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EUROPEAN COMMISSION

OFFICE FOR INFRASTRUCTURE AND LOGISTICS IN BRUSSELS

II.1. DOCUMENTATION AND COMMISSIONING

for the Manual of Standard Building Specifications

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II.1. DOCUMENTATION AND COMMISSIONING

1. ADMINISTRATIVE DOCUMENTATION

A comprehensive administrative file containing all the relevant legal permits is required for each building occupied by the Commission services.

This documentation must be produced by the developer or owner of the building and submitted to the competent Commission services in electronic format, with the exception of documents that need to be stamped by the authorities, which must also be submitted as hard copies.

The documents to be supplied are listed below:

- Planning permission, including:
 - o the decision by the municipality (College of the Mayor and Aldermen) or region,
 - o requirements imposed by the Brussels Region Fire Service and reviewed plans,
 - o signed and approved planning permission plans,
 - o details of the EPB building energy performance certifier and the EPB building energy performance proposal.
- The EPB building energy performance feasibility study or (where applicable) the integrated feasibility study must also be submitted to the Commission.
- The environmental licence.
- Certificates of conformity with the planning permit and the environmental licence, including in particular:
 - o the certificate of conformity with the fire safety requirements imposed by the competent fire department, with any comments issued during the first examination,
 - o any derogations granted by the Federal Public Service in respect of fire safety,
 - o the building energy performance (EPB) certificate.
- Other documents:
 - o an 'asbestos-free' certificate for new structures or 'asbestos-safe' certificate for existing buildings and an asbestos inventory,
 - o the soil certificate (in line with the Decree of the Government of the Brussels Capital Region of 24 September 2010 concerning the soil certificate),
 - o a list of companies involved in the project together with their details and information concerning work done,
 - o the maximum building occupancy, number and type of parking spaces available (if necessary for the public procurement procedure),
 - o a floor area schedule in line with the requirements to be supplied by the Commission (if necessary for the public procurement procedure),
 - o documentation of the 10-year warranty (10-year insurance policy covering all works), where applicable.

2. AS-BUILT DOCUMENTATION AND COMMISSIONING

2.1. GENERAL PROVISIONS

The as-built file must include all of the relevant information (in graphical and textual form) concerning the building as built up to the boundary of the private property. The documentation must be compiled by the developer or owner of the building and submitted to the competent Commission services.

The as-built file must:

- include the post-construction works file (within the meaning of the Royal Decree of 25 January 2001, as modified by the Royal Decree of 19 January 2005 concerning temporary mobile construction sites),
- include the information necessary to produce the fire safety file in accordance with the Royal Decree of 28 March 2014,
- be adapted to reflect the specific nature of the project and its requirements. The documentation referred to in the following sections (2. Architecture and design and 3. Specialised technical services) is required for a new-build project; the requirements must be adapted if an existing building is being renovated or refurbished, in line with the requirements to be supplied by the Commission.

Commissioning of the installations and technical inspections of the building must comply with the applicable regulations and the Commission's requirements.

2.1.1. Format and languages of documents

The as-built file must be supplied in electronic format.

Depending on the Commission's requirements as set out in the specifications issued for each building, the file must take the form of an as-built digital model or as-built working drawings.

The digital model must be submitted in REVIT format and must comply with the requirements to be submitted by the Commission. The technical documents must be submitted in COBIE format.

Where applicable, as-built plans must be submitted in electronic format (AutoCAD or dxf, and also pdf). They must comply with the design conventions of the graphic charter of the Office for Infrastructure and Logistics¹ (layers, colours, line types, etc.).

The Office for Infrastructure and Logistics will evaluate the file and confirm that it complies with the requirements and/or the graphic charter, and request any necessary corrections.

The documents (information in text, spreadsheet or photographic form, etc.) must either be attached to the digital model or submitted in electronic format (pdf or Microsoft Office). The documents must be submitted in French or English.

2.1.2. Labelling of equipment

All of the equipment within the building must be labelled in consultation and agreement with the Commission. The labelling system chosen must be compatible with that used by the Commission for computer-aided maintenance management.

¹ Including the plans of the surroundings of the building, any external works, the shell of the building, partitions within the building or the building's telecommunications, electricity or fire detection, alert and alarm systems.

2.2. ARCHITECTURE AND DESIGN

As a general rule, the information presented in graphical form must include:

- cadastral plans of the lot(s) and title register,
- surroundings, external works and landscaping (where applicable),
- as-built architecture (building shell, partitioning, finishings, exterior and interior joinery, metalwork, fittings and furnishings for workstations, accessibility for persons with reduced mobility (PRM), cross-sections, façade elevations, 3D models, etc., as applicable),
- structural stability, formwork and reinforcements (reinforced concrete), working load limits for floors,
- fire compartments,
- evacuation plans in line with the requirements set out in Section I.1.7. Information and signage, paragraph 3.3. Evacuation plan. The information must be verified by the Internal service for prevention and protection at work (part of the Office for Infrastructure and Logistics). It must be supplied in AutoCAD or dxf format and in pdf format,
- placement of signs: the design, placement and installation of safety signs must be verified by the Internal service for prevention and protection at work (part of the Office for Infrastructure and Logistics),
- locksmith's plans and key schedule for the building's interior and exterior doors.²

