



RESP-FIT

FREE ONLINE
Respirator Selector Tool

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RESP-FIT Online Respirator Selector

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- Free respirator selection tool for all industries and workplaces of any size
- Based on selection principles from AS/NZS ISO 16975.1 (newly adopted) and AS/NZS 1715 with classification/ratings from both
- Takes user through respirator selection steps/considerations
- Provides supporting information from standards for each step and majority of questions
- Produces pdf report to share and/or save as part of respiratory protection program (RPP)

The screenshot shows the website's header with the RESP-FIT logo and navigation links: RPD Tool, My Account, and RESP-FIT Home. The main heading is "Online Respirator Selector Tool". Below this, there is a section titled "Respirator selection" with a sub-heading "Respirator selection". The text describes the tool's purpose: "Proper respirator selection is more than just selecting the correct filter for the hazard, which is commonly not understood or appreciated. This tool seeks to improve the understanding of elements of respirator selection detailed in our standards such as mobility, communication, fit, work rate, to name just a few." Below this, there is a section titled "A RESP-FIT initiative" with the text: "RESP-FIT is national respirator protective equipment fit testing training & accreditation program aimed at the proper fit of respirators to prevent exposure to contaminated air." To the left of this text is a photograph of a person wearing a yellow hard hat and a white respirator mask. The text next to the photo reads: "RESP-FIT RPD is a free online respirator selection tool based on principles from AS/NZS 1715 & the new SA/SNZ TS ISO 16975.1. It references both standards classification ratings & terminology." The RESP-FIT logo is also present in the bottom right corner of the screenshot.



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Training and Competency Scheme



Selector Tool Based on SA/SNZ TS ISO 16975.1 Annex J - Example of Selection Record Form

Example

The following form summarizes an example of a selection record.

This form can be used as a record of the selection process.

Step 1	
Organization:	
Details of the person completing the form:	
Name:	
Job title:	

Step 2	
Is the task any of the following? Firefighting, CBRN, marine, mining, etc.	
If the task is not any of the above, describe the task (e.g. motor vehicle paint spraying inside a garage).	
(a) How long does the task take? (e.g. spraying a motor vehicle: 20 min; cutting stone: 5 min)	_____ h _____ min
How many times a shift?	_____ times

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Step 3		Define the hazard	
Is the work area deficient in oxygen or the potential to become oxygen-deficient?	Yes	Follow national regulations if they exist. If there are no national regulations, use the following table.	
	No	Continue to next question	
Is the contaminant known?	Yes	Continue to next question	
	No	I. Seek professional advice to identify respiratory or industry guidance relating to the contaminant. If the contaminant cannot be identified, RPD with the highest protection class. Go to Step 5.	
Is the concentration of the contaminant known (i.e. by measurement or estimation)?	Yes	Continue — Complete the table below	
	No	I. Refer to national regulations or industry protection level. — Go to Step 5, or II. Refer to national regulations or industry RPD type and classification. — Go to Step 5 III. Refer to ISO 16975-1 or seek professional advice for the concentration. — Continue — Complete the table below IV. Select supplied breathable gas RPD to Step 5	

Complete the boxes below for particulate contaminants (dust, fibre, fume, aerosol)		
Contaminant Name/CAS number (if applicable)	(A) Concentration (Measured or estimated concentration in air [mg/m ³ or fibres/ml])	(B) IDLH Level (if applicable) (Immediately dangerous to life or health [mg/m ³ or fibres/ml])
[]		
[]		
[]		
[]*		

Complete the boxes below for gas/vapour contaminants		
Contaminant Name/CAS number (if applicable)	(A) Concentration (Measured or estimated concentration in air [ppm or mg/m ³])	(B) IDLH Level (if applicable) (Immediately dangerous to life or health [ppm or mg/m ³])
[]		
[]		
[]		
[]*		

Result of Step 3	
Which one of the contaminant(s) from the above tables (and separate sheets) has the highest hazard ratio in (D)? Record it in (E).	
If the hazard ratio is <1, then RPD is not required, UNLESS national or local regulations require otherwise.	
Are any of the contaminant concentrations in (A) higher than the IDLH value (B)? (if applicable)	Yes
	No

* If more than four contaminants are present, continue on a separate sheet.

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Step 4		Determine the minimum protection class required	
a) Do national regulations specify the type of RPD?	Yes	Follow the regulations.	
	No	Continue to 4b	
b) Do national regulations specify the use of APF?	Yes	Choose an RPD with the appropriate APF.	
	No	Continue to 4c	
c) Circle the number to the right that is greater than the hazard ratio as given in (E).		4	10
d) Choose the PC below the circled number and record in the lower right box.*		PC1	PC2

Step 5		
There are four work rate classes — W1, W2, W3 and W4:	W1	From light manual work to sustained hand and arm work such as bearing, standing, drilling
	W2	From intense arm and trunk work to intensive shovelling or digging
Choose the work rate class that best matches the task to be undertaken.	W3	From walking quickly or running to protective equipment and/or hand tools and goods to crawling up climbing over obstacles. Work cannot be sustained for more than 15 minutes
	W4	Climbing stairs and ladders at speed. Work that cannot be sustained for more than 5 minutes

Step 6	
Using the information in Step 2 (a and b), Step 4 and Step 5, select the class and class of filter(s) suitable for the hazard, including their task.	
Alternatively, if you wish to use a supplied breathable gas RPD:	
Has a suitable filter been identified?	Yes
	No

Step 7		Supplied breathable	
Calculate the volume of the breathable gas needed for the duration of the task by using the information in Step 3 and Step 5, using the calculation below. Changing the work rate will change the useable duration of the RPD.			

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Step 7		Supplied breathable	
Duration of task (min) × 30 L/min for W1 (e.g. 20 min × 30 L/min = 600 L)			
Duration of task (min) × 40 L/min for W2			
Duration of task (min) × 50 L/min for W3			
Duration of task (min) × 65 L/min for W4			
Classification options for class S RPD: The minimum classification necessary rounded up in increments of 150 L, and in increments of 3 capacity for the task duration is greater than any available class Sxxxx RPD			
		Minimum class S	5

Step 8		Task-related factors	
Answer all of the following questions for each wearer (circle Yes/No)			
Is the task carried out in a confined space (e.g. vat, pit, chambers, tanks, pipes, sewers, flues or wells)?	Yes	Requires special additional regulation	
	No	Continue	
Is the duration of RPD continuous wear >1 hour before it is taken off?	Yes	Consider assisted fill RPD or seek guidance	
	No	Continue	
Is the contaminant an eye irritant?	Yes	Consider selecting head (respiratory) protection	
	No	Continue	
Does the task require mobility, such that the use of air supply hoses is impractical?	Yes	Do not select type S RPD	
	No	Continue	
Is precise communication needed to give safety critical instructions when RPD is worn?	Yes	Select RPDs that are additional communication	
	No	Continue	
Does the task create sparks, molten metal or UV radiation?	Yes	Seek RPD manufacturer RPD may be required	
	No	Continue	
Is the work area atmosphere potentially explosive or flammable?	Yes	Seek RPD manufacturer RPD, e.g. intrinsic safety	
	No	Continue	
Is the work area atmosphere corrosive?	Yes	Seek RPD manufacturer RPD may be required	
	No	Continue	

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Step 9		Wearer-related factors		
Answer the following questions for each wearer (circle Yes/No)				
Are any of these present in the sealing area of the respiratory interface — stubble, beards, moustache, side burns, deep facial marking or facial jewellery?	Yes	Select loose fitting RPD (class L). Continue		
	No	Continue		
Are corrective lenses worn?	Yes	Select RPDs that do not interfere with the corrective lenses or RPDs that have facilities for wearing corrective lenses. Continue		
	No	Continue		
Are other types of personal protective equipment (PPE) worn (e.g. head, eye and hearing protection, protective clothing, etc.)?	Yes	Ensure that the selected RPD and other PPE required for the task do not interfere with each other. Consider RPDs that provide integrated head and/or face and eye and hearing protection. Continue		
	No	Continue		
Has the potential wearer been medically cleared to wear an RPD?	Yes	Continue		
	No	See note below — seek professional advice		
Medical conditions. Some pre-existing medical conditions (examples include breathing disorders such as asthma, or skin allergies or heart problems) may restrict or prevent some workers wearing any RPD or certain types of RPD. Ensure that workers are medically able to wear the selected and required RPD. Seek medical advice. Where national or local regulations exist, these should be followed.				

Step 10		Final selection		
Minimum class of filtering RPD				
Fill in the boxes below with the information gathered.				
Protection class required (See Step 4)	Work rate class required (See Step 5)	Filter type and class required (See Step 6)	Suitable respiratory interface	Suitable RPD (Identify examples of suitable RPD)
PC	W			
Minimum class of supplied breathable gas RPD				
Fill in the boxes below with the information gathered.				
Protection class required (See Step 4)	Work rate class required (See Step 5)	Breathable gas capacity (Sxxxx or SY) (See Step 7)	Suitable respiratory interface	Suitable RPD (Identify examples of suitable RPD)
PC	W	S		
Choose an RPD from the list of suitable RPD meeting the above requirements. If no such option is currently available on the market, select the next higher class and record. If the selected RPD has a tight-fitting respiratory interface, conduct a fit test on the wearer using that RPD.				
Selected RPD:				
Employer statement				
I understand that it is ultimately the responsibility of the employer, to select adequate and suitable RPD based on a risk assessment, to ensure that fit testing has been carried out with the RPD selected, where applicable, and that each wearer has been trained and is medically cleared.				
Name of the person providing the information in this form: _____				
Signature: _____			Date: _____	
Company Name: _____				

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Selection is one part of a Respiratory Protection Program (RPP)

2.1 RESPIRATORY PROTECTION PROGRAM

Where RPE is required to be worn, a respiratory protection program shall be established.

The program shall develop procedures in relation to the following:

- (a) Appointment of program administrator.
- (b) Selection of RPE.
- (c) Medical screening of users of RPE.
- (d) Training.
- (e) Issue of RPE.
- (f) Fitting of equipment.
- (g) Wearing of RPE (where required).
- (h) Maintenance of RPE.
- (i) Disposal of equipment.
- (j) Record keeping.
- (k) Program evaluation.

AS/NZS 1715:2009

6 RPD programme

6.1 General

The RPD programme includes processes for selecting, using and maintaining RPD to ensure adequate protection to the wearer.

