









fact sheet booklet

Weathertex and the Environment

Weathertex puts sustainability and durability at the forefront of all its products. This ensures Weathertex delivers natural, long lasting, eco-friendly timber products to customers in Australia and around the world

Sustainably manufacturing a highly durable product is an important part of Weathertex's environmental impact.

Weathertex's timber product is the only product of its kind in the world, containing absolutely no artificial glues or binders.

As a 100% Australian owned and operated company, Weathertex is proud to deliver sustainable and durable reconstituted timber products.

Weathertex produces 100% of its product from sustainable new growth Australian hardwood in an ISO 9001 certified process. All hardwood sourced for the production of Weathertex products comes from local new growth forests within 150 kilometres of the site.

Weathertex has worked to ensure the raw timber for the production of its reconstituted natural hardwood is sourced from local sawmill tailings, thinnings and sustainably managed forests. No old growth hardwood is ever used, so the sourcing of our timber has minimal environmental impact and avoids depletion of our natural resources. Using forest thinnings and other industry by-products in the production process means timber that is not suitable for sawn timber harvesting can be utilised, rather than wasted.

The primer applied to Weathertex is a lead-free acrylic primer. As a timber product, Weathertex can be cut, shaped, drilled and worked with ease and versatility without concern for being exposed to hazardous chemicals. Weathertex will continue to develop operations to ensure that its environmental impact improves.

Weathertex on Carbon and Climate Change

As Australia is proving itself as a global leader in the area of climate change mitigation, Weathertex is turning negatives into big positives. Who would have thought that an industrial factory would return massive carbon savings by producing a product that actually contains more carbon removed from the atmosphere than what is emitted during its production.

Weathertex can proudly boast that its products have a negative carbon footprint 1 .

Timber is the only building material that is completely sustainable. Carbon dioxide sequestered from the atmosphere as trees grow, is the source of carbon in new timber cells. When timber is used to produce building products, the carbon stored in the timber cells remains locked up in the timber for the life of the product.

The trees used to produce Weathertex cladding have sequestered sufficient carbon dioxide during their growth to counter any carbon dioxide equivalent emissions produced at the Weathertex factory during its manufacture.

The amount of carbon sequestered in trees falls to almost zero as trees reach maturity at approximately twenty-five to thirty years of age.

Each kilogram of Weathertex contains approximately 890 grams of timber, 80 grams of water, less than 30 grams of wax and less than 10 grams of non-toxic acrylic primer.

As dry timber is comprised of approximately 50% carbon, each kilogram of Weathertex cladding contains approximately 445g of carbon.

Each kilogram of carbon in timber is produced from 3.67 kilograms of sequestered atmospheric carbon dioxide. Therefore, each kilogram of Weathertex has sequestered 1.633 kilograms of carbon dioxide from the atmosphere.

In 2008-2009, the total direct emissions produced by Weathertex were 1.599kg carbon dioxide equivalent emissions for each kilogram of Weathertex produced.

Given that each kilogram of Weathertex has sequestered 1.633 kilograms of carbon dioxide from the atmosphere, the carbon stored in Weathertex timber is greater than the direct emissions produced at the Weathertex factory during its manufacture, which means that Weathertex products have a negative carbon footprint¹.

Hence using Weathertex Weatherboards or Architectural Panels, helps offset the positive carbon footprints of the other construction elements used such as steel, brick, concrete and fibre cement. Timber truly is a carbon friendly building material.

Weathertex will always strive to do its part in our global efforts to reduce our carbon footprint on the world we live in. We are continually learning, assessing and are conscious of implementing new emissions reduction technologies as they become available.

Weathertex and Fire Statement

Weathertex is made from hardwood timbers and has similar fire resistant properties to timbers contained in AS3959 Construction of Buildings in Bushfire-prone Areas, Appendix E, Table E1.

