Tables of Radial Stresses in Top Layer of Three-Layer Elastic System at Distance From Load Axis

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For a load distributed over a circular area, numerical values of radial stresses in the top layer of a three-layer elastic system have been calculated, not only under the center of the load but also for radial distances from the load axis up to four times the radius of the loaded area, and for different values of Poisson's ratio.

Tables are included which indicate that, for the same axle load, the radial stresses caused by dual wheels can be considerably smaller than the stresses caused by single wheels, when the thickness of the layer is greater than the radius of one of the dual wheel load areas.

Furthermore, the tables indicate that for layers with a thickness less than the radius of one of the dual wheel load areas, the maximum radial stress is found as the radial stress under a single wheel load equal to one-fourth of the axle load.

A few examples of the important influence of Poisson's ratio on the radial stresses are also given.

•THE LIFE of a sound road structure depends mainly on the stresses in the subgrade and on the tensile stresses in the pavement caused by the wheel loads. Knowledge of these stresses is, therefore, important. In 1951 Acum and Fox (1) published tables for the stresses on the axis of a single wheel load in a three-layer system, and these tables were later extended by Jones (2).

Practically all heavy axle loads are transmitted to the road surface by dual wheels, and it is necessary to evaluate the combined stresses caused by two wheel loads placed closely together.

Normally, there is only an unimportant difference between the stresses in the subgrade caused by an axle load, transmitted by two single wheels, and the stresses caused by the same axle load, transmitted by two pairs of dual wheels. However, this is not the case when the tensile stresses in the top layer of road structure are considered. Therefore, the radial stresses were calculated for radial distances up to four times the radius of the loaded area.

PARAMETERS

The numerical values given in the tables were calculated by use of Burmister's theory (3), after correction of a printing error in Eq. 36e, where a factor of (1 - K)/(1 - I) has been omitted in the first term in the fifth line of the second bracket. The values in the tables are the radial stresses caused by unit load, and a negative sign indicates compression. Poisson's ratio is assumed equal to 0.5 for all three layers for all values in Appendix A. In Appendix B values are given for Poisson's ratio equal

Paper sponsored by Committee on Strength and Deformation Characteristics of Pavement Sections.

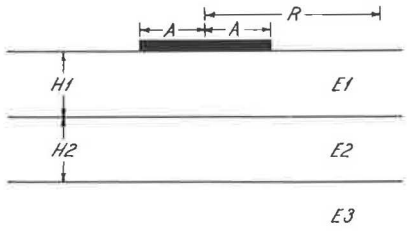

Figure 1. Notation used for parameters in a three-layer system.

to 0.4, and Appendix C gives values for Poisson's ratio equal to 0.3. The notation follows from Figure 1, where E stands for modulus of elasticity. The center for the coordinate system has been chosen at the first interface under the center of the loaded area.

As the radial stresses have been calculated both at the bottom and at the surface of the top layer, six parameters are necessary. The following parameters and parameter values have been chosen, and the tables state the radial stresses for all combinations of these values:

H1/A = 0.25, 0.50, 1.00, 1.50, 2.00
H2/A = 1.00, 2.00, 3.00
Z/H1 = 0.00, 1.00
E1/E2 = 2, 5, 10, 20, 50, 100, 500
E2/E3 = 5, 10
R/A = 0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0

Z is the vertical distance from the first interface, and R is the radial distance from the load axis. As the number of combinations of parameter values are rather high, the calculated stresses are given with only two decimals, which should be sufficient for most purposes.

The calculations are based on the usual assumptions that the materials are perfectly homogeneous, isotropic and elastic; the two topmost layers are weightless and of finite thickness but of infinite extent horizontally; the bottom layer is of infinite thickness and extent; there is perfect interaction between the layers at the interfaces; there is zero stress and displacement at infinite depth; and, finally, the load acts normal to the road surface and is distributed uniformly over a circular area.

For some of the combinations of parameter values, the radial stresses are also found in Acum and Fox's tables, as well as in Jones' tables. These stresses are stated in Table 1, and the disagreement is very small.

TABLE 1

RADIAL STRESS

H1/A	H2/A	E1/E2	E2/E3	Acum and Fox	Jones	AOV
0.25	1.00	5	5	0.3230	0.30868	0.3084
0.25	1.00	50	5	12.0880	12.095563	12.0955
2.00	1.00	5	5	0.6319	0.63161	0.6317
2.00	1.00	10	5	0.8790	0.87867	0.8782
2.00	1.00	50	5	1.3413	1.34590	1.3460
0.50	2.00	5	5	1.1490	1.15327	1.1529
0.50	2.00	50	5	7.1620	7.16480	7.1648

EXAMPLES

As an example of the use of the tables, Figure 2 shows the combined radial stress at the first interface for E1/E2 = 10, E2/E3 = 5, H1/A = 2, and H2/A = 2 for a contact pressure of 7 kg/cm^2. Poisson's ratio is equal to 0.5 in all three layers. The two

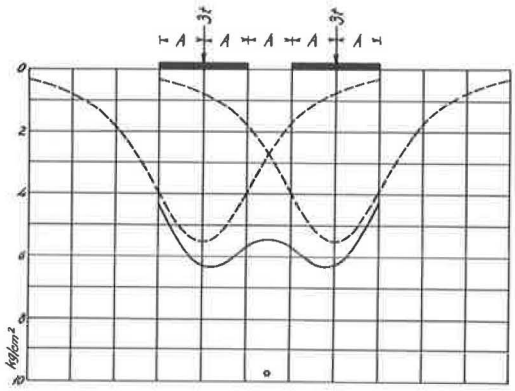

Figure 2. Effect of single wheel load of 3 tons (dotted line); combined effect of dual wheels (solid line); stress resulting from single wheel load of 6 tons (small circle).

dotted lines show the effect of a single wheel load of 3 tons, and the solid line shows the combined radial stress from dual wheels of 3 tons each. Even for a layer of this thickness (approximately 10 in.) the combined effect of the dual wheels of 3 tons each is only about 15 percent greater than the stress caused by a single wheel load of 3 tons. If, as is usually done in calculations, a single wheel load of 6 tons is used as an approximation for dual wheels, and the radial stress is calculated for this load, the result is a stress indicated in Figure 2 with a circle, which is about 50 percent too high in this example.

Table 2 gives the maximum tensile stress at the bottom of the top layer for a road structure with H1/A = 0.5, H2/A = 2.0 for a load of 6-ton single wheel, 2- × 3-ton dual wheels and 3-ton single wheel, all with a contact pressure of 7 kg/cm^2. Similar examples are given in Tables 3, 4 and 5.

From the tables it follows that for pavements with a thickness less than about the radius in the load area for one of the dual wheels, the maximum tensile stress is found by taking a single wheel load equal to one-fourth of the axle load. For pavements with a thickness greater than about the radius in the load area for one of the dual wheels, the maximum tensile stress is found as the combined effect of the two dual wheels.

INFLUENCE OF POISSON'S RATIO

To evaluate the influence of Poisson's ratio on the radial stresses in the pavement, calculations were carried out for a road with a thin top layer and for a road with a thick top layer, loaded with dual wheels as shown in Figure 2, and with different values of Poisson's ratio in the layers. The contact pressure is again 7 kg/cm^2. The values given in Tables 6 and 7 are the maximum stresses at the first interface in the top layer. These two tables show that Poisson's ratio for the top layer has an important influence on the stresses in the two examples investigated, and that the Poisson's ratio for the

TABLE 2

MAXIMUM TENSILE STRESS AT BOTTOM OF TOP LAYER

H1/A	H2/A	E1/E2	E2/E3	6 t	2 × 3 t	3 t
0.5	2.0	5	5	5.6	8.0	8.0
0.5	2.0	10	5	15.7	17.6	17.6
0.5	2.0	20	5	35.0	30.0	30.0

TABLE 3

MAXIMUM TENSILE STRESS AT BOTTOM OF TOP LAYER

H1/A	H2/A	E1/E2	E2/E3	6 t	2 × 3 t	3 t
1.0	3.0	5	5	8.8	7.1	7.1
1.0	3.0	10	5	17.7	11.6	11.6
1.0	3.0	20	5	24.6	16.5	16.5

TABLE 4

MAXIMUM TENSILE STRESS AT BOTTOM OF TOP LAYER

H1/A	H2/A	E1/E2	E2/E3	6 t	2 × 3 t	3 t
1.5	2.0	10	5	14.0	8.7	8.3
1.5	2.0	20	5	17.3	12.3	10.9
1.5	2.0	50	5	21.0	17.4	14.2

TABLE 5

MAXIMUM TENSILE STRESS AT BOTTOM OF TOP LAYER

H1/A	H2/A	E1/E2	E2/E3	6 t	2 × 3 t	3 t
2.0	2.0	10	5	9.7	6.3	5.5
2.0	2.0	20	5	11.5	8.7	7.2
2.0	2.0	50	5	13.4	11.8	9.1

TABLE 6

MAXIMUM STRESS AT FIRST INTERFACE IN TOP LAYER

H1/A	H2/A	E1/E2	E2/E3	NY1 = 0.5 NY2 = 0.5 NY3 = 0.5	NY1 = 0.5 NY2 = 0.3 NY3 = 0.5	NY1 = 0.3 NY2 = 0.5 NY3 = 0.5	NY1 = 0.3 NY2 = 0.3 NY3 = 0.5	NY1 = 0.3 NY2 = 0.3 NY3 = 0.3
0.5	3	5	5	7.8	5.8	6.0	4.5	4.4
0.5	3	10	5	16.6	14.5	12.7	11.0	11.0
0.5	3	20	5	28.2	26.0	21.8	20.0	20.0

TABLE 7

MAXIMUM STRESS AT FIRST INTERFACE IN TOP LAYER

H1/A	H2/A	E1/E2	E2/E3	NY1 = 0.5 NY2 = 0.5 NY3 = 0.5	NY1 = 0.5 NY2 = 0.3 NY3 = 0.5	NY1 = 0.3 NY2 = 0.5 NY3 = 0.5	NY1 = 0.3 NY2 = 0.3 NY3 = 0.5	NY1 = 0.3 NY2 = 0.3 NY3 = 0.3
2.0	2.0	5	5	4.0	3.7	3.1	2.9	2.8
2.0	2.0	10	5	6.3	6.0	4.8	4.6	4.5
2.0	2.0	20	5	8.7	8.5	6.8	6.6	6.4

second layer also has a measurable influence, whereas the Poisson's ratio for the third layer does not seem to be of much importance. NY1 stands for Poisson's ratio in the top layer, etc.

It follows from Tables 6 and 7 that the stresses calculated with Poisson's ratio equal to 0.5 in all three layers can be about 50 percent higher than the stresses found with a Poisson's ratio of 0.3 in all layers. Because of this variation, supplementary tables have been calculated for Poisson's ratio equal to 0.4 in all three layers (Appendix B). Tables for Poisson's ratio equal to 0.3 are given in Appendix C. It is thus possible to find intermediate values by interpolation.

CONCLUSIONS

Tables for the radial stresses in the top layer in a three-layer system have been calculated for distances from the axis of the load up to four times the radius of the loaded area. For thick pavements the radial stresses caused by dual wheels are considerably smaller than the stresses caused by the equivalent single wheel load. In thin pavement the maximum radial stress is found as the stress caused by a single wheel load equal to one-fourth of the axle load.

Furthermore, it is shown that Poisson's ratio has an important influence on the radial stresses.

REFERENCES

1. Acum, W. E. A., and Fox, L. Computation of Load Stresses in a Three-Layer Elastic System. Geotechnique, No. 2, pp. 293-300, 1951.
2. Jones, A. Tables of Stresses in Three-Layer Elastic Systems. HRB Bull. 342, pp. 176-214, 1962.
3. Burmister, D. M. The General Theory of Stresses and Displacements in Layered Systems. Jour. of Applied Physics, Vol. 16, pp. 89-94, 126-127, 296-302, 1945.

Appendix A

RATIO OF RADIAL STRESS TO SURFACE PRESSURE—POISSON'S RATIO EQUAL TO 0.5 IN ALL THREE LAYERS[a]

TABLE 8

H1/A = 0.25 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.69	-0.54	-0.54	-0.41	-0.16	-0.06	-0.01	0.02	0.03
5	5	0.31	0.47	-0.31	-0.72	-0.34	-0.16	-0.07	-0.03	-0.00
10	5	2.11	2.06	0.22	-0.98	-0.58	-0.32	-0.19	-0.11	-0.06
20	5	5.29	4.76	1.34	-1.10	-0.91	-0.59	-0.40	-0.28	-0.20
50	5	12.10	10.54	4.39	-0.44	-1.22	-1.13	-0.92	-0.73	-0.57
100	5	19.13	16.72	8.33	1.27	-0.83	-1.37	-1.40	-1.26	-1.09
500	5	39.68	35.63	23.02	11.13	5.08	1.70	-0.24	-1.33	-1.91
2	10	-0.88	-0.72	-0.70	-0.52	-0.24	-0.10	-0.03	0.01	0.04
5	10	0.18	0.34	-0.43	-0.83	-0.42	-0.22	-0.11	-0.05	-0.00
10	10	2.18	2.12	0.24	-1.00	-0.62	-0.37	-0.23	-0.14	-0.09
20	10	5.75	5.18	1.65	-0.91	-0.82	-0.58	-0.41	-0.31	-0.24
50	10	13.43	11.81	5.43	0.32	-0.72	-0.84	-0.78	-0.69	-0.61
100	10	21.44	18.92	10.24	2.80	0.29	-0.62	-0.94	-1.03	-1.03
500	10	44.75	40.60	27.67	15.31	8.69	4.71	2.18	0.54	-0.54

H1/A = 0.25 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-2.07	-2.02	-1.07	-0.17	-0.05	0.03	0.08	0.09	0.09
5	5	-3.38	-3.28	-1.56	-0.08	-0.00	0.08	0.12	0.14	0.14
10	5	-5.27	-4.95	-2.21	0.02	0.14	0.17	0.21	0.21	0.21
20	5	-8.38	-7.58	-3.37	0.03	0.38	0.39	0.38	0.36	0.33
50	5	-14.83	-13.06	-6.31	-0.69	0.60	0.85	0.84	0.77	0.68
100	5	-21.49	-18.90	-10.07	-2.37	0.17	1.03	1.26	1.25	1.16
500	5	-41.05	-36.93	-24.16	-11.94	-5.65	-2.08	-0.01	1.19	1.85
2	10	-2.53	-2.45	-1.41	-0.41	-0.20	-0.04	0.05	0.09	0.11
5	10	-4.08	-3.94	-2.09	-0.46	-0.24	-0.06	0.06	0.13	0.16
10	10	-6.24	-5.85	-2.94	-0.50	-0.20	-0.03	0.10	0.18	0.22
20	10	-9.73	-8.84	-4.48	-0.73	-0.12	0.09	0.22	0.30	0.34
50	10	-16.98	-15.09	-8.04	-2.01	-0.33	0.25	0.50	0.61	0.65
100	10	-24.49	-21.77	-12.58	-4.41	-1.35	-0.04	0.58	0.88	1.01
500	10	-46.48	-42.23	-29.13	-16.40	-9.51	-5.31	-2.60	-0.81	0.37

H1/A = 0.25 H2/A = 2.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.58	-0.44	-0.50	-0.42	-0.21	-0.12	-0.07	-0.04	-0.02
5	5	0.19	0.36	-0.39	-0.78	-0.40	-0.24	-0.15	-0.09	-0.05
10	5	1.56	1.58	-0.11	-1.15	-0.65	-0.35	-0.21	-0.14	-0.10
20	5	4.06	3.67	0.61	-1.45	-1.00	-0.56	-0.34	-0.23	-0.16
50	5	9.50	8.20	2.71	-1.37	-1.52	-1.06	-0.68	-0.46	-0.34
100	5	15.33	13.24	5.66	-0.38	-1.57	-1.46	-1.11	-0.82	-0.62
500	5	34.05	30.28	18.41	-7.56	2.63	0.26	-0.85	-1.33	-1.50
2	10	-0.69	-0.56	-0.61	-0.51	-0.29	-0.19	-0.12	-0.08	-0.05
5	10	0.05	0.22	-0.53	-0.91	-0.51	-0.32	-0.22	-0.15	-0.10
10	10	1.44	1.47	-0.22	-1.26	-0.75	-0.45	-0.30	-0.22	-0.16
20	10	4.00	3.62	0.54	-1.52	-1.08	-0.64	-0.41	-0.29	-0.22
50	10	9.70	8.39	2.86	-1.26	-1.45	-1.03	-0.68	-0.48	-0.37
100	10	15.90	13.78	6.15	0.03	-1.24	-1.22	-0.95	-0.72	-0.57
500	10	36.32	32.51	20.53	9.51	4.36	1.75	0.41	-0.30	-0.68

H1/A = 0.25 H2/A = 2.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.53	-1.57	-0.81	-0.11	-0.13	-0.09	-0.05	-0.02	-0.00
5	5	-2.48	-2.52	-1.12	0.02	-0.12	-0.13	-0.08	-0.04	-0.01
10	5	-3.95	-3.82	-1.54	0.20	-0.00	-0.10	-0.11	-0.04	-0.00
20	5	-6.44	-5.90	-2.32	0.39	0.25	-0.03	-0.06	-0.01	0.02
50	5	-11.74	-10.32	-4.42	0.20	0.68	0.45	0.26	0.17	0.16
100	5	-17.40	-15.18	-7.31	-0.80	0.69	0.81	0.65	0.51	0.42
500	5	-35.54	-31.70	-19.72	-8.57	-3.43	-0.89	0.36	0.96	1.23
2	10	-1.70	-1.73	-0.96	-0.24	-0.24	-0.20	-0.12	-0.07	-0.04
5	10	-2.78	-2.82	-1.40	-0.23	-0.30	-0.27	-0.20	-0.13	-0.07
10	10	-4.32	-4.18	-1.87	-0.08	-0.24	-0.30	-0.24	-0.16	-0.09
20	10	-6.94	-6.38	-2.76	0.01	-0.07	-0.23	-0.23	-0.17	-0.10
50	10	-12.51	-11.06	-5.11	-0.39	0.19	0.06	-0.05	-0.06	-0.02
100	10	-18.52	-16.27	-8.32	-1.68	-0.05	0.22	0.18	0.15	0.15
500	10	-38.23	-34.35	-22.24	-10.90	-5.51	-2.70	-1.18	-0.31	0.20

[a] A negative sign indicates compression.
Z/H1 = 0 indicates tables of stresses at the interface.
Z/H1 = 1 indicates tables of stresses at the surface.

