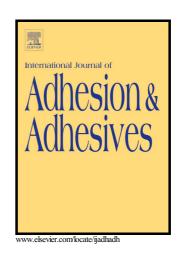
# Author's Accepted Manuscript

A review on application of structural adhesives in concrete and steel–concrete composite and factors influencing the performance of composite connections

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### **ACCEPTED MANUSCRIPT**

A review on application of structural adhesives in concrete and steel—concrete composite and factors influencing the performance of composite connections

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#### Abstract

This paper chronicles the use of structural adhesives in civil engineering construction since its inception. The usage of structural adhesives as effective and popular strengthening agents has been discussed. The application of structural adhesives as connecting agents, especially in cases of steel—concrete composites has also been discussed in detail. Various factors influence the bond strength of interfaces, such as the physical, mechanical and chemical properties of structural adhesives and adherends, the shape of adherends, water immersion, adhesive layer thickness, bonded area geometry, relative humidity and temperature of the environment during curing and service life, the amount and type of fillers and surface finishing of adherends.

Keywords: structural adhesive; steel; concrete; composite; shear strength.

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