AKD Framing.

A typical Australian home built with AKD structural pine will be re-grown in **2.5 minutes** across the Australian softwood plantation estate.
A typical Australian home stores more than 3 tonnes of carbon.

Source: www.fwpa.com.au

AKD

akd.com.au

Frame with timber. Renew our future.

Australian Plantation Pine is one of the most versatile, sustainable and renewable building products in the world today with applications across the whole built environment, whether it is residential or commercial buildings, indoors or outdoors.

One of the most valued uses of Australian Plantation Pine is in structural applications, both for indoors and outside. Structural Pine is the backbone of most Australian homes.

Why would you use anything but AKD's Australian Plantation Pine Framing?

Timber is the only renewable building material and, in Australia, AKD's structural pine is Australian owned, Australian grown and Australian made.

It is harvested from sustainably managed plantations.

Trees absorb carbon dioxide during growth while releasing oxygen into the atmosphere and storing carbon as wood fibre – in fact trees filter the air during growth. Australia's plantation resource is critical in reducing our greenhouse gas emissions and with industry plans to expand the plantation resources in Australia, it can be a real part of climate change solutions for the world.

Steel production for an average 4-bedroom home releases about 7 times more CO_2 compared with pine framing.

The timber used in a typical Australian home built with AKD Terminator framing will be re-grown in 2.5 minutes across the whole Australian softwood plantation estate. A typical timber framed Australian home stores more than 3 tonnes of carbon for its life.

Source: www.fwpa.com.au

Plantation Pine is strong yet light. This makes it easy to transport and erect, while today's high-tech manufacturing ensures that every stick is traceable to quality control records. Every piece of structural pine is an engineered component that does its job economically and reliably without leaving a large carbon footprint like most building materials today.

Timber Framing the Ultimate Renewable™

AUSTRALIAN MADE AND GROWN

AKD Australian Structural Plantation Pine is strong and dependable. **It won't let you down.**

For the Builder or Tradesperson.

If you balance up the alternatives, you'll find AKD Framing is a most cost-effective framing material. It's widely available and competitively priced.

- AKD Framing framed houses are built faster. Timber is easy to get, contractors are familiar with it and there is less hassle with following trades. All of this saves time and money.
- AKD Framing framed houses are environmentally friendly. Homeowners prefer Plantation Pine because they know it's a natural, renewable and sustainable material.
- AKD Framing framed houses are adaptable. On-site problems can be solved on the spot. If you need extra materials, there's always a timber yard down the road.
- AKD Framing framed houses are simple. You don't need specialised tools or trades to work with timber.
- AKD Framing is cost effective. Renewable Australian plantations mean your timber supplies remain price competitive and do all they can to keep you happy as a customer.

Timber is the basis of Australia's housing heritage. AKD and our industry is committed to continuing our service to Australian homeowners.

For the Homeowner.

- AKD Framing is fast. It saves time because its readily available and builders know how to use it.
- AKD Framing can be prefabricated. Our framing can be prefabricated in a factory leading to greater precision and faster building times.
- AKD Framing is cost effective. Roof trusses and wall frames made from AKD Framing are value for money and offer consistent performance.
- AKD Framing is adaptable. Once the house is built, an AKD frame is easier to live and grow with than other framing materials. You can easily add shelves to walls, put up pictures, add skirtings. Do almost anything you like to fit your lifestyle.

For the Mid-Rise Developer and Builder

With the national population projected to reach over 30 million people by 2030 and much of this growth occurring in our urban and regional centres, there will be a continued need to densify our middle suburbs through the delivery of mid-rise multi-residential and commercial projects.

Prefabricated timber framing has been shown to facilitate faster build times, safer sites, and better performing indoor environments resulting in happy purchasers and happy developers. Early adopters are already realising these benefits in the mid-rise market, and many others are starting to catch on.