External

Bushfires

The Australian standard is AS3959-2009-Construction of Buildings in Bushfire-prone Areas gives comprehensive recommendations for house design in bushfire prone areas. This standard is a primary referenced standard in the National Construction Code (NCC) 2010. The standard describes 6 Bushfire Attack levels (BAL):

- BAL LOW The risk is considered to be VERY LOW (There is insufficient risk to warrant any specific construction requirements but there is still some risk)
- BAL 12.5 The risk is considered to be LOW (There is a risk of ember attack)
- BAL 19 The risk is considered to be MODERATE (There is a risk of ember attack and burning debris ignited by windborne embers and a likelihood of exposure to an increased level of radiant heat)
- BAL 29 The risk is considered to be HIGH (There is an increased risk of ember attack and burning debris ignited by windborne embers and a likelihood of exposure to an increased level of radiant heat)
- BAL 40 The risk is considered to be VERY HIGH (There is a much increased risk of ember attack and burning debris ignited by windborne embers, a likelihood of exposure to a high level of radiant heat and some likelihood of direct exposure to flames from the fire front)

 BAL – FZ The risk is considered to be EXTREME (There is an extremely high risk of ember attack and burning debris ignited by windborne embers, and a likelihood of exposure to an extreme level of radiant heat and direct exposure to flames from the fire front)

Your local council, in conjunction with your state bushfire authority, determines the BAL and construction level required.

Weathertex cladding is suitable for use in BAL – LOW, BAL – 12.5 and BAL -19 construction levels.

Weathertex, with a density of 990 kg/m 3 has sufficient density to be used in these areas as it meets the minimum density requirement for timber of 750 kg/m 3 specified in the standard.

Weathertex can be used as wall cladding in levels up to and including BAL 19 construction.

Internal

Early Fire Hazard (EFH)

AS1530, Part 3 describes the measurement of Early Fire Hazard of Properties of building materials. These are reported as 4 numbers. The properties of Weathertex have been measured as:

Table 1: Timber Stud Wall - Lightweight Cladding					
FRL	STC	DESCRIPTION			
60/60/60 & -/60/60 Report/ Opinion CSIRO FCO-6026	without cavity insulation 41 with cavity insulation Estimate Peter Knowland and Associates	Loadbearing timber stud wall, studs at 600mm max centres. Noggings at 1200mm maximum centres. 1 layer 16mm Gyprock Fyrchek plasterboard to inside face. 1 layer 16mm Moisture Resistant Gyprock Fyrchek plasterboard to outside face. Steel strap or sheet bracing to structural requirements. Bradford R1.5 Wall Batt insulation to inside face for higher nominated STC rating or higher thermal performance. External cladding of Weathertex Non-loadbearing walls – refer to Table 2 for timber size and maximum wall height. Loadbearing walls – contact + 61 2 4980 3100 for further information on timber stud size, timber grade and maximum wall height.			
90/90/90 & -/90/90 Report/ Opinion CSIRO FCO-0965	without cavity insulation Estimate Peter Knowland and Associates	Loadbearing timber stud wall, studs at 600mm max centres. Noggings at 1200mm maximum centres. 2 layer 13mm Gyprock Fyrchek plasterboard to inside face. 2 layer 13mm Moisture Resistant Gyprock Fyrchek plasterboard to outside face. Steel strap or sheet bracing to structural requirements. Bradford R1.5 Wall Batt insulation to inside face for higher nominated STC rating or higher thermal performance. External cladding of Weathertex Non-loadbearing walls – refer to Table 2 for timber size and maximum wall height. Loadbearing walls – contact + 61 2 4980 3100 for further information on timber stud size, timber grade and maximum wall height.			

^{*} Bradford, Fyrchek and Gyprock are trademarks of CSR Limited

^{1.} Denis Cooke & Associates, "Weathertex's Greenhouse Gas Emissions Inventory 2008-2009 and Carbon Offset Claim", July 2009

Painting and Staining Weathertex

This Fact Sheet provides additional guidance to that contained in the Weathertex Installation Guide and should be read in conjunction with that document.

Weathertex Weatherboards provide an excellent base for painting and will accept exterior 100% acrylic latex (water borne) and exterior solvent-based paints. For maximum satisfaction and long term performance, it is recommended that premium brands of exterior acrylic paint should be used.

All Weathertex profiles except Wall Shingles are supplied pre-primed. See the section below for special precautions that should be taken when painting Wall Shingles.

Some general guidance for painting is given below but the manufacturers instructions for use for each paint product should be followed

Weathertex's 25 year guarantee covers the performance of the weatherboard but does not cover the performance of these paints. The respective warranties of the paint manufacturers apply to the paints.

Selection of Paint Colour and Gloss Level

The higher the gloss, the easier it is to see brush marks, nail heads and other minor painting defects on the finished job. Low sheen acrylic finishes are generally easier to use. Exterior solvent-based paints are only available in gloss. The selection however is one of personal preference.

