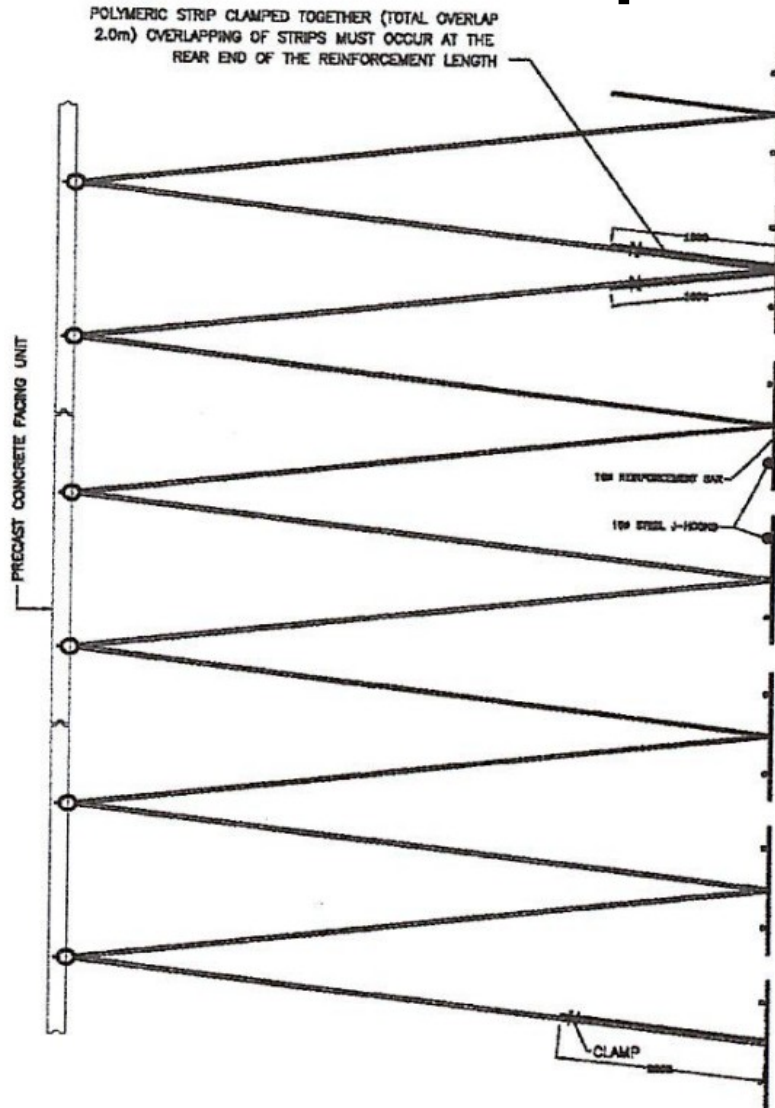


Friction Strip- Soil Reinforcement



3. PERFORMANCE EVALUATION OF FASTEN™ STRIPS

3.1 Tensile Property

Ultimate tensile strength and strain of FASTEN™ Strips were determined to refer to ASTM D 4595. (Figure 3)

