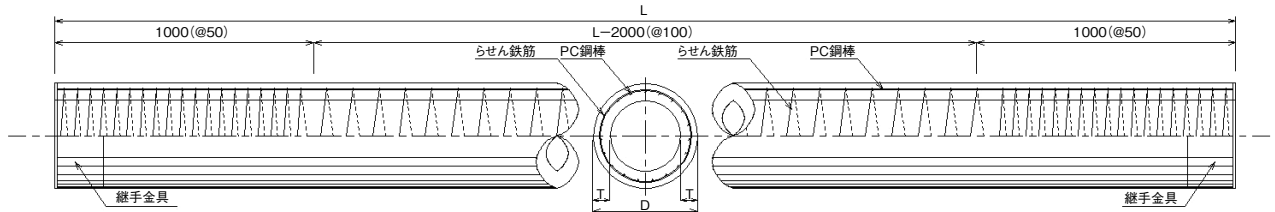


ナルックス-105(NA)パイル

近年、既製杭の施工法において高支持力が得られる施工法が開発され、これに伴い高支持力に対応できる既製杭の開発が求められてきました。ナルックス105(NA)パイルは、この要望に応え高支持力に対応して圧縮強度105N/mm²のコンクリートを用いた超高強度プレストレストコンクリートパイルです。また杭の厚さをS,M,Lの3種類にすることで経済的な設計に利用することができます。

(NA:常圧蒸気養生)



