

ARAB REPUBLIC OF EGYPT

Ministry of Development , New communities ,  
Housing and Utilities  
Research Center for Housing , Building and  
Physical Planning



EGYPTIAN CODE OF PRACTICE  
FOR  
STEEL CONSTRUCTIONS AND BRIDGES

Ministerial Decree . No . 451 - 1989

المرکز القومي لبحوث الإسكان والبناء  
Housing & Building National Research Center  
Since 1954

Permanent Committee For the Code of Practice  
for Steel Constructions and Bridges

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7 JAN 1991



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## **Preface**

During the thirties, the Railway Authority started preparing the Code of Practice for steel, concrete, wood and stone structures, which was published under the title : "General Specifications for the Design and Construction of Works". It was amended and re - issued several times in English.

Roads and Bridges Department prepared another Code of Practice, different than that of the Railway Authority, which was issued under the title "General and Technical Regulations for the Execution of Works". Similarly, these regulations were re - issued in English several times.

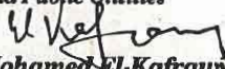
In 1951, the Egyptian Society of Engineers formed the main committee to prepare, through sub-committees, the Egyptian Standard Specification which was issued in both Arabic and English.

During the sixties, the Building Research and Training Center formed the main committee and subcommittees for updating the Code of Practice and accordingly, the Ministry of Housing and Development issued the Ministerial Decree No. 94, 1973 for the Code of Practice of Metallic Structures and Bridges.

In 1984, the Ministerial Decree No. 383, 1984 for formation of the permanent committee for the Code of Practice of the Metallic structures was issued. The committee finished the preparation of the Code in its new form in English in 1988.

In 1989, the permanent committee passed the Code after being amended in light of suggestions received from the Universities, Consulting Offices and Governmental Authorities in concern. Also, the Code was passed by the main committee for the Code of Practice for Structural and Building Works.

The Ministerial Decree No. 239, 1989 has been issued for "Steel Structures and Bridges". The permanent committee will be concerned with updating and amending the Code whenever needed. The Research Center for Housing, Building and Physical Planning will be acting for the application of the Code, publication and training

**Minister of Development, New Communities,  
Housing and Public Utilities**  
Engineer/   
**Hasaballah Mohamed El-Kafrawy**

قرار وزارى رقم ٤٥١ لسنة ١٩٨٩

بشأن الكود المصرى

لتصميم وتنفيذ المنشآت والكبارى المعدنية

وزير التعمير والمجتمعات العمرانية الجديدة والاسكان والمرافق :

- بعد الاطلاع على القانون رقم ٦ لسنة ١٩٦٤ فى شأن اسس تصميم وشروط تنفيذ الاعمال الانشائية واعمال البناء .
- وعلى القرار الوزارى رقم ٩٤ لسنة ١٩٧٣ فى شأن اسس تصميم وشروط تنفيذ المنشآت والكبارى المعدنية .
- وعلى قرار رئيس الجمهورية رقم ٤٦ لسنة ١٩٧٧ فى شأن الهيئة العامة لمركز بحوث الاسكان والبناء والتخطيط العمرانى .
- وعلى القرار الوزارى رقم ٢٨٣ لسنة ١٩٨٤ المتضمن تشكيل اللجنة الدائمة للكود المصرى لتصميم وتنفيذ المنشآت والكبارى المعدنية .
- وعلى مذكرة السيد الاستاذ الدكتور رئيس اللجنة الدائمة للكود المصرى لتصميم وتنفيذ المنشآت والكبارى المعدنية بتاريخ ٢٣ / ١٠ / ١٩٨٩ .
- وعلى محضر اجتماع اللجنة الرئيسية لاسس تصميم وشروط تنفيذ الاعمال الانشائية واعمال البناء والمشكلة بالقرار الوزارى رقم ٢٣٩ لسنة ١٩٨٩ بتاريخ ٢٣ / ١٠ / ١٩٨٩ .

### قـرـر

- مادة ١ : تستعمل اسس التصميم وشروط تنفيذ المنشآت والكبارى المعدنية المستخدمة فى المهانى الصادرة بالقرار الوزارى رقم ٩٤ لسنة ١٩٧٣ بالكود المصرى لتصميم وتنفيذ المنشآت والكبارى المعدنية .
- مادة ٢ : تتولى اللجنة الدائمة للكود المصرى لتصميم وتنفيذ المنشآت والكبارى المعدنية اقتراح التعديلات التى تراها لازمة بهدف التحديث كلما دعت الحاجة لذلك وتصير التعديلات بعد اصدارها جزءا لا يتجزأ من الكود .
- مادة ٣ : يتولى مركز بحوث الاسكان والبناء والتخطيط العمرانى المشار اليه العمل على تنفيذ ما جاء بالكود لتصميم وتنفيذ المنشآت والكبارى المعدنية ونشره وتوزيعه والتدريب عليه .

وزير  
التعمير والمجتمعات الجديدة والاسكان والمرافق  
مهندس /

PREFACE

This new specification for the Design, Fabrication and Erection of Structural Steel for Building and Bridges has been prepared by the permanent committee appointed by the Minister of Housing and Construction (Ministry by Law No. # 383 in 1984). It is an important part of a continuing effort to provide current, practical information to assist educators, designers, fabricators and other interested in the use of steel construction.

Although no effort has been spared in an attempt to ensure that all data is factual and that numerical values are accurate to a degree considered with current design practice, this code does not assume responsibility for errors or oversights resulting from the use of the information considered herein. All suggestions for improvement of this publication will receive full consideration for future printings.

The members of the committee would like to express their deep sorrow for the death of Prof. Dr. EL-Demirdash who passed away during the preparation of this publication.

They also express their gratitude and thankfulness to Prof. Dr. M. Shafik Aggour for his continuous effort during the preparation of this work.

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## PART - 1 - DESIGN

