

Supervise the pre-installation planning for retrofit works

Overview

This standard is about supervising the pre-installation planning for retrofit works by supervising the workforce to conduct pre installation checks, reviewing information sources, implementing the project programming and planning of works to include a selection of resources in accordance with organisational requirements which are equal to or exceed current statutory and legislative requirements

This standard is for people working in the occupational area of construction site supervision which is defined as the supervision of multiple construction trades and disciplines and can be used by operatives, supervisors and managers

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Performance criteria

You must be able to:

- P1 supervise the workforce to conduct pre-installation checks in accordance with organisational requirements for at least six of the following:
- 1.1 accuracy and completeness of project information
 - 1.2 building condition
 - 1.3 health and safety hazards
 - 1.4 fire safety
 - 1.5 temporary works
 - 1.6 protection of existing fabric and services
 - 1.7 suitability of materials
 - 1.8 working in and around buildings and their occupants and neighbouring properties
 - 1.9 environment and ecology including but not limited to safeguarding protected species
 - 1.10 heritage significance
 - 1.11 discovery architectural and archaeological features
- P2 supervise the workforce to conduct external and internal pre-installation building inspections, and report findings to the person responsible for at least eight of the following:
- 2.1 suitable access
 - 2.2 property suitability
 - 2.3 adjoining structures
 - 2.4 structural integrity
 - 2.5 hazardous materials
 - 2.6 dampness
 - 2.7 decay
 - 2.8 exposure ratings
 - 2.9 combustion appliances, flues and ventilation
 - 2.10 services (gas, electric, water, media cables)
- P3 supervise control measures against identified risks arising from external and internal pre-installation building inspections for at

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least eight of the following:

- 3.1 suitable access
- 3.2 property suitability
- 3.3 adjoining structures
- 3.4 structural integrity
- 3.5 hazardous materials
- 3.6 dampness
- 3.7 decay
- 3.8 exposure ratings
- 3.9 combustion appliances, flues and ventilation
- 3.10 services (gas, electric, water, media cables)

P4 supervise control measures against identified technical and procedural risks for at least eight of the following:

- 4.1 accuracy and completeness of project information
- 4.2 building condition
- 4.3 health and safety hazards
- 4.4 fire safety
- 4.5 temporary works
- 4.6 protection of existing fabric and services
- 4.7 suitability of materials
- 4.8 working in and around buildings and their occupants and neighbouring properties
- 4.9 environment and ecology including but not limited to safeguarding protected species
- 4.10 heritage significance
- 4.11 discovery of architectural or archaeological features

P5 interpret and utilise information sources against on-site conditions to contribute to the retrofit works plan, risk assessments and method statements for at least four of the following:

- 5.1 drawings, design and specification information
- 5.2 building performance criteria to industry standards
- 5.3 manufacturers' technical information and product data sheets

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- 5.4 sub-contractor methods and scope of works
 - 5.5 surveys
 - 5.6 tests
 - 5.7 examinations
 - 5.8 specialist reports
 - 5.9 statutory consents
 - 5.10 current legislation, official and technical guidance
 - 5.11 written scheme of investigation (WSI) for archaeology
- P6 report issues with the planned retrofit works and suggest corrective actions for at least six of the following information sources:
- 6.1 risk assessments
 - 6.2 method statements
 - 6.3 drawings, design and specification information
 - 6.4 building performance criteria to industry standards
 - 6.5 manufacturers' technical information and product data sheets
 - 6.6 sub-contractor methods and scope of works
 - 6.7 surveys
 - 6.8 tests
 - 6.9 examinations
 - 6.10 specialist reports
 - 6.11 statutory consents
 - 6.12 current legislation, official and technical guidance
 - 6.13 the limitations, defects of the materials and their characteristics
 - 6.14 written scheme of investigation (WSI) for archaeology
- P7 assess the project programme and contribute to the planning and sequencing of works for the installation of retrofit works for at least five of the following:
- 7.1 repair
 - 7.2 stabilisation
 - 7.3 temporary works
 - 7.4 opening-up and investigations