Prior to using RPD, it is essential to establish a written RPD programme. The RPD programme needs to be understood by all persons within the organization, as appropriate.

6.2 RPD programme elements

The RPD programme consists of the following elements:

- a) roles and responsibilities (see [6.3](#));
- b) RPD programme implementation (see [6.4](#));
- c) risk assessment (see [Clause 7](#));
- d) selection procedures (see [Clause 7](#));
- e) medical assessment (see [7.3.3.2](#));
- f) fit testing (see [7.4](#));
- g) training (see [7.5](#));
- h) use (see [7.6](#));
- i) maintenance procedures (see [7.7](#));
- j) storage (see [7.8](#));
- k) programme review (see [7.9](#));
- l) records and record keeping (see [7.10](#)).

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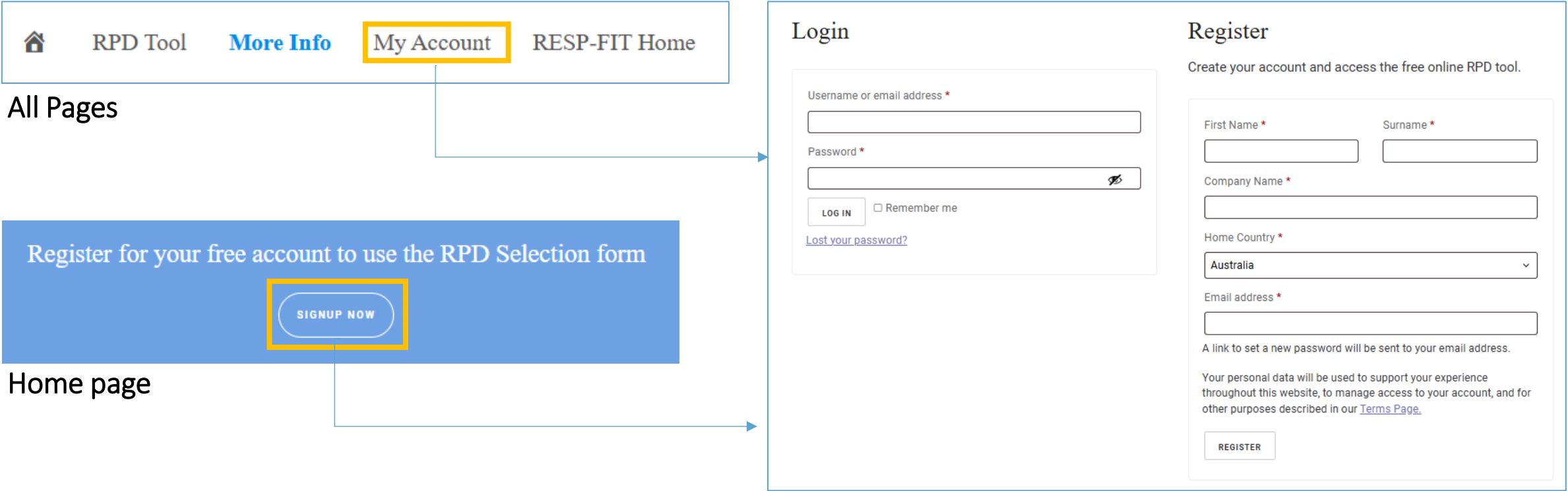
- DOES
 - take a user systematically through all respirator selection steps & considerations from standards
 - require a user to enter all relevant information for their scenario
 - likely require the user to gather certain information to enter
 - produce a PDF report with entered information & selections
 - provide AS/NZS ISO & AS/NZS 1715/1716 respirator rating/classification recommendations
 - provide other respirator selection considerations
 - provide supporting detailed information for majority of questions
- Does NOT
 - provide product recommendation for any specific manufacturer, brand, style, etc
 - make any filter recommendations or a filter change schedule
 - include training on the usage of respirators
 - include guidance on inspection, maintenance and storage of respirators



Account Login & Registration

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Requires account registration to use the tool and save reports



My Account - Dashboard

- Saves completed submission/s
- Redownload PDF report
- Start new blank RPD Selection form
- Duplicate - Starts new form previous report information preloaded for a similar scenario or update to the scenario

Dashboard

Account details

Log out

Hello [redacted] (not [redacted] [Log out](#))

Click on the entry title to view the PDF submission. To copy the record and make changes for a new submission, click duplicate. To remove a record, click delete.

Your Submissions

Search submissions... Total entries: 1

SUBMISSION	
Asbestos Conference (26-01-2026) Mark Reggers	<input type="button" value="DUPLICATE"/> <input type="button" value="DELETE"/>

Start a new blank form

Redownload PDF report

Start a new report with information preloaded



My Account – Account Details

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- Update or delete account details as required

Dashboard

Account details

Log out

First name *

Last name *

Company Name *

Home Country *

Email address *

Password change

Current password (leave blank to leave unchanged)

New password (leave blank to leave unchanged)

Confirm new password



Selector Steps/Sections

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- Disclaimer, Terms & Conditions
- Step 1 – Your Information
- Step 2 – Description of Task and Special Applications
- Step 3 – Define the Hazards
- Step 4 – Work Rate Assessment
- Step 5 – Air Purifying RPD Filter Identification
- Step 6 – Supplied Air/Breathable Gas RPD
- Step 7 – Suitability Assessment – Task-related factors
- Step 8 – Suitability Assessment – Wearer-related factors including fit testing and Respiratory Interface (RI)
- Step 9 – Finish & Download Report



What you need to get most of the tool?

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You will need information on:

- Your work area (is it or could it become: a confined space, oxygen deficient, corrosive, a flammable atmosphere?).
- The contaminant/s you need protection from and ideally the contaminant worker exposure level/s. Hazardous substances that are bought or manufactured at your workplace require a Safety Data Sheet. Substances (commonly) created as by-products (e.g. wood, flour and stone dusts) during the tasks can be entered in the tool.
- The task requirements - how long RPE is to be worn, whether clear communication is vital for safety, work rate estimation, mobility requirements.
- Other personal protective equipment (PPE) you need to use in addition to and with RPE.

Based on your inputs, the Selector recommends respiratory protection device classification/rating. This information can then be used to select respiratory protection that meets your various requirements as entered into the tool.

You should choose the type of respirator that is best for your individual worker/s taking account of their preferred choice of RPE, facepiece fitting, personal preferences (e.g. comfort, wanting to wear contact lenses or glasses, physical ability) and any pre-existing medical conditions (e.g. asthma, heart problems) that may prevent the wearing of a particular type of RPE. RPE and filters should be used in accordance with the manufacturer's instructions. You should comply with the relevant legal requirements for selection and use of RPE.

The final output is a record that can be saved electronically and/or printed. This can be saved in a Respiratory Protection Program and/or used to speak with a respirator manufacturer or distributor.

You will need to run the tool separately for each task/scenario. These can be saved electronically and accessed after setting up an account.

What is not known or hadn't been considered before is a trigger to go and investigate/assess



Terms & Conditions (Required)

This tool helps users summarise and assists in selecting respiratory protective devices (RPDs). Before using this tool, please read these terms and conditions carefully.


- 1. Acceptance**
By using this tool, you agree to these terms and conditions. If you do not agree, do not use the tool.
- 2. Purpose**
This tool is designed to assist with providing general guidance in selecting RPDs. It does not provide professional, legal, or medical advice.
- 3. Your Responsibility**
You are responsible for how you use the tool and any decisions you make as a result. The tool is not a substitute for professional judgment, training, or compliance with workplace safety laws. You must ensure that any RPD selection and use complies with your country's relevant standards, local laws, and workplace requirements.
- 4. No Liability**
Use of this tool is at your own risk. RESP-FIT does not accept any responsibility or liability for any loss, injury, damage, or other consequence arising from your use of the tool or reliance on its outputs. RESP-FIT makes no guarantees about the accuracy, completeness, or suitability of the information provided.
- 5. No Warranty**
The tool is provided "as is" without warranty of any kind, either express or implied.

TICK to confirm you have read, understood, and accepted these terms and conditions.


All terms & Conditions including the AIOH Privacy policy can be reviewed at <https://rpd.respfit.org.au/terms/>



More Information Icons & Pages


Click on a  to open a “More Information” page

STEP 3: Define the hazards

3.1: Is the work area deficient in oxygen or the potential to become oxygen-deficient?  (Required)


YES

NO

3.2: Is the contaminant known?  (Required)

YES


NO

3.4: Is the concentration of the contaminant known (i.e. by measurement or estimation)?  (Required)


YES

NO


Add Entry

Particulate or gas/vapor?  (Required)


Particulate (mechanically generated)

Contaminant  (Required)


Contaminant name or CAS number (if applicable)

(A). Concentration  (Required)

Task TWA Concentration or Peak Exposure Level.
Measured or estimated concentration in air [mg/m³ or fibres/ml]

(C). OEL / WEL / WES  (Required)

Occupational Exposure Limit (OEL) / Workplace Exposure Limit (WEL) / Workplace Exposure Standard (WES) value should be the same unit as in (A). If no OEL, what is the safe exposure value?

Hazard Ratio / RMF  (Required)

0

HR automatically calculated = (A)/(C)

Cancel Add Entry

Reference information to why question/s relates to respiratory protection selection



More Information Pages & Index

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All Pages

Home RPD Tool **More Info** My Account RESP-FIT Home



Opens a new page

RPD Selection Information

Oxygen Deficiency

The potential for oxygen deficiencies must be considered as entry into or work in oxygen-deficient atmospheres (ODA) is dangerous. An oxygen deficient environment is one where the atmosphere is below 19.5% oxygen level. A safe oxygen level means an oxygen content in air of between 19.5% -23.5% (Safe Work Australia).

Air purifying/filtering respirators such as filtering facepiece/disposable, reusable half and full face, Powered Air Purifying Respirators (PAPR) i.e. any respirator that uses a filter/cartridge to capture an airborne contaminant, must NOT be used in an oxygen deficient environment. A suitable supplied air respirator e.g. Self Contained Breathing Apparatus (SCBA) or airline with emergency breathing device function must be used.

Such atmospheres may exist in confined spaces, e.g. as a result of a chemical reaction or displacement. These conditions generally exist in areas with limited ventilation, e.g. tanks, vats, reaction vessels, wells, tunnels, pipes, conduits, access holes, silage pits and deep earthen trenches. Safe procedures for working in confined spaces are not covered in this tool but refer to your respective country/state/territory codes of practice as linked further below.

