SÁEZ formworks

SISTEMA 2000 coffers

Slab Formwork

v.20260116

SAEZ FORMWORKS, S.L.
B75465989

CTRA. DE BENIAJAN, 10
30570 MURCIA

SISTEMA 2000 COFFERS

system features

Simplicity

ONLY 2 ELEMENTS
Fast and easy to assemble. Allows prior assembly of the metal grid followed by placement of coffers and board

SUITABLE SYSTEM
Enables two-way waffle slabs to be built using recoverable coffers, with perfect rib alignment

WITHOUT RESHORING
No need to move props until complete striking. A large part of the material can be recovered after 3 days for a new use.

Finish

DESIGN
A coffer design that prevents breakage and deformation. Faster stripping is combined with greater strength and durability.

FINISH
Thanks to the quality of the manufacturing system and the correct design of the elements, concrete leakage is avoided and the concrete finish is improved.

REINFORCED COFFER
The coffer houses metal inserts inside its wings that limit deflection as much as possible and achieve minimal deformation.

Maximum concrete savings

Recoverable formwork system for constructing two-way slabs with recoverable injected-polypropylene coffers.
The Sistema 2000 Coffers system basically uses the elements of Sistema 2000 (Beam carriers, y guides adapted to the different ribs).

Advantages in waffle slabs:
- Allow greater spans between columns
- Support higher overloads
- They are divided into lightweighted areas and solid areas

system features

Versatile

SOLUCIONA GRAN VARIEDAD DE NERVIOS
The system can handle both the standard ribs of the mecado (12 y 16 cm) como los especiales 15,17 y 21

EASY ASSEMBLY
The system elements come from Sistema 2000 and, as such, are very easy and fast to assemble

ADAPTABLE
Adaptable a zonas macizadas y aligeradas con la use de boards, coffers y medias coffers

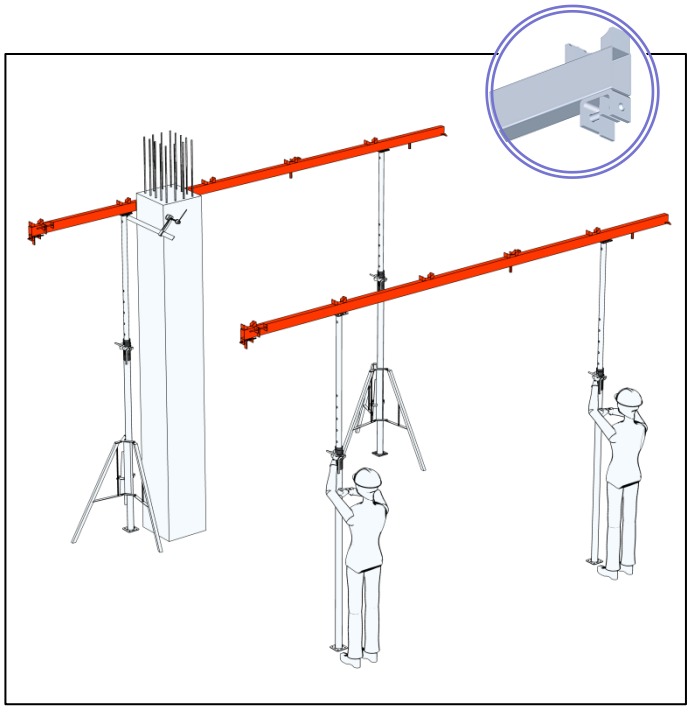
Compatible

STANDARD ELEMENTS
Most of the elements used by the system are common to Sistema 2000, allowing more economical prices while optimizing and maximizing equipment profitability.

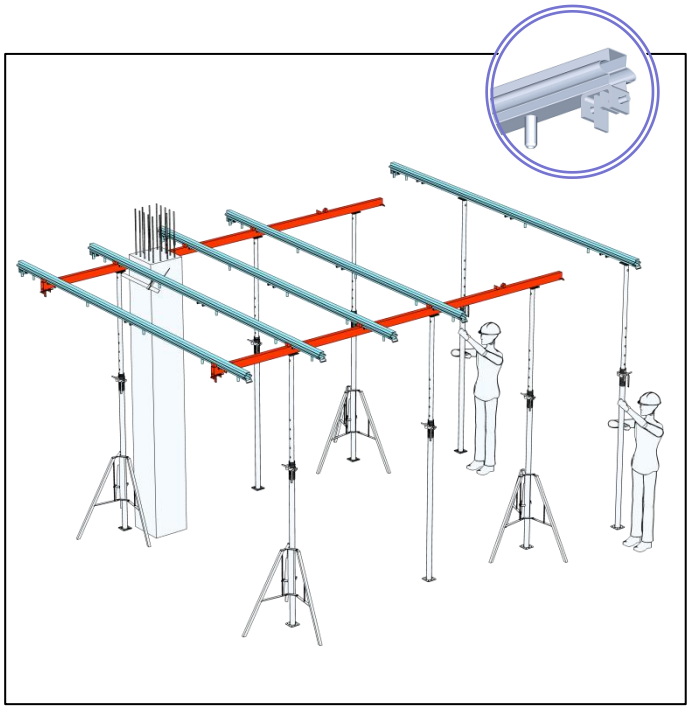
WITHOUT RESHORING
No need to move props until complete striking. A large part of the material can be recovered after 3 days for a new use

Sistema 2000 Coffers Assembly

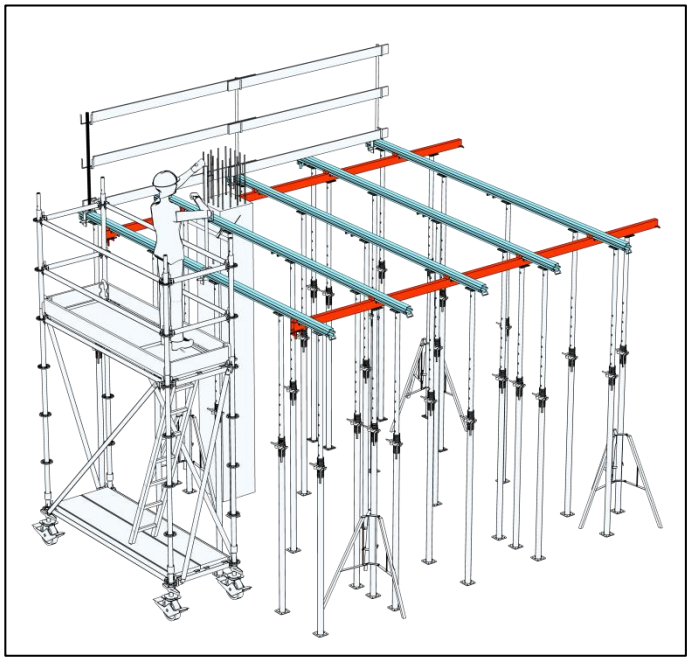
01 Positioning of the guides and their props



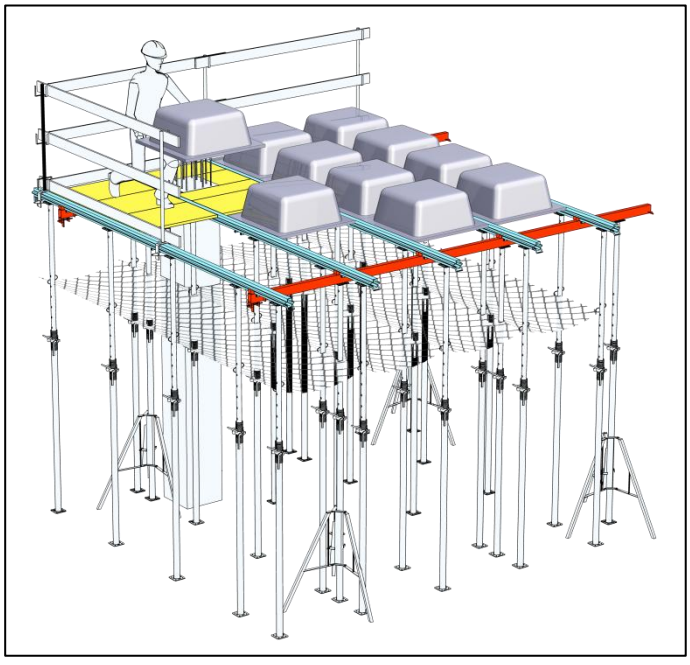
02 Positioning of the beam carriers on the guides



03 Positioning of the safety elements



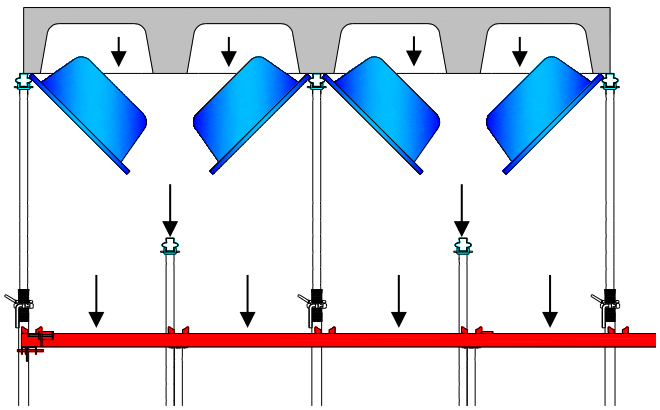
04 Positioning of the coffers and boards



Sistema 2000 Coffers Stripping

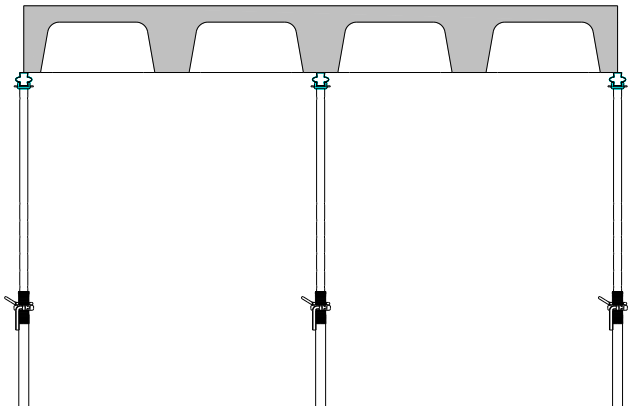
first phase

Formwork recovery. When the concrete has reached sufficient strength (40% of the specified strength fck), the guides and half (alternate rows) of the beam carriersare removed, leaving the slab supported on certain rows of beam carriers. This allows the coffers and boards to be recovered. Under conditions normal conditions, this operation can be carried out three days after pouring.