TABLE 9

H1/A = 0.25 H2/A = 3.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.49	-0.37	-0.44	-0.38	-0.19	-0.12	-0.09	-0.06	-0.04
5	5	0.26	0.43	-0.34	-0.75	-0.38	-0.23	-0.16	-0.12	-0.09
10	5	1.57	1.59	-0.09	-1.14	-0.64	-0.36	-0.23	-0.17	-0.13
20	5	3.89	3.52	0.48	-1.54	-1.05	-0.59	-0.35	-0.24	-0.18
50	5	8.90	7.65	2.24	-1.70	-1.71	-1.14	-0.70	-0.44	-0.30
100	5	14.21	12.18	4.76	-1.05	-1.99	-1.67	-1.17	-0.78	-0.53
500	5	31.26	27.58	15.98	5.53	1.06	-0.84	-1.52	-1.63	-1.53
2	10	-0.56	-0.43	-0.51	-0.44	-0.25	-0.17	-0.13	-0.10	-0.08
5	10	0.16	0.33	-0.43	-0.84	-0.47	-0.31	-0.23	-0.18	-0.14
10	10	1.45	1.48	-0.20	-1.24	-0.74	-0.45	-0.32	-0.24	-0.20
20	10	3.79	3.42	0.38	-1.63	-1.14	-0.68	-0.44	-0.32	-0.25
50	10	8.88	7.62	2.21	-1.74	-1.76	-1.20	-0.76	-0.50	-0.37
100	10	14.35	12.32	4.88	-0.95	-1.91	-1.62	-1.14	-0.76	-0.53
500	10	32.32	28.61	16.97	6.46	1.90	-0.09	-0.87	-1.09	-1.07

H1/A = 0.25 H2/A = 3.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.36	-1.41	-0.69	-0.03	-0.09	-0.09	-0.07	-0.05	-0.04
5	5	-2.21	-2.27	-0.92	0.15	-0.05	-0.12	-0.11	-0.09	-0.07
10	5	-3.56	-3.47	-1.26	0.39	0.09	-0.09	-0.13	-0.11	-0.09
20	5	-5.88	-5.38	-1.91	0.66	0.39	0.05	-0.09	-0.11	-0.09
50	5	-10.78	-9.42	-3.70	0.71	0.96	0.53	0.19	0.03	-0.02
100	5	-15.97	-13.83	-6.18	0.02	1.19	1.02	0.64	0.34	0.18
500	5	-32.80	-28.89	-17.20	-6.48	-1.85	0.17	0.96	1.17	1.15
2	10	-1.45	-1.50	-0.77	-0.11	-0.16	-0.15	-0.12	-0.10	-0.07
5	10	-2.35	-2.42	-1.06	0.02	-0.17	-0.22	-0.21	-0.17	-0.13
10	10	-3.76	-3.66	-1.45	0.21	0.04	-0.24	-0.26	-0.22	-0.18
20	10	-6.15	-5.64	-2.15	0.43	0.18	-0.14	-0.25	-0.25	-0.21
50	10	-11.17	-9.80	-4.c	0.37	0.65	0.26	-0.04	-0.17	-0.19
100	10	-16.52	-14.37	-6.49	-0.45	0.76	0.64	0.31	0.07	-0.05
500	10	-34.03	-30.28	-18.54	-7.75	-3.01	-0.88	0.03	0.37	0.46

H1/A = 0.50 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.09	0.09	-0.18	-0.31	-0.19	-0.10	-0.06	-0.03	-0.02
5	5	1.48	1.30	0.36	-0.31	-0.30	-0.22	-0.16	-0.11	-0.08
10	5	3.13	2.72	1.16	-0.08	-0.30	-0.31	-0.27	-0.22	-0.18
20	5	5.22	4.58	2.39	0.52	-0.09	-0.30	-0.35	-0.34	-0.31
50	5	8.43	7.52	4.62	1.96	0.75	0.12	-0.21	-0.37	-0.44
100	5	11.00	9.95	6.65	3.52	1.88	0.90	0.29	-0.09	-0.32
500	5	16.81	15.58	11.79	8.01	5.70	4.09	2.91	2.02	1.34
2	10	0.07	0.07	-0.20	-0.33	-0.20	-0.12	-0.07	-0.04	-0.02
5	10	1.60	1.41	0.45	-0.25	-0.26	-0.20	-0.15	-0.11	-0.09
10	10	3.43	3.01	1.41	0.12	-0.08	-0.21	-0.21	-0.19	-0.17
20	10	5.78	5.12	2.88	0.93	0.23	-0.05	-0.18	-0.23	-0.25
50	10	9.41	8.48	5.52	2.76	1.44	0.69	0.24	-0.03	-0.20
100	10	12.30	11.22	7.87	4.64	2.88	1.77	1.03	0.53	0.17
500	10	18.62	17.38	13.55	9.71	7.32	5.62	4.33	3.34	2.54

H1/A = 0.50 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-2.02	-1.90	-1.03	-0.19	-0.06	0.00	0.04	0.06	0.07
5	5	-3.40	-3.09	-1.60	-0.31	-0.03	0.06	0.10	0.12	0.12
10	5	-4.90	-4.39	-2.46	-0.58	-0.07	0.11	0.17	0.20	0.20
20	5	-6.63	-5.92	-3.46	-1.16	-0.31	0.07	0.22	0.29	0.31
50	5	-9.49	-8.55	-5.49	-2.52	-1.13	-0.38	0.03	0.28	0.40
100	5	-11.83	-10.76	-7.37	-3.98	-2.21	-1.13	-0.47	-0.03	0.25
500	5	-17.28	-16.05	-12.23	-8.27	-5.90	-4.24	-3.04	-2.12	-1.41
2	10	-2.34	-2.21	-1.28	-0.39	-0.20	-0.09	-0.01	0.04	0.06
5	10	-3.81	-3.48	-1.99	-0.61	-0.26	-0.09	-0.00	0.06	0.10
10	10	-5.43	-4.90	-2.89	-1.02	-0.41	-0.13	0.02	0.10	0.15
20	10	-7.48	-6.75	-4.20	-1.79	-0.81	-0.32	-0.06	0.10	0.20
50	10	-10.68	-9.71	-6.57	-3.49	-1.96	-1.06	-0.51	-0.14	-0.06
100	10	-13.26	-12.17	-8.71	-5.22	-3.32	-2.10	-1.29	-0.70	-0.29
500	10	-19.13	-17.89	-14.03	-10.01	-7.55	-5.80	-4.50	-3.46	-2.64

TABLE 10

H1/A = 0.50 H2/A = 2.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.00	0.01	-0.25	-0.37	-0.23	-0.14	-0.09	-0.05	-0.03
5	5	1.15	0.99	0.12	-0.47	-0.39	-0.25	-0.16	-0.11	-0.07
10	5	2.51	2.16	0.71	-0.38	-0.47	-0.37	-0.26	-0.18	-0.13
20	5	4.29	3.71	1.67	0.01	-0.40	-0.44	-0.37	-0.29	-0.23
50	5	7.16	6.32	3.58	1.16	0.19	-0.21	-0.36	-0.38	-0.37
100	5	9.63	8.63	5.48	2.55	1.14	0.39	-0.02	-0.23	-0.34
500	5	15.75	14.54	10.81	7.13	4.94	3.46	2.40	1.64	1.06
2	10	-0.05	-0.04	-0.30	-0.42	-0.27	-0.17	-0.11	-0.08	-0.05
5	10	1.12	0.96	0.09	-0.50	-0.41	-0.28	-0.19	-0.13	-0.10
10	10	2.54	2.18	0.73	-0.37	-0.46	-0.37	-0.27	-0.19	-0.14
20	10	4.42	3.84	1.79	0.11	-0.32	-0.38	-0.33	-0.26	-0.21
50	10	7.53	6.68	3.92	1.47	0.46	0.02	-0.16	-0.23	-0.25
100	10	10.25	9.24	6.07	3.10	1.65	0.84	0.38	0.11	-0.06
500	10	17.06	15.84	12.09	8.37	6.13	4.59	3.47	2.63	1.97

H1/A = 0.50 H2/A = 2.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.00	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.65	-1.58	-0.81	-0.10	-0.07	-0.06	-0.04	-0.02	-0.01
5	5	-2.74	-2.50	-1.23	-0.13	-0.01	-0.03	-0.04	-0.03	-0.01
10	5	-3.99	-3.56	-1.81	-0.28	0.02	0.05	0.04	0.03	0.04
20	5	-5.61	-4.98	-2.72	-0.69	-0.09	0.09	0.11	0.12	0.11
50	5	-8.25	-7.38	-4.51	-1.80	-0.67	-0.16	0.07	0.18	0.23
100	5	-10.54	-9.53	-6.29	-3.12	-1.59	-0.74	-0.27	0.02	0.18
500	5	-16.31	-15.11	-11.35	-7.49	-5.23	-3.70	-2.62	-1.81	-1.20
2	10	-1.78	-1.70	-0.93	-0.21	-0.16	-0.14	-0.10	-0.07	-0.04
5	10	-2.68	-2.69	-1.41	-0.29	-0.15	-0.13	-0.12	-0.09	-0.06
10	10	-4.26	-3.83	-2.06	-0.50	-0.17	-0.11	-0.10	-0.07	-0.04
20	10	-5.99	-5.35	-3.07	-1.00	-0.36	-0.14	-0.08	-0.04	-0.01
50	10	-8.83	-7.95	-5.06	-2.30	-1.12	-0.55	-0.27	-0.10	-0.00
100	10	-11.34	-10.32	-7.05	-3.84	-2.24	-1.33	-0.75	-0.43	-0.20
500	10	-17.71	-16.50	-12.72	-8.82	-6.51	-4.91	-3.76	-2.87	-2.18

H1/A = 0.50 H2/A = 3.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.02	0.03	-0.24	-0.36	-0.23	-0.14	-0.09	-0.06	-0.05
5	5	1.11	0.96	0.09	-0.50	-0.41	-0.27	-0.18	-0.12	-0.08
10	5	2.37	2.02	0.60	-0.47	-0.53	-0.41	-0.29	-0.19	-0.14
20	5	4.00	3.44	1.43	-0.19	-0.54	-0.53	-0.42	-0.31	-0.23
50	5	6.63	5.81	3.12	0.77	-0.11	-0.43	-0.49	-0.45	-0.39
100	5	8.92	7.94	4.81	2.10	0.69	0.04	-0.27	-0.39	-0.42
500	5	14.87	13.67	9.99	6.36	4.25	2.86	1.89	1.22	0.73
2	10	-0.02	-0.01	-0.27	-0.40	-0.26	-0.17	-0.12	-0.09	-0.07
5	10	1.07	0.91	0.05	-0.54	-0.45	-0.31	-0.21	-0.15	-0.12
10	10	2.35	2.00	0.57	-0.50	-0.56	-0.44	-0.32	-0.22	-0.16
20	10	4.29	3.45	1.45	-0.18	-0.53	-0.53	-0.43	-0.32	-0.24
50	10	6.78	5.95	3.25	0.89	-0.01	-0.33	-0.41	-0.39	-0.34
100	10	9.28	8.30	5.19	2.26	0.93	0.27	-0.07	-0.21	-0.27
500	10	15.75	14.55	10.84	7.20	5.06	3.63	2.62	1.90	1.37

H1/A = 0.50 H2/A = 3.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.53	-1.46	-0.71	-0.04	-0.03	-0.05	-0.05	-0.04	-0.03
5	5	-2.54	-2.31	-1.07	-0.01	0.06	0.01	-0.03	-0.04	-0.04
10	5	-3.70	-3.16	-1.58	-0.11	0.13	0.10	0.03	0.00	-0.01
20	5	-5.19	-4.55	-2.38	-0.42	0.09	0.18	0.14	0.09	0.05
50	5	-7.64	-6.79	-3.98	-1.36	-0.35	0.01	0.18	0.21	0.19
100	5	-9.78	-8.80	-5.62	-2.63	-1.13	-0.41	-0.05	0.14	0.21
500	5	-15.46	-14.27	-10.55	-6.76	-4.58	-3.14	-2.15	-1.43	-0.91
2	10	-1.60	-1.53	-0.78	-0.10	-0.09	-0.10	-0.09	-0.08	-0.07
5	10	-2.65	-2.41	-1.18	-0.11	-0.03	-0.07	-0.10	-0.10	-0.09
10	10	-3.85	-3.43	-1.72	-0.16	0.10	-0.01	-0.06	-0.08	-0.09
20	10	-5.40	-4.78	-2.57	-0.61	-0.08	0.03	0.00	-0.02	-0.05
50	10	-7.96	-7.11	-4.29	-1.66	-0.62	-0.19	-0.04	0.02	0.03
100	10	-10.25	-9.26	-6.07	-2.98	-1.53	-0.77	-0.38	-0.16	-0.05
500	10	-16.45	-15.25	-11.52	-7.70	-5.39	-4.01	-2.97	-2.20	-1.64

TABLE 11

H1/A = 1.00 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.42	0.34	0.12	-0.05	-0.09	-0.08	-0.06	-0.05	-0.04
5	5	1.32	1.14	0.64	0.20	0.02	-0.04	-0.07	-0.08	-0.08
10	5	2.09	1.84	1.17	0.55	0.24	0.08	-0.00	-0.05	-0.08
20	5	2.87	2.57	1.77	1.00	0.57	0.32	0.17	0.06	-0.02
50	5	3.85	3.51	2.61	1.71	1.16	0.80	0.55	0.36	0.22
100	5	4.53	4.18	3.23	2.27	1.66	1.24	0.94	0.70	0.51
500	5	5.94	5.57	4.57	3.55	2.87	2.39	2.02	1.71	1.45
2	10	0.48	0.40	0.17	-0.01	-0.05	-0.05	-0.04	-0.04	-0.04
5	10	1.46	1.27	0.77	0.32	0.12	0.04	-0.00	-0.03	-0.04
10	10	2.31	2.06	1.38	0.74	0.41	0.23	0.12	0.05	0.00
20	10	3.18	2.88	2.07	1.28	0.83	0.55	0.37	0.23	0.13
50	10	4.25	3.92	3.00	2.09	1.51	1.14	0.86	0.65	0.48
100	10	4.98	4.63	3.67	2.70	2.07	1.64	1.32	1.06	0.84
500	10	6.44	6.08	5.07	4.05	3.36	2.87	2.49	2.16	1.89

H1/A = 1.00 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.64	-1.58	-0.92	-0.25	-0.13	-0.06	-0.01	0.01	0.03
5	5	-2.30	-2.17	-1.35	-0.51	-0.27	-0.12	-0.03	0.02	0.05
10	5	-2.89	-2.72	-1.79	-0.83	-0.47	-0.25	-0.11	-0.02	0.03
20	5	-3.52	-3.31	-2.30	-1.23	-0.78	-0.48	-0.33	-0.14	-0.04
50	5	-4.34	-4.11	-3.02	-1.86	-1.32	-0.93	-0.65	-0.44	-0.28
100	5	-4.95	-4.70	-3.58	-2.38	-1.79	-1.35	-1.02	-0.77	-0.57
500	5	-6.27	-6.01	-4.86	-3.60	-2.96	-2.46	-2.06	-1.75	-1.48
2	10	-1.82	-1.75	-1.08	-0.39	-0.24	-0.15	-0.08	-0.03	-0.00
5	10	-2.55	-2.41	-1.58	-0.71	-0.44	-0.26	-0.15	-0.07	-0.02
10	10	-3.25	-3.07	-2.13	-1.14	-0.71	-0.45	-0.28	-0.16	-0.08
20	10	-3.88	-3.67	-2.65	-1.56	-1.08	-0.75	-0.52	-0.35	-0.22
50	10	-4.78	-4.54	-3.44	-2.27	-1.70	-1.29	-0.98	-0.74	-0.55
100	10	-5.42	-5.17	-4.04	-2.82	-2.22	-1.76	-1.41	-1.13	-0.91
500	10	-6.78	-6.52	-5.36	-4.10	-3.45	-2.94	-2.54	-2.21	-1.93

H1/A = 1.00 H2/A = 2.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.30	0.23	0.02	-0.14	-0.15	-0.11	-0.08	-0.06	-0.04
5	5	1.08	0.91	0.44	0.04	-0.10	-0.12	-0.11	-0.10	-0.08
10	5	1.78	1.55	0.91	0.33	0.07	-0.04	-0.08	-0.09	-0.10
20	5	2.53	2.25	1.47	0.75	0.36	0.16	0.05	-0.02	-0.06
50	5	3.53	3.21	2.32	1.45	0.93	0.61	0.40	0.25	0.14
100	5	4.27	3.92	2.98	2.04	1.45	1.07	0.79	0.58	0.42
500	5	5.82	5.45	4.45	3.44	2.77	2.29	1.93	1.63	1.38
2	10	0.29	0.22	0.01	-0.14	-0.15	-0.12	-0.09	-0.06	-0.05
5	10	1.11	0.94	0.47	0.07	-0.05	-0.10	-0.09	-0.08	-0.07
10	10	1.87	1.63	0.99	0.40	0.13	0.02	-0.03	-0.05	-0.06
20	10	2.68	2.39	1.62	0.98	0.49	0.28	0.16	0.07	0.02
50	10	3.79	3.46	2.57	1.69	1.16	0.83	0.61	0.44	0.31
100	10	4.60	4.25	3.31	2.36	1.76	1.37	1.08	0.85	0.67
500	10	6.27	5.91	4.91	3.89	3.21	2.73	2.36	2.04	1.79

H1/A = 1.00 H2/A = 2.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.45	-1.40	-0.80	-0.18	-0.09	-0.06	-0.04	-0.02	-0.01
5	5	-2.07	-1.95	-1.17	-0.39	-0.20	-0.10	-0.05	-0.03	-0.01
10	5	-2.64	-2.47	-1.58	-0.67	-0.38	-0.20	-0.11	-0.05	0.01
20	5	-3.22	-3.03	-2.04	-1.02	-0.62	-0.37	-0.21	-0.11	-0.04
50	5	-4.08	-3.85	-2.79	-1.65	-1.14	-0.79	-0.54	-0.36	-0.23
100	5	-4.73	-4.49	-3.38	-2.20	-1.63	-1.21	-0.91	-0.68	-0.50
500	5	-6.17	-5.91	-4.76	-3.51	-2.87	-2.38	-1.99	-1.68	-1.43
2	10	-1.54	-1.49	-0.87	-0.24	-0.16	-0.11	-0.09	-0.06	-0.05
5	10	-2.18	-2.06	-1.28	-0.49	-0.29	-0.17	-0.11	-0.08	-0.05
10	10	-2.78	-2.62	-1.72	-0.80	-0.49	-0.30	-0.19	-0.12	-0.08
20	10	-3.45	-3.25	-2.26	-1.22	-0.82	-0.54	-0.37	-0.25	-0.17
50	10	-4.39	-4.16	-3.08	-1.94	-1.42	-1.05	-0.79	-0.59	-0.44
100	10	-5.10	-4.86	-3.74	-2.55	-1.97	-1.54	-1.22	-0.98	-0.78
500	10	-6.64	-6.38	-5.23	-3.97	-3.32	-2.82	-2.43	-2.11	-1.84

TABLE 12

H1/A = 1.00 H2/A = 3.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.28	0.20	-0.00	-0.16	-0.16	-0.13	-0.09	-0.07	-0.05
5	5	1.01	0.84	0.38	-0.01	-0.14	-0.16	-0.14	-0.12	-0.09
10	5	1.66	1.43	0.80	0.23	-0.02	-0.11	-0.13	-0.13	-0.12
20	5	2.36	2.08	1.32	0.61	0.24	0.06	-0.03	-0.08	-0.10
50	5	3.33	3.00	2.12	1.27	0.77	0.47	0.28	0.15	0.06
100	5	4.06	3.71	2.78	1.85	1.28	0.91	0.65	0.46	0.32
500	5	5.68	5.31	4.32	3.31	2.64	2.17	1.82	1.52	1.28
2	10	0.26	0.19	-0.02	-0.17	-0.18	-0.14	-0.10	-0.08	-0.06
5	10	1.01	0.84	0.38	-0.01	-0.14	-0.16	-0.14	-0.12	-0.10
10	10	1.69	1.46	0.83	0.26	0.01	-0.08	-0.11	-0.11	-0.11
20	10	2.46	2.17	1.41	0.69	0.32	0.12	0.02	-0.03	-0.06
50	10	3.48	3.16	2.27	1.41	0.91	0.60	0.41	0.27	0.17
100	10	4.34	3.99	3.05	2.12	1.54	1.16	0.90	0.70	0.50
500	10	6.07	5.70	4.71	3.69	3.02	2.55	2.19	1.89	1.64

