

Fire Resistance Checklist for Building Construction (Australia)

Building Description:

- **Name:** A.Gabrielli Constructions Office
- **Location:** 336 Woolcock Street, Garbutt QLD 4814
- **Building Class:** Class 5 (Office) and Class 7 (Storage)
- **Structure:** Single-story office building attached to a large storage shed
- **Occupancy:** Office spaces, storage for machinery, tools, trucks, and cars

Passive Fire Protection Checklist

1. Exterior Walls

- **Requirement:** Minimum 120-minute fire resistance rating near property boundaries.

☒ **Review construction documentation for fire resistance ratings.**

Notes:

- Exterior Walls 120/120/120 (minutes for structural adequacy, integrity, and insulation).
- Interior walls - 60/60/60
- Structural Elements (Columns and Beams) - 120/120/120
- Floor/ ceiling assemblies – 90/90/90
- Fire Doors – 60/60/60
- Roof Construction – 60/60/60

☒ **Visually inspect exterior wall assemblies for compliance.**

- **Exterior Surface**

Step 1: Review Documentation

- **Construction Plans:**
 - **Notes:** Review the construction plans and materials specifications for the exterior surfaces, including cladding and finishes.
 - **Exterior Surface Specifications:**
 - **Materials:** Fire-resistant cladding, non-combustible insulation
 - **Fire Resistance Rating (FRR):** Minimum required FRR for exterior walls
 - **Compliance:** Materials should meet Australian Standards (AS 1530.1 for fire-resistance tests of building materials)

Step 2: Visual Inspection of Exterior Surface

Cladding and Finishes

- **Material Identification:**

☒ Verify that the materials used for exterior cladding and finishes are non-combustible and have the specified fire resistance rating.

Observations: The cladding materials are identified as fire-resistant, non-combustible panels, meeting the specified FRR.

- **Condition and Installation:**

☒ Inspect the condition of the cladding and finishes, looking for any signs of damage, wear, or improper installation.

Observations: The cladding and finishes are in good condition, with no visible signs of damage, wear, or improper installation.

Joints and Seals

- **Sealing and Joints:**

☒ Check the sealing and joints between cladding panels to ensure they are properly sealed and do not compromise fire resistance.

Observations: Joints between cladding panels are properly sealed, maintaining the integrity of the fire-resistant barrier.

Openings and Penetrations

- **Fire-Stopping Around Openings:**

☒ Inspect openings and penetrations in the exterior walls (e.g., windows, doors, vents) for proper fire-stopping measures.

Observations: All openings and penetrations have appropriate fire-stopping measures in place, maintaining the fire resistance of the exterior walls.

Wall Assemblies

- **Wall Construction:**

☒ Verify that the wall assemblies, including any layers of insulation or barriers, meet fire resistance requirements.

Observations: Wall assemblies are constructed with fire-resistant materials and non-combustible insulation, meeting the required fire resistance rating.

Step 3: Functionality Test

- **Fire Resistance Test:**

☒ Ensure that the exterior surface materials and assemblies have been tested and certified for their fire resistance properties.

Observations: Certification documents confirm that the materials and assemblies have been tested and meet the required fire resistance standards.

Step 4: Compliance Check

- **Compliance Labelling:**

☒ Check for labels indicating compliance with fire safety standards on exterior surface materials.

Observations: Labels on exterior surface materials confirm compliance with Australian Standards (AS 1530.1).

- **Proper Installation Verification:**

☒ Verify that all exterior surface materials are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation follows manufacturer guidelines and complies with relevant building codes.

Step 5: Maintenance Records Review

- **Maintenance Documentation:**

☒ Review records of any maintenance or servicing done on the exterior surfaces.

Observations: Maintenance records indicate regular inspections and servicing to ensure all exterior surfaces remain in good condition and compliant.

- **Interior Surface**

Step 1: Review Documentation

- **Construction Plans:**

- **Notes:** Review the construction plans and materials specifications for the interior surfaces, including wall finishes and ceiling materials.
- **Interior Surface Specifications:**
 - Materials: Fire-rated gypsum board, non-combustible ceiling tiles
 - Fire Resistance Rating (FRR): Minimum required FRR for interior walls and ceilings
 - Compliance: Materials should meet Australian Standards (AS 1530.3 for fire tests on building materials)

Step 2: Visual Inspection of Interior Surface

Wall Finishes

- **Material Identification:**

☒ Verify that the materials used for interior wall finishes are fire-rated and meet the specified fire resistance rating.

Observations: The wall finishes are identified as fire-rated gypsum board, meeting the specified FRR.

- **Condition and Installation:**

☒ Inspect the condition of wall finishes, looking for any signs of damage, wear, or improper installation.

Observations: Wall finishes are in good condition, with no visible signs of damage, wear, or improper installation.

Ceiling Materials

- **Material Identification:**

☒ Verify that ceiling materials are non-combustible and have the required fire resistance rating.

Observations: Ceiling tiles are identified as non-combustible, meeting the specified FRR.

- **Condition and Installation:**

☒ Inspect the condition of ceiling materials, checking for any signs of damage, wear, or improper installation.

Observations: Ceiling materials are in good condition, with no visible signs of damage, wear, or improper installation.

