GCC Building Code (GBC)

16th May, 2017
Doha, Qatar
What is GCC Building Code?
It’s a set of requirements and conditions - and subsequent regulations and annexes - relating to buildings construction to ensure safety and public health.

Objective:
Unification of the various technical, scientific and administrative laws and regulations in the field of construction within the GCC countries.

Headquarters:
The headquarters of the Secretariat of the Higher Committee and the Technical Office is in Doha, State of Qatar; headed by Mr. Nasir Bakht Al-Nuaimy.
Member Countries’ GSO Bodies
History of GCC Building Code

> The Standardization Authority, in cooperation with the Ministry of Environment in the State of Qatar, organized the first forum of the Gulf Building Code (Doha 11-13 October 2010), in which a number of national, regional bodies and international organizations participated.

> Based on the decision of the Board of Directors of the Standardization Authority, the Technical Office of the Gulf Building Code Project was established and hosted by the State of Qatar.

> In 2012, License Agreement with emirates of Abu Dhabi for the Use of ICC Codes.

> In January 2017 License Agreement for use of ICC codes in the GCC Building code.
> very soon similar agreements expected with the ACI.
Organization Structure for GSO

Secretary General

- Secretary General Office
- Strategic Management Office
- Internal Audit Unit

Corporation Services (Management)
- Finance section
- HR & Administration section
- Knowledge Management section

Outreach Department
- Capacity Building section
- Marketing & International Relations section

Conformity Department
- Technical Regulations section
- Notification section
- Certificate Authentication Section

Standards & Metrology Department
- Standards section
- Technical Committee section
- Metrology section

Technology Department
- IT Solutions section
- IT Infrastructure section
General Committee for Standards

Functions of General Committee for Standards

► Supervise the activities of technical committees of standards.
► Endorsement of the Gulf draft standards and submit them for approval by the Technical Council.
► Endorsement of the Gulf draft technical regulations submit them for approval by Technical Council and the Board of Directors.
► Approve the annual plans of technical committees, as well as sub-committees and task groups emanating from it and submit them to the Technical Council for approval.
► Follow up the implementation of annual plans by the technical committees, as well as sub-committees and task groups emanating from it, through the reports, and providing solutions to the obstacles that might hinder the implementation.
► Recommend approval of the formation of a new technical committees or subcommittees or working groups and raising the recommendation for approval by the Technical Council.
► Follow up all matters concerning the activities of Gulf Standards issued by the technical committees as well as sub-committees and task groups emanating from it, including (to change scope of work of the committees, modify action plans, etc ...)
► Perform all tasks assigned to it, and the powers delegated from the Technical Council.
► Guide the work according to GSO Technical Guides.
► Introduce periodic reports to the Technical Council about the activities of standards and obstacles at technical committees / subcommittees level.
GSO Technical Committees

GSO Technical Committees is responsible for developing the GSO Standards

TC01 GSO Technical Committee for Chemical and Textile Products
TC02 GSO Technical Committee for Mechanical Products
TC03 GSO Technical Committee for Electrical and Electronic Products
TC04 GSO Technical Committee for Metrology
TC05 GSO Technical Committee for Food and Agricultural Products
TC06 GSO Technical Committee for Construction and Building Materials
TC07 GSO Technical Committee for Oil and Gas
TC08 GSO Technical Committee for Information and Information Technology
TC09 GSO Technical Committee for Electric Power Generation, Transmission and Distribution Equipment
TC10 GSO Technical Committee for Water Production, Transport and Distribution Equipment
TC11 GSO Technical Committee for Medical Devices and Supplies
TC12 GSO Technical Committee for Cosmetics and Personal Care
TC13 GSO Technical Committee for Renewable energy and its storage technologies
GCC Building Code Committees (GBC)

<table>
<thead>
<tr>
<th>Committee Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GBC-HC</td>
<td>Higher Committee for GCC Building Code</td>
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<tr>
<td>GBC-TC</td>
<td>GCC Building Code TCs</td>
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<tr>
<td>GBC-TC-AR</td>
<td>GBC/TC Architectural</td>
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<tr>
<td>GBC-TC-EC</td>
<td>GBC/TC Energy Conservation</td>
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<tr>
<td>GBC-TC-EE</td>
<td>GBC/TC Electrical</td>
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<tr>
<td>GBC-TC-FF</td>
<td>GBC/TC Fire Fighting</td>
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<tr>
<td>GBC-TC-GR</td>
<td>GBC/TC Green Buildings and Sustainability</td>
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<tr>
<td>GBC-TC-HS</td>
<td>GBC/TC Public Health and Occupational Safety</td>
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<tr>
<td>GBC-TC-ME</td>
<td>GBC/TC Mechanical</td>
</tr>
<tr>
<td>GBC-TC-MN</td>
<td>GBC/TC Buildings Maintenance</td>
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<tr>
<td>GBC-TC-ST</td>
<td>GBC/TC Structural</td>
</tr>
<tr>
<td>GBC-TC-SY</td>
<td>GBC/TC Sanitary</td>
</tr>
<tr>
<td>GBC-TO</td>
<td>Technical Office for GCC Building Code</td>
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### GCC Building Code Technical Committees by Country

