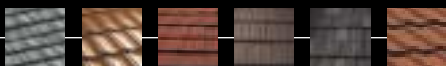


TOTAL BUILDING COST COMPARISON

LIGHTWEIGHT VS. HEAVYWEIGHT ROOFING



LIGHTWEIGHT VS. HEAVYWEIGHT ROOFING

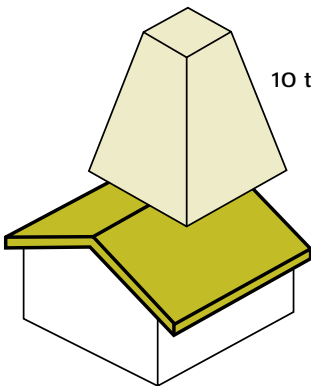
GERARD LIGHTWEIGHT ROOF

1 tonne (satin)
1.7 tonne (textured)



HEAVYWEIGHT ROOF

10 tonne



Specifying a lightweight roof can have a direct impact on the type of design and overall cost of your house.

STRUCTURAL LIGHTWEIGHT COST SAVINGS

A heavyweight roof, such as a concrete tile roof, is up to ten times heavier than a lightweight Gerard steel tile roof. This can result in additional structural requirements in areas such as trusses, rafters, lintels, bracings and labour, resulting in additional costs.

All Gerard Roofs are classified as lightweight roofing as per the New Zealand Building Standard NZS 3604 - 1999 Timber Framed Buildings. This means that the structural framing requirements for Gerard Roofs are less than for a heavyweight roof and can result in significant cost savings.

Considerable research has been done, by independent consultants, to evaluate structural cost savings from using a lightweight roof. Structural savings on the some example house designs are shown on the next page. The amount that you will save can range from \$100 to over \$1000 and depends upon a range of factors including the nature of your design and the condition of your site. An indication on the level of these potential savings is listed in the table below.

DESIGN FLEXIBILITY

Lightweight roofing materials add a degree of versatility and flexibility to your designs that is unrivalled by heavyweight roofs.

Because Gerard roofs are both lightweight and strong it is possible to incorporate steep pitches, exposed beams and integrated glass features, without incurring the additional and unnecessary structural costs associated with incorporating these features into heavyweight roofs.

STRUCTURAL LIGHTWEIGHT COST SAVINGS

		Increasing savings			
One storey	\$	→	\$	Multiple storeys	
+				+	
Simple roof	\$	→	\$	Complex roof	
+				+	
Small roof area	\$	→	\$	Large roof area	
+				+	
Flat building site	\$	→	\$	Sloping building site	
+				+	
Firm soil	\$	→	\$	Soft soil	
=				=	
SOME SAVINGS			LARGE SAVINGS		

TOTAL BUILDING COST DIFFERENCES

When comparing roof supply options it is important to compare total building cost differences to ensure that you are comparing apples with apples. To assist you with this comparison we have included a table on the back of this brochure to help you calculate the actual total cost differences between different roofing alternatives.

OTHER CONSIDERATIONS

Not only will cost be a factor in the choice of your roof but you will also need to weigh up those benefits and factors that are more subjective and are less easy to quantify. At the top of this list will be the roof style, but it will also include such things as durability, performance in extreme conditions, quality of installation, maintenance requirements, warranties and back up support.

DID YOU KNOW?

Considering that the roof is such a defining feature of a home both in terms of looks and protection, it is surprising to find that the roof is often only 5% of the total cost of a home. A few extra dollars spent at the outset, to get the roof that is best for you, will reward you with years of satisfaction and protection, and will provide you with better resale value.

