FF introduced high-quality Grade 80 rebar which will ensure the strength of the structure thus mitigating risks of damages due to natural calamities or any other factors. Projects from the past that could not acquire the required strength or the cost of construction value with conventional steel are achievable now.

FF Grade 80 is the first ever strongest steel bar in Pakistan having 33% higher strength, 13% less consumption, and up to 10% cost saving in comparison to Grade 60 steel bar.

**WHAT IS A GRADE 80 STEEL BAR?**

Grade 80 is a high reinforcement steel bar used in high-rise buildings, bridges, dams, and mega projects. Grade 80 steel bars are more efficient steel bars that will bring a revolutionary change to Pakistan’s construction industry

Grade 80 steel has been recently incorporated in the ACI code. The design guidelines are taken from the same code by structural engineers. The code is revised in terms of the latest construction technologies. One of the reasons to introduce Grade 80 steel in ACI 318 is to limit the congestion of the reinforcement in the high-rise buildings and to provide an economy to the overall project.

**SALIENT FEATURES OF REBAR**

High strength

Better formability

Corrosion-resistant

Durability

Seismic resilience

High-performance reinforcement

Economical

**WHY GRADE 80?**

With a new trend of high-rise buildings, the mega projects arising out of the need for infrastructure development, the one belt one road imitative of CPEC, and the construction package all gave the construction industry a whole new direction. Due to the influx of these mega construction projects, the demand for construction material has increased significantly.

One of the major elements in construction is steel, it comprehends 40% of a project’s total cost. Pakistan imports its steel scrap and the increasing demand for steel and soaring high prices of steel scrap are creating a negative balance on the foreign deficit. Realizing, this gap, the research & development wing at FF steel came up with a solution for both needs of the time.

The strength to go up vertically and the economy for using less amount of steel was found in Grade 80 steel bars. With a yield strength of 80,000 PSI and ultimate strength of 100,000 PSI, FF Grade 80 steel is 33% stronger than the Grade 60 steel bars.

**GRADE 80 SPECIFICATIONS**

**Properties of Grade 80 steel as per ASTM 615**

Minimum yield strength: 80,000 PSI

Minimum ultimate strength: 100,000 PSI

Minimum % Elongation of sizes: #3, #4, #5, #6, #7, #8 = 7%

Minimum % Elongation of sizes: #9, #10, #11 = 6%