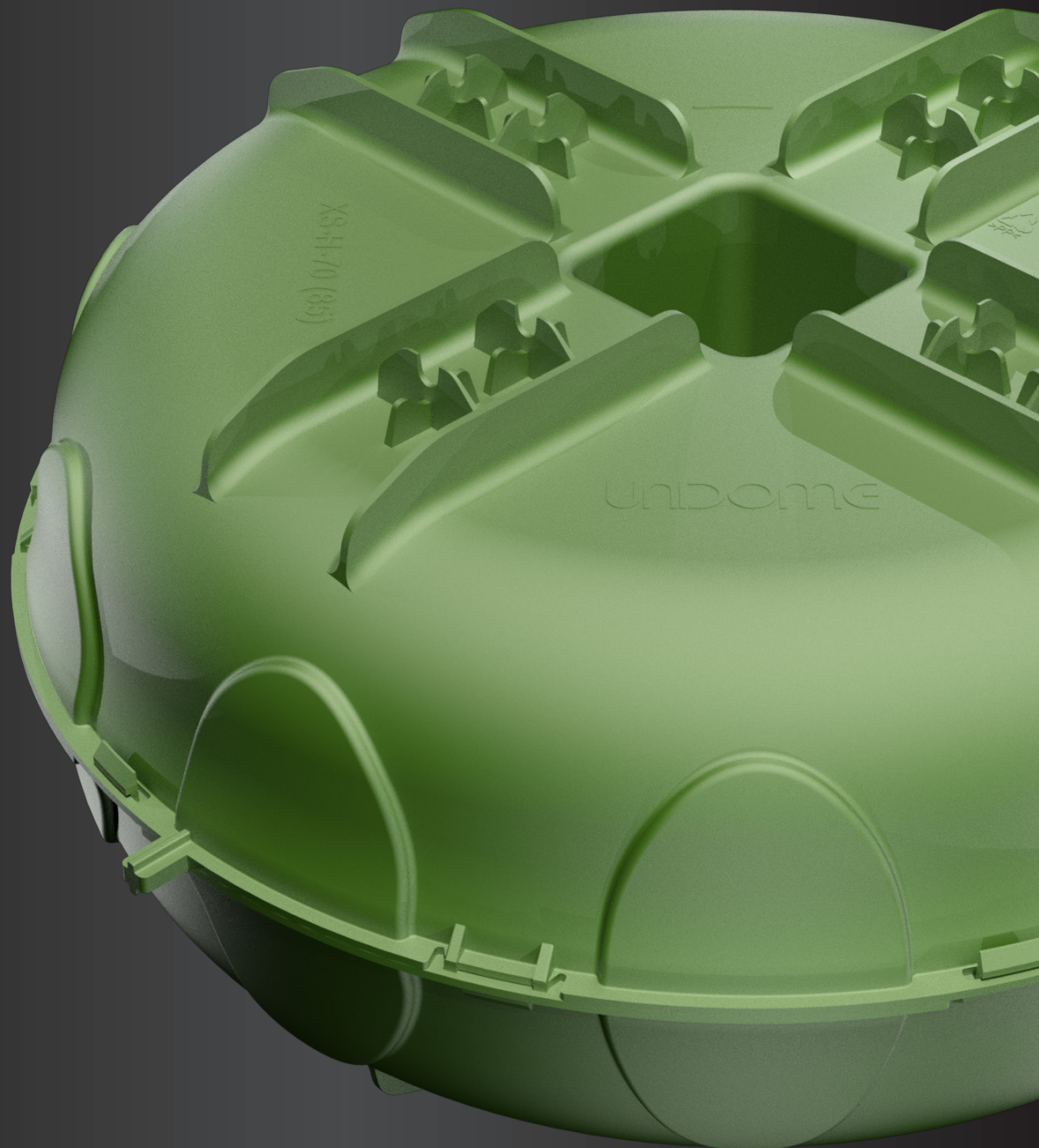


UNIDOME

SHAPING THE FUTURE OF
SUSTAINABLE CONSTRUCTION

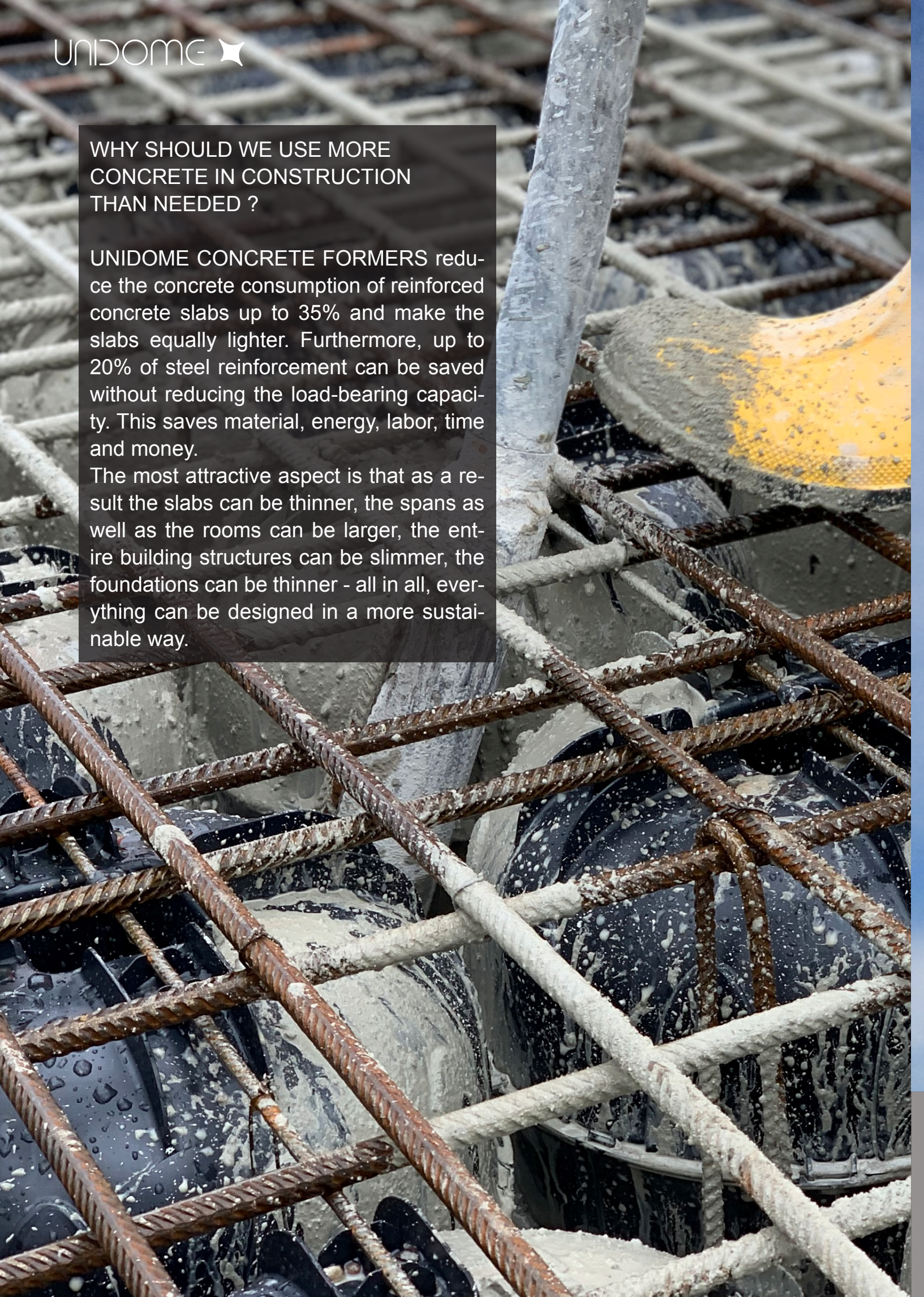


ENGLISH

WHY SHOULD WE USE MORE CONCRETE IN CONSTRUCTION THAN NEEDED ?

UNIDOME CONCRETE FORMERS reduce the concrete consumption of reinforced concrete slabs up to 35% and make the slabs equally lighter. Furthermore, up to 20% of steel reinforcement can be saved without reducing the load-bearing capacity. This saves material, energy, labor, time and money.

The most attractive aspect is that as a result the slabs can be thinner, the spans as well as the rooms can be larger, the entire building structures can be slimmer, the foundations can be thinner - all in all, everything can be designed in a more sustainable way.



Lightweight

By using Unidome, the dead load can be reduced by up to 35%.

Flexibility

Possibility of combination with other types of construction, such as post-tensioning, concrete core activation, composite construction, etc....

Large spans

The lightweight design enables wide spans with less support columns.

Cost saving

Due to the material efficiency and the lightweight, the building costs are reduced.

