

Plakapanel

Permanent decay resistant formwork



Leviat®

We imagine, model and make engineered products and innovative construction solutions that help turn architectural visions into reality and enable our construction partners to build better, safer, stronger and faster.

Leviat is a world leader in connecting, fixing, lifting and anchoring technology.

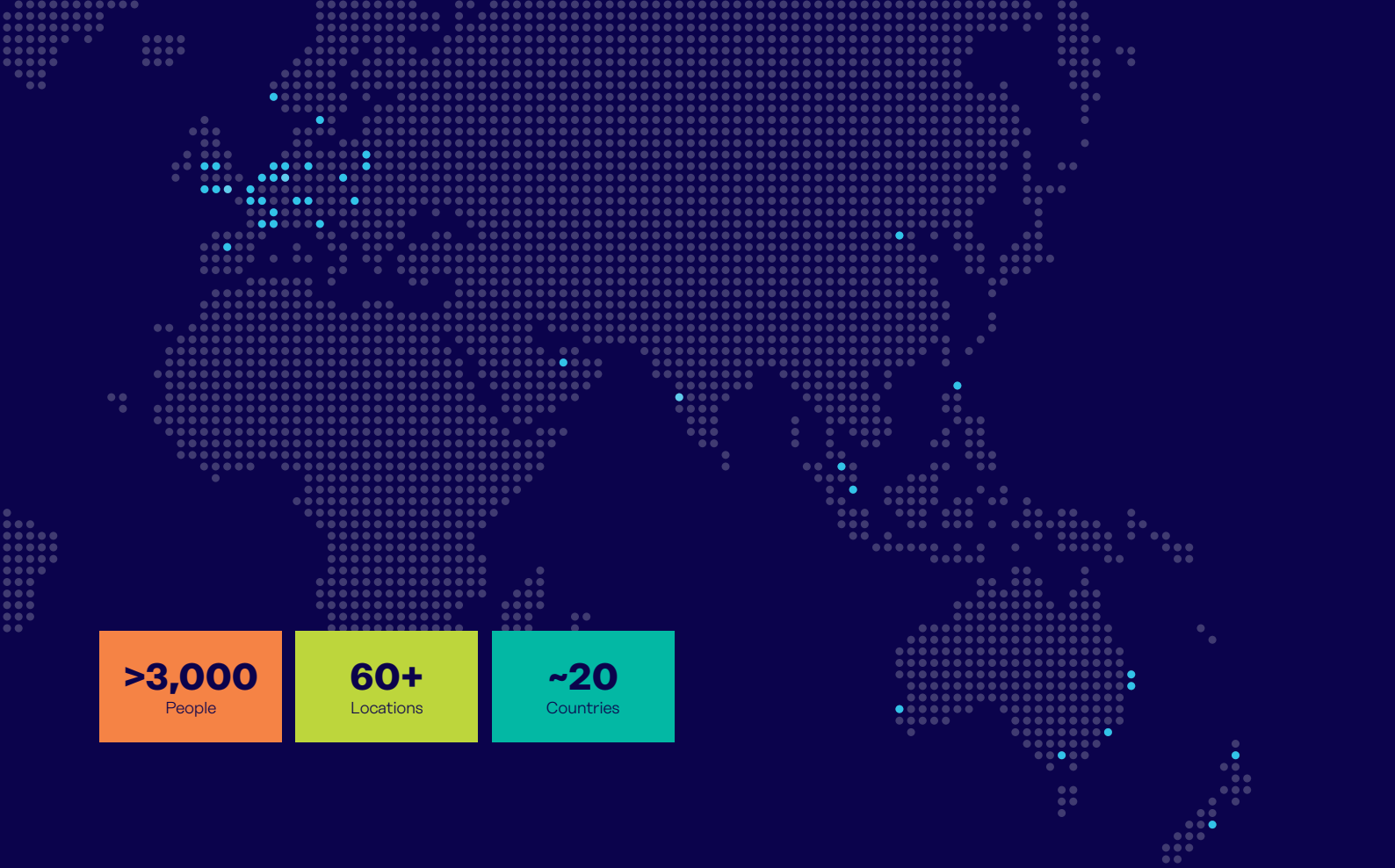
From the build of new schools, hospitals, homes and infrastructure, to the repair and maintenance of heritage structures, our engineering skills are making a difference around the world.

We provide technical design assistance at every stage of a project, from initial planning to installation and beyond.

Our technical support services range from simple product selection through to the development of a fully customised project-specific design solution.

