

# **STUDY REPORT**

**SR 286 (2013)**

## **Physical characteristics of new houses 2012**

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## **Preface**

This is the second of a series of reports on the physical characteristics of new housing. The data was obtained from BRANZ surveys to builders of new detached houses. The purpose of the surveys is to obtain data on new housing which is not available from official sources. These includes generic types of materials used by building component, and design information such as number of floors, wind zones, envelop risk matrix scores, stud arrangements, prefabrication, and efficiency measures. The data is useful for studies in the fields of sustainability, energy efficiency, durability and engineering.

## **Acknowledgments**

This work was funded by the Building Research Levy.

## **Note**

This report is intended for researchers and Government officials.

# **Physical characteristics of new houses update**

## **BRANZ Study Report SR 286**

**IC Page, MD Curtis**

### **Abstract**

The amount of official data on the characteristics of new housing is very limited. Building consents data held by Statistics New Zealand gives numbers by building type, value and floor area, aggregated into territorial authorities. This is valuable data as it is a complete record of all consents; however there is no data on materials used or housing characteristics beyond the floor area. BRANZ began a survey in 1998 to obtain data on materials used in new housing (and other buildings) and has since compiled a database of approximately 1,200 new houses per year. This report contains results of those surveys on the generic materials used in new housing, and some of the other physical characteristics of the houses. The aim is to provide information useful to researchers, officials and manufacturers.

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# **1. INTRODUCTION**

BRANZ surveys over 1200 new residential units per year in the BRANZ materials survey. This survey collects a variety of data on materials used in new housing. Using the data collected, representative results are able to be collected on the incidence and proportions of many different materials. The components and design features analysed are:

- Claddings
- Framing types
- House Storeys
- Floor types
- Floor joists
- Insulation
- Downlights
- Window types
- Wind zones
- E2 Risk scores

# **2. SUMMARY**

Data is shown on market shares trends for generic materials used in new housing. The survey used to compile the charts began in 1998 but the regional spread and sample size was not sufficient until 2002 so the charts begin from then. The survey was developed mainly for manufacturers and to preserve confidentiality the results are shown in generic categories. Not all components/ characteristics have been continuously covered since 2002, so some results are for a shorter period.

# **3. METHOD**

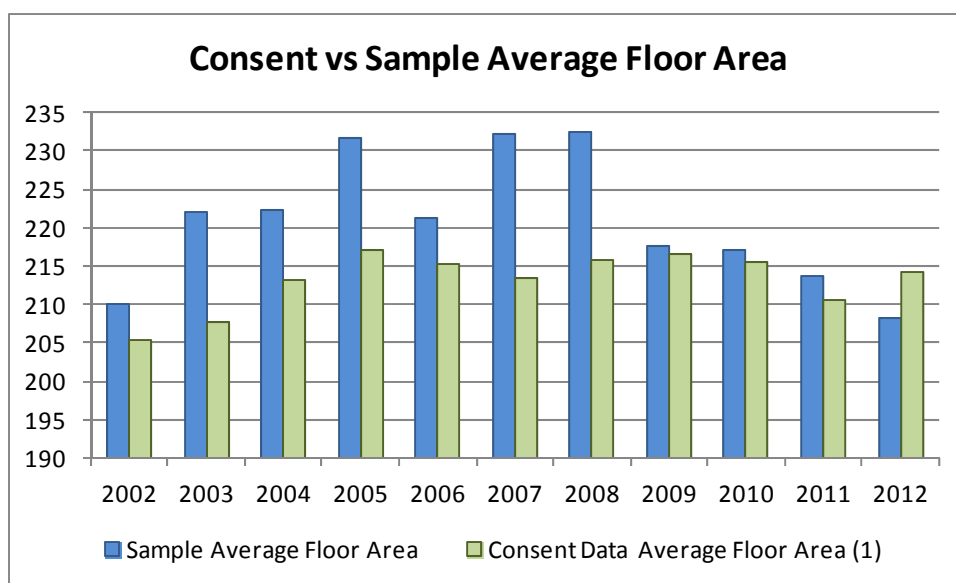
Whats-On<sup>1</sup> building consent data is used to obtain a sample of new housing for each period. From this sample, builders or designers of new houses from 31 selected territorial authorities are sent our New Dwelling survey form. Incentives are offered for the completion of the form. The 31 territorial authorities are Auckland, Christchurch, Dunedin, Franklin, Far North, Gisborne, Hutt City, Hamilton, Invercargill, Kapiti, Manukau, Marlborough, Napier, New Plymouth, North Shore, Porirua, Palmerston North, Queenstown, Rodney, Southland, Tauranga, Thames – Coromandel, Tasman, Waikato, Waipa, Wellington, Waimakariri, Western Bay of Plenty, Whangarei and Waitakere.

Where applicable, results have been weighted based on consent values to allow for regional building activity.

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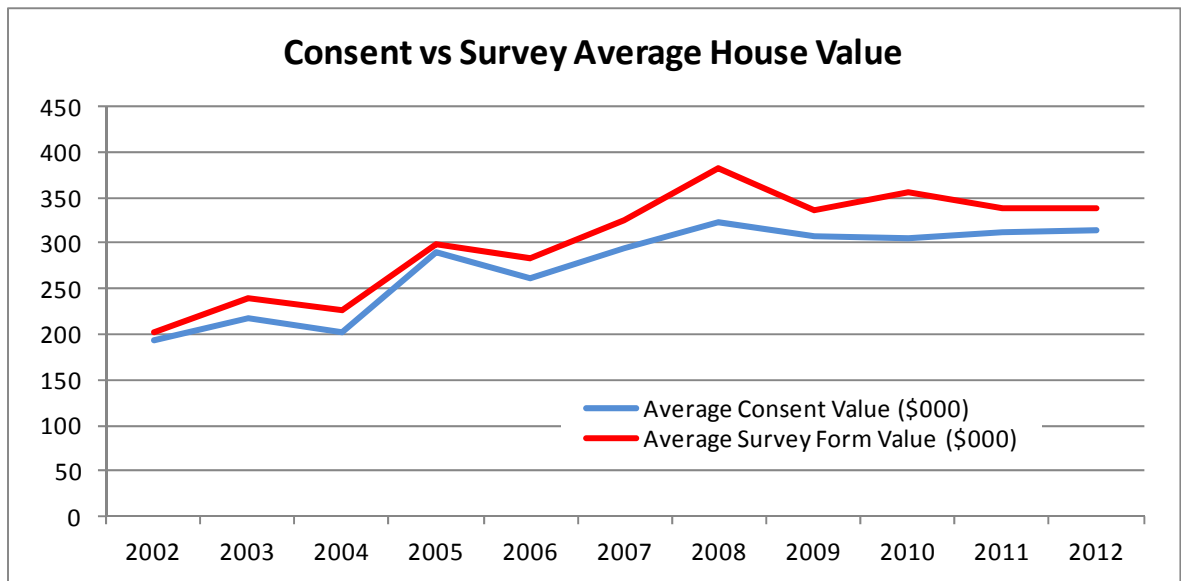
<sup>1</sup> *Whats-On Report* (Monthly). TF Stevens & Co Ltd, Auckland, New Zealand.

The average floor areas since 2002 are presented below to illustrate the accuracy of results. Figure 1 shows the average floor area from our sample of new housing and the consent data average floor area from Statistics New Zealand. The figure shows that pre-2009, there was a comparatively large difference between our sample average floor area and the consent data average floor area, with the sample being much larger. The more recent years have had a much smaller difference, and in 2012 the consent data floor area was larger than the sample floor area. In general, our sample has a slight bias towards larger houses, typically about 4% in most years, less in recent years, but up to 9% in 2007. The 2012 data has a slight bias towards smaller houses. Reasons for the bias in earlier years are not known but may be because some smaller territorial authorities are not surveyed and these may tend to have smaller houses.



**Figure 1 Consent vs Sample Average Floor Area**

Figure 2 illustrates the difference between the average consent value and the average survey form value for the houses in our sample. Both the average consent value and the average survey form value follow the same trend throughout the years. The difference between the two is often that builders suggest a lower value in the hope that it will help them obtain the job. Then once they have the job, the actual cost is sometimes higher. As mentioned above, another reason that may contribute to this difference is that the consent may be applied for before the plan has been finalised, and thus extra costs could be incurred.



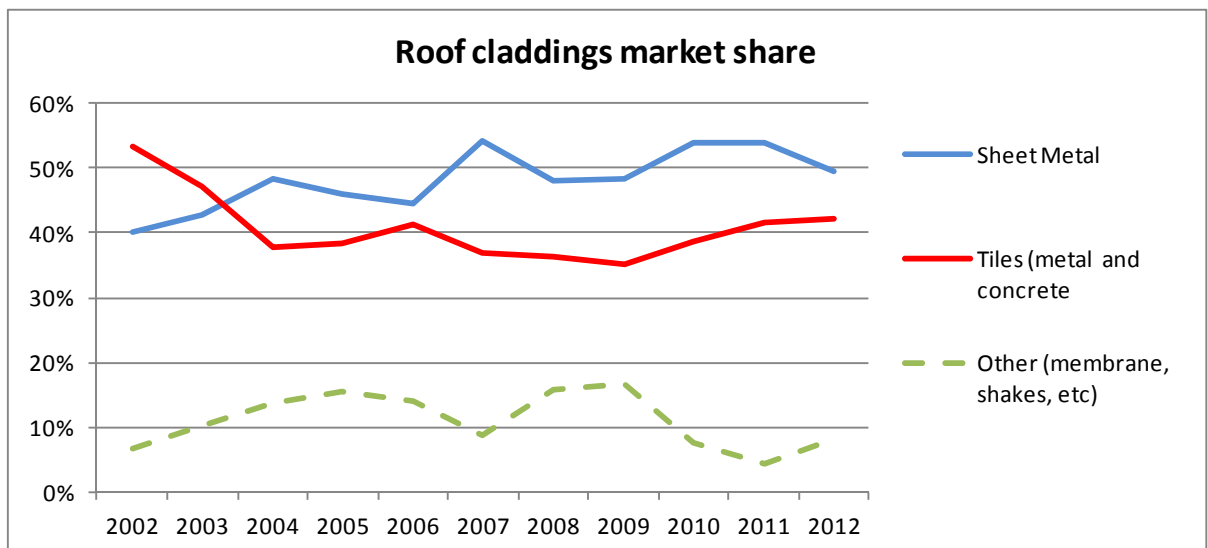
**Figure 2 Consent vs Survey Average House Value**

## 4. MAIN RESULTS

Further results are shown in the following charts. The data for these charts is in the tables in the appendix.

### 4.1 Roof Claddings

Sheet metal is the dominant roof cladding. The last two years have seen a closing of the gap between sheet metal and tiles (both metal and concrete) though.



**Figure 3 Roof Claddings Market Share**



## 4.2 Wall Claddings

Clay brick is the dominant wall cladding, and had a market share of just over 50% in Christchurch in 2012. Weatherboards have been trending upwards over the period, with just over 30% market share in 2012, up from just 10% in 2002.

The other category, mainly made up of monolithic type claddings, have continued their downward trend since the impact of the leaky homes discovery.

