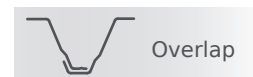
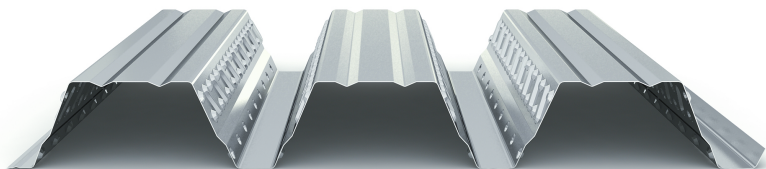


Product



Working Length: 825 mm
Height Profile: 100 mm

Description

New INCO 100.3 Composite Slab Profile as a result of the collaboration between our company and the Polytechnic University of Catalonia (UPC). The improvements in the design of the collaborating sheet metal make this slab one of the strongest on the market in large spans.

This new INCO 100.3 Composite Slab profile with 100 mm edge allows free spans between supports of up to 5 meters without propping.

Material

Steel	EN 10346
Dimensional Tolerance	EN 10346
Reaction to Fire	EN 14782

Finishing

- Galvanized Z200. Other on demand

Applications

- Industrial: hangars, plants, water tanks.
- Comercial: open spaces, sport, walled.
- Public: schools, gymnasium, pavilions.

Complementary Articles

- Tight Joint INCO 100.3 Upper/ Lower
- Trimming

Related Documents

- General Catalogue
- Technical Sheet
- Technical Dossier
- Declaration of Performance (DDP / DOP)

Manufacturing Conditions

Manufacturing Length	Min. / Max. 2.000 / 24.000 mm
Thickness Range	0,75 1,00 1,20 1,50 mm
Minimal Order	250 m ²
Package Weight	1.500-2.000 kg
Colour	Galvanised

Transport Conditions

Thickness(mm)	Surface* (m ²)	Thickness(mm)	Surface* (m ²)
0,75	2.400	1,20	1.500
1,00	1.800	1,50	1.200

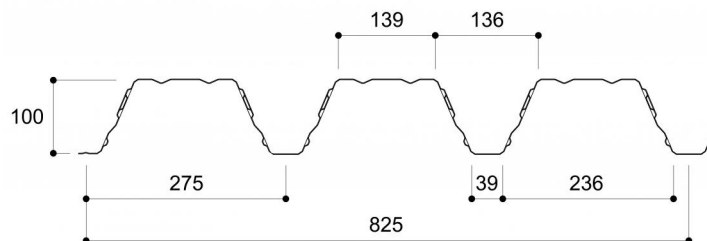
* estimated area depending on cutting length

Rev. 2021.06

INCO 100.3 Colaborante®

($f_y = 280 \text{ N/mm}^2$)

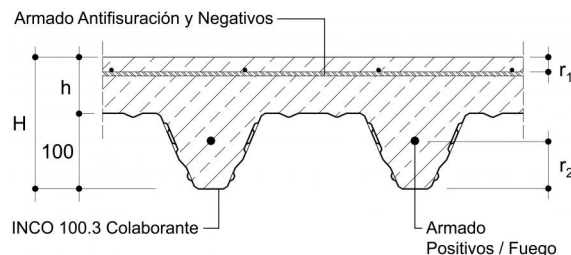
Composite slab profile dimensions



Eff. Width: 825 mm

Dim. in mm

Composite slab section



Upper reinforcement cover, r_1 (mm)

20

Lower reinforcement cover, r_2 (mm)

65

Profile characteristics INCO 100.3 Colaborante

Material	Acero	Density (daN/m^3)	7.850
Yield Strength (N/mm^2)	280	Galvanised protection	Z200
Elasticity Modulus (N/mm^2)	2.100.000		

Thickness (mm)	Weight (daN/m^2)	Eff. Area (mm^2/m)	M. Inertia (mm^4/m)			Section Modulus (mm^3/m)	
			Gross	Effective +	Effective -	Effective +	Effective -
0,75	8,92	1.136	1.617.470	1.458.115	1.459.805	24.983	21.352
1,00	11,89	1.515	2.310.769	1.917.338	1.761.922	34.908	33.982
1,20	14,27	1.818	2.773.026	2.284.717	2.003.616	42.849	44.087

Characteristic of composite slab

Concrete Type	HA-25	Aggregate Size	< (0,4 h_c)
Resistance, f_{ck} (N/mm^2)	25		< ($b_0 / 3$)
Elasticity Modulus (daN/cm^2)	30.471,58		< (tamiz C, 31,5 mm)

Slab Own Weight (kN/m^2)										
Thickness (mm)	Forged Edge (mm)									
	140	150	160	170	180	190	200	210	220	230
0,75	1,78	2,01	2,25	2,48	2,72	2,96	3,19	3,43	3,66	3,90
1,00	1,81	2,04	2,28	2,51	2,75	2,98	3,22	3,46	3,69	3,93
1,20	1,83	2,07	2,30	2,54	2,77	3,01	3,24	3,48	3,71	3,95

Volumetry and Inertia of the Composite Slab										
Forged Edge (mm)	140	150	160	170	180	190	200	210	220	230
Concrete Volume (m^3/m^2)	0,072	0,082	0,092	0,102	0,112	0,122	0,132	0,142	0,152	0,162
Gross inertia (cm^4/m)	13.905	17.742	21.952	26.554	31.578	37.064	43.056	49.599	56.743	64.538

Global Weighted Noise Reduction Index, R_A (dBA)										
Forged Edge (mm)	140	150	160	170	180	190	200	210	220	230
R_A (dBA)	44,09	46,00	47,72	49,26	50,67	51,96	53,15	54,26	55,30	56,28

Note: The R_A values correspond to the behavior of the unfinished slab, obtained by means of the mass law according to CTE-DB-HR Protection Against Noise. To know the improvement of the global noise reduction index by adding a backing.