標準仕様

| 杭径 D (mm) | 厚さ T(mm) | | | 断面積 A(mm ²) | | | 杭長 L (m) | 杭種 | PC鋼棒 | | | | タップ穴 | | | 有効プレストレス (N/mm ²) | | | 杭の参考質量 (t/L) | | |
|-----------------|----------|-----|-----|-------------------------|--------|--------|----------------|----|---------------|----------------|------|----|------|------|-------------------|----------------------------------|------|---|-----------------|-------|-------|
| | Type | | | Type | | | | | 径(mm) Type | 本数 n (本) | Type | | | Type | | | Type | | | | |
| | S | M | L | S | M | L | | | | | S | M | L | S | M | L | S | M | L | S | M |
| 300 | 60 | - | - | 45239 | - | - | 4~13 | A | 7.1 | - | - | 6 | M22 | - | - | 4 | - | - | 0.120 | - | - |
| | | | | | | | 4~15 | B | 9.0 | - | - | 8 | M22 | - | - | 8 | - | - | | - | - |
| | | | | | | | | C | 10.0 | - | - | 8 | M22 | - | - | 10 | - | - | | - | - |
| 350 | 60 | 65 | 70 | 54664 | 58198 | 61575 | 4~13 | A | 7.1 | 9.0 | 9.0 | 7 | M22 | M22 | M22 | 4 | - | - | 0.145 | 0.150 | 0.160 |
| | | | | | | | 4~15 | B | 10.0 | 10.0 | 10.7 | 8 | M22 | M22 | M22 | 8 | - | - | | | |
| | | | | | | | | C | 10.7 | 11.2 | 11.2 | 8 | M22 | M24 | M24 | 10 | - | - | | | |
| 400 | 65 | 75 | 80 | 68408 | 76576 | 80425 | 4~15 | A | 7.1 | 7.1 | 7.1 | 10 | M22 | M22 | M22 | 4 | - | - | 0.180 | 0.200 | 0.210 |
| | | | | | | | | B | 10.0 | 10.7 | 10.7 | 10 | M22 | M22 | M22 | 8 | - | - | | | |
| | | | | | | | | C | 10.7 | 11.2 | 12.6 | 10 | M22 | M24 | M27 | 10 | - | - | | | |
| 450 | 70 | 80 | 90 | 83566 | 92991 | 101788 | 4~15 | A | 9.0 | 9.0 | 9.0 | 8 | M22 | M22 | M22 | 4 | - | - | 0.220 | 0.240 | 0.265 |
| | | | | | | | | B | 9.0 | 9.0 | 10.0 | 16 | M22 | M22 | M22 | 8 | - | - | | | |
| | | | | | | | | C | 10.0 | 10.0 | 10.7 | 16 | M22 | M22 | M22 | 10 | - | - | | | |
| 500 | 80 | 90 | 100 | 105557 | 115925 | 125664 | 4~15 | A | 9.0 | 9.0 | 10.0 | 9 | M22 | M22 | M22 | 4 | - | - | 0.275 | 0.300 | 0.330 |
| | | | | | | | | B | 9.0 | 9.0 | 10.0 | 18 | M22 | M22 | M22 | 8 | - | - | | | |
| | | | | | | | | C | 10.0 | 10.7 | 10.7 | 18 | M22 | M22 | M24 ^{*1} | 10 | - | - | | | |
| 600 | 90 | 100 | 120 | 144199 | 157080 | 180956 | 4~15 | A | 9.0 | 9.0 | 10.0 | 12 | M22 | M22 | M22 | 4 | - | - | 0.375 | 0.410 | 0.470 |
| | | | | | | | | B | 9.0 | 10.0 | 10.0 | 24 | M22 | M22 | M22 | 8 | - | - | | | |
| | | | | | | | | C | 10.0 | 10.7 | 11.2 | 24 | M22 | M22 | M24 | 10 | - | - | | | |
| 700 | 100 | 110 | 140 | 188495 | 203889 | 246301 | 4~15 | A | 10.0 | 10.0 | 11.2 | 13 | M24 | M24 | M24 | 4 | - | - | 0.490 | 0.530 | 0.640 |
| | | | | | | | | B | 10.0 | 10.0 | 11.2 | 26 | M24 | M24 | M24 | 8 | - | - | | | |
| | | | | | | | | C | 11.2 | 11.2 | 12.6 | 26 | M24 | M24 | M27 | 10 | - | - | | | |
| 800 | 110 | 120 | 160 | 238447 | 256354 | 321699 | 4~15 | A | 10.0 | 10.0 | 11.2 | 17 | M24 | M24 | M24 | 4 | - | - | 0.620 | 0.665 | 0.835 |
| | | | | | | | | B | 10.0 | 10.0 | 11.2 | 34 | M24 | M24 | M24 | 8 | - | - | | | |
| | | | | | | | | C | 11.2 | 11.2 | 12.6 | 34 | M24 | M24 | M27 | 10 | - | - | | | |
| 900 | 120 | 130 | 160 | 294053 | 314473 | 371964 | 4~15 | A | 10.0 | 10.0 | 11.2 | 20 | M24 | M24 | M24 | 4 | - | - | 0.765 | 0.815 | 0.965 |
| | | | | | | | | B | 10.0 | 10.0 | 11.2 | 40 | M24 | M24 | M24 | 8 | - | - | | | |
| | | | | | | | | C | 11.2 | 12.6 | 12.6 | 40 | M24 | M27 | M27 | 10 | - | - | | | |
| 1000 | 130 | 140 | 160 | 355314 | 378247 | 422230 | 4~15 | A | 10.0 | 10.0 | 11.2 | 24 | M24 | M24 | M24 | 4 | - | - | 0.925 | 0.985 | 1.100 |
| | | | | | | | | B | 10.0 | 10.0 | 11.2 | 48 | M24 | M24 | M24 | 8 | - | - | | | |
| | | | | | | | | C | 11.2 | 12.6 | 12.6 | 48 | M24 | M27 | M27 | 10 | - | - | | | |

