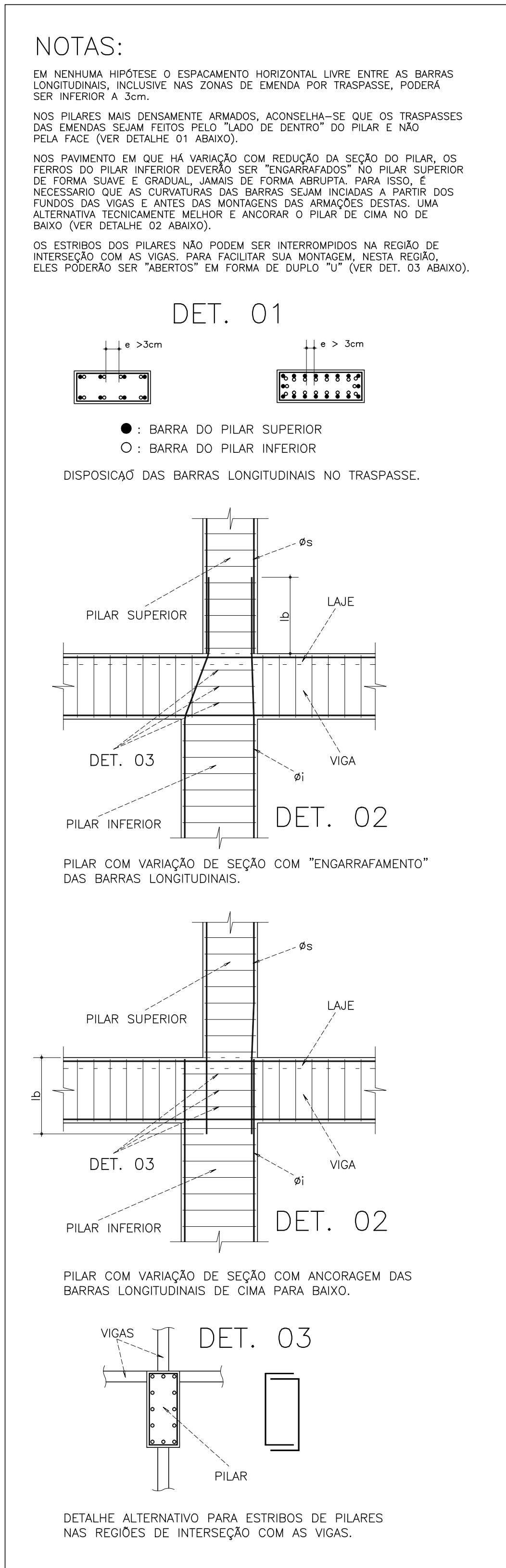
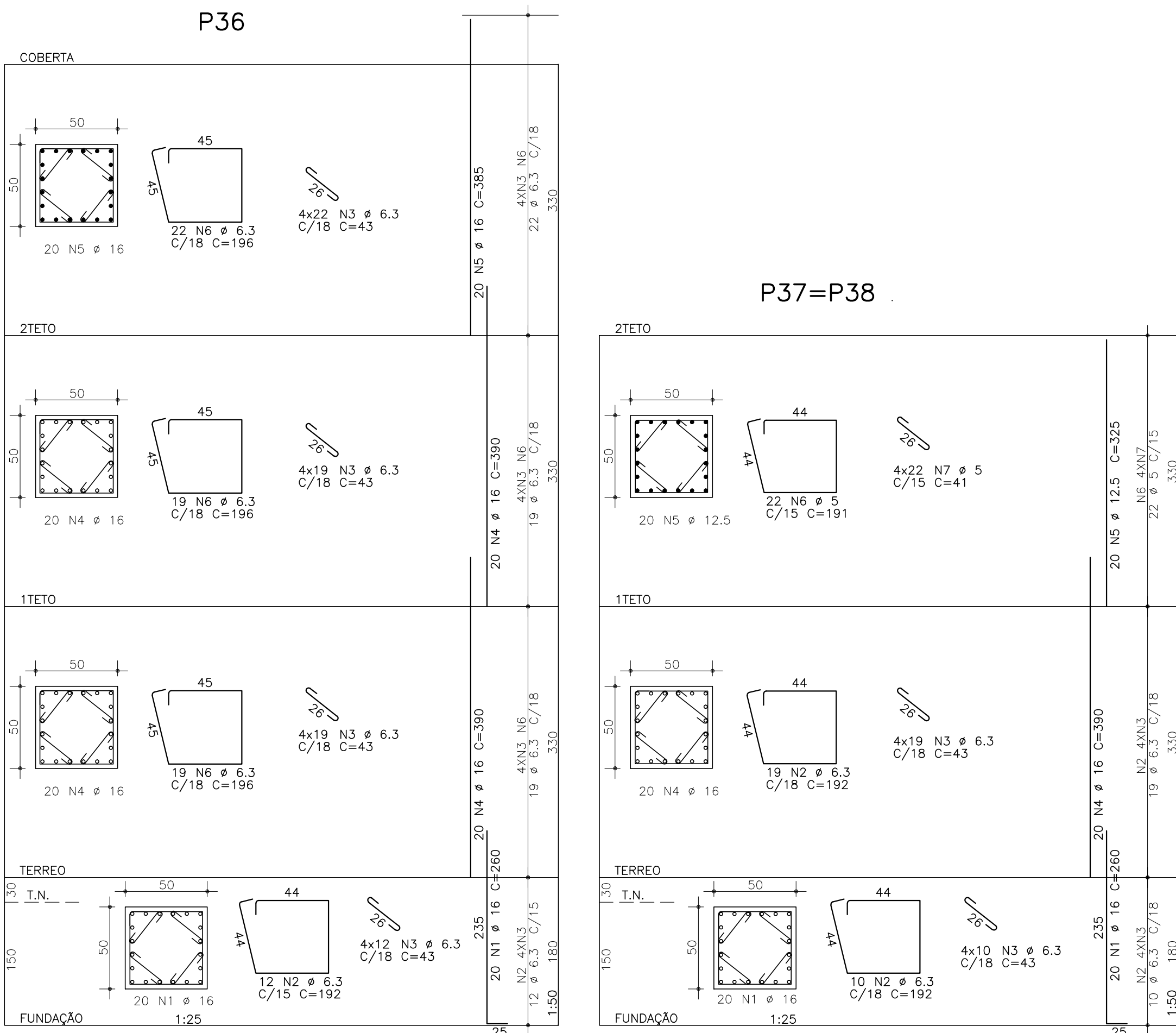
