

# **Forty-four JSCE concrete standards in English to be made freely available in downloadable form**

(Sub-committee on Test Methods and Specifications for Concrete, Concrete Committee)

JSCE has about 140 standards relating to concrete in Japanese. These JSCE standards include test methods for concrete and specifications of material quality for concrete, just like the Japanese Industrial Standards (JIS) and so on. As of this time, 44 of the 140 standards (see attached list) have been translated into English.

These JSCE concrete standards are divided into 11 categories relating to the materials used for concrete, the concrete itself, and concrete structures: cement, water, aggregate, additives, reinforcement, fresh concrete, hardened concrete, concrete products, construction equipment, resin concrete, repair materials, and general.

The first distribution of English versions planned for upload to our website will consist of thirteen standards, including 10 relating to test methods for pre-stressed concrete sheaths, a test method based on EPMA, a test method for trace element leaching, and a measurement method for the resistivity of repair materials. The remaining 31 standards will be successively made available in the same way in the near future.

## JSCE Standards (Apr./9/2012)

\*10 Standards related to prestressed concrete sheaths

| Number     | Year | Title   |
|------------|------|---|
| JSCE-E 701 | 2010 | Test method for resistance of metal sheath for prestressed concrete under concentrated loading (draft)          |
| JSCE-E 702 | 2010 | Test method for resistance of metal sheath for prestressed concrete under uniform compressive loading (draft)   |
| JSCE-E 703 | 2010 | Test method for flexibility of metal sheath for prestressed concrete (draft)                                    |
| JSCE-E 704 | 2010 | Test method for resistance of plastic sheath for prestressed concrete under concentrated loading (draft)        |
| JSCE-E 705 | 2010 | Test method for resistance of plastic sheath for prestressed concrete under uniform compressive loading (draft) |
| JSCE-E 706 | 2010 | Test method for flexibility of plastic sheath for prestressed concrete (draft)                                  |
| JSCE-E 707 | 2010 | Test method for leak tightness for plastic sheath of prestressed concrete (draft)                               |
| JSCE-E 708 | 2010 | Test method for flexural characteristics of plastic sheath for prestressed concrete (draft)                     |
| JSCE-E 709 | 2010 | Test method for abrasion resistance of plastic sheath for prestressed concrete (draft)                          |
| JSCE-E 710 | 2010 | Test method for bond characteristics of plastic sheath for prestressed concrete (draft)                         |

\*EPMA

| Number     | Year | Title   |
|------------|------|---|
| JSCE-G 574 | 2005 | Area analysis method for chemical element distribution in concrete using EPMA (draft) |

\*Leaching of trace elements

| Number     | Year | Title   |
|------------|------|---|
| JSCE-G 575 | 2005 | Test method for leaching of trace elements from hardened concrete (draft) |

\*Resistivity of repair materials

| Number     | Year | Title  |
|------------|------|--|
| JSCE-K 562 | 2008 | Test method for measuring resistivity of patching materials with four electrodes (draft) |

\*Other 31 Standards

| Number     | Year | Title  |
|------------|------|--|
| JSCE-C 506 | 2003 | Test method of density and water absorption of slag aggregate for concrete by measurement of electric resistance       |
| JSCE-D 102 | 2005 | Specification for set accelerating agent for sprayed concrete (mortar) (draft)   |
| JSCE-F 561 | 2005 | Method of making specimens for compressive strength tests of sprayed concrete (mortar) (draft)                         |
| JSCE-F 562 | 2005 | Method of making specimens for durability tests of sprayed concrete (mortar) (draft)                                   |
| JSCE-F 563 | 2005 | Test method for rebound percentage of sprayed concrete (mortar) (draft)  |
| JSCE-F 564 | 2005 | Test method for dust concentration in air during spraying concrete (mortar) (draft)                                    |
| JSCE-F 565 | 2005 | Test method for mechanical properties, spraying performance and durability of sprayed concrete (mortar) (draft)        |
| JSCE-F 566 | 2005 | Method of making specimens of bond strength tests of sprayed concrete (mortar) for repairing and strengthening (draft) |
| JSCE-G 561 | 2005 | Test method for early strength of sprayed concrete (mortar) by pull-out method (draft)                                 |
| JSCE-G 562 | 2005 | Test method for early strength of sprayed concrete (mortar) using prism specimens (draft)                              |
| JSCE-G 563 | 2005 | Test method for strength of sprayed concrete (mortar) for repairing and strengthening using prism specimens (draft)    |
| JSCE-G 564 | 2005 | Test method for length change of sprayed concrete (mortar) for repairing and strengthening (draft)                     |
| JSCE-G 571 | 2003 | Test method for effective diffusion coefficient of chloride ion in concrete by migration                               |
| JSCE-G 572 | 2003 | Test method for apparent diffusion coefficient of chloride ion in concrete by immersion in salt water                  |
| JSCE-G 573 | 2003 | Measurement method for distribution of total chloride ion in concrete structure  |
| JSCE-K 511 | 2007 | Test method for weathering resistance of concrete surface coating materials  |
| JSCE-K 521 | 1999 | Test method for oxygen permeability of concrete surface coating materials  |
| JSCE-K 522 | 2005 | Test method for vapor permeability of concrete surface coating materials   |
| JSCE-K 523 | 2005 | Test method for water permeability of concrete surface coating materials   |
| JSCE-K 524 | 2005 | Test method for chloride ion permeability of concrete surface coating materials  |
| JSCE-K 531 | 1999 | Test methods for bond strength of concrete surface coating materials   |

|            |      |   |
|------------|------|---|
| JSCE-K 532 | 2007 | Test method for elongation performance of concrete surface coating materials over concrete crack                  |
| JSCE-K 541 | 2000 | Test methods of organic crack injecting materials for repairing in concrete structures                            |
| JSCE-K 542 | 2000 | Test method of cement crack injecting materials for repairing in concrete structures                              |
| JSCE-K 543 | 2000 | Test methods for polymer modified cement crack injecting materials for repairing in concrete structures           |
| JSCE-K 551 | 2000 | Test method of grouting organic materials for repairing and strengthening in concrete structures                  |
| JSCE-K 552 | 2000 | Test methods of cement grouting materials for repairing and strengthening in concrete structures                  |
| JSCE-K 553 | 2000 | Test methods of polymer modified cement grouting materials for repairing and strengthening in concrete structures |
| JSCE-K 561 | 2003 | Test method of patching repair materials in concrete structures   |
| JSCE-K 571 | 2004 | Test methods of surface penetrants for concrete structures (draft)  |