





CONSTRUCTION MANUAL

ZENDOME.modular

30^M 75^M 150^M 300^M

ZENDOME Berlin - Made in Germany



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Introduction

Congratulations on your purchase of this geodesic dome manufactured by ZENDOME. The following information has been gained during many years of team experience and is meant to help you get the maximum out of this product for many more years to come.

ZENDOME is the first European manufacturer of geodesic domes, based on the initial idea of its inventor – the Berlin physicist Walther Bauersfeld, and ever improving it by means of modern materials. We only apply DIN certified high end materials and focus on a flawless production process.

Geodesic Domes

The origin of geodesic forms is 'Made in Germany' and their story began in Jena. The engineer and physicist Walther W.J. Bauersfeld, born in Berlin in 1879 (†1959), worked there for the Carl-Zeiss Company for around 40 years and started work on a free standing cupola for projection use as early as 1919. He applied a principle that is also widespread in nature: 60° instead of a right angle. About four years later he introduced his most popular achievement to the public: the Zeiss Planetarium – also being the first geodesic cupola in the world. Today the steel concrete structure with expressionistic art elements is under the protection of historic buildings.

The American architect, inventor and scientist Richard Buckminster Fuller - one of the greatest visionaries of the last century - took the idea of the geodesic cupola up during the 1940s, made it calculable and developed a system. He made the 'Geodesic Domes' well known and caused a commotion with his Fuller-Cupola at the 1967 Expo in Montreal. Fuller envisioned light and transportable houses that fitted into their surrounding countryside organically. The Geodesic Dome is the design of an ecologically sound living system with a minimum of energy and material being needed, and at the same time perfectly fitting into any new city or countryside surrounding. The spherical surface area leads to a minimum of required material and energy and at the same time providing a maximum of inner space. Air and Energy are able to circulate within the entire space and cannot stay in any corners. The most convincing fact is the static: within a square structure the corners are the weak points of the entire construction. Within this triangular structure however, the angles are fixed at the joints and these intersections in a large net allow the load to spread out. The net structure also allows for a higher tolerance of inner dynamics. A Dome has approximately 3% of the weight of its square competitor but can safely face tornados and earthquakes.

We are committed to this tradition and wish you only the best with your geodesic ZENDOME!

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For further information, examples and much more, please visit our website:

www.ZENDOME.com



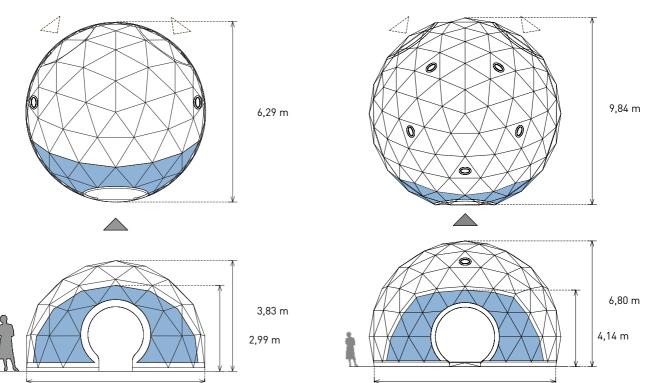
Dimensions





ZENDOME.30^M

ZENDOME.75^M



6,29 m

9,84 m

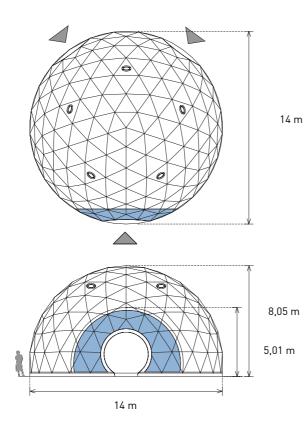


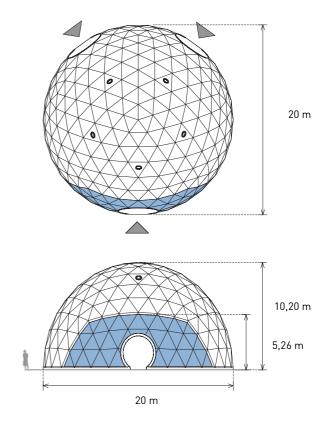




ZENDOME.150^M

ZENDOME.300^M

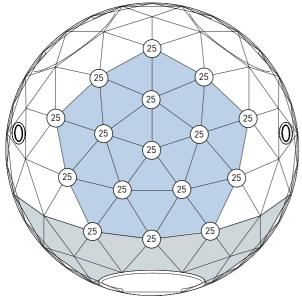






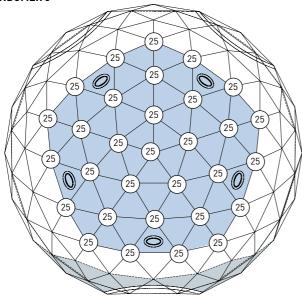
Ultimate load overview

ZENDOME.30^M

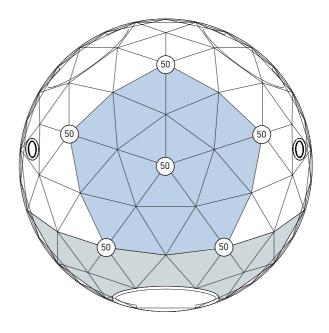


Entire Load : 400 Kg

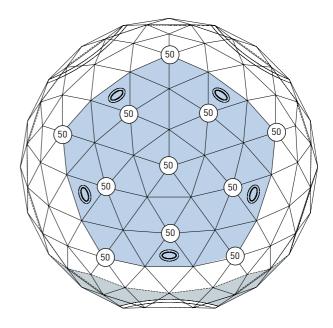
ZENDOME.75^M



Entire Load : 775 Kg

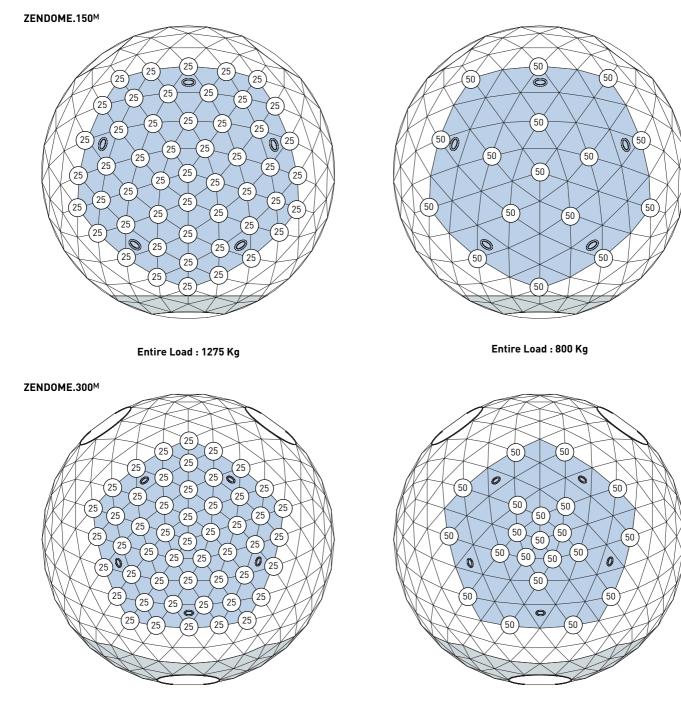


Entire Load : 300 Kg



Entire Load : 550 Kg





Entire Load : 1275 Kg

Entire Load : 1000 Kg

ZENDOME.scalepaper

Support you construction team and prepare your plans on the included scale paper. Draw out the planned space including the ZENDOME or ZENDOME.domescape, point out entrance and exit locations and the position of the panoramic windows. Important obstacles or larger plants (trees, large bushes, rocks, fire emergency pathways, low roofs etc) should also be marked on the plan.

The position of power cables, cable pathways or drainage systems which might be of interest concerning safe access ways or ground pegging should also be marked.