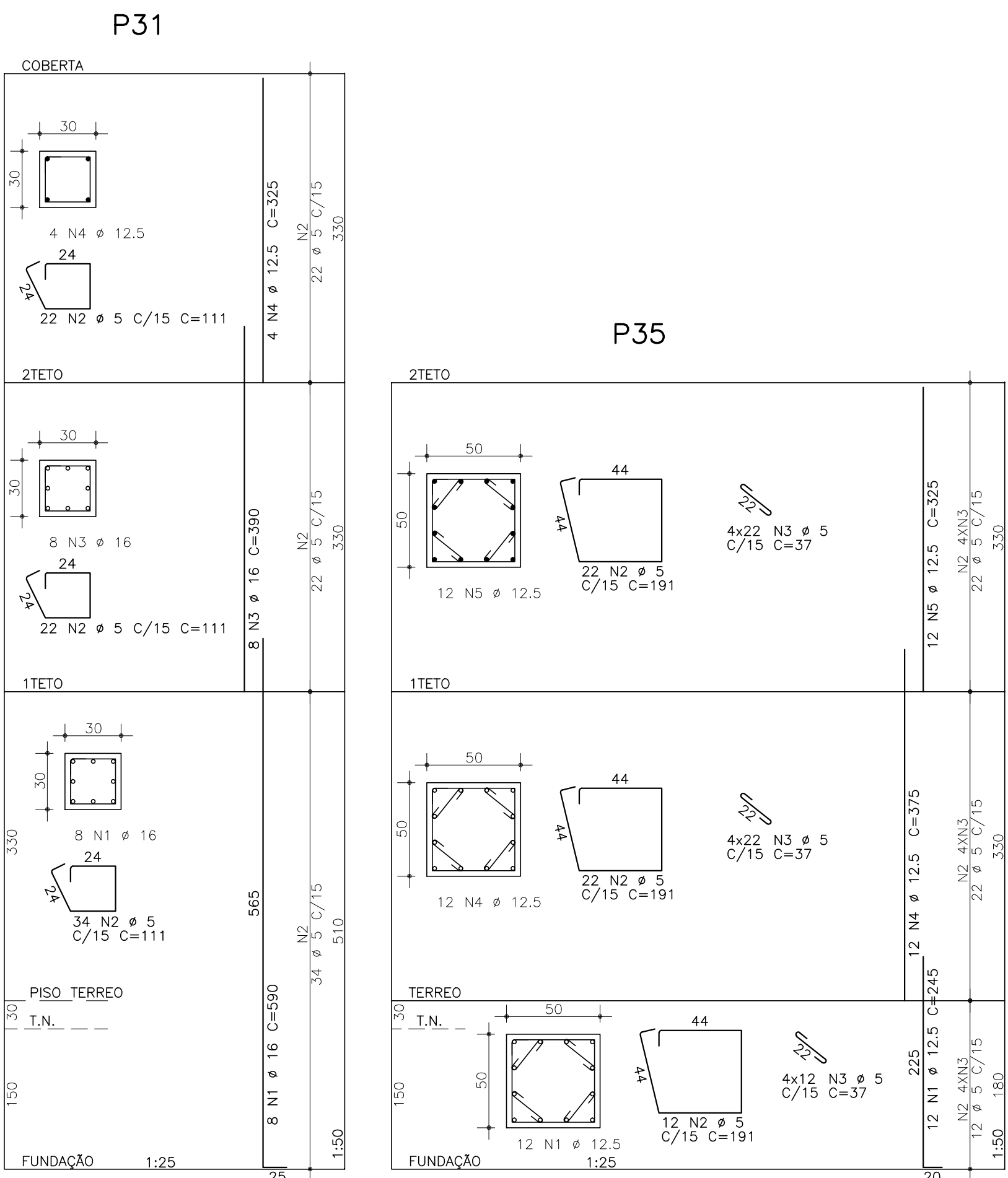
