



2. Fire - Risk Assessments & Planning - Compartmentation Survey

Category:	Fire
Subcategory:	Risk Assessments & Planning
Frequency:	36 Months
Status:	Best Practice
Type:	Approved Contractor
Priority:	Recommended
Commonality:	Common

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

Why This Task Matters

Your commitment to maintaining effective compartmentation through regular surveys safeguards pupils and staff by preventing fire and smoke spread within educational buildings. By identifying and addressing breaches in fire-resisting walls, floors, and ceilings, you ensure that safe learning environments are preserved even in complex multi-storey facilities. Your proactive approach to this essential safety measure demonstrates your expertise in protecting vulnerable occupants and maintaining the integrity of fire safety systems that everyone relies on.

Task Summary

Best Practice: A compartmentation survey examines fire-resisting walls, floors, and ceilings to confirm that fire and smoke will not spread unchecked through the building. This comprehensive survey involves systematic inspection of all compartment boundaries, including structural elements, penetrations, and cavity barriers. The survey identifies any breaches, gaps, or damage that could compromise fire resistance, particularly in areas prone to alteration such as service voids, ceiling spaces, and wall penetrations. While not a statutory requirement in all cases, it is strongly recommended in complex or multi-storey educational environments to support life safety. In schools and colleges, this is especially important where large numbers of pupils occupy multiple

compartments simultaneously, such as in classroom blocks, laboratories, or sports facilities. The survey includes detailed measurements, material testing where necessary, and photographic documentation. Evidence produced includes the contractor's survey report detailing all findings and recommendations, annotated photographs showing specific issues or remedial works, and any material test certificates.

Relevant Legislation & Guidance

- **Regulatory Reform (Fire Safety) Order 2005:** Requires adequate measures to prevent fire spread, though compartmentation surveys are not explicitly mandated
- **Fire Safety: Approved Document B (Buildings other than dwellinghouses):** Provides guidance on compartmentation requirements and fire resistance standards
- **Building Regulations 2010:** Sets standards for fire resistance of structural elements and compartmentation
- **British Standard BS 476: Fire tests on building materials and structures:** Specifies test methods for fire resistance of construction elements
- **British Standard BS 9999: Fire safety in the design, management and use of buildings - Code of practice:** Recommends compartmentation surveys as best practice in complex buildings

Typical Frequency

The compartmentation survey should be conducted every three years, though this frequency may vary based on building characteristics and risk factors. In educational settings, the survey is typically scheduled during extended holiday periods to minimise disruption. However, more frequent surveys might be required for buildings with a history of alterations, those constructed before modern fire safety standards, or premises undergoing refurbishment. Sites with complex layouts, multiple occupancy types, or high-risk areas such as science laboratories may warrant more frequent assessment. Following any significant building works or fire incidents, an immediate survey should be conducted regardless of the normal cycle.

Applicability

This task is recommended for most educational establishments, particularly those with complex or multi-storey buildings where compartmentation is critical for life safety. It is especially relevant for schools and colleges built or extended before modern fire safety standards, or those that have undergone significant alterations. The task applies to all buildings with fire-resisting construction, including classroom blocks, assembly halls, and residential accommodation. While not statutory for all premises, it is considered best practice in educational settings where failure of compartmentation could have serious consequences for large numbers of occupants.

Responsible Persons

- **Task Type:** Approved Contractor
- **Contractor Requirements:** This task should be carried out by a competent fire safety surveyor or structural engineer with specialist knowledge of compartmentation systems. Contractors should hold appropriate qualifications in fire safety assessment and be familiar with educational building types. Typical cost range: £1,000-£3,000 depending on building size and complexity.
- **Permit to Work:** Access to ceiling voids or confined spaces may require permit to work procedures.
- **Delivery Model:** Normally contractor-delivered due to the specialist expertise and equipment required for thorough compartmentation assessment.

Key Considerations

- **Timing considerations:** Schedule during school holidays to allow access to occupied areas and minimise disruption
- **Cost implications:** Budget £1,000-£3,000 for comprehensive surveys of typical school buildings
- **Resource requirements:** Allow access to all areas including ceiling voids, service risers, and roof spaces
- **Potential disruption:** May require temporary closure of areas during inspection of ceiling voids
- **Risk assessment requirements:** Survey findings should inform and update the fire risk assessment

Task Instructions

Prerequisites & Safety

- Ensure the surveyor holds appropriate qualifications in fire safety and building construction
- Confirm access to all areas including ceiling voids, roof spaces, and service ducts
- Provide building plans, previous survey reports, and fire risk assessment documentation
- Arrange for safe access equipment if working at height is required

Tools & Materials

- Building plans and construction drawings
- Ladder and safe access equipment for ceiling voids
- Measuring tools for wall thicknesses and penetration sizes

- Photographic equipment for documentation
- Moisture meter and thermal imaging camera for detecting hidden damage
- Survey checklist and reporting templates

Method (Step-by-Step)

