

## **REGULATORY IMPACT STATEMENT: RESTRICTED WORK REGULATIONS AND LICENCE CLASSES FOR BUILDING PRACTITIONERS**

### **STATEMENT OF THE NATURE AND MAGNITUDE OF THE PROBLEM AND THE NEED FOR GOVERNMENT ACTION**

There are certain deep seated behaviours in the building industry stemming from:

- many years of reliance on an external compliance regime (building inspectors) where quality standards have not been internalised
- the price driven tender based building procurement process
- an extensive use of sub-contracting to manage the volatility of demand characteristic of this industry, but which makes it difficult to hold sub-contractors accountable for their work.

The Building Act 2004 (“the Act”) introduced a range of measures to strengthen the regulatory regime for building work and to address the major systemic issues which led to major building failure which occurred from the mid 1990s to 2001, and to significantly reduce the risks of building failure in the future. It includes the designation of “restricted building work” which must be carried out or supervised by a “licensed building practitioner” (LBP).

Key factors contributing to the introduction of licensing are: a performance based building code needs highly skilled and competent designers; poor quality site management is a major contributor to building failure, particularly at junctions of different systems, materials, and processes; the industry has a low level of vocational education and training with about 50% of architectural designers, 35% of builders and carpenters, and 20% of bricklayers, 13% of plasterers and 11% of roofers holding relevant qualifications. All of these factors are compounded by an industry subject to ongoing and quite rapid change which it is poorly equipped to respond to, particularly given its low levels of vocational education and training.

To introduce this regime, the scope of *restricted building work* must be prescribed by regulation under s 84 and *classes of building practitioner licences* must be designated by regulation under s 285. The Act provides for this to be implemented from 30 November 2009, pursuant to s 2(3) of the Act. Regulations will also be required to establish complaints and disciplinary processes and licence fees. There will be further Regulatory Impact Statements once this work has been completed. The competency standards and assessment criteria for each licence class are rules to be established by the Building Practitioners Board and approved by the Minister.

It is estimated that a total of 28,000 people will need to be licensed. In order to achieve this, voluntary licensing will need to commence by November 2007.

### **STATEMENT OF THE PUBLIC POLICY OBJECTIVE(S)**

The objectives of the LBP regime are to raise the quality of, and consumer confidence in, the building and construction industry by:

- improving the competence of people carrying out restricted building work by setting minimum competence standards
- strengthening accountability of individual building practitioners
- improving transparency of responsibility for building quality
- focusing on the production of quality buildings that are healthy and safe.

**STATEMENT OF FEASIBLE OPTIONS (REGULATORY AND/OR NON-REGULATORY) THAT MAY CONSTITUTE VIABLE MEANS FOR ACHIEVING THE DESIRED OBJECTIVE(S)**

**Status Quo**

Other than registered architects, chartered engineers, plumbers and electricians, there are no licences currently covering the building industry. Designers, builders and associated occupations are subject to normal business law requirements, general consumer protection legislation, and implied warranties as to their work under the Act. They are also expected to work to the standards and requirements of the Building Code, building consents and code compliance certificates issued by territorial local authorities/building consent authorities.

There are a number of professional, trade and industry associations, such as the Registered Master Builders' Association, Certified Builders Association of New Zealand, New Zealand Building Industry Federation, Building Industry Council, New Zealand Institute of Building, Roofing Industry of New Zealand, New Zealand Subcontractors' Federation and others. Membership levels vary considerably. While some have individual competency-based entry criteria, others apply criteria based on size of, and length of time in, business. Some of the associations operate disciplinary or dispute resolution processes while others do not. In addition, a significant number of practitioners are not members of any relevant association.

The other features of the status quo are contained in the problem section.

The industry is not well placed to deliver the policy objectives as the participants are fragmented into narrow interest groups that do not represent or reach enough practitioners. The status quo is therefore not preferred as it does not fully meet the public policy objectives.