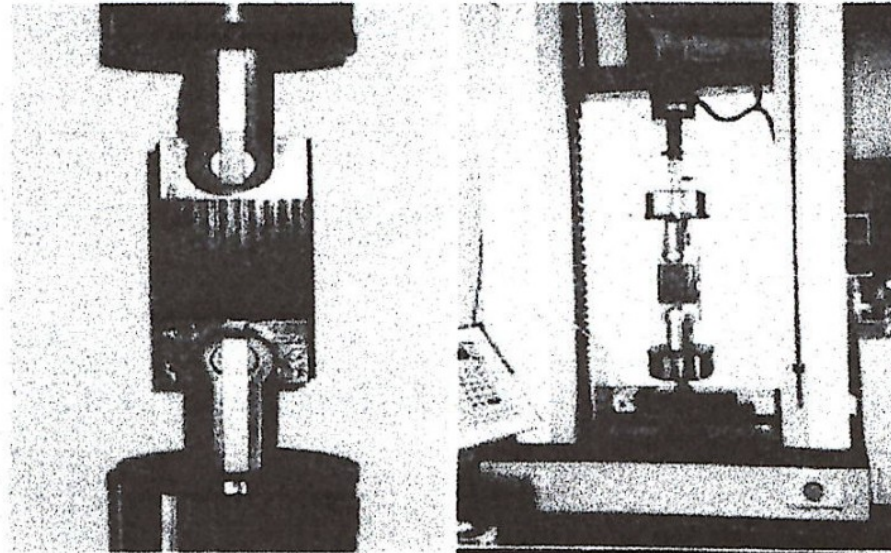
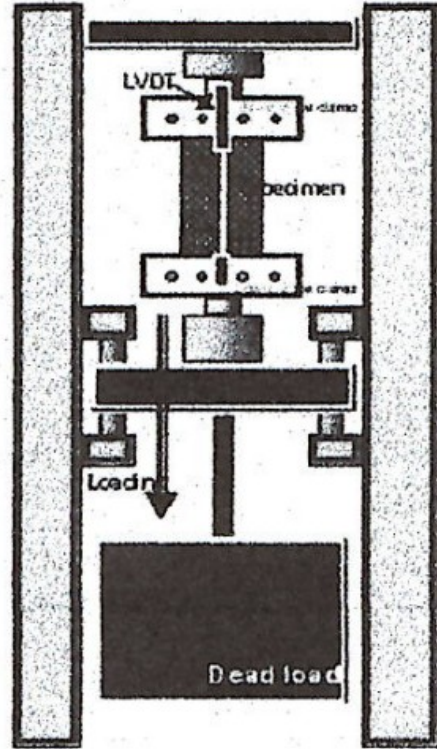


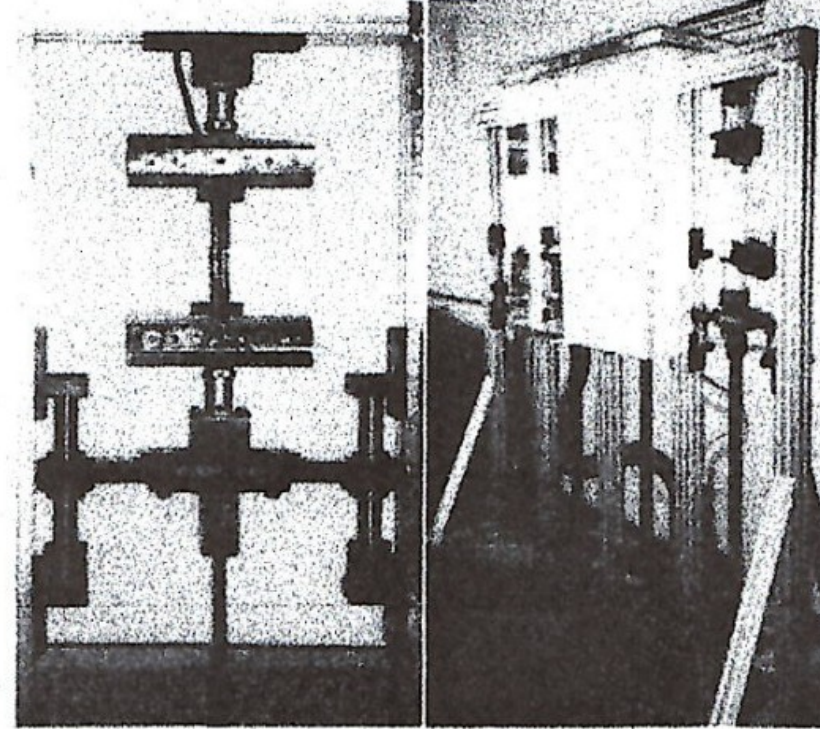
Figure 3. Tensile property test apparatus for FASTEN™ Strips

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Figure 5 shows the schematic diagram and photographs of creep deformation test equipment, respectively.



