HAIRCOL 59 FC

SCOPE

Profiled steel floor decking for use of composite floor slabs.

MATERIAL (Steel)

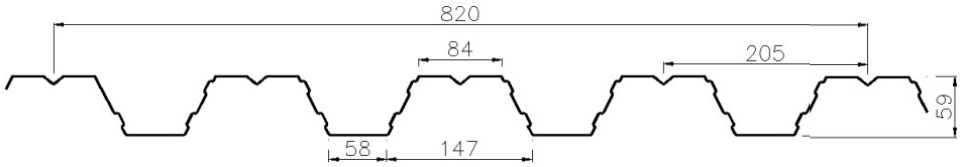
CHARACTERISTIC	STAND. REF.
Dimensional tolerance	EN 10143
Steel	EN 10346
Organic coating	EN 10169

	Thickness (mm)		
	0,75	1,00	1,20
Weight (kg/m²)	8,97	11,97	14,36
I_g (cm⁴/ml)	55,15	74,56	90,10
W_1 (cm³/ml)	17,02	23,02	27,81
W_2 (cm³/ml)	20,73	28,03	33,87

GEOMETRICAL CHARACTERISTICS

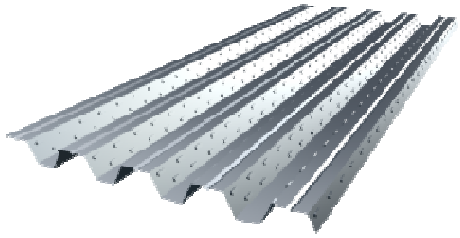
CHARACTERISTIC	VALUE	UNIT
Depth of profile	59	mm
Pitch	205	mm
Cover width	820	mm
Length	According to order (1)	mm
(1) Maximum length: 16.990 mm; Minimum length: 1.800 mm		

SECTION DETAIL

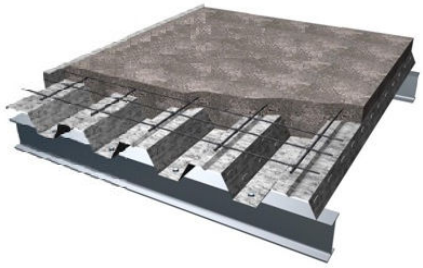


OVERLAP DETAIL

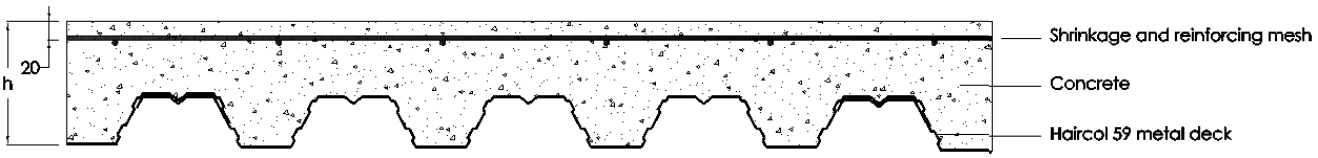
3D DETAIL



SLAB DETAIL



SLAB SECTION DETAIL



Exposure class: X0 y XC1, with measurements of the concrete cover according EC 1992-1-1[1,2]

[1] Consult other exposure classes.
[2] Verify National Annex.

VOLUME AND WEIGHT OF COMPOSITE SLAB

Slab depth, h (cm)		10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Concrete volume (dm³/m²)		67	77	87	97	107	117	127	137	147	157	167	177	187	197	207	217
Profile thickness (mm)	0,75	170	194	218	242	266	290	314	338	362	386	410	434	458	482	506	530
	1,00	173	197	221	245	269	293	317	341	365	389	413	437	461	485	509	533
	1,20	175	199	223	247	271	295	319	343	367	391	415	439	463	487	511	535

HEADQUARTERS: Avda. de la Granvia, 179 • 08908 L'Hospitalet de Llobregat • BARCELONA • SPAIN • ☏: +34 93 261 63 33 🖷: +34 93 261 63 38
FACTORY: Avda. Vall d'Aran, s/n • Pol. Ind. de Cervera • 25200 Cervera • LLEIDA • SPAIN
comercial@europerfil.es
www.europerfil.es