**Preferred Option for Licence Classes**

Thirteen licence classes are proposed. They are the result of extensive consultation with industry practitioners and represent well understood skills and roles. Taken together, they cover design and construction of building work critical to the integrity of buildings and the health and safety of users. They are:

*Whole of Building*

- Design Levels One, Two and Three
- Site Levels One, Two and Three

*Specialist and Trade*

- Carpentry
- External Plaster
- Roofing
- Brick and Blocklaying
- Concrete Structure
- Steel Structure
- Building Services

*Building categorisation for Design and Site Licences*

There are three proposed competence levels for Design and Site licences respectively. The competence levels correspond to three building categories.

A categorisation methodology has been developed to sort buildings into three levels of complexity to cover a broad range of building types, with a corresponding level of design and site licences. See Appendix 1 for further details.

Building Category		Design Lead Licence Level		Site Lead Licence Level	
1	Straightforward houses (low risk design, masonry/timber-framed)	1	e.g. builder with design knowledge	1	e.g. experienced house builder
2	Moderately complex commercial or residential buildings	2	e.g. experienced architectural designer	2	e.g. experienced large-project builder
3	Large or publicly important buildings	3	e.g. registered architect, chartered professional engineer	3	e.g. experienced construction manager

Registered Architects under the Registered Architects Act 2005 and Chartered Professional Engineers under the Chartered Professional Engineers of New Zealand Act 2002 would automatically qualify for a Design Level 3 Licence pursuant to ss 291 and 285 of the Act. These licensing regimes have standards, assessment, accountability and disciplinary arrangements comparable to the arrangements for licensed building practitioners.

### Preferred Option for Restricted Work

#### *Significant building projects*

Licensed building practitioners shall only be required for significant building projects, such as:

- construction of a new occupied building, e.g. a house, a workplace, a building for public use
- changing the use of a building, e.g. from offices to apartments, from a shop to a night club, from a single dwelling to multiple flats
- extending an occupied building, e.g. adding a bedroom, adding an extra floor.

Work that does not need a building consent, work on buildings that are only intermittently occupied, and small alterations to an existing building would be exempt from the mandatory requirement to use LBPs.

The current definition of restricted work in the Act will need to be modified in order to limit its application to, and to mandate licensed practitioners for the design and supervision of construction of significant building projects.

### Regulatory Options on Scope of Licence Classes, Restricted Building Work and Mandated Use of LBPs

Three options have been considered.

#### **Option 1: Design and Site Roles only for all Significant Building Work**

Only Site and Design licences would be mandatory for all significant building projects. All other specialist and trade licences would be optional. Industry and consumers would drive the uptake of all other licences. This would require licensing approximately 10,000 LBPs.

#### **Option 2: Design, Site and specified trade licences for higher risk components of all Significant Building Work**

Design, Site, and specified trade licences to construct or supervise critical components where there has been the strongest evidence of building failure, would be mandatory for all significant building projects. This option would require licensing around 19,000 LBPs.

After extensive and detailed consultation with industry groups, neither of these options is recommended as they are most unlikely to trigger sufficient uptake of the full range of trade and specialist licences. It is highly likely that Site leads will only use licensed trades people and specialists where they have to and will continue to use semi-skilled and unskilled labour wherever possible. Those builders who do want to provide quality work and use skilled and competent sub-trades will have to compete against substantial sections of the industry which are not so committed. The accountability regime may not be sufficiently strong to incentivise Site leads to behave differently. Key industry groups are also concerned that the accountability carried by the two mandatory licences, and particularly the Site lead, would make practitioners reluctant to take up a licence.

### **Option 3 (Preferred Option): Design, Site and Construction Work on Structure and Envelope for all Significant Building Work**

Design and Site leads will be mandatory for all significant building work. Construction work on the structure and envelope of a building will be restricted work. A Site lead would certify that the building as a whole meet consent requirements, and LBP's with the appropriate trade or specialist licences would supervise or undertake work relating to the structure or envelope of a building.

This option is the optimal approach for driving the uptake of the Trade and Specialist licences for aspects of buildings which are critical to the integrity of the building and the health and safety of occupants. In turn, this will require the industry to make a much greater commitment to formal education and training for these trades and specialists, including offering apprenticeships.

Under this option, approximately 28,000 practitioners will need to be licensed to cover the proposed Design and Site lead roles and the trades people and specialists needed to supervise or undertake restricted work. To address risks around licence classes' take up and the impact on the ability of the industry to maintain current levels of business activity, which is stretched by current demand and labour shortages, it is proposed that:

- Design lead for building categories one, two and three and Site lead for building categories one, two and three be mandatory at **30 November 2009**
- trade and specialist LBP's for structure and envelope building work be mandatory at **30 November 2011**.

