Reinforced Earth

T. S. INGOLD

BSc, MSc, PhD, DIC, MICE, MIHE, MASCE, MSocIS(France), FGS Chief Engineer, Ground Engineering Ltd Visiting Professor, Department of Civil Engineering, The Queen's University, Belfast

Thomas Telford Ltd, London, 1982



Contents

	Preface	1
1	MECHANISMS AND CONCEPTS	4
	The work of Henri Vidal	5
	The anisotropic cohesion concept	7
	The enhanced confining pressure concept	20
	Randomly reinforced soil (RRS)	27
	The limitations of laboratory studies	32
2	APPLICATIONS	33
	Ground slabs	36
	Dams	38
	Foundations	39
	Embankments	44
	Walls	49
3	RESEARCH AND DEVELOPMENT	55
	French research	56
	The UCLA study	66
	The DoE/TRRL study	72
	Recent research	80
	Current design and construction systems	99
	control design and construction systems	99

CONTENTS

	Cohesive fill	109
	Economics	113
	Polymer reinforcement	114
4	FUTURE TRENDS	123
	References	127
	Index	139