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# Report on Corrosion and Repair of Unbonded Single-Strand Tendons

Reported by Joint ACI-ASCE Committee 423



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## Report on Corrosion and Repair of Unbonded Single-Strand Tendons

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Reported by Joint ACI-ASCE Committee 423

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*This report gives general information regarding evaluating corrosion damage in structures reinforced with unbonded single-strand post-tensioning tendons. Historical development of those parts of the building code dealing with durability and corrosion protection is explained. Evolution of the types and components of unbonded tendons is described. Specific aspects of corrosion in unbonded single-strand tendons are described, and common problems in structures reinforced with these tendons are discussed. Methods are presented for repairing, replacing, and supplementing tendons.*

**Keywords:** allowable stresses; anchorage; carbonation; concrete construction; corrosion; corrosion protection; cover; durability; embrittlement; external post-tensioning; post-tensioned concrete; prestressed concrete; sheathing; single-strand tendons; unbonded post-tensioning.

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