



**Electrical Workers
Registration Board**

SAFETY | COMPETENCY | COMPLIANCE



Supervision Companion Guide



**MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT**
HĪKINA WHAKATUTUKI

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Electrical Workers Registration Board

SAFETY | COMPETENCY | COMPLIANCE

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Undertaking supervision is an important role and it should not be undertaken unless you have considered the practical and legal implications of performing this function. This supervision guideline has been written to assist electrical workers who supervise persons carrying out prescribed electrical work.

Introduction

Section 74 of the Electricity Act 1992 (“the Act”) restricts who can carry out prescribed electrical work (as defined by the Act) to those persons who are registered and hold a current licence issued by the Board or who are operating under an Employer Licence.

The Act provides exemptions for Trainees and other persons to allow them to work under the supervision of a licensed electrical worker.

Supervision is an important process and one that needs to be understood by both the Supervisor (the person doing the supervision) and the Supervisee (the person being supervised). It allows for the training and development of persons who are seeking registration as an electrical worker and ensures that there are sufficient workers available to the industry.



Supervision of prescribed electrical work

Prescribed electrical work (PEW) is defined in section 2 of the Act and in Schedule 1 of the Electrical (Safety) Regulations 2010 (the Regulations) which provides a comprehensive list of what is and is not prescribed electrical work (PEW).

Supervision is also defined in the Act:

supervision, in relation to any work, means that the work is undertaken under such control and direction of a person authorised under this Act to do the work or, in the case of section 76, a person authorised to supervise work under that section as is sufficient to ensure—

- (a) that the work is performed competently; and
- (b) that while the work is being undertaken, appropriate safety measures are adopted; and
- (c) that the completed work complies with the requirements of any regulations made under section 169

The definition of supervision was considered in *Electrical Workers Registration Board v Gallagher*¹. In the case Judge Tompkins stated:

As is made apparent by the definition of “supervision” in the Act, that requires control and direction by the supervisor so as to ensure that the electrical work is performed competently, that appropriate safety measures are adopted, and that when completed the work complies with the requisite regulations. At the very least supervision in that context requires knowledge that work is being conducted, visual and other actual inspection of the work during its completion, assessment of safety measures undertaken by the person doing the work on the site itself, and, after completion of the work, a decision as to compliance of the work with the requisite regulations.

Put simply, if you are supervising PEW you are responsible for making sure that the work is done safely and competently and is compliant.

Supervisors should also note that the work done under supervision is being done under their authorisation and as such it is the Supervisor who is responsible for and accountable for the PEW. It is the Supervisor who can face disciplinary action before the Board if the work is not completed to an acceptable standard.

Remember:
An Electrical Worker who supervises PEW is responsible for and can be held accountable for the PEW completed under their supervision.

¹ *Electrical Workers Registration Board v Gallagher* Judge Tompkins, District Court at Te Awamutu, 12 April 2011

Who can be supervised

A licensed electrical worker can supervise any unlicensed person who is carrying out PEW but there are some limitations.

Limitation 1:
the licensed person can only supervise PEW that they are authorised to do.

Limitation 2:
if the person being supervised is not a Trainee then:

- > no part of the work can be connected to a power supply; and
- > the PEW must be tested and certified by an authorised licensed person; and
- > the PEW must be connected to a power supply by an authorised licensed person.

A Trainee is a person who holds a Trainee Limited Certificate issued by the Board and is undergoing instruction or training in any class of prescribed electrical work for the purpose of obtaining registration.

Who is the supervisor

The Supervisor is the person who is ensuring that the PEW that is being carried out by the person who is being supervised is done safely and competently and is compliant. A Trainee's Supervisor may not always be the person who agreed to oversee their training. A Trainee's Supervisor is the person who is actually supervising the PEW that they are carrying out.

The Supervisor must know who they are supervising and what PEW is being done under their supervision.

The Supervisee must know who their Supervisor is and how they can get the Supervisor's assistance when they need it. The Supervisor may change during the course of a job and from day to day.