Building design, construction professionals, and property developers around Australia now have easier access to the benefits of timber framing systems in mid-rise projects following deemed-to-satisfy code regulations which came into effect in 2016, providing an easy path to compliance for timber buildings up to an effective height of 25m or approximately 8 storeys for Class 2, 3 and 5. The 2019 National Construction Code (NCC) extended the use to include all classes of buildings.

AKD is proud to be a founding funding partner of the WoodSolutions' Mid-Rise Advisory Program from 2017 to 2021.

The timber option for mid-rise buildings is most viable when considered early in the design and estimating process. AKD are keen to support the market conversion and growth in light-weight timber structural solutions for mid-rise buildings. Involving us early in the project development allows us to collaborate with our supply chain, making the most of the cost, time, environmental and other advantages of light weight timber building systems which include AKD Framing products for mid-rise buildings in Australia.

Light weight timber framing solutions are the most competitive in the 4 to 6-storey new building market but also offer a commercially viable alternative for developments going up on top of existing retail and commercial space.

Light weight has the strength to go up along with the benefit of a light footprint.

Managing elevated moisture content in timber framing

AKD Timber Framing is manufactured under controlled conditions to strict moisture content limits to optimise stiffness, stability and durability. To maximise performance, timber framing should be protected from moisture whenever possible during construction. However, it is inevitable that framing will sometimes be exposed to moisture which may lead to an elevated moisture content within the timber. This Technical Note provides guidance on how to minimise, identify and manage high moisture to maximise service life and performance of the timber.

Click here to read the full tech note.

Size ranges and availability

AKD can supply all the popular light framing sections and lengths. Check with your stockist for details and availability.

Our regular range includes the following (mm):

70 x 35	90 x 35	140 x 35
70 x 45	90 x 45	140 x 45
190 x 35	120 x 35	240 x 45
190 x 45	120 x 45	290 x 45

Available in most lengths of 300mm increments, from 2.4m to 6.0m. Other sizes and lengths may be available on request.

Termites – No Problem.

Termites are part of Australia's natural ecology and environment, and they can be found in most areas of the mainland. However, the termite risk can be affected by many factors such as proximity to natural bushland, age of the suburb, certain soil types and the further north we build.

Termites should not be ignored and can attack any house irrespective of its frame type. Termite risk should be assessed after consulting with the local building authorities and expert advice.

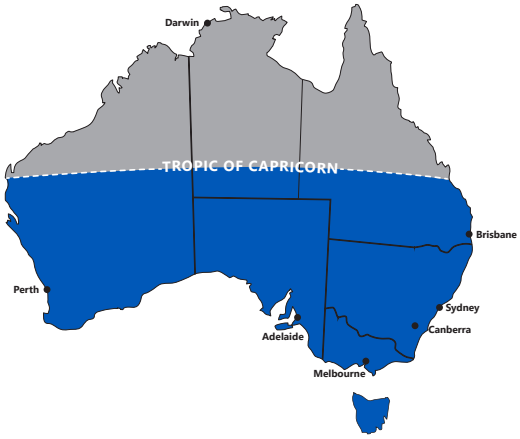
For higher risk areas or simply for peace of mind, AKD Terminator® is the cost effective and user-friendly termite resistant material for your structural solution indoors.

AKD Terminator is a termite resistant structural framing material as defined in the National Construction Code (NCC) and AKD offers Terminator in two different levels of treatment – AKD Terminator Blue for use South of Tropic of Capricorn and AKD Terminator Red for use North of Tropic of Capricorn. Both AKD Terminator Blue & Red areis compliant with Australian Standards for treatment compliance and quality assurance and also with Australian building regulations.