Environmental protection

CO₂ emissions, as well as energy consumption, can be reduced by up to 20%.

Safety

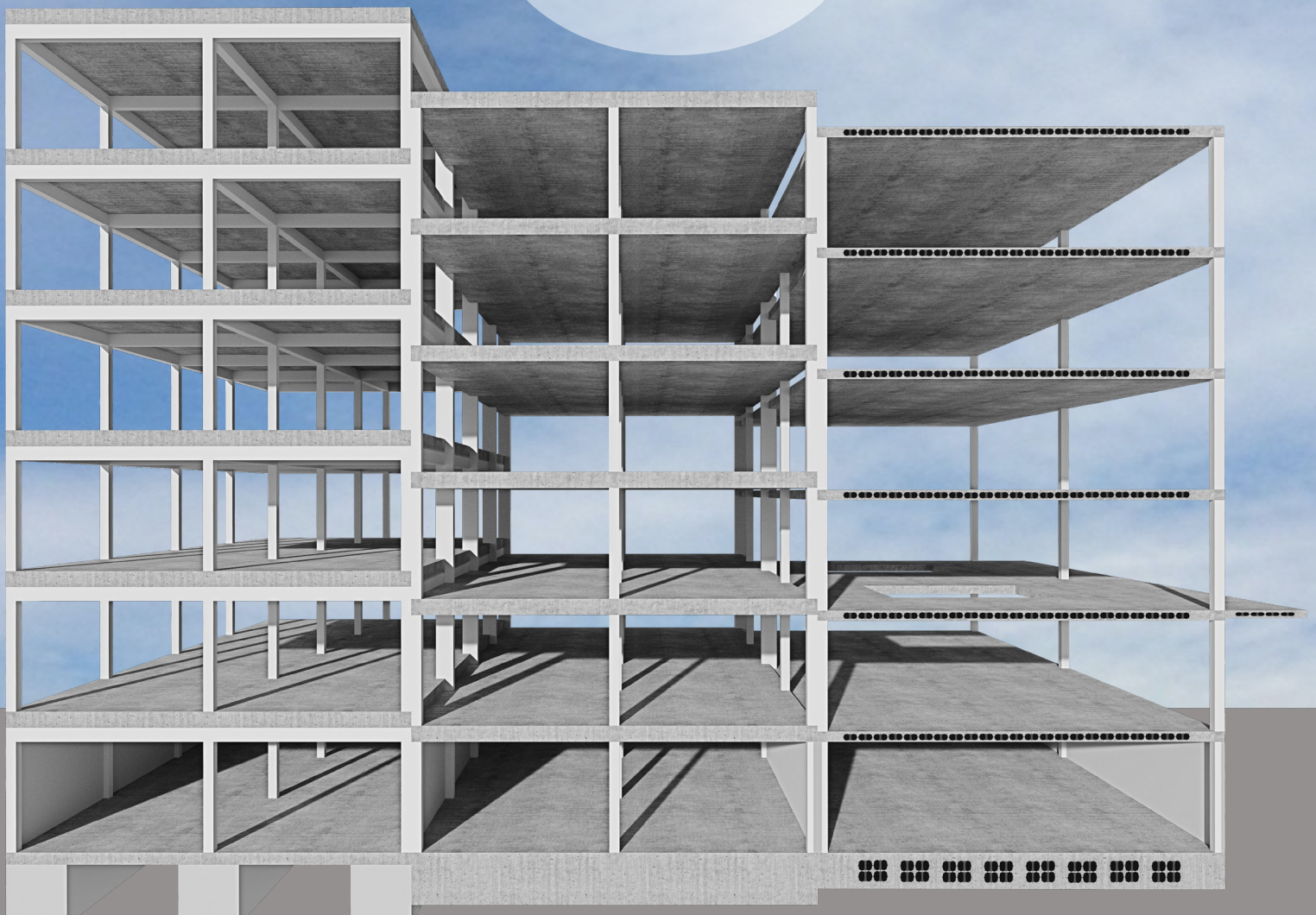
The tested and approved technology offers a tremendous and/or increased safety. This even applies to earthquake zones.

Slim slabs

The lightweight reduces deformation and allows thinner slabs.

Material efficiency

Unidome can save up to 35% concrete and up to 20% reinforcement.



CONVENTIONAL

SUSTAINABLE 

SUSTAINABILITY

The direct reduction of concrete consumption and thus of components such as sand, aggregate, water and cement describes only a part of the overall possible material efficiency. The reinforcement content of the floor slab components can also be significantly reduced. In addition, the load reduction achieved leads to slimmer load-transmitting components such as columns, walls and foundations.