H1/A = 1.00 H2/A = 3.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.38	-1.33	-0.72	-0.12	-0.06	-0.03	-0.03	-0.02	-0.02
5	5	-1.94	-1.83	-1.06	-0.29	-0.12	-0.04	-0.01	-0.00	-0.00
10	5	-2.46	-2.30	-1.43	-0.53	-0.26	-0.11	-0.04	-0.01	0.01
20	5	-3.05	-2.85	-1.88	-0.88	-0.50	-0.27	-0.14	-0.06	-0.01
50	5	-3.88	-3.66	-2.60	-1.48	-1.00	-0.66	-0.44	-0.28	-0.17
100	5	-4.54	-4.30	-3.20	-2.03	-1.47	-1.07	-0.79	-0.58	-0.42
500	5	-6.05	-5.79	-4.64	-3.39	-2.76	-2.27	-1.90	-1.60	-1.35
2	10	-1.43	-1.38	-0.77	-0.16	-0.10	-0.07	-0.06	-0.06	-0.05
5	10	-2.02	-1.91	-1.14	-0.37	-0.20	-0.11	-0.08	-0.06	-0.05
10	10	-2.57	-2.42	-1.54	-0.64	-0.36	-0.21	-0.13	-0.09	-0.06
20	10	-3.19	-3.00	-2.02	-1.01	-0.65	-0.41	-0.27	-0.18	-0.12
50	10	-4.12	-3.90	-2.84	-1.72	-1.22	-0.88	-0.64	-0.48	-0.36
100	10	-4.81	-4.57	-3.47	-2.29	-1.73	-1.32	-1.03	-0.81	-0.64
500	10	-6.46	-6.20	-5.05	-3.80	-3.16	-2.67	-2.29	-1.98	-1.72

H1/A = 1.50 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.37	0.32	0.19	0.06	0.00	-0.02	-0.03	-0.03	-0.03
5	5	0.91	0.81	0.55	0.31	0.15	0.07	0.03	0.01	-0.00
10	5	1.35	1.22	0.90	0.50	0.33	0.21	0.13	0.07	0.03
20	5	1.70	1.55	1.19	0.82	0.56	0.39	0.28	0.19	0.13
50	5	2.15	1.99	1.59	1.18	0.88	0.68	0.53	0.42	0.33
100	5	2.49	2.32	1.92	1.49	1.17	0.95	0.75	0.62	0.51
500	5	3.05	2.89	2.47	2.02	1.69	1.45	1.27	1.13	1.00
2	10	0.43	0.37	0.24	0.11	0.04	0.02	0.01	0.00	-0.01
5	10	1.02	0.91	0.66	0.40	0.24	0.15	0.10	0.06	0.03
10	10	1.46	1.33	1.01	0.68	0.46	0.32	0.23	0.16	0.11
20	10	1.88	1.73	1.36	0.98	0.72	0.54	0.42	0.33	0.25
50	10	2.40	2.24	1.79	1.38	1.07	0.86	0.71	0.59	0.49
100	10	2.66	2.50	2.09	1.65	1.33	1.11	0.95	0.81	0.70
500	10	3.28	3.11	2.69	2.25	1.91	1.67	1.50	1.35	1.22

H1/A = 1.50 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.39	-1.37	-0.80	-0.23	-0.15	-0.10	-0.05	-0.03	-0.01
5	5	-1.74	-1.70	-1.08	-0.43	-0.30	-0.19	-0.12	-0.07	-0.03
10	5	-2.03	-1.97	-1.32	-0.64	-0.46	-0.32	-0.22	-0.14	-0.08
20	5	-2.32	-2.25	-1.58	-0.87	-0.66	-0.49	-0.36	-0.26	-0.18
50	5	-2.69	-2.62	-1.93	-1.18	-0.95	-0.75	-0.60	-0.47	-0.37
100	5	-3.00	-2.92	-2.23	-1.47	-1.23	-0.97	-0.80	-0.66	-0.55
500	5	-3.53	-3.45	-2.74	-1.98	-1.72	-1.50	-1.31	-1.16	-1.03
2	10	-1.50	-1.48	-0.91	-0.32	-0.24	-0.17	-0.11	-0.07	-0.04
5	10	-1.89	-1.84	-1.22	-0.56	-0.42	-0.30	-0.21	-0.15	-0.10
10	10	-2.20	-2.14	-1.49	-0.79	-0.61	-0.46	-0.34	-0.25	-0.18
20	10	-2.51	-2.45	-1.77	-1.05	-0.83	-0.65	-0.51	-0.40	-0.31
50	10	-2.90	-2.83	-2.14	-1.39	-1.15	-0.95	-0.78	-0.65	-0.54
100	10	-3.17	-3.10	-2.40	-1.64	-1.39	-1.18	-1.00	-0.86	-0.74
500	10	-3.76	-3.68	-2.97	-2.21	-1.95	-1.72	-1.53	-1.38	-1.24

TABLE 13

H1/A = 1.50 H2/A = 2.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.27	0.22	0.10	-0.01	-0.06	-0.06	-0.06	-0.05	-0.04
5	5	0.77	0.67	0.43	0.20	0.06	-0.00	-0.02	-0.04	-0.04
10	5	1.18	1.06	0.75	0.44	0.25	0.14	0.06	0.02	-0.00
20	5	1.55	1.41	1.05	0.69	0.45	0.30	0.20	0.13	0.08
50	5	2.03	1.87	1.48	1.07	0.78	0.59	0.46	0.36	0.28
100	5	2.36	2.20	1.79	1.36	1.05	0.84	0.69	0.57	0.47
500	5	3.02	2.85	2.43	1.99	1.66	1.42	1.25	1.10	0.98
2	10	0.28	0.23	0.11	-0.00	-0.05	-0.06	-0.05	-0.04	-0.03
5	10	0.82	0.72	0.48	0.24	0.11	0.04	0.02	0.00	-0.01
10	10	1.24	1.11	0.80	0.49	0.29	0.18	0.12	0.07	0.04
20	10	1.66	1.52	1.16	0.80	0.55	0.39	0.29	0.22	0.16
50	10	2.19	2.03	1.64	1.23	0.93	0.74	0.60	0.49	0.41
100	10	2.54	2.38	1.97	1.54	1.23	1.02	0.86	0.73	0.63
500	10	3.24	3.07	2.65	2.20	1.87	1.64	1.46	1.31	1.19

H1/A = 1.50 H2/A = 2.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.29	-1.27	-0.72	-0.16	-0.11	-0.08	-0.05	-0.03	-0.02
5	5	-1.62	-1.58	-0.98	-0.35	-0.24	-0.15	-0.10	-0.06	-0.03
10	5	-1.91	-1.85	-1.22	-0.54	-0.39	-0.26	-0.18	-0.12	-0.07
20	5	-2.21	-2.14	-1.48	-0.77	-0.58	-0.43	-0.31	-0.22	-0.16
50	5	-2.60	-2.53	-1.84	-1.11	-0.88	-0.70	-0.55	-0.43	-0.34
100	5	-2.89	-2.81	-2.12	-1.37	-1.13	-0.92	-0.76	-0.63	-0.52
500	5	-3.50	-3.42	-2.72	-1.96	-1.70	-1.48	-1.29	-1.14	-1.01
2	10	-1.35	-1.33	-0.78	-0.22	-0.16	-0.12	-0.09	-0.07	-0.05
5	10	-1.71	-1.67	-1.06	-0.43	-0.31	-0.22	-0.16	-0.11	-0.08
10	10	-2.02	-1.97	-1.32	-0.65	-0.49	-0.36	-0.26	-0.20	-0.15
20	10	-2.35	-2.28	-1.62	-0.91	-0.71	-0.55	-0.42	-0.33	-0.26
50	10	-2.78	-2.70	-2.02	-1.28	-1.05	-0.86	-0.70	-0.58	-0.48
100	10	-3.08	-3.01	-2.31	-1.56	-1.32	-1.11	-0.94	-0.80	-0.69
500	10	-3.72	-3.64	-2.94	-2.18	-1.92	-1.69	-1.51	-1.35	-1.22

H1/A = 1.50 H2/A = 3.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.24	0.19	0.07	-0.03	-0.08	-0.08	-0.07	-0.06	-0.05
5	5	0.71	0.61	0.40	0.15	0.02	-0.04	-0.05	-0.06	-0.06
10	5	1.09	0.96	0.66	0.36	0.17	0.06	0.01	-0.02	-0.02
20	5	1.46	1.32	0.97	0.61	0.37	0.23	0.14	0.08	0.04
50	5	1.94	1.79	1.40	0.99	0.71	0.52	0.40	0.30	0.23
100	5	2.28	2.12	1.72	1.29	0.98	0.76	0.63	0.51	0.42
500	5	2.98	2.81	2.40	1.95	1.62	1.39	1.22	1.07	0.95
2	10	0.24	0.19	0.07	-0.03	-0.08	-0.08	-0.07	-0.06	-0.05
5	10	0.74	0.64	0.40	0.16	0.03	-0.02	-0.04	-0.05	-0.05
10	10	1.13	1.00	0.70	0.39	0.21	0.11	0.05	0.01	-0.01
20	10	1.54	1.40	1.05	0.69	0.44	0.30	0.21	0.15	0.10
50	10	2.06	1.90	1.51	1.10	0.82	0.63	0.50	0.40	0.32
100	10	2.43	2.27	1.86	1.44	1.12	0.92	0.77	0.65	0.55
500	10	3.19	3.02	2.60	2.15	1.82	1.59	1.41	1.27	1.14

H1/A = 1.50 H2/A = 3.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.24	-1.22	-0.68	-0.13	-0.08	-0.06	-0.04	-0.03	-0.02
5	5	-1.56	-1.52	-0.92	-0.30	-0.20	-0.12	-0.07	-0.04	-0.03
10	5	-1.83	-1.78	-1.14	-0.48	-0.33	-0.22	-0.14	-0.09	-0.05
20	5	-2.13	-2.06	-1.40	-0.70	-0.52	-0.37	-0.26	-0.18	-0.13
50	5	-2.52	-2.45	-1.77	-1.04	-0.82	-0.64	-0.49	-0.38	-0.30
100	5	-2.82	-2.75	-2.05	-1.31	-1.07	-0.87	-0.71	-0.58	-0.48
500	5	-3.47	-3.39	-2.69	-1.93	-1.67	-1.45	-1.26	-1.11	-0.99
2	10	-1.28	-1.26	-0.72	-0.16	-0.12	-0.09	-0.07	-0.05	-0.04
5	10	-1.62	-1.58	-0.98	-0.36	-0.25	-0.17	-0.12	-0.09	-0.07
10	10	-1.92	-1.87	-1.23	-0.56	-0.41	-0.30	-0.22	-0.16	-0.12
20	10	-2.25	-2.18	-1.52	-0.80	-0.61	-0.46	-0.35	-0.27	-0.20
50	10	-2.66	-2.59	-1.91	-1.17	-0.95	-0.76	-0.62	-0.50	-0.41
100	10	-2.99	-2.91	-2.22	-1.47	-1.23	-1.03	-0.86	-0.73	-0.62
500	10	-3.68	-3.60	-2.89	-2.13	-1.87	-1.65	-1.47	-1.31	-1.18

TABLE 14

H1/A = 2.00 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.29	0.26	0.18	0.10	0.05	0.02	0.00	-0.01	-0.01
5	5	0.63	0.58	0.44	0.30	0.19	0.11	0.07	0.04	0.02
10	5	0.88	0.81	0.65	0.46	0.32	0.22	0.16	0.11	0.08
20	5	1.10	1.02	0.84	0.63	0.47	0.35	0.27	0.21	0.16
50	5	1.35	1.27	1.07	0.85	0.66	0.53	0.44	0.36	0.31
100	5	1.51	1.43	1.23	1.00	0.81	0.67	0.57	0.49	0.42
500	5	1.85	1.77	1.56	1.32	1.13	0.98	0.87	0.79	0.72
2	10	0.34	0.30	0.23	0.15	0.09	0.05	0.03	0.02	0.01
5	10	0.71	0.65	0.52	0.37	0.25	0.18	0.13	0.09	0.07
10	10	0.98	0.91	0.74	0.56	0.41	0.31	0.24	0.19	0.15
20	10	1.21	1.14	0.95	0.74	0.57	0.45	0.37	0.30	0.25
50	10	1.47	1.39	1.19	0.97	0.78	0.65	0.55	0.47	0.41
100	10	1.64	1.56	1.35	1.12	0.93	0.79	0.69	0.61	0.54
500	10	1.98	1.90	1.69	1.45	1.25	1.11	1.00	0.91	0.84

H1/A = 2.00 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.26	-1.26	-0.73	-0.18	-0.14	-0.10	-0.07	-0.05	-0.03
5	5	-1.47	-1.45	-0.90	-0.33	-0.26	-0.20	-0.14	-0.10	-0.07
10	5	-1.64	-1.61	-1.05	-0.47	-0.38	-0.29	-0.22	-0.17	-0.12
20	5	-1.80	-1.77	-1.20	-0.61	-0.50	-0.41	-0.33	-0.26	-0.20
50	5	-2.00	-1.97	-1.40	-0.79	-0.68	-0.57	-0.48	-0.40	-0.34
100	5	-2.15	-2.12	-1.54	-0.93	-0.81	-0.70	-0.61	-0.52	-0.45
500	5	-2.46	-2.44	-1.85	-1.23	-1.12	-1.01	-0.90	-0.81	-0.74
2	10	-1.33	-1.32	-0.79	-0.25	-0.20	-0.16	-0.12	-0.09	-0.06
5	10	-1.56	-1.54	-0.99	-0.42	-0.34	-0.27	-0.21	-0.16	-0.12
10	10	-1.74	-1.72	-1.16	-0.57	-0.47	-0.39	-0.31	-0.25	-0.20
20	10	-1.94	-1.91	-1.34	-0.74	-0.61	-0.51	-0.43	-0.36	-0.30
50	10	-2.12	-2.10	-1.52	-0.91	-0.80	-0.69	-0.60	-0.51	-0.45
100	10	-2.27	-2.24	-1.67	-1.06	-0.94	-0.83	-0.73	-0.64	-0.57
500	10	-2.59	-2.56	-1.98	-1.37	-1.25	-1.13	-1.03	-0.94	-0.86

H1/A = 2.00 H2/A = 2.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.21	0.18	0.12	0.04	-0.00	-0.02	-0.03	-0.03	-0.02
5	5	0.54	0.49	0.36	0.22	0.12	0.06	0.03	0.01	-0.00
10	5	0.79	0.72	0.56	0.39	0.25	0.16	0.11	0.07	0.05
20	5	1.02	0.95	0.77	0.57	0.41	0.30	0.22	0.17	0.13
50	5	1.29	1.21	1.02	0.80	0.62	0.49	0.40	0.33	0.28
100	5	1.47	1.39	1.19	0.96	0.77	0.64	0.54	0.46	0.40
500	5	1.84	1.75	1.55	1.31	1.11	0.97	0.86	0.78	0.71
2	10	0.23	0.20	0.13	0.06	0.01	-0.01	-0.01	-0.02	-0.02
5	10	0.58	0.53	0.40	0.26	0.16	0.09	0.06	0.04	0.03
10	10	0.86	0.79	0.63	0.45	0.32	0.23	0.17	0.13	0.10
20	10	1.10	1.03	0.85	0.64	0.48	0.37	0.29	0.24	0.20
50	10	1.40	1.32	1.12	0.90	0.72	0.59	0.50	0.42	0.37
100	10	1.59	1.51	1.30	1.08	0.89	0.75	0.65	0.57	0.51
500	10	1.96	1.88	1.67	1.44	1.24	1.09	0.99	0.90	0.83

H1/A = 2.00 H2/A = 2.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.20	-1.19	-0.67	-0.14	-0.11	-0.08	-0.06	-0.04	-0.03
5	5	-1.40	-1.38	-0.84	-0.28	-0.22	-0.16	-0.12	-0.08	-0.06
10	5	-1.57	-1.55	-0.99	-0.41	-0.33	-0.26	-0.20	-0.15	-0.11
20	5	-1.74	-1.72	-1.15	-0.56	-0.46	-0.37	-0.30	-0.23	-0.18
50	5	-1.96	-1.94	-1.36	-0.76	-0.65	-0.55	-0.46	-0.38	-0.32
100	5	-2.12	-2.09	-1.51	-0.91	-0.79	-0.68	-0.59	-0.51	-0.44
500	5	-2.46	-2.43	-1.85	-1.23	-1.11	-1.00	-0.89	-0.81	-0.73
2	10	-1.24	-1.23	-0.71	-0.18	-0.15	-0.12	-0.09	-0.07	-0.06
5	10	-1.46	-1.45	-0.90	-0.34	-0.28	-0.22	-0.18	-0.14	-0.11
10	10	-1.66	-1.64	-1.08	-0.50	-0.42	-0.34	-0.28	-0.22	-0.18
20	10	-1.84	-1.81	-1.24	-0.65	-0.55	-0.46	-0.38	-0.31	-0.26
50	10	-2.07	-2.04	-1.47	-0.87	-0.75	-0.65	-0.56	-0.48	-0.42
100	10	-2.24	-2.21	-1.63	-1.02	-0.91	-0.80	-0.70	-0.62	-0.54
500	10	-2.58	-2.55	-1.97	-1.36	-1.24	-1.12	-1.02	-0.93	-0.85

TABLE 15

H1/A = 2.00 H2/A = 3.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.19	0.16	0.09	0.02	-0.02	-0.04	-0.04	-0.04	-0.03
5	5	0.51	0.45	0.33	0.19	0.09	0.04	0.01	-0.01	-0.01
10	5	0.74	0.68	0.52	0.34	0.21	0.13	0.08	0.04	0.02
20	5	0.97	0.90	0.72	0.52	0.36	0.25	0.18	0.14	0.10
50	5	1.25	1.17	0.98	0.76	0.58	0.45	0.36	0.30	0.25
100	5	1.44	1.36	1.16	0.93	0.74	0.61	0.51	0.44	0.38
500	5	1.82	1.74	1.53	1.30	1.10	0.96	0.85	0.77	0.69
2	10	0.19	0.16	0.09	0.02	-0.02	-0.04	-0.04	-0.04	-0.03
5	10	0.52	0.47	0.34	0.21	0.11	0.05	0.02	0.01	-0.00
10	10	0.78	0.72	0.56	0.38	0.25	0.16	0.11	0.08	0.06
20	10	1.02	0.95	0.77	0.57	0.41	0.31	0.23	0.18	0.15
50	10	1.33	1.25	1.06	0.84	0.66	0.53	0.44	0.37	0.32
100	10	1.54	1.46	1.26	1.03	0.84	0.70	0.61	0.53	0.47
500	10	1.94	1.86	1.65	1.42	1.22	1.08	0.97	0.88	0.81

H1/A = 2.00 H2/A = 3.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.16	-1.16	-0.64	-0.11	-0.09	-0.06	-0.05	-0.03	-0.03
5	5	-1.36	-1.35	-0.81	-0.25	-0.19	-0.14	-0.10	-0.07	-0.05
10	5	-1.53	-1.51	-0.96	-0.38	-0.30	-0.23	-0.18	-0.13	-0.10
20	5	-1.71	-1.69	-1.12	-0.53	-0.44	-0.35	-0.28	-0.22	-0.18
50	5	-1.93	-1.90	-1.33	-0.73	-0.62	-0.52	-0.43	-0.36	-0.30
100	5	-2.09	-2.06	-1.49	-0.88	-0.77	-0.66	-0.56	-0.48	-0.42
500	5	-2.44	-2.41	-1.83	-1.22	-1.10	-0.99	-0.88	-0.80	-0.72
2	10	-1.20	-1.19	-0.67	-0.15	-0.12	-0.09	-0.07	-0.06	-0.05
5	10	-1.41	-1.40	-0.85	-0.30	-0.24	-0.19	-0.14	-0.11	-0.09
10	10	-1.58	-1.56	-1.01	-0.43	-0.35	-0.28	-0.22	-0.17	-0.14
20	10	-1.77	-1.75	-1.18	-0.59	-0.50	-0.41	-0.33	-0.27	-0.22
50	10	-2.01	-1.99	-1.42	-0.82	-0.71	-0.60	-0.52	-0.44	-0.38
100	10	-2.20	-2.17	-1.59	-0.98	-0.87	-0.76	-0.66	-0.58	-0.51
500	10	-2.57	-2.54	-1.96	-1.34	-1.22	-1.11	-1.00	-0.92	-0.84

