



SANS 10400: BUILDING REGULATIONS

Accredited by ECSA: 3 CPD Points

OVERVIEW

This dynamic 3-day workshop is specifically designed for Building Control Officers, municipal building inspectors and any other building professional wanting to gain an in-depth overview of the National Building Regulations & Building Standards Act (amended 2008), together with the most recent editions of all of the Parts of SANS 10400 – including Part A (updated 2022) and Part XA (updated 2021)

The course will cover all Approved Documents over three days, and comprises a facilitated navigation through the documents, discussing how and when the guidance can be applied

This workshop provides South African building inspectors with critical knowledge. Participants will acquire tools to understand the scope and content of:

- The National Building Regulations: Parts A to XA
- The corresponding "deemed-to-satisfy" national standards SANS 10400 - Parts A to XA

WHO SHOULD ATTEND?

The course is designed for persons who desire to learn practical site management techniques that will assist them in completing work tasks, establishing and maintaining priorities and meeting deadlines for work and projects. This course is suitable to a wide range of Building Inspectors professionals but will greatly benefit:

- Project Professionals
- Site Engineers
- Superintendents
- Managers
- Building Inspectors
- Quality Controllers
- Site Inspectors
- Quantity Surveyors
- Building Contractors
- Property Developers
- Management & Quality Controllers
- Property Developers

THREE DAY SANS 10400 WORKSHOP

DAY ONE: 08H30 TO 16H00

UNDERSTANDING SA'S APEX BUILDING LAW: THE NATIONAL BUILDING REGULATIONS

- Powers and functions of local authorities
- Approval of plans and drawings
- Minor building work
- Certificate of occupancy

THE NATIONAL BUILDING REGULATIONS

- Prescriptive regulations
- Functional regulations
- Compliance with functional regulations

SANS 10400 - DEEMED-TO-SATISFY MINIMUM STANDARDS

- Rational design by a competent person
- Agrément certification
- Regulatory role of the local authority

Part A - NBR & SANS 10400: General principles

- Deemed-to-satisfy requirements
- Category 1 buildings

NBR: PART A: ADMINISTRATIVE REGULATIONS A1 TO A25

- Submission and approval/rejections of building proposals
- Regulation of work on site
- Inspection to ensure construction fulfils design functionality
- Appointment of competent persons to design, inspect and certify
- Occupancy classification of buildings
- Design population of buildings

Part C - NBR & SANS 10400: Dimensions

- Minimum floor areas
- Minimum ceiling heights

PART B - NBR & SANS 10400: STRUCTURAL DESIGN

- Other national standards referenced in SANS 10400-B
- The design life of a building
- The preventative maintenance cycles
- Prescriptive standards to prevent damage to buildings

Part E - NBR - Demolition work

- Demolition of any building
- Safeguarding of basements
- Prohibition of dangerous methods

PART D - NBR & SANS 10400 - PUBLIC SAFETY

- Changes in level
- Pedestrian entrances to parking areas in buildings
- Ramps
- Swimming pools
- Deemed-to-satisfy requirements

Part G - NBR & SANS 10400 - Excavations

- General stability requirement
- Deemed to satisfy standards
- Temporary excavations
- Construction Regulations 2014

DAY TWO: 08H30 TO 16H00

Part F - NBR & SANS 10400 - Site operations

- Protection of the public
- Damage to local authority's property
- Geotechnical site and environmental conditions
- Preparation of the site
- Control of dust and noise
- Cutting into, laying open and demolishing work
- Waste material on site
- Cleaning of the site
- Builders' sheds
- Sanitary facilities
- Deemed-to-satisfy standards
- Soil poisoning
- Stormwater disposal

Part H - NBR & SANS 10400 - Foundations

- Design intention of foundations
- Deemed-to-satisfy standards for foundations
- Factors influencing the design of foundations
- Scope of SANS 10400-H foundation solutions
- Parameters of Type 1 single storey masonry buildings
- Site classification
- Types of foundations

THREE DAY SANS 10400 WORKSHOP

DAY TWO: 08H30 TO 16H00

PART J - NBR & SANS 10400 - FLOORS

- Requirements for floors
- Water-resistant floors
- Suspended timber floors

PART L - NBR & SANS 10400 - ROOFS

- General requirement for roofs
- Fire resistance and combustibility
- Deemed-to-satisfy standards for roof covering and waterproofing
- Slab roofs - drainage and waterproofing
- Gutters and downpipes
- Deemed-to-satisfy standards for timber roof structures
- Minimum roof pitches
- Wall plates
- Anchoring roof trusses
- Bracing roof trusses
- Purlin and batten splicing
- Purlin rafters and beams
- Support for hot water heaters
- Ceiling assembly
- Fire resistance