There are four basic mechanisms by which oxygen-deficient atmospheres, or their equivalent, may occur. These are:

1. Ascending to altitude.
2. Chemical reaction with solid products, e.g. the formation of rust or other corrosion products.
3. Chemical reaction gaseous, e.g. respiration, fire.
4. Displacement (dilution) by some other gas or vapour.

Of these, only the first two may result in an oxygen deficiency without the introduction of, or an increase in concentration of, some other gas or vapour. In the latter two cases, a significant oxygen deficiency will usually be caused with the simultaneous production of a toxic concentration of such a gas or vapour.

At high altitudes, although oxygen percent by volume remains constant, the amount of oxygen available for breathing is reduced owing to the lower pressure. This may produce effects similar to those of lack of oxygen by action of a simple asphyxiant.

Opens a new page

Index

Step 2 - Special Applications

2.2 [Special Application Overview](#)

- Fire Fighting (FF) Special Application
- Chemical, Biological, Radiological and Nuclear (CBRN) Special Application
- Marine (MA) Special Application
- Mining (MN) Special Application
- Abrasive Blasting (AB) Special Application
- Welding (WE) Special Application
- Escape (ES) Special Application

2.3 [Task Duration & Frequency](#)

2.4 [Temperature & Humidity](#)

Step 3 - Define the hazards

3.1 [Oxygen Deficiency](#)

3.2 [Contaminant Identification](#)

3.4 [Contaminant Concentration](#)

3.5 [Specific Regulatory/Standard/Industry Respirator Requirements](#)

3.9 [Methods for determining the RPD protection required](#)

3.10 Hazard Ratio Measurement

- Contaminant Type
- Contaminant & CAS Number
- Contaminant Concentration
- Occupational Exposure Limits/Standards
- Hazard Ratio/Required minimum protection factor (RMPF)

Step 4 - Work Rate Assessment

Step 5 - Air Purifying RPD Filter Identification

Step 6 - Supplied Air/Breathable Gas RPD

Step 7 - Task-related Factors

Step 8 - Wearer-related Factors

Reference information to why question/s relates to respiratory protection selection



Green Boxes

Equivalent AS/NZS ISO & AS/NZS 1715/1716 Classification/Ratings

AS/NZS ISO Classification/Rating from entered information

Equivalent AS/NZS 1715/1716 (where applicable)

3.10: Hazard Ratio Measurement
Please add the contaminant(s) in the table below.

Contaminant	(A). Concentration	(B). IDLH	(C). OEL / WEL / WES	Hazard Ratio / RMPF	
Benzene	20	500	1	20	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

(E). Highest hazard ratio

20

Assessment

Your minimum protection class required
This is based your hazard ratio as given in (E).
PC 3

AS/NZS 1715/1716 Standards Equivalent

Code: RMPF 50 - Example RMPF 50 respirator combination include Full facepiece with P2 particulate filter, Full facepiece with Class 1 gas/vapour filter, PAPR with loose fitting headtop and PAPR-P2/PAPR-P3 particulate filter. Refer AS/NZS 1715 for full list. Select suitable respirator system/combination appropriate for the application/task hazard.



AS/NZS ISO to AS/NZS 1715/1716 Equivalence Table

Information where Green boxes are drawn from

AS/NZS ISO Classification/Rating

Code Class	ISO Code	ISO Comments	AS/NZS Code	AS/NZS Comments
Gas Vapour	OG	Organic Gas low boiling point <65°C, 1 class. Gas filters shall be additionally classified by work rate and are also marked with a lower case "w" and the work rate class number, i.e. "w1", "w2", "w3" or "w4", after the efficiency and/or capacity class.	AX	Organic Compounds Boiling Point <65°C
Gas Vapour	OV	Organic Vapour ≥65°C, 1-4 classes. Gas filters shall be additionally classified by work rate and are also marked with a lower case "w" and the work rate class number, i.e. "w1", "w2", "w3" or "w4", after the efficiency and/or capacity class.	A	Organic Vapour Boiling Point ≥65°C, Class 1-3
Gas/Vapour	AC	Acidic Compounds, 1-4 classes. Gas filters shall be additionally classified by work rate and are also marked with a lower case "w" and the work rate class number, i.e. "w1", "w2", "w3" or "w4", after the efficiency and/or capacity class.	B & E	Acid and Inorganic Gases, Class 1-3
Gas/Vapour	BC	Basic compounds (Ammonia & Methylamine). Gas filters shall be additionally classified by work rate and are also marked with a lower case "w" and the work rate class number, i.e. "w1", "w2", "w3" or "w4", after the efficiency and/or capacity class.	K	Ammonia, Class 1-3

Equivalent AS/NZS 1715/1716 Classification/Rating

Link found in the "More Info Index Page" bottom row or rpd.respfit.org.au/translate/



Orange Boxes

- Orange boxes can indicate
 - Supporting information
 - Interim direction
 - Selection considerations

5.2: Has a suitable air purifying filter been identified? ⓘ (Required)

- YES
- NOT YET
- NO

Speak to respirator manufacturer and/or PPE distributors to investigate if the contaminant/s can be captured by an air purifying filter.

After confirming there is a suitable filter/cartridge, change response to “yes” to enter suitable filter details in Step 5.3. Refer to “More Info” link end of the 5.2 question for a number of manufacturers filter selection guides.

If there is no suitable filter cartridge for the contaminant/s, change response to “no” and go to Step 6 to select a supplied air/breathable gas respirator.

3.1: Is the work area deficient in oxygen or the potential to become oxygen-deficient? ⓘ (Required)

- YES
- NO

Entry into or work in oxygen-deficient atmospheres (<19% by volume) is dangerous. Such atmospheres may exist in confined spaces, e.g. as a result of a chemical reaction, displacement combustion, absorption and purging. These conditions generally exist in areas with limited ventilation, e.g. tanks, vats, reaction vessels, wells, tunnels, pipes, conduits, access holes, silage pits and deep earthen trenches.

Supplied Air/Supplied Breathable gas respiratory protection function is required for any oxygen deficient environment. This may be a SCBA (SXXXX) with sufficient duration or airline with escape (SY ES) capability for the required exit time with the highest Protection Class (PC) available. Air purifying respirators are not to be used as they only filter selected contaminants from the immediate environment and do not provide any different oxygen level to the oxygen deficient working environment.

Refer AS/NZS 1715 Section 4.2.7 or SA/SNZ TS ISO 16975.1 Section 7.2 Figure 3 Chart C and 7.3.2.4 for further information.

7.5: Is precise communication needed to give safety critical instructions when RPD is worn? ⓘ (Required)

- YES
- NO

Many tasks involve verbal communication between co-workers which may be especially important where safety is concerned, e.g. during confined space entry. Since RPD will in general impede communication, an assessment of the additional risks involved may be required. The RPD must permit communication to the level needed for the task (e.g. speaking, hearing and visual communications) as when workers find communication difficult, there may be a temptation to remove RPD in work areas, resulting in exposure to contaminants. RPD with speech transmitters and RPD models incorporating voice amplifiers or radios should be considered to aid communications.



Step 1 – Your Information

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STEP 1: Your information

Submission name (Required)
Give your submission a unique name

0 of 50 max characters

Your name (Required) **Email** (Required) **Your organisation**

Name of wearer(s), Similar Exposure Group (SEG) **Location/Task/Area**

Step 2 – Task Description & Special Applications

- Special Applications are new AS/NZS ISO terminology/classification
- Respiratory Protective Devices (RPD) for special applications are classified by the **unique hazards** in which they are used and for which **additional performance requirements have been defined** e.g. additional resistance to heat and flame for RPD intended for use in firefighting.

STEP 2: Description of the task

2.1: Describe the task and the working environment (Required)

(e.g. motor vehicle paint spraying inside a spray booth, kerb stone cutting outdoors, welding, abrasive blasting)

2.2: Does the task involve any special applications? (Required)

In most instances, only one special application will apply. Though more than one may be applicable for the task or environment, e.g. Structural firefighting concurrent with a CBRN environment. Where there is more than one special application selected, for the final respirator selection, select one with the highest protection class and work rate. Also, in addition to any special application selections, where question 3.9 Hazard ratio (HR) assessment or Control Banding (CB) is completed and a Protection Class (PC) is recommended, select the highest PC from the selected special application/s and Hazard Ratio/Control Banding recommendations.

- No special application
- Not sure
- Fire Fighting (FF): structural, hazardous materials, rescue, wildland/bushfire. ⓘ
- Chemical, Biological, Radiological and Nuclear (CBRN): First on-scene responder. Responder, receiver/first receiver. ⓘ
- Marine (MA): Firefighting, hazardous materials. ⓘ
- Mining (MN): Firefighting and rescue, underground mining explosive, underground non-explosive. ⓘ
- Abrasive Blasting (AB) ⓘ
- Welding (WE) ⓘ
- Escape (ES): Mining, marine, CBRN, fire, general filtering, general supplied air. ⓘ



Step 2 – Task Information

- Information relating to the task
- Task minutes used in other section calculation for supplied air volume (if relevant)

2.3: How long does the task take in MINUTES? ⓘ (Required)

Number of times the task is undertaken per shift

2.4: What are the working conditions? (Include the range) ⓘ

Temperature (°C)

Humidity (%RH)



Step 3: Define the Hazard

- Oxygen Deficiency?
- Contaminant?
- Contaminant Level?

- Links to AIOH, HASANZ and IOHA consultants

rpd.respfit.org.au

STEP 3: Define the hazards

3.1: Is the work area deficient in oxygen or the potential to become oxygen-deficient? ⓘ (Required)

- YES
 NO

3.2: Is the contaminant known? ⓘ (Required)

- YES
 NO

3.4: Is the concentration of the contaminant known (i.e. by measurement or estimation)? ⓘ (Required)

- YES
 NO



Contact an Occupational Hygienist or similar qualified/skilled professional to assist with measurement or estimation of contaminant levels. You can find an Occupational Hygiene Consultant in the following organisation's directory:

- [Australian Institute of Occupational Hygienists Register](#)
- [Health & Safety Association New Zealand \(HASANZ\) Register](#)
- [International Occupational Hygiene Member Associations](#)

Continue to complete the Control Banding Calculation table below

or

Select a supplied breathable gas RPD with the highest protection class.

