

# **Guidelines for the Plumbers, Gasfitters and Drainlayers Board's Advanced Proficiency Assessment**

## **1. Purpose**

- 1.1. The Advanced Proficiency Assessment (APA) is the Board's method of determining whether an applicant has the required competencies to be registered in the Certifying class for the applicable trade.

The APA consists of a theory assessment and a series of practical tasks to demonstrate competence in the required skill sets.

## **2. Itinerary**

- 2.1. The APA takes place over three consecutive 8-hour days.

- 2.2. Part one (day 1, morning):

Consists of written and oral questions to test the applicant's knowledge of legislative and Building Code compliance requirements in New Zealand and their ability to design plumbing or gasfitting or drainlaying systems that comply with those requirements.

- 2.3. Part two (day 1, afternoon; days 2 and 3):

The applicant is required to complete several practical tasks and oral questions are asked relating to the tasks being undertaken.

## **3. Theory assessment: Day 1, morning**

- 3.1. The theory assessment takes place in a suitable room, such as a classroom or meeting room.

- 3.2. The Board's standard examination rules apply for the APA theory assessment.

- 3.3. For a list of the required theory assessment equipment please see **Appendix A**.

#### **4. Practical assessment: Day 1, afternoon; Days 2 and 3**

4.1. The applicant is assessed over various projects focusing on specific practical skill sets. The projects cover competencies such as:

##### 4.1.1. Plumbing

- Pipework installation covering various material types
- Continuous water heater and/or hot water cylinder installations
- Valve trains
- Stack and waste pipe installations
- Line and level
- Testing
- Moisture protection

##### 4.1.2. Gasfitting

- Pipework installation covering various material types
- Appliance installation covering various appliance types
- Appliance maintenance and servicing
- Flue installation
- Ventilation requirements
- Testing and commissioning
- Moisture protection

##### 4.1.3. Drainlaying

- Pipework installation covering various material types
- Installation of waste water treatment plant, septic and/or interceptor tank
- Pumped systems
- Line and level
- Trenching and shoring
- Thrust and anchor blocks
- Testing

#### **5. Materials and tools**

5.1. All materials, fixtures and appliances are provided by the Board.

5.2. Applicants are required to provide all hand and power tools to carry out the practical assessment.

5.3. For a recommended tool list please see **Appendix B**.

#### **6. Pass mark results**

6.1. A pass, 60% or above, in the theory assessment and a pass, 80% or above, in each category of the practical assessment, is required before an applicant is eligible to apply to the Board for registration in the certifying class in the relevant trade(s) through the APA pathway.

## 7. Results

### 7.1. Theory

7.1.1. The applicant is informed of their theory assessment result on the morning of day 2 of the APA. The applicant must attain a pass in the theory section to proceed on to the practical assessment section.

- 60% and over: pass
- Below 60%: fail

7.1.2. Where an applicant fails the theory assessment the APA ceases as the applicant will have failed the APA. The remaining portion of the APA fee will be refunded to the applicant.

7.1.3. Where an applicant has failed the APA they may choose to reapply to sit the APA. They may also, in the meantime or subsequently, apply for any other applicable authorisation granted by the Board to legally carry out restricted work in New Zealand.

### 7.2. Practical:

7.2.1. The applicant is informed of their practical assessment result within 10 working days following the conclusion of the APA.

7.2.2. The practical assessment is grouped into 4 categories:

#### Plumbing

- pipework
- hot water heater installation
- stack and waste pipes
- building penetrations

#### Gasfitting

- pipework
- flueing and ventilation
- appliances
- building penetrations

#### Drainlaying

- pipework
- trenching and shoring
- line and level
- traps, tanks and pumps

7.2.3. If the applicant attains a mark of 80% or more in each of the four categories of the practical assessment, and there is no unsafe work as defined in clause 7.3, the applicant will have passed the APA.

7.2.4. If the applicant attains a mark of less than 60% in any of the 4 categories of the practical assessment the applicant will have failed the APA.

7.2.5. If the applicant attains a mark of 60% or more in each of the 4 categories of the practical assessment, and there is no unsafe work as defined in clause 7.3, but attains a mark between 60% and 79% in any of the categories the applicant will not yet have passed the APA but may, within 1 year, produce evidence to satisfy the Board that they now have the required level of competency in the deficient area(s). If the provided evidence is accepted by the Board the applicant will then be considered to have passed the APA.

7.2.6. If the applicant does not provide further evidence as provided for in clause 7.2.5 within 1 year of completing the assessment the applicant will have failed the APA.

7.2.7. Where an applicant has failed the APA they may choose to reapply to sit the APA. They may also, in the meantime or subsequently, apply for any other applicable authorisation granted by the Board to legally carry out restricted work in New Zealand.

Unsafe:

7.3. An unsafe condition is such that an action or inaction by the applicant, or the installation or non-installation of appliances, fixtures, fittings or pipework that either directly or if left could cause serious harm to people or significant damage to property.

