Over a period of more than 45 years, an extensive research program has allowed a series of very simple propositions, relating to the safe design of shells experiencing imperfection sensitive buckling, to be recast in the form of a series of lemmas. These are briefly summarized and their practical use is illustrated in relation to the prediction of safe lower bounds to the imperfection sensitive buckling of axially loaded, fiber reinforced polymeric, laminated cylinders. With a fundamental aspect of the approach, sometimes referred to as the reduced stiffness method, being the delineation of the various shell membrane and bending stiffness (or perhaps more appropriately energy) components contributing to the buckling resistance, the method will be shown to also provide a powerful way of making rational design decisions to optimize the use of fiber reinforcement.