Surface Coverings

- **Flooring and Other Surfaces:**

☒ Check other interior surfaces such as flooring for fire resistance and condition.

Observations: Flooring and other surfaces are fire-resistant and in good condition, with no visible issues.

Step 3: Functionality Test

- **Fire Resistance Test:**

☒ Ensure that interior surface materials have been tested and certified for their fire resistance properties.

Observations: Certification documents confirm that interior surface materials meet the required fire resistance standards.

Step 4: Compliance Check

- **Compliance Labelling:**

☒ Check for labels indicating compliance with fire safety standards on interior surface materials.

Observations: Labels on interior surface materials confirm compliance with Australian Standards (AS 1530.3).

- **Proper Installation Verification:**

☒ Verify that all interior surface materials are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation follows manufacturer guidelines and complies with relevant building codes.

Step 5: Maintenance Records Review

- **Maintenance Documentation:**

☒ Review records of any maintenance or servicing done on interior surfaces.

Observations: Maintenance records indicate regular inspections and servicing to ensure all interior surfaces remain in good condition and compliant.

- **Wall Composition**

Step 1: Review Documentation

- **Construction Plans:**

- **Notes:** Review the construction plans and materials specifications for wall composition, including structural components and fire-rated materials.
- **Wall Composition Specifications:**
 - **Materials:** Fire-rated gypsum board, non-combustible insulation, structural steel or timber frames
 - **Fire Resistance Rating (FRR):** Minimum required FRR for interior and exterior walls
 - **Compliance:** Materials should meet Australian Standards (AS 1530 series for fire tests on building materials)

Step 2: Visual Inspection of Wall Composition

Interior Walls

- **Material Identification:**

☒ Verify that interior wall materials are fire-rated and meet the specified fire resistance rating.

Observations: Interior walls are constructed using fire-rated gypsum board and non-combustible insulation, meeting the specified FRR.

- **Condition and Installation:**

☒ Inspect the condition of interior walls, checking for any signs of damage, wear, or improper installation.

Observations: Interior walls are in good condition, with no visible signs of damage, wear, or improper installation.

Exterior Walls

- **Material Identification:**

☒ Verify that exterior wall materials are fire-resistant and have the required fire resistance rating.

Observations: Exterior walls are constructed using fire-resistant cladding and non-combustible insulation, meeting the specified FRR.

- **Condition and Installation:**

☒ Inspect the condition of exterior walls, looking for any signs of damage, wear, or improper installation.

Observations: Exterior walls are in good condition, with no visible signs of damage, wear, or improper installation.

Structural Components

- **Frame Material:**

- ☑ Verify the material used for structural frames (e.g., steel, timber) and its fire resistance properties.

Observations: Structural frames are made of steel/timber, which provide adequate fire resistance and structural integrity.

- **Fire-Stopping and Sealing:**

- ☑ Check for proper fire-stopping and sealing around penetrations and joints in the wall composition.

Observations: Fire-stopping and sealing around penetrations and joints are properly installed, maintaining the fire resistance of the walls.

Step 3: Functionality Test

- **Fire Resistance Test:**

- ☑ Ensure that wall composition materials and assemblies have been tested and certified for their fire resistance properties.

Observations: Certification documents confirm that wall composition materials meet the required fire resistance standards.

Step 4: Compliance Check

- **Compliance Labelling:**

- ☑ Check for labels indicating compliance with fire safety standards on wall composition materials.

Observations: Labels on wall composition materials confirm compliance with Australian Standards (AS 1530 series).

- **Proper Installation Verification:**

- ☑ Verify that all wall composition materials are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation follows manufacturer guidelines and complies with relevant building codes.

Step 5: Maintenance Records Review

- **Maintenance Documentation:**

- ☑ Review records of any maintenance or servicing done on wall composition.

Observations: Maintenance records indicate regular inspections and servicing to ensure all wall composition components remain in good condition and compliant.

Step 1: Review Documentation

Construction Plans:

- **Notes: Review the construction plans and materials specifications for structural elements, including beams, columns, and floor assemblies.**
- **Structural Elements Specifications:**
 - **Materials: Structural steel, fire-rated timber, reinforced concrete**
 - **Fire Resistance Rating (FRR): Minimum required FRR for structural elements**

- **Compliance: Materials should meet Australian Standards (AS 4100 for steel structures, AS 1720 for timber structures, AS 3600 for concrete structures)**

Step 2: Visual Inspection of Structural Elements

Beams and Columns

- **Material Identification:**
 - ☒ Verify that beams and columns are made of fire-rated materials and meet the specified fire resistance rating.
 - Observations:** Beams and columns are made of structural steel with fire-resistant coatings, meeting the specified FRR.
- **Condition and Installation:**
 - ☒ Inspect the condition of beams and columns, checking for any signs of damage, wear, or improper installation.
 - Observations:** Beams and columns are in good condition, with no visible signs of damage, wear, or improper installation.