Appendix B

RATIO OF RADIAL STRESS TO SURFACE PRESSURE—POISSON'S RATIO EQUAL TO 0.4 IN ALL THREE LAYERS[a]

TABLE 16

H1/A = 0.25 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.72	-0.57	-0.53	-0.36	-0.14	-0.04	-0.01	0.02	0.03
5	5	-0.00	0.17	-0.43	-0.69	-0.32	-0.15	-0.07	-0.03	-0.00
10	5	1.43	1.45	-0.09	-1.00	-0.56	-0.31	-0.18	-0.11	-0.07
20	5	4.08	3.69	0.75	-1.27	-0.93	-0.59	-0.39	-0.27	-0.19
50	5	9.96	8.63	3.11	-1.05	-1.45	-1.20	-0.92	-0.71	-0.55
100	5	16.22	14.07	6.37	0.13	-1.42	-1.64	-1.50	-1.28	-1.07
500	5	35.13	31.31	19.35	8.33	3.03	0.24	-1.25	-2.00	-2.34
2	10	-0.89	-0.73	-0.66	-0.46	-0.20	-0.08	-0.02	0.02	0.04
5	10	-0.12	0.06	-0.54	-0.78	-0.39	-0.20	-0.10	-0.04	-0.01
10	10	1.48	1.49	-0.08	-1.03	-0.60	-0.35	-0.22	-0.14	-0.09
20	10	4.46	4.03	0.98	-1.12	-0.88	-0.59	-0.42	-0.31	-0.24
50	10	11.12	9.72	4.00	-0.41	-1.06	-1.00	-0.85	-0.72	-0.62
100	10	18.27	16.00	8.04	1.43	-0.50	-1.06	-1.18	-1.16	-1.09
500	10	39.80	35.86	23.58	12.08	6.21	2.83	0.76	-0.52	-1.33

H1/A = 0.25 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.79	-1.74	-0.91	-0.16	-0.04	0.04	0.07	0.08	0.08
5	5	-2.95	-2.86	-1.36	-0.06	0.01	0.07	0.11	0.12	0.12
10	5	-4.55	-4.32	-1.84	0.08	0.14	0.16	0.18	0.18	0.18
20	5	-7.19	-6.50	-2.74	0.20	0.40	0.36	0.34	0.31	0.28
50	5	-12.76	-11.19	-5.08	-0.14	0.79	0.87	0.79	0.70	0.60
100	5	-18.67	-16.30	-8.19	-1.33	0.70	1.24	1.30	1.21	1.07
500	5	-36.57	-32.67	-20.61	-9.30	-3.73	-0.74	0.91	1.78	2.20
2	10	-2.20	-2.12	-1.21	-0.35	-0.16	-0.02	0.05	0.09	0.11
5	10	-3.57	-3.43	-1.78	-0.37	-0.19	-0.03	0.07	0.13	0.15
10	10	-5.38	-5.05	-2.46	-0.35	-0.13	0.01	0.12	0.18	0.20
20	10	-8.35	-7.58	-3.62	-0.43	0.01	0.14	0.23	0.29	0.32
50	10	-14.63	-12.94	-6.55	-1.25	0.05	0.42	0.56	0.62	0.64
100	10	-21.31	-18.82	-10.38	-3.06	-0.56	0.41	0.82	0.99	1.04
500	10	-41.53	-37.50	-25.10	-13.29	-7.11	-3.49	-1.24	0.19	1.10

H1/A = 0.25 H2/A = 2.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.61	-0.48	-0.48	-0.37	-0.17	-0.09	-0.06	-0.03	-0.01
5	5	-0.07	0.11	-0.48	-0.74	-0.36	-0.20	-0.12	-0.07	-0.04
10	5	1.03	1.10	-0.31	-1.12	-0.60	-0.32	-0.20	-0.13	-0.09
20	5	3.14	2.86	0.18	-1.53	-0.99	-0.55	-0.33	-0.22	-0.15
50	5	7.91	6.79	1.79	-1.75	-1.65	-1.09	-0.69	-0.45	-0.33
100	5	13.11	11.22	4.21	-1.18	-1.96	-1.63	-1.19	-0.84	-0.62
500	5	30.05	26.49	15.22	5.17	0.91	-0.94	-1.66	-1.86	-1.83
2	10	-0.72	-0.58	-0.58	-0.46	-0.25	-0.16	-0.10	-0.06	-0.03
5	10	-0.20	-0.02	-0.60	-0.84	-0.45	-0.28	-0.19	-0.12	-0.08
10	10	0.92	0.99	-0.43	-1.23	-0.70	-0.41	-0.27	-0.19	-0.14
20	10	3.08	2.80	0.11	-1.60	-1.06	-0.62	-0.39	-0.28	-0.21
50	10	8.06	6.93	1.91	-1.66	-1.60	-1.08	-0.69	-0.48	-0.36
100	10	13.58	11.67	4.61	-0.84	-1.70	-1.45	-1.07	-0.77	-0.59
500	10	32.04	28.43	17.06	6.85	2.39	0.32	-0.62	-1.03	-1.19

H1/A = 0.25 H2/A = 2.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.34	-1.36	-0.69	-0.10	-0.11	-0.07	-0.05	-0.02	0.01
5	5	-2.23	-2.25	-0.98	0.02	-0.09	-0.11	-0.07	-0.03	0.00
10	5	-3.52	-3.40	-1.33	0.22	0.01	-0.09	-0.07	-0.03	0.00
20	5	-5.69	-5.21	-1.95	0.45	0.27	0.06	-0.01	-0.00	0.02
50	5	-10.32	-9.02	-3.60	0.53	0.80	0.49	0.26	0.15	0.15
100	5	-15.33	-13.27	-5.96	-0.09	1.06	0.99	0.73	0.53	0.41
500	5	-31.61	-27.97	-16.63	-6.31	-1.80	0.25	1.13	1.46	1.53
2	10	-1.49	-1.51	-0.83	-0.23	-0.21	-0.16	-0.10	-0.06	-0.02
5	10	-2.50	-2.50	-1.19	-0.17	-0.25	-0.22	-0.16	-0.10	-0.05
10	10	-3.84	-3.71	-1.61	-0.03	-0.10	-0.24	-0.19	-0.13	-0.07
20	10	-6.11	-5.61	-2.31	0.14	0.02	-0.16	-0.18	-0.13	-0.07
50	10	-10.97	-9.65	-4.17	0.04	0.41	0.19	0.03	-0.01	0.01
100	10	-16.27	-14.19	-6.81	-0.82	0.45	0.50	0.35	0.25	0.10
500	10	-33.96	-30.27	-18.82	-8.32	-3.58	-1.28	-0.15	0.43	0.72

[a] A negative sign indicates compression.
Z/H1 = 0 indicates tables of stresses at the interface.
Z/H1 = 1 indicates tables of stresses at the surface.

TABLE 17

H1/A = 0.25 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.41	-0.41	-0.43	-0.33	-0.16	-0.10	-0.07	-0.05	-0.03
5	5	-0.80	-0.81	-0.83	-0.70	-0.34	-0.20	-0.13	-0.08	-0.07
10	5	1.0	1.01	-0.70	-1.11	-0.60	-0.33	-0.21	-0.15	-0.11
20	5	3.03	2.98	0.01	-1.58	-1.02	-0.56	-0.34	-0.23	-0.17
50	5	7.47	6.98	1.41	-1.99	-1.73	-1.16	-0.70	-0.44	-0.30
100	5	12.29	10.42	2.54	-1.68	-2.27	-1.79	-1.22	-0.80	-0.54
500	5	27.79	24.21	13.26	3.54	-0.35	-1.80	-2.17	-2.07	-1.91
2	10	-0.59	-0.47	-0.48	-0.38	-0.21	-0.14	-0.10	-0.08	-0.06
5	10	-0.09	0.08	-0.51	-0.78	-0.42	-0.27	-0.19	-0.15	-0.11
10	10	0.94	1.02	-0.40	-1.20	-0.69	-0.41	-0.28	-0.22	-0.17
20	10	2.93	2.66	-0.00	-1.68	-1.11	-0.65	-0.42	-0.30	-0.24
50	10	7.45	6.36	1.43	-2.02	-1.82	-1.20	-0.74	-0.48	-0.35
100	10	12.40	10.52	3.63	-1.60	-2.21	-1.75	-1.20	-0.80	-0.55
500	10	28.67	25.17	14.09	4.48	0.35	-1.19	-1.64	-1.62	-1.45

H1/A = 0.25 H2/A = 3.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.20	-1.23	-0.59	-0.03	-0.07	-0.07	-0.06	-0.04	-0.03
5	5	-2.01	-2.04	-0.82	0.13	-0.04	-0.09	-0.09	-0.07	-0.05
10	5	-3.22	-3.12	-1.10	0.36	0.09	-0.07	-0.10	-0.09	-0.07
20	5	-5.26	-4.80	-1.62	0.67	0.39	0.07	-0.05	-0.08	-0.07
50	5	-9.60	-8.35	-3.05	0.91	1.02	0.57	0.23	0.06	0.00
100	5	-14.25	-12.25	-5.11	0.53	1.43	1.14	0.71	0.39	0.21
500	5	-29.25	-25.69	-14.60	-4.63	-0.52	1.09	1.59	1.59	1.42
2	10	-1.28	-1.14	-0.67	-0.10	-0.13	-0.12	-0.10	-0.08	-0.06
5	10	-2.15	-2.17	-0.94	0.01	-0.14	-0.19	-0.17	-0.14	-0.11
10	10	-3.40	-3.29	-1.27	0.21	0.06	-0.19	-0.21	-0.18	-0.15
20	10	-5.49	-5.03	-1.83	0.47	0.21	-0.09	-0.19	-0.20	-0.17
50	10	-9.93	-8.67	-3.36	0.63	0.77	0.34	0.04	-0.10	-0.14
100	10	-14.70	-12.70	-5.54	0.14	1.08	0.83	0.44	0.17	0.02
500	10	-30.45	-26.87	-15.74	-5.70	-1.51	0.21	0.82	0.93	0.86

H1/A = 0.50 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.00	0.01	-0.21	-0.30	-0.17	-0.09	-0.05	-0.03	-0.02
5	5	1.12	0.98	0.18	-0.37	-0.31	-0.22	-0.15	-0.11	-0.08
10	5	2.52	2.18	0.80	-0.25	-0.38	-0.34	-0.28	-0.22	-0.17
20	5	4.37	3.81	1.81	0.17	-0.16	-0.40	-0.41	-0.37	-0.32
50	5	7.31	6.47	3.76	1.34	0.32	-0.17	-0.40	-0.49	-0.52
100	5	9.72	8.73	5.60	2.70	1.25	0.43	-0.06	-0.34	-0.50
500	5	15.26	14.07	10.42	6.83	4.69	3.23	2.17	1.39	0.80
2	10	-0.02	-0.01	-0.23	-0.32	-0.19	-0.11	-0.06	-0.04	-0.02
5	10	1.22	1.07	0.25	-0.32	-0.28	-0.17	-0.15	-0.12	-0.09
10	10	2.79	2.44	1.02	-0.08	-0.26	-0.26	-0.24	-0.21	-0.18
20	10	4.88	4.30	2.25	0.53	-0.01	-0.21	-0.28	-0.29	-0.29
50	10	8.22	7.36	4.58	2.06	0.92	0.32	-0.03	-0.22	-0.34
100	10	10.93	9.91	6.73	3.72	2.15	1.20	0.79	0.17	-0.11
500	10	16.97	15.77	12.07	8.41	6.20	4.64	3.47	2.50	1.87

H1/A = 0.50 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.71	-1.59	-0.85	-0.16	-0.05	0.01	0.04	0.06	0.06
5	5	-2.81	-2.54	-1.32	-0.23	-0.00	0.07	0.09	0.11	0.11
10	5	-4.08	-3.62	-1.93	-0.41	0.00	0.14	0.18	0.19	0.18
20	5	-5.71	-5.06	-2.86	-0.85	-0.13	0.15	0.26	0.30	0.30
50	5	-8.31	-7.43	-4.64	-1.97	-0.75	-0.12	0.19	0.37	0.45
100	5	-10.48	-9.47	-6.33	-3.24	-1.64	-0.71	-0.16	0.19	0.40
500	5	-15.64	-14.46	-10.86	-7.17	-4.95	-3.44	-2.36	-1.53	-0.92
2	10	-1.97	-1.85	-1.08	-0.33	-0.16	-0.06	0.00	0.04	0.07
5	10	-3.23	-2.94	-1.66	-0.49	-0.19	-0.05	0.02	0.07	0.10
10	10	-4.64	-4.16	-2.40	-0.79	-0.28	-0.06	0.05	0.12	0.16
20	10	-6.47	-5.79	-3.52	-1.40	-0.56	-0.16	0.04	0.16	0.23
50	10	-9.39	-8.48	-5.61	-2.82	-1.47	-0.70	-0.25	0.04	0.10
100	10	-11.81	-10.77	-7.56	-4.36	-2.63	-1.56	-0.86	-0.37	-0.03
500	10	-17.38	-16.18	-12.54	-8.79	-6.48	-4.87	-3.68	-2.74	-2.00

TABLE 18

H1/A = 0.50 H2/A = 2.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.06	-0.05	-0.26	-0.34	-0.20	-0.12	-0.07	-0.04	-0.03
5	5	0.86	0.74	-0.01	-0.49	-0.37	-0.24	-0.15	-0.10	-0.07
10	5	2.02	1.72	0.44	-0.48	-0.50	-0.37	-0.26	-0.18	-0.13
20	5	3.59	3.08	1.22	-0.24	-0.52	-0.49	-0.40	-0.30	-0.23
50	5	6.19	5.41	2.85	0.65	-0.15	-0.43	-0.49	-0.46	-0.41
100	5	8.45	7.51	4.53	2.82	0.60	-0.00	-0.30	-0.43	-0.47
500	5	14.17	13.00	9.42	5.93	3.92	2.59	1.67	1.01	0.54
2	10	-0.12	-0.10	-0.30	-0.38	-0.24	-0.15	-0.09	-0.06	-0.04
5	10	0.83	0.71	-0.04	-0.52	-0.40	-0.26	-0.18	-0.12	-0.09
10	10	2.04	1.74	0.46	-0.48	-0.50	-0.37	-0.27	-0.19	-0.14
20	10	3.70	3.18	1.32	-0.16	-0.46	-0.44	-0.36	-0.28	-0.22
50	10	6.51	5.72	3.15	0.92	0.09	-0.23	-0.33	-0.34	-0.32
100	10	9.00	8.06	5.05	2.31	1.04	0.38	0.16	-0.15	-0.24
500	10	15.37	14.20	10.59	7.07	5.01	3.62	2.63	1.90	1.34

H1/A = 0.50 H2/A = 2.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.38	-1.31	-0.67	-0.09	-0.06	-0.05	-0.04	-0.02	-0.00
5	5	-2.33	-2.12	-1.03	-0.10	-0.00	-0.01	-0.03	-0.01	0.01
10	5	-3.43	-3.04	-1.50	-0.19	0.05	0.06	0.03	0.02	0.02
20	5	-4.84	-4.26	-2.24	-0.48	0.02	0.13	0.14	0.13	0.11
50	5	-7.21	-6.39	-3.77	-1.34	-0.36	0.05	0.20	0.26	0.27
100	5	-9.29	-8.33	-5.33	-2.45	-1.09	-0.37	-0.01	0.20	0.30
500	5	-14.64	-13.48	-9.95	-6.37	-4.27	-2.88	-1.93	-1.22	-0.71
2	10	-1.51	-1.44	-0.79	-0.20	-0.14	-0.11	-0.09	-0.06	-0.03
5	10	-2.50	-2.28	-1.18	-0.23	-0.11	-0.10	-0.10	-0.07	-0.04
10	10	-3.65	-3.26	-1.71	-0.37	-0.10	-0.06	-0.06	-0.05	-0.03
20	10	-5.17	-4.58	-2.54	-0.73	-0.19	-0.04	-0.01	0.01	0.02
50	10	-7.72	-6.89	-4.24	-1.77	-0.75	-0.28	-0.08	0.03	0.08
100	10	-1.00	-9.03	-6.00	-3.08	-1.65	-0.88	-0.45	-0.17	-0.01
500	10	-15.92	-14.76	-11.20	-7.57	-5.42	-3.97	-2.94	-2.16	-1.57

H1/A = 0.50 H2/A = 3.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.04	-0.03	-0.24	-0.33	-0.20	-0.12	-0.07	-0.05	-0.04
5	5	0.83	0.71	-0.03	-0.51	-0.38	-0.25	-0.16	-0.11	-0.07
10	5	1.92	1.62	0.36	-0.55	-0.54	-0.40	-0.27	-0.18	-0.13
20	5	3.37	2.87	1.04	-0.39	-0.63	-0.56	-0.43	-0.31	-0.22
50	5	5.76	5.00	2.48	0.34	-0.39	-1.07	-0.59	-0.51	-0.42
100	5	7.86	6.93	4.00	1.36	0.23	-0.29	-0.50	-0.55	-0.53
500	5	13.35	12.20	8.65	5.22	3.29	2.04	1.21	0.64	0.25
2	10	-0.08	-0.06	-0.28	-0.37	-0.23	-0.15	-0.10	-0.07	-0.06
5	10	-0.79	0.67	-0.06	-0.54	-0.42	-0.28	-0.19	-0.14	-0.10
10	10	1.90	1.60	0.33	-0.58	-0.57	-0.43	-0.30	-0.21	-0.15
20	10	3.39	2.88	1.05	-0.38	-0.62	-0.56	-0.43	-0.32	-0.23
50	10	5.88	5.11	2.59	0.44	-0.20	-1.07	-0.53	-0.46	-0.38
100	10	8.17	7.24	4.30	1.59	0.44	-0.10	-0.33	-0.40	-0.40
500	10	14.14	12.98	9.42	5.97	4.01	2.73	1.85	1.24	0.80

H1/A = 0.50 H2/A = 3.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.27	-1.21	-0.59	-0.03	-0.03	-0.04	-0.04	-0.03	-0.03
5	5	-2.16	-1.96	-0.89	0.00	0.09	0.02	-0.02	-0.03	-0.03
10	5	-3.19	-2.81	-1.31	-0.04	0.15	0.11	0.04	0.01	-0.01
20	5	-4.52	-3.91	-1.98	-0.26	0.17	0.22	0.16	0.11	.0.06
50	5	-6.72	-5.92	-3.35	-0.99	-0.11	0.21	0.28	0.27	0.23
100	5	-8.66	-7.72	-4.78	-1.98	-0.76	-0.10	0.17	0.29	0.32
500	5	-13.85	-12.71	-9.22	-5.69	-3.67	-2.36	-1.50	-0.88	-0.45
2	10	-1.34	-1.28	-0.65	-0.09	-0.08	-0.09	-0.08	-0.07	-0.05
5	10	-2.26	-2.05	-0.99	-0.08	-0.02	-0.05	-0.08	-0.08	-0.07
10	10	-3.32	-2.94	-1.43	-0.07	0.13	0.02	-0.04	-0.06	-0.07
20	10	-4.69	-4.13	-2.14	-0.41	0.03	0.10	0.05	0.01	-0.03
50	10	-6.99	-6.19	-3.61	-1.24	-0.33	0.01	0.10	0.11	0.09
100	10	-9.06	-8.11	-5.16	-2.34	-1.05	-0.41	-0.11	0.04	0.10
500	10	-14.73	-13.58	-10.07	-6.52	-4.47	-3.13	-2.22	-1.56	-1.08