Paint colour can have an effect on the performance of Weathertex Weatherboards. Because Weathertex is a wood product, its dimensions will change with changes in moisture content. Dark paint colours can allow surfaces in warmer climates to become very hot in direct sunlight (up to 80°C) leading to loss of moisture and subsequent shrinkage of the weatherboard. Plastic joiners can also distort at temperatures above 70°C. Light paint colours will lead to better thermal efficiency of the building and minimise problems due to moisture change.

Surface Preparation

Weathertex Weatherboards and Shingles MUST be painted within 60 Days of Fixing.

Surfaces must be free from dirt, dust or grease. Wash with water if necessary and allow to dry before painting. Stubborn dirt or grease on primed weatherboards can be removed using mineral turpentine on a clean cloth. Set fasteners flush with the surface and where necessary fill any holes with suitable filler. Prime any areas where bare board has been exposed during fixing (including any cut ends) with an oil-based (solvent) or acrylic tannin resistant wood primer. Lightly sandpaper any nibs or blemishes that have occurred during fixing.

Painting

Acrylic Finishes

Apply recommended number of coats directly to primed Weathertex, paying particular attention to ensure that the bottom edges are fully coated. Allow the recommended drying time between coats (normally 2 hours minimum). Observe the temperature limitations for application advised by the manufacturer.

Tannin blocking paints can be applied direct to Weathertex Wall Shingles, but for light colours three coats may be required. For other paints apply the recommended primer before subsequent painting.

Solvent-based Finishes

Exterior solvent-based (enamel) paints will also give a very satisfactory finish on Weathertex and may be preferred by some consumers because of their generally harder, easier to clean surface.

Exterior acrylic based paints will however normally give a longer retention of decorative appearance and service life. All major paint manufacturers market suitable enamel paints.

Apply one coat of solvent-based exterior undercoat direct to primed Weathertex Weatherboards. Finish with one or two coats of gloss exterior solvent-based paint. Allow the recommended drying time between coats (normally 16 hours minimum). For Weathertex Wall Shingles use the primer recommended by the manufacturer for bare timber

It is advisable to use all components of a finish (ie. primer, undercoat, topcoat) from the same manufacturer to ensure compatibility. The recommendations of the paint manufacturer should be followed.

Mould resistance

Although the factory applied primer on Weathertex is mould resistant, mould can grow on almost any surface in tropical and sub-tropical areas subject to high levels of humidity or where a house is in constant shade. To minimise mould growth, some manufacturers offer specific mould-resistant paints or anti-mould additives that can be mixed with paints before application.

Natural Woodsman Board

Weathertex's Natural Woodsman Board surface provides unique appearance options, not achievable with the use of paints or pigmented finishes. When installed natural, the Weathertex Woodsman surface has the characteristics and look of raw, undressed timber. The natural surface can be oiled to maintain the look of fresh, brown timber or, alternatively it can be left untreated and allowed to age naturally. If allowed to age, the surface will weather and grey similar to other natural timber.

When purchasing and installing Weathertex Natural Woodsman Board, there are a number of things to keep in mind. Painting natural board with a pigmented finish will void all warranty. If a pigmented painted finish is to be applied, it must be onto Weathertex's primed board. If the raw surface is to be oiled, a good quality, exterior grade timber oil such as a decking oil must be used. Weathertex recommends the appearance of a satin style oil. To maintain the fresh brown appearance and prevent aging and greying, the oil must be applied and maintained in accordance with the oil manufacturer's instructions.

Weathertex's natural finished products are covered by a 7 year warranty not to rot, split or crack. Please see warranty section on the Weathertex website for full details. If the board is to be installed untreated and allowed to weather naturally it may develop some small black spots on the surface. This is carbon which is inherent with the manufacturing process. These small black spots are not mould and will not affect the performance or longevity of the product.

Maintenance

Regularly wash the paint surface with water to remove dirt and grime and to improve the performance of the coating. Generally, exterior acrylic coatings weather by chalking in the long term rather than by flaking. When painting becomes necessary and the surface is unbroken, wash down with water. Remove all loose chalk, dirt and dust by washing or scrubbing, and allow to dry.

Mould or tannin stains can be removed by scrubbing with household bleach diluted 1:9 in water, followed by subsequent washing with fresh water. Where paint has flaked or surface damage has occurred, remove loose paint by high-pressure water jets and/or sanding. Prime bare areas with exterior wood primer.

Re-paint as under "Painting and Staining Weathertex" above.

Weathertex and Termites

An extensive evaluation of the susceptibility of Weathertex to termite attack was conducted by the Research and Development laboratory at Raymond Terrace from 1963 through to 1979.