Phase A: Preparation and Planning

1. Review building plans and previous compartmentation documentation
2. Identify all compartment boundaries and potential areas of concern
3. Plan access routes for ceiling voids, service ducts, and roof spaces
4. Schedule survey during period of low occupancy

Phase B: Systematic Inspection

1. Examine all fire-resisting walls for continuity, penetrations, and damage
2. Inspect ceiling voids for breaches, missing fire stopping, and service penetrations
3. Check floor compartments for proper fire resistance and cavity barriers
4. Assess service penetrations (pipes, cables, ducts) for correct fire stopping
5. Examine doors, windows, and other openings in compartment boundaries
6. Test fire resistance of materials where visual inspection is inconclusive

Phase C: Documentation and Reporting

1. Photograph all identified breaches and areas requiring attention
2. Measure and document the extent of any compartmentation failures
3. Prepare detailed report with prioritised recommendations for remedial works
4. Provide cost estimates for recommended repairs and improvements

Measurements & Acceptance Criteria

- Fire-resisting walls must maintain integrity for the required period (typically 30-120 minutes)
- Penetrations must be fire-stopped with approved materials achieving equivalent fire resistance
- Cavity barriers must be continuous and properly fixed
- Fire doors must achieve the required fire resistance rating for their location

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 secure any critical breaches with temporary measures. Escalate significant findings to the fire safety manager and senior leadership.

Arrange for urgent contractor repairs to restore compartmentation integrity. Update the fire risk assessment to reflect any increased risks during repair periods.

Reinstatement & Housekeeping

No reinstatement required as this is a survey task. Ensure all access points are secured after inspection.

Completion Checks

Verify that the survey report is comprehensive and covers all areas of the building. Confirm that all findings are clearly documented with photographic evidence. Ensure recommendations are prioritised and include cost estimates.

Client Oversight Checklist (Before the Visit)

- Confirm surveyor's qualifications and experience with educational buildings
- Provide access to building plans, previous reports, and keys for all areas
- Arrange safe access to ceiling voids and other restricted areas
- Schedule during a period when areas can be accessed safely

Client Oversight Checklist (During the Visit)

- Observe systematic inspection of all compartment boundaries
- Ensure access to ceiling voids, service ducts, and other hidden areas
- Confirm thorough documentation of all findings with photographs
- Verify that the surveyor understands the building's use and occupancy patterns

Deliverables & Acceptance Criteria (After the Visit)

- Receive comprehensive survey report detailing all compartment boundaries inspected
- Review report for clarity of findings and practicality of recommendations
- Ensure all photographs are clearly annotated and referenced in the report
- Confirm that recommendations include prioritisation and cost estimates

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 remedial works based on risk level and implement critical repairs immediately. Agree realistic timescales for completing recommended improvements. Schedule follow-up inspection after major remedial works.

Reinstatement & Sign-off

No reinstatement required. Complete final sign-off once the survey report is received and reviewed.

Record-Keeping & Evidence

- **Upload Process:** Upload any required statutory or supporting evidence to the corresponding task form in Compliance Pod.
- **Statutory Evidence:** No statutory evidence is required for this task.
- **Supporting/Good Practice Evidence:** The survey report, annotated photographs of findings, and any material test certificates support audit readiness and demonstrate due diligence.

Common Pitfalls & Best Practice Tips

- **Common mistakes to avoid:** Missing hidden areas like ceiling voids, failing to document findings adequately, or delaying remedial works
- **Best practices for efficient completion:** Maintain clear building plans, conduct surveys during holidays, and use digital photography for efficient documentation
- **Pro tips for educational settings:** Coordinate with maintenance staff for access, involve facilities team in understanding findings, and link compartmentation to broader fire safety training
- **Warning signs that indicate problems:** Smoke or heat transfer between compartments, damaged fire-stopping materials, or history of unauthorised building alterations

Quick Reference Checklist

- Building plans and previous reports reviewed
- Access to all areas including voids arranged
- All compartment boundaries inspected
- Penetrations and service routes checked
- Photographic evidence collected
- Detailed report with recommendations prepared
- Evidence uploaded to Compliance Pod

Grouped Tasks

This task is not normally grouped with other tasks.

Related Tasks

- Fire - Risk Assessments & Planning - Risk Assessment Review & Renew
- Fire - Risk Assessments & Planning - Stopping & Service Penetration Inspection
- Fire - Risk Assessments & Planning - Fire Alarm Zone Plan Update & Verification
- Fire - Risk Assessments & Planning - Personal Emergency Evacuation Plan (PEEP) Review
- Fire - Risk Assessments & Planning - Generic Emergency Evacuation Plan (GEEP) Review
- Fire - Risk Assessments & Planning - Fire Logbook Review & Update
- Fire - Risk Assessments & Planning - Arson Risk Assessment & Perimeter Security Review
- Fire - Risk Assessments & Planning - Fire Safety Management Policy Review

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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.