TABLE 19

H1/A = 1.00 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.37	0.26	+0.07	-0.08	-0.10	-0.08	+0.06	-0.05	-0.04
5	5	1.09	0.93	0.49	0.11	-0.04	-0.08	+0.09	-0.09	-0.09
10	5	1.79	1.56	0.94	0.38	0.12	-0.00	+0.06	-0.10	-0.11
20	5	2.51	2.24	1.49	0.78	0.40	0.19	0.06	-0.03	-0.04
50	5	3.45	3.13	2.26	1.42	0.91	0.60	0.38	0.22	0.10
100	5	4.10	3.76	2.85	1.94	1.37	1.00	0.73	0.51	0.35
500	5	5.46	5.10	4.14	3.16	2.52	2.07	1.72	1.44	1.20
2	10	0.40	0.33	0.13	-0.02	-0.05	-0.09	+0.05	-0.04	-0.04
5	10	1.22	1.06	0.61	0.21	0.05	-0.01	+0.04	-0.06	-0.06
10	10	2.00	1.77	1.14	0.56	0.28	0.13	0.08	+0.03	-0.05
20	10	2.81	2.53	1.77	1.04	0.63	0.39	0.24	0.13	0.05
50	10	3.83	3.51	2.63	1.77	1.24	0.90	0.66	0.47	0.33
100	10	4.53	4.19	4.27	2.35	1.76	1.37	1.07	0.84	0.65
500	10	5.94	5.58	4.61	3.63	2.98	2.52	2.17	1.87	1.62

H1/A = 1.00 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.35	-1.29	+0.76	-0.21	-0.11	-0.04	-0.01	0.02	0.03
5	5	-1.93	-1.81	+1.12	-0.42	-0.21	-0.08	-0.01	0.03	0.05
10	5	-2.46	-2.30	+1.51	-0.68	-0.37	-0.18	-0.06	0.01	0.03
20	5	-3.04	-2.84	-1.96	-1.04	-0.63	-0.36	-0.23	-0.07	0.01
50	5	-3.82	-3.60	-2.64	-1.61	-1.11	-0.75	-0.50	-0.31	-0.18
100	5	-4.40	-4.16	-3.16	-2.09	-1.54	-1.13	-0.83	-0.60	-0.42
500	5	-5.66	-5.41	-4.37	-3.25	-2.63	-2.16	-1.79	-1.50	-1.25
2	10	-1.51	-1.45	+0.90	-0.33	-0.20	-0.12	-0.06	-0.03	0.01
5	10	-2.15	-2.03	+1.32	-0.60	-0.36	-0.22	-0.13	-0.04	0.00
10	10	-2.78	-2.61	-1.80	-0.96	-0.58	-0.35	-0.20	-0.10	-0.03
20	10	-3.38	-3.18	-2.28	-1.34	-0.90	-0.60	-0.39	-0.25	-0.14
50	10	-4.22	-4.00	-3.03	-1.99	-1.46	-1.07	-0.79	-0.58	-0.41
100	10	-4.84	-4.60	-3.59	-2.51	-1.94	-1.51	-1.18	-0.93	-0.73
500	10	-6.13	-5.88	-4.85	-3.71	-3.09	-2.61	-2.23	-1.92	-1.67

H1/A = 1.00 H2/A = 2.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.23	0.16	-0.02	-0.14	-0.14	-0.11	-0.08	-0.05	-0.04
5	5	0.89	0.74	0.32	-0.03	-0.13	-0.18	-0.12	-0.10	-0.08
10	5	1.55	1.34	0.75	0.19	-0.02	-0.10	-0.12	-0.12	-0.11
20	5	2.20	1.93	1.21	0.54	0.21	0.04	-0.04	-0.08	-0.11
50	5	3.13	2.82	1.98	1.16	0.69	0.42	0.24	0.12	0.03
100	5	3.83	3.50	2.59	1.71	1.16	0.82	0.58	0.39	0.26
500	5	5.32	4.96	4.00	3.03	2.39	1.96	1.62	1.35	1.12
2	10	0.22	0.16	-0.02	-0.15	-0.15	-0.11	-0.08	-0.06	-0.04
5	10	0.92	0.76	0.34	-0.00	-0.11	-0.19	-0.10	-0.09	-0.07
10	10	1.60	1.39	0.80	0.27	0.05	-0.05	-0.07	-0.08	-0.08
20	10	2.33	2.06	1.34	0.66	0.32	0.15	0.06	-0.00	-0.04
50	10	3.37	3.05	2.20	1.38	0.90	0.61	0.42	0.28	0.18
100	10	4.14	3.81	2.90	2.00	1.45	1.09	0.84	0.64	0.49
500	10	5.75	5.39	4.42	3.45	2.81	2.36	2.02	1.74	1.50

H1/A = 1.00 H2/A = 2.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.19	-1.15	-0.65	-0.15	-0.08	-0.05	-0.03	+0.02	-0.01
5	5	-1.72	-1.61	-0.96	-0.31	-0.15	-0.07	-0.03	+0.01	0.01
10	5	-2.22	-2.07	-1.31	-0.54	-0.28	-0.13	-0.06	0.00	0.02
20	5	-2.76	-2.58	-1.73	-0.84	-0.48	-0.26	-0.13	+0.05	0.00
50	5	-3.55	-3.34	-2.40	-1.40	-0.93	-0.61	-0.39	-0.24	-0.13
100	5	-4.17	-3.93	-2.95	-1.90	-1.37	-0.99	-0.71	-0.51	-0.36
500	5	-5.53	-5.28	-4.26	-3.14	-2.53	-2.06	-1.71	-1.42	-1.19
2	10	-1.27	-1.22	-0.72	-0.21	-0.14	-0.10	-0.07	-0.05	-0.04
5	10	-1.82	-1.72	-1.06	-0.40	-0.23	-0.13	-0.09	-0.06	-0.04
10	10	-2.35	-2.20	-1.44	-0.66	-0.38	-0.23	-0.14	-0.08	-0.05
20	10	-2.96	-2.77	-1.92	-1.02	-0.65	-0.42	-0.27	-0.17	-0.10
50	10	-3.83	-3.61	-2.67	-1.67	-1.18	-0.85	-0.61	-0.44	-0.32
100	10	-4.51	-4.27	-3.29	-2.22	-1.68	-1.29	-1.00	-0.78	-0.60
500	10	-5.97	-5.72	-4.69	-3.57	-2.95	-2.48	-2.11	-1.82	-1.57

TABLE 20

H1/A = 1.00 H2/H3 = 3.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.21	0.15	-0.03	-0.16	-0.16	-0.12	-0.08	-0.06	-0.04
5	5	0.83	0.68	0.27	-0.07	-0.17	-0.18	-0.14	-0.11	-0.09
10	5	1.41	1.20	0.62	0.11	-0.09	-0.15	-0.15	-0.14	-0.13
20	5	2.05	1.79	1.07	0.42	0.10	-0.04	-0.10	-0.13	-0.14
50	5	2.99	2.68	1.84	1.04	0.59	0.29	0.13	0.03	-0.04
100	5	3.63	3.30	2.41	1.53	1.00	0.67	0.45	0.29	0.17
500	5	5.17	4.81	3.85	2.89	2.26	1.83	1.50	1.24	1.02
2	10	0.20	0.14	-0.04	-0.17	-0.17	-0.13	-0.09	-0.07	-0.05
5	10	0.83	0.68	0.27	-0.07	-0.17	-0.18	-0.14	-0.12	-0.09
10	10	1.44	1.22	0.64	0.14	-0.07	-0.13	-0.14	-0.13	-0.12
20	10	2.13	1.87	1.16	0.50	0.16	0.01	-0.06	-0.09	-0.10
50	10	3.08	2.77	1.93	1.13	0.67	0.41	0.25	0.13	0.06
100	10	3.88	3.55	2.65	1.77	1.24	0.90	0.67	0.50	0.37
500	10	5.54	5.18	4.22	3.25	2.62	2.18	1.85	1.57	1.35

H1/A = 1.00 H2/A = 3.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.12	-1.08	-0.59	-0.10	-0.05	-0.03	-0.02	-0.02	-0.02
5	5	-1.61	-1.51	-0.87	-0.24	-0.09	-0.03	-0.00	0.00	0.00
10	5	-2.08	-1.93	-1.19	-0.43	-0.19	-0.06	-0.01	0.02	0.02
20	5	-2.61	-2.43	-1.59	-0.72	-0.38	-0.18	-0.07	-0.01	0.02
50	5	-3.37	-3.16	-2.23	-1.25	-0.80	-0.50	-0.30	-0.17	-0.08
100	5	-3.98	-3.75	-2.78	-1.74	-1.22	-0.86	-0.60	-0.42	-0.28
500	5	-5.40	-5.15	-4.13	-3.01	-2.41	-1.95	-1.60	-1.33	-1.10
2	10	-1.17	-1.13	-0.64	-0.14	-0.09	-0.07	-0.06	-0.05	-0.04
5	10	-1.68	-1.58	-0.94	-0.30	-0.15	-0.08	-0.05	-0.04	-0.04
10	10	-2.17	-2.03	-1.28	-0.52	-0.27	-0.14	-0.08	-0.05	-0.04
20	10	-2.74	-2.56	-1.72	-0.86	-0.50	-0.30	-0.18	-0.11	-0.07
50	10	-3.58	-3.37	-2.44	-1.45	-0.99	-0.68	-0.48	-0.34	-0.24
100	10	-4.23	-4.00	-3.02	-1.98	-1.45	-1.08	-0.81	-0.62	-0.47
500	10	-5.78	-5.53	-4.51	-3.39	-2.78	-2.32	-1.96	-1.67	-1.44

H1/A = 1.50 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.30	0.25	0.14	0.03	-0.02	-0.04	-0.04	-0.04	-0.03
5	5	0.77	0.60	0.23	0.23	0.09	0.01	-0.01	-0.03	-0.03
10	5	1.19	1.00	0.76	0.46	0.27	0.16	0.07	0.02	0.01
20	5	1.51	1.37	1.03	0.69	0.44	0.29	0.20	0.12	0.07
50	5	1.94	1.79	1.41	1.02	0.74	0.55	0.42	0.32	0.24
100	5	2.27	2.11	1.72	1.30	1.01	0.81	0.66	0.55	0.41
500	5	2.82	2.65	2.25	1.82	1.50	1.28	1.12	0.98	0.87
2	10	0.36	0.31	0.19	0.09	0.03	0.00	-0.00	-0.01	-0.01
5	10	0.90	0.70	0.55	0.32	0.17	0.10	0.05	0.02	0.00
10	10	1.29	1.17	0.87	0.56	0.36	0.24	0.16	0.11	0.08
20	10	1.68	1.54	1.20	0.84	0.59	0.43	0.33	0.24	0.19
50	10	2.19	2.02	1.64	1.24	0.96	0.77	0.63	0.48	0.39
100	10	2.44	2.29	1.88	1.47	1.17	0.96	0.81	0.69	0.58
500	10	3.04	2.87	2.46	2.03	1.72	1.49	1.33	1.19	1.07

H1/A = 1.50 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.14	-1.11	-0.66	-0.19	-0.13	-0.08	-0.05	-0.02	0.00
5	5	-1.45	-1.41	-0.90	-0.38	-0.26	-0.17	-0.10	-0.04	-0.01
10	5	-1.71	-1.66	-1.12	-0.55	-0.39	-0.26	-0.17	-0.10	-0.05
20	5	-1.99	-1.92	-1.36	-0.76	-0.56	-0.41	-0.29	-0.20	-0.13
50	5	-2.34	-2.27	-1.68	-1.05	-0.83	-0.65	-0.50	-0.39	-0.30
100	5	-2.62	-2.55	-1.96	-1.32	-1.09	-0.89	-0.69	-0.56	-0.46
500	5	-3.13	-3.06	-2.46	-1.81	-1.56	-1.34	-1.17	-1.02	-0.90
2	10	-1.25	-1.23	-0.77	-0.29	-0.20	-0.14	-0.09	-0.06	-0.03
5	10	-1.58	-1.54	-1.03	-0.49	-0.36	-0.25	-0.17	-0.11	-0.07
10	10	-1.87	-1.82	-1.27	-0.69	-0.52	-0.38	-0.28	-0.20	-0.14
20	10	-2.17	-2.10	-1.54	-0.93	-0.72	-0.56	-0.43	-0.33	-0.25
50	10	-2.57	-2.50	-1.92	-1.28	-1.02	-0.83	-0.67	-0.55	-0.45
100	10	-2.80	-2.72	-2.13	-1.49	-1.25	-1.04	-0.88	-0.74	-0.63
500	10	-3.35	-3.27	-2.67	-2.02	-1.77	-1.55	-1.37	-1.23	-1.10

TABLE 21

H1/A = 1.50 H2/A = 2.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.22	0.17	0.07	-0.03	-0.06	-0.07	-0.06	-0.05	-0.04
5	5	0.64	0.55	0.34	0.13	0.02	-0.03	-0.05	-0.05	-0.05
10	5	1.02	0.90	0.62	0.34	0.17	0.08	0.03	0.00	-0.01
20	5	1.37	1.23	0.90	0.56	0.34	0.20	0.13	0.07	0.03
50	5	1.82	1.67	1.30	0.91	0.64	0.46	0.35	0.26	0.19
100	5	2.17	2.02	1.63	1.22	0.93	0.73	0.60	0.49	0.36
500	5	2.78	2.61	2.21	1.78	1.47	1.25	1.09	0.95	0.84
2	10	0.23	0.18	0.08	-0.02	-0.05	-0.06	-0.05	-0.04	-0.03
5	10	0.69	0.60	0.38	0.18	0.06	0.01	-0.01	-0.02	-0.02
10	10	1.07	0.95	0.67	0.38	0.21	0.11	0.06	0.03	0.01
20	10	1.47	1.33	1.00	0.66	0.43	0.29	0.21	0.15	0.10
50	10	1.97	1.82	1.44	1.05	0.78	0.60	0.48	0.39	0.31
100	10	2.31	2.15	1.76	1.35	1.06	0.86	0.72	0.61	0.51
500	10	2.99	2.82	2.42	1.99	1.67	1.45	1.29	1.15	1.03

H1/A = 1.50 H2/A = 2.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.05	-1.04	-0.59	-0.14	-0.09	-0.06	-0.04	-0.03	-0.02
5	5	-1.34	-1.30	-0.81	-0.29	-0.19	-0.12	-0.07	-0.04	-0.02
10	5	-1.59	-1.55	-1.02	-0.46	-0.32	-0.21	-0.13	-0.08	-0.04
20	5	-1.87	-1.81	-1.26	-0.67	-0.49	-0.35	-0.24	-0.16	-0.11
50	5	-2.24	-2.17	-1.60	-0.97	-0.76	-0.59	-0.45	-0.34	-0.26
100	5	-2.51	-2.44	-1.86	-1.22	-0.99	-0.80	-0.64	-0.52	-0.42
500	5	-3.10	-3.03	-2.43	-1.78	-1.53	-1.32	-1.14	-1.00	-0.88
2	10	-1.10	-1.08	-0.64	-0.19	-0.14	-0.10	-0.08	-0.06	-0.04
5	10	-1.41	-1.38	-0.88	-0.36	-0.26	-0.18	-0.13	-0.09	-0.06
10	10	-1.70	-1.66	-1.12	-0.55	-0.41	-0.29	-0.21	-0.15	-0.11
20	10	-2.00	-1.94	-1.39	-0.79	-0.60	-0.46	-0.34	-0.26	-0.20
50	10	-2.40	-2.34	-1.76	-1.13	-0.91	-0.73	-0.59	-0.48	-0.39
100	10	-2.70	-2.62	-2.04	-1.40	-1.16	-0.97	-0.81	-0.68	-0.58
500	10	-3.31	-3.23	-2.64	-1.98	-1.73	-1.52	-1.34	-1.20	-1.07

H1/A = 1.50 H2/A = 3.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.20	0.15	0.05	-0.05	-0.08	-0.08	-0.07	-0.05	-0.04
5	5	0.60	0.51	0.29	0.11	-0.02	-0.06	-0.07	-0.07	-0.06
10	5	0.94	0.82	0.54	0.26	0.09	0.01	-0.03	-0.05	-0.06
20	5	1.28	1.15	0.82	0.49	0.27	0.14	0.07	0.03	-0.00
50	5	1.74	1.58	1.21	0.83	0.57	0.40	0.29	0.21	0.14
100	5	2.09	1.93	1.55	1.14	0.85	0.63	0.50	0.40	0.31
500	5	2.73	2.57	2.17	1.74	1.42	1.21	1.05	0.92	0.80
2	10	0.19	0.15	0.04	-0.05	-0.08	-0.08	-0.07	-0.06	-0.05
5	10	0.62	0.53	0.31	0.12	-0.01	-0.05	-0.06	-0.06	-0.06
10	10	0.98	0.86	0.58	0.30	0.14	0.05	0.01	-0.01	-0.02
20	10	1.36	1.22	0.89	0.55	0.33	0.21	0.13	0.08	0.05
50	10	1.84	1.69	1.32	0.93	0.67	0.50	0.38	0.30	0.23
100	10	2.20	2.04	1.65	1.25	0.96	0.76	0.63	0.52	0.43
500	10	2.93	2.76	2.36	1.93	1.61	1.40	1.23	1.10	0.99

H1/A = 1.50 H2/A = 3.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.00	-0.99	-0.55	-0.11	-0.07	-0.05	-0.03	-0.02	-0.02
5	5	-1.28	-1.24	-0.76	-0.25	-0.16	-0.09	-0.05	-0.03	-0.02
10	5	-1.53	-1.48	-0.96	-0.41	-0.27	-0.17	-0.10	-0.06	-0.03
20	5	-1.79	-1.74	-1.19	-0.60	-0.43	-0.29	-0.20	-0.13	-0.08
50	5	-2.17	-2.10	-1.52	-0.91	-0.70	-0.53	-0.40	-0.30	-0.23
100	5	-2.45	-2.38	-1.79	-1.16	-0.93	-0.74	-0.59	-0.48	-0.38
500	5	-3.06	-2.99	-2.39	-1.74	-1.49	-1.28	-1.11	-0.97	-0.85
2	10	-1.04	-1.03	-0.59	-0.14	-0.10	-0.08	-0.06	-0.05	-0.04
5	10	-1.33	-1.30	-0.81	-0.30	-0.21	-0.14	-0.10	-0.07	-0.05
10	10	-1.60	-1.55	-1.03	-0.48	-0.34	-0.24	-0.17	-0.12	-0.09
20	10	-1.90	-1.84	-1.29	-0.70	-0.53	-0.39	-0.27	-0.20	-0.15
50	10	-2.29	-2.22	-1.65	-1.03	-0.82	-0.64	-0.51	-0.41	-0.33
100	10	-2.60	-2.53	-1.94	-1.30	-1.08	-0.88	-0.73	-0.61	-0.51
500	10	-3.26	-3.19	-2.59	-1.93	-1.68	-1.47	-1.30	-1.15	-1.03