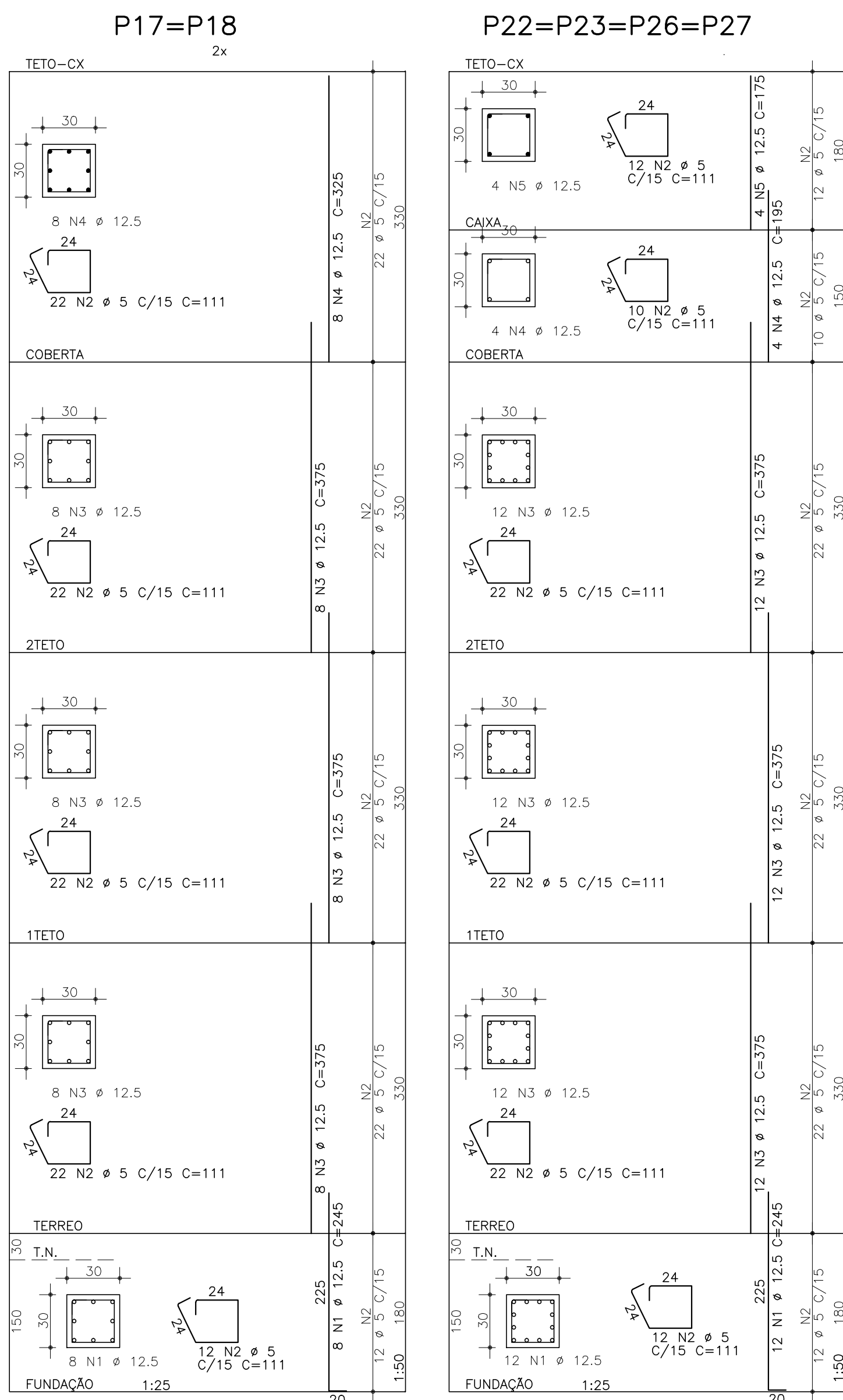
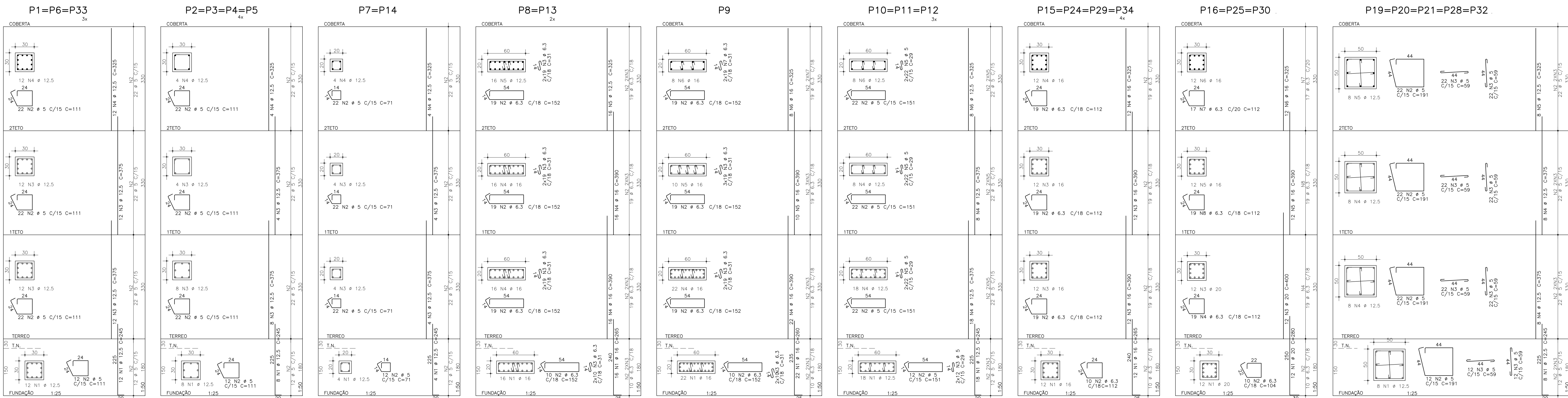