Enabling voluntary licensing from November 2007 and the phased introduction of the licence classes over four years provides individuals and companies with reasonable time frames to organise necessary training, upskilling, and assessment requirements.

### **STATEMENT OF THE NET BENEFIT OF THE PROPOSAL, INCLUDING THE TOTAL REGULATORY COSTS (ADMINISTRATIVE, COMPLIANCE AND ECONOMIC COSTS) AND BENEFITS (INCLUDING NON-QUANTIFIABLE BENEFITS), AND OTHER FEASIBLE OPTIONS**

#### ***Government and Territorial Authorities***

##### *Training and education costs*

Participation in tertiary education and training is likely to increase as new entrants to the building industry seek qualifications which are relevant to licensing. This will affect spending on Vote: Education. The estimates pertain solely to that caused by the behaviour of future industry entrants to the industry.

If a licence assists career advancement, and if the major route to licensing is holding a recognised national qualification, then it is likely that there will be a rise in the number of future entrants into the industry who obtain a qualification. Licensing is a stronger incentive to train in the future than has existed to date.

The extent to which behaviour might change has been modelled using training rates in New South Wales, where the building industry has been licensed since 1990. New Zealand's 2004 training rates are 3.8 % for carpenters, 0.5% for bricklayers and 1.8% for all trades surveyed. The comparable rates in New South Wales are 4.3%, 1.4% and 2.8% respectively. Because training costs include the overheads for those who enrol but do not graduate, the extra cost which non-completers add to the cost of each graduate has also been included in the modelling. It is assumed that graduates of trade qualifications currently carry with them their cost share of about 70% of trainees who do not complete. The annual cost of additional graduates at 30% completion is estimated to be \$9.28 million.

Assuming completions will increase markedly under licensing – trainees currently can get well-paid work in the industry whether or not they complete, but in the future they will have an immediate career need to be qualified – to 75% in all occupations, the annual cost of these additional graduates is estimated to be \$4.59 million. See Appendix 2. Furthermore, once phasing is considered, the estimate of the likely extra cost to government decreases. This is because participation has already increased in many of the trades. The continuing rise in trainee numbers in trades (especially in carpentry) suggests that much of the increase is already occurring to bring the training rate up to the 'future' rate. Many of the extra costs of licensing may already be in the system, and most of those that are not, are unlikely to be a cost to government until at least the 2009 academic year.

#### *Impact on Student Loan Scheme*

Most of the expected extra trainees in occupations to be licensed will be through industry training organisations and will not access the student loan scheme. The main impact on the student loan scheme will come from those students doing full time or part-time courses at TEOs, approved for student loans by the TEC. When the future training rate is reached, this represents about 133 design students, 78 carpentry and 158 in supervisory courses. Currently, about 74% of full-time, full-year students receive loans, and 15% of part-time students. Using those proportions, and assuming that the students borrowed the maximum allowable, uptake costs to the student loan scheme could be \$2.64 million annually.

This costing does not, however, take into account possible borrowing by students who do not complete the courses. If they borrowed the maximum, in the same proportion as graduates, the costs to the student loan scheme could be another \$4.38 million per annum, on top of the \$2.64 million spent by graduates, making total student (both graduates and non-completers) borrowing of around \$7.02 million annually.

#### *Territorial Local Authorities / Building Consent Authorities*

Territorial Local Authorities (TLAs) / Building Consent Authorities (BCAs) will have to amend and expand systems and documentation to accommodate the requirements under the Act to record LBPs associated with a building consent and certification by LBPs required for a code compliance certificate. This is not likely to be onerous and is also likely to be required as part of licensing and accreditation for BCAs. Licensing will help TLAs identify appropriate LBP in the building consent process and provide transparency for building officials as to which LBP is responsible for work they are inspecting, as details for LBPs must be made

available in a publicly searchable database. As licensing will be implemented alongside licensing and accreditation for BCAs, a number of the costs arising from these two measures will be included in building consent fees, and a portion of those costs will be directly attributable to licensing building practitioners.

