

What is Reinforcing Steel?



Reinforcement, normally steel, is placed in concrete to provide the tension strength of the finished component.

It is produced in a steel mill normally in 18M lengths.

Fabricators then take that bar and cut it to size and bend it as required by the designer.

The steel will be put into place as per the structural design and finally the concrete poured around it.

Detailer

Detailing is one of the most important aspects of the rebar business.

A detailer's job is to create shop and placing drawings, most commonly by use of an electronic drafting program for the purpose outlining all information regarding the rebar requirements in a given structure.

Detailers will typically make use of Structural and Architectural drawings, though all drawing sets are sometimes used.

The fabrication shop and iron workers on site rely on the detailer and the drawings they produce in a number of vital ways:

- Each bar, or set of bars laid out by the detailer on the shop drawingscorrespond to a specific bar mark.
- The bar marks comprise a range of data including the number of bars, barsize, bar shape and dimensions needed to meet the specifications in the reinforced concrete member they were designed for.
- The fabrication shop pulls the information directly from these bar marksand fabricates the bars according to the specified details therein.
- After the rebar is fabricated and sent to site, all
 information required for rebar placement will be
 found on the drawings produced by the detailer
 –another key component in the rebar business and
 further to why the detailer's job is so critical.

Estimator

Estimating refers to the procedure by which a rebar estimator, for the purpose of pricing, determines approximately how much rebar, welded wire mesh and accessories; and of what sizes are required in a reinforced concrete structure.

Estimators will typically make use of Structural and Architectural drawings, though all drawing sets are sometimes used.

The process of analyzing the drawings and specifications, interpreting and pulling together all the figures and data and entering them into an estimating program is repeated for each reinforced member in a structure until a complete estimate of the necessary scope of work is produced.

This estimate will constitute the vast majority of information necessary by the sales estimator in order to furnish a quote on a given project – one of the many reasons the estimators job is so important in the rebar business.

The Estimator needs to have a strong construction sense, have the ability to read Structural and Architectural drawings proficiently and possess good interpretation and communication skills.

As the Estimator is one of the first people in the business to see upcoming projects in detail; the position can be an exciting and desirable one to hold.

Project Manager

A Project Manager's primary responsibility is to ensure the customer's needs are being met and the project requirements and specifications are being adhered to.

Project Managers make sure the lines of communication between all parties pertaining to the Reinforcing scope of work (Detailers, Field Workers, Shop Workers, Shipping Departments etc.) are open and that the correct material is arriving on site per the contractors schedule and the Foreman's request's.



A Project Manager must have a strong understanding of the construction processes, as well as good communication and organizational skills.

Shop Worker

There are many positions available in the fabrication shop to suit varying strengths and interests.

Some of the positions typical to many fabrication shops are as follows:

The Shear Operator cuts the stock length steel to the specifications provided by the detailer.

- The Bender bends the steel to specifications provided to them.
- There are varying types of bending machines that each requires their own operator.
- The Crane Operators load and unload incoming and outgoing trucks as well as move steel from the stockpiles to the various machines (shears, benders, shanks, straighteners etc.)
- Threaders operate the required machinery to thread bars in order to suit the required mechanical coupling systems.



 Shop Workers have one of the most critical responsibilities in the fabrication process as ultimately what is sent to site is what is fabricated by the shop.

Field Worker

Fieldworkers (or Rodman) are the onsite personnel responsible for the installation of rebar.

All fieldworkers belong to the Ironworkers Union.

There are Apprentice Journeymen, Sub-Foremen, Foremen and Superintendents -all of which play key roles in the installation of reinforcing steel on site.

The Foreman is responsible for directing his team to install the correct rebar into the locations identified on the placing drawings using the detailed specifications provided therein.

The Superintendent is responsible for all the Foremen and Rodmen and for making sure each project has the necessary man power to service the job.

Reinforcing Steel installation is a very important, steady and respected trade in the construction business and there is always room for interested applicants to apply.