

Agrément South Africa

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Resilient Built Environment Management for Life

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Resilient Built Environment Management

- the capacity to recover quickly from difficulties; **toughness. Uncompromising. Unshakeable.**
- built environment refers to the **man-made surroundings** that provide the setting for human activity, ranging in scale from buildings and parks or green space to neighbourhoods and cities that can often include their supporting infrastructure, such as water supply or energy networks.



Building Standards Act

National Building Regulations and Building Standards Act, 1977 (Act 103 of 1977)

LAW: Standards Act BUILDING STANDARDS ACT

To provide for the promotion of **uniformity in the law relating to the erection of buildings in the areas of jurisdiction of local authorities**; for the prescribing of building standards; and for matters connected therewith.

**Building Act
2004**

**Building Regulations
Schedule 1 (Building Code)**

Objective

Functional
requirement

Performance

**Acceptable Solutions
and
Verification Methods**

Alternative Solutions

DEEMED TO COMPLY

ALTERNATIVE METHODS

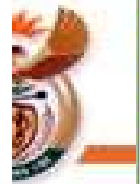
- Product certification [CodeMark]
- Determinations
- Cited documents

Other methods to demonstrate compliance:

- In-service history
- Expert opinion – e.g. producer statements
- Comparison to Acceptable Solutions, Verification Methods and other documents
- Comparison to previously approved Alternative Solutions

Cited standards

Standards



National Building Regulations

REGULATIONS:

The National Building Regulations are enforced by **Building Inspectors** under the ambit of the NRCS.

South Africa's National Building Regulations are a set of functional guidelines for anybody building any type of structure.

They were not intended to be prescriptive in terms of what people should build, but they do stipulate important “dos” and “don'ts” – many of which are in fact mandatory.

An **Agrément South Africa certificate has a deemed to satisfy** status with the NBR thus is compliant with the South African National Standards.

Code of Hammurabi 1754 BC

If a **builder builds a house for someone**, and **does not construct it properly**, and the house which he built falls in and **kills its owner**, then **the builder shall be put to death.....**,
If the owner's son dies,

Advocates **An eye for an eye, and a tooth for a tooth.**" This phrase, along with the idea of written laws, goes back to ancient Mesopotamian culture.

Importance of following the regulations

Everyone therefore who hears these words of mine, and does them, I will liken him to a wise man, who built his house on a rock. The rain came down, the floods came, and the winds blew, and beat on that house; and it didn't fall, for it was **founded on the rock**. Everyone who hears these words of mine, and doesn't do them will be like **a foolish man, who built his house on the sand**. The rain came down, the floods came, and the winds blew, and beat on that house; and it fell—and great was its fall.

— Matthew 7:24–27, World English Bible

BUILDING REGULATIONS AND REVIEW BOARD

Local authorities are responsible for the administration of the National Building Regulations, and control the on-site activities on construction projects. When present, professional architects and engineers are required to perform specific functions. The role of the NRCS is to -

- Advise the Minister about **possible amendments and changes to the National Building Regulations;**
- **Promote uniformity in the understanding and implementation of National Building Regulations (NBRs)** made in terms of the National Building Regulations & Building Standards Act 103 of 1977.

NRCS

- **provides technical advice to persons**, organisations and local authorities regarding the interpretation and application of the National Building Regulations and Building Standards Act, and the National Building Regulations.
- **Administers a Review Board** dealing with disputes, including those arising from appeals lodged by building owners against decisions of local authorities.
- **Conducts building defect inspections** and issues reports for legal purposes on a consultancy basis.

NRCS

- **Approval of qualifications:** The Minister has delegated the evaluation of the qualifications of candidates for appointment as Building Control Officers and approval of their appointments to the NRCS.
- **Workshops are held periodically for stakeholders,** including municipalities, the SMME sector and industry to promote uniformity in the application of the National Building Regulation.

REGULATED PRODUCTS

All structures as defined in the National Building Regulations.