LOAD TABLES

Thickness 0,75 mm

Maximum permissible loads (daN/m2)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2,00	901	1001	1101	1202	1303	1405	1506	1608	1710	1812	1915	2017	1570	1644	1719	1793
2,20	747	830	913	997	1081	1165	1250	1334	985	1041	1098	1154	1211	1267	1324	1381
2,40	629	700	770	841	593	636	679	721	764	807	850	894	937	980	1024	1067
2,60	538	598	398	430	462	494	527	559	592	625	658	691	724	757	790	823
2,80	262	286	310	334	358	382	406	431	455	480	505	530	555	580	605	630
3,00				256	274	291	309	327	345	363	382	400	418	437	455	474
3,20									255	268	281	294	307	320	333	347
3,40																
3,60																
3,80																
4,00																

Maximum permissible loads (daN/m2)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2,00	1133	1259	1385	1512	1639	1767	1894	2022	2150	2278	2407	2535	2664	2793	2923	3052
2,20	939	1044	1148	1254	1359	1465	1571	1677	1783	1889	1996	2103	2210	2317	2424	1852
2,40	791	879	968	1057	1146	1235	1324	1414	1503	1593	1683	1773	1451	1520	1588	1657
2,60	676	752	827	903	979	1055	1132	1208	1285	1012	1067	1122	1177	1233	1289	1344
2,80	585	650	715	781	847	913	979	737	781	826	871	915	960	1005	1050	1096
3,00	511	568	625	683	740	532	568	604	640	676	712	749	785	821	858	895
3,20	450	500	551	379	407	436	465	494	524	553	582	612	641	671	701	730
3,40	400	445	288	311	334	357	380	404	427	451	475	498	522	546	570	594
3,60				254	272	291	309	328	347	366	384	403	422	441	460	480
3,80								264	278	293	308	323	338	353	368	383
4,00												254	266	277	289	301

Minimum mesh reinforcement sectional area (cm²/ml)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2,00	2.11	1.99	1.91	1.85	1.80	1.76	1.73	1.70	1.68	1.66	1.64	1.63	1.62	1.61	1.60	1.59
2,20	2.21	2.08	2.00	1.93	1.88	1.84	1.81	1.78	1.76	1.74	1.72	1.71	1.70	1.69	1.68	1.09
2,40	2.31	2.18	2.09	2.03	1.98	1.93	1.90	1.87	1.85	1.83	1.81	1.80	1.29	1.28	1.27	1.26
2,60	2.43	2.30	2.20	2.13	2.07	2.03	2.00	1.97	1.94	1.33	1.31	1.30	1.29	1.28	1.27	1.27
2,80	2.56	2.42	2.31	2.24	2.18	2.14	2.10	1.36	1.34	1.33	1.32	1.30	1.29	1.28	1.27	1.27
3,00	2.70	2.55	2.44	2.36	2.30	1.41	1.39	1.37	1.35	1.33	1.32	1.30	1.29	1.28	1.28	1.27
3,20	2.85	2.68	2.57	1.49	1.44	1.41	1.38	1.36	1.35	1.33	1.31	1.30	1.29	1.28	1.28	1.27
3,40	3.02	2.84	1.54	1.49	1.44	1.41	1.38	1.36	1.34	1.33	1.32	1.30	1.29	1.28	1.28	1.27
3,60				1.48	1.44	1.41	1.38	1.36	1.35	1.33	1.31	1.30	1.29	1.28	1.28	1.27
3,80								1.36	1.34	1.33	1.32	1.30	1.29	1.29	1.28	1.27
4,00												1.30	1.30	1.29	1.28	1.27