Can an electrical worker supervise another licensed person?

The electrical worker registration and licensing scheme is based on individual accountability. If an electrical worker is authorised to carry out the PEW then they do not need to be supervised. They must take responsibility for and be accountable for the PEW that they carry out or supervise. If the PEW is beyond the limits of a licensed person's own licence then they can be supervised by another electrical worker who is authorised.

If an electrical worker is not confident that they have the knowledge or skill to complete the PEW safely and compliantly then they can get another licensed person to check and certify their PEW. They can also get it inspected by a licensed Electrical Inspector. Getting work checked and certified or inspected may also be appropriate in situations where the electrical worker is carrying out PEW that is new to them.

An Electrical Worker can also get another electrical worker to mentor them so that they can continue to learn and develop. This is different from supervision as the electrical worker is still responsible for their PEW.



Types of supervision

If an authorised person is supervising the completion of PEW they need to follow the guidelines below. The guidelines give acceptable and recognised forms of supervision for those working in the electrical industry. Note that there may be more specific requirements imposed in certain types of installations or when the PEW involves Works ².

Consider providing written instructions or diagrams for complex PEW or for PEW that the person being supervised is unfamiliar with.

DIRECT SUPERVISION

Direct supervision is working one-on-one with the person you are supervising.

Typically, this type of supervision is for low-skilled workers or inexperienced workers or when you are completing complex or high-risk PEW.

Direct supervision requires direct contact with the person being supervised while they are completing tasks. This means you maintain visual contact and/or are within earshot of those you are supervising.

Direct supervision is best used when:

- > The person being supervised has not shown a consistent ability to perform a task at the required standard;
- > The person being supervised is new to a task or is untrained;
- > The work is complex or contains variations to tasks that are usually performed as a matter of course. Work might include detailed design which requires frequent reference to the working drawings and specifications; and
- > There is a reasonable chance for unplanned events to arise that may be beyond the person's current ability.

If you are in doubt as to the level of supervision that is required it is safest to use direct supervision.

EXAMPLE IN ACTION:

A first year Trainee is installing a switchboard. Direct supervision should be adopted here as the initial overall task would be considered complex.

INDIRECT SUPERVISION

Indirect supervision is the most common form of supervision. This requires face-to-face contact on a regular or periodic basis. The Supervisor must continue to provide direction, control and oversight of tasks although not necessarily always in close

proximity. However, the Supervisor must be contactable for assistance or instruction when required.

Indirect supervision should be used when:

- > the person being supervised has previously demonstrated the ability to perform a task with limited oversight, control and direction;
- > the person being supervised knows (has demonstrated) an ability to seek clarity or assistance when it is needed; and
- > on-the-job training has been undertaken in the past, which has resulted in a safe, competent and compliant outcome.

EXAMPLE IN ACTION:

The person being supervised is installing electrical fittings that they have previously installed under direct supervision. The Supervisor is working at the same location and is utilising an indirect supervision because he has assessed the complexity of the work and knows the skills of the individuals doing the work. The Supervisor will periodically check and assist with the work as it proceeds.

REMOTE SUPERVISION

Remote supervision may be used where an authorised electrical worker is running one or more jobs and cannot be present on site at all times. Remote supervision may be appropriate where the following conditions are present:

- > those being supervised are skilled and/or knowledgeable and have demonstrated the ability to undertake certain tasks without constant, oversight, control and direction;
- > the Supervisor has identified specific tasks when he or she is needed on site to provide direction, control or oversight; and
- > lines of communication (phone or using other electronic media) are in place so that advice and assistance can be offered when and where required.

Regular contact with the supervised persons is still required.

Remember circumstances may change during the completion of the tasks. It may be necessary to reassess the level of supervision required if and when this happens and to use direct or indirect supervision when appropriate.

