

FOR FULL TABLE OF CONTENTS GO TO: www.dana.co.nz

ROTTEN TO THE CORE

DANA Director Dennis Neilson has authored or co-authored more than 60 multi-client Reviews over the last 25 years. These have been on topics such as forest investment analysis, wood processing, wood trade, and country - regional - global forest industry sectors.

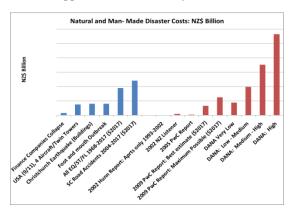
This 240 page 'book' is the first written about a specific and especially a controversial subject: In this case a looming financial catastrophe and human crisis resulting from some fateful decisions made in the 1990s by industry and government leaders in the wood business, These were, in the author's opinion, incredibly irresponsible. They led to almost 400,000 houses being constructed, containing at least some highly perishable untreated radiata pine house framing timber (lumber) and roof trusses. How many have become / will become leaky?

When the 'inevitable' happened and some houses started to leak, much of the framing timber immediately started rotting. Repairs to the cladding and (especially) the rotting timber framing can now cost \$300,000 to \$1.0 million per apartment / house. The full cost of this catastrophe will never be known, but could be more than \$50 billion, and even double that.

What rotting radiata pine timber looks like inside a house



Is this the biggest financial catastrophe ever?



Report Chapters

Executive Summary

Introduction

Chapter 1 Dedication: The Scientists who Roared

Chapter 2 Why Does Timber Rot

Chapter 3 Background to Building Wooden Houses
Chapter 4 Radiata Pine: New Zealand's Great Timber
Chapter 5 Government Involvement: 1930s-1951

Chapter 6 The 1952 Royal Commission

Chapter 7 Wood Treatment Standards: 1955-1995
Chapter 8 Commercial Interests versus Experts

Chapter 9 Leaky Homes - The International Experience

Chapter 10 Carter Holt Harvey (CHH) and International Paper (IP)

Chapter 11 Carter Holt Harvey in 2006-2017
Chapter 12 Government Involvement: 1984-1992

Chapter 13 Wood Treatment Industry Changes: 1987-1995

Chapter 14 History of Boron Treatment levels
Chapter 15 Why Did the Industry Want to Change
Chapter 16 Changes to Radiata Pine Harvest Ages

Chapter 17 1995 Decision and the Aftermath

Chapter 18 Industry Initiatives and Attitude: 1998-2003
Chapter 19 Other Sawmilling Companies: 1995-2004
Chapter 20 Unlearning the Experience: 1995-2004

Chapter 21 Events 2004/05-2015

Chapter 22 The Spread of Leaky Homes in New Zealand

Chapter 23 A 'Man-made' or 'Natural' Disaster

Chapter 24 Events: 2016-2017

Chapter 25 Leaky Homes Health Issues

Chapter 26 The Estimated Size of the Leaky Homes Crisis
Chapter 27 What Have We Learnt Over the Last 22 Years?
Chapter 28 New Zealand's Slipping Building Standards

Chapter 29: Steel Framing Gains Market Share

Chapter 30 Major Legal Cases
Chapter 31 Class Actions
Chapter 32 Conclusions
Appendices: [Seven]

THE INSIDE STORY OF NEW ZEALAND'S LOOMING LEAKY HOME CATASTROPHE

Rotting timber can turn your home into an empty shell -



What the brochure tells you



-- and into a repository of both rotting timber and toxic



What you get when you visit



About the Author:

Dennis Neilson is a Director of the New Zealand- based international forest industry advisory and publishing firm DANA Limited.

DANA undertakes resources and strategic planning, investment and marketing assignments, and has several NZ and international clients.

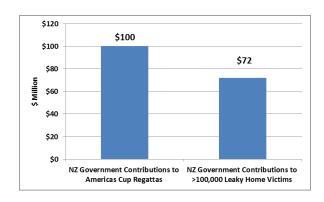
It has also authored /co-authored / published more than 60 multi-client reviews on forestry and forest products topics.

DANA also organises / co-organises conferences, seminars, field trips and industry tours around the world. In 2017-18 that included(s) in London, Rotorua & Taupo (NZ), Melbourne and Launceston (Australia), Kruger National Park in South Africa, Buenos Aires, NYC, China, and Cancun in Mexico.

\$30 million worth of Leaky Apartments: Parnell Terraces under shrink wrapped plastic tents (the new native flower of NZ?). Hundreds/thousands of these buildings have been/are/will be like this - from North Cape to the Bluff



Governments have been pouring more money into (even losing) America's Cup- campaigns than to help hundreds of thousands of Kiwi leaky home victims



To purchase: order and pay securely on-line at www.dana.co.nz; or complete the order form with payment details on the following page, scan and return to admin@dana.co.nz

ORDER FORM

ROTTEN TO THE CORE: THE INSIDE STORY OF NEW ZEALAND'S LOOMING LEAKY HOME CATASTROPHE

POSTAL ADDRESS	TELEPHONE	FACSIMILE	E-MAIL A	E-MAIL ADDRESS	
DANA Limited, PO Box 392, Rotorua, New Zealand 3040	+64 7 349 2764	+64 7 349 2763	admin@da	admin@dana.co.nz	
	THE STATE OF THE S		CHANTITY	TOTAL	
First hard copy: N	STORY IF NEW ZEALANDS LEAK Z\$ 295 incl. GST	Y HOME CATASTROPHY	QUANTITY	TOTAL	
Second/Subsequent hard copies N					
Excel data for all Charts N	Z\$ 250 incl. GST	***************************************			
ABOVE COSTS INCLUDE REGULA	R POSTAGE 10 NEW ∠E	ALAND ADDRESS			
Overseas shipping options		NZ\$ 35 NZ\$ 70			
TOTAL					
Sold at cost to New Zealand leaky summary of their experience). Co		d us a short bullet point			
	PAYMENT OPTIC	ONS: (Please tick)			
Credit Card: UISA	☐ MASTER	RCARD	AMEX		
Name on card:			CVV #:		
Card No			Expiry:		
Direct Credit to New Zealand B Bank of New Zealand, Central A/c name: DANA Limited	Mall Rotorua, New Zea	aland 412-0332757-002 S	wift Code: BKNZN	NZ22	
	Subscrik	oer Details			
Full Name:					
Position:					
Company:					
Address:					
Address:					
Country:					
Telephone: +		Facsimile: +			
E-Mail [Clear address please]:					

General Contract Provisions

All publications of DANA Publishing are subject to the copyright laws of New Zealand, Australia, the United States and Canada. Reproduction of the report in any form is forbidden. Distribution of the analysis by the purchaser, other than within the company or organization purchasing the study is forbidden. The report represents the best judgement of the study's authors based on the information and data available prior to publication. While every effort is made to ensure the accuracy of the information contained herein, no liability is accepted for any errors or omissions or any opinions expressed or recommendations made in this analysis.