NOTAS:

EM NENHUMA HIPÓTESE O ESPACAMENTO HORIZONTAL LIVRE ENTRE AS BARRAS LONGITUDINAIS, INCLUSIVE NAS ZONAS DE EMENDA POR TRASPASSE, PODERÁ SER INFERIOR A 3cm.

NOS PILARES MAIS DENSAMENTE ARMADOS, ACONSELHA-SE QUE OS TRASPASSES DAS EMENDAS SEJAM FEITOS PELO "LADO DE DENTRO" DO PILAR E NÃO PELA FACE (VER DETALHE 01 ABAIXO).

NOS PAVIMENTO EM QUE HÁ VARIAÇÃO COM REDUÇÃO DA SEÇÃO DO PILAR, OS FERROS DO PILAR INFERIOR DEVEM SER "ENGARRAFADOS" NO PILAR SUPERIOR DE FORMA SUAVE E GRADUAL, JAMAS DE FORMA ABRUPTA. PARA ISSO, É NECESSÁRIO QUE AS CURVATURAS DAS BARRAS SEJAM INDICADAS A PARTIR DOS FUNDOS DAS VIGAS E ANTES DAS MONTAGENS DAS ARMADURAS DESTAS. UMA ALTERNATIVA TECNOLÓGICAMENTE MELHOR É ANCORAR O PILAR DE CIMA NO DE BAIXO (VER DETALHE 02 ABAIXO).