Floor Assemblies

- **Material Identification:**
 - ☒ Verify that floor assemblies are constructed using fire-rated materials and have the required fire resistance rating.
 - Observations:** Floor assemblies are made of reinforced concrete and fire-rated timber, meeting the specified FRR.
- **Condition and Installation:**
 - ☒ Inspect the condition of floor assemblies, looking for any signs of damage, wear, or improper installation.
 - Observations:** Floor assemblies are in good condition, with no visible signs of damage, wear, or improper installation.

Fire-Stopping and Sealing

Fire-Stopping Around Penetrations:

- ☒ Check for proper fire-stopping and sealing around penetrations in structural elements (e.g., openings for services).
- Observations:** Fire-stopping and sealing around penetrations are properly installed, maintaining the fire resistance of the structural elements.

Step 3: Functionality Test

Fire Resistance Test:

- ☒ Ensure that structural elements have been tested and certified for their fire resistance properties.
- Observations:** Certification documents confirm that structural elements meet the required fire resistance standards.

Step 4: Compliance Check

- **Compliance Labelling:**

☒ Check for labels indicating compliance with fire safety standards on structural elements.

Observations: Labels on structural elements confirm compliance with Australian Standards (AS 4100, AS 1720, AS 3600).

- **Proper Installation Verification:**

☒ Verify that all structural elements are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation follows manufacturer guidelines and complies with relevant building codes.

Step 5: Maintenance Records Review

Maintenance Documentation:

☒ Review records of any maintenance or servicing done on structural elements.

Observations: Maintenance records indicate regular inspections and servicing to ensure all structural elements remain in good condition and compliant.

☒ Check for fire-resistant materials and proper installation.

Interior Walls and Partitions

Step 1: Review Documentation

- **Construction Plans:**

- **Notes: Review the construction plans and materials specifications for interior walls and partitions.**
- **Interior Walls and Partitions Specifications:**
 - **Materials: Fire-rated gypsum board, metal or timber stud frames, non-combustible insulation**
 - **Fire Resistance Rating (FRR): Minimum required FRR for interior partitions**
 - **Compliance: Materials should meet Australian Standards (AS 1530 series for fire tests on building materials)**

Step 2: Visual Inspection of Interior Walls and Partitions

Material Identification

- **Wall and Partition Materials:**

☒ Verify that interior wall and partition materials are fire-rated and meet the specified fire resistance rating.

Observations: Interior walls and partitions are constructed using fire-rated gypsum board and non-combustible insulation, meeting the specified FRR.

- **Frame Material:**

☒ Verify the material used for the frames of interior walls and partitions (e.g., metal or timber) and its fire resistance properties.

Observations: Frames are made of metal studs, which provide adequate fire resistance and structural support.

Condition and Installation

- **Wall and Partition Condition:**

☒ Inspect the condition of interior walls and partitions, looking for any signs of damage, wear, or improper installation.

Observations: Interior walls and partitions are in good condition, with no visible signs of damage, wear, or improper installation.

- **Installation Verification:**

☒: Verify that interior walls and partitions are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation follows manufacturer guidelines and complies with relevant building codes

Fire-Stopping and Sealing

- **Fire-Stopping Around Penetrations:**

☒ Check for proper fire-stopping and sealing around penetrations and joints in interior walls and partitions.

Observations: Fire-stopping and sealing around penetrations and joints are properly installed, maintaining the fire resistance of the walls and partitions.

Surface Coverings

- **Finishes and Coverings:**

☒ Verify that any surface coverings (e.g., paint, wallpaper) are fire-resistant and properly applied.

Observations: Surface coverings are fire-resistant and properly applied, with no visible issues.

Step 3: Functionality Test

- **Fire Resistance Test:**

☒ Ensure that interior wall and partition materials have been tested and certified for their fire resistance properties.

Observations: Certification documents confirm that interior wall and partition materials meet the required fire resistance standards.

Step 4: Compliance Check

- **Compliance Labelling:**

☒ Check for labels indicating compliance with fire safety standards on interior wall and partition materials.

Observations: Labels on interior wall and partition materials confirm compliance with Australian Standards (AS 1530 series).

- **Proper Installation Verification:**

☒ Verify that all interior wall and partition materials are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation follows manufacturer guidelines and complies with relevant building codes.

Step 5: Maintenance Records Review

- **Maintenance Documentation:**

☒ Review records of any maintenance or servicing done on interior walls and partitions.

Observations: Maintenance records indicate regular inspections and servicing to ensure all interior walls and partitions remain in good condition and compliant.

4. Floor/Ceiling Assemblies

- **Requirement:** Ensure floor/ceiling assemblies provide adequate fire resistance.

Review Documentation:

Construction Plans and Specifications:

- **Notes:** Plans indicate the use of fire-resistant materials for floor/ceiling assemblies with specified fire resistance ratings.
- **Floor/Ceiling Assemblies:**
 - Concrete slab for the floor
 - Fire-rated suspended ceiling system
 - Mineral wool or other fire-resistant insulation

1. Visual inspection of floor / ceiling assemblies

Floor Assembly:

Material Check:

☒ Verify that the floor assembly consists of fire-resistant materials as specified.

Observation: The concrete slab is present and appears to be constructed as per the plans.

Fireproofing inspection:

☒ Check for any additional fireproofing measures applied to the floor assembly, such as fire-resistant coatings or barriers.