You can also use the ZENDOME.planningtemplate to mark the position of your ZENDOME or ZENDOME.domescape.

ZENDOME.planningtemplate (Scale 1:200)

For your planning phase we gladly offer you the assistance of our ZEN-DOME.modular 2D models. Plan your individual solutions at the event location or establish your own ZENDOME.domescapes!

First cut out the models along the dotted lines. The ZENDOMEs are based on Pentagons in order to make it simpler.

Note: the Pentagon does not state the Heavy Load Floor System but marks the outer area of the tunnel connections.

Around the ZENDOME you will find arrows that state the location of the circular doorways and show the Y-structure (www.zendome.com/y-structure). The arrows will no longer be seen after cutting out the models but the location of he doorways will remain visible. All ZENDOME. modular can be combined according to the needs or your event. ZENDOME.domescapes can easily be planned by placing the doors of different ZENDOME sizes next to each other (see example). Design your creative space and excite your clients and guests!

All technical information are given to every ZENDOME model. Make use of this possibility and send us your plan for us to make you a very individual offer.

TIP: Laminate your cut out ZENDOME in order to use it for more events to come.

Your feedback is very important to us!

We offer you our contact card or email for you to send us your opinion, ideas for improvement or simply your experiences with our product.

feedback@zendome.com

We are looking forward to hearing from you.

