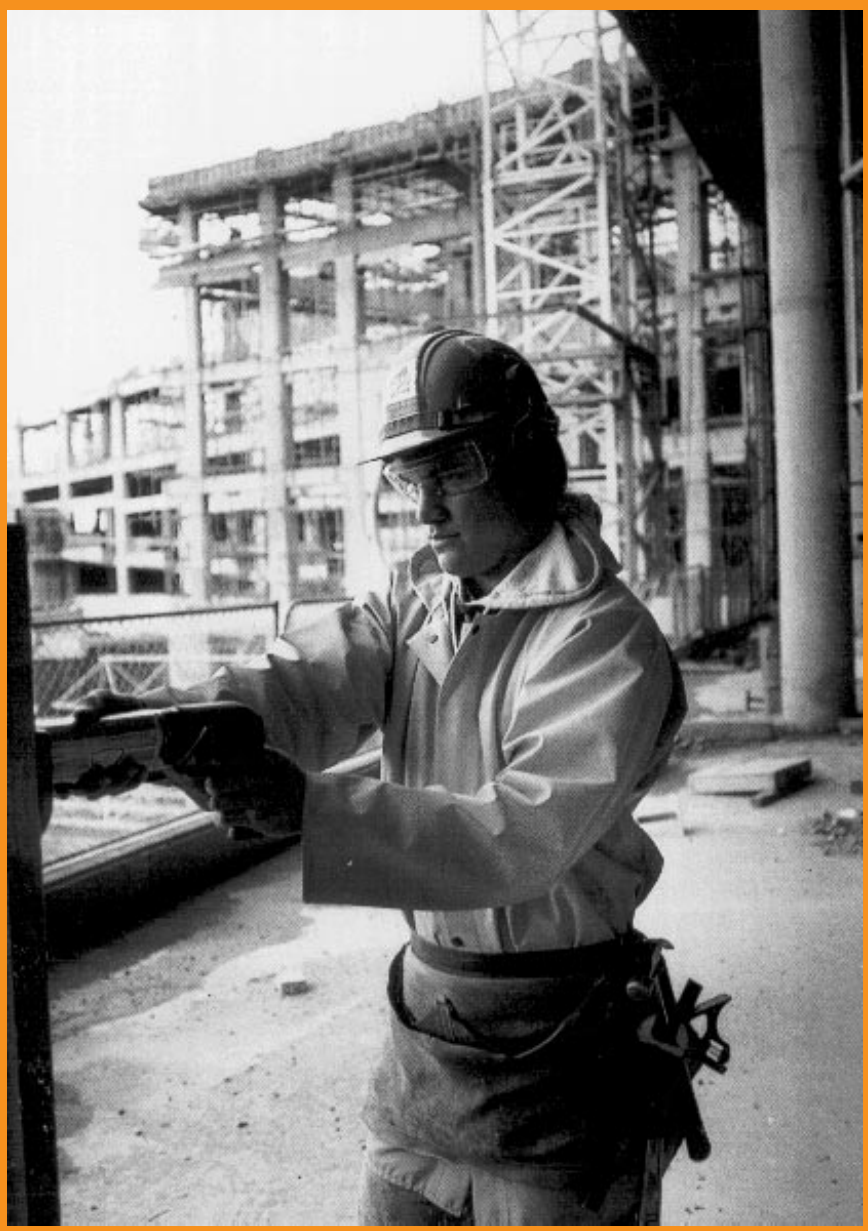
HEALTH AND SAFETY IN EMPLOYMENT ACT 1992

Approved Code of Practice for

POWDER-ACTUATED, HAND-HELD FASTENING TOOLS



OSH
OCCUPATIONAL SAFETY & HEALTH SERVICE

DEPARTMENT OF LABOUR
TE TARI MAHI

ISSUED AND APPROVED BY THE MINISTER OF LABOUR MAY 1995

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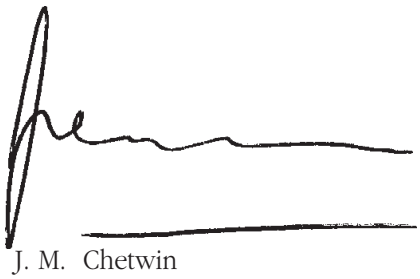
CONTENTS

