

John Shively PE

Name	F _{hor} [lb/ft]	App.Pt. z [ft]	F _{vert} [lb/ft]	App.Pt. x [ft]	Design coefficient
Earthq.- act.pressure	427.7	-5.89	483.5	4.08	1.000
Parking Lot	173.8	-3.26	181.0	4.77	1.000

Verification of complete wall**Check for overturning stability**Resisting moment $M_{res} = 23002.8$ lbfft/ftOverturning moment $M_{ovr} = 9077.1$ lbfft/ft

Safety factor = 2.53 > 1.00

Wall for overturning is SATISFACTORY**Check for slip**Resisting horizontal force $H_{res} = 3746.97$ lbf/ftActive horizontal force $H_{act} = 2437.40$ lbf/ft

Safety factor = 1.54 > 1.00

Wall for slip is SATISFACTORY**Overall check - WALL is SATISFACTORY****Dimensioning No. 1 (Stage of construction 2)****Forces acting on construction**

Name	F _{hor} [lb/ft]	App.Pt. z [ft]	F _{vert} [lb/ft]	App.Pt. x [ft]	Design coefficient
Weight - wall	0.0	-1.41	748.1	1.23	1.000
Earthq.- constr.	86.4	-1.33	0.0	1.22	1.000
Weight - earth wedge	0.0	-2.90	132.9	1.53	1.000
Earthquake - soil wedge	14.6	-2.90	0.0	1.53	1.000
Active pressure	149.0	-1.07	48.0	2.41	1.000
Earthq.- act.pressure	74.8	-2.33	56.5	2.33	1.000
Parking Lot	55.8	-0.73	13.7	2.40	1.000

Verification of block No. 4**Check for overturning stability**Resisting moment $M_{res} = 1400.7$ lbfft/ftOverturning moment $M_{ovr} = 531.5$ lbfft/ft

Safety factor = 2.64 > 1.00

Joint for overturning stability is SATISFACTORY**Check for slip**Resisting horizontal force $H_{res} = 7025.97$ lbf/ftActive horizontal force $H_{act} = 380.57$ lbf/ft

Safety factor = 18.46 > 1.00

Joint for verification is SATISFACTORY