

## **Building with timber – a practical choice**

### Timber is strong and lightweight

- A natural high strength fibre composite
- Can support trees that can grow as high as 100 metres

A comparison with steel and concrete shows that radiata pine structural timber, for example, has a strength-to-weight ratio 20% higher than structural steel and four to five times better than un-reinforced concrete in compression.

### Timber is easy to work with and install

- Easy to lift, cut, plan, drill and join
- Lightweight timber framing methods allow easy installation of additional fibre or foil insulation

### Timber is versatile

- Allows for a large variety of design forms and finishes
- Timber framed houses can be easily added to or modified

### Timber is a good insulator

- Timber itself is a natural insulator due to air pockets within its cellular structure.
  - As an insulator timber is
    - 15 times better than masonry
    - 400 times better than steel; and
    - 1770 times better than aluminium

### Timber is a healthy building material

- Easy to keep clean
- Helps maintain an optimum humidity balance
- Helps a room warm up more quickly

### Timber is safe

- Low toxicity for indoor air quality
- Doesn't conduct electricity
- Safety from fire

Contemporary timber construction has high fire resistance and noncombustible lining protect timber frames. The contents of a house are the major hazard in building fires, and this is true regardless of the building materials.

### Timber is durable

- Good design detailing and specification ensures timber structures that last for lifetimes
- Modern timber preservatives enhance natural durability

## Timber recycles carbon



### Timber is innovative

- Modern engineered timber products such as laminated veneer lumber (LVL) and glue laminated timber (glulam) can be manufactured to meet specific structural requirements

### Timber is energy efficient

- Light-weight timber frames allow easy installation of insulation
- Low thermal conductivity minimises thermal bridging

Timber windows are more thermally efficient as they do not form 'thermal-bridges' between the cold air outside and warm air inside (and vice versa in summer). Timber windows can be easily repaired, supplied in a number of colours and built to a wide range of designs.

### Timber is naturally beautiful.

- Large range of colour, grain and texture makes timber visually attractive
- Nice to touch

*This content was source from the Wood Naturally Better Information Sheet 2008, Forest and Wood Products Australia.*