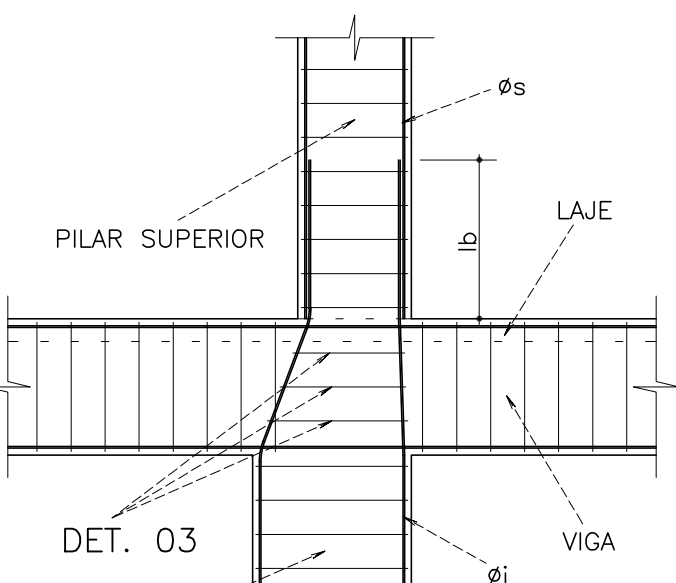
OS ESTRIBOS DOS PILARES NÃO DEVEM SER INTERRUPTOS NA REGIÃO DE INTERSEÇÃO COM AS VIGAS. PARA FACILITAR SUA MONTAGEM, NESTA REGIÃO, ELLES PODERÃO SER "ABERTOS" EM FORMA DE DUPLO "U" (VER DET. 03 ABAIXO).

DET. 01

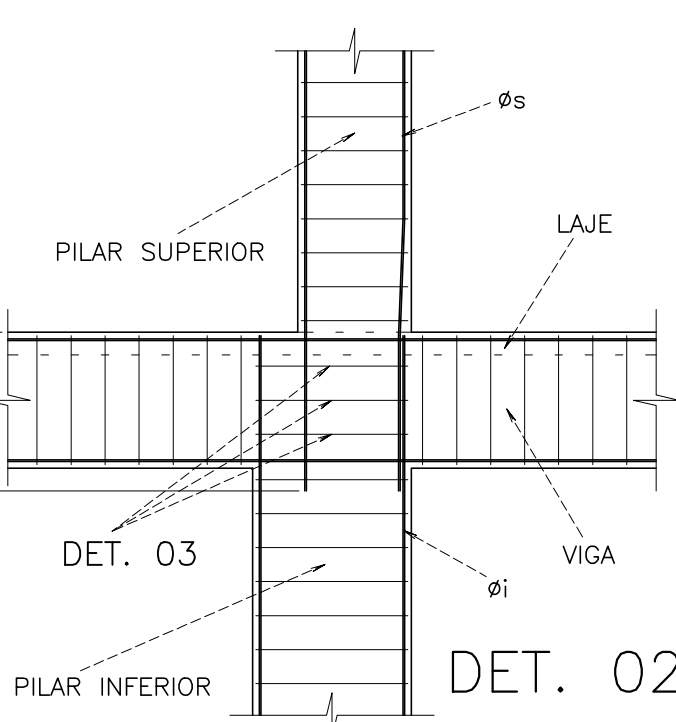


● BARRA DO PILAR SUPERIOR
○ BARRA DO PILAR INFERIOR

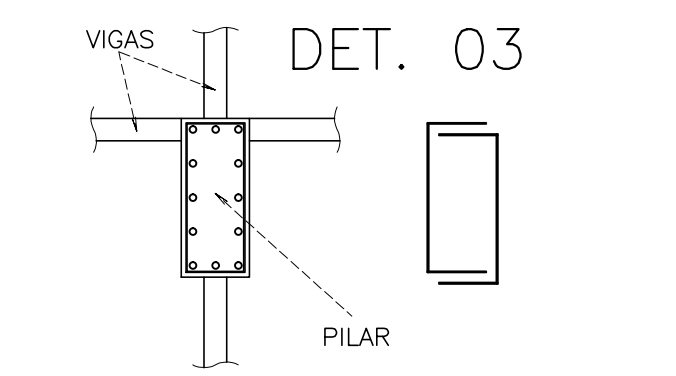
DISPOSIÇÃO DAS BARRAS LONGITUDINAIS NO TRASPASSE.