In general terms, documentation of the materials, construction systems or installations used in the building must comprise the following:

- A technical description and summary of the performance levels of the equipment, system or installation.
- Specific studies, calculations, etc.
 - o acoustic surveys of large spaces must be carried out by a specialist contractor and be approved in advance by the Commission.
- Technical data sheets, including in particular:
 - o for fire safety: certificates or documentary evidence of stability, fire resistance and reaction to fire of partitions, floors, suspended ceilings, floor coverings, walls and suspended ceilings, doors, hatches of service shafts, casings, fire dampers, chimneys, ducts and fans for smoke extraction, fire-resistant sealing and blocking systems for specialised technical services, etc.,
 - o for floor coverings: wear-resistance characteristics, slipperiness and electrostatic and acoustic behaviour,
 - o for acoustic behaviour: laboratory acoustic insulation characteristics for the façade assemblies, partitions and doors,
 - o for interior and exterior joinery: glazing, metalwork and locksmithing, material characteristics, dimensions, design plans or details, stability performance, acoustic performance, thermal performance, fire resistance and reaction to fire,

² The door plans, key schedule, master keys and all the keys for the building must be submitted to the relevant Commission representative before the building is occupied.

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air tightness, protection against humidity, wiring diagrams, control mechanisms for mechanical systems, etc.

- Operating instructions, maintenance manual, maintenance schedule, system equipment inventory, list of spare parts.
- CE marking declarations, certificates, approvals, environmental certificates or labels, etc., including in particular:
 - o for interior and exterior joinery: glazing, metalwork and locksmithing, certificates relating to protection against malicious acts (anti-intrusion class etc.),
 - o conformity certificates for restraint or anti-fall equipment and other protective systems for work at height,
 - o for frames and glazing in buildings newly constructed on behalf of the Commission: BENOR/ATG technical approvals issued by the Belgian Union for Technical Approval in the Construction Industry (UBAtC) or a European equivalent,
 - o for timber products installed upon request by the Commission: certificates confirming that the timber originates from certified sustainable plantations (PEFC label, FSC label or equivalent).
- Commissioning reports, inspection reports (initial inspection or acceptance) issued by a competent individual or external technical inspection service (where required by legislation) and – in the case of existing buildings – periodic inspection reports, in particular:
 - o a commissioning report for automatic garage doors,
 - o an inspection report by a competent individual or external technical inspection service (commissioning and acceptance) on lifting equipment and accessories for work at height, both structural and non-structural (brackets, hanging devices for window-cleaning cradles, life lines, etc.),
 - o for large spaces: *in situ* acoustic performance tests to confirm the values in the acoustic survey,
 - o for interpreting booths: *in situ* acoustic performance tests for measurement and control purposes,
 - o for play areas (early-years settings): an inspection report for playground equipment and play areas, a risk assessment for the play area and, where applicable, the manufacturer's conformity certificates for playground equipment (standards EN 1176: Playground equipment and EN 1177: Impact absorbing playground surfacing) in accordance with the Royal Decree of 28 March 2001 concerning the safety of playground equipment and the Royal Decree of 28 March 2001 concerning the use of playgrounds, amended by the Royal Decree of 28 September 2003.
- A list of approved suppliers, fitters and repair workshops with contact details.
- Warranty documents.

2.3. SPECIALISED TECHNICAL SERVICES

2.3.1. General provisions

Illustrations and/or plans of specialised technical services, including in general all networks (electrical, compressed air, hydraulic, control, etc.) with components, electrical switchboards, fire dampers, chimney flues, etc.

In general terms, documentation relating to installations must comprise the following:

- a technical description and summary of the performance levels of the installation,
- specific studies, calculations, etc.
- technical data sheets,
- operating instructions, maintenance manual, maintenance schedule, system equipment inventory, list of spare parts, etc.,
- CE marking declarations, certificates, approvals, environmental certificates or labels if applicable, etc.,
- commissioning reports, inspection reports (initial inspection or acceptance) issued by a competent individual or external technical inspection service (where required by legislation) and – in the case of existing buildings – periodic inspection reports,
- a list of approved suppliers, fitters and repair workshops with contact details,
- warranty documents.

2.3.2. Remote management

The following documents must be supplied in accordance with NBN EN ISO 16484-1 Building automation and control systems – Part 1: Project specification and implementation:

- Technical documentation; this documentation must include a description of the planned hardware, programming and software.
- Network topology schemes, wiring diagrams, etc.
- An instruction manual designed for use by future operating personnel for the purpose of ensuring that the latter are familiar with and understand the operating procedures, the installations and the control mechanisms available via the technical management system and/or the centralised technical management system.

This manual must cover all operations typically carried out by users, such as data requests, inputting and changing occupancy periods, setpoints and alarms, manual overrides, etc.

- A maintenance manual; this manual must outline the procedures to be followed to ensure that the technical management and/or centralised technical management system is functioning correctly, as well as the preventive maintenance procedures to be carried out.
- Post-completion inspection reports:

Upon acceptance of the installations, the data network within the building must be installed and active but not yet connected to the Commission's network (Snet).