Step 3 - Industry Requirements Pre-Loaded

rpd.respfit.org.au

3.5: Do National/State/Territory regulation or country or industry specific standards specify the type of respiratory protection and/or assigned protection levels for your hazard/industry?

- (Required)
- YES
- NO
- NOT SURE

Follow the national/state/territory/country regulation and/or industry specific standard respiratory protection requirements.

I. Select from pre-loaded specific hazard respiratory protection requirements

OR

II. If not preloaded, enter your specific regulatory/industry/application/environment required respiratory protection requirements.

Contact RESP-FIT respfit@aioh.org.au to have any substances added to the pre-loaded specific hazard section.

3.7: Select a National/State/Territory regulation or country standards specific

Substance	Respiratory Protection Required
There are no entries.	

Add Entry

Regulatory requirement not on the list? Enter the details below:

Product type & filter requirement

Hazard name

Protection level required

- Preloaded Asbestos (AU) & Isocyanates (AU) regulatory respiratory requirements
- Ability to add other regulatory hazard/industry specific respirators requirement
- Email respfit@aioh.org.au to request any additions to the tool



Step 3 – Asbestos (Australia) Pre-Loaded Example

Add Entry

Substance (Required)

Asbestos - Australia

Please refer to the regulatory/industry reference page for **Asbestos - Australia to select the respiratory protection that best fits your use case.**

View the [Asbestos - Australia regulatory/industry reference page](#), and select the appropriate Respiratory Protection Required below.

Respiratory Protection Required (Required)

- Non-Friable / Disposable or Half face reusable (negative pressure) / P1 or P2 particulate filter / RMPF ≥10 required
- Friable / Full Face (negative pressure) with P3 particulate filter / ≥ RMPF 100 required
- Friable / Full Face with PAPR (positive pressure) with PAPR-P3 particulate filter / RMPF 100+ required
- Friable / Full Face with airline (positive pressure) / RMPF 100+ required
- Friable / Full suit with continuous flow airline (positive pressure) / RMPF 100+ required

Asbestos – Australia

Select the RPE

The following information is from the Safe Work Australia Model Code of Practice ["How to safely remove asbestos \(July 2020\)"](#). If your local state/territory requirements are different, please use the non-preloaded form section to enter your specific required respiratory protection.

Work procedure	Required respirator	Filter type
Non-Friable: Simple enclosure erection for containing undamaged asbestos materials to prevent damage—no direct handling but possible disturbance of asbestos	Disposable, half-face particulate respirators OR Half-face, particulate filter (cartridge) respirator	P1 or P2
Non-Friable: Inspection of the condition of any installed friable asbestos, which appears in poor condition or has been disturbed	Disposable, half-face particulate respirators OR Half-face, particulate filter (cartridge) respirator	P1 or P2
Non-Friable: Sampling material for the purpose of identifying asbestos	Disposable, half-face particulate respirators OR Half-face, particulate filter (cartridge) respirator	P1 or P2
Non-Friable: Removal of non-friable asbestos (e.g. asbestos cement sheets, ceiling tiles and vinyl tiles)	Disposable, half-face particulate respirators OR Half-face, particulate filter (cartridge) respirator	P1 or P2
Friable: Extensive sample operations on friable asbestos	Full-face, particulate filter (cartridge) respirator	P3
Friable: Maintenance work involving the removal of small quantities of friable asbestos (e.g. replacement of friable asbestos gaskets and insulation)	Full-face, particulate filter (cartridge) respirator	P3
Friable: Certain forms of wet stripping in which wetting is prolonged and effective, and certain small-scale dry stripping operations	Full-face, powered air-purifying particulate respirator OR Full-face, positive pressure demand air-line respirator	P3
Friable: Certain forms of dry stripping and ineffective wet stripping (light wetting, no time given to saturate)	Full-face, powered air-purifying particulate respirator OR Full-face, positive pressure demand air-line respirator No lesser respirator will suffice	P3



Step 3 - Hazard Ratio (HR)/Required Minimum Protection Factor (RMPF) Calculation

rpd.respfit.org.au

3.9: What method of determining the Protection Level/Rating would you like to use? (Required)

- Hazard Ratio Measurement (preferred)
- Control Banding Estimation (alternative)
- Regulatory or industry specified requirement

Select particulate (mechanical or thermally generated) or gas/ vapour hazard type

3.10: Hazard Ratio Measurement

Please add the contaminant(s) in the table below.

Contaminant	(A). Concentration	(B). IDLH	(C). OEL / WEL / WES	Hazard Ratio / RMPF
There are no entries.				

Add Entry

(E). Highest hazard ratio

Add Entry

Particulate or gas/vapour? (Required)

Contaminant (Required)

Contaminant name or CAS number (if applicable)

(A). Concentration (Required)

Task TWA Concentration or Peak Exposure Level.
Measured or estimated concentration in air [ppm or mg/m³]

Substance has an IDLH? (Required)

(B). IDLH (Required)

Immediately Dangerous to Life or Health (IDLH) [ppm or mg/m³].
Required for gas/vapour only.

Gas / vapour boiling point (°C) (Required)

Boiling point value (°C)

(C). OEL / WEL / WES (Required)

Occupational Exposure Limit (OEL) / Workplace Exposure Limit (WEL) / Workplace Exposure Standard (WES) value should be the same unit as in (A). If no OEL, what is the safe exposure value?

Hazard Ratio / RMPF (Required)

HR automatically calculated = (A)/(C)

Cancel **Add Entry**

SA/SNZ TS ISO 16975.1 Annex C.1.2



Step 3 – Control Banding Estimation

3.9: What method of determining the Protection Level/Rating would you like to use? ⓘ (Required)

- Hazard Ratio Measurement (preferred)
- Control Banding Estimation (alternative)
- Regulatory or industry specified requirement

3.11: Control Banding Calculation

Please add the substance(s) and hazard codes in the table below.

Substance	Hazard codes identified	Highest Health Hazard Groups	Dustiness / Volatility	Required protection level
There are no entries.				

Add Entry

Substance (Required)

Please enter the substance name and/or code.

Hazard Statement Codes relating to human exposure (Required)

You can find hazard codes on [PubChem](#), [Safe Work Australia Hazardous Chemical Information System \(HCIS\)](#), or Safety data sheets (SDS).
Enter ALL hazard codes associated with the substance into this field, each code on a new line. Hazard codes must be in the format H### or EUH##, where each # represents a digit.

Please enter hazards relating to human exposure, not to environmental hazards.

SA/SNZ TS ISO 16975.1 Annex C.1.3

Search [Safe Work Australia HCIS](#) , [Pubchem](#) (US), or Safety Data Sheet (SDS) for chemical hazard codes



Step 3 – Control Banding Estimation

Add Entry

Substance (Required)
Toluene
Please enter the substance name and/or code.

Hazard Statement Codes relating to human exposure (Required)
H315
H373
H360
H304
You can find hazard codes on [PubChem](#), [Safe Work Australia Hazardous Chemical Information System \(HCIS\)](#), or Safety data sheets (SDS).
Enter ALL hazard codes associated with the substance into this field, each code on a new line. Hazard codes must be in the format H### or EUH##, where each # represents a digit.
Please enter hazards relating to human exposure, not to environmental hazards.

[Search/Update Codes](#)

Hazard codes identified	Hazard codes NOT identified
H315, H373, H360, H304 <small>Matches H### or EUH##</small>	None <small>Matches H### or EUH##</small>

Highest Health Hazard Groups
D - very toxic
A - irritant | B - harmful | C - toxic | D - very toxic | E - special cases, i.e. mutagens, carcinogen, respiratory sensitizers.

What amount of substances being used or handled? (Required)

SMALL: grams or millilitres
 MEDIUM: kilograms or litres
 LARGE: tonnes or cubic metres

What type of substance is being used? (Required)

Substances that generate particulate dust
 Particulate/liquids that may generate gases/vapours

Is the substance a gas during normal operation? (Required)

YES
 NO
This means that the substance is not a gas only during certain operating temperatures.

Task operating temperature (°C) (Required): 30
Substance boiling point (°C) (Required): 110

Dustiness / Volatility: **Medium**
Required protection level: **250**

[Delete](#) [Cancel](#) [Edit Entry](#)



Step 4 – Work Rate Assessment

New in AS/NZS ISO classification framework & is not part of AS/NZS 1715/1716 ratings/classifications

STEP 4: Work rate assessment ⓘ

4.1: Choose the work rate class that best matches the task to be undertaken ⓘ (Required)

- W1: From light manual work to sustained hand and arm work such as bench work, standing, drilling.
- W2: From intense arm and trunk work to intensive shovelling or digging.
- W3: From walking quickly or running with protective equipment and/or heavy tools and goods to crawling under and climbing over obstacles. Work that cannot be sustained for more than 15 minutes.
- W4: Climbing stairs and ladders at high speed. Work that cannot be sustained for more than 5 minutes.

rpd.respfit.org.au

Work Rates and Examples activities

Refer to [Work Rate Assessment – RESP-FIT RPD Online](#) for more information on the background of Work Rates and Respiratory Protective Devices (RPD) as part of AS/NZS ISO RPD Standards.

The expected work rate should be determined in order to select RPD with the appropriate work rate class. Four work rate classes, W1, W2, W3 and W4, are designated for RPD; however, those with standardized connector according to AS/NZS ISO 17420-3 are limited up to work rate W2.

To determine the required work rate class, the highest class according to the descriptions below should be used.

NOTE: Further information on work rates and work activities is given in SA/SNZ TS ISO 16976.1:2024.

