

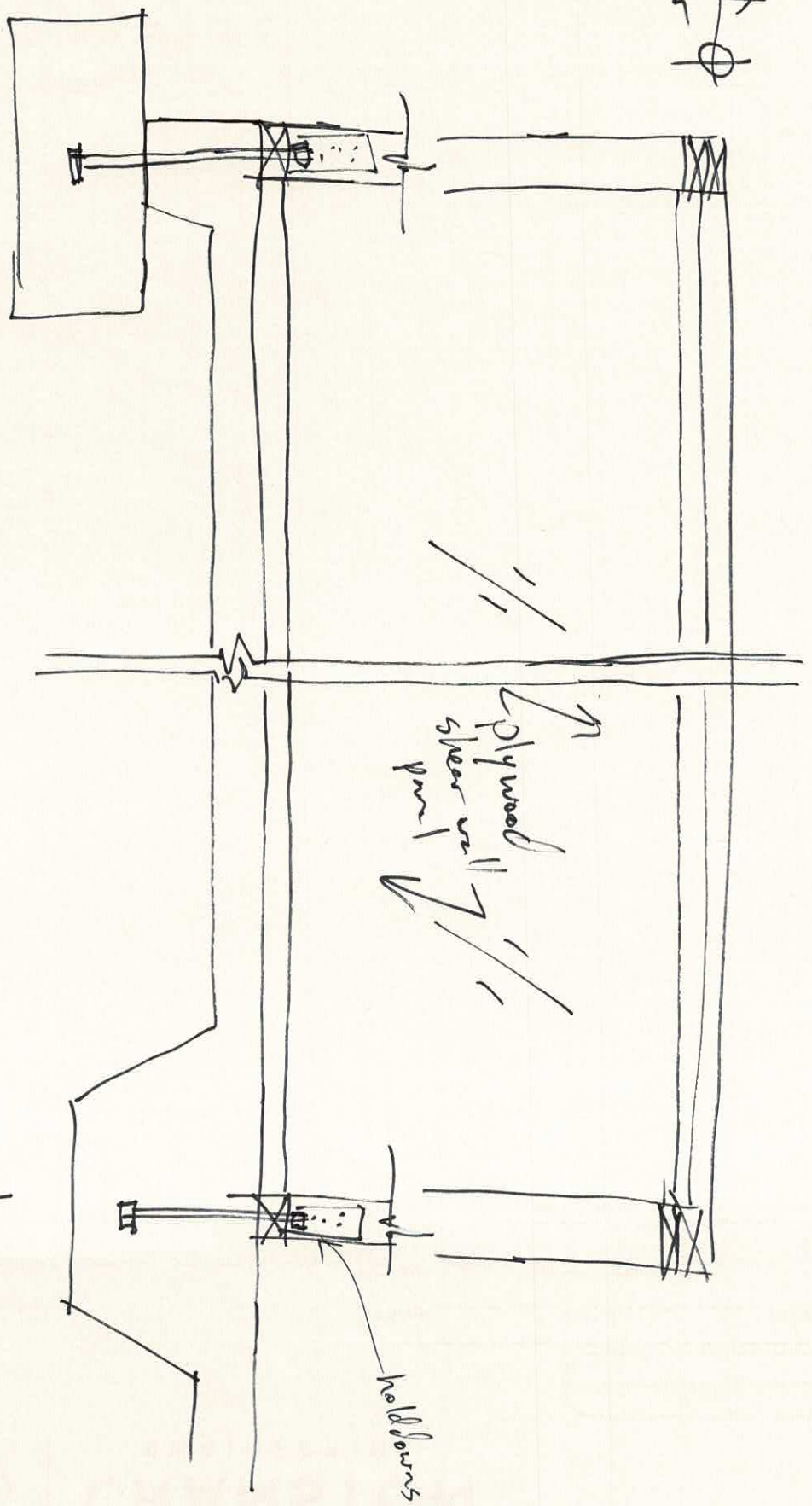
First Floor

exterior

interior
corridor
wall

plywood
shear wall panel

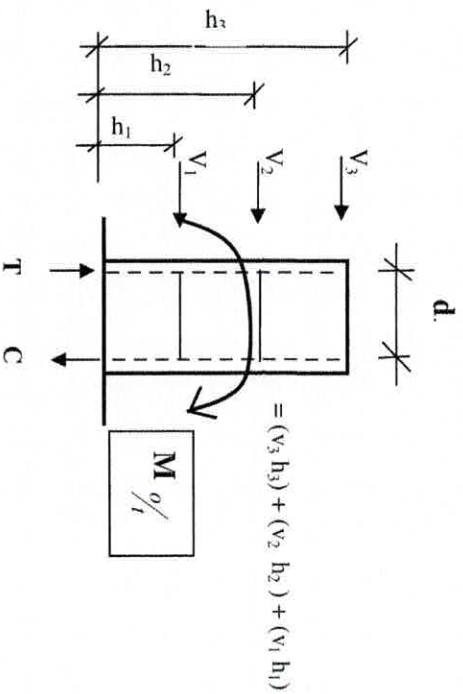
holdowns



Calculating chord forces – short or long wall

Short Walls

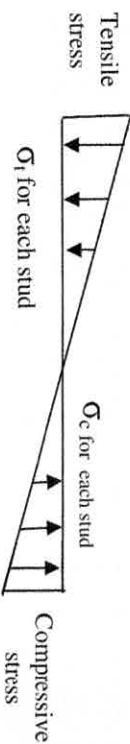
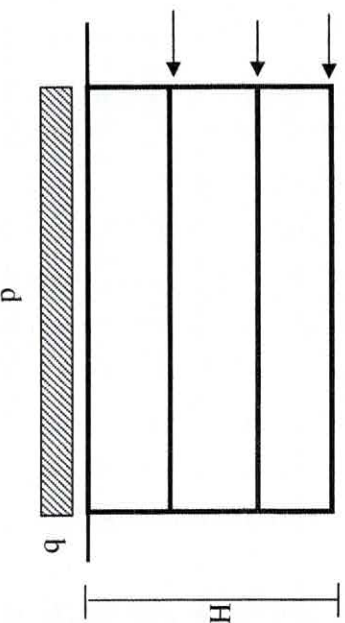
$H > d$



$$T = C = \frac{M_o/l}{jd}$$

Long Walls

$H < d$



$$\sigma = \frac{M_o/l}{z} \quad z = \frac{bd^2}{6}$$

Each stud resists tension and Compression
The T, C force in each stud.
 $T, C = \sigma \times b \times \text{stud spacing}$
@ stud location with wall