EXAMPLE IN ACTION:

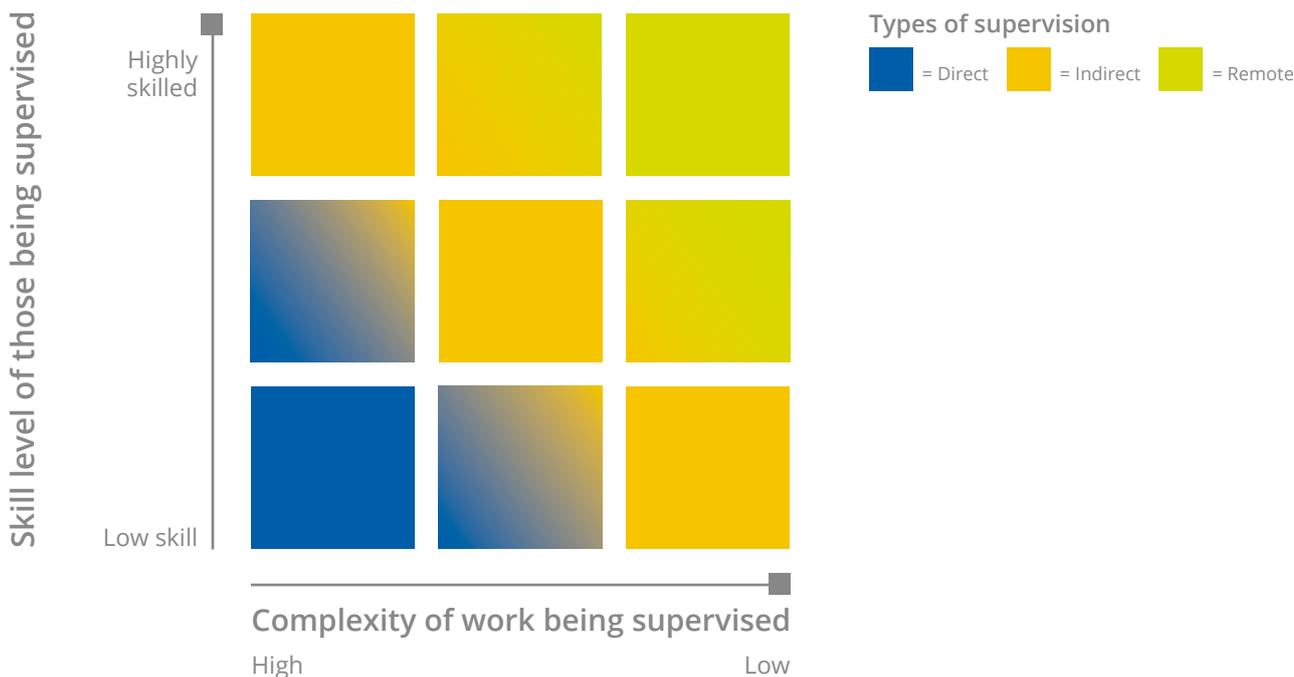
A Supervisor has three projects of differing complexity on the go at the same time. One of which involves simple low risk PEW. The person(s) being supervised are well known to the Supervisor and are highly skilled and/or knowledgeable. The Supervisor has adopted remote supervision and after issuing instructions touches base by phone and in person on a daily basis and performs any required testing and certification on completion of the PEW.

² Refer, for example to Electrical Engineers Association (EEA) Supervision for H&S Guidelines

Risk matrix to establish the correct type of supervision

The below diagram provides a risk-based view of how supervision requirements should be assessed by the Supervisor. In simple terms the figure provides direction on what type of supervision is appropriate once the skills of the individual(s) being supervised, and the complexity of the work being undertaken, have been assessed.

Supervision is not set and forget. The level and type of supervision needs to be constantly reviewed and adjusted to ensure the right level and type of supervision is being provided for the PEW being carried out and for the person being supervised.



What does good supervision look like?

If you are supervising the completion of PEW you need to consider the matters in the table below. These guide what good supervision looks like and have been developed from disciplinary decisions made by the Board.

