

THE FLEXURAL BEHAVIOUR
OF STEEL FIBRE REINFORCED CONCRETE

Diploma Project Report Submitted By:

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A B S T R A C T

This project deals mainly with an experimental study, on the influence of steel fibres on concrete.

The project is divided into two parts. In the first part, an introduction was made concerning mostly types of fibres, their general characteristics, advantages and any applications of fibre reinforced concrete. Then a literature review was made relating to past research on general items including of course items studied in the project.

In the second part an experimental programme was carried out on the effect of steel fibre on concrete using Dramix and Havex steel fibres. For the impact and flexural tests, slabs 100 X 500 X 500 were used, for shrinkage tests prisms of 100 X 100 X 500 and for compressive test, cubes of 150 X 150 X 150 mm. Seven different casting took place using different percentages of fibre content every time.

From the results it is concluded that steel fibres reinforced concrete performed much better than plain concrete.

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