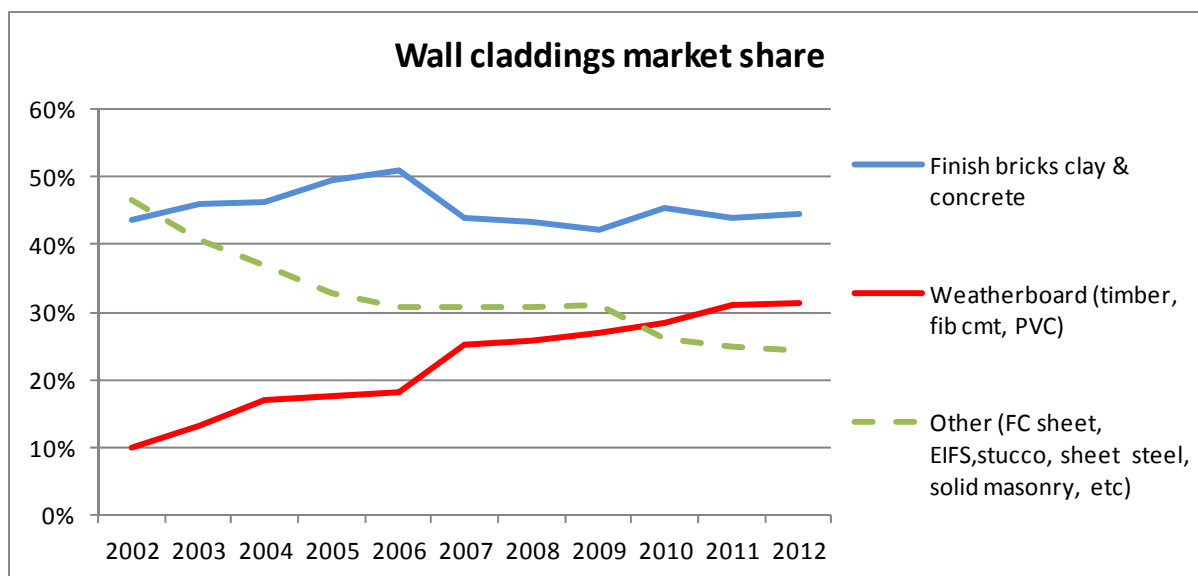


Figure 4 Wall Claddings Market Share

## 4.3 Wall Frames

Timber wall framing is the predominant structural material, however its use has been trending downwards over the period. This is due to the slow growth in steel framing, as well as the use of concrete masonry.

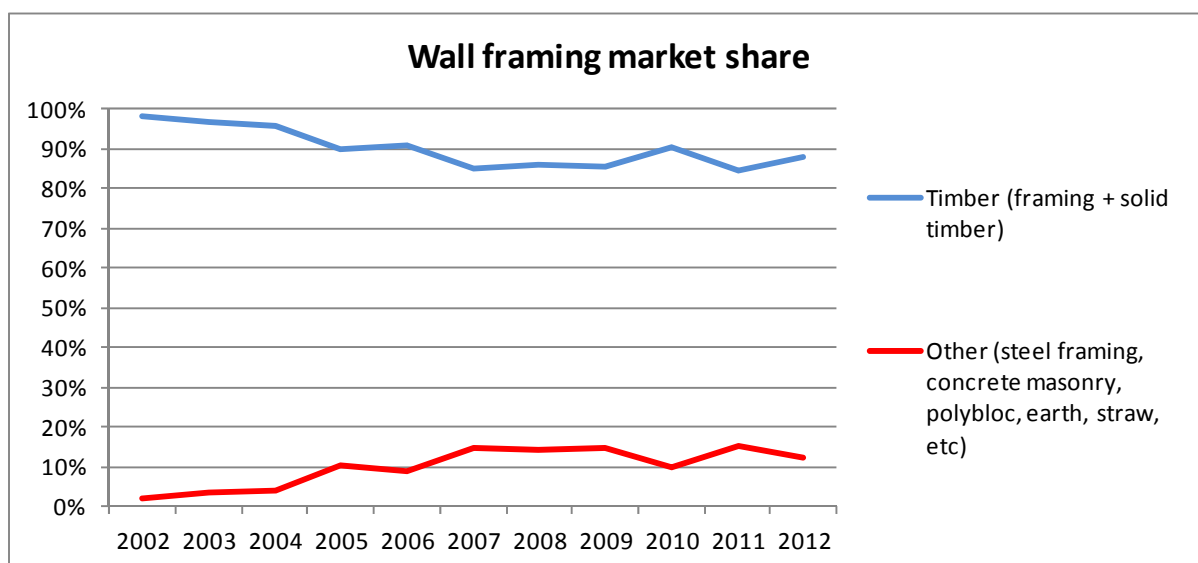
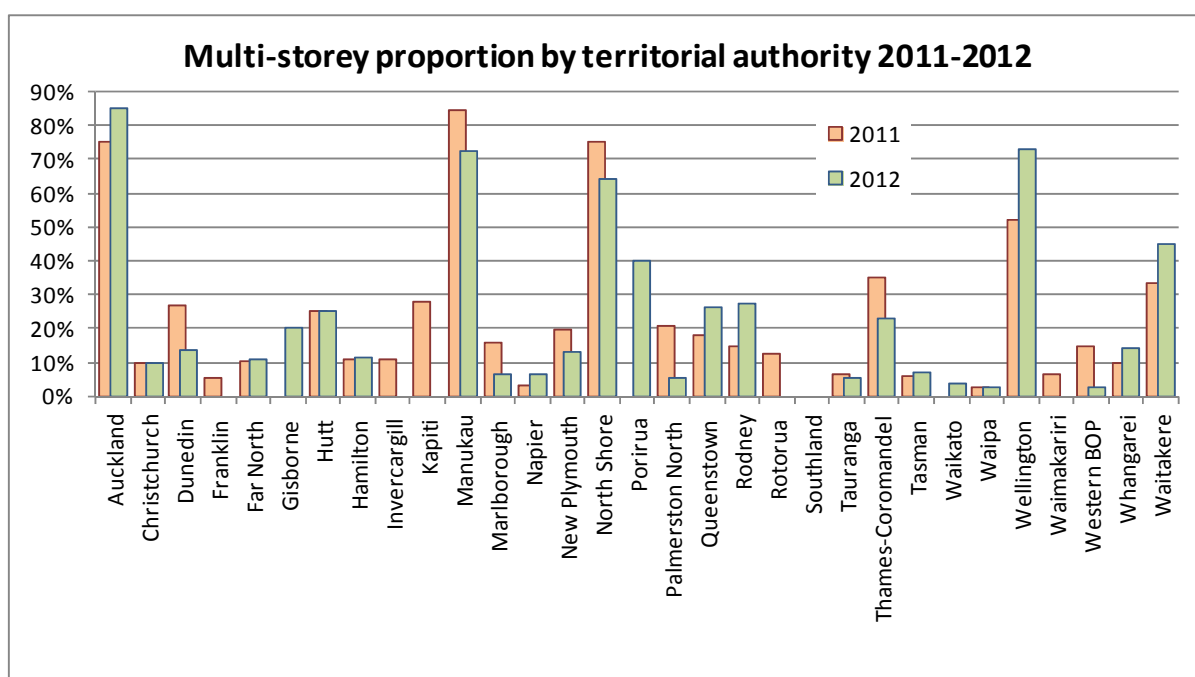


Figure 5 Wall Framings Market Share

## 4.4 House Storeys

Auckland had the highest proportion of houses that were multi-storeyed with 85% of surveyed houses being multi-storey. This was up from 75% in 2011. The other territorial authorities with a large proportion of multi-storey houses were Manukau, North Shore and Wellington. Generally the main population centres with small sections are more likely than other areas to have upper storeys.

10% of houses surveyed in Christchurch were multi-storey in both 2011 and 2012. This was down from just under 30% in 2010 and the decline is believed to be related to earthquake reconstruction, where the first replacements are simple, quick to construct low-rise houses. Similarly Waimakariri recorded nil two storey houses in 2012 and only 7% in 2011. The previous report had Waimakariri at 15% of houses with upper storeys in 2010.



**Figure 6 Multi-Storey proportion by Territory 2010**

Figure 7 shows where floor area is located. Throughout the survey period, the majority of floor area has been located on the ground floor. More recent new houses have a greater proportion of floor area on the ground floor. This has largely been at the expense of floor area on the first floor, although there has also been a decrease in the proportion of floor area on the second floor and above.

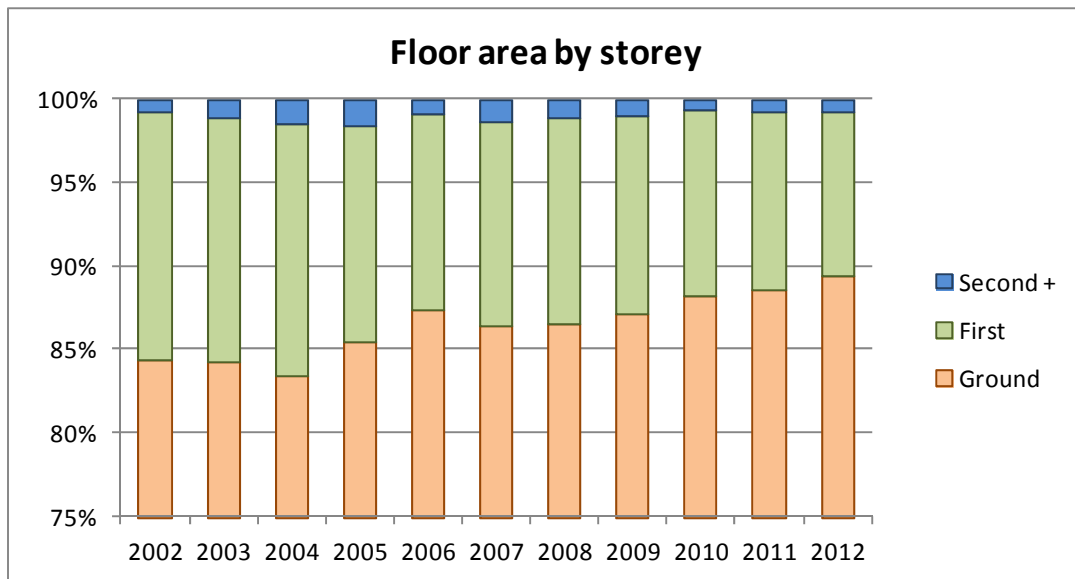


Figure 7 Floor Area by Storey

## 4.5 Flooring

Concrete flooring is the most common flooring type in new residential construction. This includes both concrete slabs and suspended concrete. The dominance is largely down to the majority of ground floors being concrete slabs. Timber flooring is much more common in upper storeys.

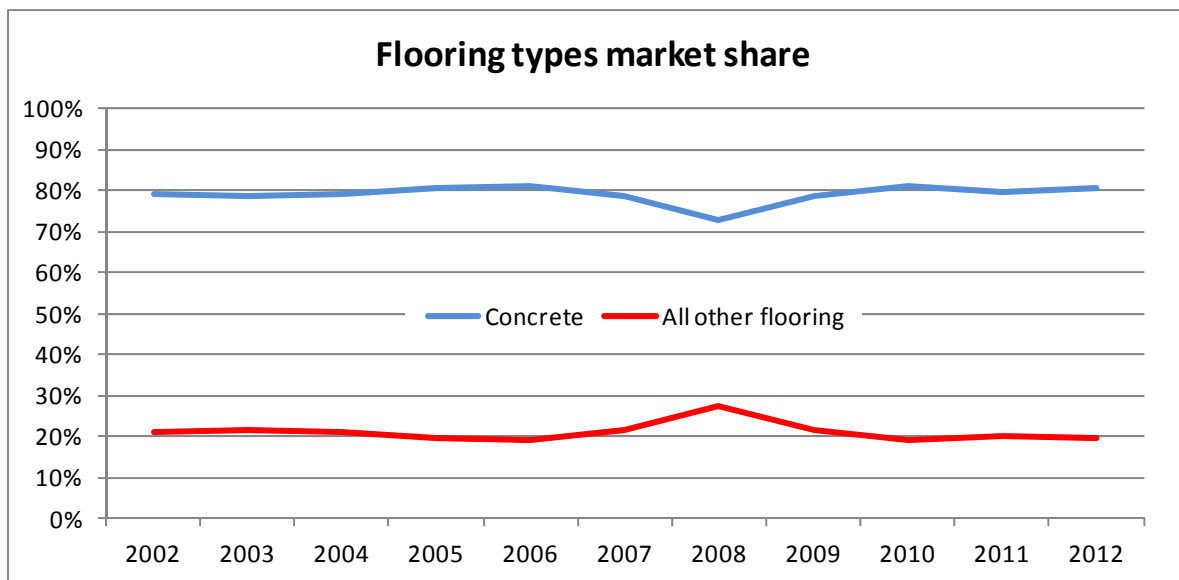


Figure 8 Flooring Types Market Share

## 4.6 Floor Joists

Solid timber floor joists are the most regularly used floor joist. In the periods from 2002 to 2006, the gap between solid timber and engineered wood was closing, and apart from a strong year for engineered wood floor joists in 2010, solid timber has been trending upwards.