Maximum permissible loads (daN/m2)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2.00	1084	1205	1236	1447	1569	1691	1813	1936	2058	2181	2304	2427	2551	2674	2798	2922
2.20	899	999	1099	1200	1301	1402	1503	1605	1707	1809	1911	2013	2115	2218	2321	1916
2.40	757	842	927	1012	1097	1182	1268	1353	1439	1525	1611	1698	1343	1407	1470	1534
2.60	647	719	792	865	937	1010	1084	1157	1230	931	982	1032	1083	1134	1185	1236
2.80	560	622	685	748	811	874	633	673	714	754	795	836	876	917	958	999
3.00	489	544	598	654	450	482	514	547	579	612	644	677	710	742	775	808
3.20	431	479	315	341	366	391	417	443	469	495	521	547	573	599	626	652
3.40			256	276	296	316	336	357	377	398	418	439	460	481	501	522
3.60						253	269	285	301	317	333	349	365	381	397	414
3.80											260	273	285	297	310	322
4.00																

Minimum mesh reinforcement sectional area (cm²/ml)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2.00	1.69	1.60	1.54	1.49	1.45	1.42	1.40	1.38	1.36	1.34	1.33	1.32	1.31	1.30	1.29	1.29
2.20	1.76	1.67	1.60	1.56	1.52	1.49	1.46	1.44	1.42	1.41	1.39	1.38	1.37	1.36	1.36	0.95
2.40	1.84	1.75	1.68	1.63	1.59	1.56	1.53	1.51	1.49	1.48	1.46	1.45	0.96	0.95	0.94	0.94
2.60	1.93	1.83	1.76	1.71	1.67	1.63	1.61	1.59	1.57	0.97	0.96	0.95	0.95	0.94	0.93	0.93
2.80	2.03	1.92	1.85	1.80	1.75	1.72	1.00	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.92	0.91
3.00	2.13	2.03	1.94	1.89	1.03	1.01	0.99	0.97	0.96	0.94	0.93	0.92	0.92	0.91	0.90	0.90
3.20	2.25	2.13	1.08	1.05	1.01	0.99	0.97	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88
3.40			1.06	1.02	0.99	0.97	0.95	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.86
3.60						0.95	0.93	0.92	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.85
3.80											0.86	0.85	0.84	0.84	0.83	0.83
4.00																

Unpropped slabs Propped slabs

HEADQUARTERS: Avda. de la Granvia, 179 • 08908 L'Hospitalet de Llobregat • BARCELONA • SPAIN • ☏: +34 93 261 63 33 🖷: +34 93 261 63 38
FACTORY: Avda. Vall d'Aran, s/n • Pol. Ind. de Cervera • 25200 Cervera • LLEIDA • SPAIN
comercial@europerfil.es
www.europerfil.es

LOAD TABLES

Thickness 1,00 mm

Maximum permissible loads (daN/m2)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2,00	1183	1315	1448	1581	1714	1848	1982	2116	2251	2386	2521	2656	2792	2928	3064	3200
2,20	980	1090	1200	1310	1420	1531	1642	1754	1866	1977	2090	2202	1759	1843	1927	2011
2,40	826	918	1011	1103	1197	1290	1384	1478	1133	1198	1264	1330	1396	1462	1529	1595
2,60	705	784	863	943	1022	750	801	853	905	957	1009	1061	1113	1166	1218	1271
2,80	609	678	481	521	561	601	642	683	724	765	806	847	889	930	972	1014
3,00	324	355	386	418	449	481	513	545	577	610	642	675	707	740	773	806
3,20	261	285	309	334	358	383	408	433	458	483	508	534	559	585	610	636
3,40				264	282	301	320	339	359	378	397	417	436	456	476	495
3,60								261	276	290	304	319	333	348	363	378
3,80														257	268	278

Maximum permissible loads (daN/m2)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2,00	1248	1434	1620	1806	1992	2177	2363	2549	2735	2921	3107	3293	3479	3665	3851	4027
2,20	1120	1287	1454	1621	1787	1927	2067	2207	2347	2488	2629	2770	2911	3053	3195	3337
2,40	1013	1155	1272	1388	1506	1623	1741	1859	1977	2096	2215	2334	2453	2572	2692	2811
2,60	887	986	1086	1186	1286	1386	1487	1588	1689	1790	1892	1993	2095	2197	2300	2402
2,80	767	852	938	1025	1111	1198	1285	1372	1460	1548	1635	1723	1811	1460	1527	1593
3,00	669	744	819	895	970	1046	1122	1199	1275	1352	1428	1106	1161	1216	1272	1327
3,20	589	655	722	788	855	922	989	1056	788	834	879	925	971	1017	1063	1109
3,40	523	582	641	700	759	548	586	623	661	699	737	775	813	851	889	928
3,60	446	520	573	399	429	460	491	523	554	585	617	649	680	712	744	776
3,80		468	310	335	360	386	412	437	463	489	515	542	568	594	621	647
4,00			260	280	301	322	343	365	386	407	429	450	472	494	516	537
4,20					250	267	285	302	319	337	354	372	389	407	425	443
4,40									261	275	289	303	318	332	346	361
4,60													255	266	278	289