Tests must therefore be carried out in two different stages. The first stage (during provisional acceptance) will involve checking all local devices.

It will be possible to connect the building's data network to Snet once the Commission has assumed responsibility for security of the building. Tests which involve communicating with parties located in other buildings can take place at this point.

The following tests must take place before provisional acceptance:

- a functional check of measurement points,

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- a functional check of control points; certain states can be set manually,
 - an alarm check,
 - a functional check of scheduling options, e.g. through the use of overrides,
 - a check to ensure that programs can be downloaded from the internet,
 - remote changes to parameters or programs and checks to ensure that these modifications have been applied,
 - a functional check of control programs; this involves assigning imputed values to measurements (e.g. exterior temperature) and carrying out checks to ensure that the control mechanisms respond correctly (actuation of burners, modulating valves, air dampers, etc.),
 - a functional check of various other programs,
 - checks to ensure correct functioning, selective addressing and the display of schematics, lists, etc.,
 - checks to ensure that the system behaves correctly in the event of a power cut or malfunction,
 - interruption in the power supply to the technical management system GT and/or the centralised technical management system GTC,
 - a power cut and short circuit in a data transmission cable,
 - interruption in the power supply to a local data collection and processing unit LPU,
 - complete erasure of all the data stored in a local data collection and processing unit (e.g. as a result of the power supply and the back-up power supply being disconnected),
 - checks to ensure that these malfunctions are flagged up correctly; the entire system must automatically resume functioning after repairs,
 - checks to ascertain response times,
 - a functional check of core programs and applications,
 - checks to ensure that communications with local control systems for specialised technical services are functioning correctly, in collaboration with the parties responsible for fitting these systems.
- Evidence that training measures have been carried out, in two stages:
 - the first stage involves general training provided by the relevant supplier at the latter's premises, using equipment which is similar to the equipment that will be installed; it must be split into a theoretical section (knowledge of the equipment and the system) and a practical section,
 - the second stage involves specialised training carried out in the building where the equipment and installations are located.
 - If necessary, the commissioning report and schedule, depending on the Commission's requirements:

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New remote management installations should preferably be commissioned³ (commissioning, checks of functional parameters) within 12 months of the date of provisional approval.

The parameters to be checked and the measurements and documentary evidence relating to the inspection schedule must comply with the requirements to be supplied by the Commission on the basis of the following reference documents:

- NBN EN ISO 16484-1 Building automation and control systems – Part 1: Project specification and implementation,
- NBN EN ISO 16484-3 Building automation and control systems (BACS) – Part 3: Functions,
- the series of standards NBN EN 50491 General requirements for home and building electronic systems (HBES) and building automation and control systems (BACS),
- CLC/TR 50090-9-2 Home and building electronic systems (HBES) – Part 9-2: Installation requirements – Inspection and testing of HBES installation.

2.3.3. Telecommunications

2.3.3.1. Wiring

The Commission (OIB, Office for Infrastructure and Logistics in Brussels) will define the principles and approve the design and execution of the installations, including the rack configurations.

No wiring may be installed until the working drawings have been approved by the Commission.

The as-built documentation must include:

- One-line diagrams, graphical representation and/or plans of the installations and detailed technical plans.

The sockets on the graphical representation and the sockets on site must be numbered in an identical manner. The numbering system used must comply with the graphic charter of the Office for Infrastructure and Logistics (see Chapter I.2.2. Telecommunications).

- The results of wiring tests (summary and full report):

Tests must be carried out on all wiring (reflectometry, load tests).

All installations must be tested after assembly and finishing.

All installations must comply with the following test protocols:

- for the copper Cat. 6a wiring: 10gPlus permanent link testing according to TIA Cat 6a Perm Link, ISO/IEC 11801 PL2 Class Ea or EN 50173 PL2 Class Ea. The tests must be certified by the manufacturer.
 - for Cat. 3 copper wiring (telephones): continuity test.
 - for optical fibres: TIA-526, ISO/IEC 14763-3 or EN 50346.
- Technical data sheets, installation and maintenance instructions and equipment certificates.

³ In accordance with the European Union's Green Public Procurement (GPP) Criteria for Office Building Design, Construction and Management:
http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm

- The manufacturer's 25-year warranty for the execution of all wiring.

2.3.3.2. Active equipment

The Commission (DIGIT) will approve the execution of installations in accordance with the detailed specifications to be supplied for the project.

The documentation must include:

- technical documentation for the equipment which has been installed; the proposed equipment must have CE markings,
- a comprehensive plan of the installations, including all connections between the equipment, with the port numbers used and any passive connections (to the fibre backbone) and electrical connections,
- an inventory of equipment supplied, including the type, serial numbers and location,
- warranties of at least one year for the equipment which has been installed,
- a full pre-patching list, based on a template to be supplied by the Commission services,
- a full report with the results of active equipment testing, as specified by the Commission (DG DIGIT).

