

WE
low carbon
rebar

steel
less than
2%
strong

Steel is recycled
today from
old cars

W21 x 53
21 → ^{nominal} normal depth
53 → LBS / Foot of length
HSS shapes



L4 x 3 x 3/8

4 x 3 → nominal depth of each leg

3/8 → thickness of the leg

Shapes
W
L
C
WT
HSS
Plate
bar
Sheet

connections
nuts

high strength bolt (most common)

SNP critical connection

Friction connection

shear connection (old standard)

moment connection



so critical
can't occur

stronger than steel

extremely strong to corner to horizontal