HANDBOOK NO. 6

THE NATIONAL BUILDING CODE, 2024

INSPECTION, MAINTANANCE AND DEMOLITION OF BUILDINGS

NATIONAL CONSTRUCTION AUTHORITY

OVERVIEW

This handbook covers the following parts of the National Building Code

PART XVII – Buildings, Inspections and Maintenance
Part III - Parking Spaces

2.0 PART XVII: INSPECTION AND MAINTENANCE

This part comprises paragraphs 335 to 337 of the Code.
Upon completion, buildings are handed back from contractors to the owners. Completed buildings should be kept in a good state of maintenance and regularly inspected. Records should be kept by the owner and submitted to the approving authorities within the intervals required. Professionals should be involved in setting up maintenance systems for the owner so that buildings do not deteriorate through the life-cycle.

2.1 Key Points

1. Regular Building Inspections

Every building must undergo an inspection every five years following its completion. This routine assessment is vital to maintaining the building's safety, structural soundness, and compliance with regulations.

2. Types of Inspections

To assess the condition of a building thoroughly, the following inspections are performed:

Visual Inspection
A general review of the building's exterior, structure, and surrounding environment, such as drainage and slopes.

Detailed Structural Inspection
A more in-depth analysis of the building's key structural components.

Overall Condition Survey
A complete check of the building's physical state and wear over time.

Inspection of Electrical and Mechanical Systems
Examines electrical wiring, HVAC systems, and other technical components.

Specialized Investigation
Focused on specific areas requiring extra attention, like testing material durability.

3. Inspection Guidelines

a. A **licensed building surveyor** is required to oversee and conduct these inspections.

b. Visual inspections look at:

1. The condition of the building's main structure, including any extensions or modifications.

2. External factors such as nearby slopes, drainage, and any changes to the surrounding landscape.

c. Once completed, the surveyor prepares a report for the building owner, detailing their findings and recommendations.

4. Follow-Up Actions from Inspections

The surveyor's report might recommend further steps, such as:

1. Reviewing the building's design and construction records.
2. Recreating structural plans if they are unavailable.
3. Conducting advanced testing to assess material quality and performance.
4. Engaging experts for necessary repairs to address identified risks.

5. Making Necessary Repairs

If issues arise during the inspection, remedial work must be carried out to address them. These include:

1. Replacing rusted reinforcement bars in concrete.
2. Repairing or rebuilding critical components like water tanks.
3. Rewiring electrical systems or stabilizing foundation elements.

All repairs must comply with the building regulations and be supervised by a registered professional, who will submit a follow-up report once the repairs are complete.

3.0 PART XXII: DEMOLITION OF BUILDINGS

It comprises Paragraphs 451 to 461 of the Code.

If for whatever reasons buildings need to be demolished, care should be taken to ensure the safety of the persons carrying out the operation, neighbouring structures and passers-by. In addition, the very structure being demolished must be brought down systematically and the debris arising from demolition disposed in an approved manner

Safeguarding Basements

If a building with a basement is demolished to ground level, the owner must provide safe lateral support for the sides of the basement.

Addressing Road Damage

If construction damages a road, the approving authority may either:

1. Issue a written notice for the owner to repair the road within a specified timeframe.
2. Repair the road themselves and recover the costs from the owner.

3. Pre-Demolition Duties

Before starting demolition, the owner must:

1. Ensure the building and its surroundings are clear of people.
2. Disconnect and remove utility meters (gas, electricity, water, etc.), unless required for demolition.

3. Shut off gas and electricity supplies.
4. Remove fittings connected to road lighting, electricity, or similar services.
5. Seal all sewer and drainage connections.
6. Remove all glass sashes and doors from the structure.
7. Where walls face public spaces, contractors must:
    - Install catch platforms and fans at intervals not exceeding 10m to control debris and dust.
    - Erect dust screens over walls to minimize nuisances.

4. Preventing Structural Collapse

Adequate shoring using approved timber or metal props must be installed to prevent accidental collapse during demolition.

5. Electrical Safety

Electrical cables not being used in demolition should remain uncharged to avoid accidents.

6. Fire, Explosion, and Flooding Precautions

During demolition, owners must:

1. Prevent risks of fire or explosion caused by gas leaks or vapors.
2. Prevent flooding from water mains or sewers.
3. Secure external openings to protect people and property.

7. Chutes for Material Removal

Chutes must be installed safely to ensure no harm comes to people or property.

8. Supervision Requirements

Demolition works must be supervised by architects or engineers.