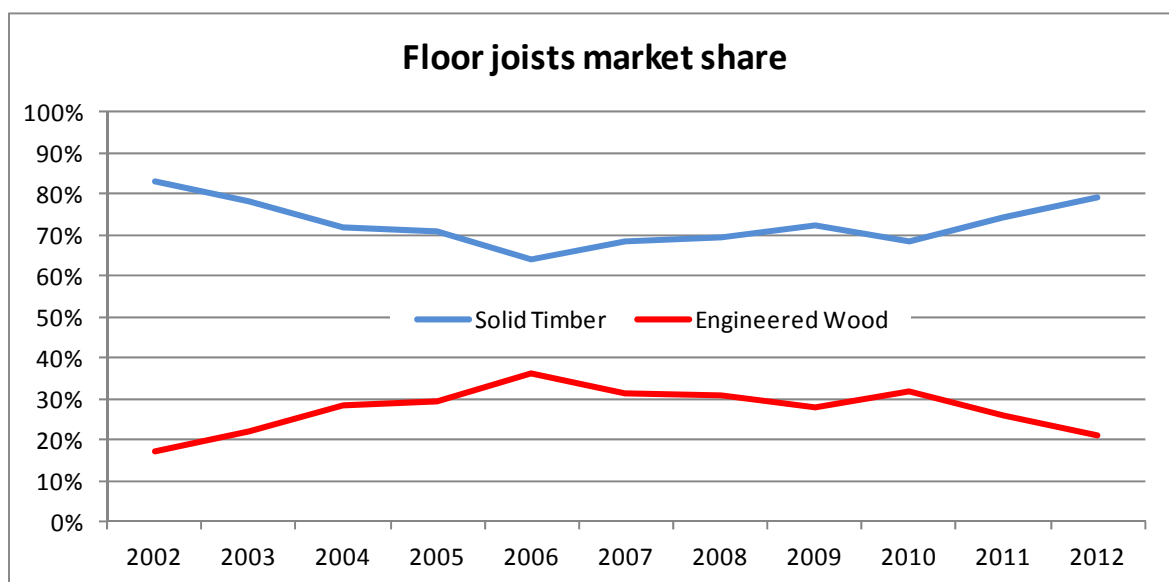


Figure 9 Floor Joists Market Share

250mm solid timber floor joists was the most common joist depth for both 2011 and 2012. The use of 150mm floor joists increased, with 200mm and 300mm being less common in 2012 than in 2011.

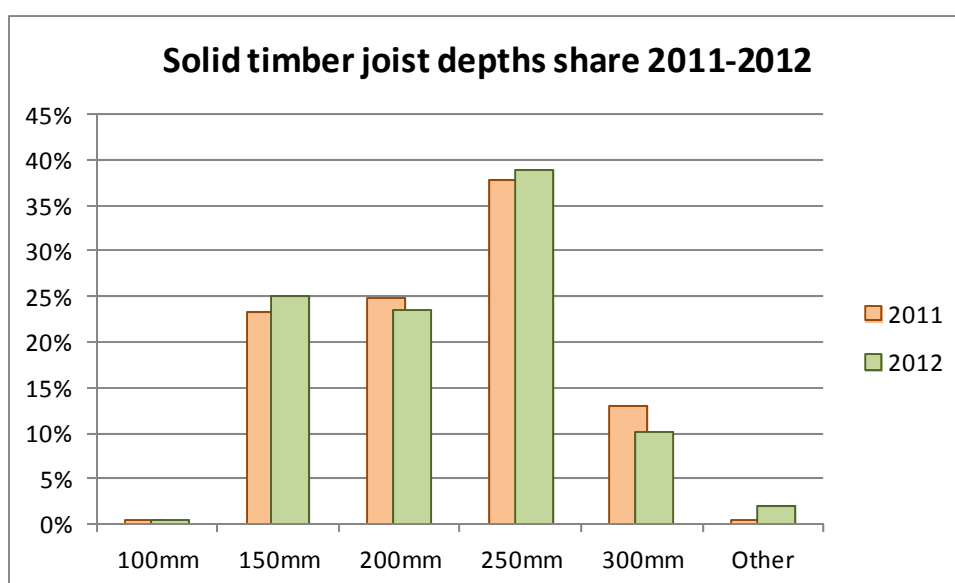


Figure 10 Solid timber joist depths share 2010

## 4.7 Insulation

Wall insulation, ceiling insulation and floor insulation for both concrete slabs and timber floors have been separated in this section.

### 4.7.1 Wall Insulation

Fibreglass is by far the dominant wall insulation material with well over 95% market share since 2010. The share appears to be increasing. The “other” category is mainly polystyrene and natural wool.

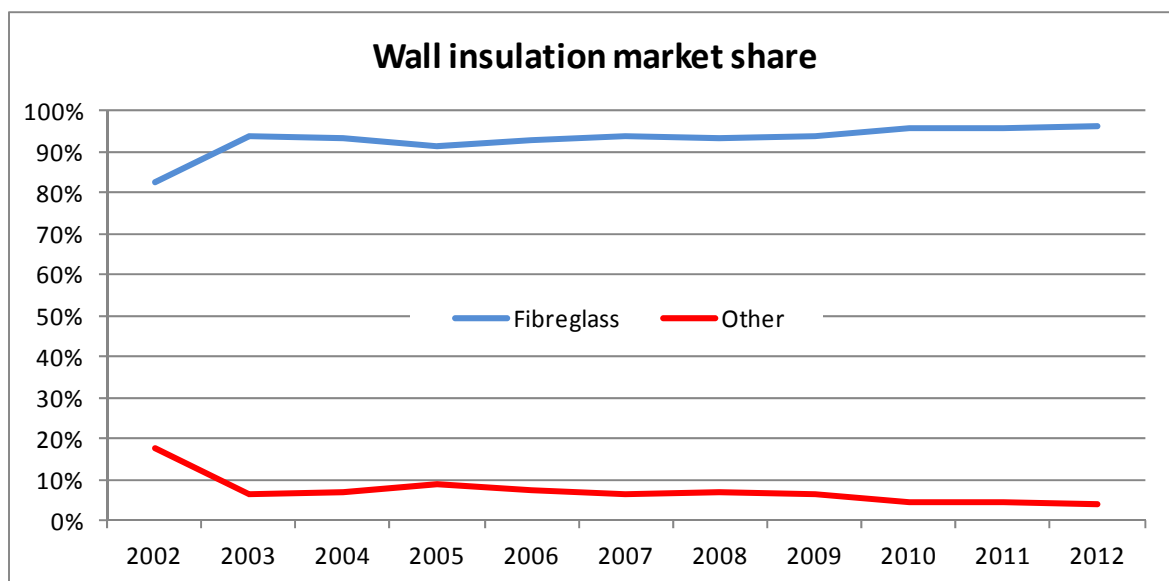
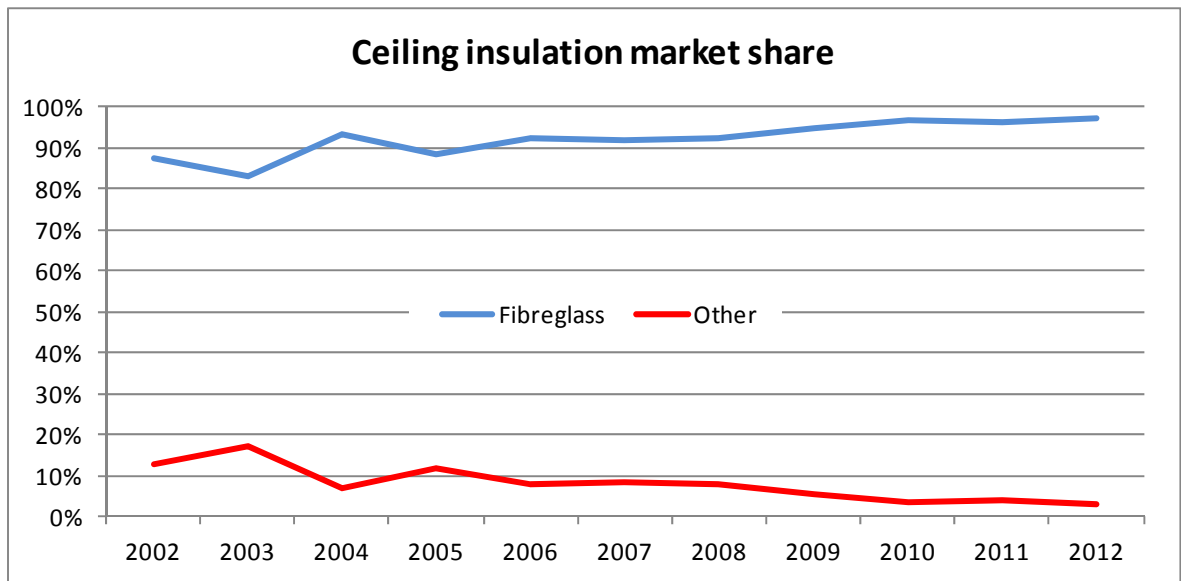


Figure 11 Wall Insulation Market Share

### 4.7.2 Ceiling Insulation

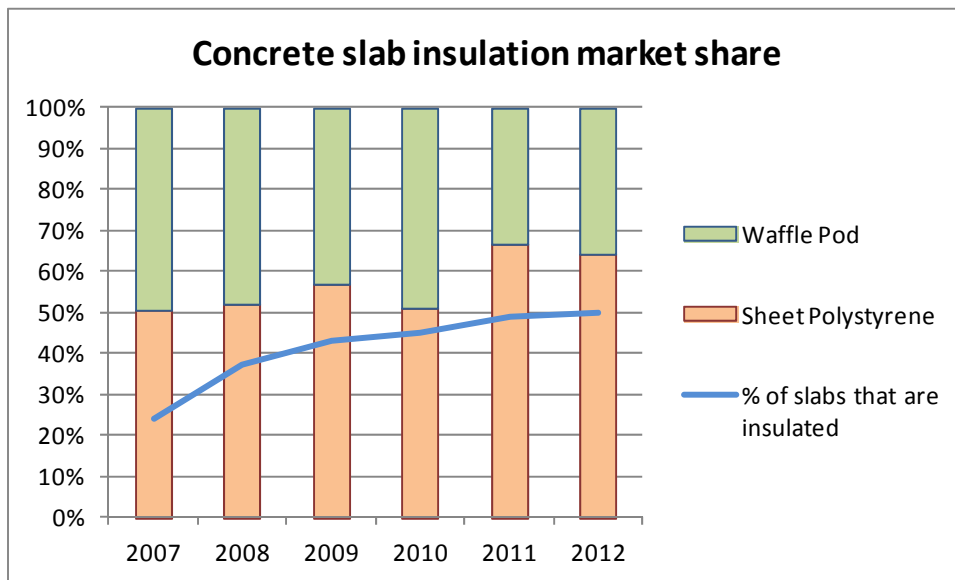
In recent years, ceiling insulation has been following the same trend as for wall insulation. However, in 2003 fibreglass was decreasing in share in the ceiling insulation market whereas it was increasing in share in the wall insulation market.