NRCS

NRCS is a public entity responsible to the Minister of Trade and Industries for administration of technical regulations including **COMPULSORY SPECIFICATIONS based on STANDARDS that protect human health and safety, and the environment.**

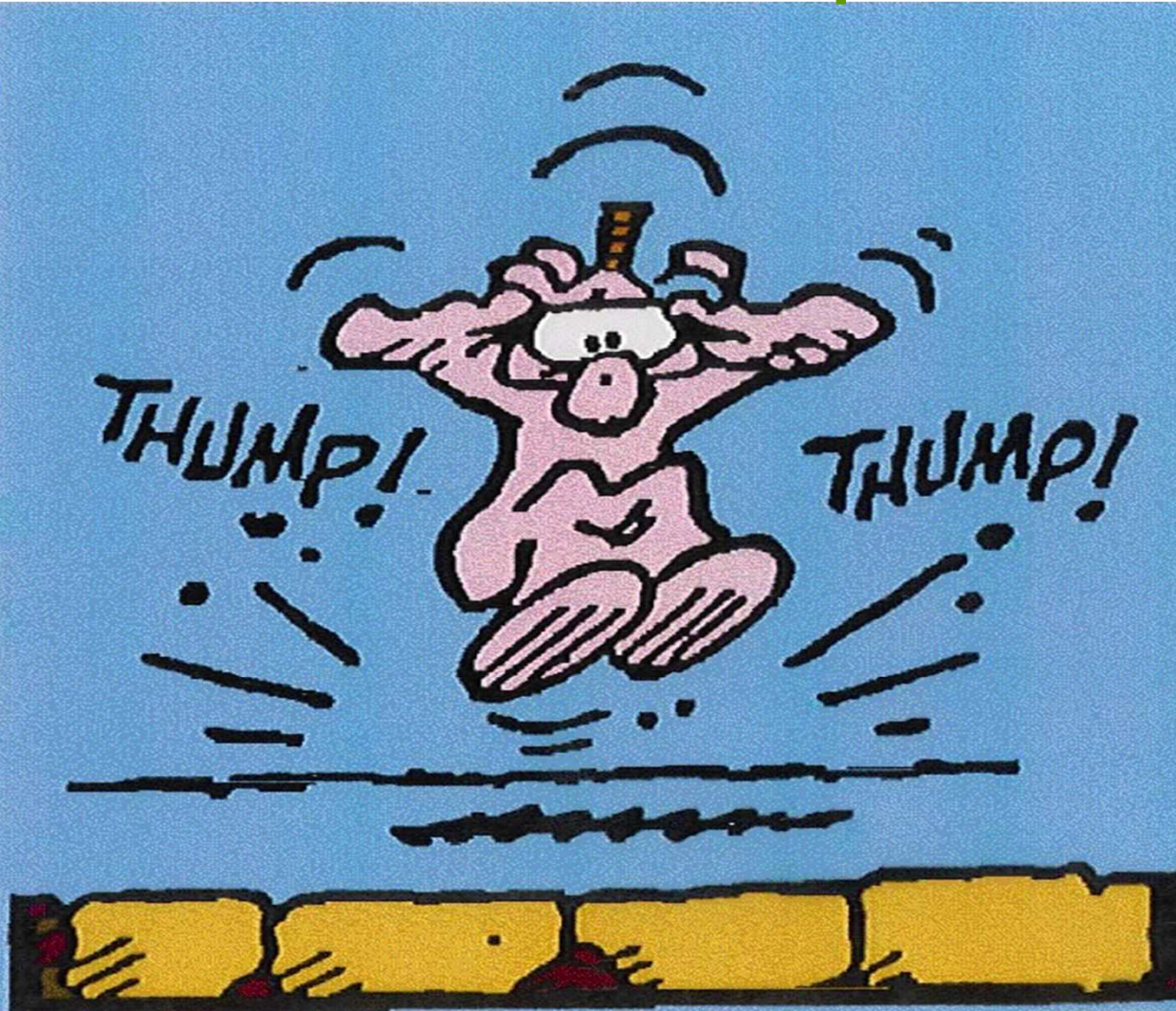
Government is also obliged to ensure that **National and International trade is fair and based on reliable measurements.** NRCS administers the Trade Metrology Act on behalf of the Minister of Trade and Industries.

The Act and regulations set requirements for measurements of quantity for trade purposes. The most common measurements in trade are for Mass, Volume, Length and Area.