Minimum mesh reinforcement sectional area (cm²/ml)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2,00	2.44	2.41	2.38	2.37	2.36	2.34	2.34	2.33	2.32	2.32	2.31	2.31	2.31	2.30	2.30	2.29
2,20	2.85	2.80	2.77	2.74	2.72	2.65	2.60	2.55	2.52	2.49	2.46	2.44	2.42	2.40	3.38	2.37
2,40	3.30	3.18	3.02	2.90	2.82	2.75	2.69	2.65	2.61	2.58	2.55	2.53	2.51	2.49	2.47	2.46
2,60	3.56	3.30	3.14	3.01	2.92	2.85	2.79	2.75	2.71	2.67	2.65	2.62	2.60	2.58	2.57	2.55
2,80	3.72	3.44	3.26	3.13	3.04	2.96	2.90	2.85	2.81	2.78	2.75	2.72	2.70	1.98	1.97	1.96
3,00	3.88	3.59	3.40	3.26	3.16	3.08	3.02	2.97	2.93	2.89	2.86	2.01	2.00	1.98	1.97	1.96
3,20	4.06	3.75	3.55	3.40	3.30	3.22	3.15	3.10	2.08	2.05	2.03	2.01	2.00	1.98	1.97	1.96
3,40	4.26	3.92	3.71	3.56	3.44	2.18	2.14	2.10	2.08	2.05	2.03	2.01	1.99	1.98	1.97	1.96
3,60	4.20	4.11	3.88	2.30	2.23	2.18	2.13	2.10	2.07	2.04	2.02	2.01	1.99	1.98	1.96	1.95
3,80		4.31	2.38	2.29	2.22	2.17	2.13	2.09	2.06	2.04	2.02	2.00	1.99	1.98	1.96	1.95
4,00			2.37	2.28	2.22	2.16	2.12	2.09	2.06	2.04	2.02	2.00	1.98	1.97	1.96	1.94
4,20					2.21	2.16	1.12	2.08	2.05	2.03	2.01	1.99	1.98	1.96	1.95	1.94
4,40									2.05	2.02	2.00	1.98	1.97	1.96	1.95	1.94
4,60													1.97	1.95	1.94	1.93

Maximum permissible loads (daN/m2)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2.00	1263	1452	1640	1828	2016	2204	2387	2549	2711	2874	3036	3199	3363	3526	3690	3854
2.20	1134	1303	1445	1578	1711	1844	1978	2112	2246	2381	2516	2651	2787	2922	3058	3194
2.40	994	1106	1217	1329	1441	1553	1666	1779	1893	2006	2120	2234	2348	2462	2576	2691
2.60	849	944	1039	1135	1231	1327	1423	1520	1617	1714	1811	1908	2006	2103	2201	2299
2.80	734	816	898	981	1064	1147	1230	1314	1398	1481	1566	1227	1288	1349	1411	1472
3.00	641	712	784	856	929	1002	1074	1147	866	916	966	1016	1067	1117	1168	1219
3.20	564	627	691	755	818	597	638	679	720	761	803	844	886	927	969	1011
3.40	501	557	613	430	464	497	531	565	599	633	667	701	735	770	804	839
3.60	448	305	332	359	386	414	441	469	497	525	553	581	609	638	666	694
3.80		254	276	298	321	343	365	388	411	434	456	479	503	526	549	572
4.00					264	282	301	319	337	356	374	393	411	430	449	468
4,20								259	274	288	303	318	333	348	363	378
4,40												253	265	276	288	300

