

ISO 14484:2013-04 (E)

Performance guidelines for design of concrete structures using fibre-reinforced polymer (FRP) materials

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Design basics	2
4.1	General	2
4.2	Design methodology	2
5	Properties of materials	2
5.1	Properties of concrete and steel	2
5.2	Properties of FRP materials	2
5.3	Resins	3
6	Structural analysis	3
7	Serviceability limit states	3
7.1	General	3
7.2	Calculation of stress and strain	3
7.3	Cracking	4
7.4	Deflections	4
8	Ultimate limit states	4
8.1	General	4
8.2	Axial and flexural capacity	4
8.3	Shear capacity	5
9	General structural details	5
9.1	FRP reinforcements/tendons	5
9.2	Externally bonded FRP sheets/plates	6
9.3	Near-surface mounted FRP reinforcement	6