

New Zealand
Vision Standards for
Occupations

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Driving

<https://www.nzta.govt.nz/assets/resources/medical-aspects/docs/medical-aspects.pdf>

Class 1 and 6 Endorsements D F R T W

The Standard of visual acuity required is 6/12 using both eyes together, with or without correcting lenses. When the vision in the worse eye is less than 6/18 but better than 6/60 corrected, the applicant should be classified as having sub-standard vision in one eye.

Class 2,3,4 or 5 Endorsements P V I O

The standard of visual acuity required is 6/9 using both eyes together, with or without correcting lenses. If the worse eye is less than 6/18 but better than 6/60, the applicant is to be classified as having sub-standard vision in one eye.

Visual field Standard All classes with or without Endorsements

For all licence classes, the minimum standard is a binocular field of 140 degrees. There is to be no significant pathological field defect encroaching within 20 degrees of the point of fixation.

Sub-standard vision: Visual acuity in the worse eye less than 6/18 but better than 6/60

For all classes and endorsement types, the individual must meet the visual acuity and visual field standards. It is important that an individual's better eye is free from pathology that affects fitness to drive.

Monocular vision: Visual acuity in worse eye less than 6/60 or vision in only one eye

For all classes and endorsement types, the individual must meet the combined visual acuity and visual field standards. It is important that an individual's better eye is free from pathology that affects fitness to drive.

Class 1 and 6 and/or Endorsements D F R T W – condition vehicle should be fitted with external rear-view mirrors on both sides.

Class 2 3 4 5 and/or Endorsements P V I O – generally considered unfit to drive.

Police

<https://www.newcops.co.nz/recruitment-process/health-fitness>

Visual Acuity

Uncorrected Vision of 6/12-2 in each eye

Corrected Acuity of 6/6-2 in each eye

Visual Fields

At least 140 degree horizontal and 45 degree vertical fields

Colour perception

Must pass Ishihara 24 plate edition test. Failure of the Ishihara test shall be followed by a diagnostic colour perception test such as 100 Hue, D15 or a Farnsworth Lantern, together with either a Medmont C100 or Oscar Vision Tester

Diplopia or Strabismus

No diplopia or manifest strabismus present.

Refractive surgery including RK, PRK, LASIK, LASEK or ICL

Radial keratotomy or astigmatic keratotomy not accepted. All other corneal or anterior treatments or re-treatments, require a minimum of three months from procedure. Must meet all previous vision standards as well as no effect from glare disability. Corrected visual acuity of 6/7.5 under glare conditions.

Fire Service

<http://www.fire.org.nz/jobs/Career-Firefighters/Documents/AFAC%20Health%20and%20Fitness%202002%20Guidelines%2030%20April%2003.pdf>

Career Firefighters

Candidates need to achieve distance vision of 6/9 without glasses or with contact lenses. Contact lenses must have been worn successfully for at least 6 months. Also, required to achieve 6/36 vision without correction.

Volunteer Firefighters

Operational firefighter must meet the same standard as career firefighters.

Pilots and Aircrew

<https://www.caa.govt.nz/medical/medical-home/>

https://www.caa.govt.nz/assets/legacy/rules/Rule_Consolidations/Part_067_Consolidation.pdf

Pilots

Class 1:

- No history or diagnosis of any vision disorder that is of aeromedical significance
- Distance visual acuity with or without correcting lenses of 6/9 or better in each eye separately and 6/6 or better binocularly
- Near visual acuity with or without correcting lenses of N5 or better binocularly at a distance of between 30 and 50 cm, and have intermediate visual acuity of N14 binocularly at a distance of 100 cm (or 1 metre)
- No deficit of colour vision to an extent that is of aeromedical significance

Class 2:

- No history or diagnosis of any vision disorder that is of aeromedical significance
- Distance visual acuity with or without correcting lenses of 6/12 or better in each eye separately and 6/9 or better binocularly
- Near visual acuity with or without correcting lenses of N5 or better binocularly at a distance of between 30 and 50 cm
- No deficit of colour vision to an extent that is of aeromedical significance

Class 3:

- No history or diagnosis of any vision disorder that is of aeromedical significance
- Distance visual acuity with or without correcting lenses of 6/9 or better in each eye separately and 6/6 or better binocularly
- Near visual acuity with or without correcting lenses of N5 or better binocularly at a distance of between 30 and 50 cm, and have intermediate visual acuity of N14 binocularly at a distance of 100 cm (or 1 metre)
- No deficit of colour vision to an extent that is of aeromedical significance

Aircrew

Varies between airlines

Air New Zealand requires 6/12 or better in each eye and if correction is required to achieve this, then your uncorrected vision must be 6/60 or better using both eyes. Those who have had laser surgery must wait at least three months since surgery.