**Figure 12 Ceiling Insulation Market Share**

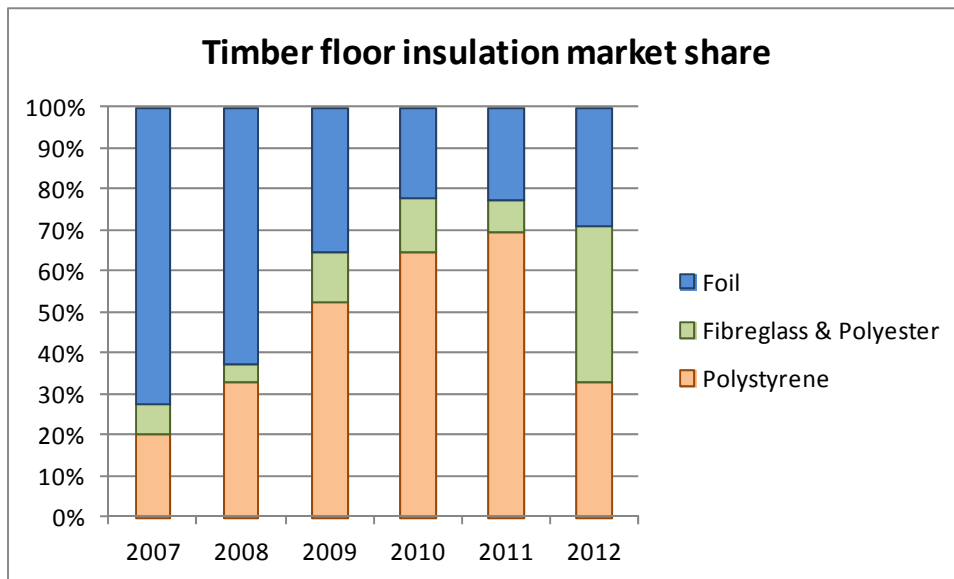
### 4.7.3 Floor Insulation

Sheet polystyrene has become the most common concrete slab insulation over the last two years. Prior to this, the use of waffle pod and sheet polystyrene was fairly evenly split. In 2012 the percentage of slabs that were insulated was approximately 50%. This appears to be flattening.



**Figure 13 Concrete floor Insulation Market Share**

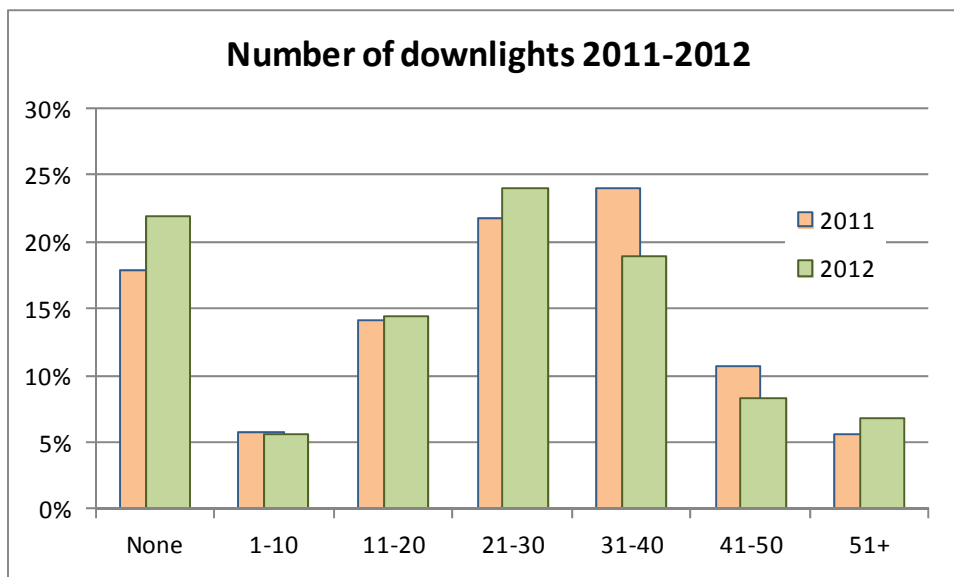
The proportion of houses using polystyrene insulation in timber floors was increasing prior to 2012. However, it's share dropped significantly in 2012, with fibreglass having a strong increase in share. Reasons for this are unclear but it's possible that polystyrene was diverted into retrofit markets and new polyester under-floor products have been coded under the fibreglass category.



**Figure 14 Timber floor insulation market share**

## 4.8 Downlights

The majority of new houses have downlights installed. However, fewer installed downlights in 2012 than 2011. There was also a decrease in the amount of houses installing 31-40 and 41-50 downlights. However, there was an increase in the amount of houses with 51+ downlights. On average there were 25 downlights per new house in 2012. In May 2012 the building regulations related to downlights changed, requiring higher specifications for safety reasons, and the average downlight cost increased. So it is possible that in future downlight numbers will decline.



**Figure 15 Number of downlights in new housing**

## 4.9 Window Frames

Aluminium was the most common window frames in 2012. The following figure shows that in many of the territorial authorities we survey, all responses received had used aluminium. Timber's use was sporadic apart from in Rotorua. One PVC window was picked up in the surveys, in Auckland.

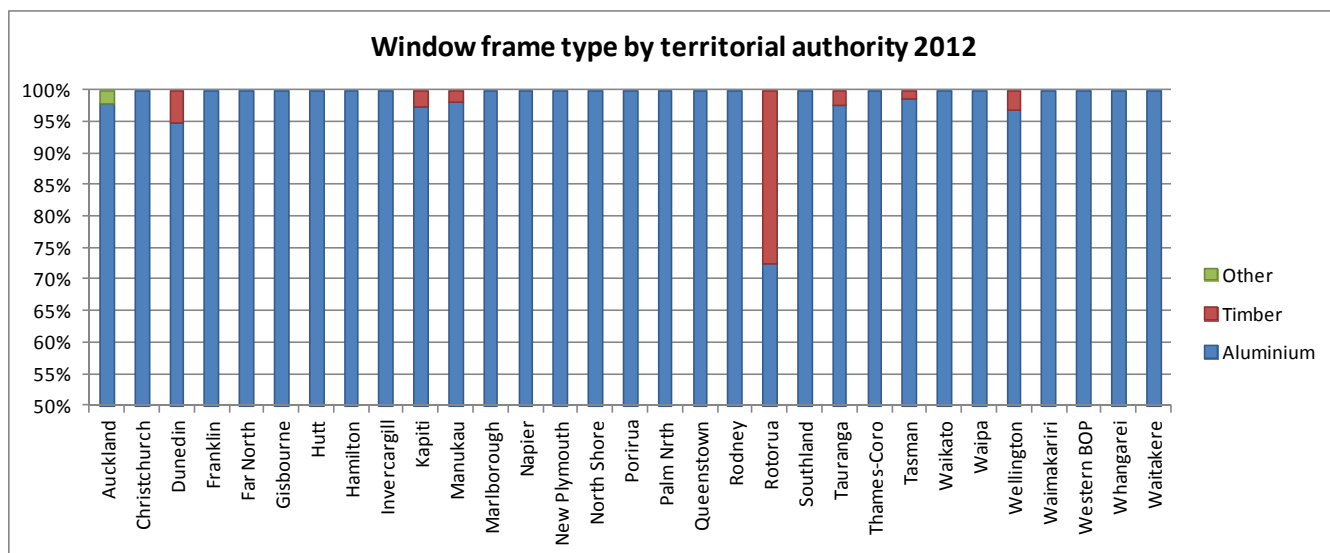


Figure 16 Window frame type

## 4.10 Double Glazing

The double glazing rate by territorial authority in 2011 and 2012 is shown below. The majority of territorial authorities surveyed had 100% double glazing. However, territorial authorities such as Auckland and Manukau and further north, have some houses without double glazing.

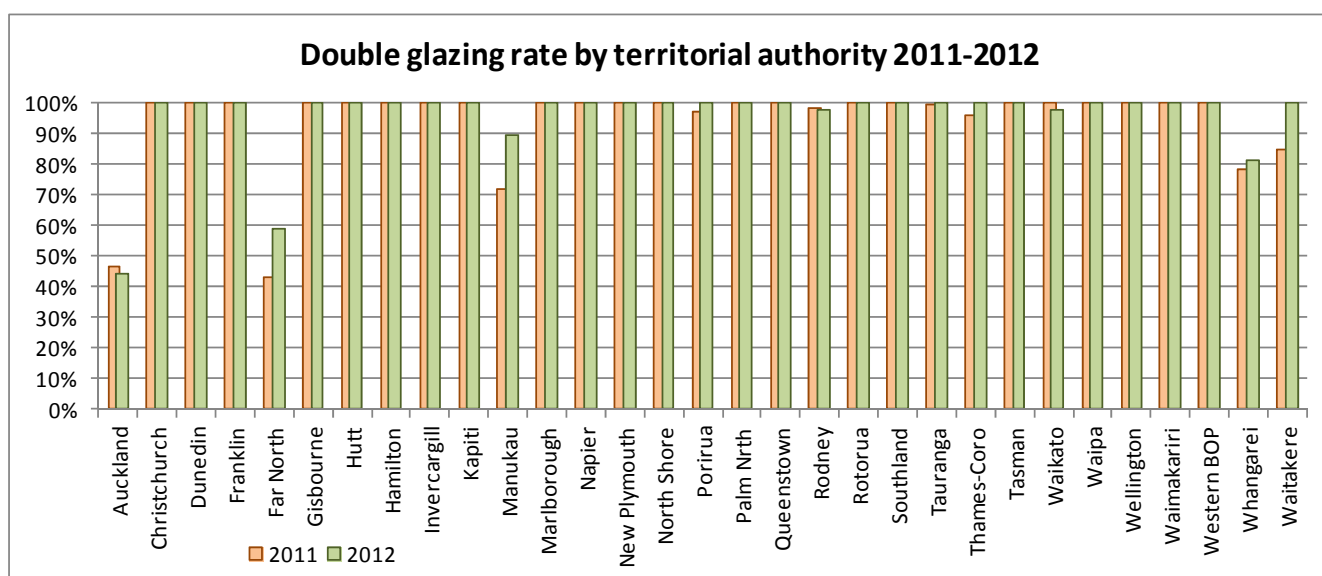
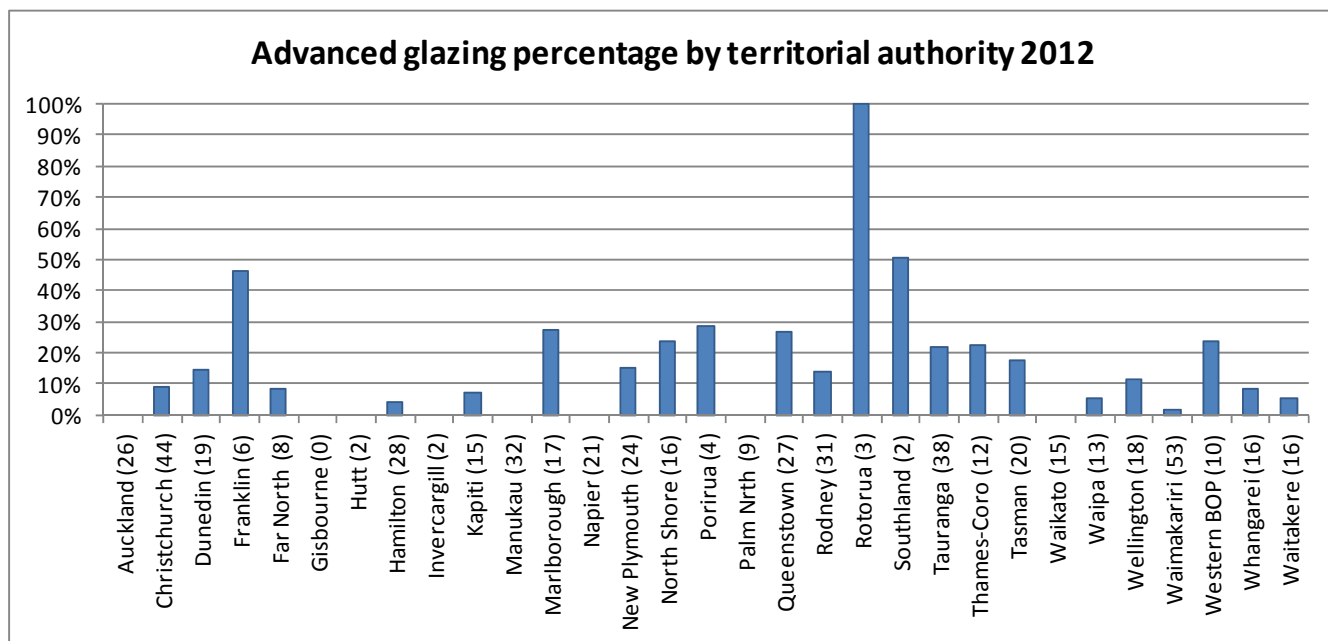