NOTICE OF ISSUE

I have issued this *Approved Code of Practice for Powder-Actuated, Hand-Held Fastening Tools*, being a statement of preferred work practices or arrangements for the purpose of ensuring the health and safety of persons to which this code applies and persons who may be affected by the activities covered by this code.



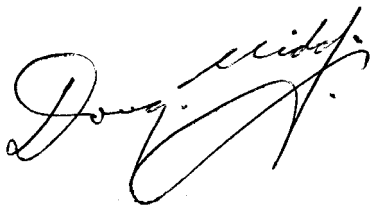
J. M. Chetwin

Secretary of Labour

May 1995

FOREWORD

I have approved this statement of preferred work practices, which is an *Approved Code of Practice for Powder-Actuated, Hand-Held Fastening Tools*, under section 20 of the Health and Safety in Employment Act 1992. When a code is approved, a Court may have regard to it in relation to compliance with the relevant sections of the Health and Safety in Employment Act. This means that if an employer in an industry or using a process to which an approved code applies can show compliance with that code in all matters it covers, a Court may consider this to be compliance with the provisions of the Act to which the code relates.



Hon. Doug Kidd
Minister of Labour
May 1995

A SUMMARY OF THE HEALTH AND SAFETY IN EMPLOYMENT ACT 1992

The principal object of the Health and Safety in Employment Act 1992 (HSE Act) is to prevent harm to employees at work. To do this, it imposes duties on employers, employees, principals and others, and promotes excellent health and safety management by employers. It also provides for the making of regulations and codes of practice.

REGULATIONS

Regulations are promulgated from time to time under the HSE Act. Regulations may impose duties on employers, employees, designers, manufacturers, and others relating to health and safety. These regulations may apply with respect to places of work, plant, processes or substances and may have been made to deal with particular problems that have arisen.

APPROVED CODES OF PRACTICE

"Approved Codes of Practice" are provided for in the HSE Act. They are statements of preferred work practice or arrangements, and may include procedures which could be taken into account when deciding on the practicable steps to be taken. Compliance with codes of practice is not mandatory. However, it may be used as evidence of good practice in Court.

EMPLOYERS' DUTIES

Employers have the most duties to perform to ensure the health and safety of employees.

Employers have a general duty to take all practicable steps to ensure the safety of employees at work. In particular, they are required to take all practicable steps to:

(a) Provide and maintain a safe working environment;

(b) Provide and maintain facilities for the safety and health of employees at work;

(c) Ensure that machinery and equipment is safe for employees;

(d) Ensure that working arrangements are not hazardous to employees; and

(e) Provide procedures to deal with emergencies that may arise while employees are at work.

Taking "all practicable steps" means doing what is reasonably able to be done in the circumstances; taking into account:

(a) The severity of any injury or harm to health that may occur;

(b) The degree of risk or probability of that injury or harm occurring;

(c) How much is known about the hazard and the ways of eliminating, reducing or controlling it; and

(d) The availability, effectiveness and cost of the possible safeguards.

HAZARD MANAGEMENT

Employers must identify and regularly review hazards in the place of work (existing, new and potential), to determine whether they are significant hazards and require further action. If an accident or harm occurs that requires particulars to be recorded, employers are required to investigate it to determine if it was caused by or arose from a significant hazard.

"Significant hazard" means a hazard that is an actual or potential cause or source of:

(a) Serious harm; or

(b) Harm (being more than trivial) where the severity of effects on any person depends (entirely or among other things) on the extent or frequency of the person's exposure to the hazard; or

(c) Harm that does not usually occur, or usually is not easily detectable, until a significant time after exposure to the hazard.