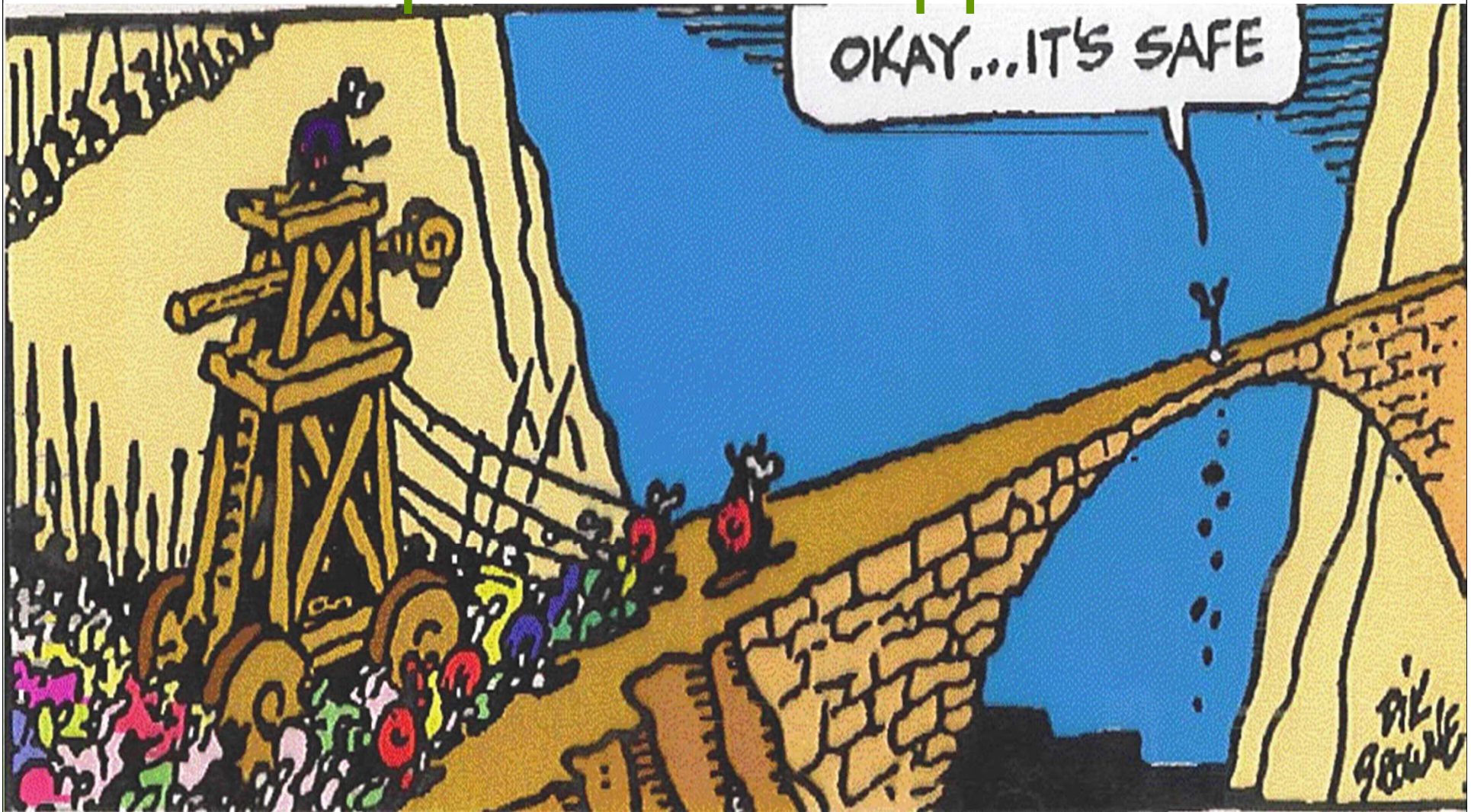
Building Inspectors

Building Inspectors employed by local authorities and is usually certified in one or more disciplines, either as a residential or commercial building inspector, a plumbing, electrical or mechanical inspector or other specialty to inspect structures at different stages of completion. These inspections are done to assure compliance with whatever building, plumbing, electrical, mechanical or specialty codes, such as swimming pool codes, that are being enforced by the jurisdiction in which they work. .

