

Pipe Burial Depth Check
4" Sch. 40 PVC for SVE Lines

Deflection % = $\frac{0.1(W+P)100}{0.149(PS)+0.061E'}$ = 0.73 ± 1 % OK	Maxium Recommended Diametric Deflection	
	PVC Pressure Pipes	5%
	PVC Sewer/Drain Pipes	7.50%
	PVC Electrical Conduits	5%

Calc. By **MS** Checked By **TCK**

W'

Height of Cover (ft)	Live Load Highway H2O (lbs/in2)
1	12.5
2	5.56
3	4.17
4	2.78
5	1.78
6	1.39
7	1.22
8	0.69

P

Height of Cover (ft)	Soil Unit Weight (lbs/ft3)				
	100	110	120	125	130
1	0.69	0.76	0.83	0.87	0.9
2	1.39	1.53	1.67	1.74	1.81
3	2.08	2.29	2.5	2.6	2.71
4	2.78	3.06	3.33	3.47	3.61
5	3.47	3.82	4.17	4.34	4.51
6	4.17	4.58	5	5.21	5.42
7	4.86	5.35	5.83	6.08	6.32
8	5.56	6.11	6.67	6.94	7.22

PS

Sch 40 Coexcel DWV	
Pipe Size (in)	Pipe Stiffness
1.5	600
2	300
3	300
4	200
5	120

E'

		Degree of compaction of pipe zone backfill			
		Loose	Slight (.85% Proctor <40% relative density)	Moderate (85%-95% Proctor 40%-70% relative density)	High (>95% Proctor >70% relative density)
Class V	CH,MH,CH-MH				
Class IV	CL,ML,ML-CH	50	200	400	1000
Class III	CL,ML,ML-CL,GM,GC,SM,SCC	100	400	1000	2000
Class II	GW,GP,SW,SPC	200	1000	2000	3000
Class I	Crushed Rock	1000	3000	3000	3000
Accuracy in Terms of Percentage Deflection		± 2%	± 2%	± 1 %	± 0.5%