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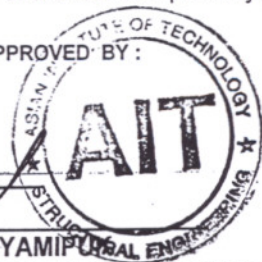
STRUCTURAL ENGINEERING LABORATORY
STRUCTURAL ENGINEERING FIELD OF STUDY
SCHOOL OF ENGINEERING AND TECHNOLOGY

TYPE OF TEST: TENSION TEST IN ACCORDANCE WITH ASTM A416-99**TEST SPECIMEN:** One (1) specimen of P.C. 7 wire strand having a diameter of 12.70 mm. (0.50 inches) of coil no. 132-561-911-11, manufactured by Bangkok Steel Wire Co., Ltd.**DATE OF TEST:** October 18, 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)
132-561-911-11 1	12.85	0.788	99.12	179.51	1,811.15	195.73	1,974.77	8.03	208,962

- Note:**
- 1) The tested specimen is conformed to Grade : 1860 in accordance with ASTM A416-99.
 - 2) This result certifies the adequacy and representative character of the test sample only.

CHECKED & APPROVED BY :



DR. SUN SAYAMIPORN
 SENIOR LABORATORY SUPERVISOR
 October 20, 2006

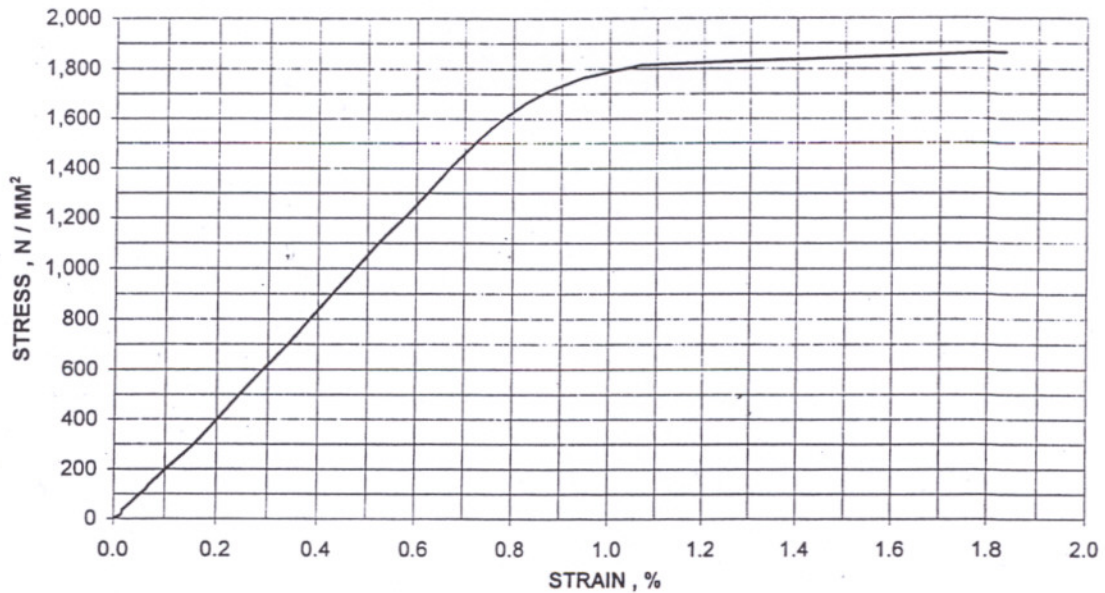


FIGURE 1 STRESS - STRAIN CURVE OF P.C. STRAND 0.50" OF SPECIMEN NO. 1

SPECIMEN NO. 1

THE P.C. 7-WIRE STRAND OF NOMINAL DIAMETER 12.70 MM.

COIL NO. 132-561-911-11

WEIGHT PER UNIT LENGTH	0.788	KGF/M.
ACTUAL DIAMETER	12.85	MM.
ACTUAL CROSS-SECTIONAL AREA	99.12	MM ²
PROOF LOAD AT 1 % EXTENSION	179.51	KN.
YIELD STRESS	1,811.15	N/MM ²
BREAKING STRENGTH	195.73	KN.
TENSILE STRESS	1,974.77	N/MM ²
ELONGATION AT RUPTURE (G.L. = 610 MM)	8.03	%
MODULUS OF ELASTICITY	208,962	N/MM ²

CHECKED & APPROVED BY:



DR. SUN SAYAMIPUK
SENIOR LABORATORY SUPERVISOR
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