

J T C C M a d d s t h e r e l i a b i l i t y f o r s a f e t y

JTCCM

Corporate Profile



*Japan Testing Center
for Construction Materials*

Introduction

The Japanese economy and society have entered an age of structural change in recent years, making the response to deregulation and international harmonization an important issue in various regulatory schemes.

The experience and lessons learned from the 1995 Great Hanshin-Awaji Earthquake have prompted the Japanese public to reaffirm the importance of securing structural safety. In government administration of building architecture and construction, there is strong demand to ensure the effective application of construction-related regulations. Since the amendment of the Building Standard Law, implementation in this direction has continued and led to the development of "performance-based provisions" under the Law in the year 2000.

Building materials used in buildings and other structures in Japan must conform to quality requirements designated under the Building Standard Law, regardless of whether the product is domestic or foreign in origin. For example, building materials designated under Article 37 of the Building Standard Law (Quality of Construction Materials) must conform to certain JIS standards or receive the approval of the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). Conformity with these criteria or with the approval requirements must be determined by testing and evaluation based on the relevant regulatory and quality standards.

The Japan Testing Center for Construction Materials (JTCCM) is a third-party organization with a history of more than 50 years in Japan, and specializes in quality performance testing, Ministerial approvals, certification under JIS, and approval of building materials as specified under the provisions of the Building Standard Law.

Organization



About JTCCM

JTCCM was established in 1963 as a third-party organization for testing, research and standardization of construction materials.

Under the guidance of the Ministry of Economy, Trade and Industry (METI) and the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) and with the strong support of the academic and industrial sectors, JTCCM grew into a fair and impartial public testing organization working to promote and assure the quality of housing and other social capital in Japan and quality in construction. Certification and other regulation-related services in the construction and building material industries have also been added to its operation, and JTCCM is now recognized as an outstanding comprehensive certification authority that contributes to the advancement of quality in housing and construction.

JTCCM handles building material testing at three laboratories and also provides, performance evaluation based on the Building Standards Law, ISO certification, and JIS mark certification. Its experience and track record cover a wide range of both construction and building materials.

Since the transition from an incorporated foundation to a general incorporated foundation in 2012, JTCCM has continued to meet the changing needs of the increasingly diverse and sophisticated Japanese housing market, JTCCM operates under the following management principles.

Management Principles

Contribution to residential housing and social infrastructure development through third-party certification services

- Maintenance and improvement in reliability through impartiality and technological capabilities
- Versatile response to the changing needs of customers and society
- Services mobilizing JTCCM's all-round capabilities

History

- 2020**: JTCCM was reorganized as a 3-unit, 6-office system. The Fukuoka Test Laboratory moved to Sue Town
- 2016**: The Central Test Laboratory modernized its Structural Test Building and Environmental Test Building.
- 2015**: Assessment and registration of Asset Management Systems began.
- 2013**: JTCCM celebrated its 50th Anniversary. Road traffic safety management system registration began.
- 2008**: JTCCM acquired certification as a JCSS calibration company for thermal conductivity and uniaxial testing machines.
- 2005**: JTCCM began the JIS Mark Certification Service under the revised Industrial Standardization Law (New JIS Mark Scheme) as a certification body accredited by the Minister of Economy, Trade and Industry.
- 2001**: Certification of field technicians for quality control of fresh concrete on site began.
- 2000**: Assessment and registration of Occupational Health and Safety Management Systems began. JTCCM began the Performance Evaluation Service under the amended Building Standard Law as an organization designated by the Minister of Land, Infrastructure, Transport and Tourism.
- 1996**: Assessment and registration of Environmental Management Systems began.
- 1993**: Assessment and registration of Quality Management Systems began.
- 1978**: Quality Control Testing for Construction Materials began.
- 1974**: The Nishinihon Test Laboratory opened.
- 1969**: JTCCM was placed under the joint supervision of the Minister of International Trade and Industries and the Minister of Construction.
- 1964**: Establishment of JTCCM was authorized by the Minister of International Trade and Industry.
- 1963**: The Central Test Laboratory opened and General Testing Service began. The Head Office of the Japan Testing Center for Construction Materials (JTCCM) opened in the Ministry of International Trade and Industry (Annex) in Chuo-ku, Tokyo.