Observations: Fireproofing materials, if any, are correctly applied and intact.

Ceiling Assembly:

Suspended ceiling System:

☒ Inspect the suspended ceiling system to ensure it is constructed with fire-rated materials

Observations: Fire-rated ceiling tiles are installed, and grid system appears intact.

Insulation Inspection:

☒ Check for fire-resistant insulation above the suspended ceiling.

Observation: Mineral wool insulation is evenly distributed and properly installed above the ceiling tiles.

Penetration Seals:

☒ Ensure all penetrations through the ceiling, such as for HVAC, plumbing, and electrical systems, are sealed with fire-resistant materials.

Observations: Penetrations are sealed with fire-resistant materials, and there are no visible gaps.

2. Compliance Check:

Fire rated labelling:

☒ Check for labels indicating the fire resistance ratings of materials used in the floor and ceiling assemblies.

Observation: Labels on ceiling tiles and insulation indicate compliance with the specified fire resistance ratings.

Proper Installation Verification:

☒ Verify that all materials are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation appears to be done correctly, with no visible deviations from the specified methods.

Maintenance records review:

Maintenance Documentation:

☒ Review records of any maintenance or repairs done on the floor/ceiling assemblies.

Observation: Maintenance records indicate regular inspections and recent repairs using compliant fire-resistant materials.

5. Fire Doors

- **Requirement:** Fire doors must have a minimum 60-minute fire resistance rating and be self-closing.

Step 1: Review Documentation

- **Construction Plans and Specifications:**
 - **Notes:** Plans indicate the use of fire-rated doors with a specified fire resistance rating.
 - **Fire Door Specifications:**
 - Fire-rated door assembly with a minimum rating of 60 minutes
 - Self-closing mechanisms
 - Fire-rated door frames and hardware

Door Material and Construction

- **Material Check:**

☒ Verify that fire doors are constructed from fire-resistant materials as specified.

Observations: Fire doors are labelled as having a 60-minute fire resistance rating, with solid core construction.

Door Integrity:

☒ Inspect the door surface for any signs of damage, wear, or warping.

Observations: Door surfaces are smooth and free from visible damage or warping.

Door Frames and Hardware

- **Frame Inspection:**

☒ Ensure that fire door frames are fire-rated and properly installed.

Observations: Door frames are metal and labelled as fire-rated, installed securely without gaps.

Hardware Check:

☒ Inspect hinges, locks, and other hardware for fire resistance and proper installation.

Observations: Fire-rated hinges and locks are installed, with no signs of tampering or wear.

Seals and Gaps

Seal Inspection:

☒ **Notes:** Check for the presence of intumescent seals around the door edges.

Observations: Intumescent seals are installed around the door edges and appear intact.

- **Gap Measurement:**

☒ Measure the gaps around the door to ensure they are within acceptable limits (typically no more than 3mm).

Observations: Gaps around the door are measured and found to be within acceptable limits.

Step 3: Functionality Test

- **Self-Closing Mechanism:**

☒ Test the self-closing mechanism to ensure the door closes and latches automatically.

Observations: Doors close smoothly and latch securely when released.

- **Door Operation:**

☒ Open and close the door multiple times to check for smooth operation.

Observations: Doors operate smoothly without sticking or resistance.

Step 4: Compliance Check

- **Fire-Rated Labelling:**

☒ Check for labels indicating the fire resistance rating on the door and frame.

Observations: Labels on the door and frame indicate a 60-minute fire resistance rating, confirming compliance.

- **Proper Installation Verification:**

☒ Verify that the fire doors are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation appears to be done correctly, with all components meeting the specified standards.

Step 5: Maintenance Records Review

- **Maintenance Documentation:**

☒ Review records of any maintenance or repairs done on fire doors.

Observations: Maintenance records indicate regular inspections and recent repairs using compliant fire-resistant materials.

6. Firestopping

Active Fire Protection Checklist

1. Sprinkler System

- **Requirement:** Automatic sprinkler system must be functional and cover both office and storage areas.

Step 1: Review Documentation

- **System Design Plans:**
 - **Notes:** Review the design plans for the sprinkler system, including the layout, types of sprinklers, and coverage areas.
 - **Sprinkler System Specifications:**
 - Wet pipe sprinkler system
 - Fire sprinkler heads with a coverage of 12 m² per head
 - Main water supply and backup pump

Step 2: Visual Inspection of Sprinkler System Components

Sprinkler Heads

- **Material and Placement Check:**

☒ Verify that sprinkler heads are installed at the correct locations and heights as per the design plans.

Observations: Sprinkler heads are evenly distributed and installed at the appropriate height from the ceiling.

- **Condition and Clearance:**

☒ Inspect sprinkler heads for any signs of damage or obstructions.

Observations: Sprinkler heads are intact with no visible damage, and there are no obstructions within 18 inches of any head.

Piping and Valves

- **Pipe Inspection:**

☒ Ensure that the sprinkler system piping is properly installed and supported.

Observations: Piping is securely fastened and shows no signs of corrosion or leaks.

- **Valve Check:**

☒ Inspect control valves to ensure they are accessible and clearly labelled.

Observations: Valves are in accessible locations, properly labelled, and in the open position.