Figure 17 Double glazing rate by territorial authority



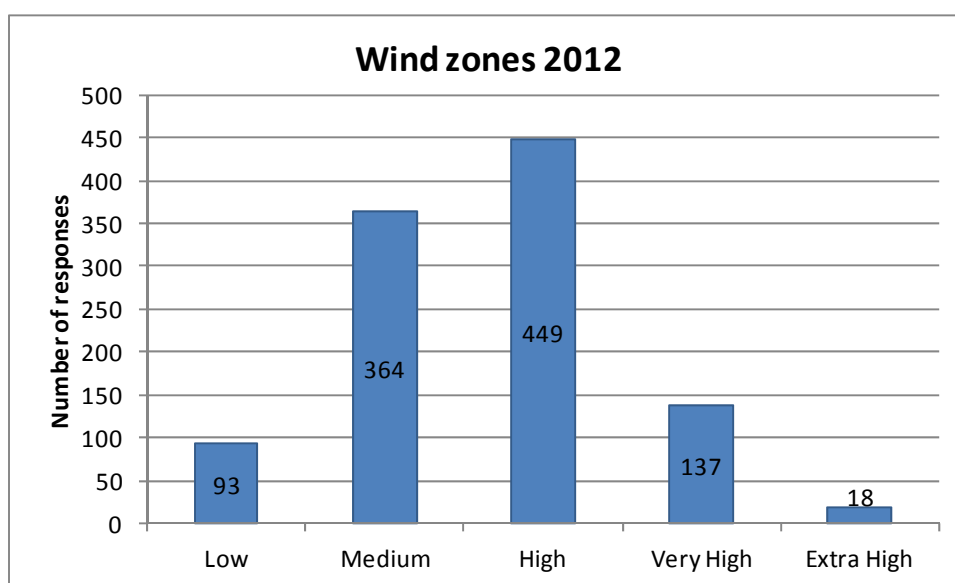
A further option to improve the performance of windows is advanced glazing. This is the use of low-emissivity (low-E) panes and/or argon gas-filled. Most houses did not use advanced glazing. However, all three responses from the Rotorua territorial authority did. The percentages in Figure 18 are based on floor area.



**Figure 18 Advanced glazing by territorial authority**

## 4.11 Wind Zones

The following figure shows the number of new houses surveyed in each wind zone. The number of responses is shown over each bar. Houses built in high wind zones are the most common, followed by medium wind zones.



**Figure 19 Wind zones frequency in new houses**

Figure 20 shows the breakdown of wind zones by territorial authorities. The line illustrates the average wind zone for each territorial authority (1 = low, 2 = medium, 3= high, 4 = very high, 5= extra high). It shows that there is quite a bit of variation between houses in the same territorial authority, with wind zones often spread over 3 or 4 wind zones. In Dunedin and Marlborough, we received survey responses encompassing all of the different wind zones. The number in brackets after each territorial authority is the number of responses.

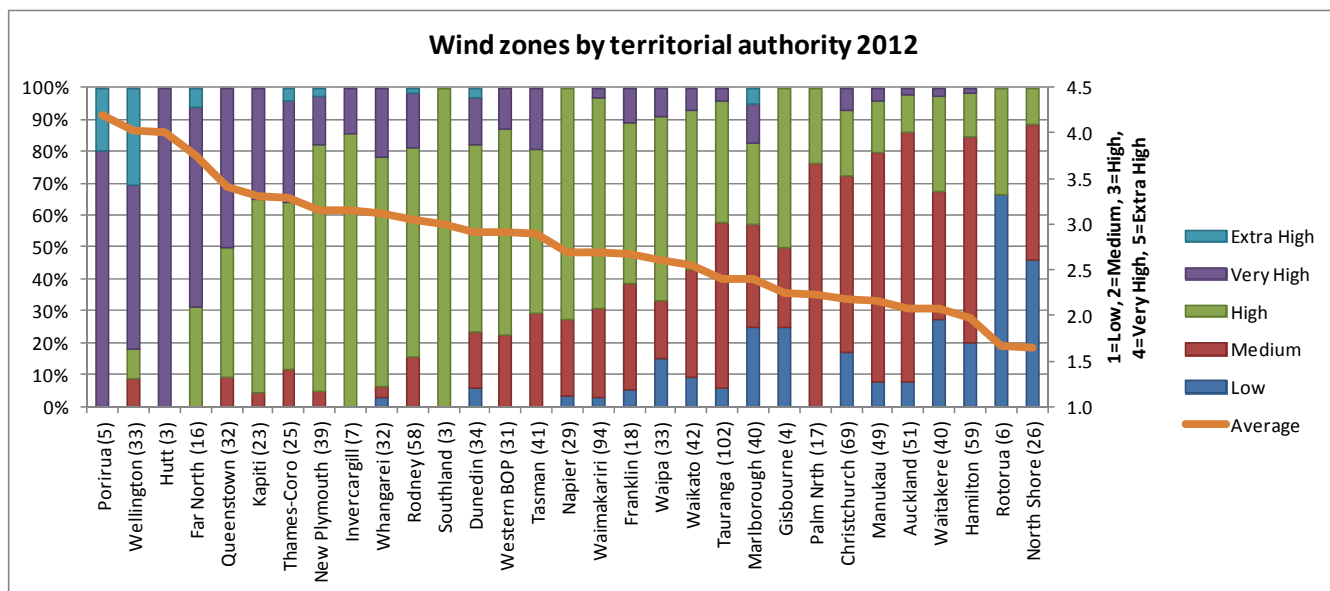


Figure 20 Wind Zones by Territory

## 4.12 E2 Risk Scores

The average risk scores by territorial authority are shown in Figure 21 as well as the breakdown of risk score range (0-6 = low, 7-12 = medium, 13-20 = high, over 20 = very high).

Comparison of the rankings in Figure 20 and Figure 21 indicate interesting findings. Kapiti and Far North houses are in the higher wind zones but have quite low risk scores. Conversely, North Shore and Waitakere houses are in the low wind zones but have high risk scores. This indicates the former regions have simple “low-risk” houses compared to the latter regions.

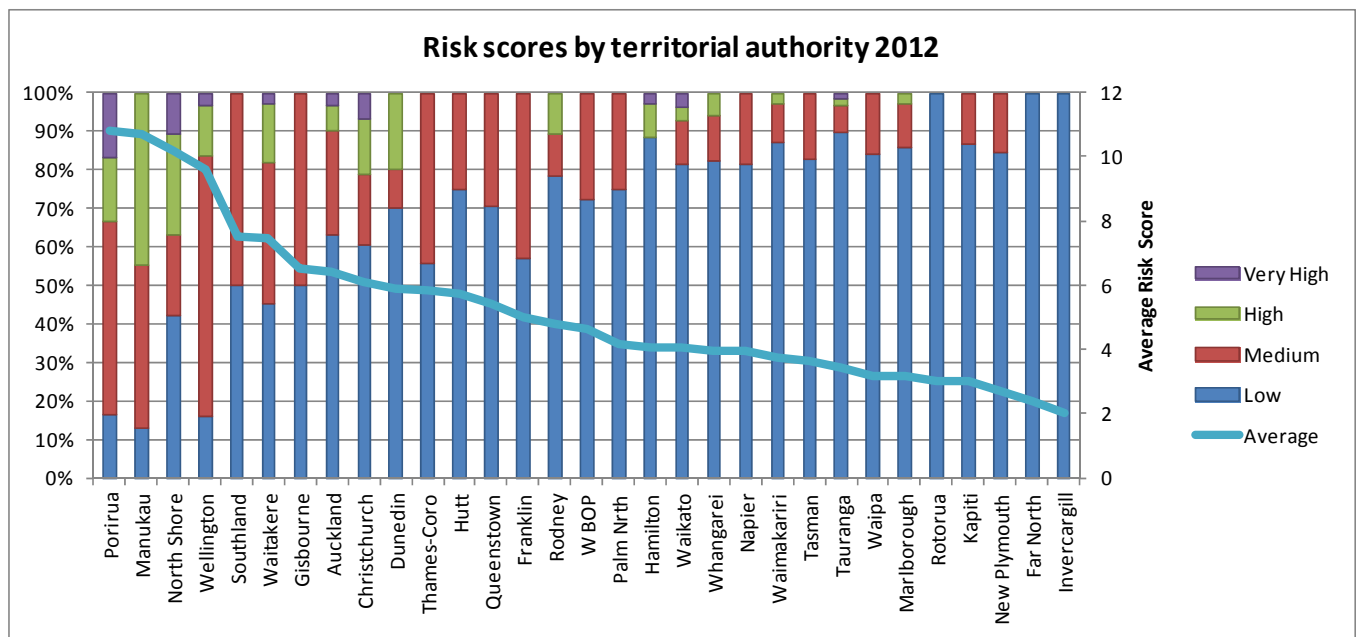


Figure 21 Average E2 risk score by territorial authority

## 5. CONCLUSIONS

In general, many of the market shares of materials have been relatively steady over the years surveyed. There are a few exceptions to this though:

- Timber wall framing share trended downward in the early 2000s as concrete masonry and other framing systems gained some market share. More recently light steel framing has gained share to about 4% while concrete has declined slightly.
- In the wall claddings market the long-term trend is a decline in monolithic type claddings (fibre cement sheet materials and EIFS). Weatherboard products have benefitted from this, with both timber and fibre cement weatherboard having large rises in market share since the early 2000s.
- In the floor joist market engineered wood products appeared to have levelled out in market share at about 30% in the mid to late 2000s but now they may be declining in share slightly.
- The proportion of concrete slabs being insulated is increasing every year, though the penetration rate appears to have slowed as it approaches the 50% mark.
- Double glazing is near 100% of new housing, except in northern parts of the North Island, and also Auckland. The latter is puzzling because BRANZ believes it is difficult to trade-off single glazing for more bulk insulation in a cost efficient way for most new houses.

## 6. APPENDIX

The appendix contains the three items:

- BRANZ materials survey details
- Tables of data for the charts
- A cost analysis of insulation and glazing.

### 6.1 BRANZ New Dwellings survey

This survey has been underway since 1998 and was originally developed to obtain data not otherwise available from official or other sources. The main users are building materials manufacturers and the results enable companies to monitor their market share (e.g. claddings, insulation, etc).

Some questions relate to the layout and design features of new dwellings which are relevant to building officials and researchers, e.g. ground and upper floors, wind zones, envelope risk matrix scores, efficiency measures, heating types, stud sizes and spacings, etc. Samples of the forms are shown below. Some questions change from survey to survey but most have remained the same since the start.

