A review of the techniques for EM analysis of curved frequency selective surfaces (CFSS) has been carried out. This review covers the salient features of CFSS and various methods of EM analysis of CFSS. Finite Element (FE) - Impedance Boundary Conditions (IBC) methods is found to be most efficient for the analysis of very large and complex CFSS structures. The curved frequency selective surface finds its usage in aerospace engineering, satellite communications, telemetry, and tracking/command applications performed from ground stations.