

# WHY TIMBER FRAMING



Timber framing is the leading choice for building Australian homes, and our future.

Around 80% of Australian homes are built with timber framing. As one of the oldest resources, it's also the building material we're most experienced with. It's safe and trusted, and it's the only framing material that tackles irreversible climate change. And research shows that this is exactly what Australians are looking for.

# Timber framing is:



#### Renewable and Sustainable

With negative perceptions about logging and deforestation, people often think cutting down trees is a bad thing. However, when timber comes from a sustainably managed source, it's one of the most ecofriendly building materials available as at least one tree is replanted for each tree that is harvested. In Australia, we replant over 70 million trees every year and our softwood plantations grow the volume of timber framing needed to build the average home in two and a half minutes.



## **Energy Efficient**

Timber has the lowest embodied energy of all mainstream building materials. This means that the

entire production process of timber framing—from planting and harvesting to manufacturing, transportation and installation—uses the least amount of energy. And new technologies and innovations are increasing yields from each log, decreasing waste and reducing energy use further.



# **Reducing Greenhouse Gases**

Timber framing is a natural way to remove greenhouse gases from the atmosphere. Trees grow for around 30 years before they are harvested, allowing them to capture large amounts of carbon dioxide.

Approximately half the dry weight of timber framing is carbon, which is locked up and stored for the life of the timber.



## **Carbon Positive**

The production process of timber—from sapling to installation—removes more carbon from the air we breathe than it emits. Younger trees collect carbon dioxide at a faster rate, so it's actually a good thing that they replace the older trees. And for every tree that's harvested, at least one more is planted in its place.



## Strong, Durable and Quiet

A timber framed house is quiet and strong as it doesn't expand and contract during temperature changes, which means no risk of premature cracking in plaster linings.

Advances in the industry, like engineered wood, also mean we can create high-tensile products for expansive open-plan living spaces and high ceilings, and homes that can last for generations to come.



# **Naturally Insulating**

Timber framing is a natural insulator. Tiny air pockets in timber framing add resistance to heat flow throughout a home. And with good design, timber framed buildings can better regulate their internal temperature and reduce household energy use when it comes to heating and cooling.



#### Low-Cost Flexibility

While most timber framing is often prefabricated or built offsite, any last-minute changes or variations are easily made onsite by carpenters.



#### **Termite Treated**

It's important to either install a termite barrier system or use timber framing that's been safely treated to keep termites out of your home. Treated timber protects your home from the inside out.



## Fire Predictable

Timber framing has significant insulating properties causing it to burn in a slow, predictable and measurable way while maintaining its structural integrity.

What's more, it's also protected from fire with cladding, like brick and plasterboard. These factors see timber perform strongly against fire, giving designers the ability to confidently create strong, durable, fire-resistant constructions.



#### Fast to Assemble

Timber framing's natural lightweight properties make it easier to transport and install. It means we can prefabricate and construct modules offsite, which increases onsite productivity and decreases weather delays. Builders also have the most experience and know-how with timber framing, making construction even more efficient.



## Easy to Renovate

When renovations are required, like when a family outgrows their home, timber framing is simple and easy to work with. Whether it's removing existing framing, adding more timber framing or both, the ready availability of designers, materials and tradespeople familiar with the material make it an easier process.



#### Simple to Install Services

Timber frames can be easily drilled to install plumbing and electric cables, unlike some materials that require cushioning grommets to protect cable insulation during installation, limiting long-term damage to plumbing due to expansion and contraction or corrosion.



#### **Good for Australia**

Timber framing helps Australia grow and prosper. From forestry and sawmill workers to treatment suppliers, nail plate and frame and truss manufacturers, distributors, carpenters and tradies—the industry provides over 45,000 local jobs and contributes \$24 billion to the Australian economy each year.

Let's build a better world. Let's build with timber framing.