Proceedings under the Act may be instituted against unlicensed persons who carry out or supervise restricted building work. Enforcement may be carried out by central government (Department of Building and Housing), local government, industry organisations or even consumers. Where the main enforcement responsibility may lie is still to be determined. If it is assumed by central or local government, there will be associated costs for investigations and prosecutions.

The administration of the licensing system will be funded through fees and levies so there are no direct costs to government. The identification of significant building work as restricted work and the proposed licence classes directly address the government's policy objectives of improving the quality of building work and the competence of building practitioners. The preferred option should, over time, also reduce the risk of liability and need for insurance currently carried by TLAs and BCAs.

### ***Building industry***

The proposed Design, Site and Trade licence classes cover skill sets that are commonly used across all building categories for restricted work and well understood by the industry. The majority have established qualifications and training pathways. There are likely to be sufficient numbers of licensees to justify the costs of establishing and maintaining a licence class.

Benefits of the preferred option include upskilling and improved assessment and education efforts. The proposed boundary for restricted work should drive a comprehensive uptake of key trade licences and provide a core of licensed practitioners available to site leads to help them reduce their direct accountability. By not restricting all building work to LBPs, flexibility is preserved for DIY activities and for the industry to determine usage of non-mandatory Trade and Specialist licences.

Practitioners with Trade and Specialist licences would be licensed to work across all building categories, but would need to recognise the limits of their own competence - a commercial carpenter may not have the necessary knowledge to undertake residential work (or vice versa). There will be no restriction on the number of licence classes an individual may hold. People will still be able to enter and work in the industry without a licence but when doing restricted work, they must be supervised by a LBP. Licensing may attract better educated entrants. It also risks older and unqualified practitioners finding assessment or upskilling onerous and exiting the industry, exacerbating the industry's current skills and labour shortages. Building, construction and development companies who employ or engage building practitioners to carry out or supervise restricted building work may need to pay higher wages and contribute to education or upskilling costs to retain or recruit qualified staff. Tendering processes may become more detailed and therefore cost more.

Insurance premiums may be higher. The proposed licensing regime will make very transparent who has taken responsibility for what. There is a strong perception in the industry that this will increase the liability risk for LBPs. Currently, most building practitioners have difficulty obtaining indemnity insurance. Unless this is resolved, builders may be reluctant to apply for Site licences particularly.

The Department is investigating the overall benefits, costs, risks and feasibility of increasing the availability of professional indemnity insurance for the building industry, and the options for doing so.

#### Assessment Costs

Practitioner-based working parties were established for each proposed licence class and using an assessment framework developed in consultation with key sector groups, considered possible ways assessment for licensing could be approached. The criteria for the assessment process were practicability, affordability and accessibility, with sufficient robustness to provide credibility. From this work, the following assessment framework and model was developed.

- All applicants will complete an assessment that demonstrates that they have a broad knowledge of licensing responsibilities, Building Code and critical building practices.
- All applicants will complete a technical C.V. setting out relevant qualifications held and a verified work history demonstrating competence. This will be the subject of a desk top review.
- A significant number of applicants whose C.V does not contain sufficient evidence of competence will have a more in-depth assessment such as on-site observation and conversation.

The working parties estimated the ratios of practitioners in each occupational group who would be likely to qualify for a licence based on a generic/desk top assessment of formal qualifications or evidence of competence – around 11,340 (42%) of applicants at “low” cost; and those needing more in–depth assessment – around 15,660 (58%) applicants at “high” cost. These ratios were then applied to the likely numbers to be licensed over the 2007 to 2011 phasing-in period.

The model was then costed with assistance from a national education provider experienced in delivering vocational training. The costs are based on two scenarios – both include set up and development costs, overheads, delivery and annual moderation costs:

- Scenario one, based on a standard industry delivery rate for assessment of \$75.00 per hour, gives a cost of around \$350 to \$650 per applicant.
- Scenario two, based on using industry assessors at no charge for the actual delivery of the assessments, gives a cost of around \$250 per applicant. By removing the actual delivery cost of assessments, both low and high cost applicants face the same charge in this scenario.

There is no direct cost to government for the transitional assessment process - all identified costs have been included in the above costs and these will be met by the applicants themselves.