※1 員弁パイル工場製品はM22

※他社標準杭厚さ(杭壁厚)は弊社TypeSに相当します。

ナルックス-105(NA)パイプ

標準仕様

| 杭径 D (mm) | 厚さ Type | 杭種 | 断面特性 | | | 設計曲げモーメント N=0 | | | | 許容せん断力 | | 設計せん断 耐力 Qcr (kN) |
|-----------------|------------|----|-----------------------------------|--|---|---------------------|---------------------|-----------------------|--------------------|------------------|-------------------|----------------------------|
| | | | 換算断面積 Ae (mm ²) | 換算断面2次 モーメント Ie ×10 ⁴ (mm ⁴) | 換算断面係数 Ze ×10 ³ (mm ³) | 長期 Mal (kN·m) | 短期 Mas (kN·m) | ひび割れ Mcr (kN·m) | 破壊 Mu (kN·m) | 長期 Qa (kN) | 短期 Qa' (kN) | |
| 300 | S | A | 46199 | 35299 | 2353 | 11.8 | 14.1 | 27.2 | 43.3 | 58.8 | 76.1 | 102.2 |
| | | B | 47287 | 36084 | 2406 | 24.1 | 28.9 | 37.4 | 81.6 | 78.2 | 98.9 | 128.4 |
| | | C | 47751 | 36415 | 2428 | 30.4 | 36.4 | 42.7 | 95.8 | 86.3 | 108.5 | 140.0 |
| 350 | S | A | 55784 | 61102 | 3492 | 17.5 | 21.0 | 40.3 | 60.2 | 70.2 | 90.8 | 121.5 |
| | | B | 57176 | 62566 | 3575 | 35.8 | 42.9 | 55.5 | 120.2 | 93.4 | 118.0 | 153.0 |
| | | C | 57544 | 62952 | 3597 | 45.0 | 54.0 | 63.2 | 134.4 | 103.0 | 129.5 | 166.9 |
| | M | A | 59990 | 64047 | 3660 | 18.4 | 22.1 | 42.2 | 90.1 | 75.2 | 97.2 | 130.0 |
| | | B | 60710 | 64804 | 3703 | 37.4 | 44.9 | 57.9 | 120.4 | 100.0 | 126.4 | 164.6 |
| | | C | 61398 | 65527 | 3744 | 47.4 | 56.9 | 66.0 | 145.3 | 110.3 | 138.7 | 178.4 |
| | L | A | 63367 | 65999 | 3771 | 19.0 | 22.8 | 43.6 | 90.2 | 80.1 | 103.5 | 138.7 |
| | | B | 64455 | 67143 | 3837 | 38.8 | 46.6 | 60.1 | 133.9 | 106.5 | 134.6 | 175.6 |
| | | C | 64775 | 67479 | 3856 | 48.4 | 58.6 | 67.0 | 146.1 | 117.5 | 147.7 | 188.9 |
| 400 | S | A | 70008 | 101755 | 5088 | 25.4 | 30.5 | 59.1 | 97.1 | 87.6 | 113.3 | 152.1 |
| | | B | 71548 | 103852 | 5193 | 51.9 | 62.3 | 80.7 | 173.0 | 116.5 | 147.2 | 190.8 |
| | | C | 72008 | 104478 | 5224 | 65.3 | 78.4 | 91.8 | 193.5 | 128.5 | 161.5 | 208.0 |
| | M | A | 78176 | 108667 | 5433 | 27.3 | 32.8 | 62.7 | 97.3 | 99.0 | 128.0 | 171.2 |
| | | B | 80176 | 111389 | 5569 | 56.3 | 67.6 | 87.0 | 192.8 | 131.7 | 166.4 | 216.7 |
| | | C | 80576 | 111934 | 5597 | 70.8 | 85.0 | 97.6 | 210.4 | 145.3 | 182.6 | 234.0 |
| | L | A | 82025 | 111566 | 5578 | 28.0 | 33.6 | 64.2 | 97.5 | 104.6 | 135.2 | 180.5 |
| | | B | 84025 | 114278 | 5714 | 57.8 | 69.3 | 89.0 | 193.1 | 139.1 | 175.8 | 228.4 |
| | | C | 85425 | 116184 | 5809 | 73.7 | 88.4 | 103.3 | 248.5 | 153.4 | 192.9 | 250.7 |
| 450 | S | A | 85614 | 159656 | 7096 | 35.5 | 42.6 | 82.5 | 140.0 | 106.7 | 138.0 | 185.7 |
| | | B | 87662 | 163357 | 7260 | 72.6 | 87.1 | 113.4 | 253.2 | 141.9 | 179.4 | 233.6 |
| | | C | 88590 | 165017 | 7334 | 91.7 | 110.0 | 130.2 | 297.5 | 156.6 | 196.9 | 255.4 |
| | M | A | 95039 | 170267 | 7567 | 38.0 | 45.7 | 87.2 | 140.2 | 119.7 | 154.8 | 206.9 |