A field-testing procedure known as the "Graveyard Test", developed by the CSIRO (Gay et al., 1957) was used. In this procedure, a suitable termite mound was located in a forest and samples of the board under test were attached to susceptible timber "bait blocks" buried in a trench around the mound. The actual board samples were not in contact with the ground, but were covered to exclude light and maintain moisture, thus encouraging termite attack. The samples were inspected every three months for up to three years. The species of termite was identified as N.exitiosus. A large range of wallboard and timber products was tested.

In comparing the Weathertex product (as it is still made today) with common timber species, the following results were obtained:

- Blackbutt (E.pilularis) DESTROYED
- Red mahogany (E.resinifera) SIGNIFICANT ATTACK
- Weathertex SURFACE NIBBLES ONLY

It is concluded from these tests that Weathertex does not attract termites and is not a preferred food. It is not claimed that Weathertex is "termite proof". It could be attacked if left in ground contact for a long period of time. However, if the requirements of the National Construction Code (NCC) are followed, the use of Weathertex as cladding in a timber-framed construction will not increase the risk of termite attack.

The reason for the superior performance of Weathertex in these tests lies in its process of manufacture. Durable hardwood timber species comprise the raw material; this is subjected to high pressure steam during the fiberising process, which removes most of the hemicellulose, the easiest timber component for termites to digest.

Weathertex should not be used in contact with the ground. Our fixing instructions state that there should be at least 150mm clearance between the bottom edge of Weathertex Weatherboards and paved surfaces which are exposed to the weather and at least 225mm clearance to unprotected ground.



SAMPLES REMOVED FROM TERMITE TEST AFTER 2.5 YEARS EXPOSURE

Weathertex and Internal Lining

Weathertex Weatherboards and Architectural Panels, as well as being superiorly suited for exterior wall cladding, can also be utilised to provide attractive and impact resistant interior linings. They are particularly useful where a strong wall lining is required up to dado or chair-rail height.

Weathertex High ImpactBoard, Weathergroove Sheets and Selflok Weatherboards can provide a strip timber effect on a feature wall.

Weathertex Sheets and Weatherboards are not recommended for interior wet areas.

The general installation requirements for each Weathertex product given in "The Weathertex Installation Guide" should be followed where applicable, however the attention to waterproofing necessary for exterior installation is obviously not required.

Weatherboards and Sheets should always be fastened to studs or noggings at maximum 600mm centres for wall lining and maximum 450mm centres for ceiling linings. Building adhesive can be used with light gauge concealed nailing to hold in place while the adhesive sets. When undertaking renovations use self drilling screws instead of nails to avoid damage to other fittings due to excessive hammering.

Wall Lining

High ImpactBoard and Weathergroove Sheets: High ImpactBoard is a smooth pre-primed sheet with a minimum density rating of 1025kg/m³, ideal for high impact internal lining.

Weathergroove Sheets have regularly spaced grooves and a unique joining system that has been designed to clip onto the rebated edges of each Weathergroove Sheet, blending in with each sheet for a continuous panel finish. (For more details refer to the Weathertex Installation Guide.)

Selflok Weatherboards: Millwood, Old Colonial, Ecogroove and Vgroove profiles are designed to be installed as a shiplap with the Weatherboards orientated horizontally. For vertical application or at an angle to the horizontal the necessary nogging must be provided to enable fastening at maximum 600mm centres. Weatherboards should be butt jointed over studs or nogging. DO NOT NAIL THROUGH THE SHIPLAP SECTION. (Refer to the Weathertex Installation Guide for more details.)

Ceiling Lining

Weathertex Sheets are not recommended for ceiling lining.

Millwood and Old Colonial Weatherboards: Method of installation is similar to that for wall lining except that to create a flat ceiling, Weatherboards must be fastened at maximum 450mm centres along the Weatherboard length. This may require additional nogging or battening.

Material Safety Data Sheet

IMPORTANT NOTICE This Material Safety Data Sheet (MSDS) is issued by Weathertex Pty Ltd in accordance with Worksafe Australia Guidelines. As such, the information contained herein must not be altered, deleted or added to. Weathertex Pty Ltd will issue a new MSDS when there is a change in product specifications and/or Worksafe Australia guidelines/regulations. Weathertex Pty Ltd will not accept any responsibility for any changes made to its MSDS in content by any other person.