Work rate class	Work	Examples of work and activities
W1	Light to moderate	<p>Average for full work shifts including breaks</p> <p>Sitting at ease: light manual work (writing, typing, drawing, sewing, bookkeeping); hand and arm work (small bench tools, inspection, assembly or sorting of light materials); arm and leg work [driving vehicle in normal conditions, operating foot switch or pedal, standing drilling (small parts), milling machine (small parts), coil winding, small armature winding, machining with low power tools]</p> <p>To:</p> <p>Sustained hand and arm work (hammering in nails, filing); arm and leg work (off-road operation of lorries, tractors or construction equipment); arm and trunk work (work with pneumatic hammer, tractor assembly, plastering, intermittent handling of moderately heavy material, weeding, hoeing, picking fruits or vegetables, pushing or pulling light-weight carts or wheelbarrows, forging); walking at a speed of up to 5,5 km/h</p>
W2	Heavy to Very Heavy	<p>Average for full work shifts including breaks</p> <p>Intense arm and trunk work (carrying heavy material, shovelling, sledgehammer work, sawing, planing or chiselling hard wood, hand mowing, digging, pushing or pulling heavily loaded hand carts or wheelbarrows, chipping castings, concrete block laying)</p> <p>To:</p> <p>Very intense activity at fast pace; working with an axe; intense shovelling or digging; climbing stairs, ramp or ladder; walking quickly with small forms; running; walking at a speed greater than 5,5 km/h</p>
W3	Very, very heavy to extremely heavy	<p>Continuous work for up to 2 h without breaks</p> <p>Safety and rescue work with heavy equipment and/or personal protective equipment; fit individuals pacing themselves at 50 % to 60 % of their maximal aerobic capacity; walking quickly or running with protective equipment and/or tools and goods; walking at 5 km/h and 10 % elevation</p> <p>To:</p> <p>Continuous work for up to 15 min without breaks.</p> <p>Rescue and fire-fighting work at high intensity; fit and well-trained individuals pacing themselves at 70 % to 80 % of their maximal aerobic capacity; searching contaminated spaces; crawling under and climbing over obstacles; removing debris; carrying a hose; walking at 5 km/h and 15 % elevation</p>
W4	Maximal	<p>Continuous work for less than 5 min without breaks</p> <p>Rescue and firefighting work at maximal intensity; fit and well-trained individuals pacing themselves at 80 % to 90 % of their maximal physical work capacity; climbing stairs and ladders at high speed; removing and carrying victims; walking at 5 km/h and 20 % elevation</p>



Step 5 – Filter Identification

STEP 5: Filter identification

Using the information in Step 2 (a and b), Step 3 and Step 4, seek professional advice to identify the type and class of filter(s) suitable for the hazard, including their relevant service life(s) applicable to your task. Alternatively, if you wish to use a supplied breathable gas RPD, go to Step 6.

5.1: Do you wish to use a supplied breathable gas RPD? *(Required)*

E.g. Self Contained Breathing Apparatus (SCBA), pressure demand or continuous flow airline.

If YES, go to Step 6.

YES

NO



Step 5 – Filter Identification

5.2: Has a suitable air purifying filter/respirator type been identified? ⓘ (Required)
E.g. disposable/filtering facepiece respirator, reusable respirators (half and full facepiece with filters), Powered Air Purifying Respirator (PAPR).

YES

NOT YET

NO

💡 Speak to respirator manufacturer and/or PPE distributors to investigate if the contaminant/s can be captured by an air purifying filter.

After confirming there is a suitable filter/cartridge, change response to "yes" to enter suitable filter details in Step 5.3. Refer to "More Info" link end of the 5.2 question for a number of manufacturers filter selection guides.

If there is no suitable filter cartridge for the contaminant/s, change response to "no" and go to Step 6 to select a supplied air/breathable gas respirator.

💡 If there is no suitable air purifying filter (after confirming with the respirator manufacturer and/or PPE distributor) or you are unsure of its suitability for the contaminant/s, continue to Step 6 to select a supplied air/breathable gas respirator.



Step 5 – Filter Identification

5.2: Has a suitable air purifying filter/respirator type been identified? ⓘ (Required)
E.g. disposable/filtering facepiece respirator, reusable respirators (half and full facepiece with filters), Powered Air Purifying Respirator (PAPR).

YES

NOT YET

NO

5.3: Select the gas/vapour filter type and/or specific gas filters ⓘ (Required)
Select "Not Relevant" if not required.

Acidic x Basic (Ammonia & Methylamine) x Organic Vapours x

Not Relevant

Select gas/vapour filter type --->

- Nitrous Oxides
- Organic Gases

Select specific gas filters --->

- Arsine
- Carbon Monoxide
- Chlorine Dioxide
- Ethylene Oxide
- Formaldehyde
- Hydrogen Cyanide
- Hydrogen Fluoride
- Mercury
- Methyl Bromide

5.4: Minimum particle filter efficiency ⓘ (Required)
Select "Not Relevant" if not required.

▼

- Not Relevant
- F1 (80% efficiency)
- F2 (95% efficiency)
- F3 (99% efficiency)
- F4 (99.9% efficiency)
- F5 (99.99% efficiency)

Continue next page/slide



Step 5 – Filter Identification (cont.)

Continue from previous page/slide

5.3: Select the gas/vapour filter type and/or specific gas filters ⓘ (Required)
Select "Not Relevant" if not required.

Organic Vapours x Acidic x Basic (Ammonia & Methylamine) x

5.4: Minimum particle filter efficiency ⓘ (Required)
Select "Not Relevant" if not required.

F3 (99% efficiency) v

Assessment

ISO suitability assessment (Required)

OV AC BC F3

AS/NZS 1715/1716 Standards Equivalent

A B & E K P3

Product

0 of 30 max characters

Manufacturer code

0 of 30 max characters

Part number

0 of 30 max characters

Recommendation received from

0 of 30 max characters

Continue next page/slide



Step 5 – Filter Identification (cont.)

Continue from previous page/slide

Has a filter change schedule been established? ⓘ (Required)

YES

TO BE DETERMINED

There is no overall rule/set timeframe about when filters should be changed. Each situation needs to be treated/assessed individually. A filter/cartridge change schedule must be established, so that the filters/cartridges are changed prior to their end of service life. The actual service life of a filters depends on many factors including its designated capacity, the contaminant, the concentration, humidity, temperature and the work rate, i.e. the flow rate of air through the filter. Advice should be sought from the manufacturer of the RPE in conjunction with an WHS professional, e.g. an occupational hygienist, on an acceptable change-over time based on likely exposure patterns, so an adequate safety margin is allowed. Based on this advice a filter replacement schedule must be established and documented. Certain filters/cartridges maybe marked for single shift/set time use only or that have time limitations that must be replaced in accordance with the manufacturer's instructions for use.

Please enter the schedule below:

Months	Days	Hours	Weeks
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Minutes			
<input type="text"/>			



Step 6 – Supplied Air/Breathable Gas

STEP 6: Supplied breathable gas RPD

6.1: Which supplied breathable gas RPD capacity class? ⓘ (Required)

Fixed volume of breathable gas (SXXXX), e.g. Self Contained Breathing Apparatus (SCBA)

External supply of breathable gas (SY), e.g. airline supplied

Supplied breathable Gas SY is where the air supply is from an external source e.g. compressor located outside the hazardous area, from pressurized cylinders or from an uncontaminated area by a blower or drawn by the breathing action of the wearer such as an airline connected to an air panel & compressor.

The supplied air/breathable gas must be of breathable quality for each wearer as well as sufficient quantity and the required pressure. The quality of the supplied air/breathable gas must be checked regularly by a competent person and records kept. Refer to [Supplied Air/Breathable Gas Quality – RESP-FIT RPD Online](#) for further information.

Distance of task to Air Panel and/or cylinders ⓘ (Required)

Is Emergency Escape capability required? ⓘ (Required)

YES

NO

Supplied breathable Gas Sxxxx where xxxx is the available breathable gas volume for the wearer. The longer the task, the greater the volume required. For example, if the SCBA available breathable gas capacity is 1260L it would have a classification of S1200. Typical examples of self-contained sources could be breathable gas cylinder, chemical oxygen or liquified-breathable gas.

The supplied air/breathable gas must be of breathable quality for each wearer as well as sufficient quantity and the required pressure. The quality of the supplied air/breathable gas must be checked regularly by a competent person and records kept. Refer to [Supplied Air/Breathable Gas Quality – RESP-FIT RPD Online](#) for further information.

Calculations based on the volume of the breathable gas needed for the duration of the task, including entry and exit has been completed (using the information in Step 2 and Step 4): Duration of task (min) × 30 L/min for W1, Duration of task (min) × 40 L/min for W2, Duration of task (min) × 50 L/min for W3, Duration of task (min) × 65 L/min for W4.

Assessment

Minimum capacity (Litres)

1,500

Minimum class

S 1,500



Step 7 – Task-related factors

STEP 7: Task-related factors ⓘ

Answer all of the following questions relating to the potential task factors.

7.1: Is the task carried out in a confined space? ⓘ (Required)
(e.g. vat, pit, chambers, tanks, trenches, pipes, sewers, flues or wells)

- YES
- NO

Work in a confined space requires special considerations in accordance with [national/state/territory regulations and guidance materials such as codes of practice](#). Confined spaces commonly may have [oxygen deficient environments, immediately dangerous to life and health \(IDLH\)](#) and or [unknown contaminants](#) which all require specific RPDs.

7.2: Is the duration of RPD continuous wear >1 hour before it is taken off? ⓘ (Required)

- YES
- NO

7.3: Is the contaminant an eye irritant? ⓘ (Required)

- YES
- NO

7.4: Does the task require mobility, such that the use of air supply hoses is impractical? ⓘ (Required)

- YES
- NO

7.5: Is precise communication needed to give safety critical instructions when RPD is worn? ⓘ (Required)

- YES
- NO

Many tasks involve verbal communication between co-workers which may be especially important where safety is concerned, e.g. during confined space entry. Since RPD will in general impede communication, an assessment of the additional risks involved may be required. The RPD must permit communication to the level needed for the task (e.g. speaking, hearing and visual communications) as when workers find communication difficult, there may be a temptation to remove RPD in work areas, resulting in exposure to contaminants. RPD with speech transmitters and RPD models incorporating voice amplifiers or radios should be considered to aid communications.

7.6: Does the task create sparks, molten metal or UV radiation? ⓘ (Required)

- YES
- NO

7.7: Is the work area atmosphere potentially explosive or flammable? ⓘ (Required)

- YES
- NO

7.8: Is the work area atmosphere corrosive? ⓘ (Required)

- YES
- NO



Step 8 – Wearer-related factors

STEP 8: Wearer-related factors ⓘ

Answer all of the following questions relating to the wearers involved with the task.

8.1: Are any of these present in the sealing area of the respiratory interface – stubble, beards, moustache, side burns, deep facial marking or facial jewellery?

