

FIGURE C11-4 Base at Level Closest to Grade Elevation.

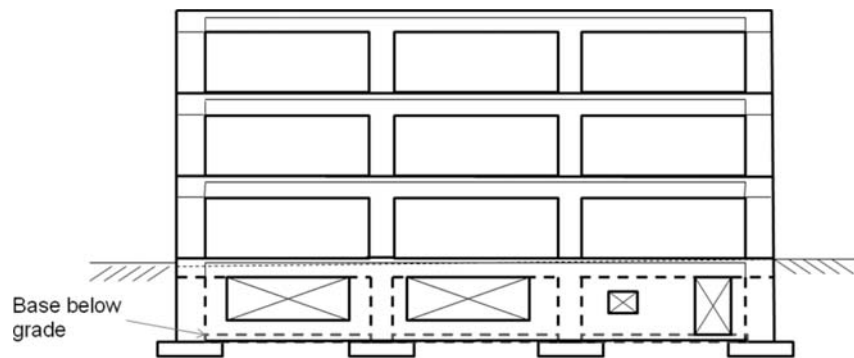


FIGURE C11-5 Base below Substantial Openings in Basement Wall.

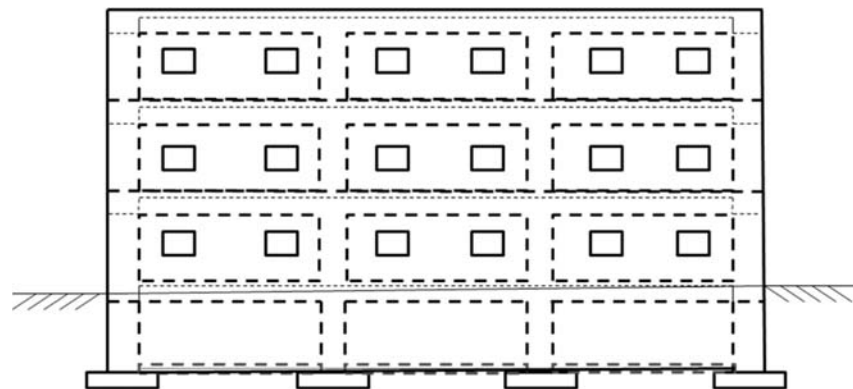


FIGURE C11-6 Base at Foundation Level Where There are Full-Length Exterior Shear Walls.

are long concrete shear walls extending over the full height and length of the building, as shown in Fig. C11-6. For this case, the appropriate location for the base is the foundation level of the basement walls.

Where the base is established below grade, the weight of the portion of the story above the base that is partially above and below grade must be included as part of the effective seismic weight. If the equivalent

lateral force procedure is used, this can result in disproportionately high forces in upper levels due to a large mass at this lowest level above the base. The magnitude of these forces can often be mitigated by using the two-stage equivalent lateral force procedure where allowed or by using a dynamic analysis to determine force distribution over the height of the building. If a dynamic analysis is used, it may be