Characteristic of Anti-Cracking Armor and Negative Reinforcement

Designation	B 500S	f_s (N/mm^2)	550
Steel Class	Soldable	Elongation %	12
f_s (N/mm^2)	500	f_s / f_y	1,05

Nominal sections of steel per linear meter															
Separation (cm)	20x20	15x15	20x20	15x15	10x10	20x20	10x10	15x15	20x20	10x10	15x15	20x20	15x15	10x10	10x10
Diameter (mm)	5	5	6	6	5	8	6	8	10	8	10	12	12	10	12
Sections (mm^2/m)	99	131	142	189	197	252	283	336	393	503	524	566	754	786	1131

Calculation hypothesis ELU: Maximum Load = $1.35 \cdot \text{Own Weight} + 1.50 \cdot \text{Use Overload}$

Deflection limitations ELS: Maximum Load = $1.00 \cdot \text{Own Weight} + 1.00 \cdot \text{Use Overload}$

Fase Encofrado: L/180

Fase Mixta: Span $\leq 3.50 \text{ m}$ - Maximum Deflection < L/350

Span > 3.50 m - Maximum Deflection < L/700 + 5 mm

For any variation of the parameters defined in this document, our Technical Department is at your disposal to carry out a personalized calculation. Revisión v22.01.28

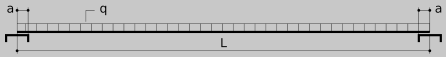
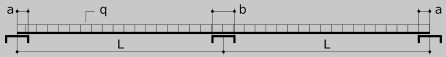
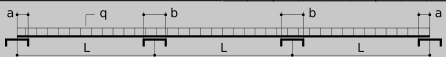
INCO 100.3 Colaborante®

(fy = 280 N/mm²)



Use Overload, Q (Kg/m²)

Thickness: 0,75 mm

1 SPAN														End support width a > 75 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	1387 99 - - - -	1069 99 - - - -	841 99 - - - -	672 99 - - - -	543 99 - - - -	442 99 - - - -	362 189 - - - -	296 189 - - - -	242 189 - - - -	198 189 - - - -	161 189 - - - -	129 189 - - - -			
150	1568 131 - - - -	1209 131 - - - -	951 131 - - - -	760 131 - - - -	614 131 - - - -	500 131 - - - -	409 252 - - - -	335 252 - - - -	274 252 - - - -	224 252 - - - -	182 252 - - - -	146 252 - - - -			
160	1750 131 8 - - -	1349 131 8 - - -	1061 131 8 - - -	848 131 8 - - -	685 131 8 - - -	558 252 8 - - -	456 252 8 - - -	373 252 8 - - -	306 252 8 - - -	250 252 8 - - -	203 252 8 - - -	163 252 8 - - -	129 252 8 - - -		
170	1932 142 8 8 - -	1489 142 8 8 - -	1172 142 8 8 - -	936 142 8 8 - -	756 142 8 8 - -	616 283 8 8 - -	504 283 8 8 - -	412 283 8 8 - -	338 283 8 10 - -	276 283 8 10 - -	224 283 8 10 - -	180 283 8 10 - -	142 283 8 10 - -		
180	2114 189 8 8 - -	1630 189 8 8 - -	1282 189 8 8 - -	1024 189 8 8 - -	827 336 8 8 - -	673 336 8 8 - -	551 336 8 8 - -	451 336 8 8 - -	370 336 8 10 - -	302 336 8 10 - -	245 336 8 10 - -	197 336 8 10 - -	156 336 8 10 - -		
190	2296 189 8 8 10 -	1770 189 8 8 10 -	1392 189 8 8 12 -	1112 189 8 8 12 -	898 393 8 8 12 -	731 393 8 8 12 -	598 393 8 8 12 -	490 393 8 8 12 -	402 393 8 10 12 -	328 393 8 10 12 -	266 393 8 10 12 -	214 393 8 10 12 -	169 393 8 10 12 -		
200	2478 252 8 8 10 -	1910 252 8 8 10 -	1502 252 8 8 12 -	1200 252 8 8 12 -	969 503 8 8 12 -	789 503 8 8 12 -	645 503 8 8 12 -	529 503 8 8 12 -	433 503 8 10 12 -	354 503 8 10 12 -	288 503 8 10 12 -	231 503 8 10 12 -	183 503 8 10 12 -		
210	2659 252 8 8 10 -	2050 252 8 8 10 -	1613 252 8 8 12 -	1288 252 8 8 12 -	1040 503 8 8 12 -	847 503 8 8 12 -	692 503 8 8 12 -	568 503 8 8 12 -	465 503 8 10 12 -	380 503 8 10 12 -	309 503 8 10 12 -	248 503 8 10 12 -	196 503 8 10 12 -		
220	2841 252 8 8 10 12	2190 252 8 8 10 12	1723 252 8 8 12 12	1376 503 8 8 12 12	1112 503 8 8 12 12	905 503 8 8 12 12	739 503 8 8 12 12	606 503 8 8 12 12	497 503 8 10 12 12	406 503 8 10 12 12	330 503 8 10 12 12	265 503 8 10 12 12	209 503 8 10 12 12		
230	3023 283 8 8 10 12	2330 283 8 8 10 12	1833 283 8 8 12 12	1464 524 8 8 12 12	1183 524 8 8 12 12	963 524 8 8 12 12	787 524 8 8 12 12	645 524 8 8 12 12	529 524 8 10 12 12	432 524 8 10 12 12	351 524 8 10 12 12	282 524 8 10 12 12	223 524 8 10 12 12		
2 SPANS														End support width a > 75 mm Intermediate support width b > 100 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	1914 252 - - - -	1487 252 - - - -	1181 252 - - - -	954 252 - - - -	781 252 - - - -	645 252 - - - -	538 252 - - - -	451 252 - - - -	379 252 - - - -	320 252 - - - -	270 252 - - - -	227 252 - - - -	190 252 - - - -		
150	2165 252 - - - -	1682 252 - - - -	1336 252 - - - -	1079 252 - - - -	883 252 - - - -	730 252 - - - -	608 252 - - - -	510 252 - - - -	429 252 - - - -	362 252 - - - -	305 252 - - - -	256 252 - - - -	215 252 - - - -		