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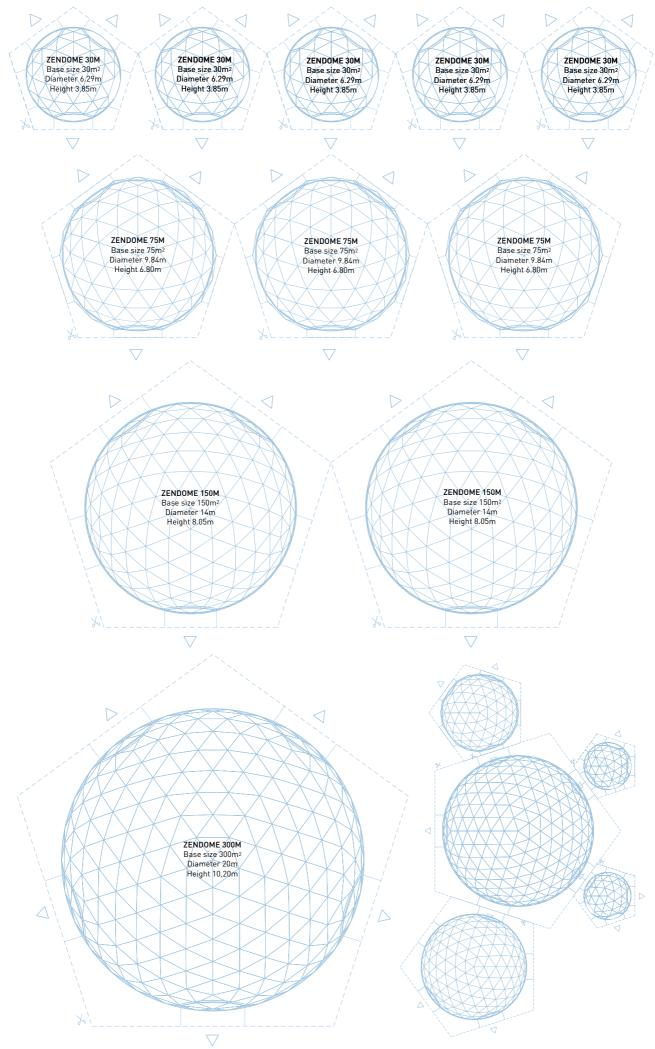
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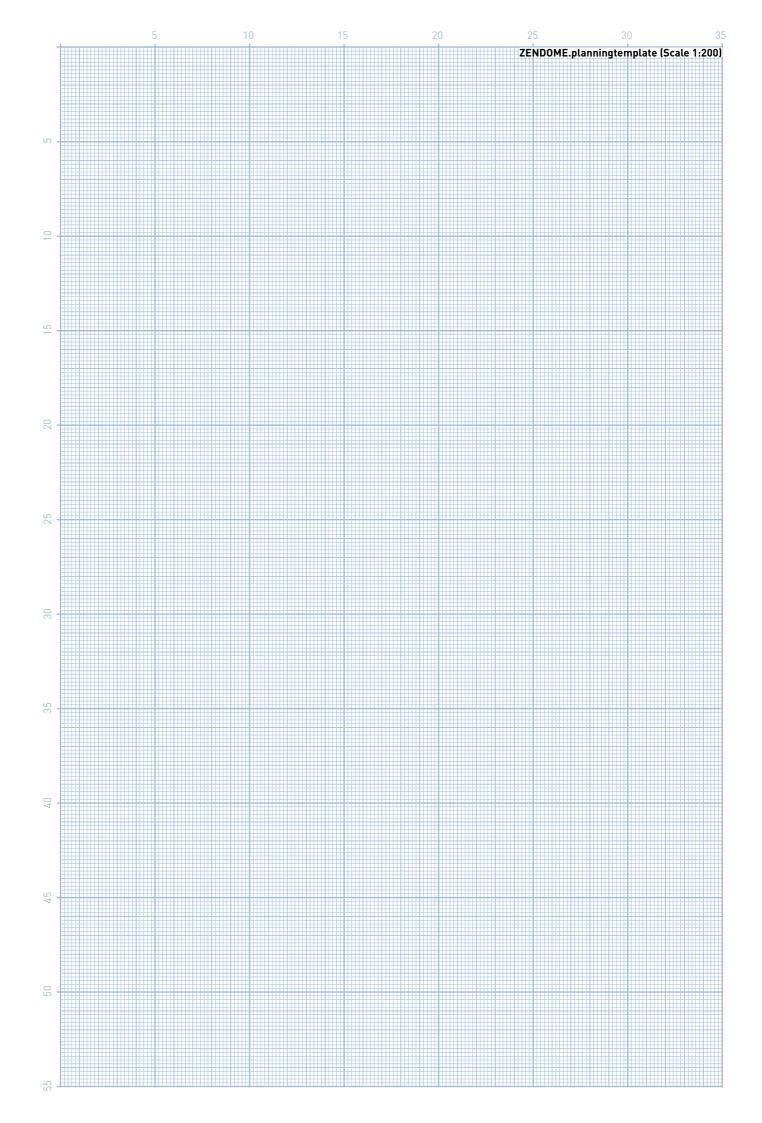
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Schwedter Strasse 34a