Where the hazard is significant, the HSE Act sets out the steps employers must take:

(a) Where practicable, the hazard must be *eliminated.*

(b) If elimination is not practicable, the hazard must be *isolated.*

(c) If it is impracticable to eliminate or isolate the hazard completely, then employers must *minimise* the hazard to employees.

Where the hazard has not been eliminated or isolated, employers must, where appropriate:

(a) Ensure that protective clothing and equipment is provided, accessible and used;

(b) Monitor employees' exposure to the hazard;

(c) Seek the consent of employees to monitor their health; and

(d) With informed consent, monitor employees' health.

INFORMATION FOR EMPLOYEES

Before employees begin work, they must be informed by their employer of:

(a) Hazards employees may be exposed to while at work;

(b) Hazards employees may create which could harm other people;

(c) How to minimise the likelihood of these hazards becoming a source of harm to themselves and others;

(d) The location of safety equipment; and

(e) Emergency procedures.

Employers are also to required to inform employees of the results of any health and safety monitoring. In doing so, the privacy of individual employees must be protected.

EMPLOYERS TO INVOLVE EMPLOYEES IN THE DEVELOPMENT OF HEALTH AND SAFETY PROCEDURES

Employers need to ensure that all employees have the opportunity to be fully involved in the development of procedures for the purpose of identifying hazards and dealing with significant hazards or dealing with or reacting to emergencies and imminent dangers.

TRAINING OF EMPLOYEES

Employers must ensure employees are either sufficiently experienced to do their work safely or are supervised by an experienced person. In addition, employees must be adequately trained in the safe use of equipment in the place of work, including protective clothing and equipment.

SAFETY OF PEOPLE WHO ARE NOT EMPLOYEES

Employers are also responsible for the health and safety of people who are not employees. Employers must take all practicable steps to ensure that employees do not harm any other person while at work, including members of the public or visitors to the place of work.

EMPLOYEES AND SELF-EMPLOYED PERSONS' DUTIES

Employees and self-employed persons are responsible for their own safety and health while at work. They must also ensure that their actions do not harm anyone else. However, these responsibilities do not detract from the employer's or principal's responsibilities.

ACCIDENTS AND SERIOUS HARM (RECORDS AND NOTIFICATION)

The HSE Act requires employers to keep a register of work-related accidents and serious harm. This includes every accident that harmed (or might have harmed):

(a) Any employee at work;

(b) Any person in a place of work under the employer's control.

Employers are also required to investigate all accidents, harm and near-misses to determine whether they were caused by a significant hazard.

Employers are required to notify serious harm that occurs to employees while at work to the Secretary of Labour (in practice, the nearest OSH office), as soon as possible. In addition, the accident must also be reported on the prescribed form within 7 days. (Forms are included in the *Workplace Accident Register* available from OSH offices and selected stationers.)

If a person suffers serious harm, the scene of the accident must not be disturbed unless to:

(a) Save life or prevent suffering;

(b) Maintain public access for essential services, e.g. electricity, gas;

(c) Prevent serious damage or loss of property.

The OSH office will advise whether it wishes to investigate the accident and what action may be taken in the meantime.

SECTION 1: SCOPE AND GENERAL

1.1 INTRODUCTION

This code of practice has been published to assist in realising the aim of better provision for safety by providing recommendations and procedures for the safe use and maintenance of powder-actuated fastening tools.

It is recommended for all employees who have to use a powder-actuated tool in the course of their work.

In this code "Act" means the Health and Safety in Employment Act 1992 and "Regulations" means the Health and Safety Regulations 1995.

1.2 SCOPE

All places of work at which an employee has to use a powder-actuated tool in the course of their duties.

1.3 DEFINITIONS

1.3.1 SHIELD

A device attached to the muzzle end of the tool, designed to prevent the escape of the fastener and flying particles or material that could ricochet.