(a) Schematic diagram



(b) Photographs

Figure 5. Schematic diagram and photographs of creep deformation test equipment for FASTEN™ Strips

Friction Strips- Soil Reinforcement

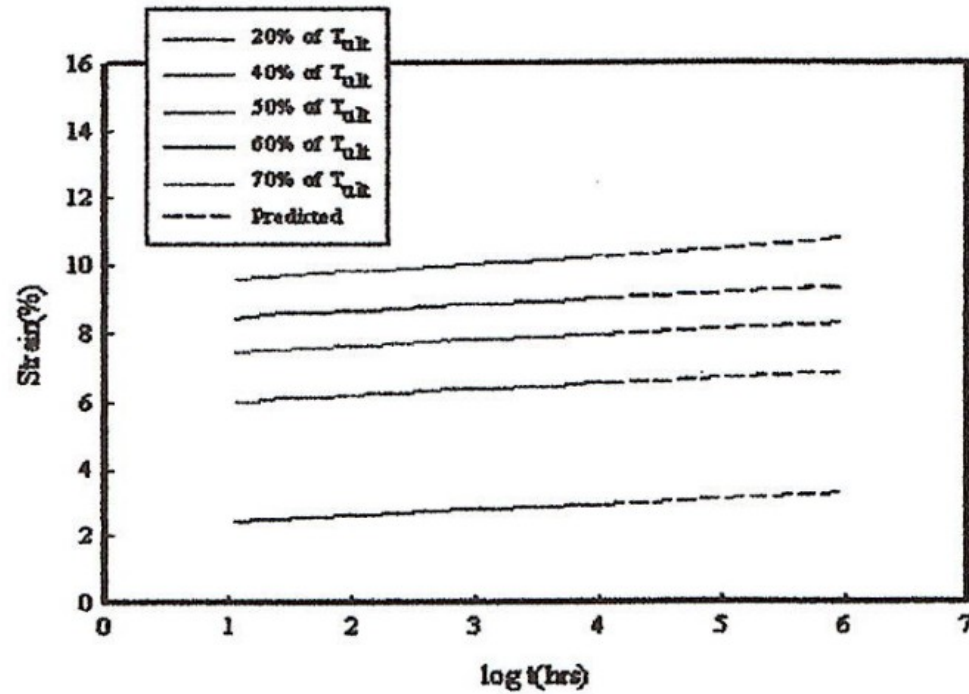


Figure 6. Creep strain curves of FASTEN™ Strips, FS 50

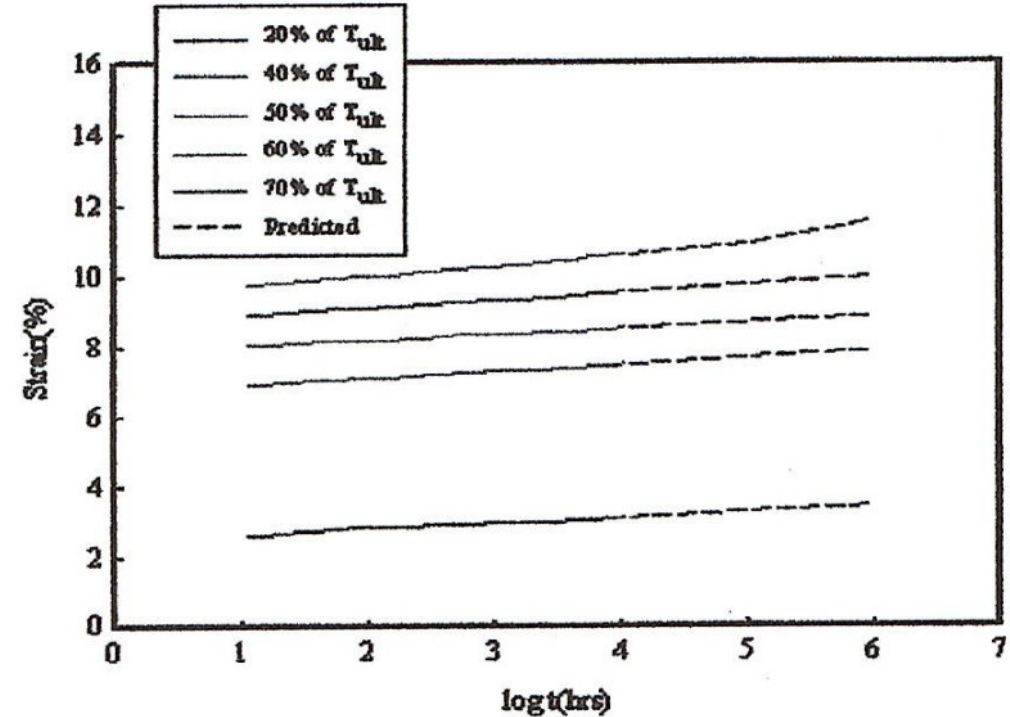


Figure 7. Creep strain curves of FASTEN™ Strips, FS 100

