracotta and concrete tiles	Not applicable

Conclusion

Smart planning of a deconstruction project is part of good site and economic management. A well-conducted site survey makes it possible to work out the total materials in the building and which materials to manage separately. A good estimate of the type, amount and quality of materials means that buyers and/or users of the materials can be found, giving you an idea of the savings (or income) that can be generated from the recovered materials.

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