

THE RESOURCE EFFICIENT BUILDER

Smart ways to become a more efficient builder, have a cleaner, safer site and in the process, produce less waste, recycle more, save money and protect the environment.



A SIMPLE GUIDE TO REDUCING WASTE



Why was this booklet written?

This booklet has two aims:

1. To provide simple guide to reducing the amount of waste produced, make recycling easier and reduce the amount of waste going into landfill.
2. To help builders comply with Council and State regulations in regard to waste minimisation and environmental management plans.

Who is this booklet for?

This booklet was written for:

- builders
- trades people
- demolition workers
- home renovators

Who was this booklet developed by?



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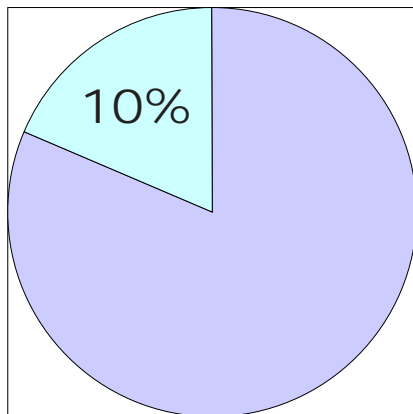
Waste Minimisation Plan

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RESOURCE EFFICIENT BUILDING

The Building Times

10% COST OF JOB LOST IN WASTE



In most cases the cost of material waste is equal to 10% of the cost of the job.

Waste is also expensive in environmental terms, as it represents the longer-term costs of pollution, resource overuse and wasted energy.

Construction and demolition waste contributes between 40 and 50 % of all solid waste that goes to landfill. On average 2.6 tonnes of waste materials are produced during the construction of a house in Melbourne (excluding soil and screenings).

Read on...there are lots of other good reasons to be a resource efficient builder

BENEFITS OF BEING A RESOURCE EFFICIENT BUILDER



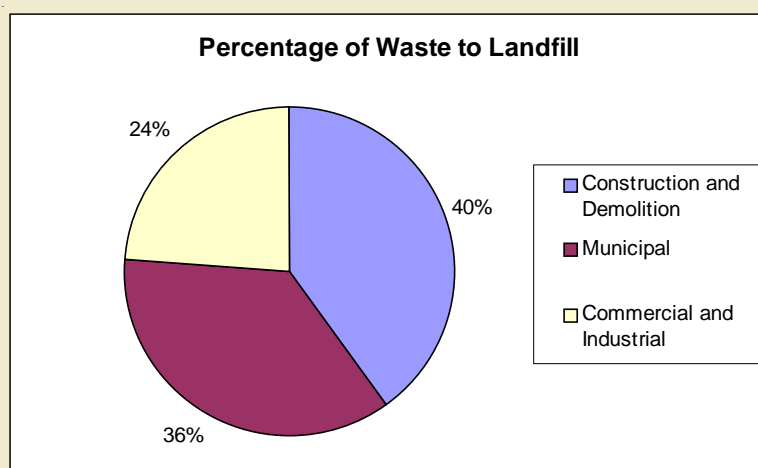
Save money **WASTE = MONEY**

You have already paid for everything you throw away.
Reduce clean up and disposal costs.

Improved site safety A well organised site has less loose material lying around on which people can trip and hurt themselves.

The site looks clean and well organised This helps to attract potential buyers and future clients.

Improved efficiency People can work easier if they don't have to pick their way through scattered rubbish. A well managed and organised site is more efficient.



Protection of the environment

You're doing your bit to waste less resources. In a recent survey, 75% of people said that they were looking for builders who carried out environmentally aware practices.

HOW CAN I CUT OUT WASTE?

6 ways to work smarter, reduce waste and save money!

1 Plan ways to reduce waste before you start the job



PREPARE A WASTE MANAGEMENT PLAN

Make a list of all the things you are going to do to reduce waste or to reuse or recycle materials on the job.

- Decide who will be responsible for these actions.