PILAR COM VARIAÇÃO DE SEÇÃO COM "ENGARRAFAMENTO" DAS BARRAS LONGITUDINAIS.



PILAR COM VARIAÇÃO DE SEÇÃO COM ANCORAGEM DAS BARRAS LONGITUDINAIS DE CIMA PARA BAIXO.



DETALHE ALTERNATIVO PARA ESTRIBOS DE PILARES NAS REGIÕES DE INTERSEÇÃO COM AS VIGAS.

Fol. 30,6MPa
Es. 30,7GPa
Comentários:
LAJES - 2,5cm
VIGAS - 3,0cm
PILARES - 3,0cm
FUNDAÇÕES - 4,0cm

Forma de Apreciação Anterior:
MODERADA

01		REVISÃO GERAL DO PROJETO		JC	01/02/2024
02		EMENDA INICIAL		JN	30/06/2023
REVISÃO		ASSUNTO		RESENHO	DATA
PAGO		APPROVO		PROPRIETÁRIO	
				PROJETO	
				PROJETO	
				CONSTRUÇÃO	
CONSELHO PROFISSIONAL		SOP-CE		GOVERNO DO ESTADO DO CEARÁ	
INTERESSADO		SEDUC - SECRETARIA DE EDUCAÇÃO		SECRETARIA DAS CIDADES	
ENGENHEIRO		RSDO SIN		ESTRUTURA DE CONCRETO ARMADO	
MUNICÍPIO		CEARÁ		ESCOLA DE ENSINO MÉDIO PADRÃO - TIPO II	
AUTOR		JAM		ETAPA	
TELEFONE		JAM		FORMA E ARMADURA DOS PILARES	
		RESERVA DE PROPRIEDADE INTELECTUAL		ESCALA	
		REVISÃO		1:50-1:25	
		DATA		01/02/2024	
		REVISÃO		01	
		ARQUIVO		ESEM R101 R102 R103 R104 R105 R106 R107 R108 R109 R110 R111 R112 R113 R114 R115 R116 R117 R118 R119 R120 R121 R122 R123 R124 R125 R126 R127 R128 R129 R130 R131 R132 R133 R134 R135 R136 R137 R138 R139 R140 R141 R142 R143 R144 R145 R146 R147 R148 R149 R150 R151 R152 R153 R154 R155 R156 R157 R158 R159 R160 R161 R162 R163 R164 R165 R166 R167 R168 R169 R170 R171 R172 R173 R174 R175 R176 R177 R178 R179 R180 R181 R182 R183 R184 R185 R186 R187 R188 R189 R190 R191 R192 R193 R194 R195 R196 R197 R198 R199 R200 R201 R202 R203 R204 R205 R206 R207 R208 R209 R210 R211 R212 R213 R214 R215 R216 R217 R218 R219 R220 R221 R222 R223 R224 R225 R226 R227 R228 R229 R230 R231 R232 R233 R234 R235 R236 R237 R238 R239 R240 R241 R242 R243 R244 R245 R246 R247 R248 R249 R250 R251 R252 R253 R254 R255 R256 R257 R258 R259 R260 R261 R262 R263 R264 R265 R266 R267 R268 R269 R270 R271 R272 R273 R274 R275 R276 R277 R278 R279 R280 R281 R282 R283 R284 R285 R286 R287 R288 R289 R290 R291 R292 R293 R294 R295 R296 R297 R298 R299 R300 R301 R302 R303 R304 R305 R306 R307 R308 R309 R310 R311 R312 R313 R314 R315 R316 R317 R318 R319 R320 R321 R322 R323 R324 R325 R326 R327 R328 R329 R330 R331 R332 R333 R334 R335 R336 R337 R338 R339 R340 R341 R342 R343 R344 R345 R346 R347 R348 R349 R350 R351 R352 R353 R354 R355 R356 R357 R358 R359 R360 R361 R362 R363 R364 R365 R366 R367 R368 R369 R370 R371 R372 R373 R374 R375 R376 R377 R378 R379 R380 R381 R382 R383 R384 R385 R386 R387 R388 R389 R390 R391 R392 R393 R394 R395 R396 R397 R398 R399 R400 R401 R402 R403 R404 R405 R406 R407 R408 R409 R410 R411 R412 R413 R414 R415 R416 R417 R418 R419 R420 R421 R422 R423 R424 R425 R426 R427 R428 R429 R430 R431 R432 R433 R434 R435 R436 R437 R438 R439 R440 R441 R442 