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- 7.5 removal of fabric, structure or services, and making good
 - 7.6 preparing the building for installation of fabric measures
 - 7.7 installation of fabric, structure or services
 - 7.8 testing
 - 7.9 commissioning
 - 7.10 handover
- P8 contribute to the planning for the efficient use of the resources required for retrofit works, for at least four of the following:
- 8.1 materials and components
 - 8.2 services
 - 8.3 plant, equipment or machinery
 - 8.4 workforce
 - 8.5 information
 - 8.6 site facilities
 - 8.7 waste management
 - 8.8 structures
 - 8.9 storage of materials within specified parameters

Knowledge and understanding

You need to know and understand:

Performance Criteria 1

Supervise pre-installation checks

- K1 why pre-installation checks, in accordance with organisational requirements, are necessary and how to supervise them
- K2 why accuracy and completeness of project information is required, and how to determine these
- K3 the implications of building conditions and common building defects for retrofit works including but not limited to:
 - K3.1 moisture ingress including but not limited to: damp, salts and causes of dampness, rain penetration, rising damp
 - K3.2 internal moisture vapour
 - K3.3 poor indoor air quality
 - K3.4 inadequate ventilation
 - K3.5 existing and damaged services
 - K3.6 structural defects
- K4 the importance of building condition and repair and maintenance as the first stage in energy efficiency improvements
- K5 specific health and safety hazards including but not limited to failure of fire safety systems, poor ventilation for the workforce (roof space, inside the property and under floor) and services
- K6 how to supervise temporary works as required during retrofit works
- K7 why protection of existing fabric and services is required and how to do this
- K8 the difference in performance characteristics between traditional and modern materials and construction methods with particular

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reference to the breathability and permeability characteristics of traditional building fabric

- K9 why identifying building materials and construction methods for buildings of different ages including alterations and additions is required and how to do this
- K10 the materials proposed are suitable and in sufficient quantity to achieve the design outcomes
- K11 how to work in and around buildings and their occupants including neighbouring properties and site constraints
- K12 the potential environmental and ecological impacts of retrofit works and how to respond including but not limited to safeguarding protected species
- K13 key terms and concepts including heritage values, heritage significance, heritage impact assessment, sustainable development and management of traditional and historic buildings and structures
- K14 legislation and official guidance specific to heritage, traditional and protected buildings
- K15 why reporting the discovery of architectural or archaeological features to the person responsible is required and how to do this

Performance Criteria 2

Supervise pre-installation building inspections

- K16 why the supervision of the workforce to conduct external and internal pre-installation building inspections, and report findings to the person responsible is required
- K17 how to supervise the workforce to conduct external and internal pre-installation building inspections and report to the person responsible for the following:
 - K17.1 suitable access

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- K17.2 property suitability
- K17.3 adjoining structures
- K17.4 structural integrity
- K17.5 hazardous materials
- K17.6 dampness
- K17.7 decay
- K17.8 exposure ratings
- K17.9 combustion appliances, flues and ventilation
- K17.10 services (gas, electric, water, media cables)
- K17.11 invasive species

K18 how to identify and respond to hazards including hazardous materials, fire safety, and flues and ventilation (incorrectly installed, blocked, damaged and insufficient)

Performance Criteria 3

Supervise control measures against identified risks from pre-installation building inspections

- K19 why supervision of control measures against identified risks arising from external and internal pre-installation building inspections is required
- K20 how to supervise control measures against identified risks arising from external and internal pre-installation building inspections for the following:
- K20.1 suitable access
 - K20.2 property suitability
 - K20.3 adjoining structures
 - K20.4 structural integrity
 - K20.5 hazardous materials
 - K20.6 dampness
 - K20.7 decay
 - K20.8 exposure ratings
 - K20.9 combustion appliances, flues and ventilation
 - K20.10 services (gas, electric, water, media cables)
 - K20.11 invasive species

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K21 how to recognise, record and report the key issues from external and internal pre-installation building inspections that may affect the commencement of the work whilst working within your authority to rectify or suspend works

Performance Criteria 4

Supervise control measures against risks

K22 why the supervision of control measures against identified technical and procedural risks are required

K23 how to supervise control measures against identified technical and procedural risks for the following:

K23.1 accuracy and completeness of project information

K23.2 building condition

K23.3 health and safety hazards

K23.4 fire safety

K23.5 temporary works

K23.6 protection of existing fabric and services

K23.7 suitability of materials

K23.8 working in and around buildings and their occupants and neighbouring properties

K23.9 environment and ecology including but not limited to safeguarding protected species