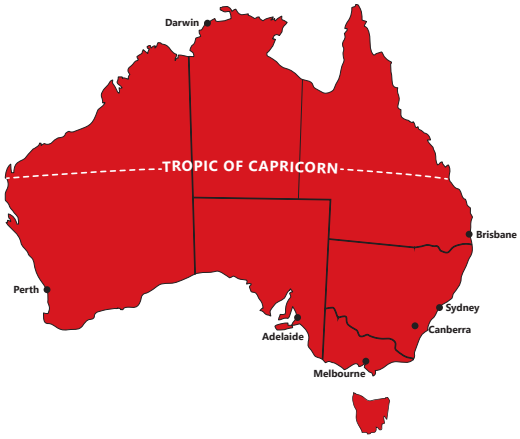
AKD Terminator utilises synthetic pyrethroid actives that have been thoroughly and independently tested to demonstrate effectiveness in Australian conditions. AKD Terminator Blue is treated to a H2F Hazard Class, effective against termite attack when used South of the Tropic of Capricorn while AKD Terminator Red is treated to an H2 Hazard Class effective against termite attack Australia wide.

Suitable applications

AKD Terminator is treated to hazard class 2 level according to the Australian Standard AS1604 series. It is suitable for dry, protected building applications (not subject to weather or dampness) such as wall frames, trusses and sub-floor construction, where additional security against termite damage is desired.



AKD Terminator Blue is approved for use south of the Tropic of Capricorn. For applications north of the Tropic of Capricorn due to the presence of Mastotermes darwiniensis, an aggressive species of tropical termite, which are found in the far north of Australia, we offer **AKD Terminator Red**.



	AKD TERMINATOR RED	AKD TERMINATOR BLUE
Treatment Hazard Level	H2	H2F
Location Usage	used across Australia	used ONLY South of Tropic of Capricorn
Treatment Identification Mark	435 70 H2	511 74 H2F Colac 197 75 H2F Tumut 338 75 H2F Caboolture 240 75 H2F Highland Pine
Protection and Care	Treated to protect against structural failure due to termite attack or insect borer attack Not to be stored in direct ground contact Not to be subjected to moisture content above 20% in service Not to be exposed to weathering/ direct sunlight for a period greater than 3 months during construction	Treated to protect against structural failure due to termite attack or insect borer attack Not to be stored in direct ground contact Not to be subjected to moisture content above 20% in service Not to be exposed to weathering/ direct sunlight for a period greater than 3 months during construction
Modification	Not to be re-sawn, re-sized or ripped after treatment	Not to be re-sawn, re-sized or ripped after treatment
Safety	Refer AKD Terminator Red SDS on our website	Refer AKD Terminator Blue SDS on our website

- AKD Terminator is sourced from sustainable and renewable Australian plantation pine forests.
- Protected against termites by a safe modern wood preservative.
- Manufactured in state-of-the-art environmentally compliant facilities in accordance with Australian Standards.
- Supplied seasoned so the timber is lightweight, dimensionally stable and easy to work with.
- In line with industry practice, both AKD Terminator Blue and Red timber is a distinct colour to help identification and proper usage on site.

Use and installation practices

AKD recommends that AKD Terminator termite resistant framing is used in conjunction with appropriate whole of house protection measures as detailed in AS3660 series for the best termite risk management practice.