ANALYSIS OF STRUCTURAL COST COMPARISONS ON EXAMPLE DESIGNS

LIGHTWEIGHT VS. HEAVYWEIGHT ROOFING							
HOUSE DESIGN		EXAMPLE 1		EXAMPLE 2		EXAMPLE 3	
Stores		One		One		Two	
Roof complexity		Simple Gable		Semi-Complex - hips, valleys		Complex - hips, valleys, poptop	
Roof area (m2)		138m2		384m2		220m2	
Building Site		Flat		Flat		Flat	
Soil		Firm		Firm		Firm	
Roof Type		Heavyweight eg. Concrete tiles	Lightweight Gerard Roof	Heavyweight eg. Concrete tiles	Lightweight Gerard Roof	Heavyweight eg. Concrete tiles	Lightweight Gerard Roof
COMPONENTS	DATA SOURCE						
Rafters/Trusses	WT Partnership	\$3,325	\$3,300	\$4,920	\$4,920	\$4,988	\$4,189
Bracing & Binders	WT Partnership	\$400	\$400	\$400	\$400		
GIB® Ultraline in lieu of standard	WT Partnership	\$26					
PRENAIL FRAMING	Placemakers			\$338		\$90	
Additional Lintel sizes, Roof Bracing and Steel Beam Lintel (eg wide door/window openings and garage door)							
Additional Subfloor bracing for suspended floor	Placemakers	\$80		\$191		Required bracing for timber ground floor not allowed for.	
TOTAL		\$3,831	\$3,700	\$5,849	\$5,320	\$5,078	\$4,189
Structural Cost Savings from using a lightweight Gerard Roof vs a Heavyweight Roof eg Concrete tiles			-\$131		-\$529		-\$889
Structural Cost Savings per m ² of roof area			-\$0.95 per m ²		-\$1.38 per m ²		-\$4.04 per m ²

*All of the above prices exclude GST. Source: WT Partnership Consulting Quantity Surveyors Oct 2002. Note: All designs are timber ground floor construction.

COMPLETE THIS TABLE TO HELP MAKE YOUR ROOF DECISION

Use the following table to help you calculate the total cost differences between different roofing alternatives. Costs inserted should include material and labour. We suggest that you use pre-GST amounts and then add GST on at the end.

TABLE: TOTAL BUILDING COST COMPARISON FOR YOUR HOUSE

Roof Brand	Gerard Roofs	Gerard Roofs			
Roof Type					
Roof Area (m ²)					
Structural Items	Things to Consider				
<i>Components</i>					
Rafters/Trusses					
Bracing and Binders					
GIB® Ultraline in lieu of standard					
<i>Prenail Framing</i>					
Additional Lintel sizes, Roof Bracing and Steel Beam Lintel	eg wide door/window openings and garage door				
Additional Subfloor bracing for suspended floor					
Roof Items					
Roofing Materials					
Accessories - eg Trims / Barges Battens / Purlins	For Longrun steel purlins generally included in builders price (approx \$5/m2 roof area). For asphalt shingle roofs check purlins/plywood included				
Building Paper Underlay - condensation & leakage protection	For Concrete / Clay tile roofs, underlay not generally included in quotes (fitted cost approx. \$2.75/m2 roof area)				
Flashings - where roof meets a wall such as around dormers & on 2 storey homes	For Concrete / Clay tile roofs flashings are often additional & often installed by a plumber (fitted cost approx. \$25/lineal m. of flashings)				
Valleys	Check included in quote (fitted cost can be approximately \$14/lineal m)				
Total of structural & roofing items					
Plus GST	add 12.5%				
TOTAL					
Other considerations					
Look / Style	Defines home's style?, Extensive range (profiles, trims, finishes (satin & textured), colours), Versatility, Impact on resale value				
Durability	Weatherproof warranty (includes covers coastal environments?), Surface Coat warranty (covers excessive fading), Printed & transferable warranties? Reputable company backing the warranty?				
Installation	Certified Roofers? Installation Warranty? Installer Quality (past work, past clients?)				
Construction Efficiencies	Time to install roof from start to finish? Can continue to work on site while roof being installed? -> faster construction				
Product Quality	Marine Environment Durability?, Surface Coating (Fading resistance, scratch resistance, low gloss, post painting, thickness?), Independent Certification (BRANZ, ISO 9001)				
Product Performance	Proven for years around the world? Noise? Natural Disaster Protection (Wind, Earthquake, Hail / Snow / Ice, Fire), Lightweight (Peace of mind, Design Flexibility, Cost Savings), Ongoing Maintenance (Cleaning?, Re-Coating?)				

All Gerard Roofs prices include installation, roofing materials, battens, building paper underlay and flashings unless otherwise state.

When getting prices from the frame and truss manufacturer be sure to check they have given you a frame and truss price for a lightweight roof and have not by default given you a frame and truss price for a heavyweight roof.

Please note Gerard Roofs has a cost calculator on its website, www.gerardroofs.co.nz, that can give you a good estimate of costs for Gerard Roofs and other roofing options. For an accurate quote, please call Gerard Roofs or your local Gerard Certified Roofer to arrange your **no obligation FREE quotation**.

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