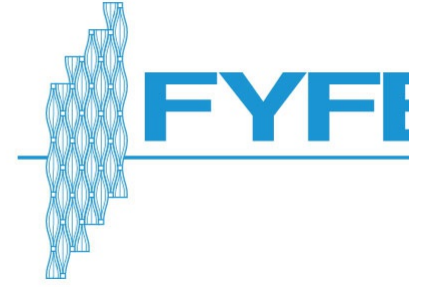




# AEGION®

## Stronger. Safer. Infrastructure.®



### Beam Strengthening

Tyfo® Fibrwrap® systems can be used to increase the structural performance of both reinforced concrete, steel and wood beams.

The potential structural uses include the following:

- Shear strengthening
- Positive moment enhancement
- Negative moment enhancement
- Torsion strengthening\*
- Supplement cut steel/openings
- Correction of an existing construction and/or design error\*

The majority of the structural elements completed have been reinforced concrete and prestressed/post-tensioned concrete. However, steel encased members, steel members and wood components (timber elements, glulam elements and truss members) can all be enhanced to some degree.

Given the basic project parameters (specifically the detailed performance goal and the existing capacity of the structural element), Fyfe Company engineers will provide a preliminary composite design and cost estimate at no obligation.

\* These applications involve more complex and/or limited designs. Special detailing and project coordination will typically be involved.