



31. Fire - Passive Fire Protection & Escape Routes - Fire Dampers Full Service & Inspection

Category:	Fire
Subcategory:	Passive Fire Protection & Escape Routes
Frequency:	Yearly
Status:	Statutory
Type:	Approved Contractor
Priority:	Core
Commonality:	Occasional

Note: This document provides guidance to support compliance but is not a substitute for professional advice.

Why This Task Matters

Your dedication to maintaining operational fire dampers ensures that smoke and fire cannot spread unchecked through ventilation systems. By ensuring these critical barriers function correctly in large educational buildings with extensive HVAC systems, you protect pupils and staff from rapid smoke contamination during emergencies. Your expertise in overseeing these essential protective systems demonstrates your vital role in maintaining comprehensive fire safety measures.

Task Summary

Statutory: Fire dampers, located in ventilation and ductwork, must be serviced and inspected annually by a specialist contractor. This comprehensive maintenance involves testing damper operation, verifying fire resistance, inspecting actuators, and ensuring proper installation. The service includes functional testing of automatic and manual controls, inspection of fusible links or electrical systems, and checking damper integrity. In large educational buildings with extensive HVAC systems, dampers protect high-occupancy teaching spaces from rapid smoke contamination. The inspection includes checking for obstructions, corrosion, and proper integration with building systems. Evidence produced includes the contractor's test report documenting all dampers inspected and performance results, inspection certificate confirming compliance and functionality, and any recommendations for

maintenance or replacement.

Relevant Legislation & Guidance

- **Regulatory Reform (Fire Safety) Order 2005:** Requires fire dampers to be maintained in good working order
- **Fire Safety: Approved Document B (Buildings other than dwellinghouses):** Provides guidance on fire damper maintenance
- **British Standard BS 9999: Fire safety in the design, management and use of buildings - Code of practice:** Includes guidance on fire damper inspection
- **Building Regulations 2010:** Require fire dampers to meet specific standards
- **British Standard BS 7346: Components for smoke and heat control systems:** Specifies requirements for fire damper inspection and maintenance

Typical Frequency

Fire dampers must be serviced and inspected annually where fitted, with this comprehensive maintenance typically scheduled during school holidays. In educational settings with fire dampers, annual servicing is essential for ensuring system reliability. The frequency cannot be reduced as it is a statutory requirement for maintaining fire safety barriers.

Applicability

This task applies to educational establishments with fire dampers in ventilation systems, which is occasional as these are typically found in larger or mechanically ventilated buildings. It is a core statutory task where dampers are present, essential for maintaining fire compartmentation in HVAC systems. The task applies to schools and colleges with mechanical ventilation systems containing fire dampers.

Responsible Persons

- **Task Type:** Approved Contractor
- **Contractor Requirements:** This task should be carried out by a competent HVAC or fire systems maintenance company with specialist knowledge of fire dampers. Contractors should hold appropriate accreditations for fire safety systems. Typical cost range: £300-£600 per annual inspection depending on system size.
- **Permit to Work:** May require coordination with building services staff and temporary ventilation shutdown.
- **Delivery Model:** Normally contractor-delivered due to the specialist testing equipment and technical knowledge required.

Key Considerations

- **Timing considerations:** Schedule during school holidays to allow for system shutdown and any repairs
- **Cost implications:** Budget £300-£600 annually for professional servicing and inspection
- **Resource requirements:** Allow access to dampers in ceiling voids, ducts, and plant rooms
- **Potential disruption:** May require temporary ventilation shutdown during testing
- **Risk assessment requirements:** Inspection findings should inform the fire risk assessment

Task Instructions

Prerequisites & Safety

- Ensure the contractor has expertise in fire damper systems
- Provide access to system documentation and damper locations
- Confirm coordination with building services for system shutdown
- Arrange for safe access to ceiling voids and ductwork

Tools & Materials

- Damper register and location records
- Specialist testing equipment for damper operation
- Access equipment for ceiling voids and ducts
- Documentation templates and checklists
- Safety equipment for working in confined spaces

Method (Step-by-Step)

Phase A: Pre-Service Assessment

1. Review damper register and previous inspection records
2. Identify all fire dampers requiring service and inspection
3. Gather system specifications and installation certificates
4. Prepare inspection schedule and safety procedures

Phase B: Visual Inspection

1. Inspect damper blades and frames for damage or corrosion
2. Check actuators, motors, and control systems
3. Examine fusible links or electrical release mechanisms