General Testing Service

Testing is the most useful tool for measuring the properties of materials and the fundamental performance of components. JTCCM provides high quality service in these testing activities for industry, public organizations, and governmental agencies in order to support high performance building and construction.

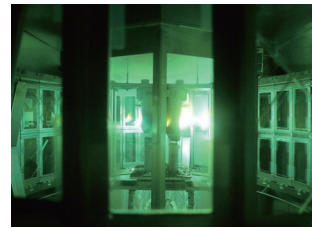
The Central Test Laboratory and the Nishinohon Test Laboratory conduct performance evaluations, testing for JIS Mark certification, and other quality performance tests to verify performance requirements for materials, components, fittings, facilities, and equipment used in buildings and other structures. This service includes measurements of physical properties, chemical components, heat release, fire resistance, durability, etc.

The two laboratories are registered as accredited services under the Japan National Laboratory Accreditation system (JNLA), which is governed under the JIS Law, and have also developed and manage Quality Management Systems complying with JIS Q17025 (ISO/IEC 17025).

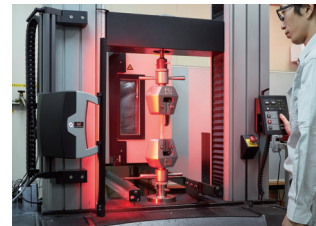
[Material tests]



Salt spray test



Accelerated weathering test



Universal test



Fungus resistance test

[Structural tests]



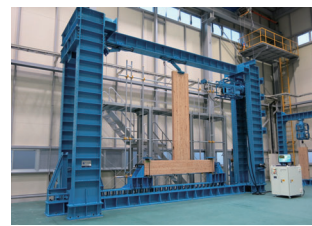
Creep test of post-installed anchor



In-plane shear test of bearing wall



Deformation test of exterior finishing materials

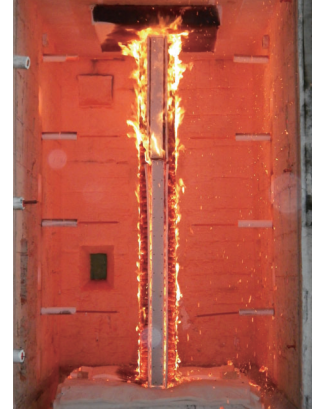


Shearing test

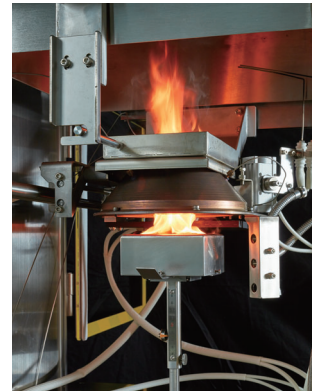
[Fire-resistance tests]



Fire-resistance test of windows and doors



Fire-resistance test of column under vertical load



Heat release test

[Environmental tests]



