A 2003 update on the largest selling post-construction termiticide[1] in Australia

After the launch of Premise, Pest Managers began using Premise for situations where a no-odour product was required. Sensitive sites such as schools and nursing homes were obvious sites for Premise. Increasingly, more Pest Managers have discovered that Premise suits all post-construction situations. The unique features of Premise and its great reliability make it the **product of choice.**

How long does Premise last?

CSIRO Field Trials

The CSIRO test method for termiticides involves treating soil plots in areas of very high termite activity. Susceptible pegs are placed in the plots to see how long termites take to break through and attack them. Control pegs are placed in untreated soil to gauge the relative intensity of termite activity. Average attack at control plots ranged between 64 and 84%. At Darwin it was always above 90%. To put this into perspective, in our experience, similar wooden pegs around termite infested houses in Sydney rarely get more than 5% strike within a year.

As the wood is in direct contact with the soil this method is an extremely tough test for a termiticide.

The CSIRO Termite Group carried out trials at four sites with *Coptotermes acinaciformis* and other species (excluding *Mastotermes*) around Australia. The results are summaries in the table below.

Site	% pegs not contacted by termites (years after treatment)						
	1	2	3	4	5	6	7
Griffith[2] (NSW)	100	100	92	100	92	92	100
Walpeup (VIC)	100	100	100	100	100	100	
Beerburrum[3] (QLD)	100	100	92	83	83	67	
Darwin (NT)	100	100	75	Assessment concluded			

At all sites Premise was 100% effective for a minimum of 2 years. This data is the basis for the NRA approved label claim that Premise will prevent concealed access by subterranean termites (except *Mastotermes*) for at least two years. Performance guarantees should not exceed 2 years.

To focus on the worst-case situation, doesn't answer the question of how long Premise remains effective for the majority of situations. Using the same data, an average of 91% of treated plots south of the tropics are still clear of termites after 5 years, even under these very high levels of attack.

[1] Source: AC Neilsen

[2] Superficial termite grazing was recorded at Griffith year 3 in one of 12 plots; termites were not present year 4. Termites were present again years 5 and 6 but not in year 7. This plot may be anomalous.

[3] Superficial termite grazing was recorded in one of 12 plots at Beerburrum year 3 but termites were not present.

House Trials

Before Premise was launched, practical trials were carried out in various locations around Australia. Pest control companies in accordance with the Australian Standard existing at the time treated eighteen termite-infested structures. These trials were commenced over six years ago and annual inspections of these houses will continue to upgrade our understanding of how Premise performs in "real world" situations. The results to date clearly indicate that Premise will last 5 years or longer in most practical situations.

Termites have regained entry at just one site. This is really a "worst case scenario" with soil above the level of the cracked slab, wood in contact with the soil, drainage problems, soil which would not accept 3 litres per drill hole and at least 4 different termite species within 2 metres of the structure. Even here Premise was effective for 3.5 years.

Location	State	Year treated	Current status	Years	Comment
Browns Plains	QLD	1995	Active termites	3.5	Termites gained entry after 3.5 years. Site subject to many problems (see explanation above)
Greenslopes	QLD	1995	Termite free	> 5	Termite activity in yard has disappeared
Springwood	QLD	1995	Concluded 2002	> 7	Colony eradicated
Church Point	NSW	1995	Termite free	> 6	
Balmain	NSW	1995	Unknown		Access to site denied after initial treatment
Epping	NSW	1995	Termite free	> 7.5	
Warners Bay	NSW	1995	Termite free	> 5	
Tingira	NSW	1997	Concluded 2002	> 5	Property sold, termite free at time
Clarence Gardens	SA	1995	Concluded 1999	> 4	Owner sold property. New owner denied access
Reynella definite	SA	1995	Concluded 1997 (termite free at that time)	> 2	Termite nest in nearby tree dusted and eradicated - no termite challenge so dropped from trial
Prospect	SA	1996	Termite free	> 6	
Cockatoo	VIC	1995	Concluded 1998 (termite free at that time)	> 3	House removed to another site
Dandenong North	VIC	1995	Concluded 1998 (termite free at that time)	> 3	Nest in tree removed no definite termite challenge so dropped from trial
Mt Hawthorn	WA	1995	Concluded 2002	> 6	Property retreated, termite free at time
Thornlie	WA	1995	Termite free	> 7	
Karawara	WA	1995	Concluded 1999 (termite free at that time)	> 4	House demolished for re-development
Kardinya	WA	1995	Termite free	> 5	
Bedford	WA	1996	Concluded 2000 (termite free at that time)	> 4	House demolished for re-development

Our local experience matches findings in the USA. Premise treated soil at one of four USDA sites was penetrated after three years however, termites abandoned the plot. House trials at over 100 sites have been running for up to 7 years with a 97% success rate. The only re-treatments have been required at sites where the treated zone has been disturbed.

When should Premise be re-applied?

The Premise 200 SC label states that "Australian trials indicate that a correctly applied Premise treatment will prevent concealed termite entry by subterranean termites (except *Mastotermes*) for at least two years". Some Pest Managers have asked whether this means that Premise should be reapplied every two years. Re-treatment after two years, although permitted, is not easily justified when the evidence indicates 5 or more years protection against concealed termite entry is achieved when Premise is correctly applied and remains undisturbed.

Pest Managers should explain to their customers that Australian trial data south of the tropics indicates that 90% of test plots as well as houses treated in trials prior to registration, remained free of termites at the 5 year inspection. The customers must clearly understand however, that regular (at least annual), competent inspections are essential to check whether termites have re-entered, if the Treated Zone has been compromised and to provide continuing advice to the homeowner to reduce the chance of future attack.

Premise and IPM

Premise has proven itself to be a very effective termiticide over these years but as our knowledge of termite biology grows it is clear that the long-term future of termite control involves an integrated approach, which includes the following:

- Regular, competent inspection of property
- Treatment of existing termite activity with Intrigue Termite Dust. Nests in trees, stumps or wall cavities may be treated with Premise
- Repair of drainage and ventilation problems
- Application of a Premise Treated Zone
- Post treatment inspections
- Placement of bait monitors (stakes, boxes, buckets) around house
- Treatment of infested aggregation devices with Intrigue Termite Dust
- Continued competent inspections and monitoring

Summary

- ✔ Premise lasts for a minimum of two years (excluding Mastotermes) but trial results in Australia show it may be expected to last 5 years or longer in most situations
- ✔ Re-application of Premise is not essential every two years if applied according to Australian Standards. Inspections (at least annually) must be continued and monitors should be installed. Unless inspections reveal termite activity or suspected disruption of the Treated Zone, or the owner insists for peace of mind, a re-treatment may not be economically justified within 5 years
- ✔ A Premise Treated Zone will be most effective if it is considered as part of an Integrated Pest Management approach to termite management

Premise - long term and robust performance world wide

Premise performance around the world	
JWPA [1] No. 13	7 to >11 years
USDA [2] Forest Service	5 to >9 years
Global Trial data	5 to 10 years, temperate climates
U.S. soil residue levels	5 years at levels > 3.0 ppm
U.S. EUP [3]	5+ years @ 98.3% control
U.S. Commercial	7+ years of commercial success

Premise has not only demonstrated outstanding performance in Australia - it has proven outstanding performance all around the world - especially in the other high termite pressure regions of the US and Asia. For over 7 years Premise has controlled termite activity, significantly reduced callbacks and improved termite professionals efficiency.

[1] Japanese Wood Preservers Association
[2] United States Department of Agriculture
[3] United States Experimental Use Permit

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