It is a postal survey to the builder identified on the building consent application form and the questions relate to that particular consent. Over 300 returns are received each quarter. The response rate is about 30% and an incentive is offered (lotto ticket, book voucher or reduced price for BRANZ publications). The main issue is to keep the form as simple and clear as possible, and on one page. It is apparent from the density of the form an upper limit on the number of questions has been reached, and preferably the form should be simpler to help improve the response rate. At the least any new questions that arise from time to time require the dropping of existing questions.

The responses are weighted by the share of building activity in each territorial authority (as indicated by building consents) in the calculation of the national market share.

### 6.2 Results Tables

The data contained in some of the charts .....

**Table 1 Average Floor Area (square metres)**

Average Floor Area (square metres) Yearly Data 2002-2012											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Sample Average Floor Area	210.0	222.0	222.2	231.6	221.3	232.1	232.6	217.5	217.0	213.7	208.2
Consent Data Average Floor Area (1)	205.4	207.7	213.1	217.1	215.2	213.4	215.8	216.5	215.6	210.6	214.3
Note: survey average floor area weighted to allow for regional building activity											
(1) Source: Statistics New Zealand											

**Table 2 Average House Value (\$000)**

Average House Value Yearly Data 2002-2012											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Average Consent Value (\$000)	193.4	218.0	202.6	289.0	260.8	293.4	322.2	306.8	305.7	312.8	313.4
Average Survey Form Value (\$000)	201.8	239.7	225.4	297.7	283.9	324.0	381.6	336.0	355.6	338.6	337.2
Note: average survey form values are weighted to allow for regional building activity											

**Table 3 Roof Claddings Market Share**

Roof Claddings Market Share Yearly Data 2002-2012											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Sheet Metal	40.1%	42.8%	48.4%	46.1%	44.7%	54.2%	48.0%	48.3%	53.8%	53.9%	49.6%
Tiles (metal and concrete)	53.3%	47.1%	37.7%	38.3%	41.3%	36.9%	36.2%	35.0%	38.6%	41.6%	42.1%
Other (membrane, shakes, etc)	6.7%	10.2%	13.9%	15.6%	14.0%	8.8%	15.8%	16.7%	7.6%	4.5%	8.3%
<b>TOTAL</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Note: percentage weighted to allow for the regional building activity.

**Table 4 Wall Claddings Market Share**

Wall Claddings Market Share Yearly Data 2002-2012											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Finish bricks clay & concrete	43.5%	46.1%	46.3%	49.5%	51.0%	44.0%	43.5%	42.1%	45.5%	44.0%	44.5%
Weatherboard (timber, fib cmt, PVC)	10.0%	13.3%	16.9%	17.7%	18.2%	25.3%	25.7%	26.8%	28.3%	31.2%	31.3%
Other (FC sheet, EIFS, stucco, sheet steel, solid masonry, etc)	46.5%	40.6%	36.8%	32.8%	30.8%	30.7%	30.8%	31.1%	26.2%	24.8%	24.2%
<b>TOTAL</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Note: percentage weighted to allow for the regional building activity.

**Table 5 Wall Framings Market Share**

Wall Framing Market Share Yearly Data 2002-2012											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Timber (framing + solid timber)	98.1%	96.5%	95.9%	89.8%	90.9%	85.1%	86.0%	85.4%	90.4%	84.7%	87.8%
Other (steel framing, concrete masonry, polybloc, earth, straw, etc)	1.9%	3.5%	4.1%	10.2%	9.1%	14.9%	14.0%	14.6%	9.6%	15.3%	12.2%
<b>TOTAL</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%

Note: percentage weighted to allow for the regional building activity.

**Table 6 Multi-Storey Proportion by Territorial Authority**

<b>Multi-Storey Proportion by TA 2011-2012</b>		
	<b>2011</b>	<b>2012</b>
Auckland	75%	85%
Christchurch	10%	10%
Dunedin	27%	14%
Franklin	5%	0%
Far North	11%	11%
Gisborne	0%	20%
Hutt	25%	25%
Hamilton	11%	11%
Invercargill	11%	0%
Kapiti	28%	0%
Manukau	84%	73%
Marlborough	16%	6%
Napier	3%	6%
New Plymouth	20%	13%
North Shore	75%	64%
Porirua	0%	40%
Palmerston North	21%	5%
Queenstown	18%	26%
Rodney	15%	27%
Rotorua	13%	0%
Southland	0%	0%
Tauranga	6%	6%
Thames-Coromandel	35%	23%
Tasman	6%	7%
Waikato	0%	4%
Waipa	2%	3%
Wellington	52%	73%
Waimakariri	7%	0%
Western BOP	15%	3%
Whangarei	10%	14%
Waitakere	33%	45%

**Table 7 Percentage of Floor Area by Storey**

<b>Percentage of Floor Area by Storey Yearly Data 2002-2012</b>			
	<b>Ground</b>	<b>First</b>	<b>Second +</b>
<b>2002</b>	84.4%	14.8%	0.8%
<b>2003</b>	84.2%	14.7%	1.1%
<b>2004</b>	83.4%	15.1%	1.5%
<b>2005</b>	85.4%	13.0%	1.6%
<b>2006</b>	87.4%	11.8%	0.8%
<b>2007</b>	86.5%	12.2%	1.3%
<b>2008</b>	86.6%	12.3%	1.2%
<b>2009</b>	87.1%	11.9%	1.0%
<b>2010</b>	88.2%	11.1%	0.7%
<b>2011</b>	88.6%	10.6%	0.8%
<b>2012</b>	89.4%	9.9%	0.7%

**Table 8 Flooring Types Market Share**

Flooring Types Market Share Yearly Data 2002-2012											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Concrete	79.0%	78.7%	79.1%	80.6%	80.8%	78.4%	72.6%	78.4%	81.0%	79.7%	80.4%
All other flooring	21.0%	21.3%	20.9%	19.4%	19.2%	21.6%	27.4%	21.6%	19.0%	20.3%	19.6%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Note: percentage weighted to allow for the regional building activity.

**Table 9 Floor Joists Market Share**

Floor Joists Market Share Yearly Data 2002-2012											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Solid Timber	82.9%	78.1%	71.6%	70.8%	63.8%	68.5%	69.2%	72.0%	68.4%	74.0%	79.0%
Engineered Wood	17.1%	21.9%	28.4%	29.2%	36.2%	31.5%	30.8%	28.0%	31.6%	26.0%	21.0%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Note: percentage weighted to allow for the regional building activity.

**Table 10 Solid Timber Joist Depths**

Solid Timber Joist Depths 2011-2012		
	2011	2012
100mm	0.5%	0.5%
150mm	23.4%	25.0%
200mm	24.9%	23.6%
250mm	37.8%	38.9%
300mm	12.9%	10.1%
Other	0.5%	1.9%

**Table 11 Wall Insulation Market Share**

Wall Insulation Market Share Yearly Data 2002-2012											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Fibreglass	82.4%	93.6%	93.0%	91.3%	92.8%	93.5%	93.2%	93.7%	95.4%	95.5%	96.1%
Other	17.7%	6.4%	7.0%	8.7%	7.2%	6.5%	6.8%	6.3%	4.6%	4.5%	3.9%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Note: percentage weighted to allow for the regional building activity.

**Table 12 Ceiling Insulation Market Share**

Ceiling Insulation Market Share Yearly Data 2002-2012											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Fibreglass	87.4%	83.1%	93.0%	88.3%	92.0%	91.9%	92.2%	94.6%	96.7%	96.2%	96.9%
Other	12.6%	16.9%	7.0%	11.7%	8.0%	8.1%	7.8%	5.4%	3.3%	3.8%	3.1%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Note: percentage weighted to allow for the regional building activity.

**Table 13 Floor Insulation Market Share**

<b>Floor Insulation Market Share Yearly Data 2007-2010</b>						
	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Concrete Slab</b>						
Waffle Pod	49.6%	48.1%	43.3%	48.9%	33.4%	35.8%
Sheet Polystyrene	50.4%	51.9%	56.7%	51.1%	66.6%	64.2%
% insulated	23.8%	36.9%	42.9%	45.0%	48.6%	49.8%
<b>Timber Floor</b>						
Foil	72.3%	62.5%	35.5%	22.3%	22.6%	29.2%
Fibreglass & Polyester	7.6%	4.6%	12.1%	13.1%	8.1%	38.1%
Polystyrene	20.2%	32.9%	52.5%	64.6%	69.3%	32.7%
Note: percentage weighted to allow for the regional building activity.						

**Table 14 Number of Downlights**

<b>Number of Downlights 2011-2012</b>		
	<b>2011</b>	<b>2012</b>
None	17.9%	21.9%
1-10	5.7%	5.6%
11-20	14.2%	14.4%
21-30	21.8%	24.0%
31-40	24.0%	18.9%
41-50	10.8%	8.4%
51+	5.6%	6.8%