ⓘ (Required)

YES

NO



Facial characteristics have to be considered within the suitability assessment because fit will impact the overall protection provided by the RPD. Facial characteristics which are surface-related, such as scarring, wrinkles, jewellery or unshaven hair can significantly affect the protection offered by some tight-fitting RPD. **Facial hair (stubble, beards, sideburns, moustache etc.) is not permitted with any tight-fitting face piece sealing surface area and the wearers face.** In these cases, loose-fitting respiratory interfaces will be most suitable.

8.2: Are corrective lenses worn? ⓘ (Required)

YES

NO

8.3: Are other types of personal protective equipment (PPE) worn? ⓘ (Required)

(e.g. head, eye and hearing protection, protective clothing, etc.)

YES

NO

8.4: Has the potential wearer been medically cleared to wear an RPD? ⓘ (Required)

YES

NO



Step 8 – Respiratory Interface (RI) Selection/Preference

New AS/NZS ISO terminology

8.5: Respiratory Interface (RI) Selection/Preference

Respiratory Interface (RI) is new terminology from the AS/NZS ISO RPD Standards to describe the RPD coverage area protective barrier between the wearers respiratory system and the ambient atmosphere (**a – mouth only, b – Nose and mouth, c – Face, d – Head, e – More than head, up to complete body**). RI are then also classified by **tight fitting (T)** being RPD those that form a seal with the wearers skin and **loose fitting (L)** being RPD that have a partial seal or no seal with the skin of the wearer. Refer to [Respiratory Interface \(RI\) Classes](#) for further examples and images of different RI classes.

Assessment

Select a Respirator Interface Code (Required)

cT: Face - tight fitting. "Full face mask/facepiece". Protects eyes.

AS/NZS 1715/1716 Standards Equivalent (Required)

Code: Full facepiece tight fitting - These RPE cover the eyes, nose and mouth. All facepieces for use in non-powered devices are fitted with inner orinasal cups which cover the mouth and nose. The inner cup reduces steaming-up of the visor and re-inhalation of the air exhaled by the wearer. Some facepieces are fitted with speech diaphragms to improve the ability to transmit the wearer's speech; some also have a means to fit special spectacles within the facepiece. The visor provides protection for the eyes against dusts and gases.

Respiratory Interface (RI) Classes

Respiratory Interface (RI) is new terminology from the AS/NZS ISO RPD Standards to describe the RPD coverage area protective barrier between the wearers respiratory system and the contaminated environment. The respiratory interface may or may not be separable from the rest of the RPD; however, it is always part of the complete RPD.

There are two types of respiratory interface: tight-fitting and loose-fitting.

- Tight-fitting (T)** respiratory interfaces which rely on a good seal between the RPD and the wearers skin
- Loose-fitting (L)** respiratory interfaces have a partial seal or no seal with the skin of the wearer which rely on sufficient air being provided to prevent hazardous substances leaking into the area covering the face, head or body.

Respiratory interfaces are classified by barrier lines and type, tight-fitting or loose-fitting


RI Class	RI area	Type
aL	a – Mouth only	L – Loose fitting
aT	a – Mouth only	T – Tight Fitting
bL	b – Nose and mouth	L – Loose fitting
bT	b – Nose and mouth	T – Tight Fitting
cL	c – Face	L – Loose fitting
cT	c – Face	T – Tight Fitting
dL	d – Head	L – Loose fitting
dT	d – Head	T – Tight Fitting
eL	e – More than head, up to complete body	L – Loose fitting
eT	e – More than head, up to complete body	T – Tight Fitting

SA/SNZ TS ISO 16973:2023 Figure E.1 Respiratory interface areas

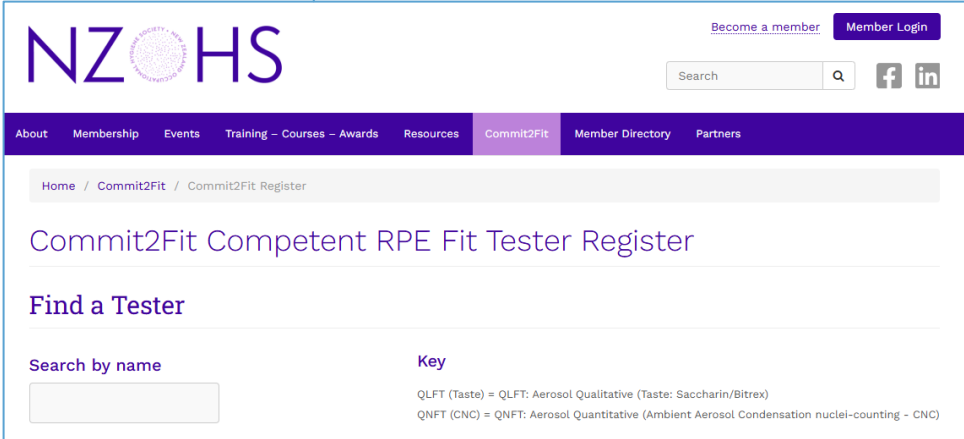
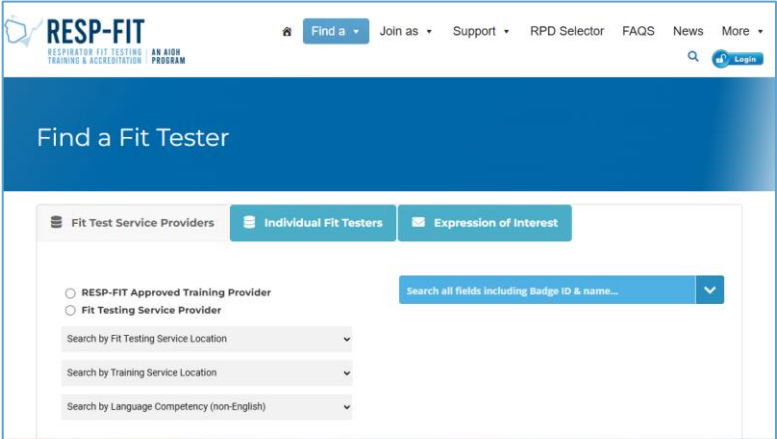


Step 8 – Fit Testing

8.6: Respirator Fit Testing

 Fit testing is required for all tight-fitting facepieces (bT, cT, dT) respiratory protective devices (RPD) no matter if its negative pressure or positive pressure. Fit testing confirms if an adequate fit is able to be achieved and is then up to the wearer to wear the RPD in the same way on the job to achieve expected/required levels of protection. There are a number of approved fit testing methodologies per AS/NZS ISO 16975.3:2023 which must be undertaken by a competent fit test operator. Refer to rpd.respfit.org.au/more-info/fit-testing-for-tight-fitting-rpd/ or respfit.org.au/faqs/ for further information on fit testing in general.

If you are looking for fit tester for your organisation/workers, in Australia visit [RESP-FIT](#) and in New Zealand visit [Commit2Fit](#).



Step 9 - Conclusion

STEP 9: Conclusion

You have now completed the RESP-FIT Online Respirator Selector form. From the information entered there are a number of **green Assessment boxes throughout the form which detail a ISO rating element and an equivalent AS/NZS 1716/1715 rating (if applicable)**. After clicking "Finish & Submit" you will be sent (to your nominated email address) and also saved to your account (if registered) a PDF document of this information and recommendations. This document with the highlighted green assessment boxes) can be provided to your selected Respirator manufacturer and/or RPD distributor to assist with your assessment and selection of an adequate and suitable respirator system/combination. **Certain section are highlighted Orange, which are other selection considerations to be evaluated/considered**. This PDF document can also be saved in your respiratory protection program (RPP) documentation as a record of your selection process undertaken.

If you need to update any section or details after completing or you had selected any "unsure" options, you need to have an account registered to go back and make these amendments and republish a updated PDF document. Depending on what changes/amendments are made, you may need you re-enter some information again as these changes may reset some sections.

Finish & Submit

Save for Later

Reset

Continue next page/slide

Resets the whole form and removes all entered information

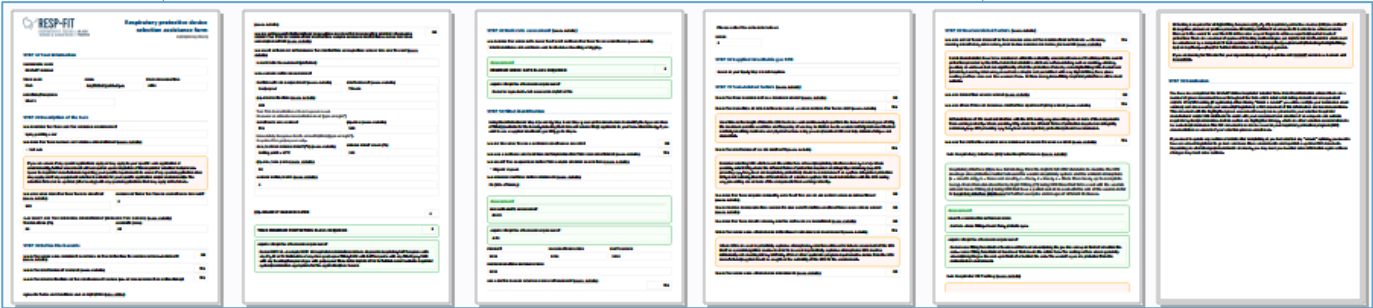
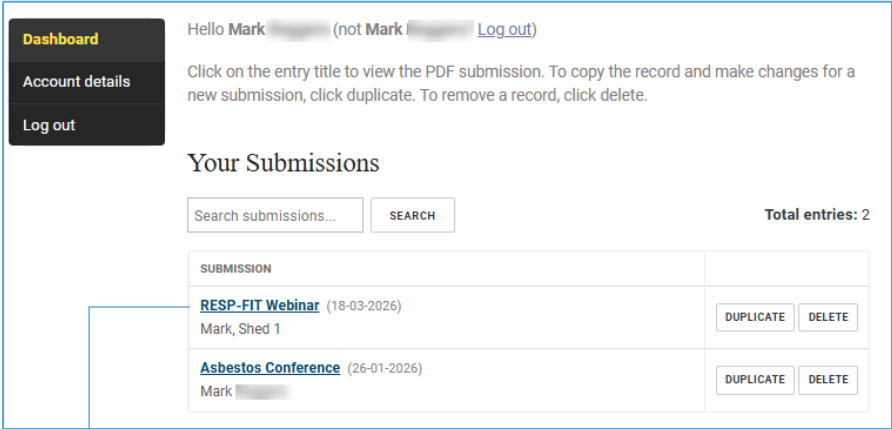


Step 9 – Report


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Finish & Submit Save for Later Reset

Your submission has been completed
A copy of your submission has been emailed to your nominated email address.
If you have an account, you can log in to view a history of your submissions.
Download your PDF



Step 9 – Save for Later

Finish & Submit  Save for Later Reset

Link to continue editing later

Please use the following link to return and complete this form from any computer.

https://rpd.respfit.org.au/rpd/?gf_token=08774d76d21b47d19fd6b2c65e404d89


Note: This link will expire after 30 days. For account holders, this form will only appear in your records after you have completed and submitted it. We recommend you email the link.