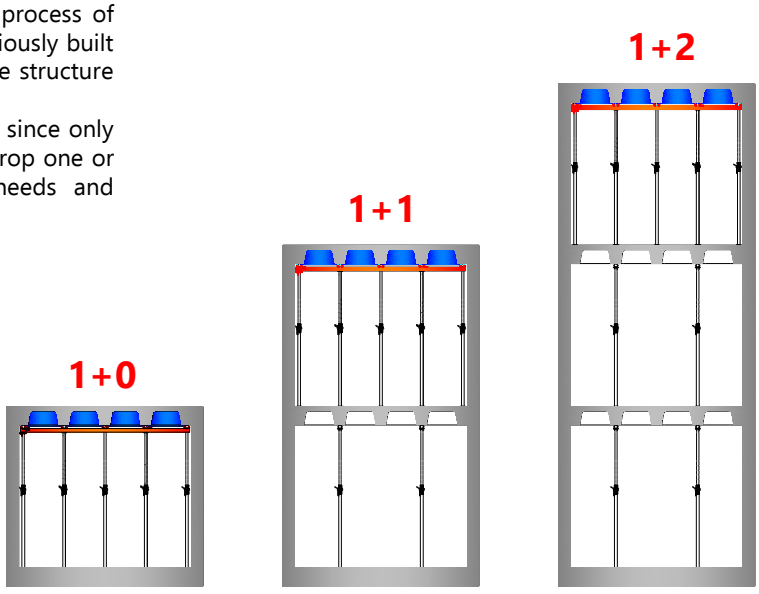
second phase

Reuse of the system. Every 1.60 metres, only one continuous line of beam carriers until 21 or 28 days, when the concrete reaches its characteristic strength and the floor no longer needs reshoring. All recovered material can be used to form the next phase of the project. Before pouring the upper floor, the concrete of the previous floor must have reached the required strength (generally 65% of the specified strength fck) to support the corresponding live load. This strength is normally reached in six or seven days.



third phase and rotation cycles

Fast execution with minimum material. The process of pouring concrete a propped floor over the previously built lower slab will be repeated successively until the structure is completed.
The system allows maximum use of equipment, since only the material needed to form one floor and to prop one or two floors is required, depending on site needs and conditions.



Sistema 2000 Coffers
system details

Particularidades del System 2000 Coffers

coffers

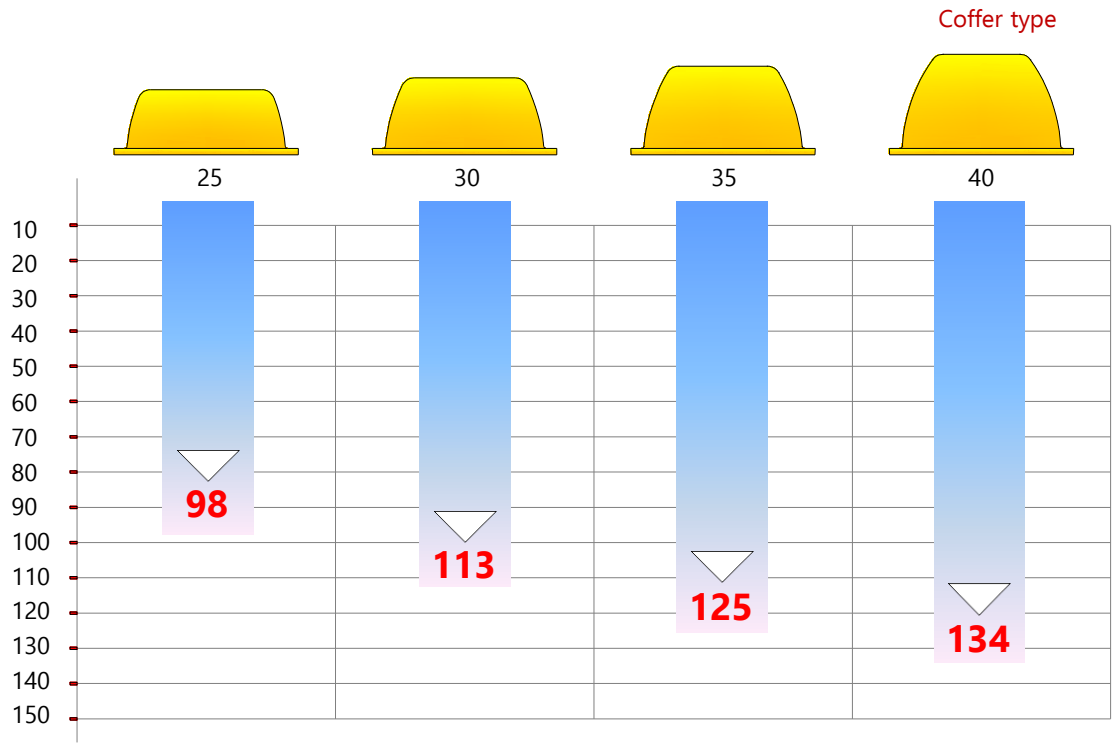
Injected in polypropylene, they are designed to prevent breakage and deformation. Their design provides fast and easy stripping, saves concrete and achieves straighter ribs. The coffer houses metal inserts inside its wings that limit deformation as much as possible.

ribs

The system has been designed so that a wide variety of ribs between coffers can be handled. Thus, ribs of 12, 14, 16, 17 and 21 cm can be handled easily