Water Supply

- **Main Supply Inspection:**

☒ Verify the main water supply is connected and operational.

Observations: Main water supply is connected, and pressure readings are within the normal range.

- **Backup Pump Check:**

☒ Inspect the backup pump for proper installation and functionality.

Observations: Backup pump is installed correctly and tested for functionality, showing operational readiness.

Step 3: Functionality Test

- **Flow Test:**

☒ Conduct a flow test to ensure water flows properly through the sprinkler heads.

Observations: Water flows at the expected rate through all tested sprinkler heads without any issues.

- **Alarm System Integration:**

☒ Verify that the sprinkler system is integrated with the building's fire alarm system.

Observations: Activation of sprinkler heads triggers the fire alarm system as expected.

- **Pressure Test:**

☒ Check the pressure levels of the system to ensure they meet the required standards.

Observations: System pressure is within the required range, and pressure gauges are functioning correctly.

Step 4: Compliance Check

- **Fire-Rated Labelling:**

☒ Check for labels indicating the fire resistance rating on sprinkler heads and system components.

Observations: Labels on sprinkler heads and components confirm compliance with specified fire resistance ratings.

- **Proper Installation Verification:**

☒ Verify that all sprinkler system components are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation follows manufacturer guidelines and complies with relevant building codes.

Step 5: Maintenance Records Review

- **Maintenance Documentation:**

☒ Review records of any maintenance or repairs done on the sprinkler system.

Observations: Maintenance records indicate regular inspections, tests, and recent repairs to ensure system functionality and compliance.

2. Fire Alarm System

- **Requirement:** Fire alarm system must be installed, operational, and regularly maintained.

Step 1: Review Documentation

- **System Design Plans:**
 - **Notes:** Review the design plans for the fire alarm system, including the layout, types of alarms, and coverage areas.
 - **Fire Alarm System Specifications:**
 - Smoke and heat detectors
 - Manual pull stations
 - Audible and visual alarm devices
 - Fire alarm control panel (FACP)
 - Notification and communication systems

Step 2: Visual Inspection of Fire Alarm System Components

Smoke and Heat Detectors

- **Material and Placement Check:**

☒ Verify that smoke and heat detectors are installed at the correct locations and heights as per the design plans.

Observations: Detectors are evenly distributed and installed at appropriate heights from the ceiling.

- **Condition and Clearance:**

☒ Inspect detectors for any signs of damage or obstructions.

Observations: Detectors are intact with no visible damage or obstructions.

Manual Pull Stations

- **Location Check:**

☒ Ensure that manual pull stations are installed at accessible locations near exits and in high-traffic areas.

Observations: Pull stations are installed at accessible locations and are unobstructed.

- **Condition Inspection:**

☒ Check the condition of manual pull stations for functionality.

Observations: Pull stations are in good working condition, with no signs of damage.

Audible and Visual Alarm Devices

- **Placement and Visibility:**

☒ Verify that audible and visual alarm devices are installed in all required areas and are clearly visible.

Observations: Alarm devices are installed in all necessary areas and are clearly visible.

- **Condition and Functionality:**

☒ Inspect alarm devices for any signs of damage and test for proper operation.

Observations: Alarm devices are intact, and functionality tests confirm they operate correctly.

Fire Alarm Control Panel (FACP)

- **Installation Check:**

☒ Ensure that the FACP is installed in a secure and accessible location.

Observations: FACP is installed securely and is easily accessible.

- **Functionality Inspection:**

☒ Test the FACP for proper operation, including all indicator lights and control switches.

Observations: FACP operates correctly, with all indicator lights and control switches functioning as intended.

Notification and Communication Systems

- **System Integration Check:**

☒ Verify that the fire alarm system is integrated with the building's notification and communication systems.

Observations: Fire alarm system is integrated with the building's communication systems, ensuring timely notifications.

- **Test Communication:**

☒ Conduct a test to ensure that the alarm system communicates properly with monitoring services and emergency responders.

Observations: Test confirms that the system communicates effectively with monitoring services and emergency responders.

Step 3: Functionality Test

- **Alarm Activation Test:**

☒ Activate the fire alarm system to ensure that all components, including detectors, pull stations, and alarms, operate correctly.

Observations: Activation of the fire alarm system triggers all alarms, detectors, and communication systems as expected.

- **Reset and Troubleshoot:**

☒ Reset the alarm system after activation and troubleshoot any issues.

Observations: System resets correctly, and any issues identified are promptly resolved.

Step 4: Compliance Check

- **Fire-Rated Labelling:**

☒ Check for labels indicating compliance with fire safety standards on all fire alarm system components.

Observations: Labels on detectors, alarms, and the FACP confirm compliance with specified fire safety standards.

- **Proper Installation Verification:**

☒ Verify that all fire alarm system components are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation follows manufacturer guidelines and complies with relevant building codes.

Step 5: Maintenance Records Review

- **Maintenance Documentation:**

☒ Review records of any maintenance or repairs done on the fire alarm system.

Observations: Maintenance records indicate regular inspections, tests, and recent repairs to ensure system functionality and compliance

3. Emergency Lighting and Exit Signs

- **Requirement:** Emergency lighting and exit signs must be operational and provide adequate illumination along all escape routes.