Make a copy of the 'Waste Management Plan' proforma on Page 9 in this book. Fill it out and your plan is done!

- Negotiate with suppliers to take back unused materials, packaging or your cut offs.
- Avoid suppliers that over package.
- Find out where local recyclers are and negotiate arrangements. Many of these also supply skips. These are listed in EcoRecycle's Demolition Handbook. Ring 1800 35 32 33 to get a copy or see www.ecorecycle.vic.gov.au



2

Design and order only what you need



- Design to standard sizes as this reduces waste.



- Don't overestimate the materials you will need.



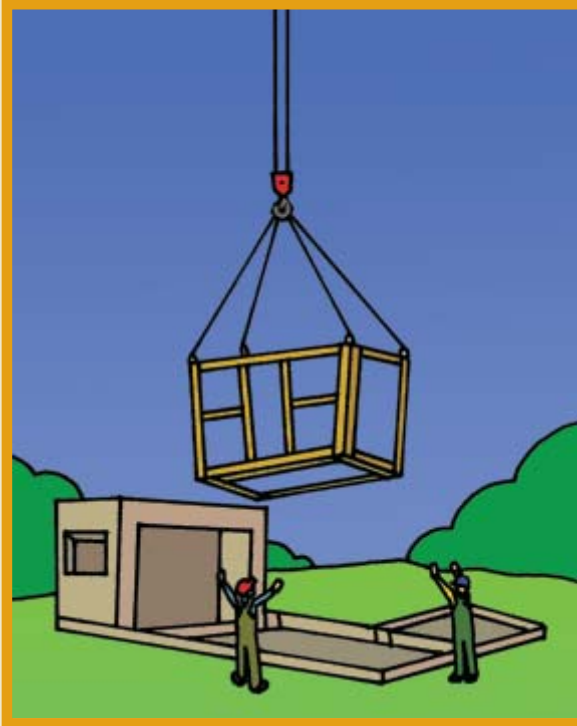
- Negotiate for delivery of supplies on an 'as needs' basis.



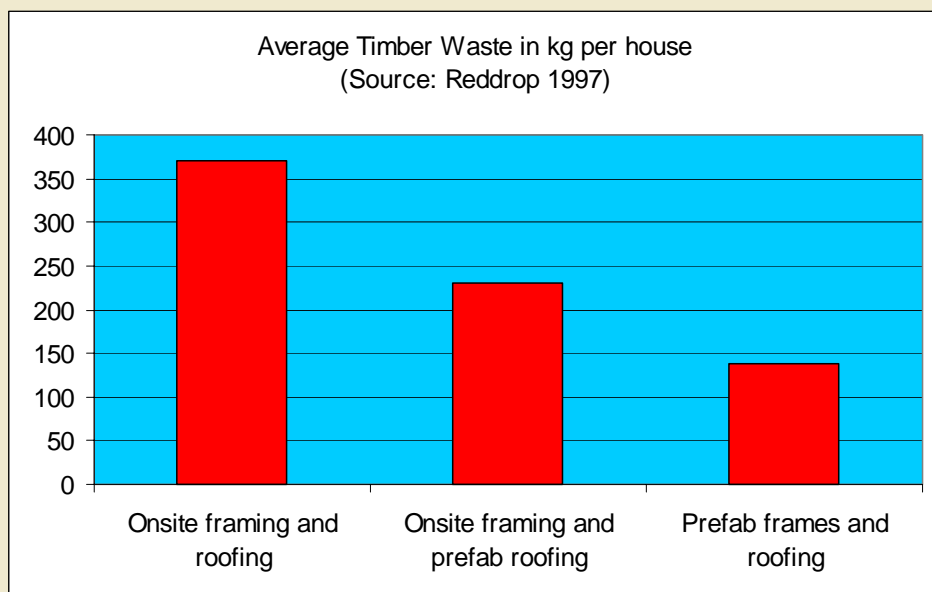
- Use products that have some recycled content or have energy conserving features. See www.ecospecifier.org

3

Use prefabricated products



Buy prefabricated products such as frames and trusses whenever possible. This greatly reduces waste.