Coffer displacement

displacement volumes



Volume in litres

Particularidades del System 2000 Coffers

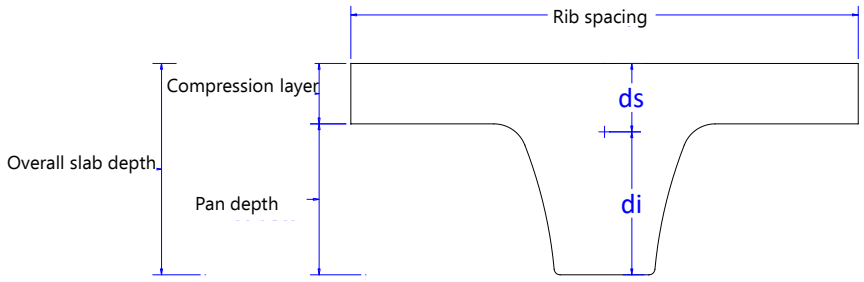
load table

Coffer depth	25	25	25	25	25	25	25	25	25	25	25
Compression topping	5	5	5	5	5	10	10	10	10	10	10
Rib	12	14,5	16	17	21	12	14	15	16	17	21
Coffer-zone weight kg/m2	367	390	403	411	441	492	511	519	528	536	566
Solid-zone weight kg/m2	750	750	750	750	750	875	875	875	875	875	875
Secondary-beam spacing m.	0,8	0,825	0,84	0,85	0,89	0,8	0,82	0,83	0,84	0,85	0,89
Dimension coffer mm	745x800	772x745	785x840	800x745	840x785	745x800	765x820	775x830	785x840	800x745	840x785
Dimension Board mm	745x500	772x500	785x500	800x500	840x500	745x500	765x500	775x500	785x500	800x500	840x500
Coffer volume m3	0,098	0,098	0,098	0,098	0,098	0,098	0,098	0,098	0,098	0,098	0,098
Coffer depth	30	30	30	30	30	30	30	30	30	30	30
Compression topping	5	5	5	5	5	10	10	10	10	10	10
Rib	12	14,5	16	17	21	12	14	15	16	17	21
Coffer-zone weight kg/m2	434	460	475	484	518	559	580	590	600	609	643
Solid-zone weight kg/m2	875	875	875	875	875	1000	1000	1000	1000	1000	1000
Secondary-beam spacing m.	0,8	0,825	0,84	0,85	0,89	0,8	0,82	0,83	0,84	0,85	0,89
Dimension coffer mm	745x800	772x745	785x840	800x745	840x785	745x800	765x820	775x830	785x840	800x745	840x785
Dimension Board mm	745x500	772x500	785x500	800x500	840x500	745x500	765x500	775x500	785x500	800x500	840x500
Coffer volume m3	0,113	0,113	0,113	0,113	0,113	0,113	0,113	0,113	0,113	0,113	0,113
Coffer depth	35	35	35	35	35	35	35	35	35	35	35
Compression topping	5	5	5	5	5	10	10	10	10	10	10
Rib	12	14,5	16	17	21	12	14	15	16	17	21
Coffer-zone weight kg/m2	512	540	557	567	605	637	660	671	682	692	730
Solid-zone weight kg/m2	1000	1000	1000	1000	1000	1125	1125	1125	1125	1125	1125
Secondary-beam spacing m.	0,8	0,825	0,84	0,85	0,89	0,8	0,82	0,83	0,84	0,85	0,89
Dimension coffer mm	745x800	772x745	785x840	800x745	840x785	745x800	765x820	775x830	785x840	800x745	840x785
Dimension Board mm	745x500	772x500	785x500	800x500	840x500	745x500	765x500	775x500	785x500	800x500	840x500
Coffer volume m3	0,125	0,123	0,125	0,125	0,125	0,125	0,125	0,125	0,125	0,125	0,125
Coffer depth	40	40	40	40	40	40	40	40	40	40	40
Compression topping	5	5	5	5	5	10	10	10	10	10	10
Rib	12	14,5	16	17	21	12	14	15	16	17	21
Coffer-zone weight kg/m2	601	632	650	661		726	752	764	775	786	
Solid-zone weight kg/m2	1125	1125	1125	1125	1125	1250	1250	1250	1250	1250	1250
Secondary-beam spacing m.	0,8	0,825	0,84	0,85	0,89	0,8	0,82	0,83	0,84	0,85	0,89
Dimension coffer mm	745x800	772x745	785x840	800x745	840x785	745x800	765x820	775x830	785x840	800x745	840x785
Dimension Board mm	745x500	772x500	785x500	800x500	840x500	745x500	765x500	775x500	785x500	800x500	840x500
Coffer volume m3	0,134	0,134	0,134	0,134	0,134	0,134	0,134	0,134	0,134	0,134	0,134

Particularidades del System 2000 Coffers

geometric properties

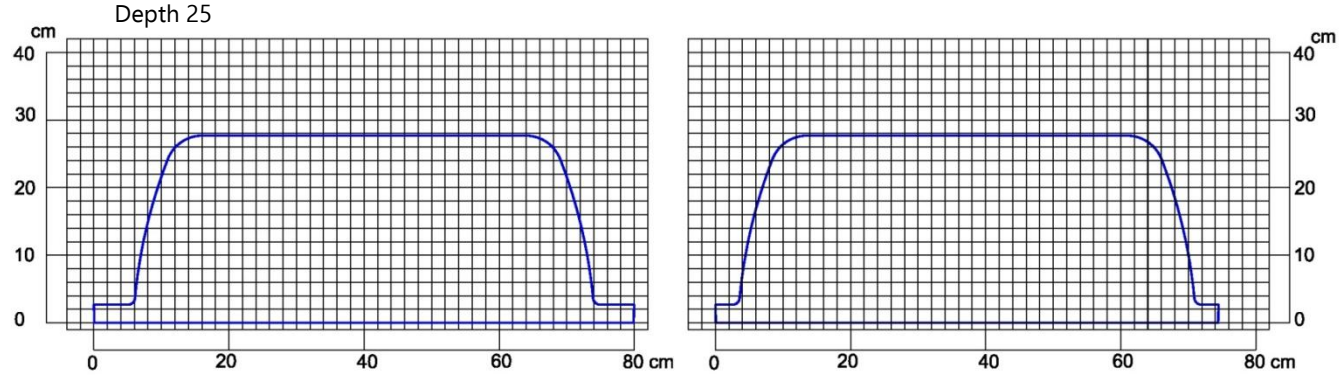
		INTEREJE 80 [cm] RIB 12				INTEREJE 82,5 [cm] RIB 14.5				INTEREJE 84 [cm] RIB 16				INTEREJE 85 [cm] RIB 17				INTEREJE 89 [cm] RIB 21			
Coffer depth [cm] >>		25	30	35	40	25	30	35	40	25	30	35	40	25	30	35	40	25	30	35	40
Layer Compression																					
A [cm2]	5	840	962	1091	1278	915	1049	X	X	960	1102	1250	1458	990	1137	1290	1503	1110	1277	1450	1683
	7	1000	1122	1250	1438	1080	1214	X	X	1128	1269	1418	1626	1160	1307	1460	1673	1288	1455	1628	1861
	10	1240	1362	1490	1678	1327	1461	X	X	1380	1521	1670	1878	1414	1561	1715	1928	1555	1721	1896	2128
	15	1640	1761	1890	2078	1739	1874	X	X	1800	1942	2090	2298	1840	1987	2140	2353	2000	2167	2340	2573
di [cm]	5	20,5	23,7	26,9	30	20,1	23,2	X	X	19,8	22,9	26	29,1	19,7	22,8	25,8	28,9	19,2	22,2	25,2	28,2
	7	22,2	25,5	28,7	31,8	21,7	24,9	X	X	21,5	24,7	27,8	30,9	21,3	24,5	27,6	30,7	20,8	23,9	26,9	29,9
	10	24,4	27,8	31,1	34,2	23,9	27,2	X	X	23,7	26,9	30,2	33,2	23,5	26,8	30	33	23	26,1	29,3	32,3
	15	27,6	31,1	34,6	37,7	27,1	30,6	X	X	26,9	30,3	33,7	36,7	26,8	30,1	33,4	36,5	26,2	29,5	32,7	35,8
Ds [cm]	5	9,5	11,3	13,1	15	9,9	11,8	X	X	10,2	12,1	14	15,9	10,3	12,2	14,2	16,1	10,8	12,8	14,8	16,8
	7	9,8	11,5	13,3	15,2	10,3	12,1	X	X	10,5	12,3	14,2	16,1	10,7	12,5	14,4	16,3	11,2	13,1	15,1	17,1
	10	10,6	12,2	13,9	15,8	11,1	12,8	X	X	11,3	13,1	14,8	16,8	11,5	13,2	15	17	12	13,9	15,7	17,7
	15	12,4	13,9	15,4	17,3	12,9	14,4	X	X	13,1	14,7	16,3	18,3	13,2	14,9	16,6	18,5	13,8	15,5	17,3	19,2
I [cm4]	5	61065	94999	139797	201459	68779	107022	X	X	73250	114002	167797	240820	76175	118571	174538	250323	87512	136302	200729	287318
	7	75915	115777	167544	237702	85576	130471	X	X	91180	138997	201053	283824	94847	144579	209114	294950	109048	166211	240384	338205
	10	100866	149566	211745	295094	113663	168509	X	X	121106	179520	253984	351909	125983	186732	264155	365622	144901	214709	303614	418924
	15	153782	217584	297457	404013	172528	244400	X	X	183487	260054	355673	480285	190685	270329	369744	498744	218734	310316	424465	570619
Wi [cm3]	5	2979	4008	5197	6715	3422	4613	X	X	3700	4978	6454	8276	3867	5200	6765	8662	4558	6140	7965	10189
	7	3420	4540	5838	7475	3943	5240	X	X	4241	5627	7232	9185	4453	5901	7577	9607	5243	6954	8936	11311
	10	4134	5380	6809	8628	4756	6195	X	X	5110	6674	8410	10600	5361	6968	8805	11079	6300	8226	10362	12970
	15	5572	6996	8597	10717	6366	7987	X	X	6821	8583	10554	13087	7115	8981	11070	13664	8348	10519	12981	15939
Ws [cm3]	5	6428	8407	10672	13431	6947	9070	X	X	7181	9422	11986	15146	7396	9719	12291	15548	8103	10649	13563	17102
	7	7746	10068	12597	15638	8308	10783	X	X	8684	11301	14159	17629	8864	11566	14522	18095	9736	12688	15919	19778
	10	9516	12260	15233	18677	10240	13165	X	X	10717	13704	17161	20947	10955	14146	17610	21507	12075	15447	19338	23668
	15	12402	15654	19315	23353	13374	16972	X	X	14007	17691	21820	26245	14446	18143	22274	26959	15850	20020	24536	29720