Installation	Must be installed above damp proof course. Not to be rip-sawn or have the width or thickness altered in any way except where needed for straightening in sections **limited to one face only and extending for less than half the length of the board.** Where alterations expose the timber surface, the exposed surface must be resealed with a topical preservative containing a contact insecticide, according to the directions shown on the product label, to protect the integrity of the treatment envelope.	Must be installed above damp proof course. Not to be rip-sawn or have the width or thickness altered in any way except where needed for straightening. Planing of wall studs for straightening at selected points before application of wall linings is permissible providing that only one face is planed. Under these circumstances, no resealing is required.
End Sealing	All product surfaces exposed by cutting to length, notching, rebating, drilling or similar operations must be resealed with a topical preservative containing a contact insecticide, according to the directions shown on the product label, to protect the integrity of the treatment envelope. Failure to adequately reseal wood surfaces exposed from these operations may result in product failure and structural failure due to termite attack	It is not necessary to reseal end cuts, rebates and notches where the freshly exposed surface is joined closely to other pieces of treated timber or other termite resistant materials.
Compatibility	The treatment used in AKD Terminator is non-corrosive. Normal steel nails and plates are suitable.	The treatment used in AKD Terminator is non-corrosive. Normal steel nails and plates are suitable
Construction Approvals	Construction of residences and commercial buildings, extensions and renovations may require approval from your local Council authority. If in doubt check with your local Council office for requirements.	Construction of residences and commercial buildings, extensions and renovations may require approval from your local Council authority. If in doubt check with your local Council office for requirements.
Construction Requirements	Terminator must be used in accordance with relevant Hazard Level as defined in AS/NZS 1604.1 2021 “Preservative-treated wood-based products, Part 1: Products and treatment”. Check with your planning authority for local or state requirements for installation of “whole of house” termite barrier systems. AKD recommends incorporation of “whole of house” termite barrier system in addition to use of termite resistant framing. Avoid the creation of termite access points, such as storage of termite susceptible timber, building of termite susceptible structures and raised garden beds and lawns, adjacent to the building.	Terminator must be used in accordance with relevant Hazard Level as defined in AS/NZS 1604.1 2021 “Preservative-treated wood-based products, Part 1: Products and treatment”. Check with your planning authority for local or state requirements for installation of “whole of house” termite barrier systems. AKD recommends incorporation of “whole of house” termite barrier system in addition to use of termite resistant framing. Avoid the creation of termite access points, such as storage of termite susceptible timber, building of termite susceptible structures and raised garden beds and lawns, adjacent to the building.
Construction Practices	Use good general building practices in accordance with relevant local and national standards and building codes.	Use good general building practices in accordance with relevant local and national standards and building codes.
Inspection	It is recommended that the building be inspection by a qualified building and pest inspector at least once every 2 years.	It is recommended that the building be inspection by a qualified building and pest inspector at least once every 2 years.
Disposal	Only dispose of treated wood wastes or off-cuts at properly licensed facilities.	Only dispose of treated wood wastes or off-cuts at properly licensed facilities

Safe handling instructions

The preservative used in AKD Terminator is safe for general use in homes and general construction. However, handling and working with any material, particularly where airborne dust is generated, may present some hazards.

The following safe handling and personal hygiene measures are recommended for AKD Framing:

- Keep the work area clean. Do not allow wood dust to accumulate.
- Avoid inhaling wood dust and wear a filter mask while power sawing, machining, sanding or any operation where wood dust is generated.
- Dust particles will remain airborne for some time after machinery is turned off. Masks should continue to be worn after the use of machinery while there is still exposure to the dust. This is more of a concern when working in small/enclosed spaces or areas with little ventilation.
- Protect the eyes while using power tools or any work where small particles may be ejected.
- Brush or wash sawdust off skin and clothes.
- Wear gloves to protect from splinters and wash hands after work and before eating, drinking or smoking.
- Wash wood dust contaminated work clothing and safety equipment before reuse.
- DO NOT BURN treated timber off-cuts or waste pieces

Do not use treated pine shavings or sawdust for animal litter

Do not use treated pine to cook food

Do not burn treated pine

Do not allow treated pine to come in contact with drinking water

Always wear dust masks, ear protection and goggles

Always wear gloves when working with timber

Wash work clothes separately

Dispose of waste in an approved landfill

Disposal

Domestic and trade users should dispose of offcuts and redundant pieces through normal waste collection services as residential or construction and demolition waste. Do not use for composting, mulching or animal bedding. Do not burn as a means of disposal.

Contact your council to find out about the particular waste disposal and recycling services provided in your area.

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WHY TIMBER FRAMING

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

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 eco-friendly 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
Timber framing that's been termite treated will safely protect your home from termite attack from the inside out. The active ingredient is most commonly found in head lice shampoo and flea collars, but works to keep borers out of your home. Treated timber has a low set-up cost and requires no annual inspections.

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.

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.

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.

renewabletimberframing.com.au