Railway workers

<http://www.kiwirail.co.nz/uploads/Publications/NTC%20National%20Standard%20for%20Health%20Assessment%20of%20Rail%20Safety%20Workers%202012.pdf>

Safety Critical Workers

- Visual acuity of 6/9 in better eye and better than 6/18 in worse eye with or without correction
- Colour vision
 - Locomotive Engineers, Remote Control Operators undertaking mainline running and other Rail Personnel qualified as Second Person or mainline piloting
 - Must pass Ishihara test
 - Rail Personnel responsible for train / shunt movements within a terminal and signal repairers
 - Must pass Ishihara or Farnsworth Lantern test
 - Train Controllers / Signal Box Controllers
 - Must pass Ishihara test or Farnsworth D15 test
 - Heritage and tourist train drivers
 - Must pass Ishihara test or Medmont C100 test and not be protans. Deutans must pass Farnsworth Lantern test
- Visual Fields of binocular field of at least 140° within 20° above and below the horizontal midline and have no significant visual field loss (scotoma, hemianopia, quadrantonopia) that is likely to impede work performance

ATTP (Around Track Personnel)

- Visual acuity of 6/9 in better eye and better than 6/18 in worse eye with or without correction
- Visual Fields of binocular field of at least 140° within 20° above and below the horizontal midline and have no significant visual field loss (scotoma, hemianopia, quadrantonopia) that is likely to impede work performance

Maritime

<http://www.maritimenz.govt.nz/commercial/certification/documents/Maritime-Rule-Part-34-Medical-Standards-Information-for-Optometrists-b.pdf>

<http://www.maritimenz.govt.nz/commercial/certification/documents/Seafarer-medical-eyesight-requirements.pdf>

<https://www.maritimenz.govt.nz/commercial/certification/documents/Maritime-Rule-Part-34-Eyesight-Test-Report-Form.pdf>

Maritime NZ uses the standards of International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), which also covers for Fishing Vessel Personnel (STCW-F aligned).

Seafarers are required to pass eyesight and colour vision tests that relate to their duties on board ships. Seafarers who are required to keep bridge lookout duties need to meet more stringent requirements than those who don't. However, for shipboard duties such as engineering or electro-technical functions, it is still important that specific standards are met.

For deck certificate holders, bridge lookout duties require good visual acuity and colour vision. Distant ships, markers and navigational hazards need to be seen and recognized, and chart and electronic displays need to be read precisely. Many navigational markers and lights are colour coded, including the navigational lights fitted to vessels, and it is vital that the bridge watchkeeper can differentiate between colours used. Colour coding is also used for displays on navigational equipment, such as radar and electronic charting.

Non-deck personnel wishing to gain STCW certificates must also meet colour vision requirements. Seafarers with engineering or electro-technical duties work with colour coded items, including electrical wiring, monitors displaying information, warning lights, pipe systems and other equipment. With regard to general eyesight, particularly near vision, gauges and instruments and other displays have to be read and monitored.

Eyesight and colour vision standards

Deck certificates

- Distance vision – Unaided vision of 6/60 each eye corrected to 6/12 each eye
- Near/intermediate vision – required for ship's navigation (eg chart and nautical publication reference, use of bridge instrumentation and equipment, and identification of aids to navigation)
- Visual fields – normal
- Night blindness – vision required to perform all necessary functions in darkness without compromise
- Diplopia – no significant condition evident

- Colour vision – 38 plate Ishihara test with no more than 2 errors. A fail result in the Ishihara test would normally mean that the required standard has not been met. However, if there is any cause for doubt about a pass result of the Ishihara test or the validity of the test results, the candidate should be further tested by one of the following:
 - A second pseudo-isochromatic (PIC) test
 - A Holmes Wright Type B lantern test with two errors in two runs of the nine pairs allowed
 - A spectral anomaloscopy conducted by a colour vision specialist

For national deck certificates where colour vision requirements are not met, Maritime NZ may issue a restricted certificate that limits the exercise of privileges to daylight hours only.

