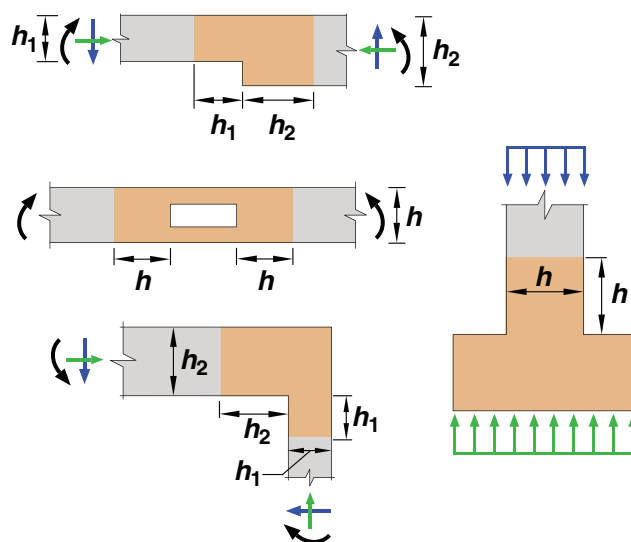
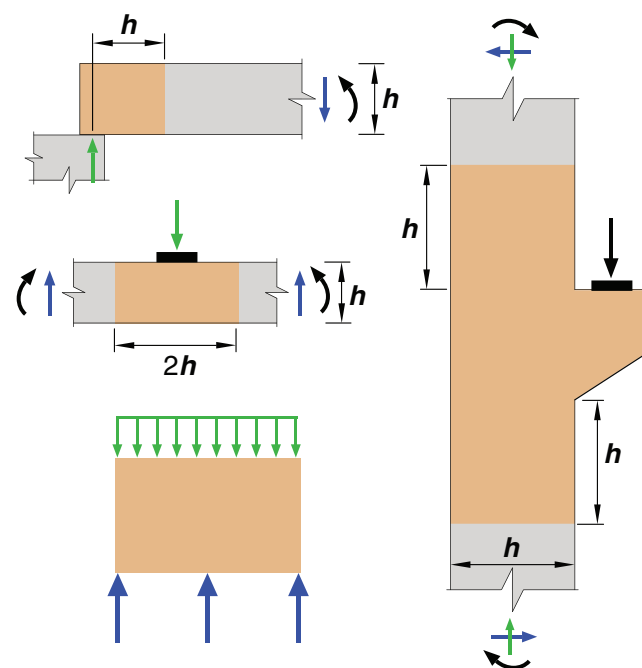


## CODE

## COMMENTARY



(a) Geometric discontinuities



(b) Loading and geometric discontinuities

Fig. R23.1—D-regions and discontinuities.

**23.2—General**

**23.2.1** Strut-and-tie models shall consist of struts and ties connected at nodes to form an idealized truss in two or three dimensions.

**R23.2—General**

**R23.2.1** For the idealized truss, struts are the compression members, ties are the tension members, and nodes are the joints. Uniformly distributed loads are usually idealized as a series of concentrated loads applied at nodes. Similarly, distributed reinforcement is usually modeled as discrete ties representing groups of individual bars or wires. Details of the use of the strut-and-tie method are given in Schlaich et al. (1987), Collins and Mitchell (1991), MacGregor (1997), FIP (1999), Menn (1986), Muttoni et al. (1997), and ACI 445R.