This means further indirect material savings. The number of necessary transports to the construction site is also significantly reduced. All this leads to a significant reduction in CO₂ emissions and thus protects the environment. 100% recycled plastic is used in the manufacture of the concrete formers.



100% Recycling



The color does not matter for us

Unidome was awarded the small business award „LEADING INNOVATORS OF SUSTAINABLE CONSTRUCTION“ in 2021 during the Corporate Vision awards ceremony.



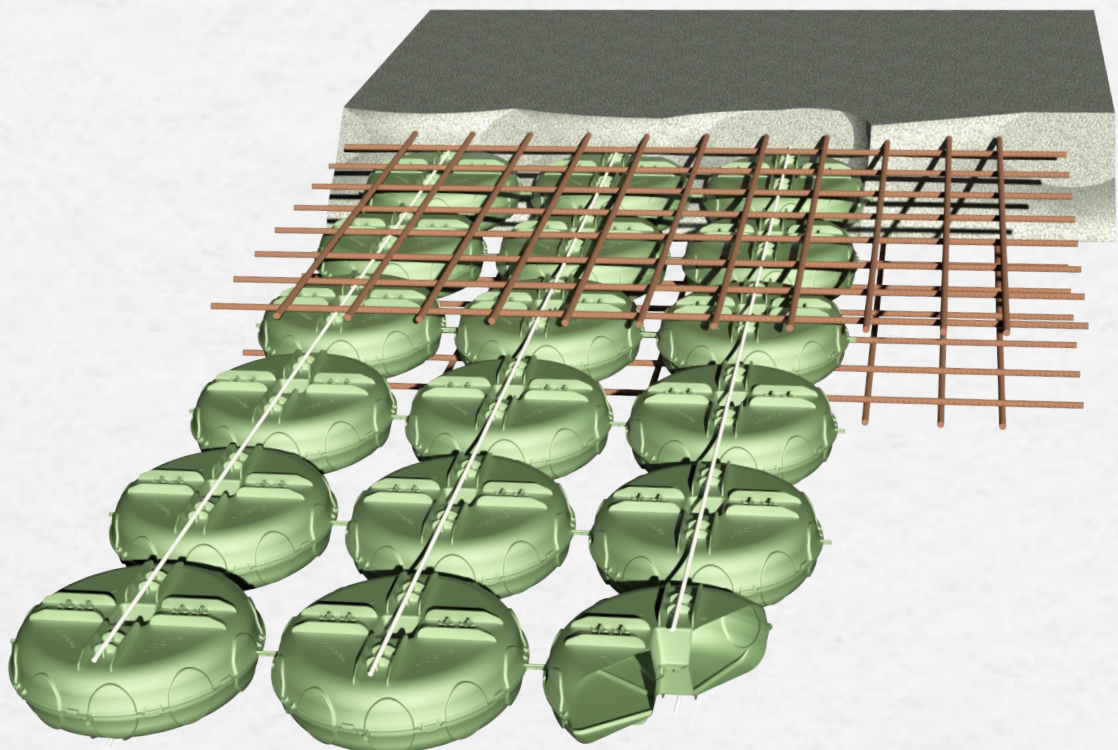
Leading Innovators of Sustainable Construction 2021

THE UNIDOME TECHNOLOGY

The Unidome technology comprises a construction method, a design concept and the corresponding building products to realize the Unidome construction method. The design is a material-efficient lightweight construction method in which material is eliminated where it has only a negligible load-bearing function.

The Unidome design concept is a methodology developed over decades to calculate the resulting cavity structures in a simple and safe way by using the factor method and reverting to the conventional and internationally accepted design principles in the reinforced concrete construction.