#### Upskilling

It is estimated that around 4,800 (17%) of the 28,000 applicants may need additional training to address identified skill gaps to meet licensing standards. It is expected that this training will be primarily theory based as the deficit is more likely to be in the knowledge and understanding that underpins building theory and technology. Such courses may be quite short (perhaps equivalent to a one-week course). The estimated full cost of such a course is around \$900 per applicant. These courses will probably be delivered by distance or on-line learning or through industry organisations or suppliers.

### Licence fees

In addition to the assessment costs, applicants or their employers will now need to pay a licence fee to cover the administrative costs of the licensing system. Based on the fees charged for electrical workers (\$103 initial registration, \$92 per annum for practising certificate), plumbers (\$75 for initial registration, \$75 per annum for practising certificate), it is estimated that the annual licence fee for building practitioners will be between \$100 to \$200 per licence. All licences will cost the same. Practitioners wishing to hold multiple licences will incur extra costs. However, it is likely that complementary licence “packages” (eg design 1, site 1 and carpentry) may be discounted but this level of costing is not yet determined.

The aggregate costs to practitioners are:

<b>Costs</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Assessment Costs (\$m)	\$3.43	\$3.48	\$3.03	\$4.00	\$13.94
Licence Costs (\$m)	\$1.03	\$1.05	\$0.91	\$1.21	\$4.20
Upskilling Costs (\$m)	\$1.48	\$1.49	\$0.49	\$0.88	\$4.34
<b>Total costs to practitioners (\$m)</b>	<b>\$5.94</b>	<b>\$6.02</b>	<b>\$4.43</b>	<b>\$6.09</b>	<b>\$22.48</b>

The possible costs to an individual practitioner are:

<b>Costs for individual practitioner</b>	<b>Low</b>	<b>High</b>	<b>Upskill</b>
Assessment Costs	\$250	\$650	\$650
Licence Costs (per licence)	\$150	\$150	\$150
Upskilling Costs (if needed)	\$0	\$0	\$900
<b>Total costs</b>	<b>\$400</b>	<b>\$800</b>	<b>\$1700</b>

The assessment costs to practitioners will decline over time as an increasing percentage of applicants will have qualifications which are aligned to licensing standards. Other costs will include maintaining on-going competency for licensing and familiarisation with licensing and restricted work requirements. The Building Practitioners Board will promulgate rules for proving currency of knowledge and skills, which will probably vary for each licence. The Minister for Building Issues will approve these rules.

### Costs to trainee building practitioners

Most of the extra trainees will be working through industry training providers, in particular the Building and Construction Industry Training Organisation (BCITO), which charges trainees by the year. This may include current unqualified practitioners who return to train for qualifications, rather than use the upskilling and in-depth assessment route. The total cost to a carpentry trainee, as reported by the BCITO, if the course takes four years, averages \$2,600. For plasterers the total cost is up to \$1,000, and for bricklayers, about \$1,200. For those studying trade courses at level 4, at tertiary institutions, a range of current costs for level 4 Carpentry as advertised on TEO websites was examined. Total costs to a student ranged from \$2,800 up to \$8,000, with an average of about \$4,000 – all depending on how many years a student takes to complete the course. The total tuition fee for students doing architectural technology at a TEO is currently \$8,800 for the two-year course.

Tuition costs for students doing the new supervisory courses have, of course, not been set. It is assumed that costs at TEOs will be similar to those for design students since the courses are assumed to be just one year, that is \$4,400. For trainees doing the courses through an ITO, part-time over two years, total tuition fees will probably be about \$1,500.

**Insurance companies**

Insurance companies may develop or extend their business for building warranty, personal indemnity and other associated insurance products. This may also incur compliance costs as explained in the BCCS.

**DIYers/owner-builders**

The definition of restricted building work as significant building projects only means that there is still a lot of building work that DIYers will be able to do without supervision. Consumers may still choose to use LBPs if they want assurance of competence and accountability. Examples of projects not requiring an LBP which a DIYer may do include:

- any work that does not need a building consent, such as painting and decorating, maintenance and repair, low fences, garden sheds, decks lower than 1 metre
- work on a building not intended for occupation as a residence, workplace or for public admission and is therefore unlikely to endanger people e.g. garages, farm buildings and sheds
- small alterations to an existing building such as replacing a window with a door, moving an internal partition, relining a house, or fitting a solar panel or free standing fire place.

