**Problem 1.7**

After starting the wall and roof construction on a custom-designed home, FD, the prime contractor, re­alized he was not going to make the big profit that he had anticipated due to the many unique features of the home for which he had not correctly estimated the cost to the owners. The contract was fixed-price with no more than 10% override on the total cost. As time proceeded, FD took the choices of the owners on ap­pliances, finishing work on the floors and walls, and many other features and purchased look-alike substi­tutes from questionable-quality, internationally-based manufacturers and vendors.

After living in the house for only 3 years, the owners were so disappointed with the quality of work that they decided to bring a law suit against FD and his company for breach of contract. How­ever, they needed sound reasons upon which to base their legal claims against FD, were the case to go to court. One of the owners, being an engineer, decided to consult the Code of Ethics for Engineers to gain insight into what may be substantial viola­tions performed during the construction phase.

(*a*) Help the owners by suggesting Code viola­tions and provide a brief logic as to why each one sited from the Code may be a sound basis for legal action.

(*b*) Discuss the applicability to this situation of the Engineer’s Code of Ethics.

(*c*) Suggest other resources that may be of use to the owners as they ponder legal action.