| | | B | 97087 | 173964 | 7732 | 78.1 | 93.8 | 120.8 | 254.1 | 159.2 | 201.3 | 262.0 |
| | | C | 98015 | 175639 | 7806 | 98.8 | 118.6 | 137.9 | 299.1 | 175.7 | 220.9 | 285.7 |
| | L | A | 103836 | 178899 | 7951 | 40.0 | 48.0 | 91.5 | 140.5 | 132.3 | 171.1 | 228.4 |
| | | B | 106812 | 184270 | 8190 | 82.9 | 99.5 | 128.1 | 297.7 | 176.0 | 222.5 | 289.9 |
| | | C | 107548 | 185599 | 8249 | 104.6 | 125.5 | 146.2 | 332.3 | 194.2 | 244.1 | 316.3 |
| 500 | S | A | 107861 | 246279 | 9851 | 49.3 | 59.1 | 113.9 | 176.8 | 135.0 | 174.6 | 233.9 |
| | | B | 110165 | 251360 | 10054 | 100.5 | 120.6 | 157.2 | 322.9 | 179.6 | 227.0 | 295.7 |
| | | C | 111209 | 253662 | 10146 | 126.8 | 152.2 | 179.6 | 380.7 | 198.1 | 249.1 | 322.5 |
| | M | A | 118229 | 260405 | 10416 | 52.1 | 62.5 | 120.2 | 177.2 | 149.4 | 193.2 | 258.4 |
| | | B | 120533 | 265485 | 10619 | 106.2 | 127.4 | 165.3 | 324.2 | 198.7 | 251.1 | 326.2 |
| | | C | 122405 | 269613 | 10785 | 134.8 | 161.8 | 192.2 | 423.5 | 219.2 | 275.6 | 358.5 |
| | L | A | 128492 | 273271 | 10931 | 54.7 | 65.6 | 126.7 | 182.0 | 163.4 | 211.3 | 283.6 |
| | | B | 131316 | 279498 | 11180 | 111.8 | 134.2 | 175.6 | 380.1 | 217.3 | 274.7 | 359.0 |
| | | C | 132144 | 281324 | 11253 | 140.7 | 168.8 | 201.8 | 424.7 | 239.7 | 301.4 | 398.8 |
| 600 | S | A | 147271 | 493811 | 16460 | 82.3 | 98.8 | 190.1 | 286.4 | 183.8 | 237.7 | 318.2 |
| | | B | 150343 | 504194 | 16806 | 168.1 | 201.7 | 262.5 | 527.6 | 244.5 | 309.0 | 402.3 |
| | | C | 151735 | 508899 | 16963 | 212.0 | 254.4 | 301.4 | 623.7 | 269.7 | 339.1 | 444.3 |
| | M | A | 160152 | 520892 | 17363 | 86.8 | 104.2 | 200.7 | 286.6 | 201.4 | 260.4 | 348.8 |
| | | B | 164616 | 535980 | 17866 | 178.7 | 214.4 | 281.6 | 621.6 | 267.8 | 338.5 | 443.5 |
| | | C | 165750 | 539712 | 17990 | 224.9 | 269.9 | 321.5 | 694.6 | 295.5 | 371.5 | 484.2 |
| | L | A | 184724 | 566460 | 18882 | 94.4 | 113.3 | 218.1 | 344.6 | 235.2 | 304.3 | 407.2 |
| | | B | 188492 | 579196 | 19307 | 193.1 | 231.7 | 303.1 | 624.1 | 312.9 | 395.5 | 516.8 |
| | | C | 190556 | 586173 | 19539 | 244.2 | 293.1 | 348.2 | 755.8 | 345.2 | 434.0 | 564.6 |
| 700 | S | A | 192579 | 890170 | 25433 | 127.2 | 152.6 | 294.3 | 444.3 | 239.7 | 310.1 | 415.6 |
| | | B | 196659 | 908530 | 25958 | 259.6 | 311.5 | 406.8 | 819.2 | 318.9 | 403.1 | 525.9 |
| | | C | 198895 | 918592 | 26245 | 328.1 | 393.7 | 470.0 | 996.0 | 351.8 | 442.3 | 577.4 |
| | M | A | 207973 | 936390 | 26754 | 133.8 | 160.5 | 309.5 | 444.7 | 260.5 | 336.9 | 451.6 |
| | | B | 212053 | 954750 | 27279 | 272.8 | 327.3 | 426.4 | 820.5 | 346.5 | 438.0 | 570.4 |
| | | C | 214289 | 964812 | 27566 | 344.6 | 413.5 | 486.0 | 999.9 | 382.3 | 480.6 | 620.6 |
| | L | A | 251501 | 1049243 | 29978 | 149.9 | 179.9 | 346.5 | 552.7 | 320.2 | 414.1 | 554.7 |