- Diseases – there should be no evidence of serious or progressive eye disease

Engineering, Electro-technical, and GMDSS radio certificates

- Distance vision – Unaided vision of 6/60 each eye corrected to 6/15 each eye
For engineering and electro-technical (not GMDSS) combined eyesight vision of at least 6/15 is acceptable
- Near/intermediate vision – required to read instruments in close proximity, to operate equipment, and to identify systems/components as necessary
- Visual fields – normal
- Night blindness – vision required to perform all necessary functions in darkness without compromise
- Diplopia – no significant condition evident
- Colour vision – 38 plate Ishihara test with no more than 2 errors. In the case where the Ishihara test is failed, the candidate may be further tested by one of the following:
 - A Farnsworth D15 test with one diametrical crossing being allowed
 - A spectral anomaloscopy conducted by a colour vision specialist.

STCW Table A-I/9

STCW Convention regulation	Category of Seafarer	Distance vision Aided		Near/Intermediate vision Both eyes together, aided and unaided	Colour vision	Visual fields	Night blindness	Diplopia
		One eye	Other eye					
I/11	Masters, deck officers and ratings required to undertake look-out duties	6/12	6/12	Vision required for ship's navigation (eg chart and nautical publication reference, use of bridge instrumentation and equipment, and identification of aids to navigation)	CIE colour vision Std 1 or 2	Normal visual fields	Vision required to perform all necessary functions in darkness without compromise	No significant condition evident
II/1								
II/2								
II/3								
II/4								
II/5								

VII/2								
I/11	All engineers, officers, electro-technical officers, electro-technical ratings and ratings or others forming part of an engine room watch	6/15	6/15	Vision required to read instruments in close proximity, to operate equipment, and to identify systems/components as necessary	CIE colour vision Std 1,2 or 3	Sufficient visual fields	Vision required to perform all necessary functions in darkness without compromise	No significant condition evident
III/1								
III/2								
III/4								
III/5								
III/6								
III/7								
VII/12								
I/1	GMDSS radio operators	6/15	6/15	Vision required to read instruments in close proximity, to operate equipment, and to identify systems/components as necessary	CIE colour vision Std 1,2 or 3	Sufficient visual fields	Vision required to perform all necessary functions in darkness without compromise	No significant condition evident
IV/2								

Armed Forces – Army, Airforce, Navy

www.defencecareers.mil.nz

There are many differing trades and Officer roles within the three disciplines of the New Zealand Defence force. Many require minimum level of vision being a class 1 drivers licence and either no decreased colour perception or colour perception restrictions.

Defence Force		Class 1 Drivers Licence	No Colour perception defect (X) or Colour perception restrictions (O)
Army	Communications Systems Operator		X
	Crewman	X	O
	Driver	X	O

	Electronic Warfare Operator	X	X
	Fire Fighter	X	
	Gunner (Artillery)		O
	Movement Operator	X	O
	Operational Support and Information Specialist (OPSIS)		O
	Plant Operator	X	O
	Electrical Fitter		O
	Electrician		O
	Information Systems Operator		X
	Ammunitions Technician		X
	Electronics Technician		X
	Intelligent Officer		O
	NZSAS		X
	Systems Engineer		X
	Army Officer		X
Navy			
	Combat Systems Specialist		O
	Diver		X
	Electronic Warfare Specialist		X
	Hydrographic Systems Operator		X
	Seaman Combat Specialist		O
	Electronic Technician		X
	Marine Technician		X
	Airborne Tactical Officer		O
	Helicopter Pilot		X
	Hydrographic Survey Officer		X
	Warfare Officer		X
	Marine Officer		X
	Weapon Engineer Officer		X
Air Force			
	Aviation Refueller	X	
	Fire Fighter	X	X
	Force Protection Specialist	X	
	Logistics Specialist	X	
	Parachute Jump Instructor		O
	Ground Support Equipment (GSE) Technician		O
	Safety and Surface Technician		X
	Air Warfare Specialist		O
	Armament Technician		O
	Electronics Technician (Aviation)		O
	Communication and Information Systems (CIS) Technician	X	
	Intelligence Specialist		X
	Air Warfare Officer		O
	Pilot		X

