ABNT STANDARD 15575 PERFORMANCE



Structuring of the NBR 15575 Performance Standard

Source: ASBEA, 2015

The current version of ABNT NBR 15575 - "Housing buildings - Performance" is applicable to residential buildings, whether single-family or multi-family.

This is divided into six parts, referring to the systems that make up residential buildings, namely:

ABNT NBR 15575-1 - Part 1: General requirements;

ABNT NBR 15575-2 – Part 2: Requirements for structural systems;

ABNT NBR 15575-4 – Part 4: Requirements for internal and external vertical sealing systems - SVVIE;

ABNT NBR 15575-5 – Part 5: Requirements for roofing systems;

ABNT NBR 15575-6 – Part 6: Requirements for hydro sanitary systems.

In addition to defining project parameters and specifications, the standard establishes responsibilities for all agents involved in civil construction – developers, designers, builders, suppliers and users (ABNT, 2013a).

Each part of the standard covers all twelve user requirements and is separated into three classes: safety, habitability and sustainability, presented in Table 1.

Quadro 1 - Exigências dos usuários

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Segurança	Desempenho estrutural
	Segurança contra incêndio
	Segurança no uso e na operação
Habitabilidade	Estanqueidade
	Desempenho térmico
	Desempenho acústico
	Desempenho lumínico
	Durabilidade e manutenibilidade
	Saúde, higiene e qualidade do ar
Sustentabilidade	Funcionalidade e acessibilidade
	Conforto tátil, visual e antropodinâmico
	Adequação ambiental

Fonte: Adaptado de ABNT, 2013a.

The standard stipulates minimum design useful life values (VUP) so that systems are designed to **ensure their durability**, as long as appropriate maintenance is carried out.

In Figure 2, it is shown that performance reduces over time, this reduction is due to natural wear and tear related to use, climatic actions, etc., and that maintenance actions increase performance, allowing for a longer useful life (ABNT, 2013a), thus highlighting its importance.

Ações de manutenção

Incremento de desempenho

Nivel minimo de desempenho

Vida útil SEM manutenção

Vida útil COM manutenção

Tempo

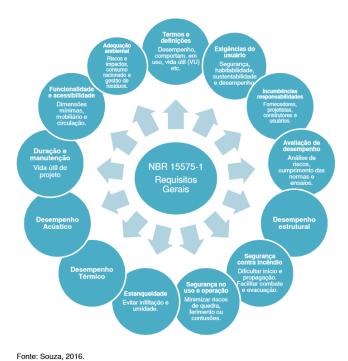
Figura 2 - Vida útil com e sem manutenção.

Fonte: ABNT, 2013.

The user, owner or not, is responsible for carrying out preventive and corrective maintenance in accordance with what is established in the property's Use, Operation and Maintenance Manual, or similar document, carrying out management and documented registration in accordance with standard NBR 5674.

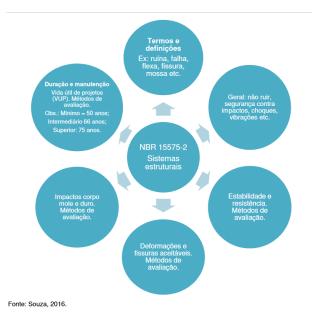
You must use the building correctly, not making, without prior authorization from the construction company and/or public authorities, <u>changes to its destination</u>, <u>loads</u> <u>or requests foreseen in the original projects</u>.

Figure 3 presents a summary of the main aspects of NBR 15575-1: General Requirements



Tonie. Souza, 2010

Figure 4 provides a summary of the main aspects of NBR 15575-2: Structural Systems.



Another important aspect is the standard describes that the performance of the building is not limited to functional performance, therefore, the flooring system must provide tactile, visual and anthropodynamic comfort. Therefore, flatness and homogeneity are required in this part (CORDOVIL, 2013). A summary of the main aspects of NBR 15575-3 is presented: Flooring Systems in Figure 5

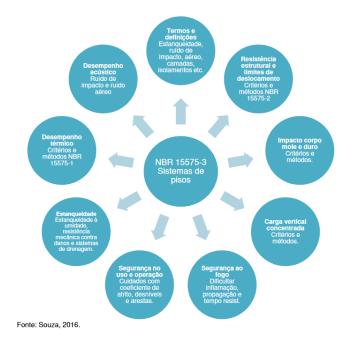


Figure 6 presents a summary of the main aspects of NBR 15575-4: Sealing ystems.

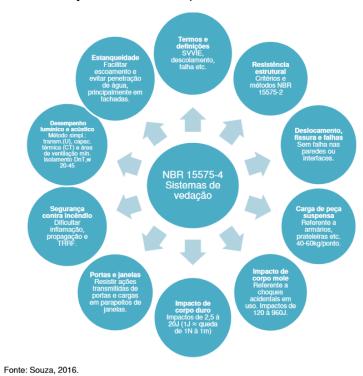
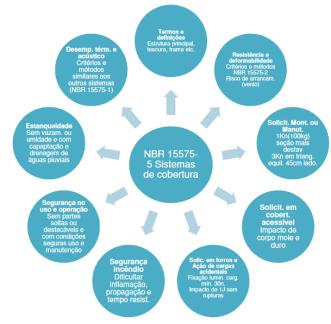
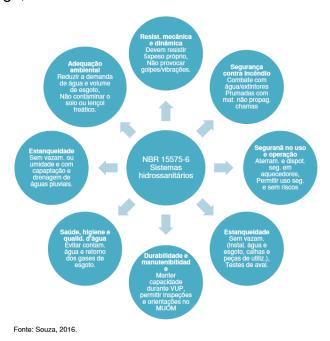


Figure 7 presents a summary of the main aspects of NBR 15575-5: Coverage Systems.



Fonte: Souza, 2016.

The sixth and final part of NBR 15,575 covers the building systems of cold water, hot water, sanitary sewage, ventilation and rainwater



The importance of the performance standard for the civil construction sector stands out for its effective contribution to raising the level of quality and useful life of buildings. Its implementation was carried out with the aim of regularizing the civil construction sector and ensuring that residential buildings have a minimum quality standard for the benefit of users. This represents an advantage not only for users, but the market benefits from greater competitiveness and regularization for all agents in the construction production chain.