<table>
<thead>
<tr>
<th>#</th>
<th>TC</th>
<th>Secretariat</th>
<th>#</th>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Architectural</td>
<td>Bahrain</td>
<td>1</td>
<td>Architectural</td>
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<tr>
<td>2</td>
<td>Structural</td>
<td>Saudi Arabia</td>
<td>2</td>
<td>Loads &amp; Forces</td>
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<td>3</td>
<td>Soil &amp; Foundations</td>
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<td></td>
<td>4</td>
<td>Testing &amp; Inspection</td>
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<td></td>
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<td></td>
<td>5</td>
<td>Concrete Structures</td>
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<td></td>
<td>6</td>
<td>Steel Structures</td>
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<td></td>
<td>7</td>
<td>Masonry Structures</td>
</tr>
<tr>
<td>3</td>
<td>Electrical</td>
<td>Saudi Arabia</td>
<td>8</td>
<td>Electrical</td>
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<tr>
<td>4</td>
<td>Mechanical</td>
<td>Qatar</td>
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<td>Mechanical</td>
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<tr>
<td>5</td>
<td>Sanitary</td>
<td>UAE</td>
<td>10</td>
<td>Sanitary</td>
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<tr>
<td>6</td>
<td>Fire Fighting</td>
<td>Kuwait</td>
<td>11</td>
<td>Fire Fighting</td>
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<tr>
<td>7</td>
<td>Green Buildings and Sustainability</td>
<td>Kuwait</td>
<td>12</td>
<td>Green Buildings and Sustainability</td>
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<td>8</td>
<td>Energy Conservation</td>
<td>Kuwait</td>
<td>13</td>
<td>Energy Conservation</td>
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<tr>
<td>9</td>
<td>Public Health and Occupational safety</td>
<td>Qatar</td>
<td>14</td>
<td>Public Health and Occupational safety</td>
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<tr>
<td>10</td>
<td>Buildings Maintenance</td>
<td>UAE</td>
<td>15</td>
<td>Buildings Maintenance</td>
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Some of the functions of the Technical Office (based in Qatar)

1. To carry out the functions of the secretariat of the High Committee and to prepare for its meetings and to prepare proposals for its agendas.

2- Supervising the follow-up of the technical regulations and standards and the standard specifications related to the building code.

3 - Prepare periodic reports on the activities and achievements of the committees, and the problems and difficulties that hinder its progress and make recommendations to resolve and develop.

4 - Follow-up implementation of training plans on the regulations and technical systems and standards related to the code.

5 - Follow-up printing and output of building codes using modern technologies.
Some of the major referenced codes...

- American Association of State Highway and Transportation Officials (AASHTO)
- American Concrete Institute (ACI)
- AISC, American Institute of Steel Construction
- American Society of Civil Engineers (ASCE)
- Saudi Building Codes
- Eurocode
- SA, Standards Australia (mainly for wind loading)
- ICC, International Code Council
- FEMA, Federal Emergency Management Agency
- ASTM International
Typical Gulf Building Codes & American Equivalents

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Equivalent</th>
</tr>
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<tbody>
<tr>
<td>301</td>
<td>MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES</td>
<td>ASCE 7</td>
</tr>
<tr>
<td>304</td>
<td>GULF BUILDING CODE: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE</td>
<td>ACI 318</td>
</tr>
<tr>
<td>306</td>
<td>GULF BUILDING CODE GBC 306: STEEL STRUCTURES</td>
<td>AISC 360</td>
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Application of the GBC Code:

- The code applies to all construction works including design, implementation, operation, maintenance, demolition, alteration and rehabilitation of buildings and installations.

Current status and way forward...

- The codes are nearly complete and on the process of review across the different disciplines and committees in all the GCC member bodies.
- The gulf building codes are expected to be officially released very soon
- Up on release, the code will be binding to all member countries and will supersede all prevailing local and international codes on use.
Thank you for your attention...