Every promise we make locally, has the commitment and dedication of our global team behind it. We employ almost 3,000 people at 60 locations across North America, Europe and Asia-Pacific, providing an agile and responsive service worldwide.



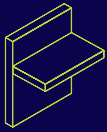


>3,000
People

60+
Locations

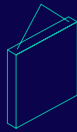
~20
Countries

Our areas of expertise:



Structural Connections

Systems to form robust, efficient connections, and continuity of concrete reinforcement as necessary, between walls, slabs, columns, beams and balconies, providing structural integrity as well as enhanced thermal and acoustic performance.



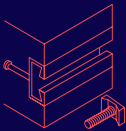
Lifting & Bracing

Systems for the safe and efficient transportation, lifting and temporary bracing of cast concrete elements and tilt-up panels before permanent structural connections are made.



Façade Support & Restraint

Systems for the safe and thermally-efficient fixing of the external building envelope, including brick and natural stone, insulated sandwich panels, curtain walling and suspended concrete façades, and also the repair and strengthening of existing masonry installations.



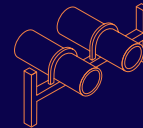
Anchoring & Fixing

Systems for fixing secondary fixtures to concrete, including anchor channels, bolts and inserts; also tension rod systems for roofs and canopies.



Formwork & Site Accessories

Non-structural accessories that complement our engineered solutions and help keep your construction environment operating safely and efficiently, including moulds for casting standard and special concrete elements and construction essentials such as reinforcing bar spacers.



Industrial Technology

Mounting channels, pipe clamps and other versatile framing systems that provide safe fixing in a wide range of industrial applications.

Leviat product ranges:

Ancon | Aschwanden | Connolly | Halfen | Helifix | Isedio | Meadow Burke | Modersohn | Moment | Plaka | Scaldex | Thermomass

Technology for the benefit of civil construction and renovation

Plakapanel is a panel produced from cement, wood fibres and additives that serves as permanent formwork. It is intended for varied use in new builds, renovation work, industrial buildings and public works.



Advantages

- Respect for the environment
- Resistant to decay
- Not sensitive to temperature differences
- Breathable material
- Good fire resistance
- Economical to purchase and to maintain

Applications

The Plakapanel panels can be treated as fibreboard based on resin. They can be cut using a circular saw equipped with a toothed disc (optional in hard metal) and with an extraction system.



Plakapanel is installed as a free inlay on joists. The width of the inlay may be no less than 25 mm. The panel can be attached with screws or nails. The screws or nails are placed every 500 mm on panels thicker than 24 mm, and every 400 mm for other thicknesses, placed 20 mm from the edge of the panel.

It is advisable to lay the panels on a foam belt for better waterproofing and pressure distribution.

Size tolerances for whole panels

Length (mm)	Width (mm)	Thickness (mm)	Angle (mm/m)
± 5	± 5	± 1,5*	± 2

* The tolerance is ± 1 mm on 20 and 22 mm thick panels
Cutting to size is possible on request

Thickness (mm)	Length x width (mm)	Weight (kg/m ²)
20	2600 x 1250	27,5
	3100 x 1250	
22	2600 x 1250	30,2
	3100 x 1250	
24	2600 x 1250	33,0
	3100 x 1250	
28	2600 x 1250	38,5
	3100 x 1250	
32	2600 x 1250	44,0
	3100 x 1250	
36	2600 x 1250	49,5
	3100 x 1250	
40	2600 x 1250	55,0
	3100 x 1250	

Other thicknesses: 10, 12, 14, 15 and 18 mm

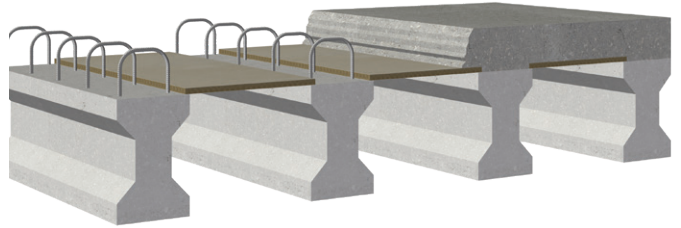
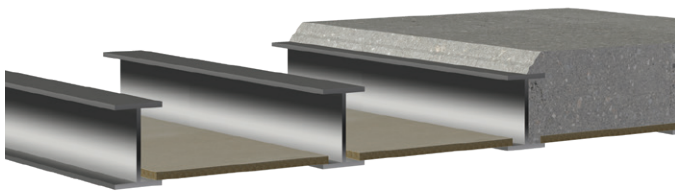