PART N - NBR & SANS 10400-N - GLAZING

- Types and fixing of glazing
- Deemed-to-satisfy standards for glazing
- Factors which determine where safety glass is required

DAY THREE: 08h30 to 15h30

PART O - NBR & SANS 10400-O - LIGHTING AND VENTILATION

- Natural lighting and ventilation
- Artificial lighting
- Artificial ventilation in workplaces
- Natural lighting in dwellings and residences
- Approval of artificial ventilation systems
- Design of artificial ventilation systems
- Artificial ventilation plant
- Testing of artificial ventilation systems
- Fire requirements
- Deemed-to-satisfy standards for natural lighting
- Standards for size of glazed openings.
- Concept of "zone of space"

Part Q - NBR & SANS 10400-Q - Non-waterborne means of sanitary disposal

- Non-waterborne means of sanitary disposal
- Permission required for pit toilets
- Construction, siting and access to such toilets
- Minimum standards for toilet closets
- Chemical toilets
- Standards for ventilated pit toilets (VIP toilets)

PART K - NBR & SANS 10400 - WALLS

- Structural strength and stability
- Water penetration
- Roof fixing
- Behaviour in fire
- Minimum deemed-to-satisfy standards for walls
- Movement joints in masonry
- Free-standing and retaining walls
- Balustrade and parapet walls
- Corbelling
- Masonry arches
- Lintels and wall beams
- Bed joint reinforcement
- Roof fixing
- Timber-framed walls
- Southern Coastal Condensation Area
- Rain penetration
- Rising damp

Part M - NBR & SANS 10400-M - Stairways

- General requirements for stairways
- Fire requirement
- Deemed-to-satisfy standards for stairways
- Dimensions
- Flights and landings
- Tolerances
- Stairways in public buildings
- Protection against falling
- Handrails
- Masonry stairways
- Timber stairways

PART P- NBR & SANS 10400-P - DRAINAGE

- Compulsory drainage of buildings
- Design of drainage installations
- Control of objectionable discharge
- Industrial effluent
- Drain disconnections
- Unauthorised drainage work
- Inspection and testing of drains
- Drains always subject to rational design
- Deemed-to-satisfy standards for materials for drains
- Prescriptive standards for drains
- Capacity and sizing of drains
- Venting of drains
- Access to drains
- Rodding eyes
- Conservancy tanks
- Septic tanks
- French drains

THREE DAY SANS 10400 WORKSHOP

DAY THREE: 08H30 TO 16H00

PART R - NBR & SANS 10400-R - STORMWATER DISPOSAL

- Owner's obligation to control and dispose of stormwater from property
- Minimum standards for stormwater disposal
- Sizing of rain goods (gutters and downpipes)
- Stormwater disposal in interconnected complexes

PART T - NBR & SANS 10400-T - FIRE PROTECTION

- General requirements for fire protection
- Minimum standards for fire resistance in different building occupancies and types
- Garages attached to dwellings
- Minimum standards for access for fire-fighting and rescue

PART S - NBR & SANS 10400-S - FACILITIES FOR PERSONS WITH DISABILITIES

- Access for the disabled
- Parking facilities for the disabled
- Toilet facilities for the disabled
- Signage and ease of access - minimum standards

PART U - NBR - REFUSE DISPOSAL

- Storage areas for refuse
- Refuse chutes

Part V - NBR & SANS 10400-V - Space heating

- Design, construction and installation of space heating systems
- Minimum standards for chimneys
- Minimum standards for hearths and fireplaces

PART W - NBR & SANS 10400-W - FIRE INSTALLATIONS

- Regulations for fire installations
- Supply of water to fire installations
- Design of fire installations
- Minimum standards for fire installations

PART XA - NBR & SANS 10400-XA - ENERGY USAGE IN BUILDINGS

- Minimum energy efficiency required for most types of building occupancy
- Requirements for minimum energy efficiency within the building envelope
- New "energy zones" mapped for all parts of South Africa
- Glazing calculations for energy efficiency
- External walls must now be cavity walls in most of SA's energy zones
- Insulation requirements for floor and roof assemblies
- Pipe insulation and energy sources for hot water supply
- LED lights and energy calculations for lighting

Workshop Presenter

John Graham

John Graham is the Founder of House Check (www.housecheck.co.za); principal of SAHITA (www.sahita.co.za); director of the non-profit National Association of Building Inspectors of South Africa (www.nabisa.org.za); Member of task team of experts: Development of curriculum for national Building Inspector Qualification (OFO Code: 335913); NHBRC qualified builder; certified by InterNACHI; author of: The Complete Guide to South African Home Inspection; SA Home Building: Management & Quality Control; SA Home Buyer's Guide; Eight Common Problems in SA Homes. CV available