Ultimately, it is in the hands of the Supervisor to gauge and ensure the level of direction, oversight and control that is right for the Supervisee and the PEW. It's important to remember that the Supervisor is accountable for the PEW.

Matters to consider	Guidance
The type and complexity of the PEW to be supervised	<p>Is the PEW:</p> <ul style="list-style-type: none"> > High Risk, General or Low Risk as defined in the Regulations? > Complex or Difficult? > A Certified Design? > Reliant on Part 2 of AS/NZS:3000? <p>Generally the higher the risk or complexity of the PEW the greater the need for direct or intensive supervision.</p>
The experience of the person(s) being supervised	<p>How would you classify those being supervised:</p> <ul style="list-style-type: none"> > A Trainee or not (remember there are further limitations when the person being supervised is not a Trainee)? > Skilled, experienced and/or knowledgeable? > Semi-skilled? > Low-skilled or a novice? <p>Generally the lower the level of the skill, experience and knowledge of the person being supervised the greater the need for direct or intensive supervision.</p> <p>Remember the level of supervision needs to be adjusted for each person being supervised. It is not "one size fits all".</p> <p>The level and type of supervision required may change during the day or the job being undertaken.</p>
The Supervisor's confidence in the person being supervised.	<p>Have you worked with the individual in the past? If so, do you have a good understanding of their skills and any relevant limitations?</p> <p>Repeatability is important where you have observed someone competently undertaking a task in the past, it is more likely they will be able to do it again.</p> <p>Has their work been the cause of concern in the past? If so, the adequacy of the supervision provided may be called into question.</p>
The Supervisor's competence as a supervisor	<p>Have you worked with the individual in the past? If so, do you have a good understanding of their skills and any relevant limitations?</p> <p>Repeatability is important where you have observed someone competently undertaking a task in the past, it is more likely they will be able to do it again.</p> <p>Has their work been the cause of failed inspections in the past? If so, the adequacy of the supervision provided may be called into question.</p>
The Supervisor's experience in working with the person being supervised and their confidence in their abilities	<p>Conflicts of interest are made known as appropriate and minuted accordingly.</p> <p>The Board continued with its conflict of interest register and continued to minute conflicts of interest relating to meeting papers on a monthly basis.</p>
The geographic spread of the work being supervised	<p>When acting as a supervisor the physical separation of worksites is a limitation that requires careful thought and planning.</p> <p>Remote supervision is a viable option in certain circumstances, but actual time on site is essential to ensure the PEW is completed safely, competently and compliantly.</p> <p>There is no generic or agreed number of sites or workers that can be supervised by one Supervisor but generally the more sites or workers the less effective the supervision is.</p>

Other practical considerations	
Sequencing	<p>Good supervision is about heading off problems before they occur. Using a step-by-step approach to those under supervision is always useful.</p> <p>Take account of supervision requirements in your work programme from the beginning. Providing the adequate levels of supervision to those onsite should not be a surprise during the construction phase.</p> <p>Think about what is required before, during and after completion of the PEW including what testing and certification is required.</p>
Workplace environment and safety	<p>Conditions in the workplace affect the level of supervision required on any given day. It is important to consider things such as weather, safety (e.g. working at height), plant and tool use, and the fittings selected.</p> <p>It is also equally important to be aware of the supervision requirements under health and safety legislation³.</p>
Safety	<p>Regulations 100 and 101 of the Regulations impose safety responsibilities on persons who carry out PEW.</p> <p>Regulation 100 imposes responsibilities on the person carrying out prescribed electrical work. If a Trainee is carrying out prescribed electrical work under Supervision then the safety obligations under the Regulation must be met by both the Trainee and the Supervisor</p> <p>Regulation 101 imposes direct obligations on employers of persons who carry out prescribed electrical work.</p>
Regulation 100	<p>Safety responsibilities of person who carries out work</p> <p>(1) A person who carries out any prescribed electrical work, or any work referred to in clause (2)(e) to (h) of Schedule 1, must take all practicable steps,—</p> <ul style="list-style-type: none"> (a) before beginning the work, to check that any associated equipment and personal protective equipment to be used by that person is in good order and condition, and is safe for its intended use; and (b) to follow the procedures approved by the employer (if any) for the work to be carried out; and (c) to use the associated equipment and the personal protective equipment provided in a competent manner; (d) to comply with AS/NZS 4836 or the certified design for all electrical work carried out on electrical equipment operating at low or extra-low voltage. <p>(2) The responsibilities set out in this regulation of a person carrying out work are in addition to, and do not limit, the responsibilities of that person under the Health and Safety at Work Act 2015.</p>