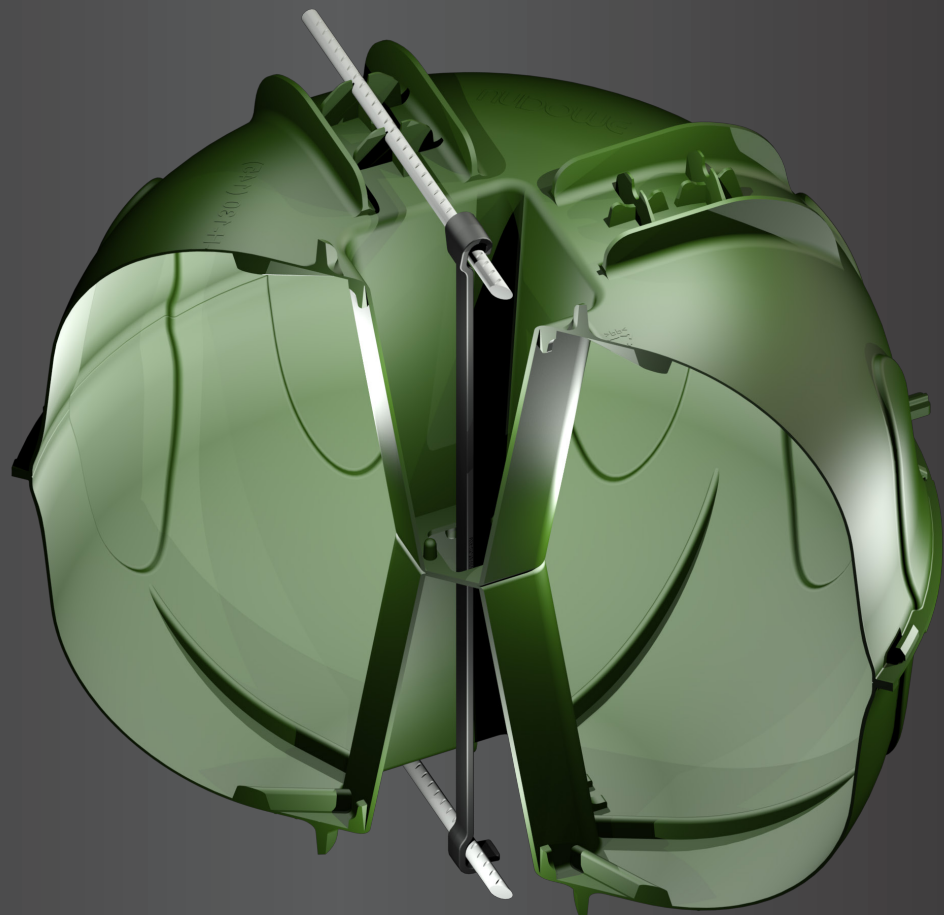
The internationally patented and approved Unidome construction products are concrete formers developed and tested for their respective applications to produce safe, economical and sustainable concrete structures.



UNIDOME CONCRETE SHAPER XS

The efficient construction method using biaxial cavity slabs has become increasingly popular on the market over the past twenty years and is now an internationally established solution. Unidome's latest products take this sustainable technology to the next level, thanks to several new features resulting from decades of practical experience. Integrated spacers, a newly developed support tunnel with venting function, spacer pins as well as an optimized closure ensure more safety, a better quality of the components and, of course, an increased economic efficiency of the entire building.

Other product lines from Unidome completes the portfolio and the range of applications.





SUSTAINABLE PRODUCTS FOR EVERY TYPE OF BUILDING

UNIDOME CONCRETE FORMERS are available in different sizes or heights, so that they are available for all relevant component thicknesses. Thus, advantages can be generated for any type of building, no matter whether it is a school or a high-rise building, for instance. The bandwidth ranges from an executable component thickness of 18 cm to over 80 cm. This is interesting for every slab and even for beams and foundation slabs. Thanks to an optimized production as well as logistics concept and an extensive sales partner network, the application of the technology is possible in almost every country. This is the only way to realize a real contribution to sustainability.