1.3.2 AUTHORISED GUNSMITH

In relation to powder-actuated fastening tools, means a person certified in writing by the master agent in New Zealand, or the maker of the tool, as competent to carry out repairs and overhauls to named models of the tool.

1.3.3 CERTIFICATED OPERATORS

Persons who have successfully passed a qualifying competency test acceptable to the Secretary of Labour. Persons who exhibit colour blindness shall demonstrate that they can identify different charges.

1.3.4 CHARGE

A cased cartridge or a caseless pellet of explosive, designed specifically for a powder-actuated, hand-held fastening tool.

1.3.5 CONSTRUCTION WORK

Any work in connection with the construction, erection, installation, repair, maintenance, cleaning, painting, renewal, removal, alteration, dismantling or demolition of any building, structure, bridge or any other engineering work, including scaffolding, excavation, site preparation, use of explosives and use of mechanical plant. It also includes any such work carried out underwater, including work on ships, wrecks, buoys, rafts, and obstructions to navigation; as well as any inspection or other work carried out for the purpose of ascertaining whether construction work should be carried out.

1.3.6 DIRECT-ACTING TOOL

A tool in which the driving force is directly applied to the fastener.

1.3.7 INDIRECT-ACTING TOOL

A tool in which the driving force is transmitted to the fastener by means of a piston with limited axial movement.

1.3.8 POWDER-ACTUATED FASTENING TOOL

A powder-actuated fastening tool is defined as a hand tool capable of driving a pin, stud, bolt, or similar object, into or through building materials, by means of an explosive force derived from the detonation of a cartridge containing an explosive; and includes every accessory or device that may be used with the tool.

1.3.9 EMPLOYEE OR SELF-EMPLOYED PERSON

Means person employed by any other person to do any work (other than residential work) for hire or reward; and in relation to any employer, means an employee of the employer.

1.3.10 EMPLOYER

A person who or that employs any other person to do any work for hire or reward, and, in relation to any employee, means an employer of the employee.

1.3.11 FASTENER

A special-purpose fastener stud, pin, nail, dowel, rivet or similar object designed to be driven into, or through, any substance by a powder-actuated fastening tool.

1.4 DOCUMENTATION

Every tool should be provided with operating instructions for the safe use, handling and maintenance of the tool and its accessories. These instructions should include at least the following:

(a) An illustration of the tool showing the basic operating function and parts.

(b) A list of components which an certificated operator is permitted to change.

(c) A list of the various fasteners and charges which are nominated to be used in the tool.

NOTE: These fasteners should comply with AS/NZS 1873.4:1994.

(d) A listing of charges and colours of charges recommended for use in the tool. This description should comply with AS/NZS 1873.3:1994.

(e) Procedures to be followed in the event of a misfire.

(f) Maintenance instructions.

1.5 ANCILLARY EQUIPMENT

Every tool should be accompanied by a lockable rigid equipment container or case with compartments to accommodate the fastening tool and any other attachments, equipment, or other materials recommended by the manufacturer or the manufacturer's New Zealand master agent for the safe operation and maintenance of the tool.

(a) A sign should be affixed to the inside face of the container highlighting the need for CAUTION signs to be displayed and the need for operators to wear eye and ear protectors when using fastening tools.

(b) A separate compartment should be provided within the container for the storing of charges. Such a compartment should:

(i) be clearly labelled with the word CHARGES; and

(ii) if removable from the container, be lockable.

1.6 RESPONSIBILITIES

Only powder-actuated fastening tools that have been designed and manufactured in accordance with AS/NZS 1873.2:1994 *Powder-actuated hand-held fastening tools, fasteners and explosive charges*, or its equivalent, may be used.

Any person leasing or hiring out a powder-actuated tool has a duty to draw the attention of the hirer to the fact that the tool may be used on a place of work only by a certificated operator. Hire tools should have a suitable notice to this effect attached to the inside of the lid of the case or container.