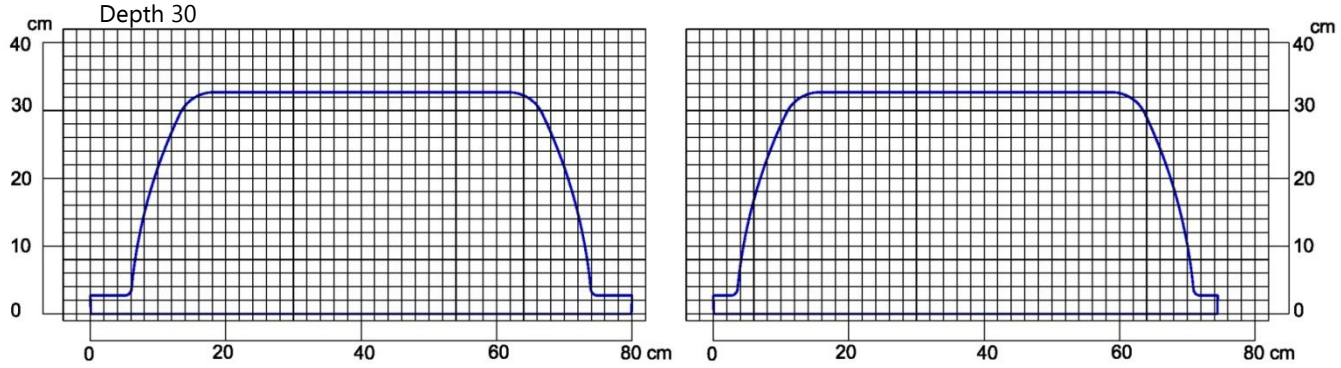
Particularidades del System 2000 Coffers

coffer/rib geometries 12 and 17

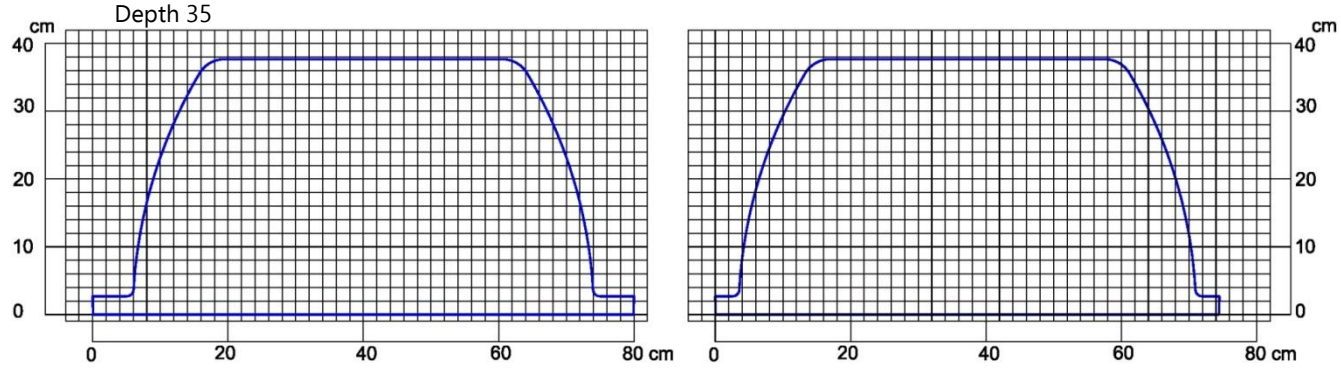
Depth 25



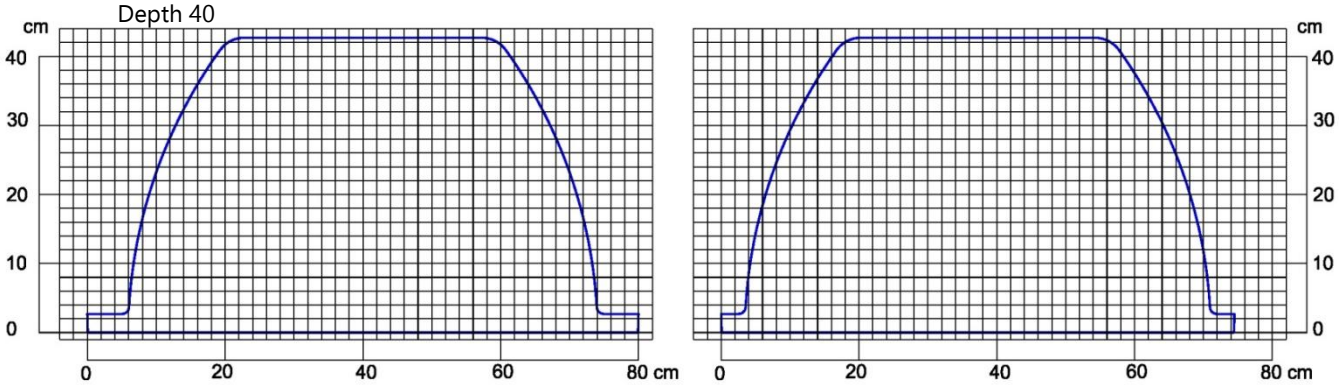
Depth 30



Depth 35



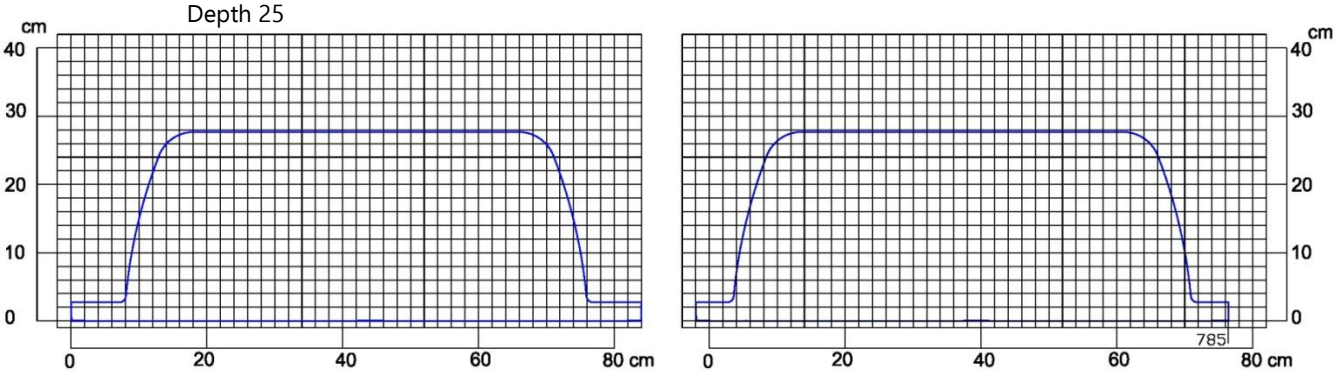
Depth 40



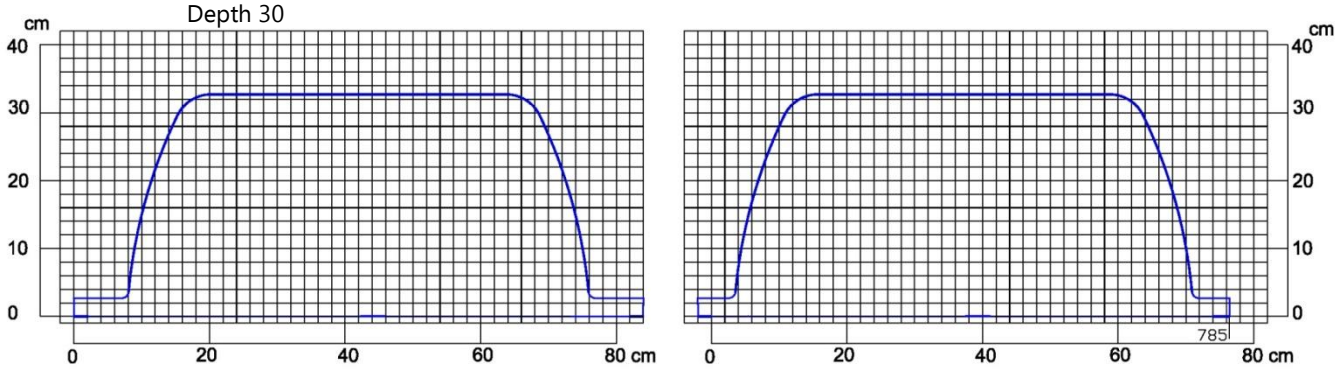
Particularidades del System 2000 Coffers

