

Building Inspection



Inspections assess **the general condition of the building and its construction systems**. All elements of a construction are evaluated from the structural parts, facades, marquees, roofs, fire fighting, sewage and rainwater installations, among others, always observing performance and safety aspects, the results found must always be reported in the technical inspection report.

Building inspection cannot be confused with building maintenance, the two are closely related, but building inspection is just a tool that will assist in planning and developing a maintenance plan.

The method that must be followed for the inspection is described in the Building Inspection Standard (IBAPE/SP, 2012) and consists, briefly, of:

1ª Step:

All building documents will be collected: administrative, technical, maintenance and operation.

2ª Step:

Talk to the building manager and residents to find out about the latest activities that have taken place in the building, such as: renovations, maintenance, among other interventions that have taken place. With the aim of knowing and recording the problems that have already been detected.

3ª Step:

Carrying out the inspection, depending on the type of building and its complexity, will require the use of multidisciplinary teams. The number of professionals involved and their complexity is defined according to the classification of building levels:

Level 1: Buildings with low technical complexity, maintenance and operation of their elements and construction systems. Typically used in buildings with very simple or non-existent maintenance plans. They are normally three-story buildings.

Level 2: Buildings of medium technical complexity, maintenance and operation of elements, with medium standards and conventional systems.

Level 3: Buildings of medium technical complexity, maintenance and operation of elements, with medium standards and conventional systems.

The maintenance standard must be in accordance with ABNT 5.674.

4^a Step:

Classification of problems found during the inspection, according to their origin, which can be:

- a) constructive or endogenous anomalies – when the problem arises from construction or a design error;
- b) when the element loses its functionality as it reaches the end of its useful life (natural aging);
- c) usage and maintenance failures – When the system or equipment loses performance due to misuse or lack of maintenance.

All problems detected must be photographed and included in the building inspection report.

5^a Step:

Classify problems according to their criticality. This classification depends on several factors such as: conservation factors, planned maintenance routines, early deterioration agents, depreciation, health risks, safety, functionality and compromised useful life.

6^a Step:

After evaluating all technical priorities, the problems will be classified according to the degree of risk (critical, regular and minimum). The list should be organized from most critical to least critical.

7^a Step:

Developing solutions for all problems encountered.

8^a Step:

Analysis of the quality of building maintenance. For this analysis, all failures found with routine maintenance activities are considered and whether there was a success rate among them. Maintenance quality can be classified as: compliant, not compliant or partially compliant.

9^a Step:

The analysis of the use of the building will determine whether it is regular or irregular in accordance with regulations and laws. After completing all stages, a Building Inspection Report is generated, which shows all the pathologies (faults and anomalies) found, as well as showing the best way to resolve these problems without compromising the safety and health of condominium owners. . This data found is also

used to improve or develop a maintenance plan, which provides greater assistance in the management of the building:

- a) Providing better technical support and the real condition of the building for possible future studies;
- b) Checking the state of conservation of the building, and this data obtained can be used for a possible future modernization of the building;
- c) Making condominium owners aware of the practice of maintenance, and showing how maintenance can value or devalue the building;
- d) Assisting in the purchase and sale of properties, informing the building's conservation status and informing possible needs for future repairs;
- e) When the report is prepared over a certain period of time, it will assist in condominium management, attesting and verifying the evolution of the state of conservation, helping to draw up new plans;
- f) Reduces the insurance value.

To analyze the documents, the initial consultation suggestion is defined below:



DOCUMENTOS ADMINISTRATIVOS
Instituição, Especificação e Convenção de Condomínio
Regimento Interno do Condomínio
Alvará de Construção
Auto de Conclusão
IPTU
Programa de Prevenção de Riscos Ambientais (PPRA)
Alvará do Corpo de Bombeiros
Ata de instalação do condomínio
Alvará de funcionamento
Certificado de Manutenção do Sistema de Segurança
Certificado de treinamento de brigada de incêndio
Licença de funcionamento da prefeitura
Licença de funcionamento do órgão ambiental estadual
Cadastro no sistema de limpeza urbana
Comprovante da destinação de resíduos sólidos, etc
Relatório de danos ambientais, quando pertinente
Licença da vigilância sanitária, quando pertinente
Contas de consumo de energia elétrica, água e gás
PCMSO – Programa de Controle Médico de Saúde Ocupacional
Alvará de funcionamento
Certificado de Acessibilidade

DOCUMENTAÇÃO TÉCNICA
Memorial descritivo dos sistemas construtivos
Projeto executivo
Projeto de estruturas
Projeto de Instalações Prediais
Instalações Hidráulico-sanitárias, e de água pluviais
Instalações de gás
Instalações elétricas
Instalações de cabeamento e telefonia
Instalações do Sistema de Proteção Contra Descargas
Instalações de ar condicionado
Projeto de Impermeabilização
Projeto de Revestimentos
Projeto de Pintura
Projeto de Paisagismo

DOCUMENTAÇÃO DE MANUTENÇÃO E OPERAÇÃO
Manual de Uso, Operação e Manutenção (Manual do Proprietário e do Síndico)
Plano de Manutenção e Operação e Controle (PMOC)
Selos dos Extintores
Relatório de Inspeção Anual de Elevadores (RIA)
Atestado do Sistema de Proteção a Descarga Atmosférica -SPDA
Certificado de limpeza e desinfecção dos reservatórios
Relatório das análises físico-químicas de potabilidade de água dos reservatórios e da rede
Certificado de ensaios de pressurização em mangueiras
Laudos de Inspeção Predial anteriores
Certificado de ensaios de pressurização em cilindro de extintores
Relatório do acompanhamento de rotina da Manutenção Geral
Relatórios dos Acompanhamentos das Manutenções dos Sistemas Específicos, tais como: ar
condicionado, motores, antenas, bombas, CFTV, Equipamentos eletromecânicos e demais
Componentes
Relatórios de ensaios da água gelada e de condensação de sistemas de ar condicionado
Central
Certificado de teste de estanqueidade do sistema de gás
Relatórios de ensaios preditivos, tais como: termografia, vibrações mecânicas, etc
Relatórios dos Acompanhamentos das Manutenções dos Sistemas Específicos, tais como: ar
condicionado, motores, antenas, bombas, CFTV, Equipamentos eletromecânicos e demais
Componentes
Cadastro de equipamentos e máquinas

In accordance with the building inspection standards of the national IBAPE, the Institute of Engineering and the NBR 5674 standard, the verification checklist must address the main elements and equipment of the building, adapting the complexities and inspection level of the building.

It will never be a waste of time to understand this set of guidelines. Simply because, without it, no management will be truly good. Do you know the compass that gives north on a journey? **The role of NBR 5674 is exactly this — pointing the way for the maintenance of all components of the condominium, from the simplest to the most complex systems.**