Is this an adequate test!



Comprehensive appraisal



building control officer

- **"building control officer"** means any person appointed or deemed to be appointed 'as building control officer
- by a local authority in terms of section 5; (iii) .

building control officer

- 5; (1). Subject to the provisions of subsection (3) a local authority shall appoint a person as building control officer in order to exercise and perform the powers, duties or activities granted or assigned to a building control officer by or under this Act.
- (2) Any person not having the qualifications prescribed by national building regulation in respect of a building control officer shall not without the approval in writing of the Minister be appointed as building control officer in terms of subsection (1).



building standards enforcement

Standards equate societal norms and values of what is acceptable and what is not.

- structural stability and safety
- Fire: focus on entire management,
- health and safety
- Condensation and moisture penetration
- humidity
- Human comfort
- Human safety
- accessibility and usability
- Constructability

Do building control officials have enough teeth?

Reasons for failures

- Poor or wrong designs
- Failure to comply with minimum standards
- Poor planning
- Poor or ineffective constructability studies
- lack of legislative compliance.
- Ineffective management and supervision on construction sites
- Failure to submit plans for all approvals
- Lack of design coordination amongst professionals
- Use of poor standard materials
- Lack of sufficiently skilled, experienced and knowledgeable persons to manage construction sites.

Endless reasons but the key reason it is easy to get away with it so people do not take it seriously



Resilient Built Environment

- There is a need to reverse the growing trend construction site accidents, building failures, collapses etc which result in unfortunate injuries and avoidable death.
- Solution is to regulate the profession.
Professionalisation
- Aim is to ensure that there are adequate controls, evaluation and constant monitoring of the levels of compliance by the construction and related industries with Construction Health and Safety issues.

Resilient Built Environment

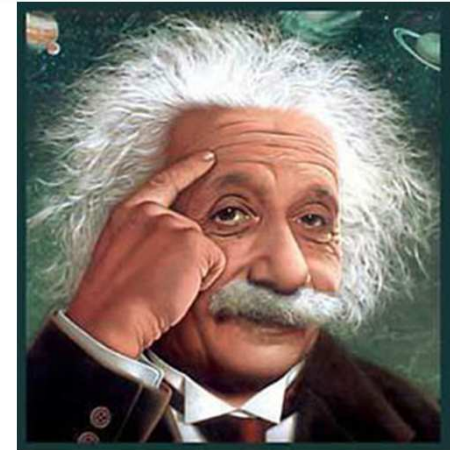
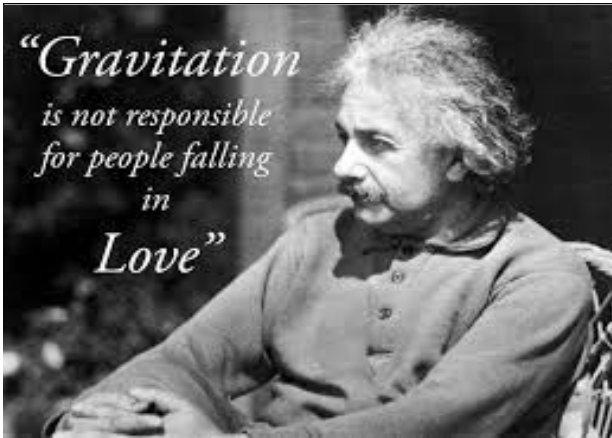
- Remunerate for retention.
- The profession is as important as any other professional trusted with the public health and safety.



Resilient Built Environment

- Career path for growth





Don't Expect Different Results: Albert Einstein

- “Insanity: doing the same thing over and over again and expecting different results.”

Knowledge Comes From Experience

- “Information is not knowledge. The only source of knowledge is experience.”
- "No problem can be solved from the same level of consciousness that created it."

Conclusion

BCO must be given powers commensurate with responsibilities

Acceptance of non compliant construction is tantamount to committing murder in case the building collapses and causes death. Therefore transgressors should be charged with murder.

Conclusion

BCO's are the public referees



#Poor buildings standards Must fall

Thank you