3 Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, Regulation 9 – Duty to provide information, supervision, training and instruction.

Other practical considerations

<p>Regulation 101</p>	<p>Responsibility of employers for safety of employees</p> <ol style="list-style-type: none"> (1) An employer who employs a person to carry out any prescribed electrical work, or any work referred to in clause (2)(e) to (h) of Schedule 1, must take all practicable steps to ensure the safety of the employee while carrying out the work, and must take the steps described in subclauses (2) and (3) in particular. (2) The employer must take all practicable steps to— <ol style="list-style-type: none"> (a) provide safe working procedures for employees to follow when carrying out the work; and (b) ensure that any associated equipment and personal protective equipment used by an employee is arranged, designed, made, tested, inspected, and maintained so that it is safe for the employee to use. (3) The employer must take all practicable steps to ensure that the employee who carries out the work— <ol style="list-style-type: none"> (a) has adequate knowledge and experience of the type of work being carried out; and (b) has been adequately trained in the safe use of the associated equipment, the personal protective equipment, and the procedures for carrying out the work; and (c) immediately before the start of the work, checks that the associated equipment and personal protective equipment is in good order and condition; and (d) uses the equipment and the procedures that the employer has approved for the work. (4) Subclause (3)(a) does not apply if the employee is in training and the employer ensures that the employee is adequately supervised to ensure the safety of the employee. (5) The responsibilities of the employer set out in this regulation are in addition to, and do not limit, the responsibilities of the employer under the Health and Safety at Work Act 2015.
<p>Timelines</p>	<p>Tight programmes or critical path scheduling can impact supervision requirements. Be cautious of accelerated work programs that can often lead to unforeseen issues or rework.</p>
<p>Communication</p>	<p>Where literacy or language barriers exist the supervisor needs to consider how this might impact achieving good quality and compliant outcomes onsite.</p>

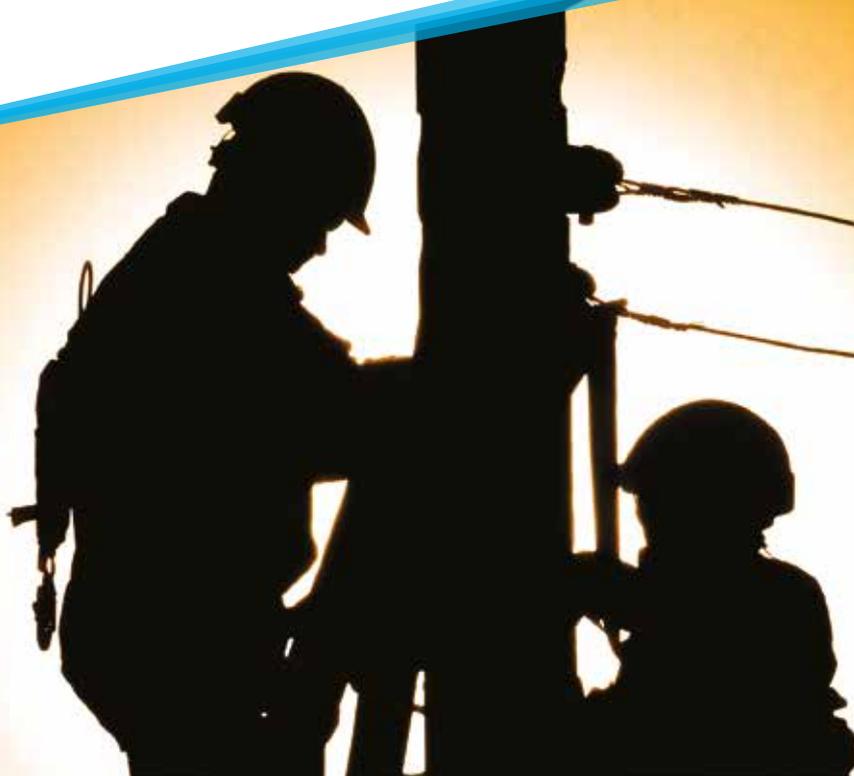
Specific supervision considerations and requirements

