

Certificate No. 0019

Certificate of Technology Assessment

Technology Name

New ECF (Epoxy Coated and Filled) strand

Applicants

SUMITOMO (SEI) STEEL WIRE CORP.
SHINKO WIRE CO., LTD

Expiry Date

17 March 2022

Scope of Assessment

1 Coating specification and performance of “New ECF Strand”

It was confirmed that the coating specification and performance of “New ECF Strand” complies with the JSCE standards described in JSCE Concrete Library 133.

2 Design, Construction, Maintenance and Durability of “New ECF Strand”

It was confirmed that It is possible to design, construct, and maintain 100 years design service life concrete structures properly by using “New ECF Strand” in conjunction with the JSCE Concrete Library 133 and Standard Specifications for Concrete Structures.

3 Safety coefficient of “New ECF Strand”

It was confirmed that the safety factor for “New ECF strand” is the same as that of the prestressing strand specified in “JIS G 3536: Steel wires and strands for prestressed concrete”.

4 Delayed fracture resistance of “New ECF Strand”

It was confirmed that the delayed fracture risk of “New ECF strand” can be remarkably reduced and even ignored due to the effectiveness of the epoxy coating when used in accordance with the design, construction and maintenance described in the JSCE Concrete library 133 and Standard Specifications for Concrete Structures.

Points to be Considered

Refer to JSCE Technology Promotion Library No.19: The report of Technology Evaluation “New ECF strand”.

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 **Japan Society of Civil Engineers**
PRESIDENT **TAMIHARU TASIRO** 