Employers must ensure that:

(a) Powder-actuated fastening tools are operated by certificated operators and used in accordance with the operating instructions and this code; and

(b) Tools are inspected regularly, repaired and maintained by those competent to carry out the work.

Operators must use the tool safely and in accordance with the operating instructions and this code.

1.7 INSTRUCTION AND TRAINING

1.7.1 REQUIREMENTS

The master agent or representative of every make of powder-actuated fastening tools shall provide an approved course of instruction in the use, care and maintenance of the make of tool as set out below.

1.7.2 INSTRUCTION

Instruction shall cover the care, use, and maintenance of the tool and shall be given by a competent person trained and nominated by the master agent for the tool. The instruction shall include the following:

(a) Principles of operating and knowledge of its construction;

(b) Preparing and checking the tool before use;

(c) Selection of the correct cartridge, pin, and guard or shield, taking into account the type of material being fired into and the distance from the edge;

(d) Loading and firing procedures and safety precautions;

(e) Misfire procedure;

(f) Limitations of use of the tool and its accessories;

(g) Eye and ear hazards and hazards in explosive atmospheres;

(h) Basic servicing and testing the tool.

1.7.3 TRAINING

In addition to instruction, a person who has not previously had proper experience in the use of the tool shall undergo a period of suitable training. This training shall be on regular work and under the direct personal supervision of an experienced certificated operator.

This training period must include practical training to enable the trainee to obtain experience under various working conditions and with different kinds of building materials. Part of the training may be taken before the instruction. The practical training would normally follow after the course of instruction and terminate with a practical demonstration and test to the satisfaction of the person nominated for this purpose by the master agent.

1.8 CERTIFICATED OPERATORS

A powder-actuated fastening tool being used in a place of work shall not be loaded or fired except by a person who is the holder of a certificate of competency issued by the manufacturer or their master agent as a powder-actuated tool operator relating to the make of the tool being used.

Provided that a person training for any such certificate may operate any such tool under the direct personal supervision of the holder of an appropriate certificate.

1.9 CERTIFICATE OF COMPETENCE AS POWDER-ACTUATED TOOL OPERATOR

An applicant for a certificate of competence as a powder-actuated fastening tools operator, before being granted a certificate, shall provide evidence that the applicant has suitable training in the operation of powder-actuated fastening tools and a thorough knowledge of the safe practices relating to that operation.

Applicants for a certificate as a powder-actuated fastening tool operator, before being granted a certificate, shall comply with the following requirements:

(a) They shall produce evidence to the examiners that they have received instruction and training in the use, care and maintenance of the tool to which the application relates.

(b) They shall satisfy the examiners that they are not suffering from any defect of colour vision which would render them unfit to select cartridges of the right strength.

(c) They shall satisfy the examiners, in oral examination, that they have complied with the provisions of the HSE Regulations relating to the granting of the certificate.

Every application shall relate to such makes of tools as the applicant may specify and each certificate as a powder-actuated tool operator granted in accordance with the HSE Regulations shall relate only to such makes of tools as may be prescribed in the certificate.

A certificate as a powder-actuated fastening tool operator under the regulations may be restricted in its application to such special trades or kinds of work as may be prescribed in the certificate.

1.10 EXAMINATION FOR CERTIFICATE

The subject-matter for the oral examination shall include hazards in the use of powder-actuated fastening tools and the special precautions to be taken by operators thereof, as set out in an approved code of safe practices relating to the use of powder-actuated fastening tools.

1.11 ISSUE OF CERTIFICATES OF COMPETENCY

The Secretary of Labour has recognised manufacturers of powder-actuated fastening tools and their New Zealand master agents as being competent to conduct examinations and issue the appropriate class of certificate.

1.12 EXPIRY AND RENEWAL

A certificate as a powder-actuated fastening tools operator remains in force without the need for renewal for such periods as may be prescribed by the Secretary of Labour.

