



表6.2.4-3 Pca床版の耐力 (断面C)

| 荷重ケース | ヤング係数 E tf/m ² | 断面2次 モーメント I m ⁴ | 軸力 N tf | アレストス P tf | 偏心量 ep cm | 鋼材量 (PC鋼材) (鉄筋) | | 下側引張 (正の曲げ) | | | | 上側引張 (負の曲げ) | | | | | | | | | | | | |
|-----------|---------------------------------|--------------------------------------|---------------|------------------|-----------------|----------------------------------|--------------------------------|------------------------|----------------------|----------------------|--|--|--|--|----------------------|----------------------|----------------------|--|--|--|--|-----|-------|---------|
| | | | | | | 鋼材量 (PC鋼材) mm ² | 鋼材量 (鉄筋) cm ² | ひび割れ時 Mc(+) tf-m | 降伏時 My(+) tf-m | 終局時 Mu(+) tf-m | 降伏時 φy(+) 10 ⁻³ x 1/m | ひび割れ時 φs(+) 10 ⁻³ x 1/m | 降伏時 φy(+) 10 ⁻³ x 1/m | 終局時 φu(+) 10 ⁻³ x 1/m | 降伏時 Mc(-) tf-m | 降伏時 My(-) tf-m | 終局時 Mu(-) tf-m | 降伏時 φy(-) 10 ⁻³ x 1/m | ひび割れ時 φs(-) 10 ⁻³ x 1/m | 降伏時 φy(-) 10 ⁻³ x 1/m | 終局時 φu(-) 10 ⁻³ x 1/m | | | |
| SECC(-60) | 3.5E+06 | 0.003408 | 11928 | -60 | 84 | 4.9 | 789.6 | 15.484 | 1.9 | 0.156 | 7.2 | 6.623 | 1087 | 1.11 | 13.7 | 103.323 | -14.4 | -1.171 | -29.3 | -7.865 | 3725 | 1/3 | -38.6 | -40.432 |
| SECC(-55) | 3.5E+06 | 0.003408 | 11928 | -55 | 84 | 4.9 | 789.6 | 15.484 | 2.2 | 0.178 | 7.8 | 6.677 | 1168 | 1/10 | 14.2 | 100.389 | -14.8 | -1.208 | -30.2 | -7.964 | 3792 | 1/3 | -39.3 | -39.502 |
| SECC(-50) | 3.5E+06 | 0.003408 | 11928 | -50 | 84 | 4.9 | 789.6 | 15.484 | 2.5 | 0.200 | 8.3 | 6.731 | 1233 | 1/10 | 14.8 | 97.599 | -15.3 | -1.244 | -31.1 | -8.062 | 3857 | 1/3 | -40.0 | -38.599 |
| SECC(-45) | 3.5E+06 | 0.003408 | 11928 | -45 | 84 | 4.9 | 789.6 | 15.484 | 2.7 | 0.222 | 8.9 | 6.783 | 1312 | 1/9 | 15.4 | 95.065 | -15.7 | -1.281 | -32.0 | -8.160 | 3921 | 1/3 | -40.8 | -37.722 |
| SECC(-40) | 3.5E+06 | 0.003408 | 11928 | -40 | 84 | 4.9 | 789.6 | 15.484 | 3.0 | 0.244 | 9.5 | 6.834 | 1390 | 1/9 | 15.9 | 93.203 | -16.2 | -1.317 | -32.9 | -8.258 | 3984 | 1/3 | -41.5 | -36.871 |
| SECC(-35) | 3.5E+06 | 0.003408 | 11928 | -35 | 84 | 4.9 | 789.6 | 15.484 | 3.3 | 0.266 | 10.0 | 6.885 | 1452 | 1/8 | 16.4 | 91.389 | -16.6 | -1.354 | -33.7 | -8.356 | 4033 | 1/3 | -42.2 | -36.044 |
| SECC(-30) | 3.5E+06 | 0.003408 | 11928 | -30 | 84 | 4.9 | 789.6 | 15.484 | 3.5 | 0.288 | 10.6 | 6.934 | 1529 | 1/8 | 17.0 | 89.621 | -17.1 | -1.390 | -34.6 | -8.454 | 4093 | 1/3 | -43.0 | -35.243 |
| SECC(-25) | 3.5E+06 | 0.003408 | 11928 | -25 | 84 | 4.9 | 789.6 | 15.484 | 3.8 | 0.310 | 11.1 | 6.983 | 1590 | 1/8 | 17.5 | 87.899 | -17.5 | -1.427 | -35.5 | -8.552 | 4151 | 1/3 | -43.7 | -34.466 |
| SECC(-20) | 3.5E+06 | 0.003408 | 11928 | -20 | 84 | 4.9 | 789.6 | 15.484 | 4.1 | 0.332 | 11.7 | 7.031 | 1664 | 1/7 | 18.0 | 86.222 | -18.0 | -1.464 | -36.3 | -8.650 | 4197 | 1/3 | -44.4 | -33.712 |
| SECC(-15) | 3.5E+06 | 0.003408 | 11928 | -15 | 84 | 4.9 | 789.6 | 15.484 | 4.4 | 0.354 | 12.2 | 7.079 | 1723 | 1/7 | 18.6 | 84.589 | -18.4 | -1.500 | -37.2 | -8.748 | 4252 | 1/3 | -45.1 | -32.981 |