160	2416 252 6 - - -	1877 252 8 - - -	1491 252 8 - - -	1204 252 8 - - -	985 252 8 - - -	815 252 8 - - -	679 252 8 - - -	569 283 8 - - -	479 283 8 - - -	404 283 8 - - -	341 283 8 - - -	286 283 8 - - -	240 283 8 - - -		
170	2667 252 6 8 - -	2072 252 6 8 - -	1646 283 6 8 - -	1329 283 6 8 - -	1088 283 6 8 - -	899 283 6 8 - -	749 283 6 8 - -	628 283 6 8 - -	528 283 8 8 - -	446 283 8 8 - -	375 283 8 8 - -	316 283 8 8 - -	265 283 8 8 - -		
180	2918 283 6 6 - -	2267 283 6 6 - -	1800 283 6 6 - -	1454 336 6 6 - -	1190 336 6 6 - -	984 336 6 6 - -	820 336 6 6 - -	687 336 6 6 - -	578 336 6 6 - -	487 336 6 8 - -	410 336 6 8 - -	346 336 6 8 - -	290 336 6 8 - -		
190	3169 283 6 6 8 -	2462 283 6 6 8 -	1955 283 6 6 8 -	1579 393 6 6 8 -	1292 393 6 6 8 -	1068 393 6 6 8 -	890 393 6 6 8 -	746 393 6 6 8 -	628 393 6 6 8 -	529 393 6 6 8 -	446 393 6 6 8 -	376 393 6 6 8 -	315 393 6 6 8 -		
200	3420 283 6 6 8 -	2657 283 6 6 8 -	2110 283 6 6 8 -	1704 503 6 6 6 -	1395 503 6 6 6 -	1153 503 6 6 6 -	961 503 6 6 6 -	805 503 6 6 6 -	677 503 6 6 6 -	571 503 6 6 6 -	481 503 6 6 6 -	405 503 6 6 6 -	340 503 6 6 6 -		
210	3671 283 6 6 8 -	2852 283 6 6 8 -	2265 503 6 6 6 -	1829 503 6 6 6 -	1497 503 6 6 6 -	1238 503 6 6 6 -	1031 503 6 6 6 -	864 503 6 6 6 -	727 503 6 6 6 -	613 503 6 6 6 -	516 503 6 6 6 -	435 503 6 6 6 -	365 503 6 6 6 -		
220	3922 283 6 6 8 8	3047 283 6 6 8 8	2420 503 6 6 6 6	1954 503 6 6 6 6	1599 503 6 6 6 6	1322 503 6 6 6 6	1102 503 6 6 6 6	923 503 6 6 6 6	777 503 6 6 6 6	655 503 6 6 6 6	552 503 6 6 6 6	465 503 6 6 6 6	390 503 6 6 6 6		
230	4173 336 6 6 6 8	3242 283 6 6 8 8	2575 524 6 6 6 6	2079 524 6 6 6 6	1702 524 6 6 6 6	1407 524 6 6 6 6	1172 524 6 6 6 6	982 524 6 6 6 6	826 524 6 6 6 6	697 524 6 6 6 6	587 524 6 6 6 6	495 524 6 6 6 6	415 524 6 6 6 6		
3 SPANS														End support width a > 75 mm Intermediate support width b > 100 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	1829 189 - - - -	1420 189 - - - -	1126 189 - - - -	908 189 - - - -	742 189 - - - -	613 189 - - - -	509 189 - - - -	426 189 - - - -	357 189 - - - -	300 189 - - - -	251 189 - - - -	211 189 - - - -	176 189 - - - -		
150	2069 189 - - - -	1606 189 - - - -	1274 189 - - - -	1028 189 - - - -	840 189 - - - -	693 189 - - - -	576 252 - - - -	482 252 - - - -	404 252 - - - -	340 252 - - - -	284 252 - - - -	238 252 - - - -	199 252 - - - -		
160	2309 189 8 - - -	1792 189 8 - - -	1422 189 8 - - -	1147 189 8 - - -	937 189 8 - - -	773 189 8 - - -	643 252 8 - - -	537 252 8 - - -	451 252 8 - - -	378 252 8 - - -	317 252 8 - - -	266 252 8 - - -	222 252 8 - - -		
170	2549 189 8 8 - -	1979 189 8 8 - -	1569 197 8 8 - -	1266 197 8 8 - -	1034 197 8 8 - -	853 283 6 8 - -	709 283 6 8 - -	593 283 6 8 - -	498 283 6 8 - -	417 283 6 8 - -	350 283 8 8 - -	294 283 8 8 - -	245 283 8 8 - -		
180	2789 197 6 8 - -	2165 197 8 8 - -	1717 197 8 8 - -	1385 197 8 8 - -	1131 197 8 8 - -	934 336 6 6 - -	776 336 6 6 - -	649 336 6 6 - -	544 336 6 6 - -	456 336 6 6 - -	383 336 6 6 - -	321 336 6 8 - -	268 336 6 8 - -		
190	3029 197 6 8 10 -	2351 197 6 8 10 -	1865 252 6 6 8 -	1504 252 6 6 10 -	1229 393 6 6 8 -	1014 393 6 6 8 -	843 393 6 6 8 -	705 393 6 6 8 -	591 393 6 6 8 -	496 393 6 6 8 -	416 393 6 6 8 -	349 393 6 6 8 -	292 393 6 6 8 -		
200	3269 252 6 6 8 -	2537 252 6 6 8 -	2012 252 6 6 8 -	1623 252 6 6 8 -	1326 503 6 6 6 -	1094 503 6 6 6 -	910 503 6 6 6 -	760 503 6 6 6 -	638 503 6 6 6 -	535 503 6 6 6 -	449 503 6 6 6 -	377 503 6 6 6 -	315 503 6 6 6 -		
210	3509 252 6 6 8 -	2723 252 6 6 8 -	2160 252 6 6 8 -	1742 252 6 6 8 -	1423 503 6 6 6 -	1174 503 6 6 6 -	976 503 6 6 6 -	816 503 6 6 6 -	685 503 6 6 6 -	574 503 6 6 6 -	482 503 6 6 6 -	405 503 6 6 6 -	338 503 6 6 6 -		
220	3748 252 6 6 8 8	2910 252 6 6 8 8	2308 252 6 6 8 8	1861 503 6 6 6 6	1520 503 6 6 6 6	1255 503 6 6 6 6	1043 503 6 6 6 6	872 503 6 6 6 6	731 503 6 6 6 6	614 503 6 6 6 6	515 503 6 6 6 6	432 503 6 6 6 6	361 503 6 6 6 6		
230	3988 283 6 6 8 8	3096 283 6 6 8 8	2455 283 6 6 8 8	1980 524 6 6 6 6	1618 524 6 6 6 6	1335 524 6 6 6 6	1110 524 6 6 6 6	928 524 6 6 6 6	778 524 6 6 6 6	653 524 6 6 6 6	548 524 6 6 6 6	460 524 6 6 6 6	384 524 6 6 6 6		