The following test programme must be carried out as a minimum:

- o local checks to ensure that all of the installations are operating properly, and that no alarms have been output indicating defects in any of their components,
- o checks to ensure that each interconnection between the equipment is operating properly,
- o checks to ensure that the labels used correspond to the actual configuration,
- o tests of each patched plug to check end-to-end connectivity (from the office to the switch port),
- o switched connection tests (during high-volume transfers, to ensure that no errors occur).

2.3.4. Heating, ventilation, air conditioning (HVAC)

2.3.4.1. Heating systems

The as-built documentation must include:

- The contents of the log book for new heating systems, in accordance with the applicable EPB building energy performance regulations concerning heating systems,⁴ on a case-by-case basis, including:

⁴ In particular:

- Annex 2 of the Decree of the Brussels Capital Region of 21 June 2018 relating to the building energy performance requirements which apply to heating and cooling systems in buildings.

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Type 1 heating systems Boiler with rated power > 20 kW and < 100 kW	Type 2 heating systems Boiler with rated power ≥ 100 kW or multiple boilers of > 20 kW
<ul style="list-style-type: none"> - a certificate of acceptance and overview of procedures issued by a energy performance heating consultant type I, with the values recorded when the heating system was put into use for the first time, - - a dimensional plan (calculation note), user manuals and assembly and maintenance documents for the various components within the system, - user manuals for the system controls. 	<ul style="list-style-type: none"> - a certificate of acceptance and overview of procedures issued by a energy performance heating consultant type II, with the values recorded when the heating system was put into use for the first time, - a dimensional plan (calculation note) for the heating system and description of the building and its occupancy type, - an inventory of system equipment, - as-built technical drawings and plans, including for chimney flues, - technical data sheets, user manuals, and assembly and maintenance documents for the various components within the system, - a description of how to configure the system and the ideal settings, - a maintenance schedule.

For any heating system in use before the entry into force of the Decree of 21 June 2018 relating to the EPB building energy performance requirements which apply to heating and cooling systems, the log book must only include all the information available, and at least the mandatory periodic inspection and, in case of Type 2 systems, energy metering reports.

- A PEB diagnostic report (included in the log book) for heating systems type II. every 5 years.
- An acceptance inspection report by an external technical inspection service (SECT) if required by law (steam generation, etc.).
- An inspection report by a competent individual or external technical inspection service concerning gas supply installations (pipes, pressure-reducing station, boiler room).
- Approval by the Royal Association of Belgian Gas Professionals (ARGB) for gas burners, manifolds and valves (Gas.be, Cerga certification).
- Inspection reports by an external technical inspection service (SECT) or competent individual of the oil tanks, as required by legislation (mandatory installation and periodic inspections).
- If necessary, a commissioning report according to the Commission's requirements:

New centralised HVAC installations should preferably be commissioned⁵ (design, commissioning, checks of functional parameters and performance, communication with the building management system) within 12 months of the date of provisional approval.

The parameters to be checked and the measurements and documentary evidence relating to the inspection schedule must comply with the requirements to be supplied by the Commission on the basis of the following reference documents:

⁵ In accordance with the European Union's Green Public Procurement (GPP) Criteria for Office Building Design, Construction and Management:
http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm

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- NBN EN 14336 Heating systems in buildings – Installation and commissioning of water based heating systems,
- NBN EN 12599 Ventilation for buildings – Test procedures and measurement methods to hand over air conditioning and ventilation systems,
- NBN EN 378-2 Refrigerating systems and heat pumps – Safety and environmental requirements – Part 2: Design, construction, testing, marking and documentation,
- Standard Specifications 105 Central heating, ventilation and air conditioning. Belgian Buildings Agency,
- The European Union’s Green Public Procurement (GPP) Criteria for Office Building Design, Construction and Management.

2.3.4.2. Air-conditioning systems

Functional checks of the HVAC control system and communication with the building’s remote management system must be carried out jointly by the engineering teams responsible for the two installations.

The as-built documentation must include:

- Log books for the new air-conditioning systems, in accordance with the applicable building energy performance regulations on air-conditioning systems,⁶ and with the following contents:

Air-conditioning systems Effective rated power > 12 kW
<ul style="list-style-type: none">- an acceptance certificate and commissioning report,- a dimensional plan of the air-conditioning system, description of the building and of the installations, design parameters, zoning, occupancy, operating modes, etc.,- a list of refrigeration systems (refrigerating agent),- an inventory of system equipment,- as-built technical drawings and plans,- technical data sheets, user manuals and assembly and maintenance documents for the various components within the system,- a description of how to control the system,- a list of electricity and energy meters,- a maintenance schedule.

For any air-conditioning system in use before the entry into force of the Ministerial Decree of 21 March 2014 setting out the minimum contents of log books for air-conditioning systems, the log book must only include all the information available, and at least the mandatory periodic inspection and energy metering certificates for installations with an effective rated power of over 12 kW.

⁶ In particular:

- the Decree of the Brussels Capital Region of 21 June 2018 relating to the building energy performance requirements which apply to heating and cooling systems in buildings
- the Ministerial Decree of 21 March 2014 setting out the minimum contents of log books for air-conditioning systems,
- the Ministerial Decree of 21 March 2014 setting out the minimum maintenance requirements for air-conditioning systems under the regulations concerning energy performance and the interior climate of buildings,
- the Decree of the Government of the Brussels Capital Region of 29 November 2018 on refrigeration systems.

