

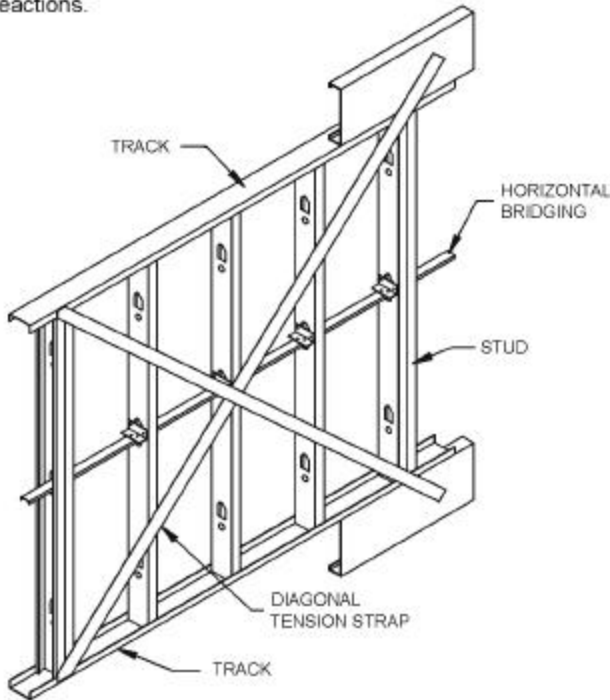
Lightweight Steel Framing Details – *Axial Loadbearing Walls*

CSSBI 59-04-C
November 2004

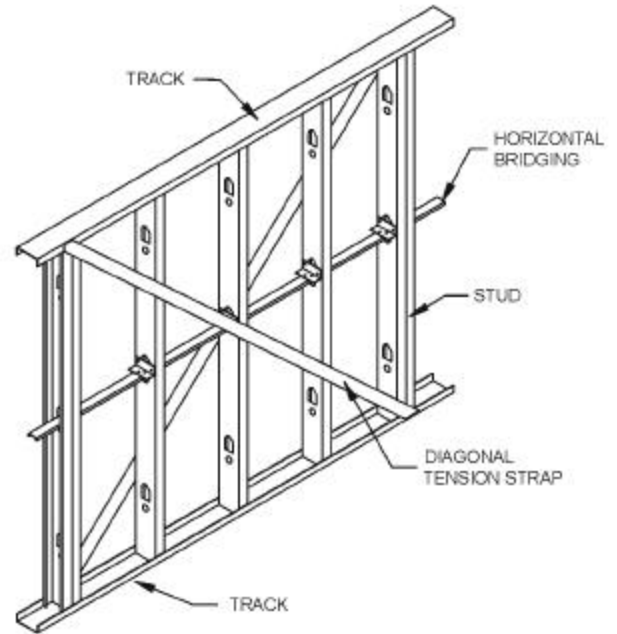


AXIAL LOADBEARING WALLS

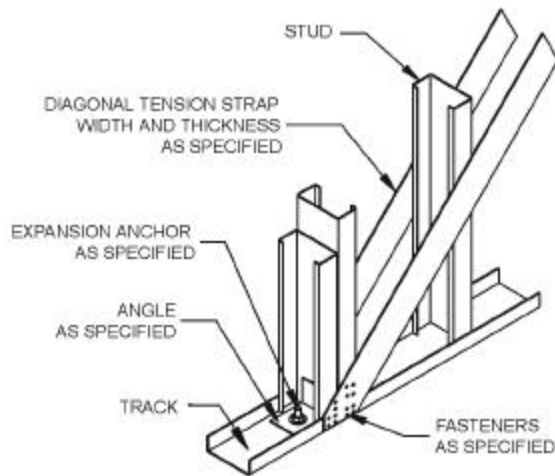
In axial loadbearing construction, some form of bracing is required to resist wind, seismic and the sway effects produced by vertical loads acting on the structure (the P-delta effect). Diagonal tension straps are normally the most economical means of providing this bracing. Diagonal straps are typically installed in pairs to form the X pattern over the face of the studs. Strap end connections must be engineered to transfer the full design load and account for horizontal and vertical strap reactions.