## 8. Fees

8.1. The APA fees must be paid in full prior to commencing the assessment. The application fee is non-refundable but any unused portion of the assessment fee and materials fee will be refunded.

8.2. Fees\*

- Application fee \$690.00
- Assessment fee \$2,300.00
- Materials fee \$1,500.00

\*All fees are inclusive of goods and services tax (GST) and are as listed in the gazette notice current at the time of application and may differ from those in other publications. Gazette notices are available to view on the Board's website <http://www.pgdb.co.nz/legislation-policies/legislation.html>.

## Appendix A

### 1. Theory assessment

- 1.1. Applicants must report to the allocated room at least 15 minutes before the commencement of the assessment.
- 1.2. No class notes, handwritten notes or publications are permitted to be taken into assessment rooms. This includes Acts, Regulations, Codes of Practice and Standards. When sections of Acts, Regulations, Standards or Codes of Practice are required to be used to assist answering a question in an assessment the Board will make the relevant publication or extract available.
- 1.3. No cell phones or electronic equipment are permitted to be taken into the assessment room unless specifically allowed.
- 1.4. Equipment list

Applicants are required to provide the following equipment to sit the theory assessment:

- *calculator (must not have programmable functions or printable capability)*
- *pens*
- *drawing instruments:*
  - *compass*
  - *dividers*
  - *protractor*
- *set squares:*
  - *45/90 degrees*
  - *60/30 degrees*
- *pencil 2b*
- *eraser*
- *ruler*
- *scale ruler*
- *highlighters – red, blue, yellow, orange – for isometric design*

## Appendix B

### 1. Practical assessment

- 1.1. Assessment applicants must report to the workshop at least 15 minutes before the commencement of the assessment.
- 1.2. No handwritten notes or publications are permitted to be taken into the workshop. This includes Acts, Regulations, Codes of Practice and Standards. When sections of Acts, Regulations, Standards or Codes of Practice are required to be used the Board will make the relevant publication or extract available.
- 1.3. No cell phones or electronic equipment are permitted to be taken into the assessment room unless specifically allowed.
- 1.4. Applicants are required to provide the following tools. Note this list is provided as guidance but is not limited to these items.

#### (a) Hand Tools:

- *spanners*
- *screwdrivers*
- *hammer*
- *hacksaw and blades – 18-24-32*
- *junior hacksaw and blades*
- *files – flat, half round and round*
- *tape measure and rules*
- *carpenter pencil*
- *adjustable bevel*
- *centre punch*
- *level – 600mm*
- *calculator (must not have programmable functions or printable capability)*
- *tin snips – aviation – left and right hand*
- *straight tin snips*
- *posi or square drive bits*
- *claw hammer*
- *pipe tongs/stilsons*
- *multi grips/polygrips*
- *crescent/shifting spanner – 100mm-300mm*
- *pliers*
- *screwdrivers*
- *wood chisel 20mm*
- *polybutylene pipe cutters*
- *tube cutter copper – 10mm-25mm*
- *15mm copper tube benders*
- *20mm copper tube benders*
- *copper pipe expander 15mm, 20mm and 25mm*
- *22mm or 28mm speed or auger bit*
- *crox tool 15mm*
- *crox tool 20mm*
- *safety glasses*
- *safety boots*
- *testing and commissioning equipment*
- *earmuffs*
- *safety gloves*
- *overalls*
- *dust mask*

#### (b) Power Tools:

- *drill*
- *drill bits wood and metal*
- *skill saw*
- *jigsaw*
- *reciprocating saw*
- *multi tool saw*

Appendix C – Examples of a final mark sheet

Advanced Proficiency Assessment Plumbing Result				
Name:	<i>Thomas Crapper</i>			
AU Number:	XXXXX			
Date:				
Result:	Pass			Unsafe Matter(s)
Percent/Score:	0%			0
	Required %	Mark	NYC	
Theory	60%	88	-	
Practical				
Pipework	80%	92	0	
HWC	80%	90	0	
Stack & Waste	80%	86	0	
Penetrations	80%	80	0	

Advanced Proficiency Assessment Plumbing Result				
Name:	<i>Michael Flatley</i>			
AU Number:	XXXXX			
Date:				
Result:	Not Yet Competent			Unsafe Matter(s)
Percent/Score:	0%			0
	Required %	Mark	NYC	
Theory	60%	88	-	
Practical				
Pipework	80%	62	1	
HWC	80%	90	0	
Stack & Waste	80%	86	0	
Penetrations	80%	80	0	

Advanced Proficiency Assessment Plumbing Result				
Name:	<i>Roman Plumberi</i>			
AU Number:	XXXXX			
Date:				
Result:	Fail			Unsafe Matter(s)
Percent/Score:	0%			0
	Required %	Mark		Fail
Theory	60%	88	-	
Practical				
Pipework	80%	62	0	
HWC	80%	90	0	1
Stack & Waste	80%	86	0	
Penetrations	80%	80	0	