- A PEB diagnostic report (included in the log book), every 5 years (>100 kW) or 15 years (>12 kW).
- When applicable, the commissioning schedule and report must also be included in the log book according to the Commission's requirements: see paragraph 3.4.1. Heating systems.

2.3.5. Electricity and lighting

Functional checks of the control system for the electrical installations and the installations for communication with the building's remote management system must be carried out jointly by the engineering teams responsible for the two installations.

The as-built documentation for electrical installations must comply with the General Regulation on Electrical Installations (RGIE) and the Royal Decree of 4 December 2012 concerning the minimum safety requirements for electrical installations in workplaces⁷, and include the following:

- Electrical installation diagrams and plans as defined in Section 3.1.2. Electrical installation diagrams and documents and Section 3.1.3. Signalisation and indications in low and extra low tension of the General Regulation on Electrical Installations.
- In the case of existing buildings, and in the event that the electrical installation includes parts which do not comply or do not comply in full with the provisions of the RGIE General Regulation on Electrical Installations, a list of these parts, the results of any risk assessments carried out in relation to them, and documentary evidence of any compensatory measures taken.
- Calculations and any other documents required to evaluate compliance with the RGIE General Regulation on Electrical Installations and the Royal Decree of 4 December 2012 concerning the minimum safety requirements for electrical installations in workplaces.
- Certificates guaranteeing the CE conformity of equipment as regards safety.
- In particular for lighting installations, diagrams, plans, technical data sheets and instructions for the installation and its control mechanisms,
- A report providing details of the conformity test or the first inspection by an external technical inspection service (SECT). For existing buildings, the second-to-last and last periodic inspection check of the electrical installation. This must include:
 - o checks of electrical installations, including electrical installations linked to other technical installations (HVAC, lifts, etc.),
 - o checks of generator sets and cogeneration sets.
- Inspection reports by an external technical inspection service (SECT) or competent individual of the oil tanks for the generator sets, as required by legislation (installation and periodic mandatory inspections).
- A certificate of conformity of photovoltaic and cogeneration installations, issued by Brugel (the Brussels energy regulator).
- If necessary, the commissioning schedule and report must also be included in the as-built documentation according to the Commission's requirements.

Commissioning should preferably take place during the 12 months following the provisional approval, including putting into service and an energy audit of new

⁷ Integrated into the Well-Being at Work Code by the Royal Decree of 28 April 2017 establishing Volume III Workplaces.

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electrical installations, for the purpose of monitoring energy consumption by the Commission services and analysing data such as maximum power, power factor, harmonic distortion of circuits and renewable energy installations⁸ in order to optimise their management and initiate energy-saving measures.

Lighting installations must be commissioned⁹ by placing into service the new installations in order to check the lighting level and the proper functioning of the installation's control mechanisms.

The parameters to be checked and the measurements and documentary evidence relating to the inspection schedule must comply with the requirements to be supplied by the Commission on the basis of the following reference documents:

- CIBSE Commissioning Code L (Lighting),
- NBN EN 12464-1 Light and lighting. Lighting of work places – Part 1: Indoor work places,
- the European Union's Green Public Procurement (GPP) Criteria for Office Building Design, Construction and Management, for Indoor Lighting and for Renewable Energy Generation Installations.

2.3.6. Plumbing

The file must include the following in respect of new installations:

- schematic diagrams for distribution and discharge, working drawings for networks, plant room plans, hydraulic calculations, etc.,
- technical data sheets for the materials and equipment used, operating manuals, maintenance requirements, etc.,
- results of control tests (mechanical resistance and leak-tightness of networks, water flow measurements, domestic hot water temperature, etc.), where applicable.

2.3.7. Lifts and escalators

2.3.7.1. Passenger and goods lifts

The as-built documentation must include:

- The safety-related documents described above in accordance with the Royal Decree of 9 March 2003 on the safety of lifts (amended by the Royal Decree of 17 March 2005, the Royal Decree of 13 May 2005 and the Royal Decree of 10 December 2012) and the Royal Decree of 12 April 2016 on commercialisation of lifts and lifts security component:
 - operating manual: instructions for manual and emergency control (general instructions or detailed instructions if specific adaptations have been carried out, instructions for emergency use),
 - instructions for use and maintenance,
 - a CE conformity declaration (obligatory since July 1999), dated and signed by the manufacturer,

⁸ In accordance with the European Union's Green Public Procurement (GPP) Criteria for Office Building Design, Construction and Management:

http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm

⁹ In accordance with the European Union's Green Public Procurement (GPP) Criteria for Office Building Design, Construction and Management:

http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm

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- commissioning documentation for the installation and acceptance check by an external technical inspection service.

The fire detectors in the hoistways must also be checked by the external technical inspection service (SECT) for the lifts.