Minimum mesh reinforcement sectional area (cm²/ml)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2.00	2.14	2.12	2.11	2.10	2.09	2.08	2.07	2.04	2.01	1.99	1.97	1.95	1.94	1.92	1.91	1.90
2.20	2.50	2.47	2.38	2.30	2.23	2.18	2.14	2.11	2.08	2.06	2.03	2.02	2.00	1.99	1.98	1.96
2.40	2.75	2.58	2.46	2.38	2.31	2.26	2.22	2.18	2.15	2.13	2.11	2.09	2.07	2.06	2.04	2.03
2.60	2.85	2.67	2.55	2.46	2.39	2.34	2.29	2.26	2.23	2.20	2.18	2.16	2.15	2.13	2.12	2.11
2.80	2.97	2.78	2.65	2.56	2.48	2.43	2.38	2.35	2.31	2.29	2.27	1.56	1.54	1.53	1.52	1.51
3.00	3.09	2.88	2.75	2.65	2.58	2.52	2.47	2.44	1.59	1.57	1.55	1.54	1.53	1.51	1.51	1.50
3.20	3.21	3.00	2.86	2.76	2.68	1.65	1.62	1.59	1.57	1.55	1.53	1.52	1.51	1.50	1.49	1.48
3.40	3.35	3.13	2.98	1.71	1.67	1.62	1.59	1.57	1.55	1.53	1.51	1.50	1.48	1.48	1.47	1.46
3.60	3.51	1.83	1.75	1.69	1.64	1.60	1.57	1.54	1.52	1.50	1.49	1.47	1.46	1.45	1.44	1.43
3.80		1.80	1.72	1.66	1.61	1.57	1.54	1.52	1.50	1.48	1.46	1.45	1.44	1.43	1.42	1.41
4.00					1.58	1.54	1.52	1.49	1.47	1.45	1.44	1.43	1.41	1.40	1.39	1.39
4,20								1.46	1.44	1.42	1.41	1.40	1.39	1.38	1.37	1.36
4,40												1.37	1.36	1.35	1.34	1.33

Unpropped slabs Propped slabs

HEADQUARTERS: Avda. de la Granvia, 179 • 08908 L'Hospitalet de Llobregat • BARCELONA • SPAIN • ☏: +34 93 261 63 33 🖷: +34 93 261 63 38
FACTORY: Avda. Vall d'Aran, s/n • Pol. Ind. de Cervera • 25200 Cervera • LLEIDA • SPAIN
comercial@europerfil.es
www.europerfil.es

LOAD TABLES

Thickness 1,20 mm

Maximum permissible loads (daN/m2)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2,20	1164	1294	1424	1555	1687	1819	1951	2084	2217	2350	2483	2617	2751	2886	3020	3155
2,40	980	1089	1199	1310	1421	1532	1643	1755	1867	1979	2092	1674	1758	1843	1927	2012
2,60	836	930	1024	1118	1213	1308	1403	1085	1152	1219	1286	1354	1421	1489	1557	1625
2,80	723	804	885	966	721	775	828	882	936	990	1044	1099	1153	1208	1263	1318
3,00	631	701	503	546	588	631	675	718	761	805	849	893	937	981	1026	1070
3,20	344	378	411	445	480	514	549	584	619	654	689	724	760	795	831	867
3,40		308	335	362	389	417	445	472	500	528	556	585	613	641	670	699
3,60		250	271	292	314	335	357	379	401	423	445	468	490	512	535	558
3,80						266	283	300	317	334	351	368	386	403	421	438
4,00										258	271	284	297	310	323	337

Maximum permissible loads (daN/m2)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2,40	1011	1162	1314	1465	1616	1767	1919	2070	2221	2372	2524	2675	2826	2977	3129	3280
2,60	920	1058	1196	1334	1472	1610	1747	1885	2006	2127	2248	2369	2490	2612	2734	2856
2,80	842	969	1095	1216	1319	1422	1526	1630	1734	1838	1942	2047	2152	2257	2362	2468
3,00	727	883	972	1061	1151	1241	1332	1422	1513	1413	1696	1787	1879	1970	2062	1669
3,20	616	777	856	935	1014	1093	1173	1253	1333	895	1493	1173	1231	1290	1349	1409
3,40	524	690	759	829	900	970	1041	1112	846	760	944	993	1043	1093	1143	1193
3,60	446	613	679	741	804	867	635	677	718	645	801	843	885	927	969	1011
3,80		526	610	667	471	506	540	575	610	547	680	716	751	787	822	858
4,00			344	372	401	430	459	488	518	463	577	607	637	667	697	727
4,20			292	316	340	365	389	414	438	390	488	513	538	563	588	614
4,40				268	288	308	328	349	369	326	411	431	452	473	494	515
4,60						258	275	292	309	270	343	360	377	395	412	430
4,80									256		284	298	312	326	340	354
5,00													254	265	276	288