Enter your email address if you would like to receive the link via email.

Email Address (Required)

Send Link

Link to continue RPD Selection Form

 RESP-FIT RPD <[redacted]>
To: [redacted] 4:42 PM

Thank you for saving RPD Selection Form. Please use the unique link below to return to the form from any computer.

https://rpd.respfit.org.au/rpd/?gf_token=08774d76d21b47d19fd6b2c65e404d89

Remember that the link will expire after 30 days so please return via the provided link to complete your form submission.



Feedback/Suggestions

rpd.respfit.org.au

- First version of the tool
- It will only get better from here as the tool evolves over time with further feedback and funding
- Plans under way to make improvements to the PDF report to add an Executive Summary section to condense recommendations on the first page
- Aspirations to add a Bioaerosol control banding function from SA/SNZ TS ISO 16975.1 Annex H reference to Canadian Standard Z94.4

Email feedback/suggestions to respfit@aioh.org.au at any time



Example Scenario Steps

A technician is performing solvent-based metal cleaning inside a manufacturing workshop. The process uses a liquid blend containing benzene, methyl ethyl ketone (MEK) and with a light oil mist from spraying. Benzene exposure is 20x the WES/WEL and MEK exposure is 2x the WES/WEL. The task involves spraying, wiping, and drying components for several hours per shift.

STEP 1: Your information

Submission name (Required)
Give your submission a unique name

14 of 50 max characters

Your name (Required) **Email** (Required) **Your organisation**

Name of wearer(s), Similar Exposure Group (SEG) **Location/Task/Area**

STEP 2: Description of the task

2.1: Describe the task and the working environment (Required)
(e.g. motor vehicle paint spraying inside a spray booth, kerb stone cutting outdoors, welding, abrasive blasting)

Workers clean metal components using solvent based cleaners that contain Toluene and Methyl ethyl ketone (MEK). They also spray the cleaner which creates a mist. They also wipe these parts and wait for them to dry. They conduct this task multiple times during a shift.

2.2: Does the task involve any special applications? (Required)

No special application

2.3: How long does the task take in MINUTES? (Required) **Number of times the task is undertaken per shift**

2.4: What are the working conditions? (Include the range) (Required)

Temperature (°C) **Humidity (%RH)**

Example Scenario Steps (cont.)

STEP 3: Define the hazards

3.1: Is the work area deficient in oxygen or the potential to become oxygen-deficient? ⓘ (Required)

YES

NO

3.2: Is the contaminant known? ⓘ (Required)

YES

NO

3.4: Is the concentration of the contaminant known (i.e. by measurement or estimation)? ⓘ (Required)

YES

NO

3.5: Do National/State/Territory regulation or country or industry specific standards specify the type of respiratory protection and/or assigned protection levels for your hazard/industry? ⓘ (Required)

YES

NO

NOT SURE

3.9: What method of determining the Protection Level/Rating would you like to use? ⓘ (Required)

Hazard Ratio Measurement (preferred)

Control Banding Estimation (alternative)

Regulatory or industry specified requirement



Example Scenario Steps (cont.)

Edit Entry

Particulate or gas/vapour? (Required)

Contaminant (Required)

Contaminant name or CAS number (if applicable)

(A). Concentration (Required)

Task TWA Concentration or Peak Exposure Level.
Measured or estimated concentration in air [ppm or mg/m³]

Substance has an IDLH? (Required)

(B). IDLH (Required)

Immediately Dangerous to Life or Health (IDLH) [ppm or mg/m³].
Required for gas/vapour only.

Gas / vapour boiling point (°C) (Required)

Boiling point value (°C)

(C). OEL / WEL / WES (Required)

Occupational Exposure Limit (OEL) / Workplace Exposure Limit (WEL) / Workplace Exposure Standard (WES) value should be the same unit as in (A). If no OEL, what is the safe exposure value?

Hazard Ratio / RMPF (Required)

20

HR automatically calculated = (A)/(C)

Delete

Cancel

Edit Entry

3.10: Hazard Ratio Measurement

Please add the contaminant(s) in the table below.

Contaminant	(A). Concentration	(B). IDLH	(C). OEL / WEL / WES	Hazard Ratio / RMPF	
Benzene	20	500	1	20	<div style="display: flex; justify-content: space-around; font-size: x-small;"> Edit Delete </div>
Methyl Ethyl Ketone (MEK)	300	3,000	150	2	<div style="display: flex; justify-content: space-around; font-size: x-small;"> Edit Delete </div>
Oil Mist	10		5	2	<div style="display: flex; justify-content: space-around; font-size: x-small;"> Edit Delete </div>

Add Entry

(E). Highest hazard ratio

20

Assessment

Your minimum protection class required

This is based your hazard ratio as given in (E).

PC 3

AS/NZS 1715/1716 Standards Equivalent

Code: RMPF 50 - Example RMPF 50 respirator combination include Full facepiece with P2 particulate filter, Full facepiece with Class 1 gas/vapour filter, PAPR with loose fitting headtop and PAPR-P2/PAPR-P3 particulate filter. Refer AS/NZS 1715 for full list. Select suitable respirator system/combination appropriate for the application/task hazard.



Example Scenario Steps (cont.)

STEP 4: Work rate assessment

4.1: Choose the work rate class that best matches the task to be undertaken (Required)

- W1: From light manual work to sustained hand and arm work such as bench work, standing, drilling.
- W2: From intense arm and trunk work to intensive shovelling or digging.
- W3: From walking quickly or running with protective equipment and/or heavy tools and goods to crawling under and climbing over obstacles. Work that cannot be sustained for more than 15 minutes.
- W4: Climbing stairs and ladders at high speed. Work that cannot be sustained for more than 5 minutes.

Assessment

Minimum work rate class required

This is based your task selection above.

W 2

AS/NZS 1715/1716 Standards Equivalent

Code: No Equivalent - Not assessed in AS/NZS 1716

STEP 5: Filter identification

Using the information in Step 2 (a and b), Step 3 and Step 4, seek professional advice to identify the type and class of filter(s) suitable for the hazard, including their relevant service life(s) applicable to your task. Alternatively, if you wish to use a supplied breathable gas RPD, go to Step 6.

5.1: Do you wish to use a supplied breathable gas RPD? (Required)

E.g. Self Contained Breathing Apparatus (SCBA), pressure demand or continuous flow airline.

If YES, go to Step 6.

- YES
- NO

5.2: Has a suitable air purifying filter/respirator type been identified? (Required)

E.g. disposable/filtering facepiece respirator, reusable respirators (half and full facepiece with filters), Powered Air Purifying Respirator (PAPR).

- YES
- NOT YET
- NO



Example Scenario Steps (cont.)

5.3: Select the gas/vapour filter type and/or specific gas filters ⓘ (Required)
Select "Not Relevant" if not required.

Organic Vapours ✕

5.4: Minimum particle filter efficiency ⓘ (Required)
Select "Not Relevant" if not required.

F2 (95% efficiency) ▾

Assessment

ISO suitability assessment (Required)

OV F2

AS/NZS 1715/1716 Standards Equivalent

A P2

Product 456789 6 of 30 max characters

Manufacturer code 1234 4 of 30 max characters

Part number 987654321 9 of 30 max characters

Recommendation received from

Manufacturer ABC 16 of 30 max characters

Has a filter change schedule been established? ⓘ (Required)

YES

TO BE DETERMINED

Please enter the schedule below:

Months	Days	Hours	Weeks
			2

Minutes



Example Scenario Steps (cont.)

STEP 6: Supplied breathable gas RPD

Based on your input, Step 6 is not required.

STEP 7: Task-related factors ⓘ

Answer all of the following questions relating to the potential task factors.

7.1: Is the task carried out in a confined space? ⓘ (Required)

(e.g. vat, pit, chambers, tanks, trenches, pipes, sewers, flues or wells)

- YES
 NO

7.2: Is the duration of RPD continuous wear >1 hour before it is taken off? ⓘ (Required)

- YES
 NO



Wear time is the length of time the RPD has to be worn continuously to perform the task. For some types of RPD, the maximum possible wear time and frequency of use may be limited due to wearer comfort, increased thermal comfort, breathing resistance and physical burden. Using powered/assisted RPD can help minimize fatigue and discomfort.

7.3: Is the contaminant an eye irritant? ⓘ (Required)

- YES
 NO



Consider selecting RPD which covers the entire face or head (respiratory interfaces class c, d or e). Where possible, select RPD, where the different forms of protection required are integrally combined, (e.g. RPD providing eye, face, head and respiratory protection) should be considered. If an eye/face integrated protection RPD, is not suitable, then the different items of selected eye/face PPE must not interfere with the RPD during use, preventing one or more of the components from working correctly.

7.4: Does the task require mobility, such that the use of air supply hoses is impractical? ⓘ (Required)

- YES
 NO

7.5: Is precise communication needed to give safety critical instructions when RPD is worn? ⓘ (Required)

- YES
 NO

7.6: Does the task create sparks, molten metal or UV radiation? ⓘ (Required)

- YES
 NO

7.7: Is the work area atmosphere potentially explosive or flammable? ⓘ (Required)

- YES
 NO

7.8: Is the work area atmosphere corrosive? ⓘ (Required)

- YES
 NO



Example Scenario Steps (cont.)

STEP 8: Wearer-related factors ⓘ

Answer all of the following questions relating to the wearers involved with the task.

8.1: Are any of these present in the sealing area of the respiratory interface – stubble, beards, moustache, side burns, deep facial marking or facial jewellery?