In addition, for existing installations:

- risk assessment reports by an external technical inspection service (SECT),¹⁰ documents relating to any modernisation measures and their execution, and the re-approval certificate issued by the external technical inspection service (SECT),
 - preventive maintenance records for the past 10 years,
 - preventive inspection reports for the past 10 years,
 - a certificate confirming that lift installations are asbestos-free (including lobby doors, the hoistway and the brake blocks), supplied by the party responsible for installing the lift.
- The summary technical data sheet must include the following information:
- serial number of the lift (the number displayed on the sign plate in the lift car),
 - Commission No (from 1 to X),
 - brand of the lift,
 - party responsible for installing the lift,
 - year of commissioning,
 - type (electrical, electrical without machine room, hydraulic, coils, etc.)
 - control type,
 - operation mode (simplex, duplex, triplex, etc.),
 - location of the machine room (number of the floor or shaft),
 - function (fire-fighting lift, evacuation lift, goods lift, passenger lift, lift for persons with reduced mobility (PRM), car park lift),
 - type of key and/or badge readers installed in combination with the function (e.g. fire-fighting = KABA 900),
 - rated load,
 - number of persons,
 - number of floors,

¹⁰In accordance with the transitional arrangements outlined in the Royal Decree of 9 March 2003 and its amendments:

Article 13. For lifts commissioned before 1 July 1999, the manager (in consultation with the external technical inspection service of his/her choice and no later than 30 months after the date of entry into force of this Decree) must choose the date on which the first risk assessment will be carried out.

Article 14. The manager must arrange for the first risk assessment of the lift to be carried out at the latest:

1. 3 years after the date of entry into force of this Decree, for lifts commissioned before 1 January 1958;
2. 4 years after the date of entry into force of this Decree, for lifts commissioned between 1 January 1958 and 31 March 1984;
3. 5 years after the date of entry into force of this Decree, for lifts commissioned between 1 April 1984 and 10 May 1998.

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- number of entrances,
 - number of door operators,
 - travel height,
 - rated speed,
 - return on emergency power supply Y/N,
 - functioning on emergency power supply Y/N,
 - number of the telephone in the car (in recess),
 - remote alarm/information service,
 - extension number of the remote alarm/information service,
 - supply voltage,
 - rated current,
 - power consumption.
- Wiring diagrams: complete and updated diagrams, including the power supply cabinet, adaptations specific to the Commission, bill of materials/legend (contacts, relays, switches, sensors, etc.).
 - Layout plans: layout of the lift shaft, machine room, vertical section, layout of the lobbies, layout of the lift cars, details of the control panel of the lift car and lobby button boxes, specific plans for different installations (pulley room, remote equipment, etc.).
 - Approval certificates for the fireproof lobby doors.
 - Certificates, calculations and documents regarding the safety features, e.g. brakes, cables, shock absorbers, speed governors, safety gears, hoistway door locks, batteries, etc.
 - Various other certificates (derogations, ISO certificates issued by the party responsible for installing the lifts, etc.).
 - Technical data sheets for the following components: motor, winch motor assembly, pump motor assembly for hydraulic systems, drive controller, door operator, etc.

2.3.7.2. Lifting platforms for goods lifts

In the event that a platform system is installed on the roof of the goods lift car, it must comply with the requirements to be supplied by the Commission on the basis of a technical opinion (based on the prototype model) issued by the Ministry of Labour.

A report must be issued by the Internal Service for Prevention and Protection at work (OIB.SIPP) before the platform is commissioned.

The as-built documentation must include:

- plans, instructions for assembly, disassembly and use,
- an acceptance report by an external technical inspection service authorising use of the platform.

2.3.7.3. Lifting platforms for persons with reduced mobility (PRM)

Documentation for lifting platforms must comply with standard NBN EN 81-40 (inclined lifting platforms) or NBN EN 81-41 (vertical lifting platforms) and include in particular:

- instructions for normal and emergency use,

- installation instructions and a list of spare parts,
- where applicable, instructions for battery packs (charger type, maintenance and replacement units),
- maintenance and inspection schedule,
- indication of safe loads and sound pressure level (less than 70 dBA),
- wiring diagram,
- acceptance check by an external technical inspection service (SECT).

2.3.7.4. Lifting tables

The as-built documentation must include:

- layout plans and all electrical wiring diagrams,
- the location of the instructions for use,
- an acceptance check by an external technical inspection service.

2.3.7.5. Escalators

The as-built documentation must include:

- the file in accordance with standard EN 115-1 Safety of escalators and moving walks – Design including commissioning documentation,
- an acceptance check by an external technical inspection service (SECT).

2.3.8. Fire safety

Documentation of fire safety installations must include in particular:

- plans and diagrams of the installations,
- technical data sheets, CE markings and maintenance manuals for the equipment,
- operating manuals, servo control table,
- calculations (where applicable),
- an inspection report by an external technical inspection service (SECT, accredited by the Belgian Accreditation Organisation (BELAC) or a European equivalent).

2.3.8.1. Fire detection, alerts and alarms

The as-built file, commissioning and installation checks must comply with standards NBN S 21-100-1 and NBN S 21-100-2.

Working drawings of installations must also be approved by an external technical inspection service (SECT, which is also responsible for acceptance of the installation) before the commencement of work.