Where a DIYer/owner-builder plans major alterations involving structure (ie load bearing walls) and envelope, changes of use for a building, or a new building, a Design lead will have to certify the plans meet the Building Code, and a Site lead and relevant Trade LBPs will have to supervise and certify the construction meets requirements for the issue of a code compliance certificate. This level of supervision will increase larger home building projects costs but should be offset over time by reduced BCA inspection costs. The requirements improve saleability and protect future owners.

There may be a flow-on effect for building supply companies servicing the DIY market. However, less than 16 % of the money that owner-occupiers spend per year on renovating, altering, decorating and improving their homes is spent on consented work. The preferred option will have no impact on non-consented work (ie over 80% of what DIYers do) and will only affect consented work that constitutes a significant building project.

**Consumers**

Consumers may face initial price increases as initial licensing costs are passed on, including through building consent fees, but there are long-term benefits (which are difficult to quantify) in improving building design, quality and durability and reducing the cost and time for re-work and repairs. Because of the long life-cycle of houses, quality remains a feature of the housing stock for a long time. Improving the quality of New Zealand's housing stock delivers society-wide benefits at individual, community and national levels.

Licensing should not make finding building practitioners to undertake significant building projects any more difficult once past the transition phase. One exception may be finding licensed designers in small towns and rural areas, where builders have typically provided basic design services. This may be alleviated by experienced builders also holding a Design One licence.

The benefits include a more competent, educated and trained workforce better able to respond to ongoing change. This will significantly reduce the likelihood of future systemic failure in the industry. The cost of remedying recent systemic failures has been estimated at \$1 billion. In addition to repair costs, there are wider economic costs associated with poor quality building – which are substantial and have not

been quantified – and there are significant negative social impacts, including possible health effects.

A more competent and educated workforce should in turn lead to a reduction in the costs of construction over time. For example:

- there is evidence that better quality design reduces construction costs (see Tilley, P. “Poor design and documentation hits project costs”, BUILD, January/February 2001: 48 – 50.)
- a reduction in the amount of re-work during construction (there is anecdotal evidence backed by some research that re-work is a significant problem in building work – see Josephson, P., Larsson, B., Li, H. “Illustrative Benchmarking Rework and Rework Costs in Swedish Construction Industry”, Journal of Management in Engineering, Vol. 18, No. 2, April 2002, pp. 76 – 83)
- a reduction in remedial work required over the life of the building.

A more accountable workforce with a greater willingness to accept responsibility for meeting standards rather than relying on inspection and compliance should lead to a reduction in inspection and compliance costs as Building Consent Authorities (BCAs) develop greater confidence in the industry. Regulatory authorities in British Columbia reported to New Zealand building officials that the introduction of occupational licensing for building practitioners, made in response to their building failures, has contributed significantly to improving the performance and changing the culture of the construction industry in that province. Increases in industry insurance premiums may also be passed on to consumers.

## **STATEMENT OF CONSULTATION UNDERTAKEN**

### **Stakeholder Consultation**

Industry consultation over the last 15 months has included public discussion document released in August 2004, followed by consultation meetings around the country with industry/stakeholder and consumer representatives. There was broad support for licensing but some concern about the details of the proposed licensing arrangement. The initial proposals were re-designed and discussed extensively with industry representatives and experts.

Since May 2005 when Ministers asked for further investigation of the costs and practicability of the proposals, the Department has investigated the costs and practicability of the proposed licence classes; undertaken further research on building failure; worked extensively with industry on implementation issues; trialled key aspects of the licensing regime with a number of BCAs and designers; undertaken further consultation with key sector groups on the shape of the proposed licensing regime. Industry groups consulted include the Registered Master Builders Federation; Certified Builders Association; NZ Institute of Building, NZ Institute of Architects; Institute of Professional Engineers; Association of Designers NZ; Designers Institute; Designers Association; Roofing Association; Cladding Institute; Masonry Trades Association.