Identification

Product Name/Names

- Weathertex Planks
- Weathertex Primelok Planks
- Weathertex Sheets

Un Number:	None Allocated
Dangerous Goods Class	
and Subsidiary Risk:	None Allocated
Hazchem Code:	None Allocated
Poisons Schedule:	Not Scheduled
Uses:	Exterior wall cladding
	and exterior signboard

Physical Description/Properties:

Appearance: The products are manufactured as 9.5mm thick, pressed hardboards. They are made from wood fibres, which are reunited under heat and pressure. With the exception of Weathertex Wall Shingles, the products are paint coated on all surfaces. A PVC spline is inserted into the back of Weathertex Primelok.

Boiling Point, °C: Not Applicable

VapourPressure,

mm Hg at 25 °C: Not Applicable

Solubility in Water, g/I: Negligible

Specific Gravity: 0.9-1.1

Flash Point, °C: Not Applicable

Flammability Limits, %: Not Applicable

Autoignition Temp, °C: Does not auto-ignite

Other Properties:

Early Fire Hazard Indices to AS 1530.3:

Ignitability Index:	14
Spread of Flame Index:	7
Heat Evolved Index:	6
Smoke Developed Index:	4

Ingredients:

Substance CAS No Proportion

Hardwood (mixed eucalypt species) None > 95%
Paraffin Wax 8002-74-2 < 4%
Pigmented Primer < 1%

Health Hazard Information

The boards in their intact state are not classified as hazardous according to the criteria of Worksafe Australia.

Health Effects

The known health effects of the constituents of the board are as follows:

Wood dust: When the boards are machined (sawn, sanded, drilled, routed, planed, etc.) wood dust is produced. Wood dust may cause irritation of the nose and throat, eyes and skin, some woods may also be sensitisers, some people may develop allergic dermatitis or asthma. Inhalation of wood dusts may increase the risk of nasal and paranasal sinus cancers.

Paraffin wax: Wax vapour may be irritating to the nose and throat, eyes and skin if the board is heated to 120° or more.

Exposure to wood dust produced from machining the boards may result in the following health effects:

ACUTE:

Swallowed: Unlikely to occur but swallowing the dust may result in abdominal discomfort.

Eye: The dust and vapour may be irritating to the eyes causing discomfort and redness.

Skin: The dust and vapour may irritate the skin, resulting in itching and occasionally a red rash. Allergic dermatitis may occur.

Inhaled: The dust and vapour may irritate the nose, throat and lungs, especially in people with upper respiratory tract or chest complaints. Asthma may occur.

CHRONIC:

Repeated exposures over many years to uncontrolled wood dusts and vapours from these boards may increase the risk of allergic dermatitis, asthma or chronic nose or throat irritation in some people. The risk of nasal or paranasal sinus cancers may be increased but if the work practices noted in this MSDS are followed no chronic health effects are anticipated.

First Aid

Swallowed: Drink a glass of water.

Eye: Flush with flowing water for at least 15 minutes, and if symptoms persist seek immediate medical attention.

Skin: Wash with mild soap and running water.

Inhaled: Leave the dusty area.

Advice to Doctor

Treat Symptomatically

Precautions for use

Exposure Standards

The Worksafe Australia Exposure Standards published in October 1991 are:

Wood dust: 1 mg/m³ time-weighted average (TWA)

Paraffin wax (fume): 2mg/m³ time-weighted average (TWA)

Material Safety Data Sheet

Engineering Controls

- All work with these boards should be carried out in such a way as to minimise the generation of dust and vapour.
- Under factory conditions, machining should be done with equipment fitted with exhaust devices capable of removing wood dust and vapour at the source. Hand power tools should be fitted with dust bags and used in well ventilated greas.
- Work areas should be well ventilated. They should be cleaned at least daily, and dust removed by vacuum cleaning or wet sweeping method.

Personal Protection

Skin Protection: Wear loose, comfortable clothing. Long sleeved shirts and trousers are recommended if skin irritation occurs.

After handling boards, wash with mild soap and water. Do not scratch or rub the skin if it becomes irritated. Wash work clothes regularly and separately from other clothes. Comfortable work gloves (AS/NZS 2161) should be worn.

Respiratory Protection: A class P1 or P2 replaceable filter or disposable half face-piece respirator should be worn when machining. Respirators should comply with AS/NZS 1716 and be selected, used and maintained in accordance with AS/NZS 1715.

Eye Protection: General use industrial safety glasses or non fogging goggles (AS/NZS 1337) should be worn when machining.

