

Methods

- Beam dimension, concrete strength, and reinforcement level parameters were prepared for analysis
- Raw stress-strain data was imported into and corrected with Excel
- 0.2% and 0.5% offset yield strengths were determined graphically
- Ramberg-Osgood curves were fit to data sets with $r^2 > 0.95$
- Moment capacities estimated using this data and a capacity calculator (Shahrooz)
- Steel properties were defined in XTRACT using the same stress-strain data used earlier.
- Concrete properties were defined using on data based on Razvi-Saatcioglu model
- Capacities were estimated using XTRACT software
- Estimates were compiled and used to compare the models that produced them

Pictures