The as-built file must include the following:

- A detailed study:¹¹

¹¹In accordance with standard NBN S 21-100-2, a specialist company certified by a certification body accredited in accordance with NBN EN ISO 17065 (Conformity assessment – Requirements for bodies certifying products, procedures and services) will be responsible for detailed studies, positioning and commissioning of fire detection and alarm installations and the associated documentation.

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- working drawings for installations approved (before the commencement of work) by an external technical inspection service, including detectors and push buttons with identification of loops and zones and wiring patterns.

The numbering of detectors, alarm indicators, push buttons and technical addresses must comply with the graphic charter of the Office for Infrastructure and Logistics (see Section I.2.7. Fire safety).

- a risk assessment,
 - one-line diagrams,
 - detailed block diagrams for control panels and distribution frames,
 - details of all addressing messages,
 - a servo control table and cause-and-effect programming,
- A certificate stating that the party responsible for installing the systems is accredited as an automated fire detection systems specialist, issued by BELAC or a European equivalent.
 - Commissioning documentation by the party responsible for installing the systems; the latter must test 100% of fire detection installations in accordance with NBN S 21-100-1, including a list of all detectors with details of the analogue sensitivity value on the provisional acceptance date.
 - Technical data sheets for the equipment installed, and the relevant CE markings and certificates (quality label authorised by BELAC or a European equivalent) for the equipment.
 - Operating and maintenance manuals.
 - An initial inspection certificate for the installations issued by the external technical inspection service.¹²

2.3.8.2. Automatic extinguishing systems – sprinklers

The as-built file must be approved by an external technical inspection service (accredited by BELAC or a European equivalent) before the commencement of work, and must include:

- detailed working drawings,
- technical sheets for the materials and equipment used,
- detailed drawings of the mounting and arrangement of control stations,
- hydraulic calculations,
- a certificate stating that the party responsible for installing the systems is accredited as a sprinkler systems specialist, issued by BELAC or a European equivalent,
- maintenance requirements and test reports by the party responsible for installing the system,
- operating manuals and the procedures to be followed in the event of a fault,
- EC conformity certificates for the equipment used,
- an initial inspection certificate for the installation, issued by an external technical inspection service.

¹² The inspection body for the installations must be accredited as a ‘type A’ body in accordance with NBN EN ISO 17020 (accredited by BELAC or a European equivalent), in accordance with standard NBN S 21-100-2.

2.3.8.3. Fire detection and automatic extinguishing systems in computer rooms (local server units LSU)

The as-built file must include the following:

- Working drawings of installations, approved before the start of work by an external technical inspection service (SECT, accredited by BELAC or a European equivalent), including:
 - o layout plans including detectors and push buttons with identification of loops and zones, as well as wiring patterns,
 - o one-line diagrams,
 - o isometric calculations for automatic extinguishing systems,
 - o detailed block diagrams for the control panel and distribution frame,
 - o details of all addressing messages, cause-and-effect programming.
- Technical data sheets for the equipment installed as well as bills of materials and quantities for all the system components.
- Certificates issued by BELAC (or a European equivalent) for the equipment.
- Commissioning documentation issued by the party responsible for installing the systems, including:
 - o a physical test of each detector, alarm button and technical address,
 - o checks of physical location with reference to the messages issued by the control panel,
 - o tests of all automatic responses,
 - o an exhaustive list of all the above tests,
 - o a sensitivity check of analogue values,
 - o an air leak test of the room and dimensions of the pressure relief valves.
- An inspection report by an external technical inspection service accredited by BELAC or a European equivalent.

2.3.8.4. Automatic extinguishing system for deep-fat fryers

The as-built file must include the following:

- an instruction manual,
- an inspection report by an external technical inspection service (SECT).

2.3.9. Gas detection and venting

The as-built technical file for the gas detection and venting installations must include:

- a commissioning report by the party responsible for installing the detection, ventilation and gas cut-off system equipment, including one test per burner head using a certified calibration gas, with a calibration report for all detectors,
- a copy of the gas sensor calibration certificate,
- a technical data sheet and instruction manual for the control panel,
- EC conformity certificates for the equipment used,
- ATEX certificates for CH₄ and LPG detectors, depending on requirements,

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- the location of individual installation components,
- inspection reports issued by a competent individual or an external technical inspection service (SECT) where required by law (natural gas installation, LPG gas detection and venting installation).

Where applicable in the case of LPG gas detection and venting installations and in accordance with the Royal Decree of 17 May 2007, checks must be carried out in accordance with:

- standard NBN EN 50073 Guide for selection, installation, use and maintenance of apparatus for the detection and measurement of combustible gases or oxygen (replaced by NBN EN 60079-29-2 Explosive atmospheres – Part 29-2: Gas detectors – Selection, installation, use and maintenance of detectors for flammable gases and oxygen),
- NBN EN 12101-4 Smoke and heat control systems – Part 4: Installed SHEVS systems for smoke and heat ventilation.

2.3.10. Electronic security

Technical inspections and commissioning of electronic security installations must comply with the requirements to be supplied by the Commission Directorate-General for Human Resources and Security.

Provisional functional acceptance of security equipment can only take place if a network is available within the building and a connection has been established with the Commission's network.