Durability tests of exterior materials of buildings by solar radiation



Test for reduction of transmitted impact sound by floor coverings



Watertight and wind pressure resistance test using real wind



Thermal conductivity test

Performance Evaluation Service

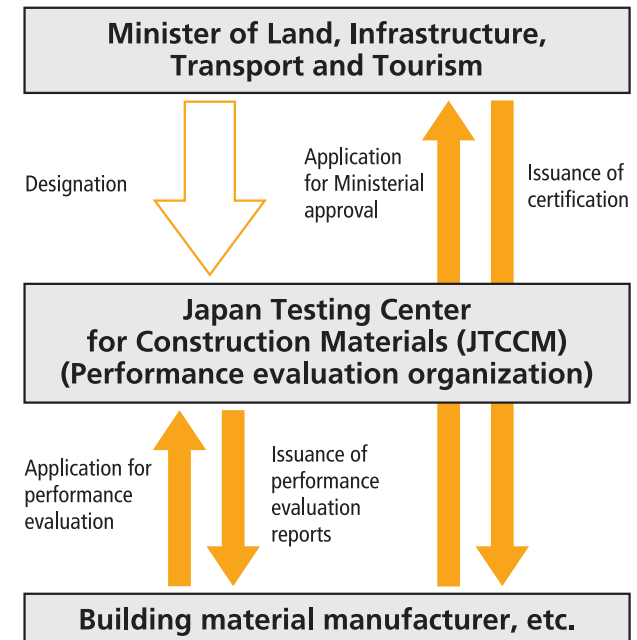
Ministerial Approval System

Under Japan's Building Standard Law, buildings, building parts and materials, etc. shall conform to the technical requirements stipulated in the Law and Ordinances. Conformity of conventional materials, etc., may be confirmed based on specifications or general verification methods. Conformity of new materials, etc., must be confirmed based on Ministerial approval, which is granted based on the results of testing by a performance evaluation organization having the required capabilities.

Performance Evaluation Organization

As a performance evaluation organization designated by the Minister of Land, Infrastructure, Transport and Tourism, JTCCM conducts tests and evaluations of structural methods and building materials at the request of manufacturers, etc., and issues the evaluation reports required for Ministerial approval.

Flow of Ministerial Approval System



Quality Control Testing for Construction Materials

Quality control of construction materials is extremely important in public works. The JTCCM Construction Materials Test Laboratory provides testing services for steel and concrete used in reinforced concrete structures. This kind of testing must be done at a short distance from the construction site. The Construction Materials Test Laboratory also conducts tests of concrete, mortar, reinforcing bars, steel materials, asphalt, base course materials and other materials used in construction and civil engineering, as well as concrete core strength tests and carbonation tests used in seismic resistance diagnosis of buildings and other structures.

JTCCM has several other testing branches in addition to the Construction Materials Test Laboratory and the Nishinohon Test Laboratory. Four are located in the Kanto District (Tokyo, Saitama, Kanagawa, Chiba), one is located in the Chugoku District (Yamaguchi), and one is in the Kyushu District (Fukuoka).

The Construction Materials Test Laboratory is registered as an accredited body under the Japan National Laboratory Accreditation system (JNLA), which is governed under the JIS Law. It has also developed and manages a Quality Management System complying with JIS Q 17025 (ISO/IEC 17025).