Specific tasks, such as dismantling frameworks or cutting reinforced concrete, must be handled by skilled workers under professional supervision.

9. Managing Overloads

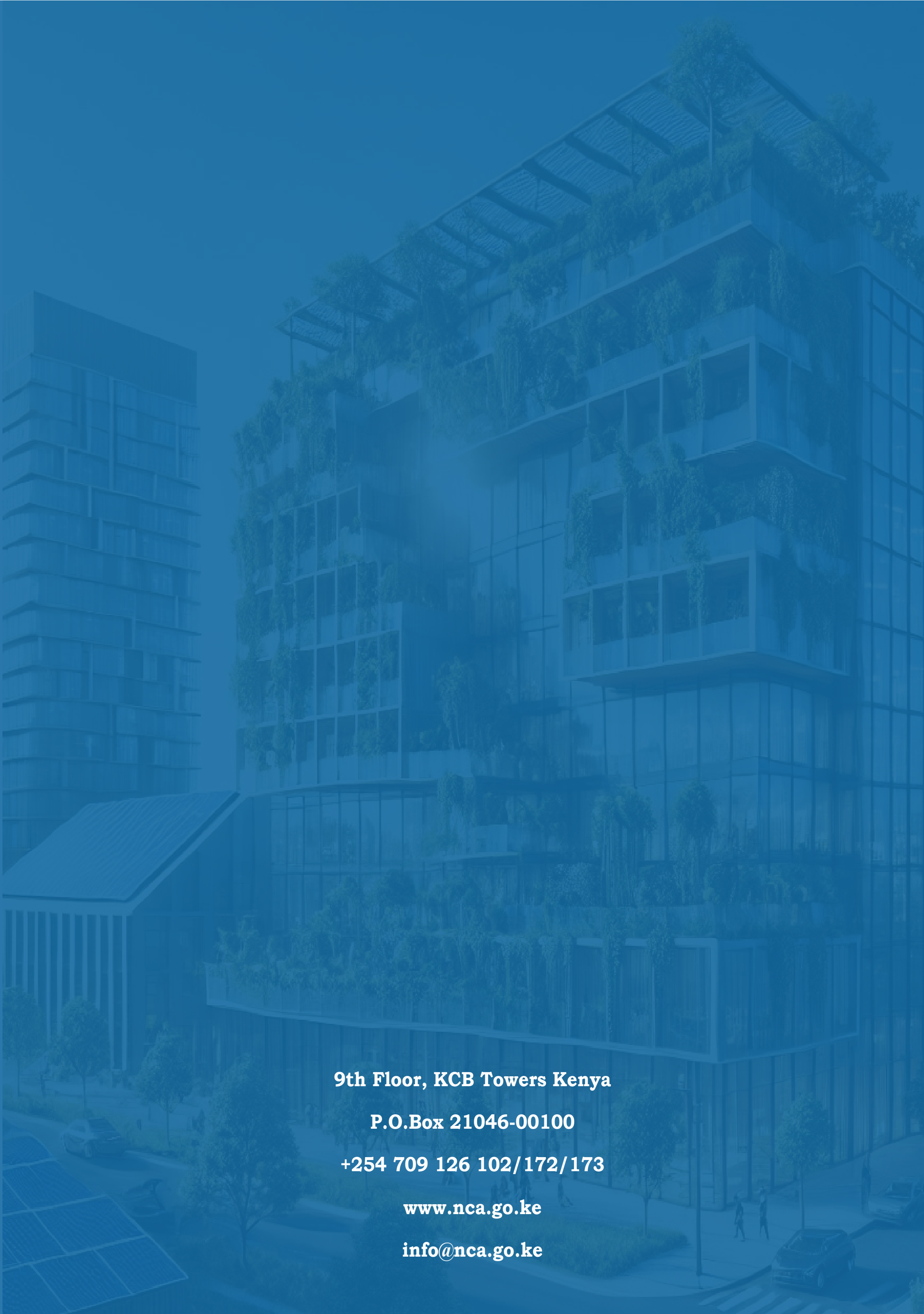
Floors, roofs, or other structural parts must not be overloaded with debris or materials to avoid safety risks.

Debris should not accumulate against fences, walls, or hoardings in a way that could make them unstable.

10. Handling Steelwork and Frames

When cutting or dismantling steelwork, precautions must prevent sudden twists, springs, or collapses.

During the removal of framed structures, measures must prevent the collapse of surrounding elements.



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