coffer/rib geometries 16 and 21

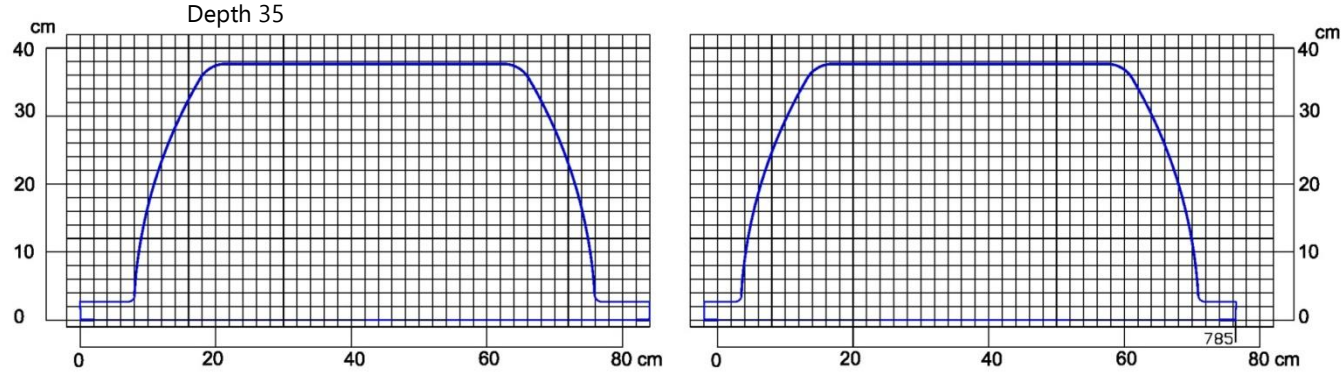
Depth 25



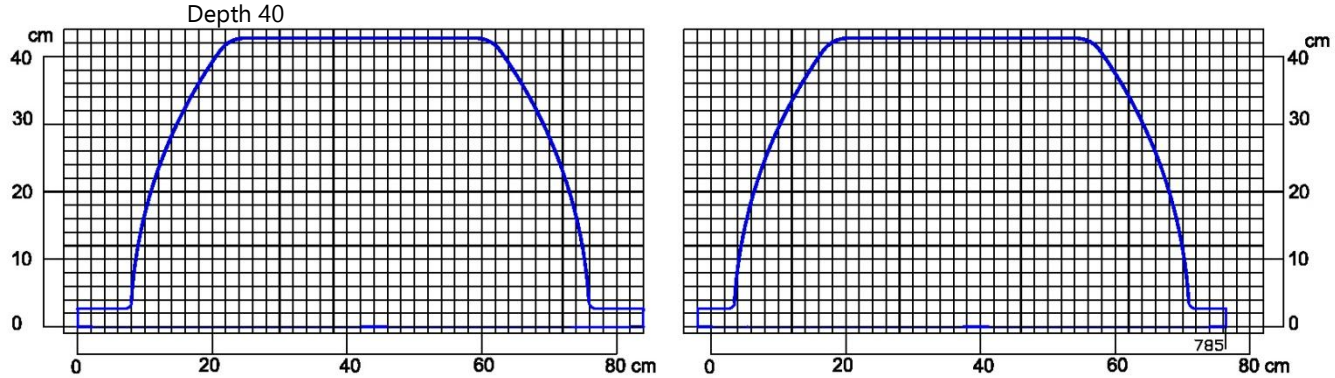
Depth 30



Depth 35



Depth 40

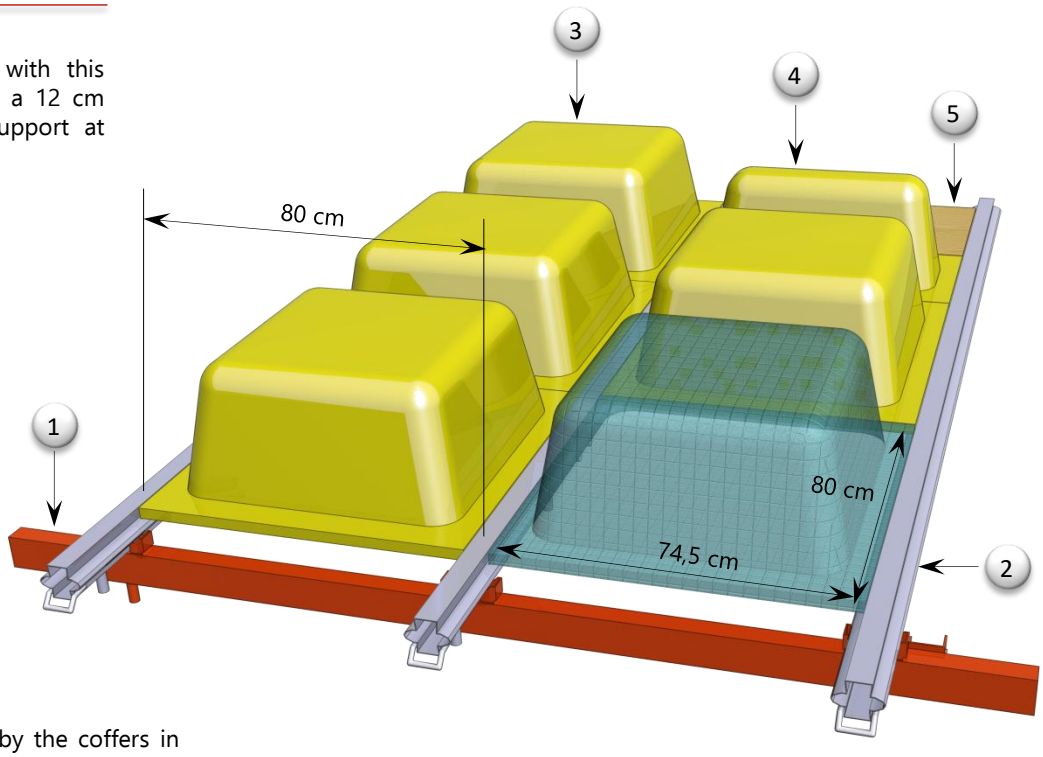


System 2000 Coffers rib 12

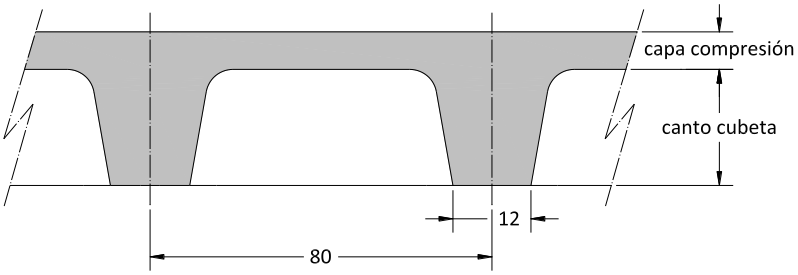
rib 12 e80

The standard grid formed with this formwork is 80x80 cm, with a 12 cm rib, and secondary-beam support at 1.60 m. Uses rib 12 guide.

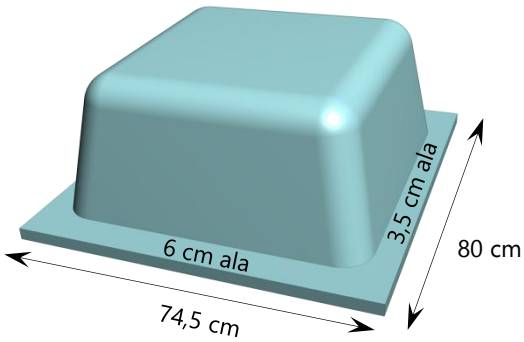
1. Rib 12 guide
2. Beam carrier
3. 745x800 mm coffer
4. Half coffer n12
5. Board 745x500 mm



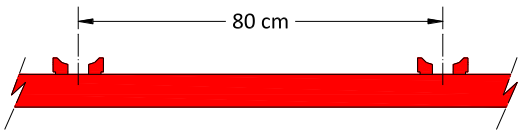
Shape of the rib left by the coffers in the concrete (both directions).



Coffer used

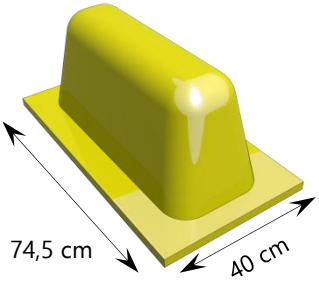


Rib 12 guide. Distance between seats

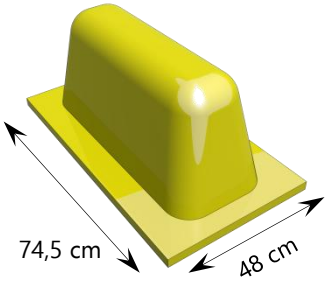


Rib 12 drop-panel board

1/2 coffer. Rib 12
Depth 25 and 30



1/2 coffer. Rib 12
Depth 35 and 40

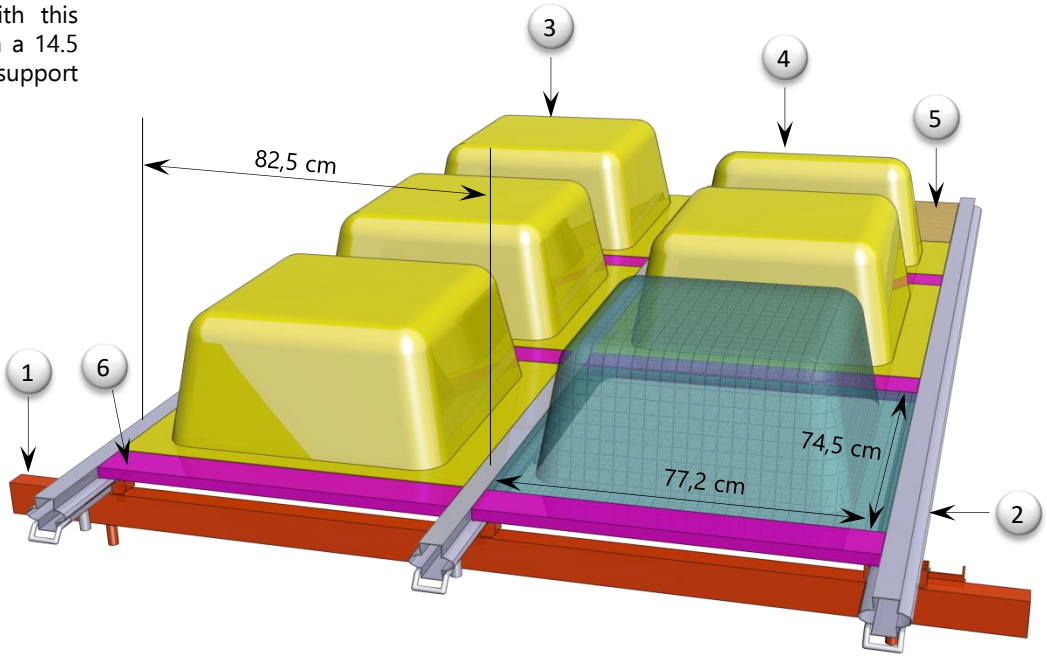


System 2000 Coffers rib 14,5

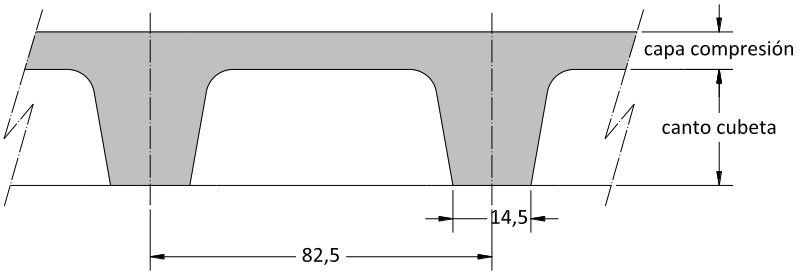
rib 14.5 e82.5

The standard grid formed with this formwork is 82.5x82.5 cm, with a 14.5 cm rib, and secondary-beam support at 1.65 m. Uses rib 14.5 guide.