4

Team up with other builders to recycle



- If you are building on an estate you may be able to share the cost of recycling with other builders.

5

Provide rubbish bins



Have bins for ordinary rubbish like food wrapping and drink containers as this can contaminate material that could otherwise be recycled.

Label bins to keep this litter separate from recycled materials. Make sure everyone on-site understands this. **DON'T GET FINED FOR LITTERING**

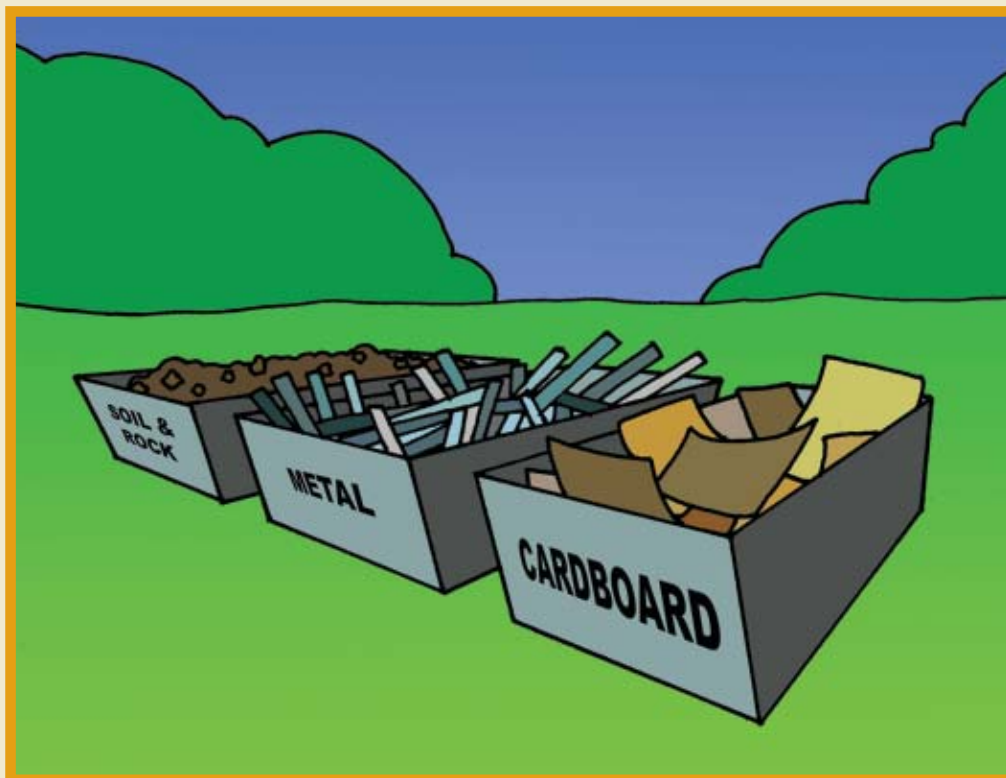
6

Separate waste for recycling where possible



Mixed building site waste can still be recycled. Use a skip company that takes the material to a recycling centre.

When using a mixed waste service ask for details of what and how much was recycled.



Where space permits, separate materials for recycling. This may reduce your disposal costs. Make sure everyone on-site understands this. Materials may be sorted into cardboard, metal, rock and soil for recyclers in your area. Ask bin hire companies and recycling contractors to supply clearly marked bins.

REDUCE WASTE

Reducing the amount of material you order and reducing the amount of material going to landfill can result in significant cost savings. Packaging waste can also account for a significant amount of waste from building sites.

Construction waste includes:



- bricks



- cardboard



- vegetation



- soil and rock



- timber



- polystyrene



- tiles



- plaster



- metals



- concrete

ALL of these can be recycled!



If you only do one thing, use a skip company that takes the material to a recycling centre. Mixed waste can still be recycled.