| SECC(-10) | 3.5E+06 | 0.003408 | 11928 | -10 | 84 | 4.9 | 789.6 | 15.484 | 4.6 | 0.376 | 12.8 | 7.126 | 1796 | 1/7 | 19.1 | 83.000 | -18.9 | -1.537 | -38.0 | -8.847 | 4295 | 1/3 | -45.9 | -32.272 |
| SECC(-5) | 3.5E+06 | 0.003408 | 11928 | -5 | 84 | 4.9 | 789.6 | 15.484 | 4.9 | 0.399 | 13.3 | 7.172 | 1854 | 1/6 | 19.6 | 81.452 | -19.3 | -1.573 | -38.9 | -8.946 | 4348 | 1/3 | -46.6 | -31.585 |
| SECC(0) | 3.5E+06 | 0.003408 | 11928 | 0 | 84 | 4.9 | 789.6 | 15.484 | 5.2 | 0.421 | 13.9 | 7.218 | 1926 | 1/6 | 20.2 | 79.945 | -19.8 | -1.610 | -39.7 | -9.045 | 4389 | 1/3 | -47.3 | -30.920 |
| SECC(5) | 3.5E+06 | 0.003408 | 11928 | 5 | 84 | 4.9 | 789.6 | 15.484 | 5.4 | 0.443 | 14.4 | 7.263 | 1983 | 1/6 | 20.7 | 78.478 | -20.2 | -1.648 | -40.5 | -9.145 | 4429 | 1/3 | -48.0 | -30.274 |
| SECC(10) | 3.5E+06 | 0.003408 | 11928 | 10 | 84 | 4.9 | 789.6 | 15.484 | 5.7 | 0.465 | 14.9 | 7.308 | 2039 | 1/6 | 21.2 | 77.301 | -20.7 | -1.683 | -41.3 | -9.246 | 4467 | 1/3 | -48.7 | -29.649 |
| SECC(15) | 3.5E+06 | 0.003408 | 11928 | 15 | 84 | 4.9 | 789.6 | 15.484 | 6.0 | 0.487 | 15.5 | 7.353 | 2108 | 1/6 | 21.7 | 76.225 | -21.1 | -1.720 | -42.2 | -9.347 | 4515 | 1/3 | -49.4 | -29.043 |
| SECC(20) | 3.5E+06 | 0.003408 | 11928 | 20 | 84 | 4.9 | 789.6 | 15.484 | 6.3 | 0.509 | 16.0 | 7.397 | 2163 | 1/6 | 22.2 | 75.167 | -21.6 | -1.756 | -43.0 | -9.449 | 4551 | 1/3 | -50.0 | -28.456 |
| SECC(25) | 3.5E+06 | 0.003408 | 11928 | 25 | 84 | 4.9 | 789.6 | 15.484 | 6.5 | 0.531 | 16.5 | 7.441 | 2218 | 1/5 | 22.7 | 74.126 | -22.0 | -1.793 | -43.8 | -9.551 | 4586 | 1/3 | -50.7 | -27.886 |
| SECC(30) | 3.5E+06 | 0.003408 | 11928 | 30 | 84 | 4.9 | 789.6 | 15.484 | 6.8 | 0.553 | 17.0 | 7.484 | 2271 | 1/5 | 23.2 | 73.101 | -22.3 | -1.829 | -44.6 | -9.654 | 4620 | 1/3 | -51.4 | -27.335 |
| SECC(35) | 3.5E+06 | 0.003408 | 11928 | 35 | 84 | 4.9 | 789.6 | 15.484 | 7.1 | 0.575 | 17.5 | 7.527 | 2325 | 1/5 | 23.7 | 72.093 | -22.9 | -1.866 | -45.3 | -9.759 | 4642 | 1/3 | -52.1 | -26.800 |
| SECC(40) | 3.5E+06 | 0.003408 | 11928 | 40 | 84 | 4.9 | 789.6 | 15.484 | 7.3 | 0.597 | 18.1 | 7.570 | 2391 | 1/5 | 24.2 | 71.101 | -23.4 | -1.902 | -46.1 | -9.864 | 4674 | 1/3 | -52.7 | -26.282 |
| SECC(45) | 3.5E+06 | 0.003408 | 11928 | 45 | 84 | 4.9 | 789.6 | 15.484 | 7.6 | 0.619 | 18.6 | 7.613 | 2443 | 1/5 | 24.7 | 70.126 | -23.8 | -1.939 | -46.9 | -9.970 | 4704 | 1/3 | -53.4 | -25.779 |
| SECC(50) | 3.5E+06 | 0.003408 | 11928 | 50 | 84 | 4.9 | 789.6 | 15.484 | 7.9 | 0.641 | 19.1 | 7.655 | 2495 | 1/5 | 25.2 | 69.168 | -24.3 | -1.975 | -47.6 | -10.078 | 4723 | 1/3 | -54.0 | -25.292 |
| SECC(55) | 3.5E+06 | 0.003408 | 11928 | 55 | 84 | 4.9 | 789.6 | 15.484 | 8.2 | 0.663 | 19.6 | 7.697 | 2546 | 1/5 | 25.7 | 68.229 | -24.7 | -2.012 | -48.4 | -10.187 | 4751 | 1/3 | -54.7 | -24.820 |
| SECC(60) | 3.5E+06 | 0.003408 | 11928 | 60 | 84 | 4.9 | 789.6 | 15.484 | 8.4 | 0.685 | 20.1 | 7.739 | 2597 | 1/5 | 26.2 | 67.299 | -25.2 | -2.049 | -49.1 | -10.297 | 4768 | 1/3 | -55.3 | -24.362 |

* ひび割れ引張強度をコンクリートの引張強度33.1kgf/cm²と仮定した。
* 降伏時は鉄筋の降伏時とする。