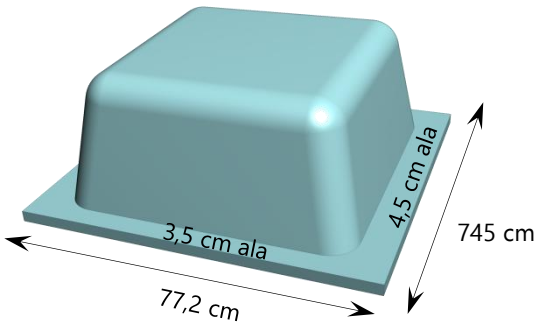
1. Rib 14.5 guide
2. Beam carrier
3. 772x745 mm coffer
4. Half coffer n14.5
5. Board 772x500 mm
6. Omega 772x75 mm



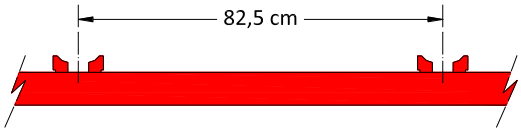
Shape of the rib left by the coffers in the concrete (both directions).



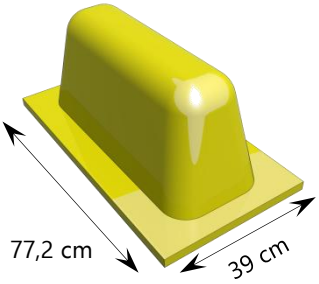
Coffer used



Rib 14 guide. Distance between seats



1/2 coffer. Rib 14.5
Depth 25 and 30



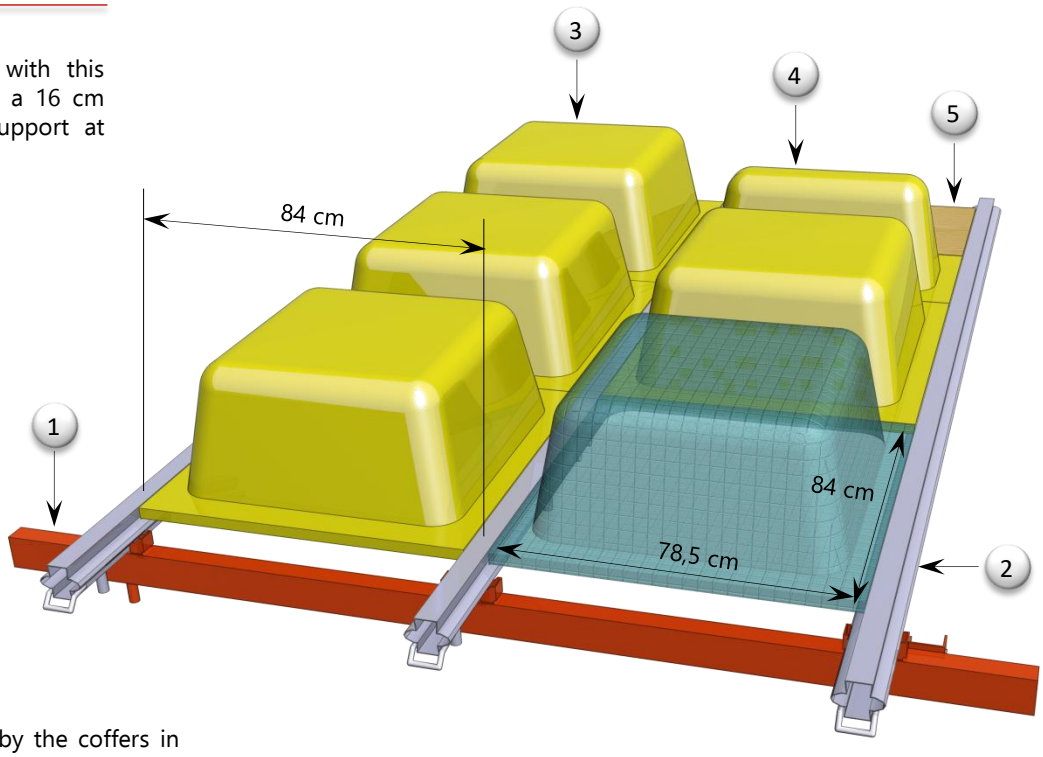
Rib 14.5 drop-panel board

System 2000 Coffers rib 16

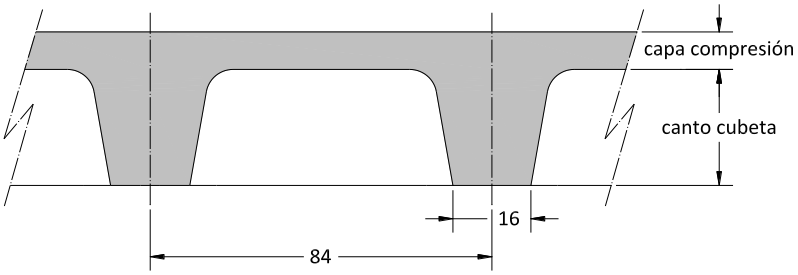
rib 16 e84

The standard grid formed with this formwork is 84x84 cm, with a 16 cm rib, and secondary-beam support at 1.68 m. Uses rib 16 guide.

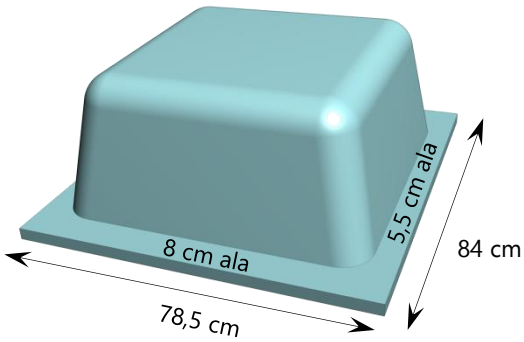
1. Rib 16 guide
2. Beam carrier
3. 785x840 mm coffer
4. Half coffer n16
5. Board 785x500 mm



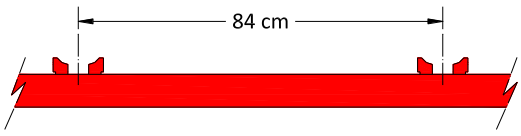
Shape of the rib left by the coffers in the concrete (both directions).