A Supervisor must provide instructions to enable the supervised person to carry out the PEW in a safe, competent and compliant manner. The instructions should include:

- (a) Site and health and safety instructions;
- (b) How the prescribed electrical work is to be carried out;
- (c) The fittings to be installed (if any) and how to install them, including reference to any manufacturers' instructions and/or declarations of conformity;
- (d) How relevant regulations and codes are to be complied with;
- (e) Methods of electrical isolation, testing and earthing;
- (f) Procedures in relation to the use of locks for personal protection against electric shock and safety tags;
- (g) The equipment to be used and how to use it;
- (h) Personal protective equipment to be used and how to use it;
- (i) The limits of the prescribed electrical work the Trainee can carry out; and
- (j) Procedures to follow in the event the Trainee requires assistance or clarification.

Remember part of the role of a Supervisor is to allow the supervised person to learn and to gain the benefit of the Supervisor's knowledge, skill and experience.

A Supervisor is responsible for the competence and compliance of any PEW carried out under their supervision. To ensure this a Supervisor must test to verify the PEW is safe and compliant prior to carrying out the required certification.



Can a trainee do any certification

The Board allows Trainees to complete an Electrical Safety Certificate (ESC) for some (not all) Low Risk PEW (as defined by regulation 6A(1) of the Regulations) if their Supervisor authorises them to do so.

A Trainee cannot do an ESC for any maintenance or repair (including replacement) work carried out on the types of prescribed electrical work listed in regulation 6A(2) of the Regulations. The PEW described in regulation 6A(2) is PEW that would normally be High Risk but is deemed to be Low Risk when it involves maintenance or repair. The Board requires that such work be verified and certified by the Supervisor.

It is up to the Supervisor whether a Trainee can and should provide an ESC for Low Risk PEW.



The Supervisee's responsibilities

Supervision is a two-way relationship. The person being supervised also has obligations and responsibilities.

The person being supervised should check and understand:

- > Who their Supervisor is;
- > The health and safety requirements for the PEW; and
- > The Supervisor's instructions on how the PEW is to be carried out.

The person being supervised must also take all practicable steps to ensure their own safety whilst carrying out the PEW including:

- > Ensuring personal protective equipment to be used is in good order and condition, and is safe for its intended use;
- > Ensuring all equipment to be used is in good order and condition, and is safe for its intended use;
- > Taking all practicable steps to follow the instructions set out by the Supervisor and/or employer in relation to health and safety; and
- > Taking all practicable steps to carry out the PEW in a safe manner.

The person being supervised must also:

- > Know who their Supervisor is at all times whilst carrying out prescribed electrical work and how they can contact them;
- > Understand and follow the directions and instructions given by their Supervisor at all times;
- > Use their best endeavours to carry out work assigned by a Supervisor in a competent and compliant manner; and
- > Ask their Supervisor if they do not understand any instruction or if they are unsure how to carry out any PEW assigned by a Supervisor.

A person who is being supervised should refuse to do any PEW where they feel unsafe or where they do not consider they have the required competence or skills or the necessary supervision to carry out the work in a safe, competent or compliant manner.





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