H	L			
	Q	N		
	R60	R90	R120	R180

L: Span between supports (m)
H: Height of the slab edge (mm)
Q: Use overload (Kg/m²)
N: Section of negatives (mm²/m).
See table of nominal sections.

Armed fire R60/90/120/180: Diameter of positives/fire per valley for REI 60/90/120/180. In the calculation of the fire requirement, a leveling concrete or pavement with equivalent thermal characteristics of 0 mm thick has been considered, for other thicknesses consult our technical department. Without reinforcement of positives / fire, the slab respect an REI 30.

Shoring
Double Shoring

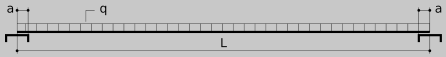
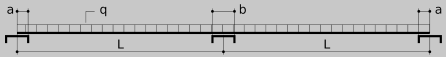
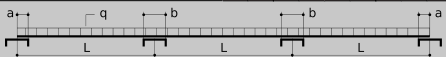
INCO 100.3 Colaborante®

(fy = 280 N/mm²)



Use Overload, Q (Kg/m²)

Thickness: 1,00 mm

1 SPAN														End support width a > 75 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	1834 99	1409 99	1106 99	882 99	712 99	580 99	475 99	390 99	322 99	263 189	216 189	175 189	123 189		
150	2075 131	1594 131	1251 131	998 131	805 131	656 131	537 131	442 131	363 252	298 252	244 252	199 252	160 252		
160	2316 131	1780 131	1397 131	1114 131	899 131	732 131	600 131	493 131	405 252	333 252	273 252	222 252	179 252		
170	2557 142	1965 142	1542 142	1230 142	993 142	808 142	662 142	545 283	448 283	368 283	302 283	245 283	198 283		
180	2798 189	2150 189	1687 189	1346 189	1086 189	885 189	725 189	596 336	490 336	403 336	330 336	269 336	216 336		
190	3038 189	2335 189	1833 189	1462 189	1180 189	961 189	788 393	648 393	533 393	438 393	359 393	292 393	235 393		
200	3279 252	2520 252	1978 252	1578 252	1274 252	1037 252	850 503	699 503	575 503	473 503	388 503	316 503	254 503		
210	3520 252	2705 252	2124 252	1694 252	1367 252	1114 252	913 503	751 503	617 503	508 503	416 503	339 503	273 503		
220	3761 252	2891 252	2269 252	1810 252	1461 252	1190 503	975 503	802 503	660 503	543 503	445 503	362 503	292 503		
230	4002 283	3076 283	2414 283	1926 283	1555 283	1266 524	1038 524	854 524	702 524	578 524	474 524	386 524	311 524		
2 SPANS														End support width a > 75 mm Intermediate support width b > 100 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	2534 336	1962 336	1553 336	1250 336	1021 336	842 336	701 336	587 336	494 336	417 336	352 336	298 336	252 336		
150	2867 336	2219 336	1756 336	1415 336	1155 336	953 336	793 336	664 336	559 336	472 336	399 336	337 336	285 336		
160	3200 336	2477 336	1960 336	1579 336	1289 336	1064 336	885 336	742 336	624 336	527 336	445 336	377 336	317 336		
170	3533 336	2735 336	2164 336	1743 336	1423 336	1175 336	978 336	819 336	689 336	582 336	492 336	416 336	350 336		
180	3865 393	2992 393	2368 393	1908 393	1557 393	1285 336	1070 336	896 336	754 336	637 336	538 336	455 336	383 336		
190	4198 393	3250 393	2572 393	2072 393	1692 393	1396 393	1162 393	973 393	819 393	692 393	585 393	495 393	417 393		
200	4531 393	3507 393	2776 393	2236 393	1826 393	1507 393	1254 503	1051 503	884 503	747 503	631 503	534 503	450 503		
210	4864 393	3765 393	2980 393	2400 393	1960 393	1618 393	1346 503	1128 503	949 503	802 503	678 503	573 503	483 503		
220	5197 393	4023 393	3184 393	2565 393	2094 393	1728 503	1439 503	1205 503	1014 503	857 503	724 503	613 503	516 503		
230	5529 393	4280 393	3388 393	2729 393	2228 393	1839 524	1531 524	1283 524	1079 524	911 524	771 524	651 524	550 524		
3 SPANS														End support width a > 75 mm Intermediate support width b > 100 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	2424 252	1875 252	1483 252	1193 252	972 252	801 252	666 252	556 252	467 252	393 252	331 252	279 252	234 252		
150	2743 252	2121 252	1677 252	1349 252	1100 252	907 252	753 252	630 252	529 252	445 252	375 252	315 252	265 252		
160	3061 252	2368 252	1872 252	1506 252	1228 252	1012 252	841 252	703 252	590 252	497 252	419 252	352 252	296 252		
170	3379 252	2614 252	2067 252	1663 252	1356 252	1117 252	928 252	776 252	652 252	549 283	463 283	389 283	327 283		
180	3698 283	2860 283	2262 283	1820 252	1484 252	1223 252	1016 252	849 252	713 336	601 336	506 336	426 336	358 336		
190	4016 283	3106 283	2457 283	1976 283	1612 283	1328 283	1104 283	923 283	775 393	652 393	550 393	462 393	389 393		
200	4335 283	3353 283	2651 283	2133 283	1739 283	1434 283	1191 283	996 503	836 503	704 503	594 503	499 503	420 503		
210	4653 283	3599 283	2846 283	2290 283	1867 283	1539 283	1279 283	1069 503	898 503	756 503	636 503	536 503	451 503		
220	4971 283	3845 283	3041 283	2447 283	1995 283	1644 283	1366 283	1142 503	959 503	808 503	680 503	573 503	482 503		
230	5290 283	4092 283	3236 283	2603 283	2123 283	1750 283	1454 524	1216 524	1021 524	860 524	724 524	610 524	513 524		

H	L			
	Q	N		
	R60	R90	R120	R180

L: Span between supports (m)
H: Height of the slab edge (mm)
Q: Use overload (Kg/m²)
N: Section of negatives (mm²/m).
See table of nominal sections.

Armed fire R60/90/120/180: Diameter of positives/fire per valley for REI 60/90/120/180. In the calculation of the fire requirement, a leveling concrete or pavement with equivalent thermal characteristics of 0 mm thick has been considered, for other thicknesses consult our technical department. Without reinforcement of positives / fire, the slab respect an REI 30.

Shoring
Double Shoring

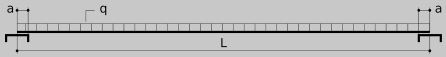
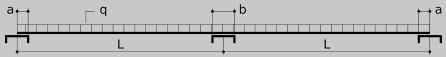
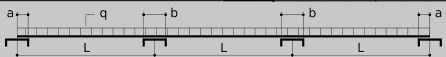
INCO 100.3 Colaborante®

(fy = 280 N/mm²)



Use Overload, Q (Kg/m²)