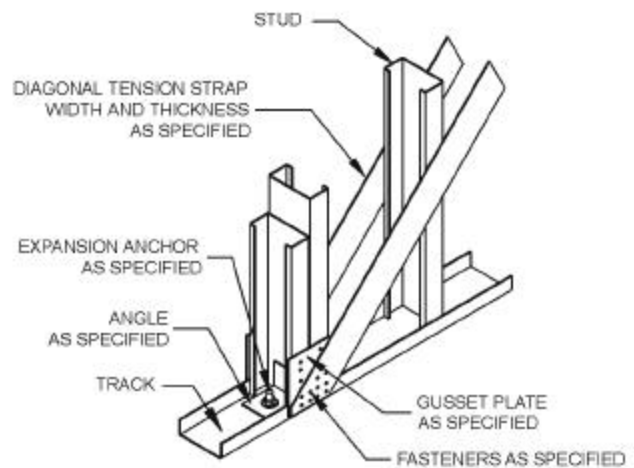
35 DIAGONAL TENSION STRAPS ONE SIDE



36 DIAGONAL TENSION STRAPS BOTH SIDES

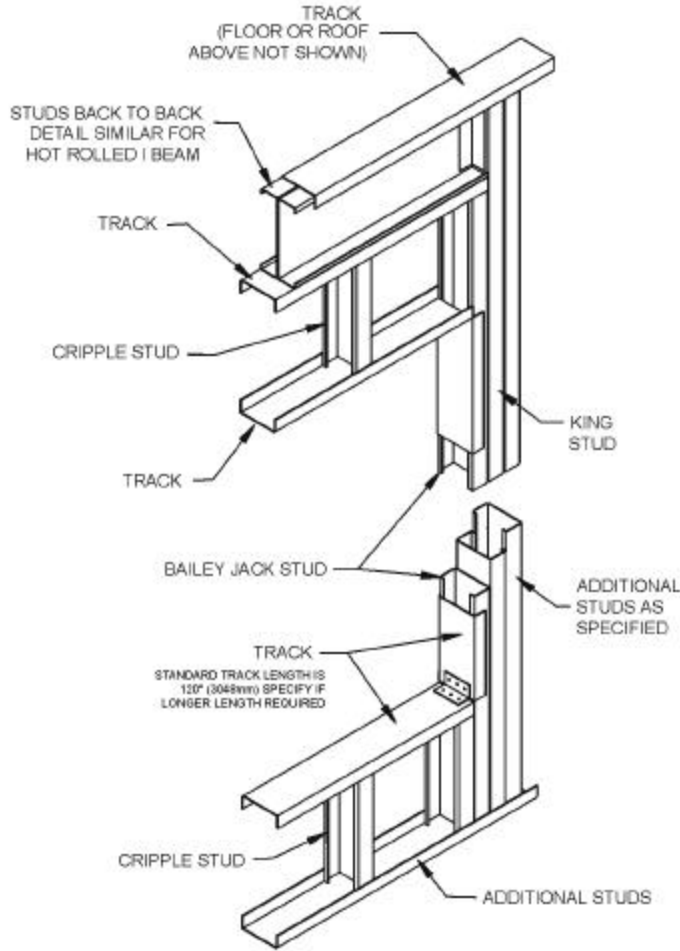


37 TENSION STRAP CONNECTION

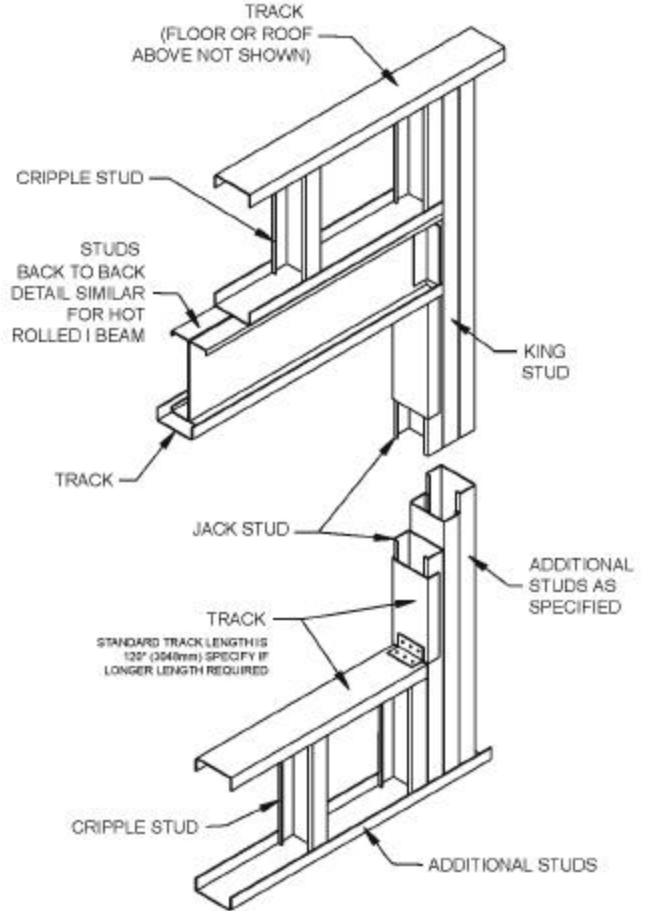


38 TENSION STRAP CONNECTION WITH GUSSET PLATES

