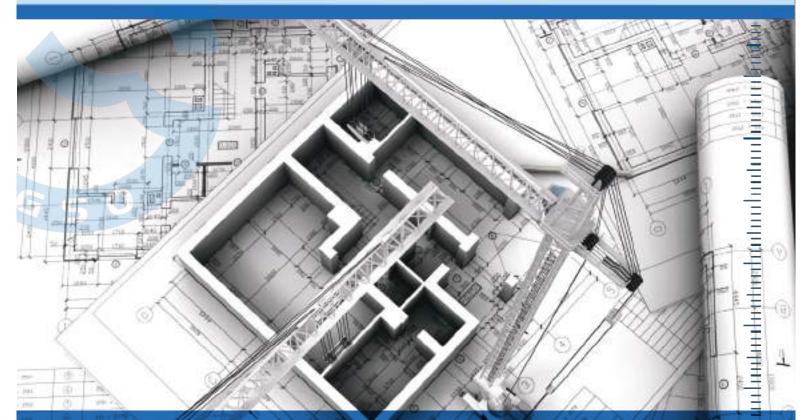


أدول مجلس التعاون أدول الظرج العربية GCC Standardization Organization



# **GCC Building Code**

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Member states of the GCC Standardization Organization witness a massive constructional boom and many huge infrastructure and housing projects, with a worth of hundreds of billions, are implemented. This boom is expected to thrive more in the short and medium term, at least. Building and construction sector is considered the second economic sector in the region, in terms of investments, after the petrochemical sector.

A large number of construction and building national and multinational companies which participate in this massive constructional upsurge in a race against time to achieve the hopes and inspirations of the leaders and the people of the region in order to catch up with our current constantly changing world.

The fact that there are many international companies participating in our projects reflects our positive interaction with our world and our economic openness which enhances the chances of our success in gaining time and making more steps forward. However, this has some drawbacks, notably that: these companies enter gulf building and construction market equipped with their national experiences and their own cadres. Thus, they follow building regulations and requirements implemented in their home countries in terms of design and construction of the Gulf projects, which may not be ideally suitable for the gulf climate and environment. No doubt, this may lead to numerous designing and implementation defects in buildings resulting in a huge waste of financial resources at least. Nonetheless, this is a natural result for the lack of laws, regulations and requirements that are related to our region, reflect our needs, and take into account our natural and climatic circumstances.

Hence, it was necessary to enact legislation, regulations and technical and administrative laws that aim mainly at stipulating the minimum acceptable level of comfort, safety and public health that should be available for the users of these buildings and houses. These laws determine as well the minimum requirements for the design, building materials used, and the construction methods adopted that provide protection from natural hazards or other accidents what is known as building code.

The code is an effective tool to adjust the process of designing





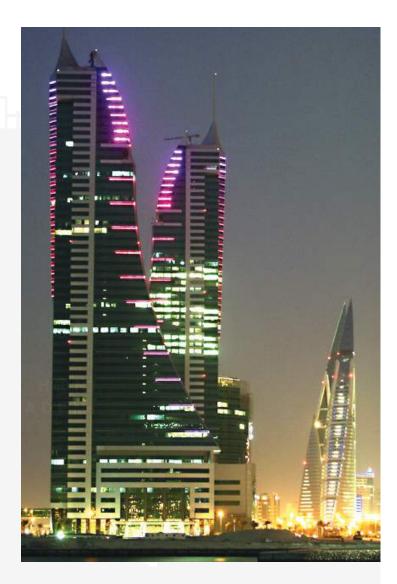
and constructing buildings and houses, and its application leads to ensure providing safe buildings and houses for its users with an acceptable level of comfort where their basic needs can be met, as characterized by specific level of quality. So building code is an effective device to build a safe and comfortable houses where available the desired guality and the required level of performance.

The application of the Building Code in designing and constructing houses and buildings is considered necessary and sensitive. At present, the methods followed in building and designing the houses are governed by only few controls that are almost lack safety, health and guality requirements. So, there should be awareness in our societies of the importance of application of Building Code especially in the housing sector and what benefits and positives will be achieved through it during issuing building permits, in the phase of implementation and when granting the certificates of completion the construction. As a result, the quality of buildings and housing will rise in general as this will ensure safety and comfort of the occupants. However, the application of Building Code may lead to raising the initial cost of implementation, but it will save a lot of money and effort in the long term.

The existence of Building Code is a noble goal we must seek and cooperate to achieve it because of its great benefits in terms of protection and safety of the buildings and their occupants and users.

The Code opens the region's markets for the Gulf building and construction companies, consulting offices and support services to the construction industry to invest in all the countries of the region when we apply the Code and contributes at increasing their experience and facilitates procedures before.

It should be noted that the existence of GCC building Code gives a significant added value to this important economic sector and create new jobs although it needs a continues efforts to enact mechanisms of the application and inspection of facilities and buildings and attention for updating it according to the new standards referenced in the Code.



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### **Definition of Building Code:**

It is a set of technical, scientific, and administrative laws that are related to buildings and construction to ensure compliance with the minimum acceptable limit of safety and public health. These laws are based on scientific foundations, natural conditions, engineering rules, properties of materials, natural hazards - such as earthquakes and fires - as well as facilities purposes.

#### Or in short:

It is a set of requirements and prerequisites - including any sublaws, implementing regulations and appendices - related to building and construction to ensure safety and public health.

