4. Technical data on any repair materials

## C. Submit Product Design Criteria

- 1. Loadings for design:
  - a. Initial handling and erection stresses.
  - b. All dead and live loads as specified on the Contract Drawings or as required.
  - c. All other loads specified for various members where they are applicable.

## D. Submit Product Design Calculations

- 1. The Design calculations shall be performed by a qualified Structural Engineer experienced in GRC design.
- 2. Calculations for the design of any GRC member shall be supported by a statement explaining the principle of design and type of analysis adopted.
- Any computer programmes used in the designs shall be fully described and details of input and print out shall be presented in a manner which can be readily understood.
  - a. Program manuals and any instruction to program users shall be made available to the Engineer upon request.
  - b. Where any such programme cannot be demonstrated by the Contractor to have been fully checked or where the Engineer considers it necessary, the Contractor shall run such test examples as the Engineer may choose, in order to verify the completeness and accuracy of the program.
- 4. Design members exposed to the weather to provide for movement of components without damage, failure of joint seals, undue stress on fasteners or other detrimental effects, when subject to seasonal or cyclic day/night temperature ranges.
- 5 Design system to accommodate construction tolerances, deflection of other building structural members and clearance of intended openings.

## E. Submit Shop Drawings

- Layout plans and detailed fabrication and placement drawings for each GRC element.
- 2. Shop drawings are to include the following information.