Flammability

- These boards are flammable but difficult to ignite.
- Avoid build-up of dust and keep all storage and work areas well ventilated.
- Avoid sources of radiant heat and flame; and avoid sparks and sources of ignition in all electrical equipment, including dust extraction equipment.
- · People must not smoke in storage or work areas.

Safe Handling Information

Storage and Transport

- The boards should be stored in well ventilated areas away from sources of heat, flame or sparks.
- · No special transport requirements are considered necessary.

Spills and Disposal

Off-cuts and general waste material should be placed in containers and disposed of at approved landfill sites, or burnt in an approved furnace or incinerator, in accordance with disposal authority guidelines.

Smoking

Weathertex Pty Ltd recommends that all work areas be non-smoking areas.

Labelling

Fire/Explosion Hazard

- Burning or smouldering boards or dust can generate carbon dioxide and other pyrolysis products typical of burning organic material.
- Use water or dry foam fire extinguishers.
- Dry dusts in high concentrations can be explosive.

Warning: This is a reconstituted wood product made from wood, and wax. Exposure to wood dust may cause irritation to the eyes, respiratory system and skin, and may cause sensitisation by inhalation resulting in asthma, and by skin contact resulting in dermatitis. In addition, inhalation of wood dust may cause cancer.

Worksafe Australia has established Exposure Standards for wood dust, based on the known health effects. Levels of wood dust must be kept below these Exposure Standards.

Wood products should be handled in accordance with safe work practices to minimise exposure to dust generated during cutting and machining. To assist in this, work and storage areas must be well ventilated and kept clean. Sawing, sanding and routing equipment should be fitted with dust extractors. Wearing a dust mask conforming with Australian Standard AS/NZS 1715 and AS/NZS 1716 and eye protection conforming with AS/NZS 1337 is recommended and is essential if dust levels exceed Worksafe Australia Exposure Standards.

When handling, working or cleaning up, wear protective clothing and gloves. Wash skin and clothing afterwards.

Offcuts, shavings and dust should be disposed of in a manner, which avoids the generation of dust, and in accordance with the requirements of local waste disposal authorities. For further information, refer to the material safety data sheet for this product, or call + 61 2 4980 3100.

Other Information

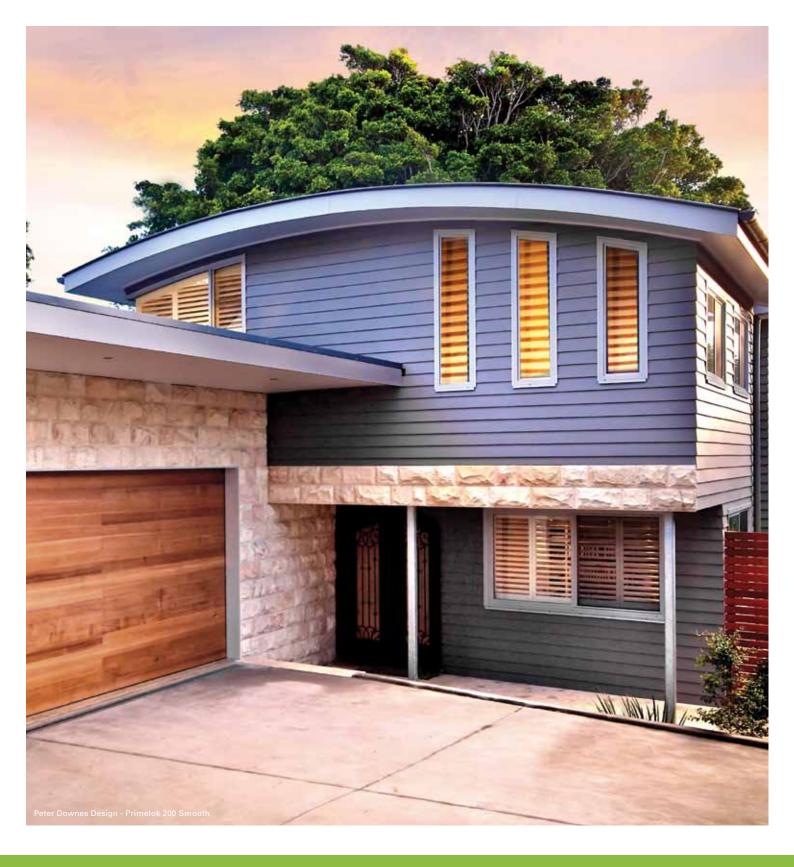
Contact Point

Weathertex Customer Service Centre

Masonite Road, Raymond Terrace NSW 2324

Telephone No: + 61 2 4980 3100

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