Tensile test for reinforced steel bar by 2000kN universal testing machine



Carbonation test



Asphalt extraction test for asphalt mixture



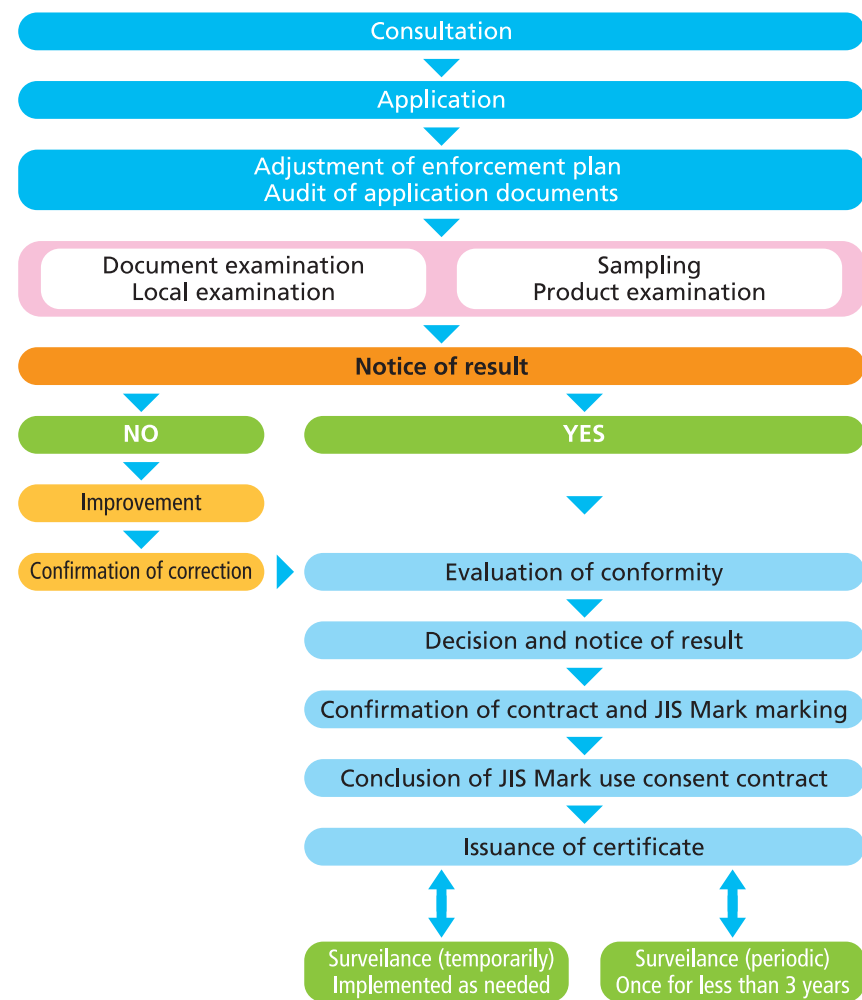
Test for chloride ion content

JIS Mark Certification Service

JIS Mark System

The JIS Mark system is a scheme under which a certification body accredited by the Minister of Economy, Trade and Industry (METI) qualifies products and processing technologies to display the JIS Mark through an audit of the Quality Management System of the manufacturing facility and product tests to verify compliance of the products with the relevant JIS standards. As a registered certification body under the Industrial Standardization Law, JTCCM provides a JIS Mark certification service for products and processing technologies in the area of Civil Engineering and Architecture.

Flow of JIS Mark Certification



● Although the normal procedure period is 3 months, there may be exceptions when a long-term product test is required or when a corrective measure for quality management should be taken.

Normal procedure period : 3months

JIS Mark Certification Service at JTCCM

JTCCM makes an important contribution to the improvement of manufacturers' quality control systems through its JIS Mark certification services. JTCCM provides certification services for the 8 JIS divisions shown at the right, covering about 160 standards. JTCCM also provides JIS Mark certification in 62 countries including Japan and is expanding its activities overseas.

See website for details
https://www.jtccm.or.jp/biz/ninsho/english_pe/tabid/319/Default.aspx

Scope of JTCCM Certification

JIS code	Division
A	Civil Engineering and Architecture
B	Mechanical Engineering
G	Ferrous Materials and Metallurgy
H	Nonferrous Materials and Metallurgy
K	Chemical Engineering
R	Ceramics
S	Domestic Wares
Z	Miscellaneous

As of November 21, 2020

ISO Certification Service

Management System Certification

Under this program, corporate management systems are audited to determine whether they are organized and managed in accordance with ISO and other international standards, and are certified if approved.