TABLE 22

H1/A = 2.00 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.24	0.21	0.15	0.08	0.03	0.01	-0.01	-0.01	-0.01
5	5	0.56	0.51	0.39	0.25	0.15	0.08	0.04	0.02	-0.00
10	5	0.77	0.71	0.56	0.39	0.26	0.17	0.11	0.07	0.04
20	5	0.98	0.91	0.74	0.54	0.39	0.28	0.21	0.16	0.12
50	5	1.25	1.17	0.98	0.74	0.57	0.45	0.36	0.30	0.24
100	5	1.38	1.30	1.11	0.89	0.71	0.58	0.49	0.41	0.35
500	5	1.71	1.63	1.43	1.20	1.01	0.88	0.78	0.70	0.63
2	10	0.30	0.27	0.20	0.13	0.07	0.04	0.02	0.01	-0.00
5	10	0.62	0.57	0.44	0.31	0.20	0.13	0.09	0.06	0.04
10	10	0.87	0.81	0.65	0.48	0.34	0.25	0.18	0.14	0.11
20	10	1.11	1.04	0.86	0.67	0.51	0.40	0.32	0.26	0.22
50	10	1.34	1.27	1.08	0.86	0.68	0.56	0.47	0.40	0.34
100	10	1.51	1.43	1.23	1.01	0.83	0.69	0.60	0.52	0.46
500	10	1.83	1.75	1.55	1.32	1.13	1.00	0.90	0.82	0.75

H1/A = 2.00 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.03	-1.02	-0.80	-0.16	-0.13	-0.09	-0.06	-0.04	-0.02
5	5	-1.21	-1.20	-0.75	-0.29	-0.22	-0.16	-0.12	-0.08	-0.05
10	5	-1.37	-1.34	-0.89	-0.41	-0.33	-0.25	-0.19	-0.13	-0.10
20	5	1.52	-1.50	-1.03	-0.54	-0.44	-0.35	-0.28	-0.21	-0.16
50	5	-1.71	-1.69	-1.21	-0.71	-0.61	-0.51	-0.42	-0.35	-0.29
100	5	-1.85	-1.82	-1.35	-0.84	-0.73	-0.63	-0.53	-0.46	-0.39
500	5	-2.15	-2.13	-1.65	-1.14	-1.02	-0.91	-0.81	-0.73	-0.66
2	10	-1.09	-1.08	-0.66	-0.22	-0.17	-0.13	-0.10	-0.07	-0.05
5	10	-1.30	-1.28	-0.84	-0.37	-0.30	-0.23	-0.18	-0.13	-0.10
10	10	-1.47	-1.45	-0.99	-0.50	-0.42	-0.33	-0.26	-0.21	-0.16
20	10	-1.65	-1.63	-1.16	-0.66	-0.56	-0.47	-0.39	-0.30	-0.25
50	10	-1.83	-1.80	-1.33	-0.83	-0.72	-0.62	-0.52	-0.45	-0.38
100	10	-1.97	-1.94	-1.47	-0.96	-0.85	-0.74	-0.65	-0.57	-0.50
500	10	-2.28	-2.25	-1.77	-1.26	-1.14	-1.03	-0.93	-0.85	-0.77

H1/A = 2.00 H2/A = 2.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.18	0.16	0.10	0.03	-0.01	-0.03	-0.03	-0.03	-0.02
5	5	0.47	0.42	0.30	0.18	0.09	0.04	0.01	0.00	-0.01
10	5	0.69	0.63	0.48	0.31	0.19	0.11	0.07	0.04	0.02
20	5	0.91	0.84	0.67	0.48	0.33	0.23	0.16	0.12	0.09
50	5	1.17	1.09	0.90	0.69	0.52	0.41	0.32	0.26	0.21
100	5	1.34	1.26	1.07	0.85	0.67	0.55	0.46	0.39	0.33
500	5	1.69	1.61	1.41	1.18	1.00	0.86	0.76	0.68	0.62
2	10	0.19	0.16	0.10	0.04	0.00	-0.01	-0.02	-0.02	-0.02
5	10	0.50	0.45	0.33	0.20	0.11	0.06	0.03	0.02	0.01
10	10	0.75	0.69	0.54	0.37	0.25	0.17	0.12	0.09	0.07
20	10	1.00	0.93	0.76	0.57	0.40	0.30	0.23	0.18	0.14
50	10	1.27	1.19	1.00	0.79	0.62	0.50	0.41	0.35	0.30
100	10	1.45	1.37	1.18	0.96	0.78	0.65	0.56	0.49	0.43
500	10	1.81	1.73	1.53	1.30	1.12	0.98	0.88	0.80	0.73

H1/A = 2.00 H2/A = 2.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.97	-0.96	-0.54	-0.12	-0.09	-0.07	-0.05	-0.03	-0.02
5	5	-1.15	-1.13	-0.69	-0.24	-0.18	-0.13	-0.10	-0.07	-0.04
10	5	-1.30	-1.28	-0.83	-0.36	-0.28	-0.21	-0.16	-0.11	-0.08
20	5	-1.46	-1.44	-0.98	-0.49	-0.40	-0.32	-0.25	-0.19	-0.15
50	5	-1.67	-1.65	-1.17	-0.68	-0.57	-0.47	-0.39	-0.32	-0.26
100	5	-1.82	-1.79	-1.32	-0.82	-0.71	-0.60	-0.51	-0.44	-0.37
500	5	-2.14	-2.11	-1.64	-1.13	-1.01	-0.90	-0.80	-0.72	-0.65
2	10	-1.01	-1.00	-0.58	-0.16	-0.13	-0.10	-0.08	-0.06	-0.05
5	10	-1.21	-1.19	-0.75	-0.30	-0.24	-0.19	-0.15	-0.11	-0.09
10	10	-1.38	-1.36	-0.91	-0.44	-0.36	-0.29	-0.23	-0.18	-0.14
20	10	-1.55	-1.53	-1.06	-0.57	-0.48	-0.40	-0.32	-0.26	-0.21
50	10	-1.77	-1.75	-1.28	-0.78	-0.67	-0.57	-0.49	-0.41	-0.35
100	10	-1.93	-1.90	-1.43	-0.93	-0.81	-0.71	-0.62	-0.54	-0.47
500	10	-2.26	-2.23	-1.76	-1.25	-1.13	-1.02	-0.92	-0.83	-0.76

TABLE 23

H1/A = 2.00 H2/A = 3.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.15	0.13	0.07	0.01	-0.02	-0.04	-0.04	-0.04	-0.04
5	5	0.43	0.35	0.27	0.14	0.06	0.01	-0.01	-0.02	-0.03
10	5	0.64	0.54	0.43	0.27	0.15	0.08	0.04	0.01	-0.00
20	5	0.86	0.75	0.62	0.43	0.26	0.17	0.12	0.09	0.06
50	5	1.12	1.01	0.86	0.65	0.48	0.35	0.25	0.18	0.19
100	5	1.31	1.19	1.03	0.82	0.64	0.51	0.42	0.36	0.30
500	5	1.67	1.59	1.39	1.17	0.98	0.84	0.75	0.67	0.60
2	10	0.16	0.13	0.07	0.02	-0.02	-0.04	-0.04	-0.04	-0.03
5	10	0.44	0.40	0.28	0.16	0.07	0.02	0.00	-0.01	-0.01
10	10	0.68	0.62	0.47	0.31	0.19	0.11	0.07	0.04	0.03
20	10	0.91	0.84	0.67	0.48	0.33	0.24	0.17	0.13	0.10
50	10	1.20	1.12	0.94	0.73	0.56	0.44	0.36	0.30	0.25
100	10	1.40	1.32	1.13	0.91	0.73	0.60	0.51	0.44	0.39
500	10	1.79	1.71	1.51	1.28	1.09	0.96	0.86	0.78	0.71

H1/A = 2.00 H2/A = 3.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.94	-0.93	-0.52	-0.10	-0.07	-0.05	-0.04	-0.03	-0.02
5	5	-1.11	-1.10	-0.66	-0.21	-0.16	-0.11	-0.08	-0.06	-0.04
10	5	-1.27	-1.25	-0.79	-0.33	-0.25	-0.19	-0.14	-0.10	-0.07
20	5	-1.43	-1.41	-0.94	-0.46	-0.37	-0.29	-0.23	-0.17	-0.13
50	5	-1.63	-1.61	-1.14	-0.64	-0.54	-0.44	-0.36	-0.30	-0.24
100	5	-1.79	-1.76	-1.29	-0.79	-0.68	-0.58	-0.49	-0.41	-0.35
500	5	-2.13	-2.10	-1.62	-1.11	-1.00	-0.89	-0.79	-0.71	-0.67
2	10	-0.97	-0.96	-0.55	-0.12	-0.10	-0.08	-0.06	-0.05	-0.04
5	10	-1.16	-1.14	-0.70	-0.25	-0.20	-0.15	-0.12	-0.09	-0.07
10	10	-1.31	-1.29	-0.84	-0.37	-0.30	-0.23	-0.18	-0.14	-0.11
20	10	-1.49	-1.46	-1.00	-0.52	-0.43	-0.35	-0.28	-0.22	-0.18
50	10	-1.72	-1.69	-1.22	-0.73	-0.62	-0.53	-0.44	-0.37	-0.32
100	10	-1.89	-1.86	-1.39	-0.89	-0.77	-0.67	-0.58	-0.50	-0.44
500	10	-2.24	-2.21	-1.74	-1.23	-1.11	-1.00	-0.90	-0.82	-0.75

Appendix C

RATIO OF RADIAL STRESS TO SURFACE PRESSURE—POISSON'S RATIO EQUAL TO 0.3 IN ALL THREE LAYERS[a]

TABLE 24

H1/A = 0.25 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.69	-0.55	-0.48	-0.30	-0.10	-0.02	0.01	0.03	0.03
5	5	-0.18	-0.01	-0.48	-0.64	-0.28	-0.13	-0.06	-0.02	0.00
10	5	0.96	1.03	-0.27	-0.98	-0.52	-0.28	-0.16	-0.10	-0.06
20	5	3.17	2.89	0.30	-1.35	-0.92	-0.56	-0.36	-0.25	-0.18
50	5	8.24	7.59	2.12	-1.47	-1.58	-1.22	-0.90	-0.68	-0.52
100	5	13.79	11.85	4.77	-0.75	-1.84	-1.81	-1.54	-1.26	-1.03
500	5	31.03	27.42	16.08	5.88	1.28	-0.98	-2.07	-2.54	-2.67
2	10	-0.85	-0.70	-0.60	-0.39	-0.16	-0.05	-0.00	0.03	0.04
5	10	-0.29	-0.11	-0.57	-0.72	-0.34	-0.17	-0.09	-0.03	0.00
10	10	1.00	1.06	-0.27	-1.01	-0.57	-0.33	-0.20	-0.13	-0.08
20	10	3.49	3.18	0.51	-1.24	-0.88	-0.57	-0.40	-0.30	-0.23
50	10	9.26	8.05	2.88	-0.95	-1.28	-1.08	-0.88	-0.73	-0.62
100	10	15.61	13.57	6.23	0.35	-1.10	-1.38	-1.36	-1.25	-1.13
500	10	35.30	31.57	19.90	9.21	4.04	1.19	-0.40	-1.43	-1.99

H1/A = 0.25 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.51	-1.45	-0.76	-0.11	-0.02	0.05	0.07	0.08	0.08
5	5	-2.55	-2.46	-1.10	-0.02	0.03	0.08	0.11	0.12	0.12
10	5	-3.89	-3.65	-1.50	-0.12	0.17	0.16	0.18	0.18	0.17
20	5	-6.16	-5.53	-2.22	0.35	0.45	0.37	0.33	0.30	0.26
50	5	-10.95	-9.54	-4.01	0.31	0.57	0.91	0.78	0.66	0.57
100	5	-16.16	-14.00	-6.56	-0.45	1.13	1.42	1.35	1.20	1.03
500	5	-32.44	-28.73	-17.37	-6.93	-2.02	0.45	1.71	2.30	2.52
2	10	-1.88	-1.79	-1.01	-0.28	-0.11	0.01	0.07	0.10	0.11
5	10	-3.07	-2.94	-1.49	-0.28	-0.12	0.01	0.10	0.14	0.16
10	10	-4.61	-4.31	-2.02	-0.21	-0.05	0.06	0.15	0.19	0.21
20	10	-7.13	-6.46	-2.92	-0.16	0.14	0.21	0.28	0.32	0.32
50	10	-12.57	-11.06	-5.26	-0.60	0.38	0.59	0.65	0.66	0.65
100	10	-18.50	-16.21	-8.45	-1.90	0.12	0.80	1.04	1.11	1.10
500	10	-36.94	-33.12	-21.40	-10.45	-4.95	-1.86	-0.02	1.10	1.77

H1/A= 0.25 H2/A = 2.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.59	-0.47	-0.44	-0.31	-0.14	-0.07	-0.04	-0.01	0.00
5	5	-0.22	-0.04	-0.51	-0.66	-0.31	-0.16	-0.09	-0.05	-0.02
10	5	0.66	0.77	-0.44	-1.06	-0.56	-0.29	-0.13	-0.11	-0.07
20	5	2.43	2.24	-0.13	-1.54	-0.94	-0.51	-0.30	-0.19	-0.14
50	5	6.58	5.62	1.08	-1.99	-1.69	-1.08	-0.66	-0.43	-0.31
100	5	11.21	9.48	3.01	-1.78	-2.20	-1.71	-1.20	-0.83	-0.60
500	5	26.49	23.12	12.43	-3.15	-0.49	-1.87	-2.26	-2.23	-2.04
2	10	-0.69	-0.56	-0.52	-0.38	-0.20	-0.12	-0.07	-0.03	-0.01
5	10	-0.34	-0.15	-0.61	-0.76	-0.39	-0.23	-0.15	-0.09	0.21
10	10	0.56	0.66	-0.54	-1.16	-0.63	-0.36	-0.23	-0.16	-0.11
20	10	2.38	2.19	-0.18	-1.60	-1.00	-0.57	-0.35	-0.24	-0.18
50	10	6.71	5.74	1.18	-1.92	-1.65	-1.07	-0.67	-0.46	-0.34
100	10	11.61	9.87	3.35	-1.50	-1.99	-1.57	-1.11	-0.78	-0.59
500	10	28.23	24.82	14.04	-4.60	0.77	-0.81	-1.41	-1.57	-1.56

H1/A = 0.25 H2/A = 2.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.12	-1.13	-0.57	-0.08	-0.08	-0.06	-0.03	-0.01	0.01
5	5	-1.94	-1.94	-0.82	0.04	-0.06	-0.07	-0.05	-0.01	0.01
10	5	-3.07	-2.95	-1.09	0.24	0.04	-0.04	-0.04	-0.01	0.01
20	5	-4.93	-4.59	-1.55	0.54	0.32	0.09	0.02	0.02	0.04
50	5	-8.97	-7.79	-2.84	0.81	0.93	0.56	0.31	0.20	0.16
100	5	-13.38	-11.49	-4.74	0.52	1.35	1.13	0.79	0.55	0.42
500	5	-27.99	-24.54	-13.85	-4.33	-0.41	1.19	1.75	1.85	1.77
2	10	-1.26	-1.26	-0.69	-0.18	-0.16	-0.12	-0.07	-0.03	-0.01
5	10	-2.17	-2.16	-1.00	-0.12	-0.19	-0.17	-0.12	-0.07	-0.03
10	10	-3.34	-2.82	-1.33	0.03	-0.12	-0.18	-0.14	-0.09	-0.04
20	10	-5.29	-4.84	-1.87	0.27	0.09	-0.09	-0.11	-0.08	-0.03
50	10	-9.51	-8.32	-3.32	0.40	0.59	0.30	0.11	0.05	0.05
100	10	-14.19	-12.27	-5.45	-0.06	0.84	0.73	0.49	0.34	0.27
500	10	-30.04	-26.55	-15.75	-6.06	-1.93	-0.10	0.70	1.02	1.14

[a] A negative sign indicates compression.
Z/H1 = 0 indicates tables of stresses at the interface.
Z/H1 = 1 indicates tables of stresses at the surface.

TABLE 25

H1/A = 0.25 H2/A = 3.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.53	-0.41	-0.39	-0.27	-0.12	-0.07	-0.04	-0.03	-0.02
5	5	-0.16	0.02	-0.46	-0.63	-0.29	-0.16	-0.10	-0.07	-0.05
10	5	0.68	0.79	-0.43	-1.05	-0.54	-0.29	-0.18	-0.12	-0.09
20	5	2.36	2.17	-0.18	-1.57	-0.96	-0.52	-0.30	-0.20	-0.15
50	5	6.25	5.31	0.83	-2.17	-1.79	-1.12	-0.66	-0.41	-0.28
100	5	10.56	8.87	2.50	-2.15	-2.44	-1.82	-1.21	-0.78	-0.52
500	5	24.61	21.31	10.82	1.81	-1.50	-2.55	-2.64	-2.35	-1.97
2	10	-0.58	-0.46	0.44	-0.32	-0.16	-0.11	-0.08	-0.05	-0.03
5	10	-0.24	-0.07	-0.54	-0.70	-0.36	-0.22	-0.16	-0.12	-0.09
10	10	0.59	0.69	-0.52	-1.14	-0.62	-0.36	-0.14	-0.18	-0.14
20	10	2.27	2.09	-0.27	-1.65	-1.04	-0.59	-0.37	-0.26	-0.20
50	10	6.23	5.29	0.80	-2.20	-1.83	-1.16	-0.71	-0.45	-0.32
100	10	10.65	8.95	2.57	-2.09	-2.39	-1.79	-1.20	-0.78	-0.53
500	10	25.37	22.05	11.52	2.61	-0.91	-2.03	-2.20	-1.99	-1.68

H1/A = 0.25 H2/A = 3.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.91	-0.93	-0.48	-0.03	-0.06	-0.05	-0.05	-0.03	-0.02
5	5	-1.76	-1.77	-0.68	0.13	-0.02	-0.07	-0.06	-0.05	-0.03
10	5	-2.83	-2.72	-0.91	0.36	0.10	-0.04	-0.07	-0.06	-0.05
20	5	-4.59	-4.18	-1.30	0.70	0.40	0.10	-0.02	-0.05	-0.04
50	5	-8.40	-7.26	-2.41	1.11	1.08	0.60	0.26	0.09	0.03
100	5	-12.54	-10.69	-4.07	1.00	1.63	1.23	0.75	0.42	0.24
500	5	-26.04	-22.66	-12.17	-3.04	0.60	1.84	2.07	1.91	1.61
2	10	-1.08	-1.09	-0.55	-0.08	-0.11	-0.10	-0.09	-0.07	-0.04
5	10	-1.88	-1.89	-0.79	0.02	-0.11	-0.15	-0.13	-0.11	-0.08
10	10	-2.98	-2.87	-1.06	0.23	-0.02	-0.14	-0.16	-0.14	-0.11
20	10	-4.79	-4.38	-1.48	0.53	0.24	-0.04	-0.14	-0.15	-0.13
50	10	-8.68	-7.54	-2.67	0.87	0.87	0.40	0.09	-0.05	-0.09
100	10	-12.92	-11.07	-4.33	0.67	1.34	0.97	0.53	0.24	0.09
500	10	-27.06	-23.67	-13.14	-3.87	-0.22	1.10	1.43	1.36	1.16

