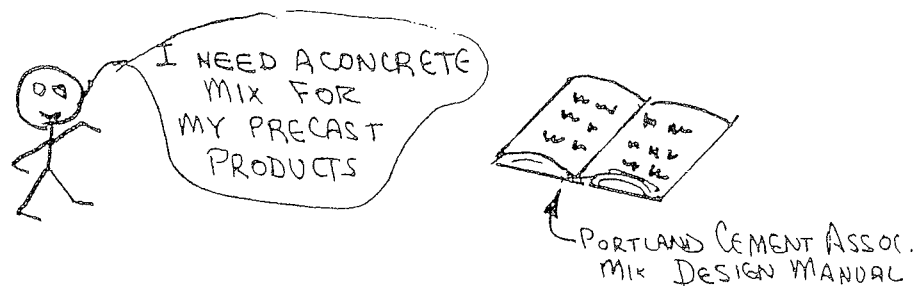


GARY K. MUNKELT, PE

Problem: HOW IS A CONCRETE MIX DESIGNED?

- I. A concrete mix can be designed by starting with some standard guidelines for amounts of cement, sand, stone and water. Those guidelines are available in textbooks or publications by organizations such as the National Precast Concrete Association. The final design will be chosen after data is available from compression testing of cylinders when concrete is 28 days old.



- II. Suppliers of cement will normally provide assistance with the design of a mix. This is a good source for experience to make sure the mix design is cost efficient and capable of obtaining necessary strengths to allow stripping of the product at a desired time.



- III. Additives are available to give concrete desired properties. Suppliers of these additives work closely with a precaster to design a mix. Their interest is not only to sell a product but also to make sure the end result is as desired.