All parties consulted agree with the licence classes but some, Registered Master Builders Federation and Certified Builders Association in particular, raised concerns about the definition of significant building work which they consider should include all or any work on a building's structure and envelope. This means that almost any building work beyond redecorating would be restricted to licensed builders. Such a restriction would raise costs significantly, severely curtail DIY activity, aggravate current labour shortages, and probably deliver only slightly more benefits than the preferred option.

### **Government Departments/Agencies Consultation**

Treasury, Ministry of Education, Department of Prime Minister and Cabinet, Tertiary Education Commission, Department of Labour, (who were represented on an interdepartmental working group on training and education costs). Other departments consulted were Ministry of Economic Development, Department of Conservation, Department of Internal Affairs, and Ministry of Consumer Affairs. No significant concerns were raised during this process.

### **BUSINESS COMPLIANCE COST STATEMENT**

Key compliance costs:

- familiarisation with licensing and restricted work requirements - approximately 42,000 companies/enterprises will need to update staff and systems to understand and manage the licensing and restricted work requirements (Statistics NZ - NZ Business Demographic Statistics February 2005)
- time away from business or work for practitioners undergoing assessment and for upskilling training estimated to be required by 17% (or 4,800) of possible applicants
- compilation of compliant curriculum vitae and other paperwork for licence application
- LBPs will be required to demonstrate continuing professional development to maintain their licence – and this will entail a cost to the individual practitioner of both money for courses or materials and time away from business or employment
- insurance issues – direct accountability and more transparency will increase incentives to carry or increase personal professional indemnity insurance
- employment issues – conditions of employment will change to reflect requirement to hold and maintain a licence, and take into account regulatory responsibilities over and above those to an employer
- insurance companies will be required to alter internal systems and forms for processing clients and claims.

Individual building practitioners – under the preferred option 28,000 people are likely to need to be licensed in order to run their own business or to pursue promotions and supervisory responsibilities in the industry.

A comprehensive communication and information strategy to provide information on

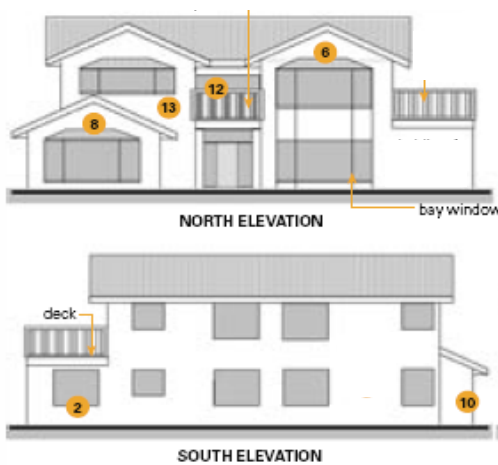
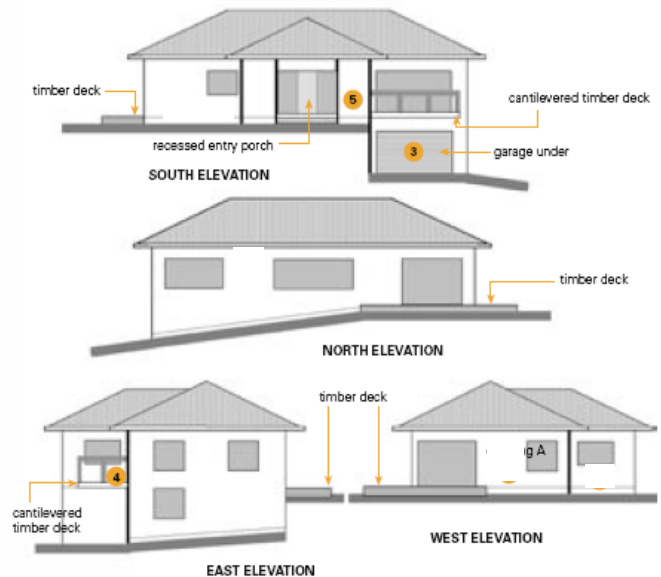
- what licensing means
- how to become licensed
- what work is restricted
- what work can and cannot be done by DIYers
- the coverage of each licence class.

The information will be delivered by fact sheets, Department of Building and Housing's website, industry and producer presentations, seminars for key stakeholders and material for the media.