H1/A = 0.50 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.05	-0.03	-0.21	-0.28	-0.15	-0.08	-0.04	-0.02	-0.01
5	5	0.86	0.75	0.06	-0.39	-0.31	-0.21	-0.14	-0.10	-0.07
10	5	2.06	1.77	0.54	-0.36	-0.42	-0.35	-0.27	-0.21	-0.17
20	5	3.69	3.18	1.36	-0.09	-0.42	-0.75	-0.43	-0.38	-0.32
50	5	6.35	5.57	3.03	0.83	-0.02	-0.39	-0.54	-0.58	-0.56
100	5	8.58	7.64	4.68	1.99	0.72	0.04	-0.34	-0.54	-0.64
500	5	13.78	12.64	9.12	5.71	3.75	2.43	1.49	0.82	0.31
2	10	-0.06	-0.04	-0.23	-0.29	-0.17	-0.09	-0.05	-0.03	-0.02
5	10	0.95	0.84	0.12	-0.35	-0.28	-0.20	-0.15	-0.11	-0.09
10	10	2.30	2.00	0.73	-0.22	-0.33	-0.29	-0.25	-0.21	-0.18
20	10	4.15	3.62	1.75	0.22	-0.20	-0.32	-0.35	-0.34	-0.32
50	10	7.18	6.38	3.77	1.47	0.50	0.01	-0.25	-0.38	-0.45
100	10	9.69	8.73	5.70	2.91	1.52	0.70	0.19	-0.13	-0.35
500	10	15.38	14.22	10.66	7.18	5.13	3.71	2.66	1.86	1.24

H1/A = 0.50 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.38	-1.28	-0.69	-0.13	-0.03	0.02	0.04	0.06	0.06
5	5	-2.34	-2.10	-1.06	-0.16	0.03	0.08	0.09	0.11	0.10
10	5	-3.43	-3.03	-1.55	-0.27	0.07	0.17	0.18	0.19	0.18
20	5	-4.87	-4.28	-2.33	-0.58	0.02	0.24	0.29	0.32	0.30
50	5	-7.23	-6.40	-3.86	-1.47	-0.41	0.10	0.33	0.45	0.49
100	5	-9.23	-8.27	-5.37	-2.57	-1.13	-0.34	0.11	0.39	0.53
500	5	-14.05	-12.91	-9.53	-6.11	-4.05	-2.67	-1.70	-0.98	-0.45
2	10	-1.63	-1.52	-0.88	-0.27	-0.12	-0.03	0.02	0.05	0.07
5	10	-2.71	-2.44	-1.35	-0.38	-0.12	-0.01	0.05	0.09	0.11
10	10	-3.93	-3.50	-1.96	-0.59	-0.15	0.02	0.09	0.15	0.17
20	10	-5.55	-4.93	-2.90	-1.05	-0.33	-0.02	0.13	0.22	0.27
50	10	-8.21	-7.35	-4.73	-2.23	-1.03	-0.38	-0.02	0.21	0.25
100	10	-10.44	-9.45	-6.48	-3.57	-2.00	-1.06	-0.47	-0.06	0.21
500	10	-15.66	-14.51	-11.09	-7.60	-5.45	-3.96	-2.88	-2.04	-1.39

TABLE 26

H1/A = 0.50 H2/A = 2.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.09	-0.07	-0.25	-0.31	-0.17	-0.10	-0.05	-0.03	-0.02
5	5	0.65	0.56	-0.09	-0.48	-0.34	-0.21	-0.13	-0.08	-0.06
10	5	1.64	1.39	0.24	-0.55	-0.50	-0.36	-0.24	-0.16	-0.11
20	5	3.02	2.56	0.87	-0.42	-0.60	-0.52	-0.40	-0.29	-0.22
50	5	5.36	4.63	2.24	0.24	-0.40	-0.58	-0.58	-0.51	-0.43
100	5	7.42	6.53	3.71	1.21	0.16	-0.31	-0.51	-0.57	-0.57
500	5	12.71	11.59	8.14	4.85	3.01	1.83	1.03	0.48	0.09
2	10	-0.14	-0.11	-0.29	-0.34	-0.20	-0.12	-0.07	-0.05	-0.03
5	10	0.63	0.53	-0.11	-0.51	-0.37	-0.24	-0.16	-0.10	-0.07
10	10	1.66	1.40	0.26	-0.54	-0.50	-0.36	-0.25	-0.17	-0.13
20	10	3.12	2.65	0.95	-0.35	-0.54	-0.48	-0.37	-0.28	-0.21
50	10	5.64	4.91	2.50	0.47	-0.20	-0.41	-0.45	-0.41	-0.36
100	10	8.01	7.12	4.27	1.74	0.65	0.13	-0.23	-0.34	-0.27
500	10	13.81	12.69	9.22	5.88	3.99	2.75	1.88	1.25	0.79

H1/A = 0.50 H2/A = 2.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.11	-1.05	-0.54	-0.08	-0.05	-0.04	-0.03	-0.01	0.00
5	5	-1.94	-1.74	-0.82	-0.05	0.02	0.01	-0.00	0.00	0.00
10	5	-2.89	-2.53	-1.20	-0.09	0.10	0.10	0.06	0.05	0.04
20	5	-4.15	-3.61	-1.82	-0.27	0.13	0.20	0.16	0.15	0.12
50	5	-6.25	-5.49	-3.10	-0.94	-0.10	0.22	0.30	0.32	0.30
100	5	-8.14	-7.23	-4.47	-1.87	-0.65	-0.06	0.21	0.35	0.40
500	5	-13.06	-11.95	-8.64	-5.32	-3.39	-2.14	-1.30	-0.70	-0.27
2	10	-1.22	-1.15	-0.63	-0.16	-0.11	-0.09	-0.07	-0.04	-0.02
5	10	-2.09	-1.89	-0.96	-0.17	-0.08	-0.07	-0.07	-0.05	-0.02
10	10	-3.08	-2.73	-1.38	-0.24	-0.03	-0.01	-0.03	-0.02	-0.00
20	10	-4.42	-3.88	-2.07	-0.49	-0.05	0.05	0.05	0.05	0.05
50	10	-6.70	-5.92	-3.51	-1.31	-0.43	-0.06	0.07	0.14	0.16
100	10	-8.76	-7.84	-5.06	-2.41	-1.14	-0.49	-0.16	0.05	0.16
500	10	-14.23	-13.11	-9.78	-6.41	-4.42	-3.11	-2.20	-1.52	-1.01

H1/A = 0.50 H2/A = 3.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.07	-0.05	-0.23	-0.30	-0.17	-0.10	-0.05	-0.04	-0.03
5	5	0.63	0.54	0.02	-0.50	-0.35	-0.22	-0.14	-0.09	-0.06
10	5	1.57	1.31	0.18	-0.60	-0.54	-0.38	-0.25	-0.17	-0.11
20	5	2.85	2.40	0.72	-0.53	-0.69	-0.57	-0.42	-0.30	-0.21
50	5	5.01	4.30	1.94	-0.01	-0.59	-0.71	-0.65	-0.54	-0.43
100	5	6.92	6.04	3.26	0.97	-0.15	-0.54	-0.66	-0.65	-0.59
500	5	11.96	10.86	7.45	4.20	2.44	1.34	0.62	0.16	-0.15
2	10	-0.11	-0.08	-0.26	-0.33	-0.20	-0.12	-0.08	-0.06	-0.04
5	10	0.60	0.51	0.02	-0.53	-0.39	-0.25	-0.17	-0.11	-0.08
10	10	1.54	1.29	0.16	-0.62	-0.56	-0.40	-0.27	-0.19	-0.13
20	10	2.86	2.41	0.73	-0.53	-0.68	-0.57	-0.43	-0.30	-0.22
50	10	5.11	4.40	2.03	0.08	-0.51	-0.64	-0.60	-0.49	-0.40
100	10	7.19	6.32	3.53	1.02	0.03	-0.38	-0.53	-0.54	-0.50
500	10	12.67	11.56	8.13	4.87	3.08	1.94	1.19	0.68	0.33

H1/A = 0.50 H2/A = 3.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.02	-0.97	-0.47	-0.03	-0.02	-0.03	-0.03	-0.03	-0.02
5	5	-1.80	-1.62	-0.72	0.02	0.10	0.02	-0.01	-0.02	-0.02
10	5	-2.70	-2.36	-1.05	0.03	0.17	0.12	0.05	0.02	0.01
20	5	-3.88	-3.31	-1.60	-0.10	0.25	0.26	0.18	0.12	0.07
50	5	-5.85	-5.10	-2.76	-0.66	0.11	0.34	0.36	0.32	0.26
100	5	-7.60	-6.71	-4.00	-1.47	-0.37	0.16	0.35	0.41	0.40
500	5	-12.35	-11.24	-7.97	-4.71	-2.84	-1.68	-0.92	-0.40	-0.06
2	10	-1.08	-1.03	-0.53	-0.08	-0.07	-0.07	-0.06	-0.05	-0.04
5	10	-1.89	-1.70	-0.80	-0.05	-0.00	-0.04	-0.07	-0.06	-0.06
10	10	-2.81	-2.47	-1.16	0.01	0.17	0.04	-0.02	-0.04	-0.05
20	10	-4.03	-3.51	-1.74	-0.24	0.12	0.15	0.08	0.04	0.00
50	10	-6.08	-5.33	-2.85	-0.87	-0.09	0.17	0.21	0.19	0.13
100	10	-7.95	-7.05	-4.33	-1.78	-0.63	-0.11	0.11	0.20	0.22
500	10	-13.13	-12.02	-8.74	-5.45	-3.55	-2.34	-1.55	-0.99	-0.59

TABLE 27

H1/A = 1.00 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.27	0.21	0.04	-0.09	-0.10	-0.08	-0.06	-0.05	-0.04
5	5	0.95	0.81	0.41	0.08	-0.08	-0.11	-0.10	-0.10	-0.09
10	5	1.54	1.33	0.76	0.25	0.03	-0.06	-0.10	-0.12	-0.13
20	5	2.20	1.94	1.24	0.59	0.25	0.07	-0.03	-0.09	-0.12
50	5	3.08	2.77	1.95	1.15	0.69	0.42	0.23	0.09	-0.00
100	5	3.70	3.37	2.49	1.63	1.11	0.77	0.53	0.34	0.20
500	5	4.99	4.64	3.71	2.77	2.17	1.76	1.44	1.18	0.96
2	10	0.33	0.27	0.09	-0.06	-0.06	-0.08	-0.05	-0.05	-0.04
5	10	1.04	0.89	0.48	0.13	-0.01	-0.05	-0.06	-0.07	-0.08
10	10	1.73	1.52	0.94	0.41	0.17	0.05	-0.01	-0.02	-0.08
20	10	2.48	2.22	1.50	0.82	0.46	0.26	0.13	0.04	-0.03
50	10	3.44	3.13	2.30	1.48	1.00	0.70	0.48	0.32	0.19
100	10	4.10	3.78	2.89	2.01	1.47	1.11	0.85	0.63	0.47
500	10	5.44	5.09	4.15	3.21	2.60	2.18	1.85	1.57	1.35

H1/A = 1.00 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-1.07	-1.02	-0.60	-0.18	-0.09	-0.03	0.00	0.02	0.03
5	5	-1.58	-1.47	-0.91	-0.34	-0.15	-0.05	0.01	0.04	0.06
10	5	-2.05	-1.90	-1.24	-0.56	-0.28	-0.11	-0.01	0.04	0.06
20	5	-2.58	-2.40	-1.65	-0.86	-0.49	-0.25	-0.13	-0.01	0.06
50	5	-3.31	-3.10	-2.27	-1.38	-0.91	-0.58	-0.36	-0.20	-0.08
100	5	-3.85	-3.62	-2.76	-1.82	-1.29	-0.92	-0.64	-0.44	-0.28
500	5	-5.04	-4.80	-3.89	-2.89	-2.31	-1.86	-1.52	-1.25	-1.05
2	10	-1.22	-1.16	-0.73	-0.28	-0.17	-0.09	-0.05	-0.01	0.02
5	10	-1.78	-1.67	-1.09	-0.50	-0.28	-0.16	-0.08	-0.01	0.03
10	10	-2.31	-2.18	-1.51	-0.80	-0.49	-0.26	-0.13	-0.05	0.01
20	10	-2.90	-2.71	-1.94	-1.13	-0.73	-0.46	-0.28	-0.15	-0.06
50	10	-3.69	-3.47	-2.63	-1.72	-1.23	-0.87	-0.62	-0.43	-0.28
100	10	-4.26	-4.03	-3.16	-2.20	-1.66	-1.26	-0.97	-0.74	-0.55
500	10	-5.49	-5.24	-4.33	-3.33	-2.73	-2.28	-1.93	-1.64	-1.40

H1/A = 1.00 H2/A = 2.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.18	0.13	-0.03	-0.14	-0.13	-0.10	-0.07	-0.05	-0.03
5	5	0.74	0.60	0.23	-0.07	-0.15	-0.15	-0.12	-0.10	-0.08
10	5	1.29	1.09	0.55	0.13	-0.09	-0.14	-0.14	-0.13	-0.12
20	5	1.91	1.66	0.99	0.37	0.08	-0.04	-0.10	-0.13	-0.14
50	5	2.78	2.48	1.68	0.91	0.49	0.26	0.11	0.01	-0.06
100	5	3.43	3.11	2.24	1.41	0.91	0.60	0.39	0.24	0.12
500	5	4.83	4.49	3.56	2.63	2.04	1.64	1.33	1.08	0.88
2	10	0.18	0.12	-0.04	-0.15	-0.14	-0.11	-0.07	-0.05	-0.04
5	10	0.77	0.63	0.25	-0.05	-0.14	-0.13	-0.11	-0.09	-0.07
10	10	1.37	1.17	0.63	0.15	-0.04	-0.09	-0.10	-0.10	-0.10
20	10	2.03	1.78	1.10	0.48	0.19	0.05	-0.02	-0.06	-0.08
50	10	2.99	2.69	1.89	1.11	0.68	0.43	0.27	0.16	0.08
100	10	3.72	3.40	2.53	1.68	1.17	0.85	0.63	0.45	0.32
500	10	5.24	4.89	3.96	3.03	2.43	2.02	1.70	1.44	1.23

H1/A = 1.00 H2/A = 2.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.94	-0.90	-0.51	-0.12	-0.07	-0.04	-0.02	-0.01	-0.00
5	5	-1.39	-1.30	-0.77	-0.25	-0.11	-0.04	-0.00	0.01	0.02
10	5	-1.83	-1.70	-1.07	-0.43	-0.20	-0.08	-0.02	0.02	0.04
20	5	-2.33	-2.15	-1.43	-0.69	-0.36	-0.17	-0.06	0.00	0.04
50	5	-3.05	-2.85	-2.04	-1.18	-0.74	-0.46	-0.27	-0.14	-0.05
100	5	-3.62	-3.40	-2.55	-1.63	-1.13	-0.78	-0.54	-0.36	-0.22
500	5	-4.91	-4.67	-3.76	-2.77	-2.19	-1.76	-1.43	-1.17	-0.95
2	10	-1.00	-0.96	-0.57	-0.18	-0.11	-0.08	-0.06	-0.04	-0.03
5	10	-1.48	-1.39	-0.86	-0.33	-0.18	-0.10	-0.06	-0.04	-0.02
10	10	-1.95	-1.82	-1.18	-0.53	-0.29	-0.15	-0.09	-0.04	-0.02
20	10	-2.50	-2.33	-1.60	-0.85	-0.51	-0.30	-0.18	-0.10	-0.05
50	10	-3.31	-3.10	-2.20	-1.41	-0.97	-0.66	-0.46	-0.31	-0.21
100	10	-3.94	-3.71	-2.85	-1.92	-1.42	-1.05	-0.79	-0.59	-0.44
500	10	-5.32	-5.08	-4.17	-3.17	-2.59	-2.14	-1.80	-1.53	-1.30

TABLE 28

H1/A = 1.00 H2/A = 3.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.18	0.12	-0.04	-0.15	-0.14	-0.11	-0.07	-0.05	-0.04
5	5	0.69	0.56	0.19	-0.11	-0.18	-0.17	-0.13	-0.11	-0.08
10	5	1.21	1.01	0.48	0.02	-0.10	-0.18	-0.17	-0.15	-0.13
20	5	1.83	1.58	0.87	0.27	-0.00	-0.11	-0.15	-0.16	-0.16
50	5	2.65	2.35	1.56	0.81	0.40	0.18	0.06	-0.06	-0.11
100	5	3.24	2.93	2.07	1.24	0.76	0.47	0.28	0.14	0.04
500	5	4.69	4.34	3.42	2.49	1.90	1.51	1.22	0.98	0.78
2	10	0.16	0.11	-0.06	-0.16	-0.16	-0.12	-0.08	-0.06	-0.05
5	10	0.69	0.56	0.19	-0.11	-0.18	-0.17	-0.14	-0.11	-0.09
10	10	1.23	1.03	0.50	0.04	-0.13	-0.16	-0.16	-0.14	-0.12
20	10	1.86	1.61	0.94	0.34	0.04	-0.07	-0.11	-0.13	-0.13
50	10	2.73	2.44	1.64	0.88	0.47	0.25	0.12	0.03	-0.03
100	10	3.43	3.12	2.26	1.42	0.94	0.64	0.44	0.32	0.22
500	10	5.03	4.69	3.76	2.83	2.24	1.84	1.53	1.28	1.08

H1/A = 1.00 H2/A = 3.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.88	-0.84	-0.46	-0.08	-0.04	-0.02	-0.02	-0.01	-0.01
5	5	-1.30	-1.21	-0.70	-0.19	-0.06	-0.01	0.01	0.01	0.01
10	5	-1.72	-1.58	-0.96	-0.34	-0.13	-0.02	0.02	0.03	0.03
20	5	-2.19	-2.02	-1.31	-0.58	-0.28	-0.10	-0.01	0.03	0.05
50	5	-2.89	-2.69	-1.89	-1.04	-0.62	-0.35	-0.19	-0.08	-0.01
100	5	-3.45	-3.23	-2.38	-1.48	-1.00	-0.66	-0.44	-0.27	-0.16
500	5	-4.78	-4.53	-3.63	-2.65	-2.08	-1.65	-1.33	-1.07	-0.87
2	10	-0.92	-0.89	-0.50	-0.12	-0.07	-0.05	-0.05	-0.04	-0.03
5	10	-1.37	-1.27	-0.76	-0.24	-0.11	-0.05	-0.04	-0.03	-0.02
10	10	-1.80	-1.67	-1.04	-0.42	-0.20	-0.09	-0.04	-0.02	-0.01
20	10	-2.31	-2.14	-1.42	-0.69	-0.38	-0.20	-0.10	-0.05	-0.02
50	10	-3.07	-2.87	-2.06	-1.21	-0.79	-0.51	-0.34	-0.22	-0.14
100	10	-3.68	-3.45	-2.60	-1.69	-1.20	-0.86	-0.62	-0.45	-0.33
500	10	-5.13	-4.89	-3.98	-2.99	-2.42	-1.98	-1.65	-1.39	-1.18

H1/A = 1.50 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.27	0.23	0.13	0.03	-0.03	-0.04	-0.04	-0.04	-0.04
5	5	0.66	0.58	0.37	0.17	0.05	-0.01	-0.03	-0.04	-0.05
10	5	1.01	0.89	0.62	0.34	0.19	0.10	0.05	-0.01	-0.04
20	5	1.34	1.21	0.89	0.56	0.34	0.21	0.12	0.06	0.02
50	5	1.75	1.60	1.24	0.87	0.61	0.44	0.32	0.23	0.16
100	5	2.03	1.87	1.49	1.10	0.82	0.64	0.54	0.43	0.35
500	5	2.58	2.42	2.03	1.62	1.32	1.12	0.96	0.84	0.73
2	10	0.30	0.26	0.15	0.05	0.01	-0.01	-0.01	-0.02	-0.02
5	10	0.78	0.69	0.48	0.27	0.14	0.06	0.02	-0.00	-0.02
10	10	1.14	1.02	0.74	0.46	0.28	0.17	0.11	0.06	0.02
20	10	1.51	1.37	1.04	0.71	0.48	0.34	0.24	0.17	0.11
50	10	1.94	1.79	1.42	1.04	0.81	0.63	0.51	0.41	0.33
100	10	2.22	2.07	1.69	1.29	1.01	0.82	0.68	0.57	0.47
500	10	2.79	2.63	2.24	1.82	1.52	1.31	1.16	1.03	0.92