Thickness: 1,20 mm

1 SPAN														End support width a > 75 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	2217 99	1701 99	1334 99	1063 99	858 99	699 99	574 99	473 99	390 99	321 99	266 189	195 189	134 189		
150	2508 131	1925 131	1510 131	1203 131	971 131	792 131	649 131	535 131	442 131	364 131	301 252	246 252	192 252		
160	2800 131	2149 131	1685 131	1343 131	1085 131	884 131	725 131	598 131	494 131	407 252	335 252	275 252	224 252		
170	3091 142	2373 142	1861 142	1483 142	1198 142	976 142	801 142	660 142	545 142	450 283	371 283	304 283	247 283		
180	3382 189	2596 189	2036 189	1624 189	1311 189	1068 189	877 189	723 189	597 336	493 336	406 336	333 336	271 336		
190	3674 189	2820 189	2212 189	1764 189	1424 189	1161 189	952 189	785 189	649 393	535 393	441 393	362 393	295 393		
200	3965 252	3044 252	2388 252	1904 252	1537 252	1253 252	1028 252	848 503	701 503	578 503	477 503	391 503	319 503		
210	4257 252	3268 252	2563 252	2044 252	1650 252	1345 252	1104 252	910 503	751 503	621 503	512 503	420 503	342 503		
220	4548 252	3492 252	2739 252	2184 252	1763 252	1437 252	1180 252	973 503	803 503	664 503	547 503	449 503	366 503		
230	4840 283	3715 283	2914 283	2324 283	1876 283	1530 283	1256 524	1035 524	855 524	707 524	583 524	479 524	390 524		
2 SPANS														End support width a > 75 mm Intermediate support width b > 100 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	3064 393	2368 393	1871 393	1505 393	1228 393	1013 393	842 393	706 393	594 393	502 393	425 393	360 393	305 393		
150	3467 393	2679 393	2117 393	1703 393	1389 393	1146 393	954 393	799 393	673 393	568 393	481 393	408 393	346 393		
160	3870 503	2990 503	2363 503	1901 393	1551 393	1279 393	1065 393	892 393	751 393	635 393	538 393	456 393	386 393		
170	4272 503	3301 503	2610 503	2099 503	1713 503	1413 503	1176 393	985 393	830 393	701 393	594 393	504 393	427 393		
180	4675 503	3613 503	2856 503	2297 503	1874 503	1546 503	1287 503	1078 503	908 393	768 393	650 393	551 393	467 393		
190	5077 503	3924 503	3102 503	2495 503	2036 503	1680 503	1398 503	1171 503	987 503	834 503	707 393	599 393	508 393		
200	5480 503	4235 503	3348 503	2694 503	2198 503	1813 503	1509 503	1264 503	1065 503	900 503	763 503	647 503	548 503		
210	5883 503	4546 503	3594 503	2892 503	2359 503	1946 503	1620 503	1358 503	1144 503	967 503	819 503	695 503	589 503		
220	6285 503	4858 503	3840 503	3090 503	2521 503	2080 503	1731 503	1451 503	1222 503	1033 503	875 503	742 503	628 503		
230	6688 503	5169 503	4086 503	3288 503	2683 503	2213 503	1842 503	1544 524	1300 524	1100 524	932 524	790 524	669 524		
3 SPANS														End support width a > 75 mm Intermediate support width b > 100 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	2933 283	2265 283	1788 283	1437 283	1171 283	965 283	801 283	670 283	563 283	475 283	401 283	339 252	285 252		
150	3318 336	2562 336	2023 283	1626 283	1325 283	1092 283	907 283	759 283	638 283	538 283	454 283	384 283	324 283		
160	3703 336	2860 336	2259 336	1815 336	1479 336	1219 336	1013 283	847 283	712 283	600 283	507 283	429 283	362 283		
170	4089 336	3158 336	2494 336	2004 336	1634 336	1346 336	1118 336	935 336	786 336	663 283	560 283	474 283	399 283		
180	4474 336	3455 336	2729 336	2194 336	1788 336	1473 336	1224 336	1024 336	861 336	726 336	613 336	519 336	437 336		
190	4860 336	3753 336	2964 336	2383 336	1942 336	1600 336	1330 336	1112 336	935 336	789 336	667 393	562 393	475 393		
200	5245 336	4051 336	3199 336	2572 336	2096 336	1727 336	1435 336	1201 336	1010 336	852 336	720 503	607 503	513 503		
210	5630 336	4348 336	3435 336	2761 336	2250 336	1854 336	1541 336	1289 336	1084 336	914 503	773 503	652 503	551 503		
220	6016 336	4646 336	3670 336	2950 336	2404 336	1981 336	1647 336	1378 336	1158 336	977 503	826 503	697 503	589 503		
230	6401 336	4944 336	3905 336	3139 336	2559 336	2108 336	1752 336	1466 336	1233 524	1040 524	879 524	742 524	627 524		

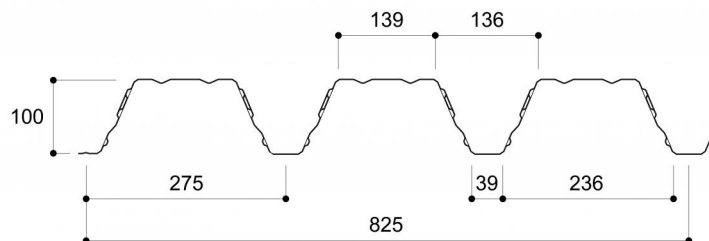
H	L			
	Q	N		
	R60	R90	R120	R180

L: Span between supports (m)
H: Height of the slab edge (mm)
Q: Use overload (Kg/m²)
N: Section of negatives (mm²/m).
See table of nominal sections.

Armed fire R60/90/120/180: Diameter of positives/fire per valley for REI 60/90/120/180. In the calculation of the fire requirement, a leveling concrete or pavement with equivalent thermal characteristics of 0 mm thick has been considered, for other thicknesses consult our technical department. Without reinforcement of positives / fire, the slab respect an REI 30.

Shoring
Double Shoring

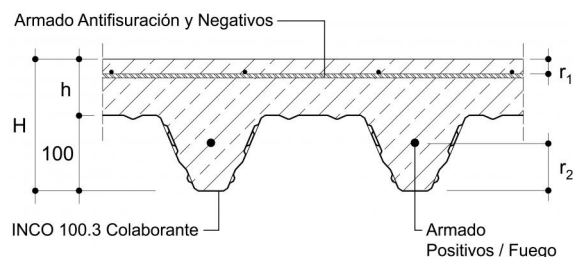
Composite slab profile dimensions



Eff. Width: 825 mm

Dim. in mm

Composite slab section



Upper reinforcement cover, r_1 (mm)

20

Lower reinforcement cover, r_2 (mm)

65

Profile characteristics INCO 100.3 Colaborante

Material	Acero	Density (daN/m^3)	7.850
Yield Strength (N/mm^2)	320	Galvanised protection	Z200
Elasticity Modulus (N/mm^2)	2.100.000		

Thickness (mm)	Weight (daN/m^2)	Eff. Area (mm^2/m)	M. Inertia (mm^4/m)			Section Modulus (mm^3/m)	
			Gross	Effective +	Effective -	Effective +	Effective -
0,75	8,92	1.136	1.617.470	1.458.115	1.459.805	24.983	21.352
1,00	11,89	1.515	2.310.769	1.917.338	1.761.922	34.908	33.982
1,20	14,27	1.818	2.773.026	2.284.717	2.003.616	42.849	44.087

Characteristic of composite slab

Concrete Type	HA-25	Aggregate Size	< (0,4 h_c)
Resistance, f_{ck} (N/mm^2)	25		< ($b_0 / 3$)
Elasticity Modulus (daN/cm^2)	30.471,58		< (tamiz C, 31,5 mm)

Slab Own Weight (kN/m^2)										
Thickness (mm)	Forged Edge (mm)									
	140	150	160	170	180	190	200	210	220	230
0,75	1,78	2,01	2,25	2,48	2,72	2,96	3,19	3,43	3,66	3,90
1,00	1,81	2,04	2,28	2,51	2,75	2,98	3,22	3,46	3,69	3,93
1,20	1,83	2,07	2,30	2,54	2,77	3,01	3,24	3,48	3,71	3,95

Volumetry and Inertia of the Composite Slab										
Forged Edge (mm)	140	150	160	170	180	190	200	210	220	230
Concrete Volume (m^3/m^2)	0,072	0,082	0,092	0,102	0,112	0,122	0,132	0,142	0,152	0,162
Gross inertia (cm^4/m)	13.905	17.742	21.952	26.554	31.578	37.064	43.056	49.599	56.743	64.538

Global Weighted Noise Reduction Index, R_A (dBA)										
Forged Edge (mm)	140	150	160	170	180	190	200	210	220	230
R_A (dBA)	44,09	46,00	47,72	49,26	50,67	51,96	53,15	54,26	55,30	56,28

Note: The R_A values correspond to the behavior of the unfinished slab, obtained by means of the mass law according to CTE-DB-HR Protection Against Noise. To know the improvement of the global noise reduction index by adding a backing.