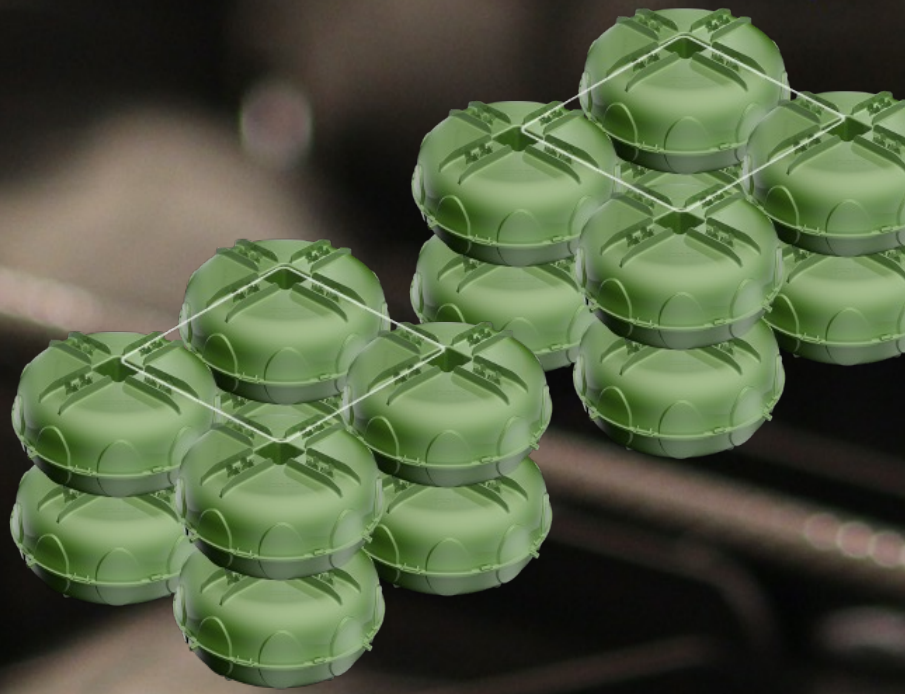
You can find more information about our diverse Unidome references on our homepage www.unidome.de



Other product lines

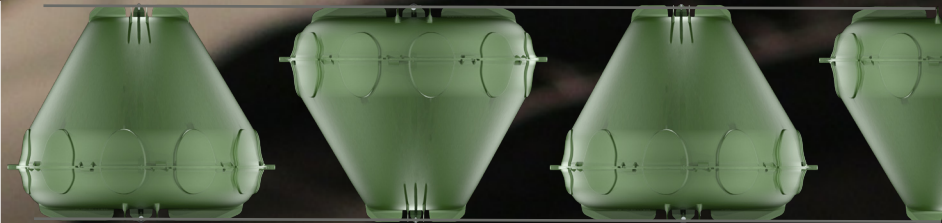
UNIDOME XS-D

The sustainable product line for concrete components between 50 cm and 100 cm thickness. The XS-D for doubled or tripled sustainability.



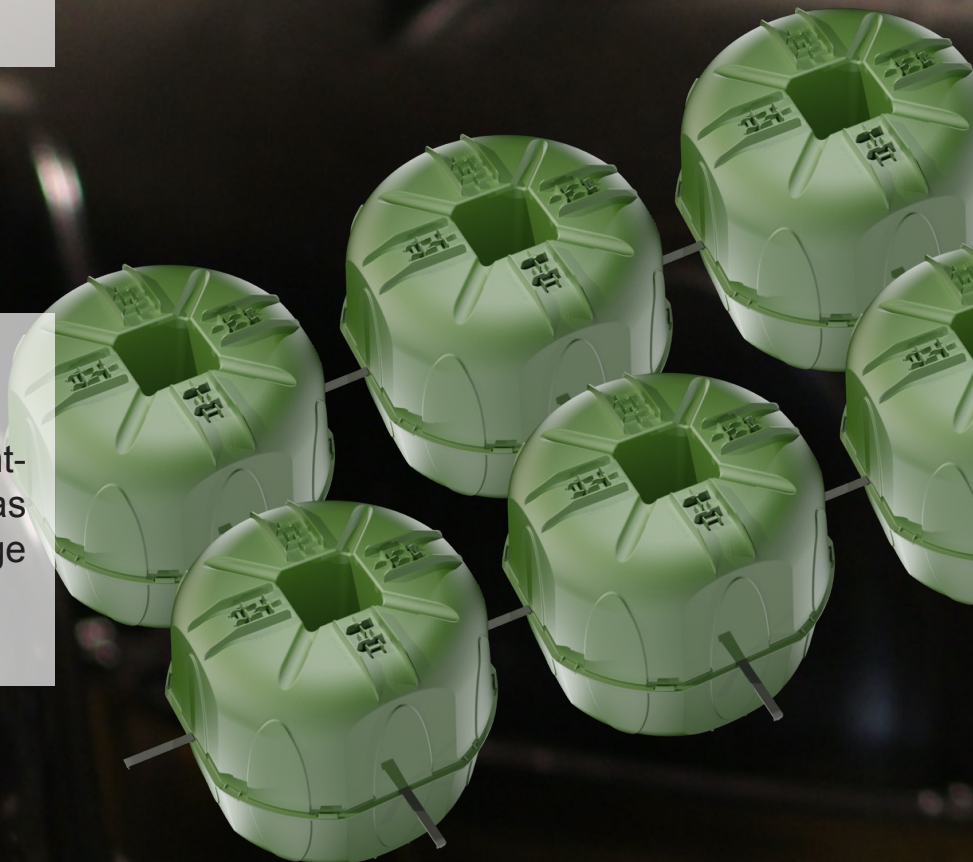
Unidome XS-A

The product line that allows a lightweight slab to withstand even more shear force. Perfectly complements the XS product line in high-stress areas.