H1/A = 1.50 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.89	-0.87	-0.52	-0.17	-0.11	-0.07	-0.03	-0.01	0.01
5	5	-1.16	-1.13	-0.74	-0.32	-0.21	-0.13	-0.07	-0.02	0.00
10	5	-1.43	-1.38	-0.93	-0.47	-0.32	-0.21	-0.12	-0.06	-0.02
20	5	-1.66	-1.60	-1.15	-0.66	-0.48	-0.33	-0.22	-0.14	-0.08
50	5	-1.99	-1.92	-1.45	-0.93	-0.72	-0.55	-0.41	-0.31	-0.22
100	5	-2.25	-2.18	-1.70	-1.17	-0.95	-0.76	-0.61	-0.49	-0.37
500	5	-2.74	-2.67	-2.18	-1.63	-1.39	-1.19	-1.02	-0.89	-0.77
2	10	-0.99	-0.97	-0.62	-0.25	-0.17	-0.11	-0.07	-0.04	-0.02
5	10	-1.29	-1.25	-0.85	-0.42	-0.30	-0.20	-0.13	-0.08	-0.04
10	10	-1.56	-1.50	-1.07	-0.60	-0.44	-0.31	-0.22	-0.15	-0.09
20	10	-1.83	-1.77	-1.31	-0.81	-0.62	-0.47	-0.35	-0.25	-0.18
50	10	-2.21	-2.14	-1.66	-1.14	-0.92	-0.74	-0.60	-0.45	-0.36
100	10	-2.42	-2.35	-1.86	-1.33	-1.10	-0.91	-0.75	-0.63	-0.53
500	10	-2.94	-2.87	-2.38	-1.83	-1.59	-1.38	-1.22	-1.08	-0.96

TABLE 29

H1/A = 1.5o H2/A = 2.oo Z/H1 = o.oo

E1/E2	E2/E3	R/A=o.o	R/A=o.5	R/A=1.o	R/A=1.5	R/A=2.o	R/A=2.5	R/A=3.o	R/A=3.5	R/A=4.o
2	5	o.18	o.14	o.o5	-o.o3	-o.o7	-o.o7	-o.o5	-o.o4	-o.o4
5	5	o.57	o.48	o.29	o.o8	-o.o2	-o.o5	-o.o6	-o.o6	-o.o6
1o	5	o.89	o.78	o.51	o.25	o.1o	o.o3	-o.o1	-o.o2	-o.o3
2o	5	1.2o	1.o8	o.76	o.45	o.25	o.13	o.o6	o.o2	-o.o1
5o	5	1.63	1.49	1.13	o.76	o.51	o.36	o.26	o.18	o.12
1oo	5	1.96	1.81	1.43	1.o5	o.77	o.6o	o.47	o.38	o.3o
5oo	5	2.54	2.38	1.99	1.58	1.28	1.o8	o.93	o.81	o.7o
2	1o	o.19	o.15	o.o5	-o.o3	-o.o5	-o.o6	-o.o5	-o.o4	-o.o3
5	1o	o.59	o.51	o.31	o.12	o.o2	-o.o2	-o.o3	-o.o3	-o.o3
1o	1o	o.93	o.82	o.56	o.3o	o.14	o.o6	o.o2	-o.oo	-o.o2
2o	1o	1.3o	1.17	o.85	o.54	o.33	o.21	o.14	o.o9	o.o5
5o	1o	1.8o	1.65	1.29	o.93	o.67	o.51	o.37	o.29	o.22
1oo	1o	2.o9	1.94	1.57	1.18	o.9o	o.72	o.59	o.49	o.4o
5oo	1o	2.73	2.58	2.18	1.77	1.47	1.27	1.12	o.99	o.88

H1/A = 1.5o H2/A = 2.oo Z/H1 = 1.oo

E1/E2	E2/E3	R/A=o.o	R/A=o.5	R/A=1.o	R/A=1.5	R/A=2.o	R/A=2.5	R/A=3.o	R/A=3.5	R/A=4.o
2	5	-o.81	-o.8o	-o.46	-o.12	-o.o8	-o.o5	-o.o3	-o.o2	-o.o1
5	5	-1.o6	-1.o3	-o.65	-o.24	-o.16	-o.o9	-o.o5	-o.o2	-o.o1
1o	5	-1.3o	-1.25	-o.83	-o.39	-o.26	-o.16	-o.o9	-o.o5	-o.o2
2o	5	-1.55	-1.49	-1.o5	-o.57	-o.4o	-o.27	-o.18	-o.11	-o.o7
5o	5	-1.89	-1.83	-1.36	-o.85	-o.65	-o.48	-o.36	-o.27	-o.19
1oo	5	-2.18	-2.11	-1.63	-1.1o	-o.88	-o.7o	-o.53	-o.42	-o.33
5oo	5	-2.7o	-2.63	-2.14	-1.6o	-1.36	-1.16	-o.99	-o.86	-o.75
2	1o	-o.86	-o.85	-o.51	-o.16	-o.12	-o.o9	-o.o6	-o.o5	-o.o3
5	1o	-1.13	-1.1o	-o.71	-o.31	-o.21	-o.15	-o.1o	-o.o7	-o.o4
1o	1o	-1.39	-1.34	-o.92	-o.47	-o.34	-o.23	-o.16	-o.11	-o.o7
2o	1o	-1.67	-1.61	-1.16	-o.68	-o.51	-o.37	-o.27	-o.2o	-o.16
5o	1o	-2.o4	-1.98	-1.51	-o.99	-o.79	-o.62	-o.49	-o.39	-o.31
1oo	1o	-2.32	-2.25	-1.77	-1.24	-1.o2	-o.83	-o.69	-o.57	-o.47
5oo	1o	-2.9o	-2.82	-2.33	-1.79	-1.55	-1.35	-1.18	-1.o4	-o.93

H1/A = 1.5o H2/A = 3.oo Z/H1 = o.oo

E1/E2	E2/E3	R/A=o.o	R/A=o.5	R/A=1.o	R/A=1.5	R/A=2.o	R/A=2.5	R/A=3.o	R/A=3.5	R/A=4.o
2	5	o.17	o.13	o.o3	-o.o5	-o.o8	-o.o6	-o.o6	-o.o5	-o.o4
5	5	o.51	o.42	o.23	o.o7	-o.o4	-o.o8	-o.o8	-o.o7	-o.o6
1o	5	o.81	o.7o	o.44	o.19	o.o4	-o.o3	-o.o5	-o.o7	-o.o7
2o	5	1.15	1.o2	o.71	o.4o	o.2o	o.1o	o.o2	-o.o2	-o.o4
5o	5	1.55	1.4o	1.o5	o.69	o.44	o.29	o.2o	o.13	o.o8
1oo	5	1.88	1.73	1.36	o.97	o.7o	o.53	o.41	o.32	o.25
5oo	5	2.49	2.33	1.94	1.53	1.24	1.o3	o.89	o.77	o.67
2	1o	o.16	o.12	o.o3	-o.o5	-o.o8	-o.o6	-o.o7	-o.o5	-o.o4
5	1o	o.52	o.44	o.25	o.o7	-o.o3	-o.c7	-o.o7	-o.o6	-o.o6
1o	1o	o.85	o.74	o.48	o.23	o.o8	o.o1	-o.o2	-o.o3	-o.o4
2o	1o	1.19	1.o6	o.75	o.44	o.24	o.13	o.o7	o.o3	o.o1
5o	1o	1.65	1.5o	1.15	o.78	o.54	o.38	o.28	o.21	o.15
1oo	1o	1.98	1.83	1.46	1.o7	o.8o	o.62	o.5o	o.41	o.33
5oo	1o	2.67	2.51	2.12	1.71	1.41	1.21	1.o6	o.94	o.83

H1/A = 1.5o H2/A = 3.oo Z/H1 = 1.oo

E1/E2	E2/E3	R/A=o.o	R/A=o.5	R/A=1.o	R/A=1.5	R/A=2.o	R/A=2.5	R/A=3.o	R/A=3.5	R/A=4.o
2	5	-o.77	-o.76	-o.43	-o.o9	-o.o6	-o.o4	-o.o2	-o.o2	-o.o1
5	5	-1.o1	-o.98	-o.6o	-o.21	-o.12	-o.o7	-o.o3	-o.o2	-o.o1
1o	5	-1.24	-1.19	-o.78	-o.34	-o.22	-o.13	-o.o7	-o.o3	-o.o1
2o	5	-1.48	-1.42	-o.98	-o.51	-o.35	-o.23	-o.14	-o.o9	-o.o5
5o	5	-1.82	-1.76	-1.29	-o.78	-o.59	-o.43	-o.31	-o.23	-o.17
1oo	5	-2.o8	-2.o1	-1.54	-1.o1	-o.8o	-o.62	-o.48	-o.38	-o.3o
5oo	5	-2.66	-2.59	-2.1o	-1.56	-1.32	-1.12	-o.96	-o.83	-o.72
2	1o	-o.81	-o.79	-o.46	-o.12	-o.o9	-o.o6	-o.o5	-o.o4	-o.o3
5	1o	-1.o6	-1.o3	-o.65	-o.25	-o.17	-o.11	-o.o7	-o.o5	-o.o4
1o	1o	-1.3o	-1.25	-o.84	-o.4o	-o.28	-o.18	-o.12	-o.o8	-o.o6
2o	1o	-1.57	-1.51	-1.o7	-o.6o	-o.43	-o.31	-o.22	-o.16	-o.1o
5o	1o	-1.93	-1.87	-1.4o	-o.89	-o.69	-o.53	-o.41	-o.32	-o.25
1oo	1o	-2.22	-2.15	-1.67	-1.15	-o.93	-o.75	-o.61	-o.5o	-o.41
5oo	1o	-2.84	-2.77	-2.28	-1.74	-1.5o	-1.3o	-1.13	-1.oo	-o.89

TABLE 30

H1/A = 2.00 H2/A = 1.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.20	0.18	0.12	0.06	0.02	-0.00	-0.01	-0.02	-0.02
5	5	0.48	0.44	0.33	0.20	0.11	0.06	0.03	-0.00	-0.02
10	5	0.68	0.62	0.48	0.32	0.20	0.12	0.07	0.04	0.02
20	5	0.88	0.81	0.65	0.46	0.32	0.22	0.16	0.11	0.08
50	5	1.13	1.06	0.88	0.67	0.51	0.40	0.32	0.26	0.19
100	5	1.26	1.18	1.00	0.78	0.61	0.50	0.41	0.34	0.29
500	5	1.57	1.50	1.30	1.08	0.90	0.77	0.68	0.60	0.54
2	10	0.26	0.23	0.17	0.10	0.05	0.03	0.01	0.01	-0.01
5	10	0.54	0.49	0.38	0.25	0.16	0.10	0.06	0.04	0.02
10	10	0.77	0.71	0.57	0.40	0.28	0.19	0.14	0.10	0.07
20	10	1.00	0.93	0.76	0.58	0.43	0.33	0.26	0.21	0.17
50	10	1.22	1.15	0.96	0.76	0.59	0.48	0.39	0.33	0.28
100	10	1.38	1.30	1.11	0.90	0.72	0.60	0.51	0.44	0.39
500	10	1.68	1.61	1.41	1.19	1.01	0.88	0.79	0.72	0.65

H1/A = 2.00 H2/A = 1.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.80	-0.79	-0.47	-0.14	-0.00	-0.08	-0.05	-0.03	-0.01
5	5	-0.96	-0.95	-0.60	-0.25	-0.19	-0.14	-0.09	-0.06	-0.03
10	5	-1.10	-1.08	-0.73	-0.36	-0.28	-0.21	-0.15	-0.10	-0.07
20	5	-1.25	-1.22	-0.86	-0.47	-0.38	-0.30	-0.23	-0.17	-0.13
50	5	-1.45	-1.42	-1.05	-0.64	-0.53	-0.44	-0.36	-0.29	-0.23
100	5	-1.56	-1.53	-1.16	-0.76	-0.65	-0.55	-0.46	-0.39	-0.33
500	5	-1.84	-1.82	-1.44	-1.04	-0.92	-0.82	-0.72	-0.64	-0.58
2	10	-0.86	-0.85	-0.52	-0.19	-0.00	-0.11	-0.08	-0.06	-0.04
5	10	-1.04	-1.03	-0.68	-0.32	-0.26	-0.20	-0.15	-0.11	-0.07
10	10	-1.20	-1.18	-0.82	-0.44	-0.36	-0.28	-0.22	-0.17	-0.13
20	10	-1.37	-1.34	-0.98	-0.59	-0.49	-0.41	-0.33	-0.27	-0.22
50	10	-1.54	-1.51	-1.14	-0.74	-0.64	-0.54	-0.46	-0.38	-0.32
100	10	-1.67	-1.64	-1.27	-0.87	-0.76	-0.66	-0.57	-0.49	-0.43
500	10	-1.96	-1.93	-1.55	-1.15	-1.04	-0.93	-0.83	-0.75	-0.68

H1/A = 2.00 H2/A = 2.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.16	0.13	0.08	0.02	-0.02	-0.03	-0.03	-0.03	-0.03
5	5	0.40	0.36	0.25	0.14	0.06	0.02	-0.00	-0.01	-0.02
10	5	0.60	0.54	0.40	0.25	0.14	0.07	0.03	0.01	-0.00
20	5	0.80	0.74	0.58	0.40	0.26	0.17	0.11	0.08	0.05
50	5	1.07	1.00	0.82	0.62	0.46	0.35	0.28	0.20	0.16
100	5	1.22	1.14	0.96	0.75	0.58	0.46	0.38	0.31	0.26
500	5	1.55	1.47	1.28	1.06	0.88	0.75	0.66	0.59	0.53
2	10	0.16	0.14	0.08	0.03	-0.01	-0.02	-0.02	-0.02	-0.02
5	10	0.43	0.38	0.27	0.16	0.08	0.03	0.01	0.00	-0.01
10	10	0.66	0.60	0.46	0.31	0.19	0.12	0.08	0.06	0.04
20	10	0.89	0.82	0.66	0.48	0.34	0.25	0.19	0.15	0.12
50	10	1.14	1.07	0.89	0.69	0.53	0.42	0.34	0.28	0.24
100	10	1.32	1.24	1.06	0.85	0.68	0.56	0.47	0.41	0.35
500	10	1.66	1.59	1.39	1.17	0.99	0.87	0.77	0.70	0.64

H1/A = 2.00 H2/A = 2.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.74	-0.74	-0.42	-0.10	-0.00	-0.06	-0.04	-0.03	-0.02
5	5	-0.90	-0.89	-0.55	-0.20	-0.15	-0.11	-0.08	-0.05	-0.03
10	5	-1.04	-1.02	-0.67	-0.31	-0.24	-0.18	-0.13	-0.09	-0.06
20	5	-1.19	-1.17	-0.81	-0.43	-0.34	-0.26	-0.20	-0.15	-0.12
50	5	-1.39	-1.36	-0.99	-0.60	-0.50	-0.41	-0.33	-0.27	-0.21
100	5	-1.53	-1.50	-1.13	-0.73	-0.62	-0.53	-0.44	-0.37	-0.31
500	5	-1.83	-1.80	-1.43	-1.02	-0.91	-0.80	-0.71	-0.63	-0.56
2	10	-0.78	-0.78	-0.46	-0.13	-0.00	-0.09	-0.07	-0.05	-0.04
5	10	-0.96	-0.94	-0.61	-0.25	-0.20	-0.16	-0.12	-0.09	-0.07
10	10	-1.11	-1.10	-0.75	-0.38	-0.30	-0.24	-0.19	-0.14	-0.11
20	10	-1.27	-1.25	-0.89	-0.50	-0.42	-0.34	-0.27	-0.21	-0.18
50	10	-1.48	-1.46	-1.09	-0.69	-0.59	-0.50	-0.42	-0.35	-0.29
100	10	-1.63	-1.60	-1.23	-0.83	-0.72	-0.62	-0.54	-0.46	-0.40
500	10	-1.94	-1.91	-1.54	-1.13	-1.02	-0.91	-0.82	-0.74	-0.67

TABLE 31

H1/A = 2.00 H2/A = 3.00 Z/H1 = 0.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	0.13	0.11	0.05	0.00	-0.02	-0.04	-0.04	-0.04	-0.03
5	5	0.37	0.33	0.22	0.11	0.03	-0.01	-0.03	-0.04	-0.04
10	5	0.57	0.51	0.38	0.23	0.12	0.06	0.02	-0.01	-0.02
20	5	0.76	0.69	0.53	0.36	0.22	0.14	0.08	0.05	0.02
50	5	1.02	0.95	0.77	0.57	0.42	0.31	0.24	0.17	0.13
100	5	1.18	1.10	0.92	0.71	0.54	0.43	0.35	0.28	0.24
500	5	1.53	1.45	1.26	1.04	0.86	0.74	0.65	0.57	0.51
2	10	0.14	0.11	0.06	0.00	-0.02	-0.04	-0.04	-0.04	-0.03
5	10	0.38	0.34	0.23	0.12	0.04	0.00	-0.01	-0.02	-0.02
10	10	0.59	0.54	0.40	0.25	0.14	0.07	0.04	0.02	0.01
20	10	0.82	0.75	0.59	0.41	0.28	0.19	0.14	0.10	0.07
50	10	1.08	1.01	0.83	0.63	0.47	0.36	0.29	0.23	0.19
100	10	1.27	1.19	1.01	0.80	0.63	0.51	0.43	0.37	0.31
500	10	1.64	1.56	1.37	1.15	0.97	0.84	0.75	0.68	0.62

H1/A = 2.00 H2/A = 3.00 Z/H1 = 1.00

E1/E2	E2/E3	R/A=0.0	R/A=0.5	R/A=1.0	R/A=1.5	R/A=2.0	R/A=2.5	R/A=3.0	R/A=3.5	R/A=4.0
2	5	-0.72	-0.71	-0.40	-0.08	-0.00	-0.04	-0.03	-0.02	-0.02
5	5	-0.87	-0.86	-0.52	-0.18	-0.13	-0.09	-0.06	-0.04	-0.03
10	5	-1.01	-0.99	-0.64	-0.28	-0.21	-0.15	-0.11	-0.07	-0.05
20	5	-1.16	-1.13	-0.78	-0.40	-0.32	-0.24	-0.18	-0.13	-0.10
50	5	-1.35	-1.32	-0.96	-0.56	-0.47	-0.38	-0.30	-0.24	-0.19
100	5	-1.49	-1.47	-1.10	-0.70	-0.60	-0.50	-0.42	-0.35	-0.29
500	5	-1.81	-1.79	-1.41	-1.01	-0.89	-0.79	-0.70	-0.62	-0.55
2	10	-0.75	-0.74	-0.43	-0.11	-0.00	-0.07	-0.05	-0.04	-0.03
5	10	-0.91	-0.89	-0.56	-0.21	-0.17	-0.12	-0.09	-0.07	-0.05
10	10	-1.06	-1.04	-0.69	-0.33	-0.26	-0.19	-0.14	-0.11	-0.08
20	10	-1.21	-1.19	-0.82	-0.45	-0.37	-0.30	-0.23	-0.18	-0.14
50	10	-1.43	-1.40	-1.03	-0.64	-0.54	-0.45	-0.37	-0.31	-0.26
100	10	-1.59	-1.56	-1.19	-0.79	-0.68	-0.59	-0.50	-0.43	-0.37
500	10	-1.92	-1.89	-1.52	-1.11	-1.00	-0.89	-0.80	-0.72	-0.65