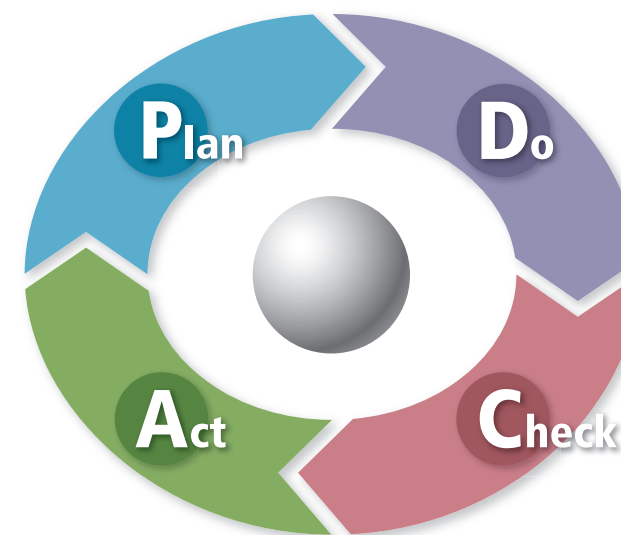
Management System Certification at JTCCM

Based on international standards such as ISO, JTCCM provides third-party certification of the management systems of organizations, focusing on the construction industry.

[Scope of Certifications]

- **ISO 9001**
(Quality Management Systems)
- **ISO 14001**
(Environmental Management Systems)
- **ISO 55001**
(Asset management - Management Systems)
- **ISO 45001 · OHSAS 18001**
(Occupational Health and Safety Management Systems)
- **ISO 39001**
(Road Traffic Safety Management Systems)

Others



Investigation and Research / Standardization

Investigation and Research

At the request of the national government, public institutions, and private companies and organizations, JTCCM conducts investigations and research to contribute to the development of the construction materials and construction industries.

Standardization

By standardizing the JTCCM standard (JSTM) and national and international standards (JIS/ISO), JTCCM is contributing to improvement of the quality of construction and civil engineering materials, consumer protection, dissemination and development of technology, facilitation of trade, etc.

Provision of Information

JTCCM distributes its latest technical information and various other information on the construction industry in original magazines, e-mail magazines, and SNS, and also holds lectures and workshops based on the results of research and standardization.



Access

Nihonbashi Office (Tokyo Office)

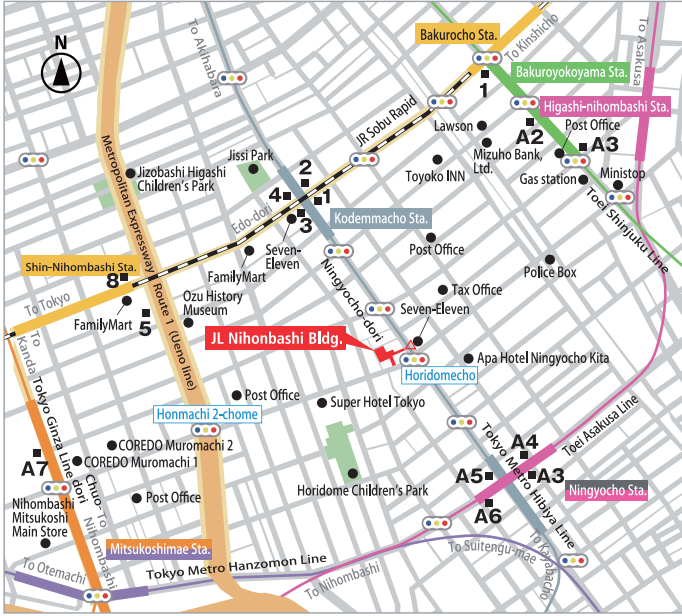
JL Nihonbashi Building 1-10-15 Nihonbashi-Horidomecho, Chuo-ku, Tokyo 103-0012 Japan

Certification & Auditors Unit

- ISO Auditors Headquarters TEL: +81-3-3249-3151
- Product Certification Headquarters TEL: +81-3-3808-1124

Secretariat

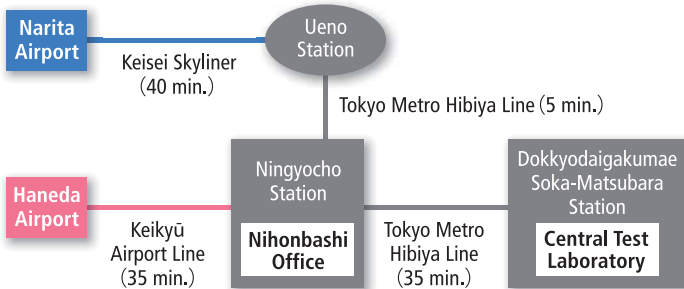
- Administration and Coordination Department TEL: +81-3-3664-9211
- Management Development Department TEL: +81-3-3527-2131