SECTION 2: SELECTION OF TOOLS AND SAFETY PRECAUTIONS

2.1 OPERATION OF POWDER-ACTUATED FASTENING TOOLS

(a) Every employer shall take all practicable steps to ensure that every employee who operates a powder-actuated fastening tool in the course of that employee's work is the holder of a certificate of competence as a powder-actuated fastening tool operator granted in accordance with the HSE Regulations.

(b) Every self-employed person who operates a powder-actuated fastening tool in the course of that person's work shall be the holder of a certificate of competence as a powder-actuated fastening tool operator granted in accordance with the HSE Regulations.

(c) Every owner of a powder-actuated fastening tool shall take all practicable steps to ensure that every person who operates that tool in the course of that person's work is the holder of a certificate of competence as a powder-actuated fastening tools operator, granted in accordance with the HSE Regulations, which is appropriate to that type of tool.

(d) Nothing in this regulation shall prevent a person in training to become the holder of a certificate of competence from operating a powder-actuated fastening tool under the direct supervision of the holder of an appropriate certificate.

2.2 GENERAL

When using a powder-actuated fastening tool, operators have a responsibility to protect themselves and others from hazards associated with this type of work. These hazards can and should be managed. The operator of a powder-actuated fastening tool should manage the hazards through compliance with this code in conjunction with any manufacturer's requirements.

2.3 POWDER-ACTUATED FASTENING TOOL LOADING

The operator should comply with the following requirements regarding loading of a powder-actuated fastening tool with a charge and fastener:

(a) Only load the powder-actuated fastening tool at the place where it is intended to be used and immediately prior to its use.

(b) Only carry a loaded powder-actuated fastening tool when, because of mechanical failure, it cannot be unloaded.

(c) If the powder-actuated fastening tool has been loaded but not put into immediate operation, remove both the charge and fastener.

2.4 PERSONAL PROTECTIVE EQUIPMENT

During firing of the powder-actuated fastening tool, operators should ensure that all persons required to be in the immediate vicinity of the firing activities, wear:

(a) Suitable eye protectors complying with AS/NZS 1337; and

(b) Suitable ear protectors complying with AS 1270.

2.5 USING THE POWDER-ACTUATED FASTENING TOOL

When using a powder-actuated fastening tool, the operator should comply with the following:

(a) Ensure the barrel of a loaded or unloaded powder-actuated fastening tool is always pointed in a safe direction away from the operator's body and is at no time pointed towards any person. This applies in particular where a charge that has misfired is being removed.

(b) Only certificated operators, and where necessary their assistants or other nominated persons, should be permitted in the immediate vicinity of the firing place. Other persons should be kept out of the immediate vicinity of the firing place. Powder-actuated fastening tools should not be operated in areas congested with people.

(c) Operators should ensure they are in a safe and well-balanced position before firing.

(d) Always use the weakest charge when firing for the first time into previously untried material.

(e) When there is a possibility that a fastener may pass completely through the material, the area on the opposite side to the operating location should be kept clear of persons in all directions for a distance which will ensure that injury from the fastener or associated debris cannot occur.

The area on the opposite side to the operating location should be cordoned to restrict entry with appropriate CAUTION signs being displayed (see 2.11).

(f) In the event of a misfire, ensure the correct procedure is followed (see 2.12).

2.6 FASTENERS AND CHARGES

The operator should comply with the following requirements regarding the choice of fasteners and charges for a particular powder-actuated fastening tool:

(a) Ensure that only those fasteners and charges complying with NZS 1873.3 and NZS 1873.4 are used in the tool. These items must be clearly marked and packaged to show the name and model of tool for which the charge or pin is nominated as being suitable.

(b) Ensure that fasteners and their attachments are not modified after manufacture, particularly if modified to achieve interchangeability between types and makes of powder-actuated fastening tools.