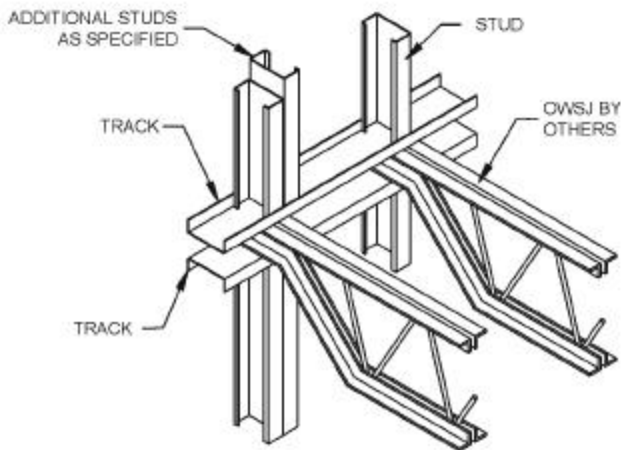
AXIAL LOADBEARING WALLS



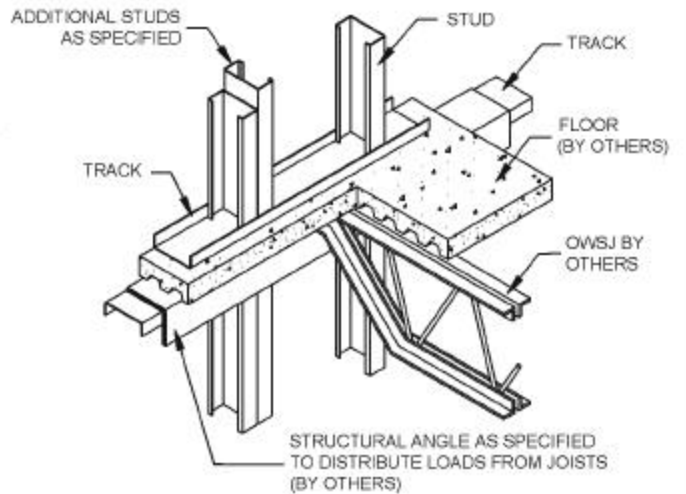
39 WALL OPENING WITH UPPER LINTEL



40 WALL OPENING WITH LOWER LINTEL



41 OPEN WEB STEEL JOISTS IN LINE WITH AXIAL LOADBEARING STEEL STUDS



42 OPEN WEB STEEL JOISTS OFFSET TO AXIAL LOADBEARING STEEL STUDS