## Appendix 1: Brief Summary of Building Categories

**Category One buildings are masonry or timber-framed houses with low-risk designs.**

Follow prescribed structural design standards, but can have engineered foundations, roof and lintels.  
Can have up to two households, but only if side-by-side.  
Low weathertightness risk for the building envelope.



**Example of Category Two house**

level one, or 100 people at level two. Tighter limits apply to sleeping occupants, and to crowds.

**Category Two covers a range of buildings from more complex houses, to moderate-sized multi-use buildings.**

Includes houses that have higher weathertightness risk, or that are not designed using prescribed structural design standards.

The highest occupied floor level can't be more than 10 m above the exit. The building can't have more than 500 people at ground level, 250 people at



**Example of Category Two building**

**Category Three covers a range of large or special-use buildings.**

Includes any building with an occupied floor more than 10 m above the exit, with occupant numbers above the Category Two limits, or with special uses.

Examples of occupant numbers that would make a building Category Three include:

- more than 50 sleeping people or 500 active people at ground level
- more than 25 sleeping people, or 250 active people one level above the ground
- more than 25 sleeping people, or 100 active people two levels above the ground
- any crowds two levels above the ground

Also includes any prisons, hospitals, high-hazard factories and warehouses, police stations, ambulance bays, Class I registered historic buildings, power stations, water and waste treatment buildings. (This is not a comprehensive list.)

NOTE: This document provides an indication of the types of buildings in each category only and does not constitute the full building categorisation methodology.

**APPENDIX 2: COSTING MODEL with non-completers taken into account**

<b>Proposed Licence Classes</b>	<b>Additional grads at future training rates</b>	<b>Total Cost of Additional Grads without non-completers counted</b>	<b>Total cost of additional grads at 30% completion rate (h)</b>	<b>Annual cost of additional grads at 30% completion rate</b>	<b>Total cost of additional grads at 75% completion rate</b>	<b>Annual cost of additional grads at 75% completion rate</b>
Design	133	\$2,323,244	\$4,785,883	\$2,392,941	\$2,694,963	\$1,347,482
Site Supervision(incl. Spec Clad)	165					
Site ITO	82	\$262,400	\$566,784	\$283,392	\$304,384	\$152,192
Site TEO	83	\$724,922	\$2,413,990	\$2,413,990	\$942,399	\$942,399
Carpentry	371					
Carpentry ITO	293	\$2,429,556	\$3,838,698	\$959,675	\$2,623,920	\$655,980
Carpentry TEO	78	\$1,185,444	\$2,015,255	\$671,752	\$1,315,843	\$438,614
Roofing	0					
External Plaster	31	\$116,560	\$251,770	\$125,885	\$135,210	\$67,605
Steel Construction Supervision	35					
Steel Construction ITO	18	\$57,600	\$124,416	\$62,208	\$66,816	\$33,408
Steel Construction TEO	17	\$148,478	\$494,432	\$494,432	\$193,021	\$193,021
Concrete Construction Supervision	76					
Concrete Construction ITO	38	\$121,600	\$262,656	\$131,328	\$141,056	\$70,528
Concrete Construction TEO	38	\$331,892	\$1,105,200	\$1,105,200	\$431,460	\$431,460
Brick and Blocklaying	94	\$215,542	\$340,556	\$85,139	\$232,785	\$58,196
Building Services Supervision	20	\$174,680	\$377,309	\$377,309	\$202,629	\$202,629
		<b>\$8,091,918</b>	<b>\$16,576,949</b>	<b>\$9,103,251</b>	<b>\$9,284,486</b>	<b>\$4,593,513</b>

(Note that the apparently precise costings are the result of applied formulae, and have been translated into more general estimates in the RIS. Formula for assessing annual cost per student, carrying their share of non-completers, is:

$C \cdot (1 + (N-G)/GL)$  - where N is total number of students enrolling, G the number who graduate, C the annual cost for one student and L the course length.

For complete annual costs, the formula result is multiplied by the number of students; and for total costs, by the number of years the training takes.

For design, the first completion rate has been set at 32% rather than 30%, based on a study by the Ministry of Education (Retention, Completion and Progression in Tertiary Education, 2003)