Unidome XL

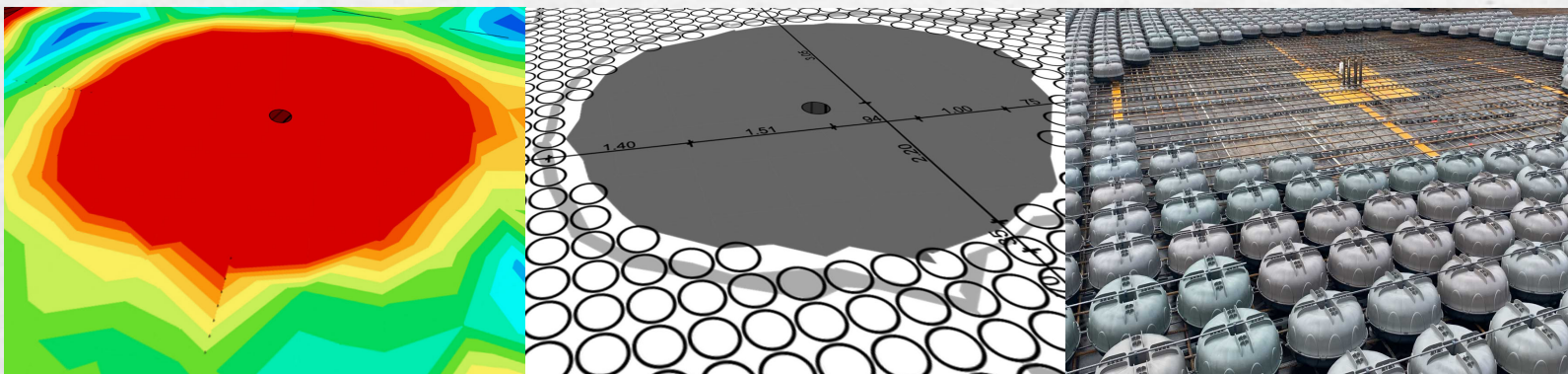
The ultimate product line for light-weight concrete components as well as for foundations with large component thicknesses.