R443 R444 R445 R446 R447 R448 R449 R450 R451 R452 R453 R454 R455 R456 R457 R458 R459 R460 R461 R462 R463 R464 R465 R466 R467 R468 R469 R470 R471 R472 R473 R474 R475 R476 R477 R478 R479 R480 R481 R482 R483 R484 R485 R486 R487 R488 R489 R490 R491 R492 R493 R494 R495 R496 R497 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R698 R699 R700 R701 R702 R703 R704 R705 R706 R707 R708 R709 R710 R711 R712 R713 R714 R715 R716 R717 R718 R719 R720 R721 R722 R723 R724 R725 R726 R727 R728 R729 R730 R731 R732 R733 R734 R735 R736 R737 R738 R739 R740 R741 R742 R743 R744 R745 R746 R747 R748 R749 R750 R751 R752 R753 R754 R755 R756 R757 R758 R759 R760 R761 R762 R763 R764 R765 R766 R767 R768 R769 R770 R771 R772 R773 R774 R775 R776 R777 R778 R779 R780 R781 R782 R783 R784 R785 R786 R787 R788 R789 R790 R791 R792 R793 R794 R795 R796 R797 R798 R799 R800 R801 R802 R803 R804 R805 R806 R807 R808 R809 R810 R811 R812 R813 R814 R815 R816 R817 R818 R819 R820 R821 R822 R823 R824 R825 R826 R827 R828 R829 R830 R831 R832 R833 R834 R835 R836 R837 R838 R839 R840 R841 R842 R843 R844 R845 R846 R847 R848 R849 R850 R851 R852 R853 R854 R855 R856 R857 R858 R859 R860 R861 R862 R863 R864 R865 R866 R867 R868 R869 R870 R871 R872 R873 R874 R875 R876 R877 R878 R879 R880 R881 R882 R883 R884 R885 R886 R887 R888 R889 R890 R891 R892 R893 R894 R895 R896 R897 R898 R899 R900 R901 R902 R903 R904 R905 R906 R907 R908 R909 R910 R911 R912 R913 R914 R915 R916 R917 R918 R919 R920 R921 R922 R923 R924 R925 R926 R927 R928 R929 R930 R931 R932 R933 R934 R935 R936 R937 R938 R939 R940 R941 R942 R943 R944 R945 R946 R947 R948 R949 R950 R951 R952 R953 R954 R955 R956 R957 R958 R959 R960 R961 R962 R963 R964 R965 R966 R967 R968 R969 R970 R971 R972 R973 R974 R975 R976 R977 R978 R979 R980 R981 R982 R983 R984 R985 R986 R987 R988 R989 R990 R991 R992 R993 R994 R995 R996 R997 R998 R999 R1000 R1001 R1002 R1003 R1004 R1005 R1006 R1007 R1008 R1009 R1010 R1011 R1012 R1013 R1014 R1015 R1016 R1017 R1018 R1019 R1020 R1021 R1022 R1023 R1024 R1025 R1026 R1027 R1028 R1029 R1030 R1031 R1032 R1033 R1034 R1035 R1036 R1037 R1038 R1039 R1040 R1041 R1042 R1043 R1044 R1045 R1046 R1047 R1048 R1049 R1050 R1051 R1052 R1053 R1054 R1055 R1056 R1057 R1058 R1059 R1060 R1061 R1062 R1063 R1064 R1065 R1066 R1067 R1068 R1069 R1070 R1071 R1072 R1073 R1074 R1075 R1076 R1077 R1078 R1079 R1080 R1081 R1082 R1083 R1084 R1085 R1086 R1087 R1088 R1089 R1090 R1091 R1092 R1093 R1094 R1095 R1096 R1097 R1098 R1099 R1100 R1101 R1102 R1103 R1104 R1105 R1106 R1107 R1108 R1109 R1110 R1111 R1112 R1113 R1114 R1115 R1116 R1117 R1118 R1119 R1120 R1121 R1122 R1123 R1124 R1125 R1126 R1127 R1128 R1129 R1130 R1131 R1132 R1133 R1134 R1135 R1136 R1137 R1138 R1139 R1140 R1141 R1142 R1143 R1144 