As-built documentation of electronic security installations must comply with the requirements to be supplied by the Commission Directorate-General for Human Resources and Security.

GLOSSARY

This glossary contains definitions for a number of the terms and acronyms used in this document.

AFNOR	Association française de normalisation [French Standardisation Association]
AM	Arrêté ministériel [Belgian Ministerial Decree]
ANPI	Association nationale pour la protection contre l'incendie et l'intrusion [National Association for Protection Against Fire and Intrusion, Belgium]
AR	Arrêté royal [Belgian Royal Decree]
ARGB	Association Royale des Gaziers Belges [Royal Association of Belgian Gas Professionals] (Gas.be)
ATEX	explosive atmospheres
ATG	technical approval
BB BM BE	Bâtiments Bas, Bâtiments Moyens, Bâtiments Elevés [low-rise, medium-rise, high-rise buildings]
BELAC	Belgium Accreditation
BELGAQUA	Fédération belge du secteur de l'eau [Belgian Federation for the Water Sector]
BOSEC	Belgian Organisation for Security Certification
BT	basse tension [low voltage]
BREEAM	British Research Establishment Environmental Assessment Method
CE	European conformity marking indicating that the product complies with all the prescribed safety requirements
CEN	European Committee for Standardization
CENELEC	European Committee for Electrotechnical Standardization
CFC	chlorofluorocarbons (gases which damage the ozone layer)
CSTC	Centre Scientifique et Technique de la Construction [Scientific and Technical Construction Centre, or BBRI Belgian Building Research Institute]
CVC	heating, ventilation, air conditioning (HVAC)
DIN	Deutsche Institut für Normung
DS	European Commission Directorate-General for Human Resources and Security
Grey water	waste water from toilets and showers
EEx	Explosion-proof (ATEX)
EMAS	Eco-Management and Audit Scheme
EN	European standard
ENV	European pre-standard
EOTA	European Organisation for Technical Approval
EU	ECSC Euronorms

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GMAO	gestion de la maintenance assistée par ordinateur [computer-aided maintenance management, CAMM]
GT	gestion technique [technical management]
GTC	gestion technique centralisée [centralised technical management]
HFC	hydrofluorocarbons (gases which damage the ozone layer)
HCFC	hydrochlorofluorocarbons (gases which damage the ozone layer)
HQE	Haute Qualité Environnementale [High Quality Environmental standard]
HR	humidité relative [relative humidity]
HR-DS.1	European Commission Directorate-General for Human Resources and Security, Operations Unit
HT	haute tension [high voltage]
IBGE	Bruxelles Environnement (environmental and energy authority for the Brussels Capital Region)
IBN	Institut Belge de Normalisation [Belgian Standardisation Institute]
ISO	International Organization for Standardization
LOI/CODE/RGPT	Law of 4 August 1996 on the well-being of workers at work and its executing decrees, Well-being at Work Code, General Labour Protection Regulation (Belgium)
LPG	liquefied petroleum gas
LR	local de reconfiguration [cabling concentration room]
LSU	computer room
LTG	local de télécommunication général [main distribution frame room]
MB	Moniteur Belge [Belgian Official Journal]
NBN	Normes enregistrées de l'Institut belge de normalisation [registered standards of the Belgian Bureau for Standardisation]
NIT	Notes d'information technique [technical information notes, published by the Belgian Scientific and Technical Construction Centre]
NORMES/BASE/INCENDIE	Royal Decree of 7 July 1994 laying down basic fire and explosion prevention standards applicable to new buildings, amended by the Royal Decree of 19 December 1997, the Royal Decree of 4 March 2003, the Royal Decree of 13 June 2007, the Royal Decree of 1 March 2009, the Royal Decree of 12 July 2012 and the Royal Decree of 7 December 2016
OIB	Office pour les infrastructures et la logistique à Bruxelles [Office for Infrastructure and Logistics in Brussels] (European Commission)
OIB.SIPP	Service Interne de Prévention et de Protection au travail (SIPP) [Internal service for prevention and protection at work], European Commission, Brussels
PMR	personne à mobilité réduite [person with reduced mobility]
RGIE	Règlement Général sur les Installations Electriques (Belgique) [General Regulation on Electrical Installations, Belgium]
RIA	Robinet d'Incendie Armé (dévidoir) [fire hose reel]

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RRU	Règlement Régional d’Urbanisme de la région de Bruxelles-Capitale [Regional Urban Planning Regulation for the Brussels Capital Region]
SCIC	European Commission Directorate-General for Interpretation
SECT	Service Externe pour les Contrôles Techniques – organisme agréé par le SPF Économie [external technical inspection service, approved body by the Federal Public Service Economy]
STS	Spécifications Techniques publiées par le Service Agrément et Spécifications dans la Construction (Service Public Fédéral Economie) [technical specifications, published by the Construction Specifications and Approval Service (Federal Public Service Economy)]
UBAtc	Union Belge pour l’Agrément technique dans la construction [Belgian Union for Technical Approval in the Construction Industry]
ULT	Unité Locale de Traitement [local data collection and processing unit]
VDE	Verband Deutscher Elektrotechniker
VIVAQUA	Société de distribution des eaux [water distribution company]

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