



Transparent Shells: Form, Topology, Structure

By Hans Schober

Download now

Read Online →

Transparent Shells: Form, Topology, Structure By Hans Schober

This book describes the design, detailing and structural engineering of filigree, double-curved and long-span glazed shells of minimal weight and ingenious details.

Innovative, clear and understandable geometric principles for the design of double-curved shell structures are explained in a practical manner. The principles are simple to apply with the use of functions now available in most CAD programs. The author demonstrates how floating and homogeneous structures can be created on these "free" forms, particularly grid shells of planar rectangles. These are especially suitable for glazing with flat panes and offer structural, economical and architectural advantages. Examples are provided to illustrate in simple ways the latest methods of form finding calculation and holistic optimisation through the complex interaction of structure, form and topology.

Numerous examples built all over the world from 1989 to 2014 offer orientation and assistance in the design of such double-curved shells. Essential design parameters, many details and node connections of constructed projects are presented and evaluated. These structures have been built all over the world in close partnership with renowned architects.

↓ [Download Transparent Shells: Form, Topology, Structure ...pdf](#)

📄 [Read Online Transparent Shells: Form, Topology, Structure ...pdf](#)

Transparent Shells: Form, Topology, Structure

By Hans Schober

Transparent Shells: Form, Topology, Structure By Hans Schober

This book describes the design, detailing and structural engineering of filigree, double-curved and long-span glazed shells of minimal weight and ingenious details.

Innovative, clear and understandable geometric principles for the design of double-curved shell structures are explained in a practical manner. The principles are simple to apply with the use of functions now available in most CAD programs. The author demonstrates how floating and homogeneous structures can be created on these "free" forms, particularly grid shells of planar rectangles. These are especially suitable for glazing with flat panes and offer structural, economical and architectural advantages. Examples are provided to illustrate in simple ways the latest methods of form finding calculation and holistic optimisation through the complex interaction of structure, form and topology.

Numerous examples built all over the world from 1989 to 2014 offer orientation and assistance in the design of such double-curved shells. Essential design parameters, many details and node connections of constructed projects are presented and evaluated. These structures have been built all over the world in close partnership with renowned architects.

Transparent Shells: Form, Topology, Structure By Hans Schober Bibliography

- Rank: #3371600 in Books
- Published on: 2015-12-21
- Original language: English
- Number of items: 1
- Dimensions: 10.90" h x .90" w x 8.50" l, 2.46 pounds
- Binding: Hardcover
- 272 pages

 [Download Transparent Shells: Form, Topology, Structure ...pdf](#)

 [Read Online Transparent Shells: Form, Topology, Structure ...pdf](#)

Editorial Review

About the Author

This book draws on the author's contemplations and experiences, and includes his descriptions of recent developments in the field of transparent shell structures. He gathered these during his time with the engineering firm schlaich bergemann und partner.

Dr.-Ing. **Hans Schober** graduated in Structural Engineering at the University of Stuttgart, before joining schlaich bergemann und partner in 1982. In 1992 he became a partner at the Stuttgart headquarters, then taking over the position of managing director of the New York branch in 2005. In 2009 he then returned to Stuttgart as partner at sbp until 2013. Since then he has worked as a consultant. As a student of Jörg Schlaich he devoted his time to pedestrian and railway bridges; focusing particularly on the design of filigree transparent shells and stressed cable net facades. On various projects he worked in collaboration with a number of internationally renowned architects including, amongst others, F. O. Gehry, Meinhard von Gerkan und Volkwin Marg (gmp), Rafael Vinoly, Hani Rashid (asymptote), David Childs (SOM), James Carpenter, I. M. Pei, Cesar Pelli, Massimiliano Fuksas, and Shigeru Ban.

Users Review

From reader reviews:

Kenneth Sisk:

The actual book Transparent Shells: Form, Topology, Structure will bring you to the new experience of reading a new book. The author style to spell out the idea is very unique. If you try to find new book to learn, this book very acceptable to you. The book Transparent Shells: Form, Topology, Structure is much recommended to you to see. You can also get the e-book in the official web site, so you can quicker to read the book.

Carole Garner:

The book untitled Transparent Shells: Form, Topology, Structure is the guide that recommended to you to read. You can see the quality of the book content that will be shown to a person. The language that publisher use to explained their way of doing something is easily to understand. The copy writer was did a lot of exploration when write the book, to ensure the information that they share for you is absolutely accurate. You also could possibly get the e-book of Transparent Shells: Form, Topology, Structure from the publisher to make you considerably more enjoy free time.

Marvin Boyer:

It is possible to spend your free time to learn this book this guide. This Transparent Shells: Form, Topology, Structure is simple to deliver you can read it in the recreation area, in the beach, train along with soon. If you did not get much space to bring the actual printed book, you can buy often the e-book. It is make you easier to read it. You can save often the book in your smart phone. Thus there are a lot of benefits that you will get when you buy this book.

Leroy Mallett:

Beside this Transparent Shells: Form, Topology, Structure in your phone, it could possibly give you a way to get nearer to the new knowledge or facts. The information and the knowledge you are going to get here is fresh from your oven so don't possibly be worry if you feel like an outdated people live in narrow community. It is good thing to have Transparent Shells: Form, Topology, Structure because this book offers for your requirements readable information. Do you often have book but you seldom get what it's interesting features of. Oh come on, that wil happen if you have this with your hand. The Enjoyable arrangement here cannot be questionable, including treasuring beautiful island. Techniques you still want to miss it? Find this book in addition to read it from right now!

Download and Read Online Transparent Shells: Form, Topology, Structure By Hans Schober #Z23087I4KY5

Read Transparent Shells: Form, Topology, Structure By Hans Schober for online ebook

Transparent Shells: Form, Topology, Structure By Hans Schober Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Transparent Shells: Form, Topology, Structure By Hans Schober books to read online.

Online Transparent Shells: Form, Topology, Structure By Hans Schober ebook PDF download

Transparent Shells: Form, Topology, Structure By Hans Schober Doc

Transparent Shells: Form, Topology, Structure By Hans Schober Mobipocket

Transparent Shells: Form, Topology, Structure By Hans Schober EPub