ⓘ (Required)

YES

NO



Facial characteristics have to be considered within the suitability assessment because fit will impact the overall protection provided by the RPD. Facial characteristics which are surface-related, such as scarring, wrinkles, jewellery or unshaven hair can significantly affect the protection offered by some tight-fitting RPD. **Facial hair (stubble, beards, sideburns, moustache etc.) is not permitted with any tight-fitting face piece sealing surface area and the wearers face.** In these cases, loose-fitting respiratory interfaces will be most suitable.

8.2: Are corrective lenses worn? ⓘ (Required)

YES

NO

8.3: Are other types of personal protective equipment (PPE) worn? ⓘ (Required)

(e.g. head, eye and hearing protection, protective clothing, etc.)

YES

NO



Different items of PPE must not interfere with the RPD during use, preventing one or more of the components from working correctly. Where possible, RPD, where the different forms of protection required are integrally combined, (e.g. RPD providing eye, face, head and respiratory protection) should be considered.

8.4: Has the potential wearer been medically cleared to wear an RPD? ⓘ (Required)

YES

NO



Medical conditions – seek professional advice

Some pre-existing medical conditions (examples include breathing disorders such as asthma, or skin allergies or heart problems) may restrict or prevent some workers wearing any RPD or certain types of RPD. Ensure that workers are medically able to wear the selected and required RPD. Seek medical advice for suitability of respirator use.



Example Scenario Steps (cont.)

8.5: Respiratory Interface (RI) Selection/Preference ⓘ



Respiratory Interface (RI) is new terminology from the AS/NZS ISO RPD Standards to describe the RPD coverage area protective barrier between the wearers respiratory system and the ambient atmosphere (**a – mouth only, b – Nose and mouth, c – Face, d – Head, e – More than head, up to complete body**). RI are then also classified by **tight fitting (T)** being RPD those that form a seal with the wearers skin and **loose fitting (L)** being RPD that have a partial seal or no seal with the skin of the wearer. Refer to [Respiratory Interface \(RI\) Classes](#) for further examples and images of different RI classes.

Assessment

Select a Respirator Interface Code (Required)

cT: Face - tight fitting. "Full face mask/facepiece". Protects eyes.

AS/NZS 1715/1716 Standards Equivalent (Required)

Code: Full facepiece tight fitting - These RPE cover the eyes, nose and mouth. All facepieces for use in non-powered devices are fitted with inner orinasal cups which cover the mouth and nose. The inner cup reduces steaming-up of the visor and re-inhalation of the air exhaled by the wearer. Some facepieces are fitted with speech diaphragms to improve the ability to transmit the wearer's speech; some also have a means to fit special spectacles within the facepiece. The visor provides protection for the eyes against dusts and gases.

8.6: Respirator Fit Testing ⓘ



Fit testing is required for all tight-fitting facepieces (bT, cT, dT) respiratory protective devices (RPD) no matter if its negative pressure or positive pressure. Fit testing confirms if an adequate fit is able to be achieved and is then up to the wearer to wear the RPD in the same way on the job to achieve expected/required levels of protection. There are a number of approved fit testing methodologies per AS/NZS ISO 16975.3:2023 which must be undertaken by a competent fit test operator. Refer to rpd.respfit.org.au/more-info/fit-testing-for-tight-fitting-rpd/ or respfit.org.au/faqs/ for further information on fit testing in general.

If you are looking for fit tester for your organisation/workers, in Australia visit [RESP-FIT](#) and in New Zealand visit [Commit2Fit](#).

STEP 9: Conclusion

You have now completed the RESP-FIT Online Respirator Selector form. From the information entered there are a number of green Assessment boxes throughout the form which detail a ISO rating element and an equivalent AS/NZS 1716/1715 rating (if applicable). After clicking "Finish & Submit" you will be sent (to your nominated email address) and also saved to your account (if registered) a PDF document of this information and recommendations. This document with the highlighted green assessment boxes) can be provided to your selected Respirator manufacturer and/or RPD distributor to assist with your assessment and selection of an adequate and suitable respirator system/combination. Certain section are highlighted Orange, which are other selection considerations to be evaluated/considered. This PDF document can also be saved in your respiratory protection program (RPP) documentation as a record of your selection process undertaken.

If you need to update any section or details after completing or you had selected any "unsure" options, you need to have an account registered to go back and make these amendments and republish a updated PDF document. Depending on what changes/amendments are made, you may need you re-enter some information again as these changes may reset some sections.

Finish & Submit

Save for Later

Reset



The RESP-FIT Online Respirator Selector.....

rpd.respfit.org.au

- DOES
 - take a user systematically through all respirator selection steps & considerations from standards
 - require a user to enter all relevant information for their scenario
 - likely require the user to go and find certain information to enter
 - produce a PDF report with entered information & selections
 - provide AS/NZS ISO & AS/NZS 1715/1716 respirator rating/classification recommendations
 - provide other respirator selection considerations
 - provide supporting detailed information for majority of questions
- Does NOT
 - provide product recommendation for any specific manufacturer, brand, style, etc
 - make any filter recommendations or a filter change schedule
 - include training on the usage of respirators
 - include guidance on inspection, maintenance and storage of respirators



RESP-FIT Online Respirator Selector

rpd.respfit.org.au

- Free respirator selection tool with ideal use cases for
 - Any size industries and/or workplaces
 - Occupational Hygienists and Safety Professionals
 - Respirator Fit Testers
 - Respirator Manufacturers
 - PPE Distributors
 - Regulators
- Based on selection principles from AS/NZS ISO (newly adopted) and AS/NZS 1715 with classification/ratings from both to assist with industry transition
- Provides supporting information from standards for each step and majority of questions
- Produces pdf report to share and/or save as part of respiratory protection program

RESP-FIT
RESPIRATOR FIT TESTING
TRAINING & ACCREDITATION
AN AIOH PROGRAM

RPD Tool My Account RESP-FIT Home

Online Respirator Selector Tool

RESP-FIT RPD
is a free online
respirator
selection tool

*based on principles
from AS/NZS 1715 & the
new SA/SNZ TS ISO
16975.1. It references
both standards
classification
ratings & terminology.*

Respirator selection

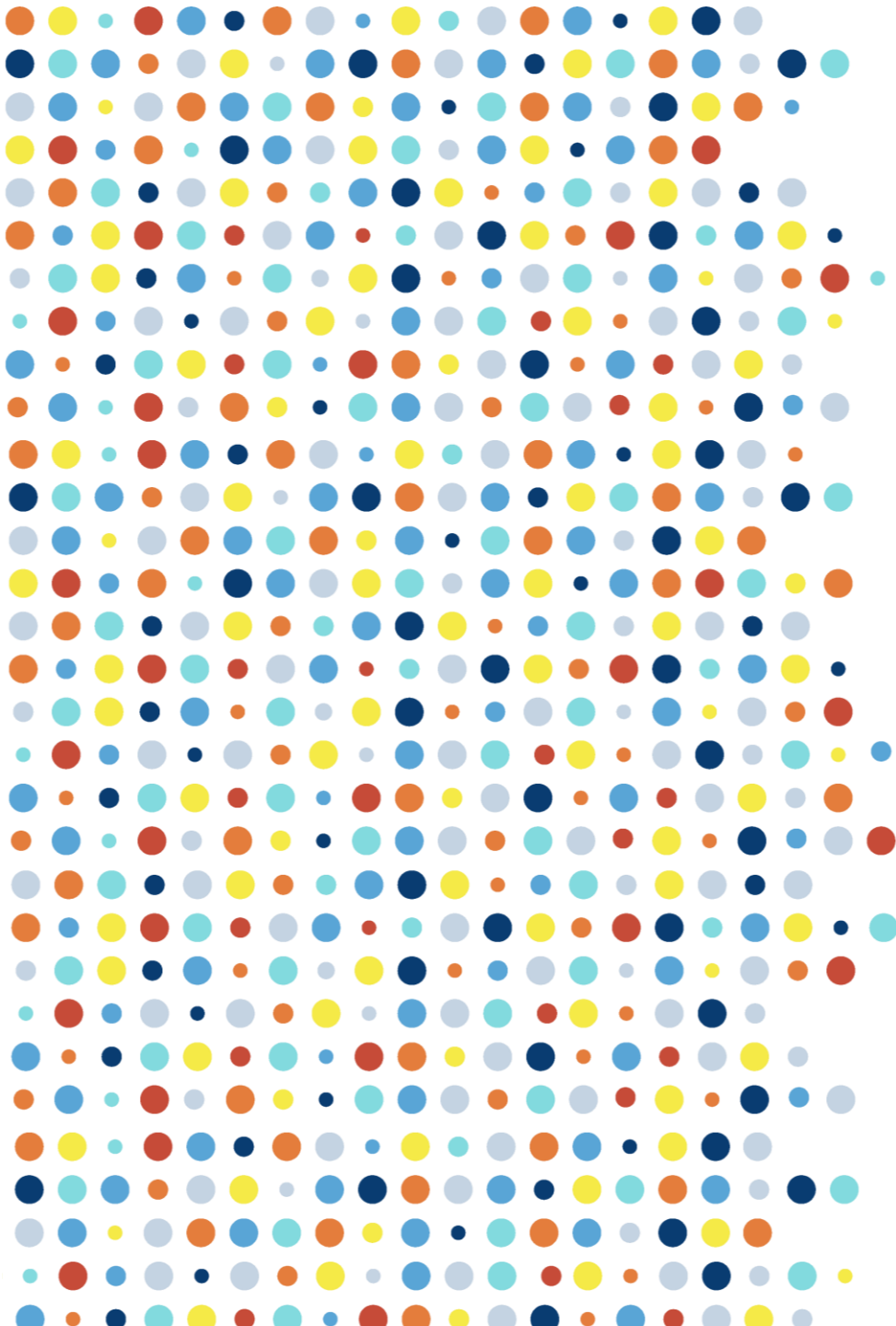
Proper respirator selection is more than just selecting the correct filter for the hazard, which is commonly not understood or appreciated. This tool seeks to improve the understanding of elements of respirator selection detailed in our standards such as mobility, communication, fit, work rate, to name just a few.

A RESP-FIT initiative

RESP-FIT is national respirator protective equipment fit testing training & accreditation program aimed at the proper fit of respirators to prevent exposure to contaminated air.

RESP-FIT
RESPIRATOR FIT TESTING
TRAINING & ACCREDITATION





RESP-FIT
RESPIRATOR FIT TESTING
TRAINING & ACCREDITATION

Questions?

For more information visit rpd.respfit.org.au

Or email respfit@aioh.org.au