Characteristic of Anti-Cracking Armor and Negative Reinforcement

Designation	B 500S	f_s (N/mm^2)	550
Steel Class	Soldable	Elongation %	12
f_s (N/mm^2)	500	f_s / f_y	1,05

Nominal sections of steel per linear meter															
Separation (cm)	20x20	15x15	20x20	15x15	10x10	20x20	10x10	15x15	20x20	10x10	15x15	20x20	15x15	10x10	10x10
Diameter (mm)	5	5	6	6	5	8	6	8	10	8	10	12	12	10	12
Sections (mm^2/m)	99	131	142	189	197	252	283	336	393	503	524	566	754	786	1131

Calculation hypothesis ELU: Maximum Load = $1.35 \cdot \text{Own Weight} + 1.50 \cdot \text{Use Overload}$

Deflection limitations ELS: Maximum Load = $1.00 \cdot \text{Own Weight} + 1.00 \cdot \text{Use Overload}$

Fase Encofrado: L/180

Fase Mixta: Span $\leq 3.50 \text{ m}$ - Maximum Deflection < L/350

Span > 3.50 m - Maximum Deflection < L/700 + 5 mm

For any variation of the parameters defined in this document, our Technical Department is at your disposal to carry out a personalized calculation. Revisión v22.01.28

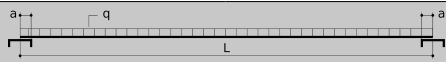
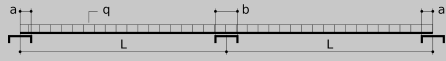
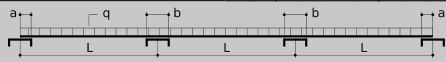
INCO 100.3 Colaborante®

($f_y = 320 \text{ N/mm}^2$)



Use Overload, Q (Kg/m²)

Thickness: 0,75 mm

1 SPAN														End support width a > 75 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	1387 99	1069 99	841 99	672 99	543 99	442 99	362 99	296 189	242 189	198 189	161 189	129 189			
150	1568 131	1209 131	951 131	760 131	614 131	500 131	409 131	335 252	274 252	224 252	182 252	146 252			
160	1750 131	1349 131	1061 131	848 131	685 131	558 131	456 252	373 252	306 252	250 252	203 252	163 252	129 252		
170	1932 142	1489 142	1172 142	936 142	756 142	616 142	504 283	412 283	338 283	276 283	224 283	180 283	142 283		
180	2114 189	1630 189	1282 189	1024 189	827 189	673 336	551 336	451 336	370 336	302 336	245 336	197 336	156 336		
190	2296 189	1770 189	1392 189	1112 189	898 189	731 393	598 393	490 393	402 393	328 393	266 393	214 393	169 393		
200	2478 252	1910 252	1502 252	1200 252	969 252	789 503	645 503	529 503	433 503	354 503	288 503	231 503	183 503		
210	2659 252	2050 252	1613 252	1288 252	1040 503	847 503	692 503	568 503	465 503	380 503	309 503	248 503	196 503		
220	2841 252	2190 252	1723 252	1376 252	1112 503	905 503	739 503	606 503	497 503	406 503	330 503	265 503	209 503		
230	3023 283	2330 283	1833 283	1464 283	1183 524	963 524	787 524	645 524	529 524	432 524	351 524	282 524	223 524		
2 SPANS														End support width Intermediate support width a > 75 mm b > 100 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	1914 252	1487 252	1181 252	954 252	781 252	645 252	538 252	451 252	379 252	320 252	270 252	227 252	190 252		
150	2165 252	1682 252	1336 252	1079 252	883 252	730 252	608 252	510 252	429 252	362 252	305 252	256 252	215 252		
160	2416 252	1877 252	1491 252	1204 252	985 252	815 252	679 252	569 283	479 283	404 283	341 283	286 283	240 283		
170	2667 252	2072 252	1646 283	1329 283	1088 283	899 283	749 283	628 283	528 283	446 283	375 283	316 283	265 283		
180	2918 283	2267 283	1800 283	1454 283	1190 336	984 336	820 336	687 336	578 336	487 336	410 336	346 336	290 336		
190	3169 283	2462 283	1955 283	1579 283	1292 393	1068 393	890 393	746 393	628 393	529 393	446 393	376 393	315 393		
200	3420 283	2657 283	2110 283	1704 503	1395 503	1153 503	961 503	805 503	677 503	571 503	481 503	405 503	340 503		
210	3671 283	2852 283	2265 283	1829 503	1497 503	1238 503	1031 503	864 503	727 503	613 503	516 503	435 503	365 503		
220	3922 283	3047 283	2420 283	1954 503	1599 503	1322 503	1102 503	923 503	777 503	655 503	552 503	465 503	390 503		
230	4173 336	3242 283	2575 283	2079 524	1702 524	1407 524	1172 524	982 524	826 524	697 524	587 524	495 524	415 524		
3 SPANS														End support width Intermediate support width a > 75 mm b > 100 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	1829 189	1420 189	1126 189	908 189	742 189	613 189	509 189	426 189	357 189	300 189	251 189	211 189	176 189		
150	2069 189	1606 189	1274 189	1028 189	840 189	693 189	576 189	482 252	404 252	340 252	284 252	238 252	199 252		
160	2309 189	1792 189	1422 189	1147 189	937 189	773 189	643 252	537 252	451 252	378 252	317 252	266 252	222 252		
170	2549 189	1979 189	1569 197	1266 197	1034 197	853 197	709 283	593 283	498 283	417 283	350 283	294 283	245 283		
180	2789 197	2165 197	1717 197	1385 197	1131 197	934 252	776 336	649 336	544 336	456 336	383 336	321 336	268 336		
190	3029 197	2351 197	1865 252	1504 252	1229 252	1014 393	843 393	705 393	591 393	496 393	416 393	349 393	292 393		
200	3269 252	2537 252	2012 252	1623 252	1326 252	1094 503	910 503	760 503	638 503	535 503	449 503	377 503	315 503		
210	3509 252	2723 252	2160 252	1742 252	1423 503	1174 503	976 503	816 503	685 503	574 503	482 503	405 503	338 503		
220	3748 252	2910 252	2308 252	1861 252	1520 503	1255 503	1043 503	872 503	731 503	614 503	515 503	432 503	361 503		
230	3988 283	3096 283	2455 283	1980 283	1618 524	1335 524	1110 524	928 524	778 524	653 524	548 524	460 524	384 524		

H	L			
	Q	N		
	R60	R90	R120	R180

L: Span between supports (m)
H: Height of the slab edge (mm)
Q: Use overload (Kg/m²)
N: Section of negatives (mm²/m).
See table of nominal sections.