| | | B | 256701 | 1072643 | 30647 | 306.5 | 367.8 | 479.3 | 999.2 | 425.9 | 538.4 | 701.4 |
| | | C | 259301 | 1084343 | 30981 | 387.3 | 464.7 | 553.9 | 1192.3 | 469.9 | 590.7 | 770.2 |
| 800 | S | A | 243787 | 1487830 | 37196 | 186.0 | 223.2 | 430.4 | 665.0 | 302.8 | 391.7 | 525.0 |
| | | B | 249123 | 1520513 | 38013 | 380.1 | 456.2 | 595.7 | 1227.9 | 402.8 | 509.2 | 664.3 |
| | | C | 252047 | 1538422 | 38461 | 480.8 | 576.9 | 688.8 | 1493.5 | 444.4 | 558.7 | 729.3 |
| | M | A | 261694 | 1560577 | 39014 | 195.1 | 234.1 | 450.6 | 665.7 | 326.8 | 422.6 | 565.7 |
| | | B | 267030 | 1593260 | 39832 | 398.3 | 478.0 | 625.4 | 1230.3 | 434.6 | 549.4 | 717.8 |
| | | C | 269954 | 1611170 | 40279 | 503.5 | 604.2 | 717.8 | 1499.0 | 479.6 | 602.8 | 784.2 |
| | L | A | 328499 | 1791693 | 44792 | 224.0 | 268.8 | 517.8 | 828.1 | 418.2 | 540.9 | 724.5 |
| | | B | 335299 | 1833343 | 45834 | 458.3 | 550.0 | 717.3 | 1500.6 | 556.2 | 703.1 | 916.6 |
| | | C | 338699 | 1854168 | 46354 | 579.4 | 695.3 | 829.3 | 1791.1 | 613.7 | 771.5 | 1006.4 |
| 900 | S | A | 300333 | 2338195 | 51960 | 259.8 | 311.8 | 600.7 | 886.9 | 373.0 | 482.5 | 646.2 |
| | | B | 306613 | 2387187 | 53049 | 530.5 | 636.6 | 834.5 | 1645.8 | 496.1 | 627.2 | 820.6 |
| | | C | 310053 | 2414024 | 53645 | 670.6 | 804.7 | 964.5 | 2010.0 | 547.4 | 688.2 | 900.7 |
| | M | A | 320753 | 2446066 | 54357 | 271.8 | 326.1 | 628.4 | 887.5 | 400.2 | 517.6 | 693.2 |
| | | B | 327033 | 2495058 | 55446 | 554.5 | 665.4 | 865.0 | 1648.3 | 532.2 | 672.8 | 875.0 |
| | | C | 334473 | 2553100 | 56736 | 709.2 | 851.0 | 1019.0 | 2389.7 | 587.3 | 738.3 | 965.9 |
| | L | A | 379964 | 2727537 | 60612 | 303.1 | 363.7 | 699.5 | 1104.9 | 478.8 | 619.3 | 828.3 |
| | | B | 387964 | 2789947 | 61999 | 620.0 | 744.0 | 973.4 | 2015.1 | 636.9 | 805.1 | 1051.9 |
| | | C | 391964 | 2821152 | 62692 | 783.7 | 940.4 | 1119.7 | 2408.6 | 702.7 | 883.4 | 1151.0 |
| 1000 | S | A | 362850 | 3509724 | 70194 | 351.0 | 421.2 | 812.3 | 1185.5 | 450.3 | 582.5 | 781.3 |
| | | B | 370386 | 3582673 | 71653 | 716.5 | 859.8 | 1122.8 | 2204.7 | 599.0 | 757.2 | 987.9 |
| | | C | 374514 | 3622632 | 72453 | 905.7 | 1086.8 | 1297.6 | 2695.9 | 660.9 | 830.8 | 1084.5 |
| | M | A | 385783 | 3662520 | 73250 | 366.3 | 439.5 | 846.0 | 1186.4 | 480.7 | 621.8 | 832.2 |
| | | B | 393319 | 3735468 | 74709 | 747.1 | 896.5 | 1164.7 | 2207.5 | 639.4 | 808.2 | 1050.7 |
| | | C | 402247 | 3821891 | 76438 | 955.5 | 1146.6 | 1371.3 | 3205.9 | 705.5 | 886.8 | 1159.0 |
| | L | A | 431830 | 3952111 | 79042 | 395.2 | 474.3 | 915.3 | 1476.6 | 540.0 | 698.4 | 936.8 |
| | | B | 441430 | 4045039 | 80901 | 809.0 | 970.3 | 1270.1 | 2698.9 | 718.2 | 907.9 | 1186.2 |
| | | C | 446230 | 4091503 | 81830 | 1022.9 | 1227.5 | 1472.1 | 3225.1 | 792.4 | 996.2 | 1304.3 |

複数の仕様があるため、最も安全側の値を記載しております。

※他社標準杭厚さ(杭壁厚)は弊社TypeSに相当します。