Step 1: Review Documentation

- **System Design Plans:**
 - **Notes:** Review the design plans for emergency lighting and exit signage, including layout and coverage areas.
 - **Emergency Lighting and Exit Sign Specifications:**
 - Emergency lights for illumination during power outages
 - Illuminated exit signs with directional indicators
 - Battery backup systems

Step 2: Visual Inspection of Emergency Lights and Exit Lights

Emergency Lights

- **Material and Placement Check:**

☒ Verify that emergency lights are installed at the correct locations as per the design plans.

Observations: Emergency lights are evenly distributed in key areas such as corridors, stairwells, and exit routes.

- **Condition and Coverage:**

☒ Inspect emergency lights for any signs of damage and check that they cover all required areas.

Observations: Emergency lights are intact with no visible damage, and coverage areas are adequately illuminated.

Exit Signs

- **Placement and Visibility:**

☒ Ensure that illuminated exit signs are installed at all required exits and are clearly visible.

Observations: Exit signs are installed above all exits and directional signs are provided where necessary, with clear visibility.

- **Condition and Illumination:**

☒ Inspect exit signs for any signs of damage and ensure they are illuminated properly.

Observations: Exit signs are in good condition, clearly illuminated, and visible from all directions.

Battery Backup Systems

- **Installation Check:**

☒ Verify that battery backup systems are installed for all emergency lights and exit signs.

Observations: Battery backup systems are installed and connected to emergency lights and exit signs.

- **Condition and Functionality:**

☒ Inspect battery backup systems for any signs of damage and test for proper operation.

Observations: Battery backup systems are intact and functioning, providing power during simulated outages.

Step 3: Functionality Test

- **Emergency Light Test:**

☒ Conduct a test to simulate a power outage and ensure emergency lights activate and provide adequate illumination.

Observations: Emergency lights activate promptly during the test, providing adequate illumination in all key areas.

- **Exit Sign Test:**

☒ Ensure that all exit signs remain illuminated during the power outage simulation.

Observations: Exit signs remain illuminated during the simulated power outage, clearly marking all exit routes.

- **Battery Backup Test:**

☒ Test the battery backup systems to ensure they provide power to emergency lights and exit signs during the simulated outage.

Observations: Battery backup systems function correctly, maintaining illumination of emergency lights and exit signs.

Step 4: Compliance Check

- **Fire-Rated Labelling:**

☒ Check for labels indicating compliance with fire safety standards on all emergency lights and exit signs.

Observations: Labels on emergency lights, exit signs, and battery backup systems confirm compliance with specified fire safety standards.

- **Proper Installation Verification:**

☒ Verify that all emergency lights and exit signs are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation follows manufacturer guidelines and complies with relevant building codes.

Step 5: Maintenance Records Review

- **Maintenance Documentation:**

☒ Review records of any maintenance or repairs done on emergency lights and exit signs.

Observations: Maintenance records indicate regular inspections, tests, and recent repairs to ensure system functionality and compliance.

4. Fire Extinguishers

- **Requirement:** Adequate number of fire extinguishers must be available, accessible, and regularly inspected.

Step 1: Review Documentation

- **System Design Plans:**
 - **Notes:** Review the design plans and fire safety documentation for the placement and types of fire extinguishers.
 - **Fire Extinguisher Specifications:**
 - **Types:** ABC dry chemical, CO2, foam, and water extinguishers
 - **Placement:** Strategically placed throughout the office and storage areas
 - **Mounting:** Properly mounted on walls or placed in accessible fire extinguisher cabinets

Step 2: Visual Inspection of Fire Extinguishers

Placement and Accessibility

- **Location Check:**

☒ Verify that fire extinguishers are placed in accordance with design plans, ensuring coverage in key areas.

Observations: Fire extinguishers are strategically placed in hallways, near exits, and in high-risk areas such as the storage shed.

- **Accessibility and Visibility:**

☒ Ensure fire extinguishers are easily accessible and not obstructed.

Observations: Fire extinguishers are easily accessible, with no obstructions blocking access. Signage indicating their locations is clear and visible.

Condition and Maintenance

- **Physical Condition:**

☒ Inspect fire extinguishers for any signs of damage, corrosion, or tampering.

Observations: All fire extinguishers are in good condition with no visible damage or signs of tampering.

- **Pressure Gauge Check:**

☒ Check the pressure gauges on fire extinguishers to ensure they are within the operational range.

Observations: Pressure gauges on all fire extinguishers indicate they are within the correct operational range.

- **Inspection Tag Review:**

☒ Examine the inspection tags to verify the last maintenance date and ensure regular inspections are conducted.

Observations: Inspection tags are up to date, with regular inspections noted. The last maintenance was performed within the last year.

Mounting and Signage

- **Proper Mounting:**

☒ Verify that fire extinguishers are properly mounted on walls or placed in designated cabinets.

Observations: All fire extinguishers are properly mounted at the correct height, making them easily accessible.

- **Signage and Instructions:**

☒ Ensure that clear instructions and signage are present for using fire extinguishers.