Minimum mesh reinforcement sectional area (cm²/ml)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2,40	3.29	3.21	3.16	3.12	3.08	3.06	3.04	3.03	3.01	3.00	2.99	2.98	2.97	2.97	2.96	2.96
2,60	3.76	3.64	3.56	3.51	3.47	3.43	3.40	3.38	3.33	3.24	3.25	3.21	3.19	3.16	3.14	3.12
2,80	4.26	4.10	3.99	3.89	3.75	3.65	3.56	3.50	3.44	3.39	3.35	3.32	3.29	3.27	3.24	3.22
3,00	4.37	4.52	4.23	4.03	3.88	3.77	3.69	3.62	3.56	3.51	3.47	3.43	3.41	3.38	3.35	2.52
3,20	4.32	4.69	4.39	4.18	4.03	3.91	3.82	3.75	3.69	3.64	3.59	2.59	2.57	2.55	2.53	2.52
3,40	4.27	4.89	4.56	4.34	4.18	4.06	3.96	3.89	2.68	2.64	2.61	2.58	2.56	2.54	2.53	2.51
3,60	4.20	5.06	4.75	4.51	4.34	4.21	2.76	2.71	2.67	2.64	2.60	2.58	2.56	2.54	2.52	2.51
3,80		4.98	4.94	4.70	2.88	2.81	2.75	2.70	2.66	2.63	2.60	2.57	2.55	2.53	2.52	2.50
4,00			3.10	2.97	2.87	2.80	2.74	2.69	2.65	2.62	2.59	2.57	2.55	2.53	2.51	2.50
4,20			3.08	2.95	2.86	2.79	2.73	2.69	2.64	2.61	2.58	2.56	2.54	2.52	2.50	2.49
4,40				2.94	2.85	2.78	2.72	2.67	2.63	2.60	2.58	2.55	2.53	2.51	2.49	2.48
4,60						2.76	2.71	2.66	2.62	2.59	2.56	2.54	2.52	2.50	2.49	2.47
4,80									2.61	2.58	2.55	2.53	2.51	2.49	2.48	2.46
5,00													2.50	2.48	2.46	2.45

Maximum permissible loads (daN/m2)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2.20	1133	1302	1471	1640	1809	1978	2147	2317	2486	2655	2824	2993	3162	3332	3501	3670
2.40	1025	1178	1331	1484	1638	1791	1944	2097	2249	2384	2520	2655	2791	2927	3064	3200
2.60	933	1073	1213	1347	1461	1575	1690	1805	1920	2036	2152	2267	2384	2500	2616	2733
2.80	852	968	1066	1164	1262	1361	1460	1560	1659	1759	1859	1959	2060	2160	2261	1846
3.00	724	845	930	1016	1102	1188	1275	1362	1449	1536	1623	1285	1349	1414	1478	1543
3.20	620	744	819	895	970	1046	1123	865	918	972	1025	1079	1133	1187	1241	1296
3.40	532	660	727	794	861	640	685	729	774	819	864	909	954	999	1045	1090
3.60	458	590	650	467	504	541	578	615	653	690	728	766	804	842	880	918
3.80		334	365	395	426	457	488	519	550	581	613	644	676	708	740	772
4.00			308	333	359	384	410	436	462	488	514	541	567	594	620	647
4,20			259	280	301	322	344	365	386	408	430	451	473	495	517	539
4,40					251	268	286	303	321	338	356	374	392	410	428	446
4,60									263	278	292	306	321	335	350	365
4,80													258	270	282	293