R1145 R1146 R1147 R1148 R1149 R1150 R1151 R1152 R1153 R1154 R1155 R1156 R1157 R1158 R1159 R1160 R1161 R1162 R1163 R1164 R1165 R1166 R1167 R1168 R1169 R1170 R1171 R1172 R1173 R1174 R1175 R1176 R1177 R1178 R1179 R1180 R1181 R1182 R1183 R1184 R1185 R1186 R1187 R1188 R1189 R1190 R1191 R1192 R1193 R1194 R1195 R1196 R1197 R1198 R1199 R1200 R1201 R1202 R1203 R1204 R1205 R1206 R1207 R1208 R1209 R1210 R1211 R1212 R1213 R1214 R1215 R1216 R1217 R1218 R1219 R1220 R1221 R1222 R1223 R1224 R1225 R1226 R1227 R1228 R1229 R1230 R1231 R1232 R1233 R1234 R1235 R1236 R1237 R1238 R1239 R1240 R1241 R1242 R1243 R1244 R1245 R1246 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R1911 R1912 R1913 R1914 R1915 R1916 R1917 R1918 R1919 R1920 R1921 R1922 R1923 R1924 R1925 R1926 R1927 R1928 R1929 R1930 R1931 R1932 R1933 R1934 R1935 R1936 R1937 R1938 R1939 R1940 R1941 R1942 R1943 R1944 R1945 R1946 R1947 R1948 R1949 R1950 R1951 R1952 R1953 R1954 R1955 R1956 R1957 R1958 R1959 R1960 R1961 R1962 R1963 R1964 R1965 R1966 R1967 R1968 R1969 R1970 R1971 R1972 R1973 R1974 R1975 R1976 R1977 R1978 R1979 R1980 R1981 R1982 R1983 R1984 R1985 R1986 R1987 R1988 R1989 R1990 R1991 R1992 R1993 R1994 R1995 R1996 R1997 R1998 R1999 R2000 R2001 R2002 R2003 R2004 R2005 R2006 R2007 R2008 R2009 R2010 R2011 R2012 R2013 R2014 R2015 R2016 R2017 R2018 R2019 R2020 R2021 R2022 R2023 R2024 R2025 R2026 R2027 R2028 R2029 R2030 R2031 R2032 R2033 R2034 R2035 R2036 R2037 R2038 R2039 R2040 R2041 R2042 R2043 R2044 R2045 R2046 R2047 R2048 R2049 R2050 R2051 R2052 R2053 R2054 R2055 R2056 R2057 R2058 R2059 R2060 R2061 R2062 R2063 R2064 R2065 R2066 R2067 R2068 R2069 R2070 R2071 R2072 R2073 R2074 R2075 R2076 R2077 R2078 R2079 R2080 R2081 R2082 R2083 R2084 R2085 R2086 R2087 R2088 R2089 R2090 R2091 R2092 R2093 R2094 R2095 R2096 R2097 R2098 R2099 R2100 R2101 R2102 R2103 R2104 R2105 R2106 R2107 R2108 R2109 R2110 R2111 R2112 R2113 R2114 R2115 R2116 R2117 R2118 R2119 R2120 R2121 R2122 R2123 R2124 R2125 R2126 R2127 R2128 R2129 R2130 R2131 R2132 R2133 R2134 R2135 R2136 R2137 R2138 R2139 R2140 R2141 R2142 R2143 R2144 R2145 R2146 R2147 R2148 R2149 R2150 R2151 R2152 R2153 R2154 R2155 R2156 R2157 R2158 R2159 R2160 R2161 R2162 R2163 R2164 R2165 R2166 R2167 R2168 R2169 R2170 R2171 R2172 R2173 R2174 R2175 R2176 R2177 R2178 R2179 R2180 R2181 R2182 R2183 R2184 R2185 R2186 R2187 R2188 R2189 R2190 R2191 R2192 R2193 R2194 R2195 R2196 R2197 R2198 R2199 R2200 R2201 R2202 R2203 R2204 R2205 R2206 R2207 R2208 R2209 R2210 R2211 R2212 R2213 R2214 R2215 R2216 R2217 R2218 R2219 R2220 R2221 R2222 R2223 R2224 R2225 R2226 R2227 R2228 R2229 R2230 R2231 R2232 R2233 R2234 R2235 R2236 R2237 R2238 R2239 R2240 R2241 R2242 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