

AIT

Asian Institute of Technology

Km. 42 Paholyothin Highway, Klong Luang, Pathumthani, Thailand 12120

P. O. Box 4 Klong Luang, Pathumthani 12120 Thailand. Tel. (66-2) 524-5527, 524-6427 Fax. (66-2) 524-5544

STRUCTURAL ENGINEERING LABORATORY

STRUCTURAL ENGINEERING FIELD OF STUDY

SCHOOL OF ENGINEERING AND TECHNOLOGY

TYPE OF TEST: TENSION TEST (BS 5896 : 1980)**TEST SPECIMEN:** One (1) specimen of P.C. 7 wire strand having a diameter of 15.70 mm. (0.60 inches) manufactured by Bangkok Steel Wire Co., Ltd.**CLIENT:****DATE OF TEST:** August 2, 2006**TEST MACHINE:** The 200-ton "SHIMADZU" universal testing machine of type: UHM 200 A.**TEST RESULTS:**

Specimen No.	Actual Diameter (mm.)	Weight /Unit Length (kg/m)	Effective X-Section Area (mm ²)	Yield Load (kN.)	Yield Stress (N/mm ²)	Breaking Load (kN.)	Tensile Strength (N/mm ²)	Elongation (%)	Modulus of Elasticity (N/mm ²)
1	15.78	1.188	150.07	240.98	1,605.80	281.03	1,872.64	7.54	210,493

- Note:**
- 1) The tested specimen conformed to Grade : Super in accordance with BS 5896 : 1980.
 - 2) This result certifies the adequacy and representative character of the test sample only.

CHECKED & APPROVED BY



DR. SUN SAYAMIPIK
SENIOR LABORATORY SUPERVISOR
August 3, 2006



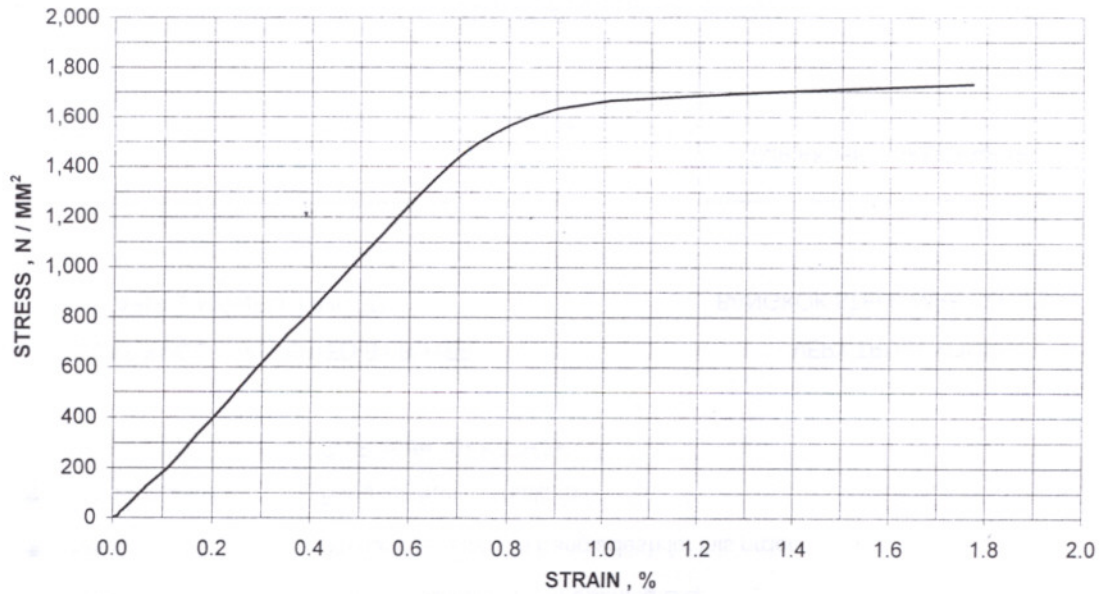


FIGURE 1 STRESS - STRAIN CURVE OF P.C. STRAND 0.60" OF SPECIMEN NO. 1

SPECIMEN NO. 1

THE P.C. 7-WIRE STRAND OF NOMINAL DIAMETER 15.70 MM.

WEIGHT PER UNIT LENGTH	1.188	KG/M.
ACTUAL DIAMETER	15.78	MM.
ACTUAL CROSS-SECTIONAL AREA	150.07	MM ²
PROOF LOAD AT 0.1 % OFFSET	240.98	KN.
YIELD STRESS	1,605.80	N/MM ²
BREAKING STRENGTH	281.03	KN.
TENSILE STRESS	1,872.64	N/MM ²
ELONGATION AT RUPTURE (G.L. = 610 MM)	7.54	%
MODULUS OF ELASTICITY	210,493	N/MM ²

CHECKED & APPROVED BY

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