Waste Minimisation Plan

BUILDER'S DETAILS

Contact Name:.....
Company Name:.....
Postal Address:.....
Suburb:.....Postcode:.....
Telephone:.....
Mobile:.....
Fax:.....
Email:.....
Plan Prepared by:.....
Date:.....

Project Title:
Project Address:.....
Suburb:.....Postcode:.....
Site Size:.....
Floor Area of Building (square metres):.....
Is there a demolition component?.....
Does your company have responsibility for
the demolition?.....
Waste disposal company used:.....

CHECKLIST

1. PROJECT PLANNING - FOCUS ON ELIMINATION

- | | |
|---|--|
| <input type="checkbox"/> Develop and analyse project waste profile (Waste Min Plan). | <input type="checkbox"/> Keep records of cost-control, reporting and monitoring. |
| <input type="checkbox"/> Make arrangements for material separation and/or collection. | <input type="checkbox"/> Tell everyone on-site about their responsibilities. |
| <input type="checkbox"/> Organise a recycler or waste contractor who will provide a report of what and how much was recycled. | |

2. PRE-CONSTRUCTION

- | | |
|--|---|
| Design | <input type="checkbox"/> Specify exact requirements to suppliers. |
| <input type="checkbox"/> Design to standard material sizes. | <input type="checkbox"/> Purchase environmentally efficient & recycled content products (see EcoSpecifier). |
| <input type="checkbox"/> Design the site set out for easier waste minimisation operational requirements. | <input type="checkbox"/> Negotiate with suppliers to take back off cuts, unused materials and packaging. |
| Estimating and Purchasing | |
| <input type="checkbox"/> Avoid over-estimating and rounding-up of purchasing requirements. | |

3. OFF-SITE ACTIVITIES

Incorporate the use of prefabricated materials.

4. ON-SITE ACTIVITIES

- Store materials to avoid degradation/damage.
- Minimise incoming packaging materials.
- Supply a bin for general rubbish.
- Use a bin with lid for safe disposal of unavoidable waste.

BEFORE project is started - Complete this table

ESTIMATED WASTE MATERIALS	PLANNED ACTIONS TO REDUCE WASTE			
	Amount (m ³ and/or tonnes)	On-site reuse (How? Where?)	Off-site reuse (Name of recycler)	Disposal (Name of contractor, landfill and amount)
Bricks				
Cardboard and paper				
Carpet/underlay				
Concrete				
Green waste				
Metals				
Pavers				
Plaster waste				
Plastic wrapping				
PVC				
Roof tiles				
Rubble				
Soil				
Tiles				
Timber				
Waffle pods				
Other (describe)				

AFTER project is finished - Complete this table using waste contractors report

WASTE MATERIALS	COMPLETED ACTIONS TO REDUCE WASTE				
	Amount (m ³ and/or tonnes)	Amount reused on-site (How? Where?) (m ³ and/or tonnes)	Amount recycled (m ³ and/or tonnes)	Amount disposed (m ³ and/or tonnes)	Percentage recycled (m ³ and/or tonnes)
Bricks					
Cardboard and paper					
Carpet/underlay					
Concrete					
Green waste					
Metals					
Pavers					
Plaster waste					
Plastic wrapping					
PVC					
Roof tiles					
Rubble					
Soil					
Tiles					
Timber					
Waffle pods					
Other (describe)					
TOTALS					



USEFUL CONTACTS

- o Master Builders Association. Phone 9411 4555 www.MBAV.com.au
- o EcoRecycle Victoria 1800 35 32 33 www.ecorecycle.vic.gov.au
- o Northern Region Waste Management Group (03) 9499 9779 www.nrwmg.vic.gov.au/wastewise/business/business.html
- o 'The Do's and Don'ts: Resourceful Construction and Demolition' produced by Arcadian Solutions. Northern Region Waste Management Group (03) 9499 9779 www.nrwmg.vic.gov.au/wastewise/business/business.html to purchase a copy.
- o For environmentally efficient & recycled content products try www.ecospecifier.org

For further information contact:



This booklet was developed by:



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