Minimum mesh reinforcement sectional area (cm²/ml)

	h (cm)															
Span (m)	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
2.20	2.50	2.47	2.44	2.43	2.41	2.40	2.39	2.39	2.38	2.37	2.37	2.37	2.36	2.36	2.36	2.35
2.40	2.88	2.83	2.79	2.76	2.74	2.73	2.71	2.70	2.69	2.65	2.63	2.60	2.58	2.56	2.55	2.53
2.60	3.28	3.20	3.15	3.09	2.99	2.92	2.86	2.81	2.77	2.73	2.71	2.68	2.66	2.64	2.62	2.61
2.80	3.68	3.51	3.32	3.19	3.09	3.01	2.95	2.90	2.85	2.82	2.79	2.76	2.74	2.72	2.70	2.00
3.00	3.67	3.63	3.43	3.29	3.19	3.11	3.05	2.99	2.95	2.91	2.88	2.04	2.02	2.01	1.99	1.98
3.20	3.66	3.76	3.55	3.41	3.30	3.21	3.15	2.11	2.08	2.06	2.03	2.02	2.00	1.98	1.97	1.96
3.40	3.64	3.90	3.68	3.53	3.41	2.17	2.12	2.09	2.06	2.03	2.01	1.99	1.98	1.96	1.95	1.94
3.60	3.61	4.05	3.82	2.26	2.19	2.14	2.10	2.06	2.03	2.01	1.99	1.97	1.95	1.94	1.93	1.91
3.80		2.43	2.31	2.23	2.16	2.11	2.07	2.03	2.00	1.98	1.96	1.94	1.92	1.91	1.90	1.89
4.00			2.27	2.19	2.13	2.07	2.03	2.00	1.97	1.95	1.93	1.91	1.90	1.88	1.87	1.86
4,20			2.23	2.15	2.09	2.04	2.00	1.97	1.94	1.92	1.90	1.88	1.86	1.85	1.84	1.83
4,40					2.05	2.00	1.97	1.93	1.91	1.88	1.86	1.85	1.83	1.82	1.81	1.80
4,60									1.87	1.85	1.83	1.81	1.80	1.79	1.78	1.77
4,80													1.76	1.75	1.74	1.73

Unpropped slabs Propped slabs

HEADQUARTERS: Avda. de la Granvia, 179 • 08908 L'Hospitalet de Llobregat • BARCELONA • SPAIN • ☏: +34 93 261 63 33 🖷: +34 93 261 63 38
FACTORY: Avda. Vall d'Aran, s/n • Pol. Ind. de Cervera • 25200 Cervera • LLEIDA • SPAIN
comercial@europerfil.es
www.europerfil.es

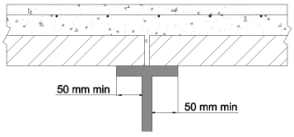
LOAD TABLES

The loads above applied over the slab are characteristic values of actions (not factored loads) for a 30 minutes fire resistance without reinforcing mesh. In those situations no bar reinforcement are needed.
In case of needing bigger static loads, a fire rating bigger than 30 minutes, or dynamic loads are preview ridding over the slab contact with Technical Department.
The self weight of the slab has been taken in to account in the table and should not be included in the applied loading.

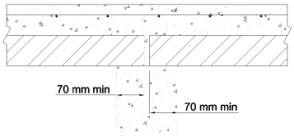
Deflection limit under construction loading:		$f = \ell/240$
Deflection limit under composite loading:	$\ell \leq 3{,}5$ m	$f = \ell/350$
	$\ell > 3{,}5$ m	$f = 0{,}5$ cm $+ \ell/700$
	Fragile floors	$f = \ell/500$
Slenderness criterion:	Simply supported beam	$\ell/h \leq 33$
	Continuous beam	$\ell/h \leq 36$
Reinforcements steel grade:		B 500 S [3]
[3] Consult for B 400 S		
HAIRCOL 59 steel grade:		S320GD
Minimum ultimate strength for concrete:		$f_{ck} = 25$ N/mm^2
Partial safety factors for loads:	Dead (self weight)	1,35
	Imposed	1,50

Notes:
The only right position of the metal deck is shown at page 1.
Decking must be propped only when is required according to tables.
Openings must be boxed out before pouring the concrete and cut out the deck after the concrete has cured. For openings bigger than 300 mm x 300 mm additional reinforcements are required.
Big cantilevers must be verified.