Armed fire R60/90/120/180: Diameter of positives/fire per valley for REI 60/90/120/180. In the calculation of the fire requirement, a leveling concrete or pavement with equivalent thermal characteristics of 0 mm thick has been considered, for other thicknesses consult our technical department. Without reinforcement of positives / fire, the slab respect an REI 30.

Shoring
Double Shoring

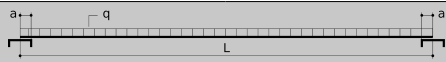
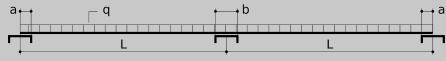
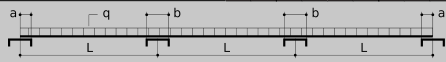
INCO 100.3 Colaborante®

(fy = 320 N/mm²)



Use Overload, Q (Kg/m²)

Thickness: 1,00 mm

1 SPAN														End support width a > 75 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	1834 99	1409 99	1106 99	882 99	712 99	580 99	475 99	390 99	322 99	263 99	217 189	175 189	123 189		
150	2075 131	1594 131	1251 131	998 131	805 131	656 131	537 131	442 131	363 131	299 252	244 252	199 252	160 252		
160	2316 131	1780 131	1397 131	1114 131	899 131	732 131	600 131	493 131	405 131	334 252	273 252	222 252	179 252		
170	2557 142	1965 142	1542 142	1230 142	993 142	808 142	662 142	545 142	448 283	368 283	302 283	245 283	198 283		
180	2798 189	2150 189	1687 189	1346 189	1086 189	885 189	725 189	596 189	490 336	403 336	330 336	269 336	216 336		
190	3038 189	2335 189	1833 189	1462 189	1180 189	961 189	788 189	648 393	533 393	438 393	359 393	292 393	235 393		
200	3279 252	2520 252	1978 252	1578 252	1274 252	1037 252	850 252	699 503	575 503	473 503	388 503	316 503	254 503		
210	3520 252	2705 252	2124 252	1694 252	1367 252	1114 252	913 252	751 503	617 503	508 503	416 503	339 503	273 503		
220	3761 252	2891 252	2269 252	1810 252	1461 252	1190 252	975 503	802 503	660 503	543 503	445 503	362 503	292 503		
230	4002 283	3076 283	2414 283	1926 283	1555 283	1266 283	1038 524	854 524	702 524	578 524	474 524	386 524	311 524		
	8 10 12 12	8 10 12 12	8 10 12 12	10 10 12 12	10 10 12 12	10 10 12 12	10 10 12 12	10 10 12 12	10 10 12 12	10 10 12 12	10 10 12 12	10 10 12 12	10 10 12 12		
2 SPANS														End support width a > 75 mm Intermediate support width b > 100 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	2534 336	1962 336	1553 336	1250 336	1021 336	842 336	701 336	587 336	494 336	417 336	352 336	298 336	252 336		
150	2867 336	2219 336	1756 336	1415 336	1155 336	953 336	793 336	664 336	559 336	472 336	399 336	337 336	285 336		
160	3200 336	2477 336	1960 336	1579 336	1289 336	1064 336	885 336	742 336	624 336	527 336	445 336	377 336	317 336		
170	3533 336	2735 336	2164 336	1743 336	1423 336	1175 336	978 336	819 336	689 336	582 336	492 336	416 336	350 336		
180	3865 393	2992 393	2368 393	1908 393	1557 393	1285 393	1070 393	896 393	754 393	637 393	538 393	455 393	383 393		
190	4198 393	3250 393	2572 393	2072 393	1692 393	1396 393	1162 393	973 393	819 393	692 393	585 393	495 393	417 393		
200	4531 393	3507 393	2776 393	2236 393	1826 393	1507 393	1254 393	1051 503	884 503	747 503	631 503	534 503	450 503		
210	4864 393	3765 393	2980 393	2400 393	1960 393	1618 393	1346 393	1128 503	949 503	802 503	678 503	573 503	483 503		
220	5197 393	4023 393	3184 393	2565 393	2094 393	1728 393	1439 503	1205 503	1014 503	857 503	724 503	613 503	516 503		
230	5529 393	4280 393	3388 393	2729 393	2228 393	1839 393	1531 524	1283 524	1079 524	911 524	771 524	651 524	550 524		
	6 6 8 10	6 6 8 10	6 6 8 10	6 6 8 10	6 6 8 10	6 6 8 10	6 6 8 10	6 6 8 8	6 6 8 8	6 6 8 8	6 6 8 8	6 6 8 8	6 6 8 8		
3 SPANS														End support width a > 75 mm Intermediate support width b > 100 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	2424 252	1875 252	1483 252	1193 252	972 252	801 252	666 252	556 252	467 252	393 252	331 252	279 252	234 252		
150	2743 252	2121 252	1677 252	1349 252	1100 252	907 252	753 252	630 252	529 252	445 252	375 252	315 252	265 252		
160	3061 252	2368 252	1872 252	1506 252	1228 252	1012 252	841 252	703 252	590 252	497 252	419 252	352 252	296 252		
170	3379 252	2614 252	2067 252	1663 252	1356 252	1117 252	928 252	776 252	652 252	549 252	463 283	389 283	327 283		
180	3698 283	2860 283	2262 283	1820 252	1484 252	1223 252	1016 252	849 252	713 252	601 252	506 336	426 336	358 336		
190	4016 283	3106 283	2457 283	1976 283	1612 283	1328 283	1104 283	923 283	775 283	652 393	550 393	462 393	389 393		
200	4335 283	3353 283	2651 283	2133 283	1739 283	1434 283	1191 283	996 283	836 283	704 503	594 503	499 503	420 503		
210	4653 283	3599 283	2846 283	2290 283	1867 283	1539 283	1279 283	1069 283	898 503	756 503	636 503	536 503	451 503		
220	4971 283	3845 283	3041 283	2447 283	1995 283	1644 283	1366 283	1142 283	959 503	808 503	680 503	573 503	482 503		
230	5290 283	4092 283	3236 283	2603 283	2123 283	1750 283	1454 283	1216 524	1021 524	860 524	724 524	610 524	513 524		
	8 8 10 10	8 8 10 10	8 8 10 10	8 8 10 10	8 8 10 10	8 8 10 10	8 8 10 10	8 8 10 10	8 8 10 10	6 6 8 8	6 6 8 8	6 6 8 8	6 6 8 8		

H	L			
	Q	N		
	R60	R90	R120	R180

L: Span between supports (m)
H: Height of the slab edge (mm)
Q: Use overload (Kg/m²)
N: Section of negatives (mm²/m).
See table of nominal sections.