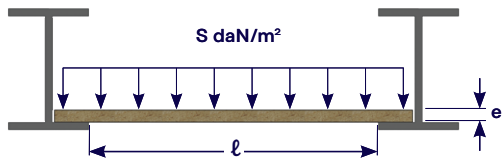
**Isotropic material,
same resistance
in all directions!**

Plakapanel Dimensioning

Plakapanel is self-bearing and supports within the limits indicated in the tables below. The minimum thickness of the panel is chosen in relation to the safety coefficient: generally it is advisable to use coefficient 3 but we advise using coefficient 5 for extra safety if builders will be walking on the panels during installation and concrete casting. The overload is limited to a deflection of 1/300 of the clear width, the weight of the slab has already been taken into account.



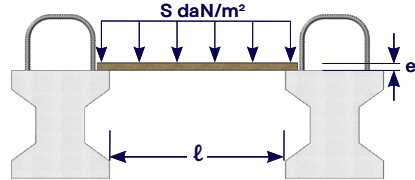
Steel joists



Permitted overload <S> in daN/m² (K = 3)							
Free bearing width "ℓ" (cm)	Thickness "e" (mm)						
	20	22	24	28	32	36	40
20	3975	4813	5730	7805	10200	12915	15950
25	2535	3070	3656	4983	6514	8249	10190
30	1753	2124	2530	3449	4511	5715	7061
35	1281	1553	1851	2525	3304	4187	5174
40	975	1183	1410	1925	2520	3195	3950
45	765	929	1108	1514	1983	2515	3110
50	589	747	892	1219	1598	2029	2510
55	437	587	732	1002	1314	1669	2066
60	331	446	584	836	1098	1395	1728
65	255	345	453	707	929	1182	1465
70		271	357	579	796	1013	1256
75			285	465	688	877	1088
80				377	574	765	950
85				308	472	673	836
90				254	392	569	740
95					327	477	659
100					275	403	564
105						342	481
110						292	412
115						249	354
120							306

daN/m² ≈ kg/m² - (safety coefficient: 3)

Concrete joists



Permitted overload <S> in daN/m² (K = 5)							
Free bearing width "ℓ" (cm)	Thickness "e" (mm)						
	20	22	24	28	32	36	40
20	2375	2877	3426	4669	6104	7731	9550
25	1511	1831	2182	2976	3892	4932	6094
30	1042	1263	1506	2056	2691	3411	4217
35	759	921	1098	1501	1966	2494	3085
40	575	699	834	1141	1496	1899	2350
45	449	546	653	894	1174	1491	1846
50	359	437	523	718	943	1199	1486
55	292	357	427	587	772	983	1219
60	242	295	354	488	643	819	1017
65	202	247	297	410	542	691	859
70			252	349	462	590	734
75				300	397	508	633
80				259	344	441	550
85				225	300	386	481
90					263	339	424
95					232	300	375
100						266	334
105						237	298
110							267
115							240
120							217

daN/m² ≈ kg/m² - (safety coefficient: 5)

Storage and transport



The panels are delivered on a pallet. It is advisable to transport the panels in an enclosed truck and to store them flat, protected from storms, in a dry ventilated space on a flat and even surface to prevent any unnecessary warping. The stored panels must be adequately supported to prevent long-term sagging under their own weight. The panels may be stacked no higher than 2 m.

Plakapanel Permanent decay resistant formwork

Technology for the benefit of construction and renovation

Plakapanel is a panel produced from cement, wood fibres and additives that serves as permanent formwork. It is intended for varied use in new builds, renovation work, industrial buildings and public works.

■ **Respect for the environment**

Plakapanel respects the environment. Due to its composition the panel is fully ecological during the whole cycle from production up to use.

■ **Not sensitive to temperature differences**

Plakapanel is resistant to cold, frost and intense heat (80°C) and maintains its properties in any climate.

■ **Resistant to decay**

Plakapanel is resistant to most living organisms (mould, bacteria, insects, etc ...).

■ **Breathable material**

Plakapanel is resistant to water for the purposes of its function as permanent formwork but does let steam through.

■ **Good fire resistance**

Plakapanel does not create hazardous gases and is classified B1 in accordance with DIN 4102 and M1 in accordance with NF P 92-501.
(NF = Norme Française)

■ **Economical in purchase and maintenance**

Plakapanel provides savings from first use onwards because it can be installed quickly and easily.
Plakapanel requires no maintenance.



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