<b>NEW DWELLING</b>																																																																
<b>Please give this form to the builder or designer to fill out for the building consent listed over the page.</b> Number of dwelling units <input type="text"/> in this consent. Contract value of work (incl sub-trades) \$ ..... incl GST.																																																																
<b>Floor areas</b> Total floor area <input type="text"/> Sq metres (include attached garage, exclude decks). <div style="text-align: center; font-weight: bold;">Strip timber (not overlay, exclude decks).</div> <table style="width: 100%; border: none;"> <tr> <th style="width: 25%;"></th> <th style="width: 25%; text-align: center;">Particleboard</th> <th style="width: 25%; text-align: center;">Plywood</th> <th style="width: 25%; text-align: center;">Concrete</th> </tr> <tr> <td>Ground level</td> <td><input type="text"/> Sq metres</td> <td><input type="text"/> Sq metres</td> <td><input type="text"/> Sq metres</td> </tr> <tr> <td>First level</td> <td><input type="text"/> Sq metres</td> <td><input type="text"/> Sq metres</td> <td><input type="text"/> Sq metres</td> </tr> <tr> <td>2nd or more levels</td> <td><input type="text"/> Sq metres</td> <td><input type="text"/> Sq metres</td> <td><input type="text"/> Sq metres</td> </tr> </table>											Particleboard	Plywood	Concrete	Ground level	<input type="text"/> Sq metres	<input type="text"/> Sq metres	<input type="text"/> Sq metres	First level	<input type="text"/> Sq metres	<input type="text"/> Sq metres	<input type="text"/> Sq metres	2nd or more levels	<input type="text"/> Sq metres	<input type="text"/> Sq metres	<input type="text"/> Sq metres																																							
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<b>Decks (above ground, not concrete patios)</b> (circle one) Includes a deck ? Yes / No (circle one or more) Deck area <input type="text"/> Sq metres Deck surface material = radiata/ hardwood/ butyl/ tiles/ other/ pour-on. Deck substrate = plywood sht/ fibre cement sht/ concrete/ timber joists.																																																																
<b>Wall Framing</b> (tick appropriate box) Radiata <input type="checkbox"/> Steel <input type="checkbox"/> Douglas fir <input type="checkbox"/> Concrete block <input type="checkbox"/> Other <input type="checkbox"/> (state) ..... Was the wall framing precut or prenailed ? Yes / No (circle one)																																																																
<b>Framing timber treatment</b> Untreated kiln dry <input type="checkbox"/> Untreated wet <input type="checkbox"/> H1.2 <input type="checkbox"/> T1.2 (orange) <input type="checkbox"/> H3.1 <input type="checkbox"/> Tick one or more ..... State where used (eg outer walls, subfloor, etc) .....																																																																
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Installer (name)	.....																																																															
<b>Noise Control</b> (circle one) Have you installed noise control products? Yes / No What type? .....																																																																
<b>Building wraps</b> <table style="width: 100%; border: none;"> <tr> <th style="width: 15%;"></th> <th style="width: 15%;">Flamestop</th> <th style="width: 15%;">Thermakraft</th> <th style="width: 15%;">Bitumac</th> <th style="width: 15%;">GIB underlay</th> <th style="width: 15%;">Greencap</th> <th style="width: 15%;">Pauloid</th> <th style="width: 15%;">Black Paper</th> <th style="width: 15%;">Other (state)</th> </tr> <tr> <td>Roof wrap</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Wall wrap</td> <td><input type="checkbox"/></td> <td>Tyvek <input type="checkbox"/></td> <td>Thermakraft coverup <input type="checkbox"/></td> <td>Framegard II <input type="checkbox"/></td> <td>Greenwrap <input type="checkbox"/></td> <td>Fastwrap <input type="checkbox"/></td> <td>Black Paper <input type="checkbox"/></td> <td>Other (state) <input type="checkbox"/></td> </tr> </table>											Flamestop	Thermakraft	Bitumac	GIB underlay	Greencap	Pauloid	Black Paper	Other (state)	Roof wrap	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wall wrap	<input type="checkbox"/>	Tyvek <input type="checkbox"/>	Thermakraft coverup <input type="checkbox"/>	Framegard II <input type="checkbox"/>	Greenwrap <input type="checkbox"/>	Fastwrap <input type="checkbox"/>	Black Paper <input type="checkbox"/>	Other (state) <input type="checkbox"/>																												
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<b>Wall cladding</b> State type (and approx % wall coverage) <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">Type .....</td> <td style="width: 20%;">% area.....</td> <td style="width: 50%;">eg fibre cement sheet, 75% also plywood, solid plaster(min 18mm), clay brick, 15% plaster on polystyrene, concrete cedar 10% block, PVC weatherboard, etc.</td> </tr> <tr> <td>Type .....</td> <td>% area.....</td> <td></td> </tr> <tr> <td>Type .....</td> <td>% area.....</td> <td></td> </tr> </table> If yes to Fibre Cement cladding what is the Manufacturer? (tick one or more) Hardies <input type="checkbox"/> BGC <input type="checkbox"/> CSR <input type="checkbox"/> PRIMA <input type="checkbox"/> Other <input type="checkbox"/> Fibre Cement Product used as (Circle one or more) Applied texture finish sheet, Flat sheet, FC plank, FC weatherboard/Linea If solid plaster, what backing? (circle one if solid plaster) fibre cement, plywood, paper, Triple S, block/brick, metal lathe										Type .....	% area.....	eg fibre cement sheet, 75% also plywood, solid plaster(min 18mm), clay brick, 15% plaster on polystyrene, concrete cedar 10% block, PVC weatherboard, etc.	Type .....	% area.....		Type .....	% area.....																																															
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<b>Roof cladding</b> Type ..... (or circle one) eg metal tiles, pre-painted corrugated, other steel profiles, concrete tiles, butyl, asphalt shingles, fibreglass shingles, etc.																																																																
<b>Wet wall linings</b> (Tick one or more in each row) <table style="width: 100%; border: none;"> <tr> <th style="width: 15%;"></th> <th style="width: 15%;">Formica Aquapanel</th> <th style="width: 15%;">Seratone</th> <th style="width: 15%;">Villaboard</th> <th style="width: 15%;">Hardies Hardiglaze</th> <th style="width: 15%;">Standard GIB</th> <th style="width: 15%;">GIB Aqualine</th> <th style="width: 15%;">Other</th> <th style="width: 15%;">(state)</th> </tr> <tr> <td>Bathroom</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>.....</td> </tr> <tr> <td>Laundry</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>.....</td> </tr> </table> Is fibre cement sheet flooring underlay used in the bathroom or laundry ? Yes/ No (circle one).											Formica Aquapanel	Seratone	Villaboard	Hardies Hardiglaze	Standard GIB	GIB Aqualine	Other	(state)	Bathroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	.....	Laundry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	.....																												
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<b>Energy efficiency</b> Tick if any of the following are being installed: <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Double glazing <input type="checkbox"/></td> <td style="width: 25%;">Solar water heaters <input type="checkbox"/></td> <td style="width: 25%;">Dual flush toilets <input type="checkbox"/></td> <td style="width: 25%;">efficient lights <input type="checkbox"/></td> <td style="width: 25%;">Energy Heat pump <input type="checkbox"/></td> <td style="width: 25%;">Low flow showers <input type="checkbox"/></td> <td style="width: 25%;">Built-in window vents <input type="checkbox"/></td> </tr> </table>										Double glazing <input type="checkbox"/>	Solar water heaters <input type="checkbox"/>	Dual flush toilets <input type="checkbox"/>	efficient lights <input type="checkbox"/>	Energy Heat pump <input type="checkbox"/>	Low flow showers <input type="checkbox"/>	Built-in window vents <input type="checkbox"/>																																																
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<b>Type of Builder</b> How many houses or dwelling units does your company build per year (approx) . .....																																																																
<b>Construction Delays</b> If you signed a contract with the owner now, how many weeks before on-site work would start? .....wks																																																																

Thank You. Please fold this form, and freepost it in the return envelope

Oct-06

<b>NEW DWELLING</b> <b>Please give this form to the builder or designer to fill out for the building consent listed over the page.</b> <b>Number of dwelling units</b> <input type="text"/> <b>in this consent.</b> <span style="float: right;"><b>Contract value of work (incl sub-trades) \$</b> ..... <b>incl GST.</b></span>																																																	
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<b>Wall Framing</b> (tick appropriate box) Radiata <input type="checkbox"/> Steel <input type="checkbox"/> Douglas fir <input type="checkbox"/> Concrete block <input type="checkbox"/> Other <input type="checkbox"/> (state) ..... Was the wall framing precut or prenailed ? Yes / No (circle one)																																																	
<b>Heating Systems</b> <span style="float: right;">Heat pump <input type="checkbox"/> Wood/Pellet burner <input type="checkbox"/> Ducted central heating (Not including DVS or HRV) <input type="checkbox"/> Underfloor heating (waterpipe) <input type="checkbox"/> Underfloor heating (electric) <input type="checkbox"/> DVS/HRV <input type="checkbox"/> Gas <input type="checkbox"/></span> Tick one or more																																																	
<b>Floor joists</b> Tick one or more <input type="checkbox"/> None <input type="checkbox"/> Solid timber <input type="checkbox"/> Posistru <input type="checkbox"/> Hyjoist <input type="checkbox"/> Steel <input type="checkbox"/> Twinaplate <input type="checkbox"/> Origin (I beam) <input type="checkbox"/> Laminated veneer lumber <input type="checkbox"/> Other (state) <input type="checkbox"/> Hyne (I beam) <input type="checkbox"/> Joist depth .....mm .....mm .....mm .....mm .....mm .....mm .....mm .....mm .....mm .....mm																																																	
<b>Insulation</b> (tick one or more) <table style="width: 100%; border: none;"> <tr> <td style="width: 20%;">R value of insulation</td> <td style="width: 10%;"><input type="text"/></td> <td style="width: 10%;">Pink Batts</td> <td style="width: 10%;">Bradford Gold</td> <td style="width: 10%;">Premier Fibreglass</td> <td style="width: 10%;">Blown FG Rocwool</td> <td style="width: 10%;">Greenstuf (polyester)</td> <td style="width: 10%;">Other polyester</td> <td style="width: 10%;">Wool</td> <td style="width: 10%;">Other (state)</td> </tr> <tr> <td>Wall insulation</td> <td><input type="text"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Ceiling insulation</td> <td><input type="text"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Floor Insulation</td> <td><input type="text"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table> <p style="font-size: small;">Expol Warmfeet   Polystyrene Under slab   Cosy Floor   Sisalation Foil   Ribraft Floor   Cupolex   Other (state) .....</p> <p>Insulation Installer (name) <input type="text"/> Builder <input type="checkbox"/> Other, please specify <input type="text"/></p> <p>Please tick.....</p>										R value of insulation	<input type="text"/>	Pink Batts	Bradford Gold	Premier Fibreglass	Blown FG Rocwool	Greenstuf (polyester)	Other polyester	Wool	Other (state)	Wall insulation	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ceiling insulation	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Floor Insulation	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<b>Noise Control</b> Have you installed noise control products? (circle one) <b>Yes / No</b> If so then what type? (Tick one or more boxes) Pink Batts Silencer <input type="checkbox"/> Gib Noiseline <input type="checkbox"/> Other Gib Products <input type="checkbox"/> Bradford Gold <input type="checkbox"/> Pink Batts <input type="checkbox"/> Other Specify <input type="text"/>																																																	
<b>Building wraps</b> Roof wrap <input type="checkbox"/> Flamestop <input type="checkbox"/> Thermakraft <input type="checkbox"/> Bitumac <input type="checkbox"/> Greencap <input type="checkbox"/> Pauloid <input type="checkbox"/> Black Paper <input type="checkbox"/> Other (state) <input type="checkbox"/> Diflex 130 <input type="checkbox"/> Tekton <input type="checkbox"/> Home RAB <input type="checkbox"/> Wall wrap (tick one or more) <input type="checkbox"/> Flamestop <input type="checkbox"/> Tyvek <input type="checkbox"/> Thermakraft <input type="checkbox"/> Framagard <input type="checkbox"/> Greenwrap <input type="checkbox"/> Fastwrap <input type="checkbox"/> Black Paper <input type="checkbox"/> Other (state) <input type="checkbox"/> Diflex 130 <input type="checkbox"/> Tekton <input type="checkbox"/> Home RAB <input type="checkbox"/>																																																	
<b>DPC</b> What DPC products have you installed? <input type="checkbox"/> Damp-a-thene <input type="checkbox"/> Mathiod <input type="checkbox"/> Supercourse <input type="checkbox"/> Other, specify <input type="text"/>																																																	
<b>Flashing Tapes</b> What flashing tapes are installed? <input type="checkbox"/> Weatherseal <input type="checkbox"/> Aluband <input type="checkbox"/> Tyvek Flexwrap <input type="checkbox"/> Protectowrap <input type="checkbox"/> Other, specify <input type="text"/>																																																	
<b>Wall cladding</b> <span style="float: right;">State type (and approx % wall coverage)</span> <table style="width: 100%; border: none;"> <tr> <td>Type .....</td> <td>% area.....</td> <td>eg fibre cement sheet, 75%</td> <td>also plywood, solid plaster(min 18mm),</td> </tr> <tr> <td>Type .....</td> <td>% area.....</td> <td>clay brick, 15%</td> <td>plaster on polystyrene, concrete</td> </tr> <tr> <td>Type .....</td> <td>% area.....</td> <td>cedar 10%</td> <td>block, PVC weatherboard, etc.</td> </tr> </table> <p style="text-align: center; font-size: small;">Hardies <input type="checkbox"/> BGC <input type="checkbox"/> CSR <input type="checkbox"/> PRIMA <input type="checkbox"/> Other <input type="checkbox"/> Eterpan <input type="checkbox"/></p> <p>If Fibre Cement cladding is used, who is the Manufacturer? (tick one or more) <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>Fibre Cement Product used as (Circle one or more) Applied texture finish sheet, Flat sheet, FC plank, FC weatherboard/Linea</p> <p>If solid plaster, what backing? (circle one if solid plaster) fibre cement, plywood, paper, Triple S, block/brick, metal lathe</p>										Type .....	% area.....	eg fibre cement sheet, 75%	also plywood, solid plaster(min 18mm),	Type .....	% area.....	clay brick, 15%	plaster on polystyrene, concrete	Type .....	% area.....	cedar 10%	block, PVC weatherboard, etc.																												
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Type .....	% area.....	cedar 10%	block, PVC weatherboard, etc.																																														
<b>Roof cladding</b> <span style="float: right;">Type ..... (or circle one)</span> eg metal tiles, pre-painted corrugated, other steel profiles, concrete tiles, butyl, asphalt shingles, fibreglass shingles, etc.																																																	
<b>Windows</b> Please tick what windows are used <input type="checkbox"/> Timber <input type="checkbox"/> Aluminium <input type="checkbox"/> PVC plastic <input type="checkbox"/> Steel <input type="checkbox"/> Other (state).....																																																	
<b>Exterior doors</b> Please tick what exterior doors are used (include entry/exit, french and sliding doors) <input type="checkbox"/> Timber <input type="checkbox"/> Aluminium <input type="checkbox"/> Composite (timber and aluminium together) <input type="checkbox"/>																																																	
<b>Fascia</b> What type of material was used? (tick one) <input type="checkbox"/> Timber Board <input type="checkbox"/> Metal <input type="checkbox"/> Other, State <input type="text"/>																																																	
<b>Wet wall linings</b> (Tick one or more in each row) <table style="width: 100%; border: none;"> <tr> <td style="width: 20%;">Formica Aquapanel</td> <td style="width: 10%;">Seratone</td> <td style="width: 10%;">Villaboard</td> <td style="width: 10%;">Hardies</td> <td style="width: 10%;">Hardiglaze</td> <td style="width: 10%;">Standard GIB</td> <td style="width: 10%;">GIB Aqualine</td> <td style="width: 10%;">Other, specify</td> <td style="width: 10%;">Timber</td> </tr> <tr> <td>Bathroom</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Laundry</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table> <p>Is fibre cement sheet flooring underlay used in the bathroom or laundry ? Yes/ No (circle one).</p>										Formica Aquapanel	Seratone	Villaboard	Hardies	Hardiglaze	Standard GIB	GIB Aqualine	Other, specify	Timber	Bathroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Laundry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>													
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<b>Energy efficiency</b> <span style="float: right;">Tick if any of the following are being installed:</span> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%;">None</td> <td style="width: 10%;">Solar water heaters</td> <td style="width: 10%;">Dual flush toilets</td> <td style="width: 10%;">Efficient lights</td> <td style="width: 10%;">Energy Heat pump</td> <td style="width: 10%;">Low flow showers</td> <td style="width: 10%;">Sliding air vents built into window frame</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>										None	Solar water heaters	Dual flush toilets	Efficient lights	Energy Heat pump	Low flow showers	Sliding air vents built into window frame	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																										
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																											