K23.10 heritage significance

K23.11 discovery of architectural and archaeological features

K24 how to apply the principles of fire safety legislation and guidance relating to the retrofit installation and use of the building

K25 how to supervise the work onsite using any statutory or manufacturers requirements for testing and maintaining fire prevention and protection systems and records

K26 how to recognise, record and report the key issues from technical and procedural risks that may affect the commencement of the work whilst working within your authority to rectify or suspend

works

Performance Criteria 5

Interpret and utilise information sources

- K27 why the interpretation and utilisation of information sources against on-site conditions to contribute to the retrofit works plan, risk assessments and method statements are required for the following:
- K27.1 drawings, design and specification information
 - K27.2 building performance criteria to industry standards
 - K27.3 manufacturers' technical information and product data sheets
 - K27.4 sub-contractor methods and scope of works
 - K27.5 surveys
 - K27.6 tests
 - K27.7 examinations
 - K27.8 specialist reports
 - K27.9 statutory consents
 - K27.10 current legislation, official and technical guidance
 - K27.11 written scheme of investigation (WSI) for archaeology
- K28 how to interpret and utilise information sources against on-site conditions to contribute to the retrofit works plan, risk assessments and method statements for the following:
- K28.1 drawings, design and specification information
 - K28.2 building performance criteria to industry standards
 - K28.3 manufacturers' technical information and product data sheets
 - K28.4 sub-contractor methods and scope of works
 - K28.5 surveys
 - K28.6 tests
 - K28.7 examinations
 - K28.8 specialist reports
 - K28.9 statutory consents
 - K28.10 current legislation, official and technical guidance
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K29 why compliance with relevant legal duties and fire safety standards during the construction phase of retrofit works is required and how to do this

K30 why documented information for fire safety including advising and sharing information with the person responsible is required

Performance Criteria 6

Report issues and suggest corrective actions

K31 why it is important to report issues with the planned retrofit works, and suggest corrective actions

K32 how to report issues with the retrofit works and suggest corrective actions for the following:

K32.1 risk assessments

K32.2 method statements

K32.3 drawings, design and specification information

K32.4 building performance criteria to industry standards

K32.5 manufacturers' technical information and product data sheets

K32.6 sub-contractor methods and scope of works

K32.7 surveys

K32.8 tests

K32.9 examinations

K32.10 specialist reports

K32.11 statutory consents

K32.12 current legislation, official and technical guidance

K32.13 the limitations, defects of the materials and their characteristics

K32.14 written scheme of investigation (WSI) for archaeology

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Performance Criteria 7**

Assessing the project programme, planning and sequencing of works

K33 why it is required, and how to assess the project programme for working on and around existing buildings and structures

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- K34 why it is required and how to contribute to the planning and sequencing of works for the installation of retrofit works for the following:
- K34.1 repair
 - K34.2 stabilisation
 - K34.3 temporary works
 - K34.4 opening-up and investigations
 - K34.5 removal of fabric, structure or services, and making good
 - K34.6 preparing the building for installation of fabric measures
 - K34.7 installation of fabric, structure or services
 - K34.8 testing
 - K34.9 commissioning
 - K34.10 handover
- K35 how to produce method statements for working on and around existing buildings and structures
- K36 why avoiding potential thermal and hygrothermal performance risks of failure is required, and how to do this through planning and sequencing of works including but not limited to:
- K36.1 thermal bridges
 - K36.2 ventilation
 - K36.3 thermal bypass
 - K36.4 condensation and interstitial condensation
 - K36.5 alterations in structure including materials, components and the building
 - K36.6 moisture movement
 - K36.7 optimisation of heating systems
- K37 the implications to planning and sequencing of offsite construction methods and onsite assembly

Performance Criteria 8

Contribute to the planning for the resources required

- K38 why it is required, and how to plan the efficient use of resources

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for retrofit works:

- K38.1 materials and components
- K38.2 services
- K38.3 plant, equipment or machinery
- K38.4 workforce
- K38.5 information
- K38.6 site facilities
- K38.7 waste management
- K38.8 structures
- K38.9 storage of materials within specified parameters

K39 how to recognise and determine when specialist skills and knowledge are required and how to resource accordingly including but not limited to:

- K39.1 electrical
- K39.2 gas
- K39.3 asbestos
- K39.4 radon
- K39.5 heritage
- K39.6 ecology
- K39.7 ventilation
- K39.8 fire safety

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