PLANNING, DESIGN AND EXECUTION

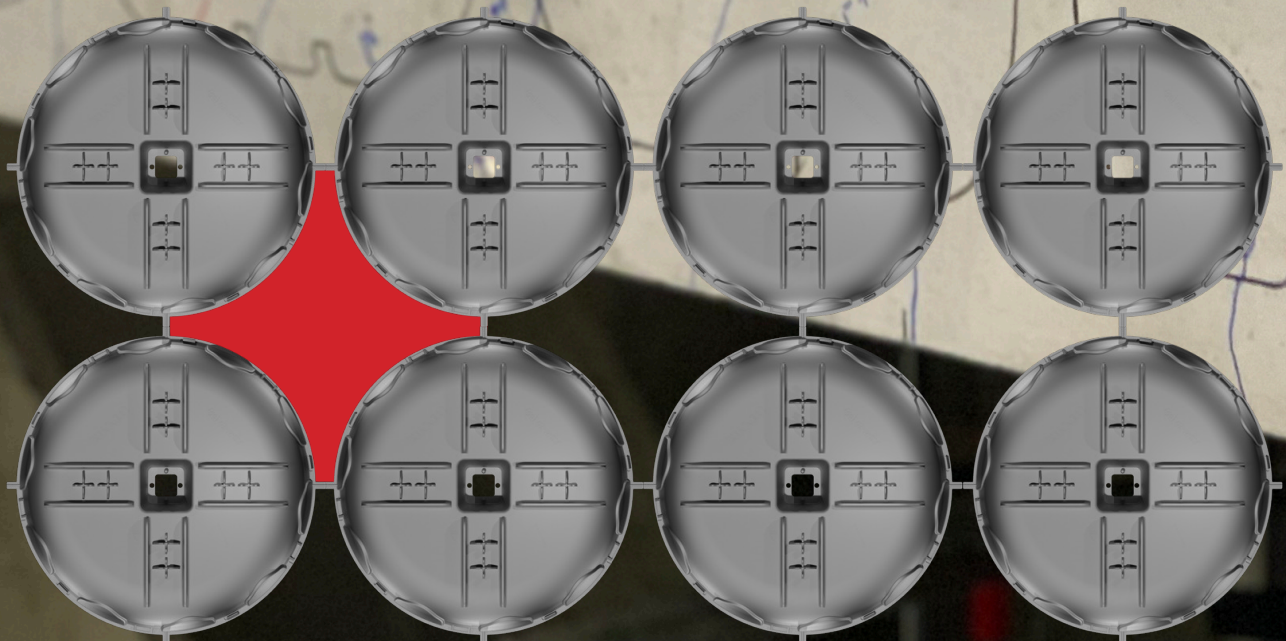
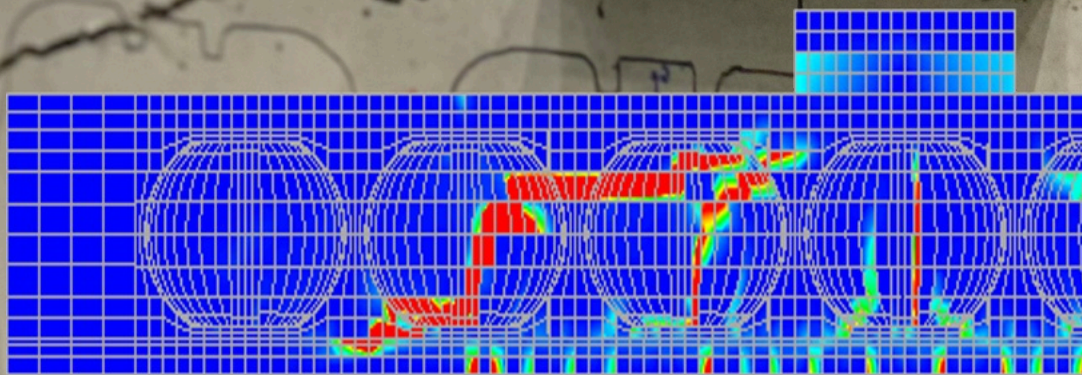
UNIDOME doesn't only make heavy concrete slabs lighter, but also the work of all project participants easier - from the architect to the structural engineer to the construction company. Rooms can be planned more flexible, static verifications can be carried out more easily due to the load reduction and the construction time can be accelerated. In addition, the Unidome technology offers advantages in the process of sustainability certification. Not only detailed planning guidelines and a software tool are available for planners, but also the guaranteed support of the entire Unidome team. Planned projects using Unidome are usually less expensive - this even satisfies the building owner.

Unidome XS usage data		XS-60 (90)	XS-80 (110)	XS-100 (130)	XS-120 (150)	XS-140 (170)	XS-160 (190)	XS-180 (210)	XS-200 (230)	XS-220 (250)	XS-240 (270)	XS-260 (290)
for more details please check technical data sheets or use the Unidome Pro software tool at www.unidome.de												
minimum slab thickness	cm	18	20	22	24	26	28	30	32	35	38	40
cavity height	cm	6	8	10	12	14	16	18	20	22	24	26
total height concrete shaper	cm	9	11	13	15	17	19	21	23	25	27	29
volume displacement	m ³ /m ²	0,0335	0,0443	0,0551	0,0652	0,0753	0,0837	0,0938	0,1010	0,1123	0,1195	0,1265
weight reduction (concrete 25 kN/m ³)	kN/m ²	0,84	1,11	1,38	1,63	1,88	2,09	2,35	2,53	2,81	2,99	3,16



RESEARCH AND DEVELOPMENT

The cooperation with various internationally recognized research institutes, partners and local authorities enables us to offer tested, proven as well as quality-assured products and a construction technology for global application. The Unidome visionaries have a broad know-how in the field of sustainable void former technology and can look back to an experience of more than 20 years. This experience is of course also being utilized for new developments.



Unidome Deutschland GmbH

Große Hub 10a
65344 Eltville-Martinsthal - Germany
Tel.: 0049 6123 795 8933
office@unidome.de

Office Valencia

Pg. de Russafa, 20
46002 Valencia - Spain
Tel.: 0034 658 809 292
office@unidome.es

**..and a worldwide
network of distribution partners**

Unidome Global DWC LLC

DWC - Unit WA-47
Dubai Logistics City
Dubai - United Arab Emirates
Tel.: 00971 4 8870740
office@unidome.me

UNIDOME