Thank You. Please fold this form, and freepost it in the return envelope

Oct-08

NEW DWELLING									
<b>Please give this form to the builder or designer to fill out for the building consent listed over the page.</b> Number of dwelling units in this consent <input type="text"/> Contract value of work (incl sub-trades) \$..... Incl GST.									
<b>Floor Areas and Ceiling Height</b>		Total Floor Area <input type="text"/> Sq metres (include attached garage, exclude decks). <div style="display: flex; justify-content: space-between;"> <div> <b>Partideboard</b>            Ground level <input type="text"/> Sq m            First level <input type="text"/> Sq m            2nd or more levels <input type="text"/> Sq m         </div> <div> <b>Plywood</b>  <input type="text"/> Sq m  <input type="text"/> Sq m  <input type="text"/> Sq m         </div> <div> <b>Strip timber (not overlay exclude decks)</b>  <input type="text"/> Sq m  <input type="text"/> Sq m  <input type="text"/> Sq m         </div> <div> <b>Strandboard</b>  <input type="text"/> Sq m  <input type="text"/> Sq m  <input type="text"/> Sq m         </div> <div> <b>Concrete</b>  <input type="text"/> Sq m  <input type="text"/> Sq m  <input type="text"/> Sq m         </div> <div> <b>Height of level to ceiling</b>  <input type="text"/> metres  <input type="text"/> metres  <input type="text"/> metres         </div> </div>							
<b>Building Envelope Risk Score and Wind Zone</b> What is the risk score (enter score for EACH elevation) North <input type="text"/> West <input type="text"/> South <input type="text"/> East <input type="text"/> What is the wind zone (tick one box) Low <input type="checkbox"/> Medium <input type="checkbox"/> High <input type="checkbox"/> Very High <input type="checkbox"/> Extra High <input type="checkbox"/>									
<b>Wall Framing</b> (tick appropriate box) Radiata <input type="checkbox"/> Steel <input type="checkbox"/> Douglas Fir <input type="checkbox"/> Concrete Block <input type="checkbox"/> Solid Wood <input type="checkbox"/> Other <input type="text"/> (state)..... Was the wall framing precut or prenailed? Yes / No (circle one)									
<b>Floor Joists</b> (tick one or more) <div style="display: flex; justify-content: space-between;"> <div>           None <input type="checkbox"/>            Joist depth: <input type="text"/> mm         </div> <div>           Solid Timber <input type="checkbox"/>            Posistrut <input type="checkbox"/>            Hyjoist <input type="checkbox"/>            Steel <input type="checkbox"/>            Twinaplate <input type="checkbox"/>            Hyne (I beam) <input type="checkbox"/>            LumberworX <input type="checkbox"/>            Other state <input type="text"/> </div> </div>									
<b>Insulation</b> (tick one or more) <div style="display: flex; justify-content: space-between;"> <div>           Insulation R Value            Wall insulation <input type="text"/>            Ceiling insulation <input type="text"/> </div> <div>           Pink Batts <input type="checkbox"/>            Bradford Gold <input type="checkbox"/>            Premier <input type="checkbox"/>            Earthwool <input type="checkbox"/>            Greenstuf <input type="checkbox"/>            Polyester <input type="checkbox"/>            Wool <input type="checkbox"/>            Polystyrene <input type="checkbox"/>            Other (state) <input type="text"/> </div> </div> Is the floor insulated? (circle one) Yes / No If yes, what floor insulation was used? <div style="display: flex; justify-content: space-between;"> <div>           Expol <input type="checkbox"/>            Warmfeet <input type="checkbox"/>            Floor insulation <input type="text"/> </div> <div>           Polystyrene (not Polythene) <input type="checkbox"/>            Under Slab <input type="checkbox"/>            Snug Floor <input type="checkbox"/>            Sisolation <input type="checkbox"/>            Ribraft <input type="checkbox"/>            Cupolex <input type="checkbox"/>            Other (state) <input type="text"/> </div> </div> Insulation Installer (name) <input type="text"/>									
<b>Window Frames</b> What are the window frames made of? Aluminium <input type="checkbox"/> Thermally broken aluminium <input type="checkbox"/> PVC <input type="checkbox"/> Timber <input type="checkbox"/> Other <input type="text"/> (state)..... Are windows double glazed? (circle one) Yes / No / Unsure Do the windows have low-e panes and/or Argon gas fill? (Circle one) Yes / No / Unsure									
<b>Noise Control</b> Have you installed noise control products? (circle one) Yes / No If so, then what type? (tick all that apply) <div style="display: flex; justify-content: space-between;"> <div>           Pink Batts <input type="checkbox"/>            Silencer <input type="checkbox"/>            Other (please specify) <input type="text"/> </div> <div>           GIB Products <input type="checkbox"/>            Noiseline <input type="checkbox"/>            Other GIB Products <input type="text"/> </div> <div>           Bradford Gold <input type="checkbox"/>            Pink Batts <input type="checkbox"/>            Polyester <input type="checkbox"/> </div> </div>									
<b>Building Wraps</b> (tick one or more) <div style="display: flex; justify-content: space-between;"> <div>           Flamestop <input type="checkbox"/>            Roof Wrap <input type="checkbox"/>            Wall Wrap <input type="checkbox"/> </div> <div>           Thermakraft <input type="checkbox"/>            Tyvek <input type="checkbox"/>            Thermakraft <input type="checkbox"/> </div> <div>           Bitumac <input type="checkbox"/>            Coverup <input type="checkbox"/>            Home RAB <input type="checkbox"/> </div> <div>           CoverTek <input type="checkbox"/>            Fastwrap <input type="checkbox"/>            Other <input type="text"/> </div> <div>           Pauloid <input type="checkbox"/>            Tyvek Supro <input type="checkbox"/>            Watergate <input type="checkbox"/> </div> <div>           Other (state) <input type="text"/>            Tekton <input type="checkbox"/>            Ecoply Barrier <input type="checkbox"/> </div> <div>           Watergate plus <input type="checkbox"/>            Gold <input type="checkbox"/>            Bitumac <input type="checkbox"/> </div> <div>           Tekton <input type="checkbox"/>            Pauloid <input type="checkbox"/> </div> </div>									
<b>DPC</b> What DPC products have you installed? Damp-a-thene <input type="checkbox"/> Mathoid <input type="checkbox"/> Supercourse <input type="checkbox"/> Other, Specify: <input type="text"/>									
<b>Flashing Tapes</b> What flashing tapes are installed? Weatherseal <input type="checkbox"/> Aluband <input type="checkbox"/> Tyvek Flexwrap <input type="checkbox"/> Protectowrap <input type="checkbox"/> Flameflash <input type="checkbox"/> Other, Specify: <input type="text"/>									
<b>Wall Cladding</b> State type and approximate % wall coverage e.g. Fibre cement sheet, 75% Other examples include: plywood sheet, plaster on claybrick, steel zincalume, fibre cement plank, Clay Brick, 15% glazing, EIFS, aerote concrete panel, radiata WB, linea WB etc. Cedar WB, 10% Type <input type="text"/> % area <input type="text"/> Type <input type="text"/> % area <input type="text"/> Type <input type="text"/> % area <input type="text"/> If Fibre Cement cladding is used, who is the manufacturer? Hardies <input type="checkbox"/> BGC <input type="checkbox"/> CSR <input type="checkbox"/> PRIMA <input type="checkbox"/> Other <input type="text"/> Eterpan <input type="checkbox"/> Fibre Cement product used as Applied texture finish sheet, Flat sheet, Linea (16mm), FC plank (7.5mm) If solid plaster, what backing was used? Fibre cement, plywood, paper, Triple S, block/brick, metal lathe									
<b>Roof Cladding</b> What roof cladding was used? (circle one or state below) metal tiles, corona shake, pre-painted corrugated, trough zincalume, corrugated zincalume, other steel profiles, concrete tiles, asphalt shingles, butyl, other (state) <input type="text"/> If roof is metal tiles, specify manufacturer name: <input type="text"/> Is the majority of the roof slope: 3-7.9° <input type="checkbox"/> 8-9.9° <input type="checkbox"/> 10-11.9° <input type="checkbox"/> 12°+ <input type="checkbox"/> Don't Know <input type="checkbox"/>									
<b>Wet Wall Linings</b> (tick one or more in each row) <div style="display: flex; justify-content: space-between;"> <div>           Bathroom <input type="checkbox"/>            Laundry <input type="checkbox"/> </div> <div>           Formica Aquapanel <input type="checkbox"/>            Seratone <input type="checkbox"/>            Pre-Formed <input type="checkbox"/> </div> <div>           Villaboard <input type="checkbox"/>            Hardiglaze <input type="checkbox"/>            Built insitu <input type="checkbox"/> </div> <div>           Hardies <input type="checkbox"/>            Standard GIB <input type="checkbox"/>            Ceramic Tiled <input type="checkbox"/> </div> <div>           GIB Aqualine <input type="checkbox"/>            Other specify <input type="text"/> </div> <div>           Timber <input type="checkbox"/>            Horizon <input type="checkbox"/> </div> </div> Has the shower been: <input type="checkbox"/> Is fibre cement sheet flooring underlay used in the bathroom or laundry? Yes / No If yes, type of underlay: <input type="text"/> Have tiles been used in the bathroom outside the shower? Yes / No (circle one)									
<b>Ceiling Linings and Battens</b> 10mm plasterboard <input type="checkbox"/> 13mm plasterboard <input type="checkbox"/> Ultralime <input type="checkbox"/> Tiles <input type="checkbox"/> Other <input type="text"/> Ceiling Linings (tick one or more) Ceiling Battens (circle one): timber or metal Are there any downlights recessed in to ceiling? Yes / No (circle one) IF YES, how many <input type="text"/>									
Thank You. Please fold this form, and freepost it in the return envelope <span style="float: right;">Aug-12</span>									