

Breathing Air Checklist

Your site-ready checklist for supervisors, maintenance, and operators.
Designed to support audit-ready best practice.



1) Confirm scope and responsibility

- Identify every air-fed helmet and breathing apparatus in use, including model, serial, and where it is used.
- Nominate an owner for breathing air safety (responsible for testing schedule, records, maintenance actions, and stop-work decisions).
- Confirm the helmet standard marking and suitability for the task (Apollo 600 is CE marked as a complex item under BS EN 14594).



2) Compressor and intake controls (prevent contamination at source)

- Site the compressor air intake away from contaminants, especially engine exhaust and any combustion sources.
- Keep vehicles away from the compressor intake while running.
- For portable or engine-driven compressors, route exhaust safely downwind of the air intake.
- Do not connect the breathing air line to any air source that has not been tested for relevant contaminants.
- Avoid piston type (oil bath) compressors for breathing air where manufacturer guidance warns of carbon monoxide risk.



3) Filtration and air supply kit checks (before each shift)

- Fit an appropriate breathing air filter between the compressed air supply and the helmet air supply hose (Apollo manual references CPF20, SurfacePrep also supplies CPF40).
- If using CPF20 or CPF40, confirm the compressed air supply is suitable for breathing air use and verify air quality using an appropriate test method.
- Change filter elements strictly in line with the filter manufacturer's guidance and the relevant OEM manual, because replacement requirements and life cycles vary by supplier and operating conditions.
- Inspect the filtration assembly, airlines, couplings, and fittings for damage, leaks, contamination, and correct connection integrity, protect from being trapped, nipped, or broken.

4) Breathing air supply hose compliance

- Confirm the air supply hose is breathing-air grade, correct material specification, and compliant with applicable industry requirements.
- For spray booth environments, confirm the hose is solvent resistant and suitable for the exposure conditions.
- Confirm the hose type and application suitability can be clearly identified during inspection and testing (do not allow unverified, non-compliant, or unknown hose types into service).
- Inspect the hose for wear, damage, contamination, softening, cracking, kinks, degraded fittings, or any sign of incompatibility with the work environment.
- Replace hoses in line with the hose manufacturer's guidance and the relevant OEM manual, do not extend service life based on appearance alone.





5) Apollo 600 helmet air supply set-up

- Confirm the working atmosphere contains at least 19.5% oxygen and is not oxygen-enriched.
- Set compressed air supply pressure to 6 to 8 bar for the Apollo 600.
Confirm air volume is within 130 to 190 litres per minute for adequate breathing supply and to ensure the helmet's low airflow indicator functions correctly.
- Keep the maximum hose length between the filter and the control valve to 40 metres, if longer is required, contact the manufacturer for appropriate measures.
- In cold conditions, if used below 4°C, reduce water content to avoid freezing risk.
- Before anyone enters the blast area, turn on breathing air and verify it is entering the helmet in the required volume and quality.
- Ensure the lens system is complete and correctly fitted (inner lens, intermediate lens, outer lenses), never operate without them.



6) Breathing air quality testing frequency

- Test breathing air quality at least every 3 months.
- Test more often when something has materially changed within the system (examples include compressor moved, blast machine moved, pipework changes, process changes, or any concern about air quality).
- For rarely used equipment, perform compressed air quality testing before each use.
- For mobile compressors, treat movement and local conditions as a trigger for retesting, do not assume yesterday's result applies to today's location.





6) Breathing air quality testing frequency continued...

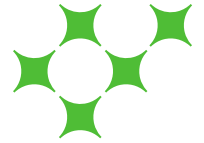
- Test parameters to include (as applicable):
- Carbon monoxide (CO)
- Carbon dioxide (CO₂)
- Oil
- Water or moisture (dew point where applicable)
- Oxygen (where instrument capability allows)
- Sensory and practical system checks as part of the on-site test process, alongside instrument measurements.



7) Operator pre-use checks

- Start compressor and pressurise the air supply line.
- Check air pressure with the respirator connected (Apollo manual requirement).
- Check air supply hoses and connections for tightness and leaks.
- Confirm the helmet's low airflow indicator is showing sufficient supply (flag retracted in Apollo manual explanation).
- Confirm a signalling or communication method is in place between blaster and pot tender, consider helmet comms if there is no constant line of sight.





8) Stop-work triggers (treat as life support failures)

Stop and investigate immediately if any of the following occur or are suspected:

- Suspected intake contamination from local processes or vehicle exhaust fumes.
- Concern about compressor malfunction or overheating, or carbon monoxide risk indicators (Apollo manual warns poor quality air can cause serious injury or death).
- Evidence or suspicion of filter failure, expiry, oil contamination, or moisture breakthrough.
- Insufficient airflow or pressure to the helmet (low airflow indicator showing inadequate supply).
- Any accidental connection risk to non-air gas lines (explicit warning to avoid gas lines such as oxygen, acetylene, nitrogen).
- Evidence the air supply hose is not breathing-air grade, not fit for the application, not solvent resistant where required, or shows degradation or contamination.

9) Record keeping (make it audit-ready)

- Keep breathing air test records accessible and retrievable, paper or electronic.
- Retain records for at least five years (SurfacePrep states employers must store records of tests and repairs for at least five years).
- Each record entry should include, at minimum:
 - Site, employer, and location
 - Equipment identification (helmet model, filter unit, compressor, hose type and specification used)
 - Date and time of test
 - Tester identity
 - Results for each parameter tested
 - Any defects found and corrective actions taken
 - Next scheduled test date and triggers noted





10) Weekly supervisor verification (simple control system)

- Confirm the testing schedule is on track (next due date visible).
- Confirm filter service and element replacement plan follows the filter manufacturer's guidance and the relevant OEM manual.
- Confirm hose specification is appropriate for the work environment, including solvent-resistant hose use where required, and that inspection and replacement follows manufacturer guidance.
- Review any near misses or complaints (including odour reports), treat as investigation triggers and document actions taken.



Booking a breathing air test

If you want documented, traceable breathing-air verification and a practical plan, book through the SurfacePrep TotalCare team (servicing).

Email us at HC.TotalCare@surfaceprep.com



Contact us



To speak with a SurfacePrep Engineer call us on **0114 254 0600**

Alternatively, email us to book a call back hc.sales@surfaceprep.com

We'll walk you through the process, review your needs, and help resolve your production challenges, fast, documented, and to spec.

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