Observations: Clear, easy-to-read instructions and signage are present near all fire extinguishers.

Step 3: Functionality Test

- **Operational Test:**

☒ Conduct a test to ensure fire extinguishers discharge properly and function as expected (Note: This is typically done during maintenance and not during every inspection to avoid waste).

Observations: Recent maintenance records indicate that operational tests have been performed, and all fire extinguishers passed the tests.

Step 4: Compliance Check

- **Compliance Labelling:**

☒ Check for labels indicating compliance with fire safety standards on all fire extinguishers.

Observations: Labels on all fire extinguishers confirm compliance with specified fire safety standards.

- **Proper Installation Verification:**

☒ Verify that all fire extinguishers are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation follows manufacturer guidelines and complies with relevant building codes.

Step 5: Maintenance Records Review

- **Maintenance Documentation:**

☒ Review records of any maintenance or servicing done on fire extinguishers.

Observations: Maintenance records indicate regular inspections, refills, and servicing to ensure all fire extinguishers are operational and compliant.

5. Fire Hose Reels

- **Requirement:** Fire hose reels must be easily accessible and operational.

Step 1: Review Documentation

- **System Design Plans:**
 - **Notes:** Review the design plans and fire safety documentation for the placement and specifications of fire hose reels.
 - **Fire Hose Reel Specifications:**
 - Length: Standard 36 meters (30 meters in some cases)
 - Diameter: 19 mm
 - Material: Reinforced rubber or PVC
 - Water supply connection and pressure requirements

Step 2: Visual Inspection of Fire Hose Reels

Placement and Accessibility

- **Location Check:**

☒ Verify that fire hose reels are placed according to design plans, ensuring coverage in key areas.

Observations: Fire hose reels are strategically placed in hallways, near exits, and in high-risk areas such as the storage shed, ensuring maximum coverage.

- **Accessibility and Visibility:**

☒ Ensure fire hose reels are easily accessible and not obstructed.

Observations: Fire hose reels are easily accessible, with no obstructions blocking access. Signage indicating their locations is clear and visible.

Condition and Maintenance

- **Physical Condition:**

☒ Inspect fire hose reels for any signs of damage, corrosion, or tampering.

Observations: All fire hose reels are in good condition with no visible damage, corrosion, or signs of tampering.

- **Hose Condition:**

☒ Check the hose for any signs of wear, cracks, or leaks.

Observations: Hoses are in good condition, with no signs of wear, cracks, or leaks.

- **Inspection Tag Review:**

☒ Examine the inspection tags to verify the last maintenance date and ensure regular inspections are conducted.

Observations: Inspection tags are up to date, with regular inspections noted. The last maintenance was performed within the last year.

Mounting and Signage

- **Proper Mounting:**

☒ Verify that fire hose reels are properly mounted on walls or in cabinets at the correct height.

Observations: All fire hose reels are properly mounted at the correct height, making them easily accessible.

- **Signage and Instructions:**

☒ Ensure that clear instructions and signage are present for using fire hose reels.

Observations: Clear, easy-to-read instructions and signage are present near all fire hose reels.

Step 3: Functionality Test

- **Operational Test:**

☒ Conduct a test to ensure fire hose reels function as expected, including checking water pressure and flow.

Observations: Recent maintenance records indicate that operational tests have been performed, and all fire hose reels passed the tests.

- **Water Pressure and Flow Test:**

☒ Test the water pressure and flow rate from the hose reels to ensure they meet required standards.

Observations: Water pressure and flow rate are within the required range, providing adequate coverage and extinguishing capability.

Step 4: Compliance Check

- **Fire-Rated Labelling:**

☒ Check for labels indicating compliance with fire safety standards on all fire hose reels and components.

Observations: Labels on all fire hose reels and components confirm compliance with specified fire safety standards.

- **Proper Installation Verification:**

☒ Verify that all fire hose reels are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation follows manufacturer guidelines and complies with relevant building codes.

Step 5: Maintenance Records Review

- **Maintenance Documentation:**

☒ Review records of any maintenance or servicing done on fire hose reels.

Observations: Maintenance records indicate regular inspections, tests, and servicing to ensure all fire hose reels are operational and compliant.

Additional Considerations

1. Means of Escape

- **Requirement:** Ensure that all means of escape are clear and unobstructed.

Step 1: Review Documentation

- **Evacuation Plans:**
 - **Notes:** Review the building's evacuation plans, including the layout of escape routes, exit locations, and assembly points.
 - **Evacuation Route Specifications:**
 - Clearly marked and unobstructed routes
 - Sufficient width and capacity for occupants
 - Compliance with local building codes and fire safety regulations

Step 2: Visual Inspection of Means of Escape

Evacuation Routes

- **Clearance and Obstructions:**

☒ Ensure evacuation routes are clear of obstructions and debris.

Observations: Evacuation routes in both office and storage areas are clear of obstructions, with no items blocking the pathways.

- **Width and Accessibility:**

☒ Verify that evacuation routes meet the required width and are easily accessible for all occupants, including those with disabilities.

Observations: Routes are wide enough and accessible, with ramps and handrails where necessary.

Exit Doors

- **Location and Accessibility:**

☒ Ensure exit doors are located according to the evacuation plan and are easily accessible.