2.7 FIRING THROUGH EXISTING HOLES

The operator should ensure that direct acting powder-actuated fastening tools are not used to drive fasteners through fixtures which have existing holes (misalignment can lead to ricochets) unless the tool is specifically equipped by the manufacturer to do so. Indirect-acting, powder-actuated fastening tools may be used in this way provided the point of the fastener can be firmly located in the hole in the fixture prior to firing.

2.8 WORKING ENVIRONMENT

The operator should be satisfied that the immediate working environment does not pose a hazard when that operator fires the powder-actuated fastening tool. The operator should ensure that the following do not present a hazard:

(a) Particles on work surfaces which may fly off during fastening. Work surfaces should be clear of such material.

(b) Concealed pipes or electrical wiring. Check the location of pipes or electrical wiring to ensure that they are not concealed within the material at the point of firing.

(c) The presence of any explosive or flammable gas, dust or vapour, or an atmosphere which is compressed. Do not use a powder-actuated fastening tool in these circumstances.

(d) The presence of excessive heat, which may cause the charge to be unintentionally exploded. Do not use a powder-actuated fastening tool in these circumstances.

2.9 MATERIAL CHARACTERISTICS

When fixing materials together with powder-actuated fastening tools, use only materials which are suitable for this fixing method. When firing into materials with a powder-actuated fastening tool, the operator should comply with the following:

(a) Where a concrete structure is of a prestressed or post-tensioned type, advice should be sought from its designer or other suitably qualified party, regarding the suitability and placement of fasteners to be set into these structures.

NOTE: Fasteners set too close to the prestressing wires or cables may damage these elements and could compromise the integrity of the structure.

(b) Due to the risk of disintegration of the materials, fasteners should not be driven into concrete, or similar material, under the following circumstances:

(i) Nearer than 75 mm to an edge;

(ii) Nearer than 75 mm to another fastening;

(iii) Where the thickness of the material is less than 100 mm, or less than 3 times the shank penetration into the base material, whichever is the lesser; or

(vi) Nearer than 150 mm to where another fastener has failed to fully penetrate and has damaged the surrounding base material (spalling).

(c) Where fixings are made into steel with a higher strength than common grades of structural steel (i.e. above grade 350), advice should be sought to ensure the correct selection of powder-actuated fastening tools, fasteners and charges.

Fasteners should not be driven into steel under the following circumstances:

(i) Nearer than 16 mm to an edge;

(ii) Nearer than 25 mm to another fastener;

(iii) Nearer than 100 mm to a heat-affected zone (see 2.10 (ii));

(vi) Less than 4 mm in thickness or 3 mm in thickness when specialised fasteners are intended to be used.

2.10 UNSUITABLE MATERIALS

Some materials are considered to be unsuitable to be fixed together using powder-actuated fastening tool. These may be:

(a) The base material (for example, concrete and steel); and

(b) The material to be fixed to that base material (for example timber or steel);

(c) Spalled areas caused by previous unsatisfactory fastening.

When firing into particular materials with a powder-actuated fastening tool, the operator should comply with the following:

(a) Do not drive fasteners into brittle materials which are liable to shatter and materials which are too hard. Unsuitable brittle materials include cast iron, marble, glazed tiles, slate, natural stones, fired clay bricks. Concrete and concrete products with a compressive strength greater than 60 MPA are also unsuitable as they are too hard.

(b) Do not drive fasteners into areas of steel that have been affected by welding, flame cutting or similar processes.

(c) Do not drive fasteners into joints in masonry, for example brickwork or stonework joints.

(d) Do not drive fasteners into timber where timber is the base material. A timber member is unsuitable for the purpose of securing another timber member to it. Manufactured products such as plywood, hardboard and

particle board are considered to be timber where those products have similar physical characteristics to timber.

(e) Do not drive fasteners into soft materials with a low compressive strength (i.e. concrete of less than 10 MPA) as they are unsuitable for use as a base material. Unsuitable materials include plaster board and lightweight, aerated or weak concrete.

NOTE: As a general rule, do not fire into any material which dulls the point of a fastener if used as a centre punch as this material is too hard for the fastener to penetrate.