Armed fire R60/90/120/180: Diameter of positives/fire per valley for REI 60/90/120/180. In the calculation of the fire requirement, a leveling concrete or pavement with equivalent thermal characteristics of 0 mm thick has been considered, for other thicknesses consult our technical department. Without reinforcement of positives / fire, the slab respect an REI 30.

Shoring
Double Shoring

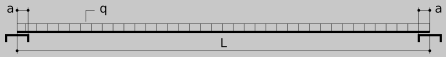
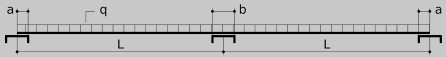
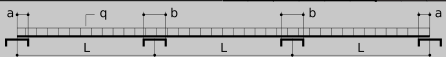
INCO 100.3 Colaborante®

(fy = 320 N/mm²)



Use Overload, Q (Kg/m²)

Thickness: 1,20 mm

1 SPAN														End support width a > 75 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	2217 99	1701 99	1334 99	1063 99	858 99	699 99	574 99	473 99	390 99	321 99	266 99	218 99	134 189		
150	2508 131	1925 131	1510 131	1203 131	971 131	792 131	649 131	535 131	442 131	364 131	301 131	247 252	192 252		
160	2800 131	2149 131	1685 131	1343 131	1085 131	884 131	725 131	598 131	494 131	407 131	336 252	275 252	224 252		
170	3091 142	2373 142	1861 142	1483 142	1198 142	976 142	801 142	660 142	545 142	450 142	372 283	304 283	247 283		
180	3382 189	2596 189	2036 189	1624 189	1311 189	1068 189	877 189	723 189	597 189	493 336	406 336	333 336	271 336		
190	3674 189	2820 189	2212 189	1764 189	1424 189	1161 189	952 189	785 189	649 189	535 393	441 393	362 393	295 393		
200	3965 252	3044 252	2388 252	1904 252	1537 252	1253 252	1028 252	848 252	701 503	578 503	477 503	391 503	319 503		
210	4257 252	3268 252	2563 252	2044 252	1650 252	1345 252	1104 252	910 252	751 503	621 503	512 503	420 503	342 503		
220	4548 252	3492 252	2739 252	2184 252	1763 252	1437 252	1180 252	973 252	803 503	664 503	547 503	449 503	366 503		
230	4840 283	3715 283	2914 283	2324 283	1876 283	1530 283	1256 283	1035 524	855 524	707 524	583 524	479 524	390 524		
2 SPANS														End support width a > 75 mm Intermediate support width b > 100 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	3064 393	2368 393	1871 393	1505 393	1228 393	1013 393	842 393	706 393	594 393	502 393	425 393	360 393	305 393		
150	3467 393	2679 393	2117 393	1703 393	1389 393	1146 393	954 393	799 393	673 393	568 393	481 393	408 393	346 393		
160	3870 503	2990 503	2363 503	1901 393	1551 393	1279 393	1065 393	892 393	751 393	635 393	538 393	456 393	386 393		
170	4272 503	3301 503	2610 503	2099 503	1713 503	1413 503	1176 393	985 393	830 393	701 393	594 393	504 393	427 393		
180	4675 503	3613 503	2856 503	2297 503	1874 503	1546 503	1287 503	1078 503	908 393	768 393	650 393	551 393	467 393		
190	5077 503	3924 503	3102 503	2495 503	2036 503	1680 503	1398 503	1171 503	987 503	834 503	707 393	599 393	508 393		
200	5480 503	4235 503	3348 503	2694 503	2198 503	1813 503	1509 503	1264 503	1065 503	900 503	763 503	647 503	548 503		
210	5883 503	4546 503	3594 503	2892 503	2359 503	1946 503	1620 503	1358 503	1144 503	967 503	819 503	695 503	589 503		
220	6285 503	4858 503	3840 503	3090 503	2521 503	2080 503	1731 503	1451 503	1222 503	1033 503	875 503	742 503	628 503		
230	6688 503	5169 503	4086 503	3288 503	2683 503	2213 503	1842 503	1544 503	1300 524	1100 524	932 524	790 524	669 524		
3 SPANS														End support width a > 75 mm Intermediate support width b > 100 mm	
															
	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00		
140	2933 283	2265 283	1788 283	1437 283	1171 283	965 283	801 283	670 283	563 283	475 283	401 283	339 252	285 252		
150	3318 336	2562 336	2023 283	1626 283	1325 283	1092 283	907 283	759 283	638 283	538 283	454 283	384 283	324 283		
160	3703 336	2860 336	2259 336	1815 336	1479 336	1219 336	1013 283	847 283	712 283	600 283	507 283	429 283	362 283		
170	4089 336	3158 336	2494 336	2004 336	1634 336	1346 336	1118 336	935 336	786 336	663 283	560 283	474 283	400 283		
180	4474 336	3455 336	2729 336	2194 336	1788 336	1473 336	1224 336	1024 336	861 336	726 336	613 336	519 283	438 336		
190	4860 336	3753 336	2964 336	2383 336	1942 336	1600 336	1330 336	1112 336	935 336	789 336	667 336	562 393	475 393		
200	5245 336	4051 336	3199 336	2572 336	2096 336	1727 336	1435 336	1201 336	1010 336	852 336	720 336	607 503	513 503		
210	5630 336	4348 336	3435 336	2761 336	2250 336	1854 336	1541 336	1289 336	1084 336	914 336	773 503	652 503	551 503		
220	6016 336	4646 336	3670 336	2950 336	2404 336	1981 336	1647 336	1378 336	1158 336	977 336	826 503	697 503	589 503		
230	6401 336	4944 336	3905 336	3139 336	2559 336	2108 336	1752 336	1466 336	1233 336	1040 336	879 524	742 524	627 524		

H	L			
	Q	R60	R90	R180

L: Span between supports (m)
H: Height of the slab edge (mm)
Q: Use overload (Kg/m²)
N: Section of negatives (mm²/m).
See table of nominal sections.

Armed fire R60/90/120/180: Diameter of positives/fire per valley for REI 60/90/120/180. In the calculation of the fire requirement, a leveling concrete or pavement with equivalent thermal characteristics of 0 mm thick has been considered, for other thicknesses consult our technical department. Without reinforcement of positives / fire, the slab respect an REI 30.

Shoring
Double Shoring