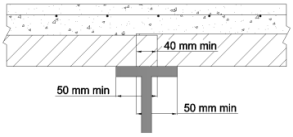
CONSTRUCTION



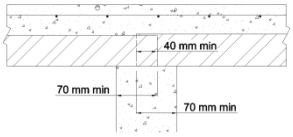
End butted bearing on steel or concrete



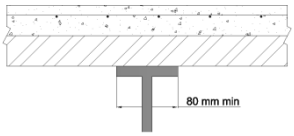
End butted bearing on masonry



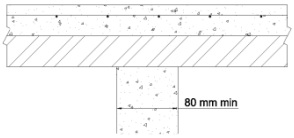
End lapped bearing on steel or concrete



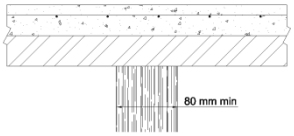
End lapped bearing on masonry



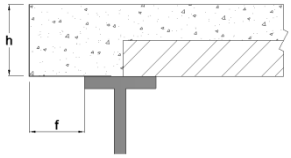
Continuous bearing on steel



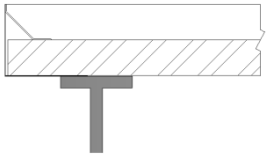
Continuous bearing on concrete

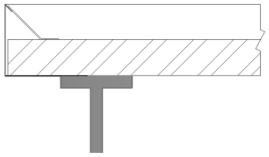


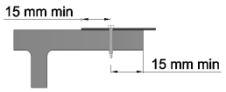
Prop



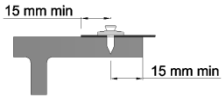
Slab edge trim cantilever


Slab edge trim with restraint strap


Slab edge trim with vertical leg return lip and restraint strap



Minimum edge distance for screws



Minimum edge distance for nails

Recommended thickness for slab edge cantilever (mm)

h (cm)	Cantilever, f (mm)												
	0	25	50	75	100	125	150	175	200	225	250	275	300
10	1,00	1,00	1,00	1,00	1,20	1,20	1,50	2,00	2,50	2,50	3,00	3,00	3,00
11	1,00	1,00	1,00	1,20	1,20	1,50	1,50	2,00	2,50	2,50	3,00	3,00	3,00
12	1,00	1,00	1,00	1,20	1,50	1,50	2,00	2,00	2,50	2,50	3,00	3,00	3,00
13	1,00	1,00	1,20	1,50	1,50	2,00	2,00	2,50	2,50	2,50	3,00	3,00	
14	1,00	1,20	1,20	1,50	1,50	2,00	2,00	2,50	2,50	2,50	3,00	3,00	
15	1,20	1,20	1,50	1,50	2,00	2,00	2,50	2,50	2,50	3,00	3,00	3,00	
16	1,20	1,50	1,50	2,00	2,00	2,50	2,50	2,50	2,50	3,00	3,00		
18	1,50	1,50	2,00	2,00	2,50	2,50	2,50	2,50	3,00	3,00	3,00		
20	2,00	2,00	2,50	2,50	2,50	3,00	3,00	3,00	3,00				
25	2,50	2,50	3,00	3,00									

A restraint strap is recommended if slab depth is bigger than 14 cm, mainly if slab edge trim thickness is smaller than recommendations above.
A 13 mm minimum vertical leg return lip is recommended for any slab depth and edge trim thickness.

For any further clarification, you can contact Technical Department (tecnico@europerfil.es or by phone).
EUROPERFIL, S.A. reserves the right to change this document without notice.

HEADQUARTERS: Avda. de la Granvia, 179 • 08908 L'Hospitalet de Llobregat • BARCELONA • SPAIN • ☏: +34 93 261 63 33 🖷: +34 93 261 63 38
FACTORY: Avda. Vall d'Aran, s/n • Pol. Ind. de Cervera • 25200 Cervera • LLEIDA • SPAIN
comercial@europerfil.es
www.europerfil.es