From nearest railway station

- 5 min. walk from Ningocho Station on Tokyo Metro Hibiya Line and Toei Asakusa Line
- 5 min. walk from Kodemmacho Station on Tokyo Metro Hibiya Line (Exit 3)
- 8 min. walk from Higashi-nihombashi Station on Toei Asakusa Line and Bakuroyokoyama Station on Toei Shinjuku Line (Exit A3)
- 9 min. walk from Suitengumae Station on Tokyo Metro Hanzomon Line
- 8 min. walk from Bakurocho Station on JR Sobu Rapid Line (Exit 1)
- 10 min. walk from Mitsukoshimae Station on Tokyo Metro Hanzomon Line and Ginza Line (Exit 3)

From airport



For inquiries about this Corporate Profile, please contact the Management Development Dep.
TEL: +81-3-3527-2131 FAX: +81-3-3527-2134

Japan Testing Center for Construction Materials

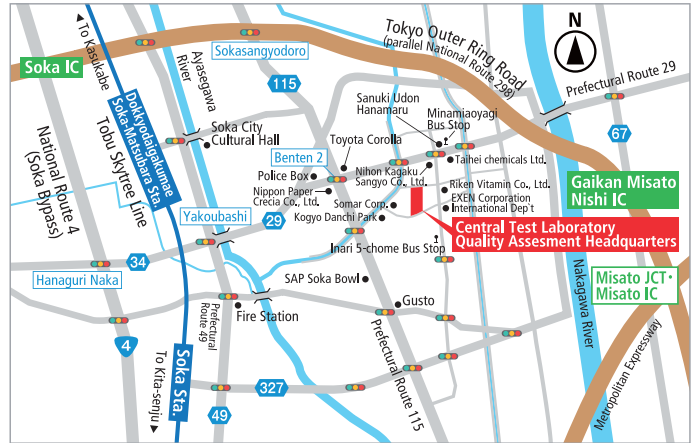
JL Nihonbashi Building, 1-10-15 Nihonbashi-horidomecho, Chuo-ku, Tokyo 103-0012 Japan

www.jtccm.or.jp

Search JTCCM

Performance Test Unit

5-21-20 Inari, Soka-shi, Saitama 340-0003 Japan
Central Test Laboratory TEL: +81-48-935-1991
Quality Assessment Headquarters TEL: +81-48-935-9001



From nearest railway station

- Approx. 10 min. by taxi from Soka Station (East Exit) or Dokkyodaigakumae Soka-Matsubara Station (East Exit) on Toei Skytree Line

Via expressway

- Approx. 10 min. from Misato Interchange (West Exit) on Joban Expressway and Metropolitan Expressway
- Approx. 15 min. on National Route 298 (bound for Misato) from Soka Interchange on Tokyo Outer Ring Road

Performance Test Unit

Yamakawa, Sanyo Onoda-shi, Yamaguchi 757-0004 Japan
Nishinohon Test Laboratory TEL: +81-836-72-1223



From nearest railway station

- Approx. 5 min. by taxi from Asa Station on JR San-yo Line and San-yo Shinkansen

Via expressway

- Approx. 5 min. on National Route 2 (bound for Ogori and Hiroshima) from Habu Interchange on San-yo Expressway
- Approx. 40 min. on National Route 2 (bound for Shimonoseki) from Yamaguchi-minami Interchange on San-yo Expressway
- Approx. 15 min. on Prefectural Route 65 (bound for Sanyo region) from Minenishi Interchange on Chugoku Expressway