Observations: Exit doors are located as per the evacuation plan and are easily accessible from all parts of the building.

- **Condition and Functionality:**

☒ Inspect exit doors for any signs of damage and test to ensure they open easily and fully.

Observations: Exit doors are in good condition, open easily, and are not obstructed. Panic bars and latches function correctly.

Exit Signage

- **Visibility and Placement:**

☒ Verify that exit signage is clearly visible and correctly placed along evacuation routes and at exits.

Observations: Exit signs are clearly visible and placed at strategic points along the evacuation routes and above exit doors.

- **Illumination:**

☒ Ensure exit signs are illuminated and remain visible during power outages.

Observations: Exit signs are properly illuminated and have backup power sources to remain visible during outages.

Assembly Points

- **Location and Marking:**

☒ Verify the location of assembly points and ensure they are clearly marked and easily accessible.

Observations: Assembly points are located at a safe distance from the building, clearly marked, and easily accessible.

Step 3: Functionality Test

- **Exit Door Operation:**

☒ Test the operation of exit doors to ensure they open quickly and fully.

Observations: All exit doors operate correctly, opening quickly and fully when tested.

- **Illumination Test:**

☒ Conduct a test to ensure emergency lighting and illuminated exit signs function during a simulated power outage.

Observations: Emergency lighting and illuminated exit signs remain functional during the simulated outage.

Step 4: Compliance Check

- **Fire-Rated Labelling:**

☒ Check for labels indicating compliance with fire safety standards on exit doors and signage.

Observations: Labels on exit doors and signage confirm compliance with specified fire safety standards.

- **Proper Installation Verification:**

☒ Verify that all means of escape components are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation follows manufacturer guidelines and complies with relevant building codes.

Step 5: Maintenance Records Review

- **Maintenance Documentation:**

☒ Review records of any maintenance or servicing done on means of escape components.

Observations: Maintenance records indicate regular inspections, tests, and servicing to ensure all means of escape are operational and compliant.

2. Fire Safety Signage

- **Requirement:** Appropriate fire safety signage must be displayed throughout the building.

Step 1: Review Documentation

- **Signage Plan:**

- **Notes:** Review the building's fire safety signage plan, including the types and locations of signs.
- **Fire Safety Signage Specifications:**
 - **Types:** Exit signs, fire extinguisher location signs, fire hose reel signs, emergency assembly point signs, evacuation route signs
 - **Placement:** Strategically placed throughout the building to guide occupants during an emergency
 - **Compliance:** Signage should meet Australian Standards (AS 2444, AS 1319)

Step 2: Visual Inspection of Fire Safety Signage

Exit Signs

- **Placement and Visibility:**

☒ Verify that exit signs are placed above all exit doors and along evacuation routes, ensuring they are clearly visible.

Observations: Exit signs are properly placed and visible from all directions. They are located at all required exits and along evacuation routes.

- **Illumination:**

☒ Ensure exit signs are illuminated and visible in low light or power outage conditions.

- **Observations:** Exit signs are properly illuminated, with backup power sources in place to maintain visibility during outages.

Fire Extinguisher Signs

- **Location and Visibility:**

☒ Ensure fire extinguisher signs are placed above or near each fire extinguisher, making them easily identifiable.

Observations: Fire extinguisher signs are correctly placed and visible, making fire extinguishers easy to locate.

Fire Hose Reel Signs

- **Placement and Visibility:**

☒ Verify that fire hose reel signs are placed above or near each fire hose reel, ensuring clear identification.

Observations: Fire hose reel signs are correctly placed and visible, making fire hose reels easy to locate.

Emergency Assembly Point Signs

- **Location and Marking:**

☒ Ensure emergency assembly point signs are placed at designated assembly points, clearly marking these locations.

Observations: Assembly point signs are properly placed and clearly mark the designated areas.

Evacuation Route Signs

- **Placement and Direction:**

☒ Verify that evacuation route signs are placed along all evacuation routes, clearly indicating the direction to the nearest exit.

Observations: Evacuation route signs are properly placed along all routes, clearly indicating the direction to exits.

General Condition and Compliance

- **Sign Condition:**

☒ Inspect all fire safety signs for any signs of damage, wear, or fading.

Observations: All fire safety signs are in good condition, with no signs of damage, wear, or fading.

- **Compliance Labels:**

☒ Check for labels indicating compliance with Australian Standards on all fire safety signs.

Observations: All signs have labels confirming compliance with AS 2444 and AS 1319.

Step 3: Functionality Test

- **Illumination Test:**

☒ Conduct a test to ensure all illuminated signs function during a simulated power outage.

Observations: All illuminated signs remain functional and visible during the simulated outage.

Step 4: Compliance Check

- **Proper Installation Verification:**

☒ Verify that all fire safety signs are installed according to the manufacturer's instructions and building code requirements.

Observations: Installation follows manufacturer guidelines and complies with relevant building codes.

Step 5: Maintenance Records Review

- **Maintenance Documentation:**

☒ Review records of any maintenance or servicing done on fire safety signs.

Observations: Maintenance records indicate regular inspections and servicing to ensure all signs remain visible and compliant.