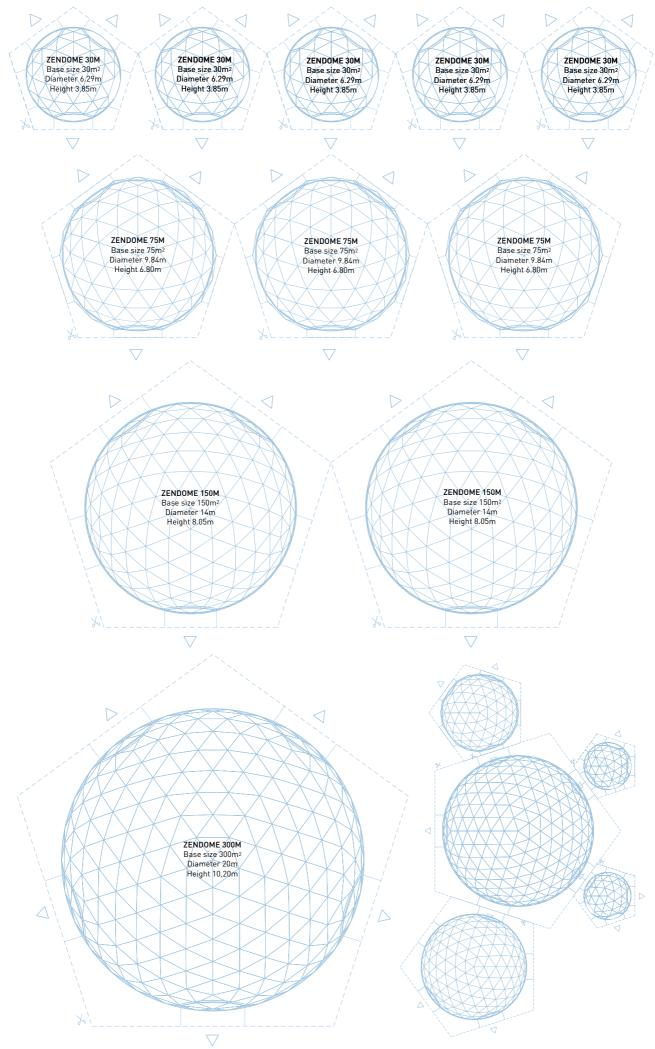
10435 Berlin Germany

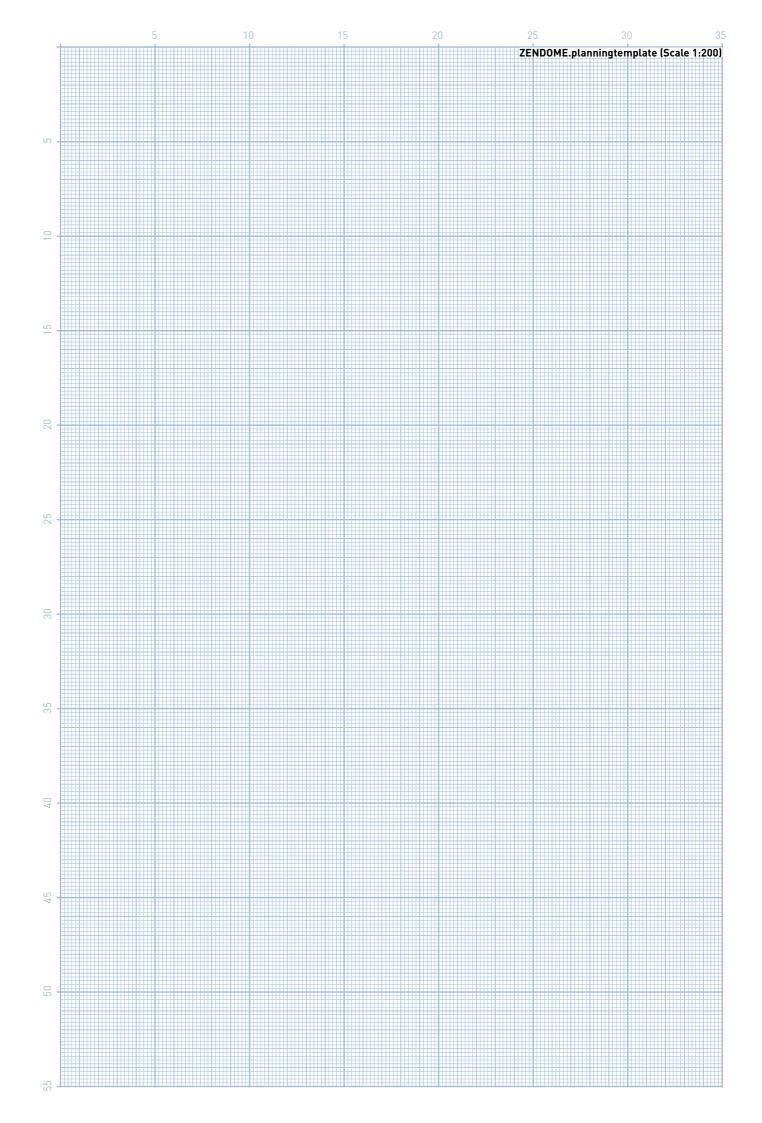
ZENDOME.planningtemplate (Scale 1:200)





ZENDOME.planningtemplate (Scale 1:200)







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