Table 4. Limit creep strain of FASTEN™ Strips at 52°C, 60% Tdesign

FASTEN™ Strip	FS 50	FS 100
Limit Creep Strain (%)	9.2	9.3

Friction Strips- Soil Reinforcement

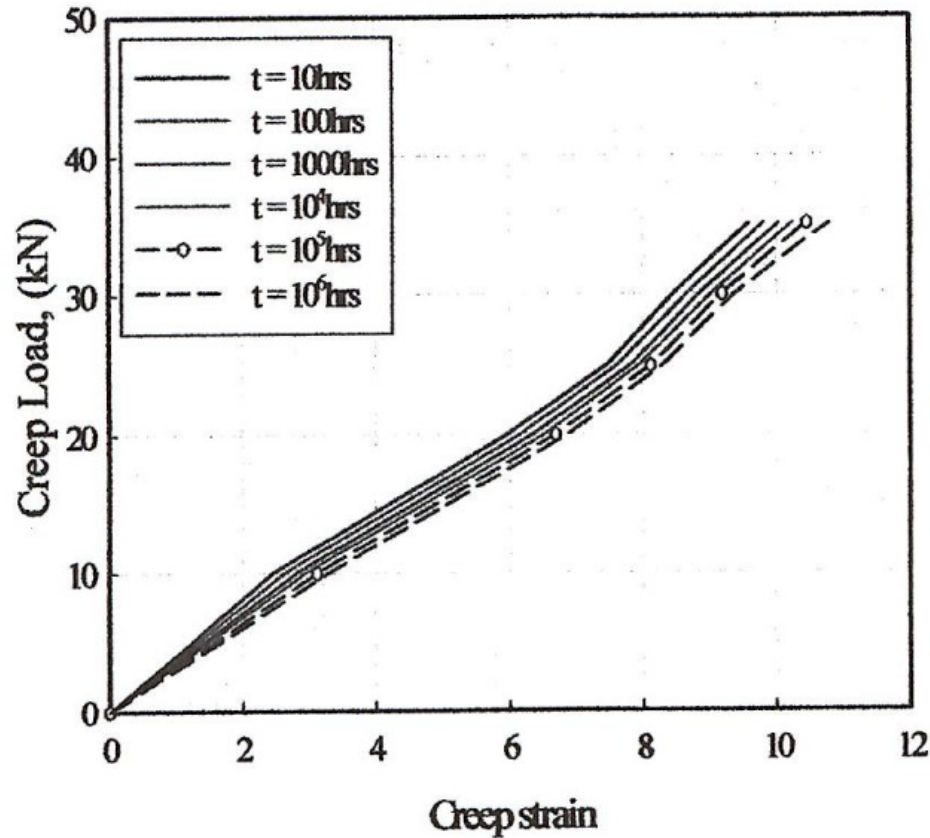


Figure 8. Isochronous creep strain curves of FASTEN™ Strips, FS 50

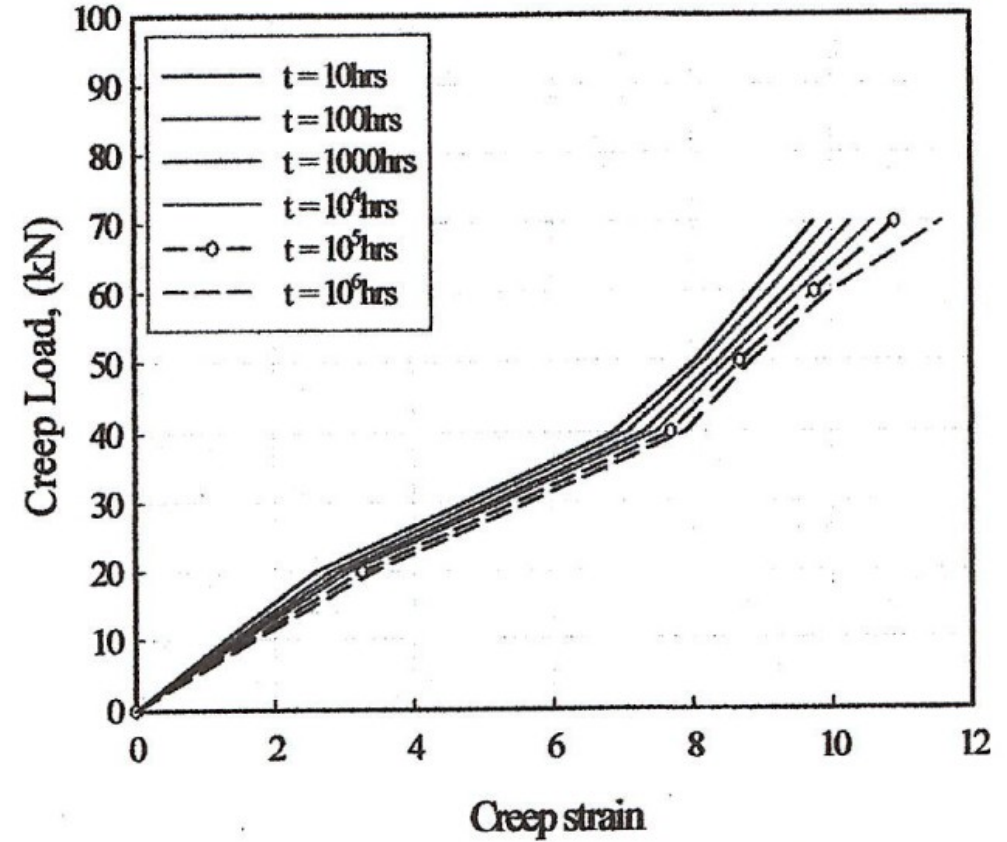


Figure 9. Isochronous creep strain curves of FASTEN™ Strips, FS 100

Friction Strips- Soil Reinforcement

Table 5. Chemical resistance of FASTEN™ Strips

FASTEN™ Strip			FS 50			FS 100		
Temperature (°C)			25	35	70	25	35	70
Strength Retention (%)	pH	3.5	98.2	98.2	98.2	98.3	98.4	98.4
		7.3	98.4	98.4	98.6	98.4	98.2	98.4
		12.4	98.6	98.4	98.5	98.5	98.5	98.5

Table 6. Biological resistance of FASTEN™ STRIPS

FASTEN™ Strip	FASTEN™ FS 50	FASTEN™ FS 100
Strength Retention (%)	99.5	99.6