Coffer used

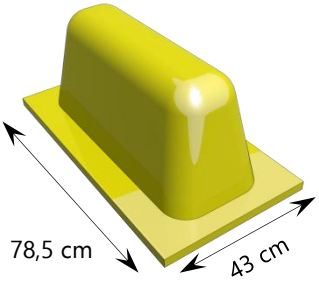


Rib 16 guide. Distance between seats

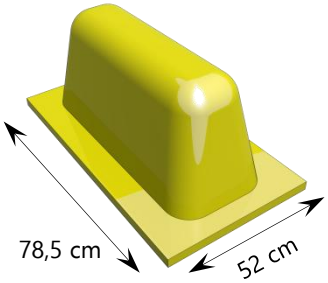


Rib 16 drop-panel board

1/2 coffer. Rib 16
Depth 25 and 30



1/2 coffer. Rib 16
Depth 35 and 40

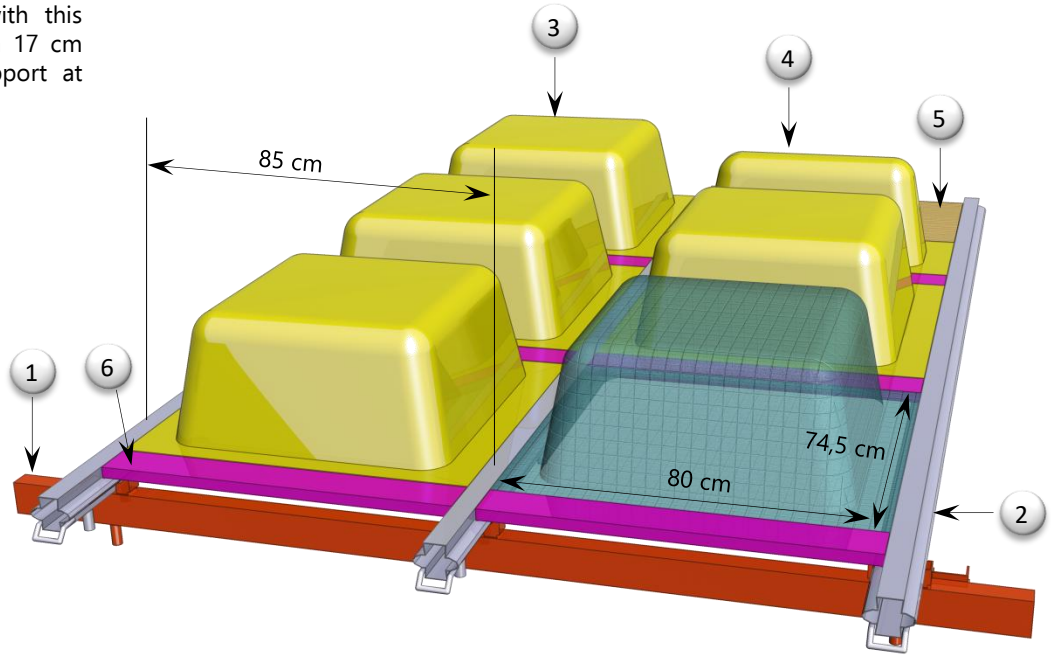


System 2000 Coffers rib 17

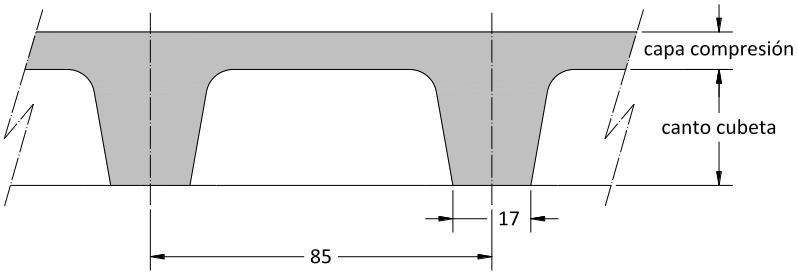
rib 17 e85

The standard grid formed with this formwork is 85x85 cm, with a 17 cm rib, and secondary-beam support at 1.70 m. Uses rib 17 guide.

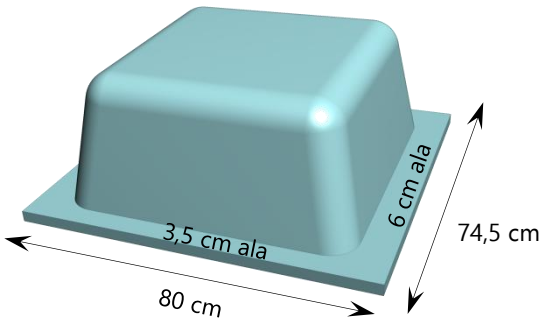
1. Rib 17 guide
2. Beam carrier
3. 745x800 mm coffer
4. Half coffer n17
5. Board 800x500 mm
6. Omega 800x100 mm



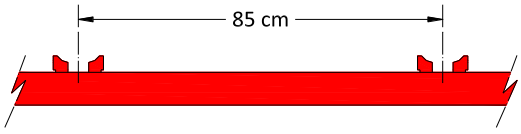
Shape of the rib left by the coffers in the concrete (both directions).



Coffer used

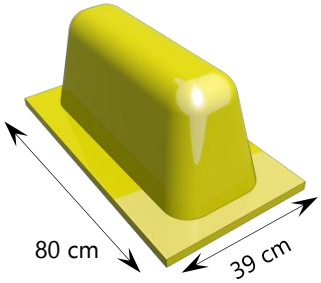


Rib 17 guide. Distance between seats

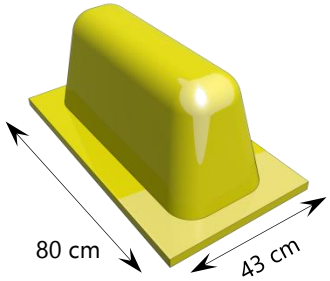


Rib 17 drop-panel board

1/2 coffer. Rib 17
Depth 25 and 30



1/2 coffer. Rib 17
Depth 35 and 40

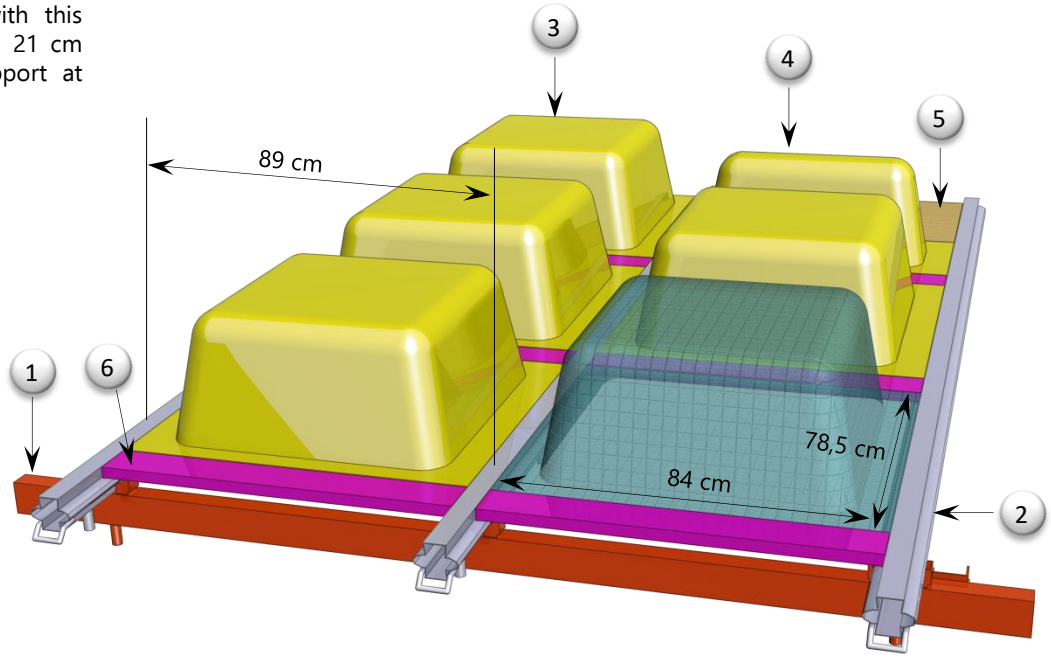


System 2000 Coffers rib 21

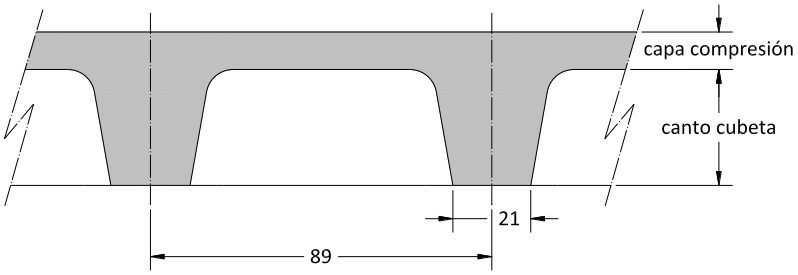
Rib 21 e89

The standard grid formed with this formwork is 89x89 cm, with a 21 cm rib, and secondary-beam support at 1.78 m. Uses rib 21 guide.

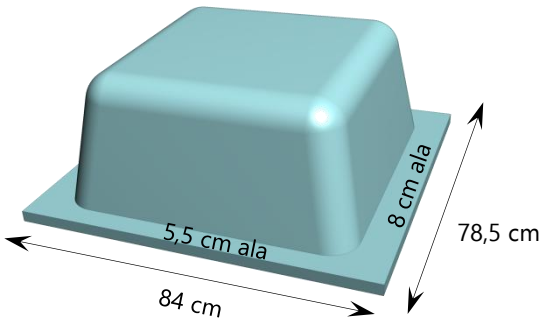
1. Rib 21 guide
2. Beam carrier
3. 785x840 mm coffer
4. Half coffer n21
5. Board 840x500 mm
6. Omega 840x100 mm



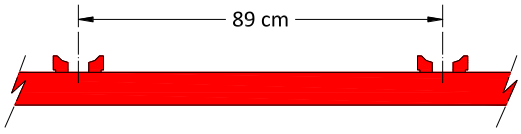
Shape of the rib left by the coffers in the concrete (both directions).