Source: Saudi Building Code

#### **Purpose of Building Code:**

The Code aims to identify the minimum limit of requirements and prerequisites that achieve public health and safety through strength, stability and solidity of buildings and facilities and access to it and provision of a healthy environment, lighting and adequate ventilation, and water conservation, protection of life and properties from dangers of fire and

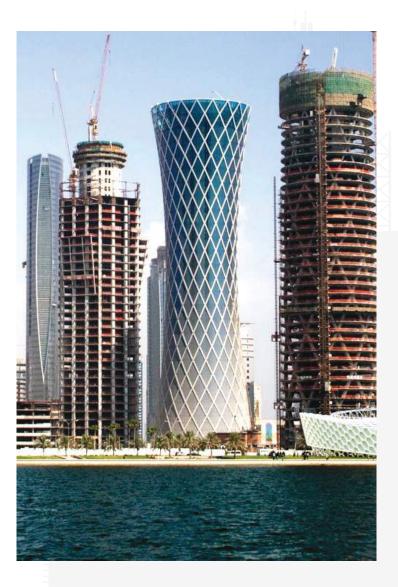












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## Code Application:

- The requirements and prerequisites form an integrated unit. However, the priority in application is given to requirements then come the prerequisites. The more definitive and more specific terms will prevail in case there are any discrepancies between Code's terms.
- Code applies to all construction and building work phases including design, construction, operation, maintenance, demolition, modification and rehabilitation of buildings and facilities.
- Engineers, inspectors, and observers working in the field of Code application need to get a practice permit from an accredited body.

The Building Code is a set of laws and technical and administrative regulations related to construction and based on scientific and engineering rules, so as to ensure implementing the acceptable limit of safety and public health, taking into account the properties of materials, the local natural conditions, requirements of fire protection and natural hazards as well as the purpose of using facilities.

In general, Buildings require Building Code to set the terms of security, safety and comfort, it becomes more important in the Gulf region for the geographical nature of it and the different atmosphere of its different region, such as dry desert climate and high humidity in areas close to the sea, as it is very hot in most seasons of the year, and different types of soil that contained high levels of salt as there is a seismic phenomena in some areas, and all these and other factors affect on the safety of the buildings and their residents.

Hence, the importance of Building Code comes to raise the quality of construction and the preservation of the Gulf economy by ensuring the safety of the buildings and their occupants and putting the terms that define the foundations of design and the methods appropriate to the circumstances and the potential of the region which instructs engineers and technicians and they can do their jobs in sound and safe ways and contributes in putting scientific and engineering solutions in the construction and building sector, through using the Code as a recognized







set of laws at the national level for all member states in the GCC Standardization Organization (GSO).

Building Code with its regulations and terms ensures and organize the quality of design, construction and proper use. And so by setting clear rules and specific language for designers and implementers, supervisors and the competent authorities in order to follow in work, even if not mentioned in the contract or agreement, when Code is adopted it becomes as a binding law, so Its positive effects will be reflected automatically at all fields of construction and building especially for normal citizen who does not possess the technical expertise that the Code put them in his hands without the cost, when he deals with consultant office to design his home, it is enough to the normal citizen to say « the design as required by the GCC Building Code» or when he concerts with the contractor, will say « the implementation must be according to GCC Building Code» and thus ensures good design and implementation and the safety of building-s performance.





#### Steps taken toward GCC Building Code Draft:

GCC Standardization Organization organized the first forum on GCC Unified Building Code Draft (in Doha - 11 to 13 October 2010) in cooperation with the Ministry of Environment in Qatar, represented by General Directorate for Laboratories and Standardization Affairs. Worth noting that a number of national bodies and regional and international organizations, which are interested in the subject of Forum, have attended it. It has been consensus on a number of general and specific Recommendations to formulate a GCC Unified Building Code.

Based on the decision of GCC Standardization Organization's Board of Directors, a Technical Office for GCC Building Code Project was established in Qatar.

Based on the decision of GCC Standardization Organization's Board of Directors, a Higher Committee for GCC Building Code Technical Office was formed to work on the project. The Higher Committee includes representatives from national standardization bodies, the General Secretariat of the GCC and the General Secretariat of GCC Standardization Organization, in order to review and approve the annual operational plan for the office; to examine the national visions in terms of the mechanisms and methods to be adopted in preparing the Building Code Draft; and to agree on a unified vision and a work plan to a achieve concrete development in the preparation of this draft.

# *Up till now, ten specialized technical committees were formed and they are currently working on preparing GCC Building Code Draft:*

- 1- Architectural TC.
- 2- Structural TC.
- 3- Electrical TC.
- 4- Mechanical TC.
- 5- Sanitary TC.
- 6- Fire Fighting TC.
- 7- Green Buildings and Sustainability TC.
- 8- Energy Conservation TC.
- 9- Public Health and Occupational safety TC.
- 10-Buildings Maintenance TC.



The GCC Standardization Organization aims at helping the GCC achieve the objectives set forth in its charter and in the GCC Economic Agreement by unifying the various standardization activities and following up application and compliance of the same in cooperation and coordination with the standardization bodies in the Member States in an endeavor to develop the production and service sectors, foster the Intra-GCC trade, protect the consumer, environment and the public health, and encourage the GCC industries and agricultural production that would enhance the GCC economy, maintain the achievements of the Member States and minimize the technical trade barriers as envisaged by the objectives of the Customs Union.

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