4. Verify damper position indicators and access doors
5. Assess surrounding ductwork for obstructions

Phase C: Functional Testing

1. Test automatic activation from fire alarm signals
2. Verify manual control operation and override functions
3. Check damper closure speed and full sealing
4. Test control system status indicators
5. Confirm integration with building management systems

Phase D: Maintenance and Servicing

1. Lubricate moving parts and actuators
2. Clean damper mechanisms and remove obstructions
3. Replace faulty components and fusible links
4. Adjust damper alignment and settings

Phase E: Documentation and Certification

1. Document all test results and system performance
2. Prepare detailed test report with damper-by-damper results
3. Issue inspection certificate confirming compliance
4. Recommend maintenance schedule and any upgrades

Measurements & Acceptance Criteria

- Dampers must close fully within design time limits (typically <15 seconds)
- Control systems must respond correctly to activation signals
- Fusible links must be appropriate for the fire rating
- No obstructions should prevent damper operation

If Results Fail

Follow instructions on the Compliance Pod task completion form to record remedial/follow up actions and generate Reactive Task Tickets as required. Immediately implement alternative ventilation controls. Escalate significant issues to facilities management and arrange urgent repairs. Monitor affected areas closely until systems are restored.

Reinstatement & Housekeeping

Restore ventilation systems to normal operation and remove any temporary barriers. Ensure all access points are secured.

Completion Checks

Verify that the inspection certificate confirms compliance. Confirm that the test report covers all fire dampers. Ensure recommendations are specific and prioritised.

Client Oversight Checklist (Before the Visit)

- Confirm contractor's expertise in fire damper systems
- Provide damper register and location details
- Arrange access to ceiling voids and ducts
- Schedule during period when ventilation shutdown is feasible

Client Oversight Checklist (During the Visit)

- Observe inspection of damper components and controls
- Ensure comprehensive testing of all dampers
- Verify that measurements are taken accurately
- Confirm detailed documentation of findings

Deliverables & Acceptance Criteria (After the Visit)

- Receive inspection certificate confirming damper compliance
- Review detailed test report with damper-by-damper results
- Ensure recommendations for repairs are specific and prioritised
- Confirm that all documentation is complete and accurate

Defects & Follow-up

Follow instructions on the Compliance Pod task completion form to record remedial/follow up actions and generate Reactive Task Tickets as required. Prioritise repairs to critical dampers protecting escape routes. Agree timescales for damper replacement or repair. Schedule re-inspection after major works.

Reinstatement & Sign-off

Confirm ventilation systems are operational. Complete final sign-off once all documentation is received.

Record-Keeping & Evidence

- **Upload Process:** Upload any required statutory or supporting evidence to the corresponding task form in Compliance Pod.
- **Statutory Evidence:** Contractor's test report and inspection certificate must be retained for at least 3 years.

- **Supporting/Good Practice Evidence:** Damper-by-damper test results and maintenance recommendations support audit readiness.

Common Pitfalls & Best Practice Tips

- **Common mistakes to avoid:** Not testing all dampers, missing concealed units, or failing to check control system integration
- **Best practices for efficient completion:** Maintain detailed damper register, conduct pre-service visual checks, and coordinate with HVAC maintenance
- **Pro tips for educational settings:** Use inspection visits to review ventilation system awareness, coordinate with air quality testing, and maintain clear records of damper modifications
- **Warning signs that indicate problems:** Dampers that don't close fully, damaged actuators, or frequent control faults

Quick Reference Checklist

- Damper register and previous records reviewed
- All fire dampers identified and accessed
- Damper blades, actuators, and controls inspected
- Functional testing of activation systems completed
- Control system integration verified
- Maintenance and component replacement completed
- Test report and inspection certificate received
- Evidence uploaded to Compliance Pod

Grouped Tasks

This task is not normally grouped with other tasks.

Related Tasks

- Fire - Passive Fire Protection & Escape Routes - Fire Doors Full Inspection
- Fire - Passive Fire Protection & Escape Routes - Disabled Refuge Full Service & Inspection
- Fire - Passive Fire Protection & Escape Routes - Fire Doors Integrity & Gaps Check
- Fire - Passive Fire Protection & Escape Routes - Means of Escape & Final Exit Doors Inspection

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Users must ensure that all tasks are carried out in line with current legislation, manufacturer instructions, site-specific risk assessments, and organisational policies. Where necessary, professional advice should be sought from competent and accredited specialists — for example, fire risk assessors, water hygiene consultants, electrical engineers, gas safety contractors, or health and safety advisors.