2.11 USE OF CAUTION SIGNS

At all times when a powder-actuated tool is being used, a notice or notices bearing the following words CAUTION: EXPLOSIVE-POWERED TOOL IN USE should be displayed so as to be clearly legible to all persons who are in, or near, the place where the tool is being used.

This notice or notices should:

(a) Be displayed on rigid rectangular board, measuring not less than 500 mm in width and 300 mm in height;

(b) Incorporate lettering not less than 50 mm high for the word CAUTION and not less than 30 mm high for the remainder of the text;

(c) Comply with the relevant requirements of NZS/AS 1319:1983; and

(d) If bearing the logo of the site owner or contractor, ensure that such name or logo does not reduce the legibility of the message and does not exceed 20 mm in height.

2.12 MISFIRING

The operator should comply with the following requirements when a powder-actuated fastening tool misfires:

(a) In the event of a misfire, observe the manufacturer's misfire precautions and procedures. In the event of a misfire, where the manufacturer has not provided specific instructions, the operator should comply with the following:

(i) First wait 10 seconds, then release the powder-actuated fastening tool from its depressed condition.

(ii) Second, release the powder-actuated fastening tool from the work surface without changing the direction in which the tool is pointing.

(iii) Finally, remove the charge and store it safely for later disposal.

(b) Any charges which have misfired should not be used again. Rather they should be returned to the supplier for destruction.

(c) If numerous misfires occur from one batch of charges, that batch should be returned to the supplier for destruction.

2.13 STORAGE OF POWDER-ACTUATED FASTENING TOOLS AND CHARGES

When not in use, persons in control of the powder-actuated fastening tool and charges should comply with the following requirements:

(a) Before and after using the powder-actuated fastening tool, the operator should ensure:

(i) The tool is cleaned;

(ii) The charges and unloaded powder-actuated fastening tool are in their box or case; and

(iii) The case or container is locked.

(b) Persons in control of the powder-actuated fastening tool and charges, when not in use, should ensure the equipment is stored in a secure place. Persons in control of the powder-actuated fastening tool and charges may be the site manager, the employer, the operator or the owner.

SECTION 3: INSPECTION AND MAINTENANCE

3.1 INSPECTION

A powder-actuated fastening tool should be inspected in accordance with the manufacturer's instructions immediately prior to use on any particular day to ensure it is fully operational and is free from any defect that has been revealed by any inspection, examination or overhaul.

3.2 MAINTENANCE

The user of the powder-actuated fastening tool should ensure that the manufacturer's maintenance instructions are observed to ensure each tool is kept in good working order and to ensure it functions correctly.

Every powder-actuated fastening tool should:

(a) Be cleaned at least once a day after use; and

(b) At least once in every week in which the tool is used, dismantled and examined for defects by a certificated operator.

3.3 REPAIRS

Powder-actuated fastening tools should be serviced only by suitably qualified persons recognised by the manufacturer or the master agent.

Operators of powder-actuated fastening tools should only carry out simple replacement of worn parts which are specifically listed in manufacturer's "instructions for use". Repair work should only be carried out by persons nominated by the manufacturer.

After any overhaul, the person who carried out the overhaul should ensure a certificate is issued stating that the tool is free from defects. (This certificate should be displayed inside the lid of the case or container.)

Powder-actuated fastening tools should be returned to the manufacturer's master agent for a complete overhaul every 6 months.

REFERENCED DOCUMENTS

(1) Health and Safety in Employment Act 1992.

(2) Health and Safety in Employment Regulations 1995.

(3) AS 1270:1988 *Hearing protection devices.*

(4) NZ/AS 1319:1983 *Safety signs for the occupational environment.*

(5) AS/NZS 1337:1992 *Eye protectors for industrial applications.*

(6) AS/NZS 1873:1994 Parts 1-4 *Powder-actuated hand-held fastening tools, fasteners and explosive charges.*