Coffer used

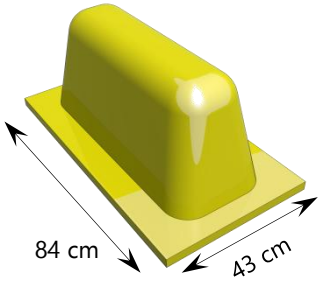


Rib 21 guide. Distance between seats

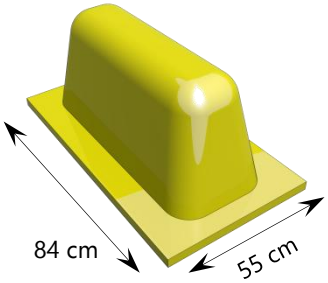


Rib 21 drop-panel board

1/2 coffer. Rib 21
Depth 25 and 30



1/2 coffer. Rib 21
Depth 35 and 40

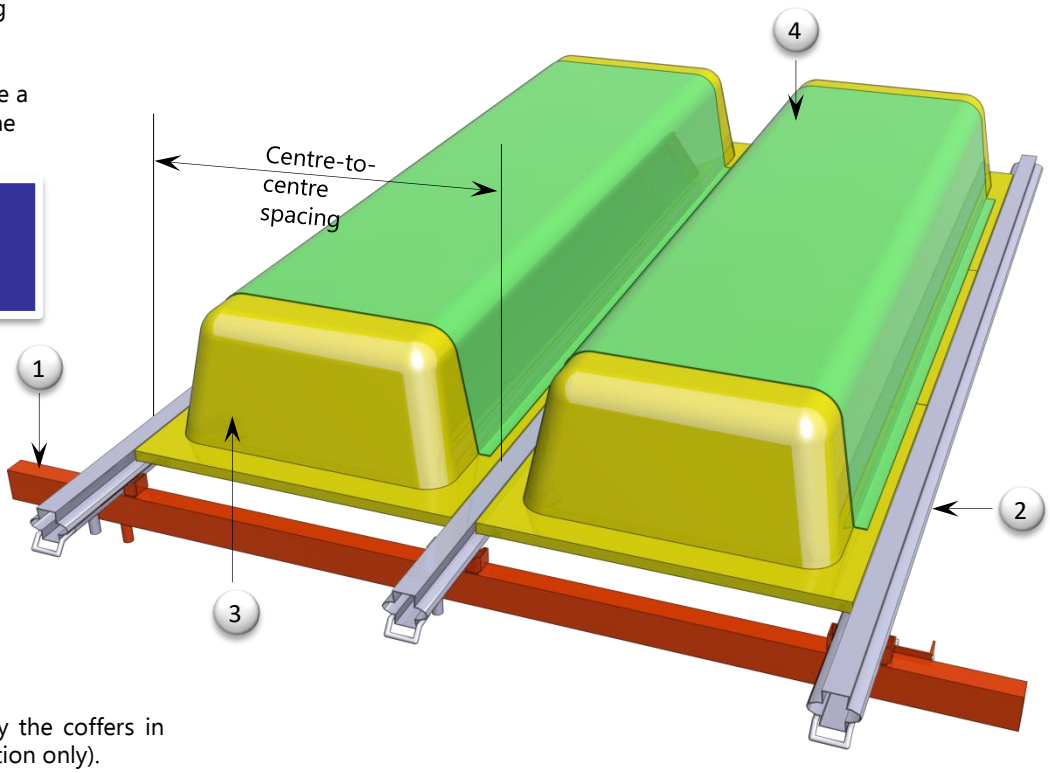


Sistema 2000 Coffers One-way

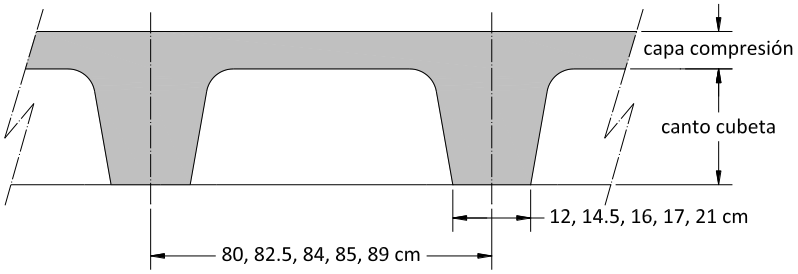
One-way

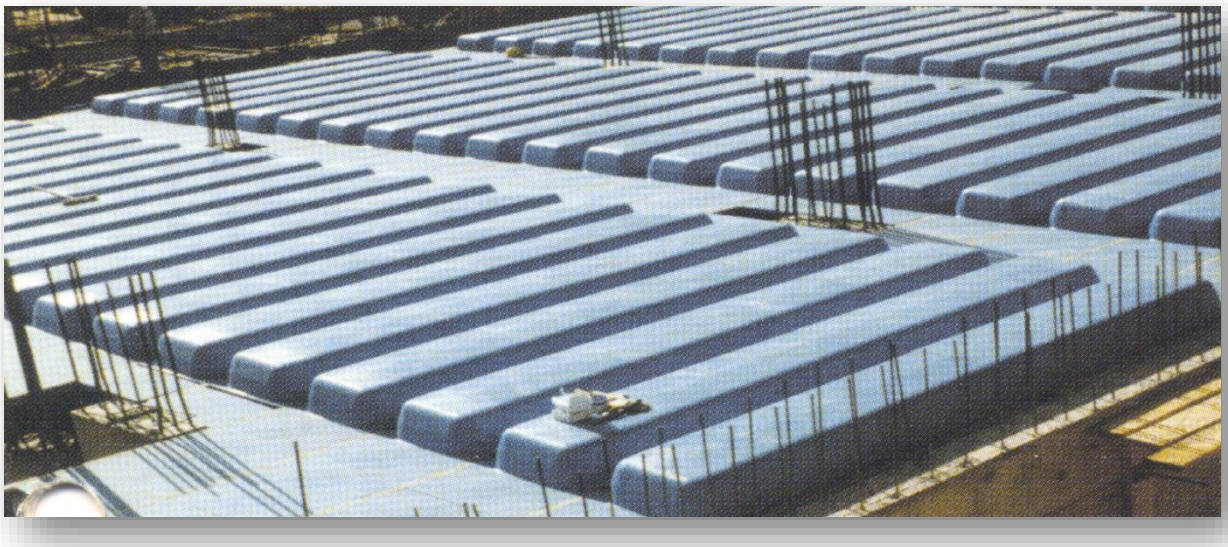
Centre-to-centre spacings from 80 to 89 cm, with ribs ranging between 12 and 21 cm, and secondary beam spacing between 1.60 and 1.78 m. Use a specific guide according to the rib size.

1. Guide according to rib
2. Beam carrier
3. Coffer
4. One-way sheet

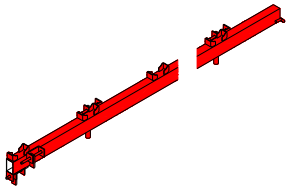


Shape of the rib left by the coffers in the concrete (one direction only).



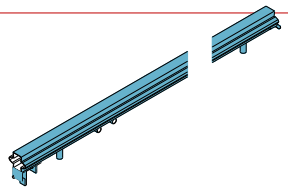


Sistema 2000 Coffers Elements



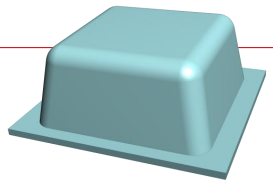
GUIDE 4.20 and 2.10 m

DIMENSIONS (mm)	WEIGHT (kg)	DESCRIPTION
4800: N-12 2400: N-12 4940: N-14,5 1640: N-14,5 5000: N-16 2500: N-16 4250: N-17 2550: N-17 4450: N-21 2670: N-21	25,0 13,5 25,8 9,4 26,0 14,0 22,0 14,3 23,2 15,0	They level the beam carriers and are used to assemble the frame



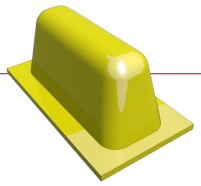
PORTATASOPANDA 4, 3 and 2 m

DIMENSIONS (mm)	WEIGHT (kg)	DESCRIPTION
4000 3000 2000	25,0 19,0 13,0	Elements load-bearing elements that support the boards and the concrete load until 3 days after pouring



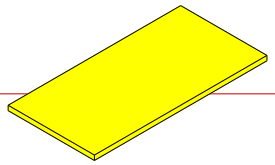
RECOVERABLE COFFER (various sizes)

DIMENSIONS (mm)	WEIGHT (kg)	DESCRIPTION
250: N-12 a N-21 300: N-12 a N-21 350: N-12 a N-21 400: N-12 a N-21	8,1 8,6 9,2 9,7	Recoverable injected-polypropylene coffer (different heights)



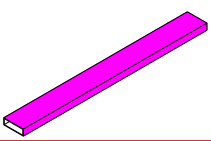
HALF RECOVERABLE COFFER (various sizes)

DIMENSIONS (mm)	WEIGHT (kg)	DESCRIPTION
250: N-12 a N-21 300: N-12 a N-21 350: N-12 a N-21 400: N-12 a N-21	4,4 4,7 5,0 5,2	Half recoverable injected-polypropylene coffer (different heights



BOARD 1x0,5 m

DIMENSIONS (mm)	WEIGHT (kg)	DESCRIPTION
745x500: N-12 772x500: N-14,5 785x500: N-16 800x500: N-17 840x500: N-21	4,6 4,8 4,9 5,0 5,2	Surface form-facing recoverable timber three-ply 27 mm thick



OMEGA

DIMENSIONS (mm)	WEIGHT (kg)	DESCRIPTION
772x75 800x100 840x100	2,1 2,4 2,7	Element recoverable metal element placed between the coffers

Notes

Notes

SÁEZ formworks

v.20260116

SAEZ FORMWORKS, S.L.
B75465989

CTRA. DE BENIAJAN, 10
30570 MURCIA