

DUOL

WOODEN STRUCTURES



ISO 9001
BUREAU VERITAS
Certification



TECHNOLOGY IS ON OUR SIDE

Spans of up to 150 meters and proven membrane technology have made DUOL well-known far beyond its borders; one of Europe's most modern CNC-controlled production and efficient solutions due to the material advantage as well as the technical know-how.

ECONOMY ABOVE ALL

DUOL wooden structures are often lighter and more competitive than comparable constructions with alternative building materials. Combination of high quality wood, covered with membrane system offers great value, high durability and comfort.

Why DUOL wooden structures:

- Europe most modern CNC production
- Complete one-stop solution, quality control in all phases
- The high-level of factory wooden pre-fabrication reduces assembly time and costs
- 20 years experiences
- Worldwide references
- Innovative DMS™ double membrane system
- Certified solutions
- Ecological



DUOL

Our experiences in membrane technology joined Europe's most modern CNC wood-processing production.

Technology advantage is on our side: wide spans, customizable design, highest quality with lowest price are now possible.

Wooden structure certified with international standards - DIN, EN, PEFC, OENORM, EUROCODE, ISO 9001 and others, guarantees highest quality with most economical design solution.

DUOL stands for safety and economy, as well as for complete one-stop solutions including engineering and production.

ISO 9001

BUREAU VERITAS
Certification





Wien, Austria, Foto: Andreas Hauch

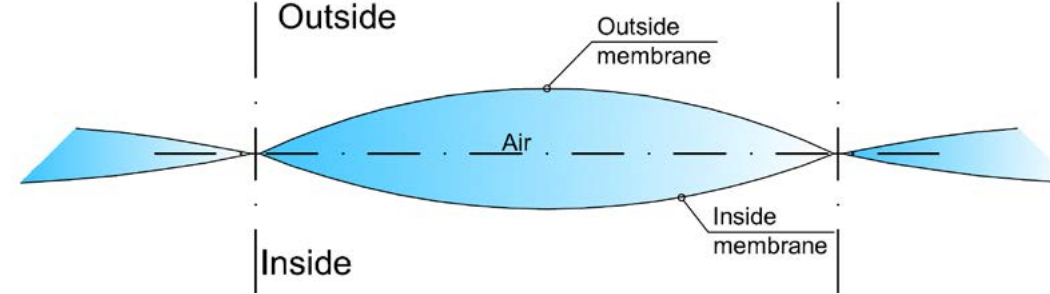
EXPERTS IN MEMBRANE TECHNOLOGY

With more than 20 years experiences in prefabricated structures, with more than 1100 objects all over the world, DUOL is partner you can trust.

Our innovative membrane technology offers perfect insulation, huge energy savings, long durability and perfect aesthetic performance.

BEST THERMAL INSULATION

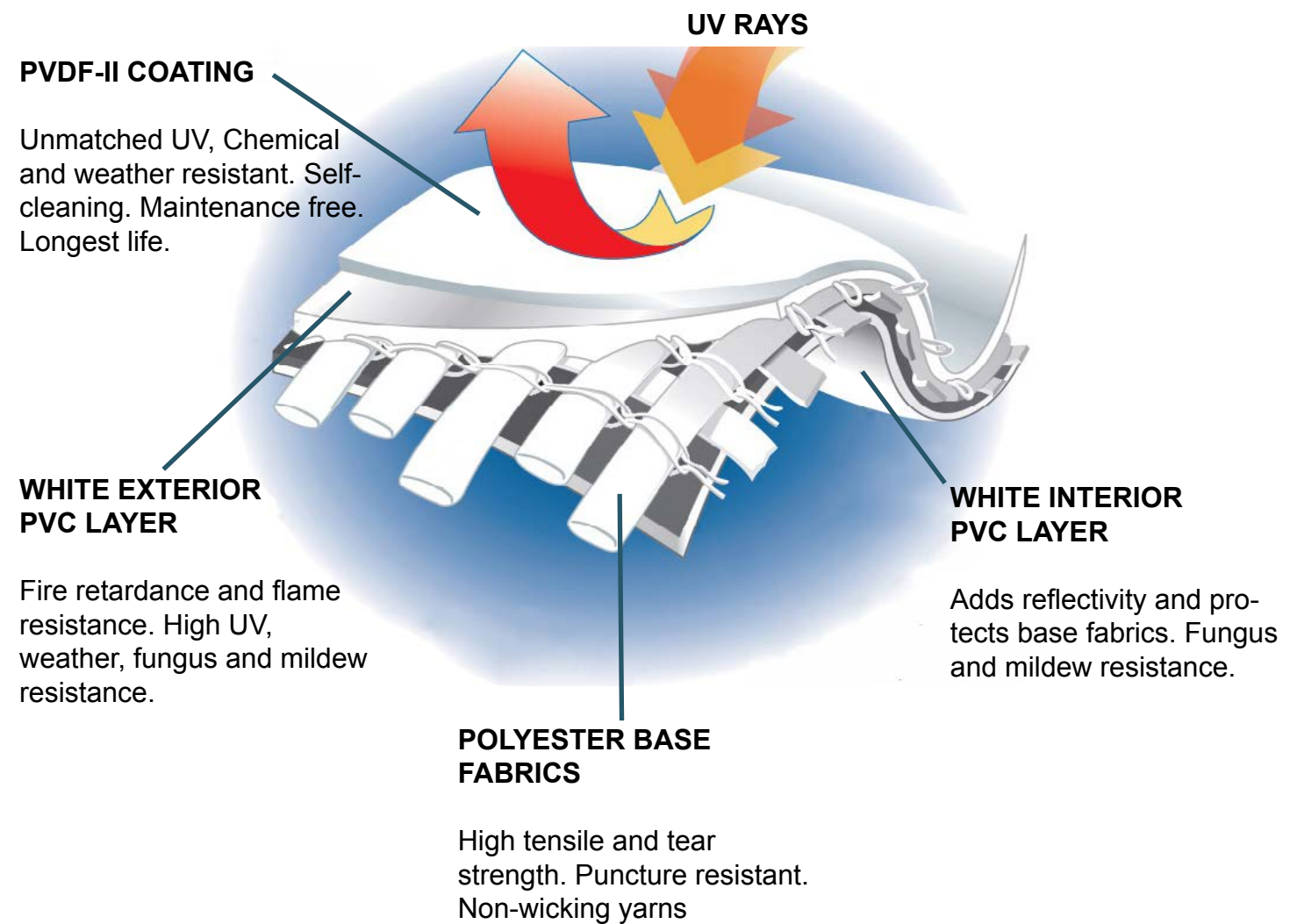
Thanks to DMS™ technology and excellent insulation properties there is no condensation inside the hall. Condensation is on inner side of the membrane and in between layers.



ADVANCED MEMBRANE COATING

Membrane with standard PVDF layer generates electrical charge that attracts some dirt. Our new PVDF-II coating has a special flourine layer on top of PVDF lacquer to prevent dirt adhesion caused by the electrostatic attraction.

HIGHEST QUALITY FABRICS





QUALITY IS TIMELESS

Thanks to DMS™ advanced technology, the replacement of the membrane is not required and the life expectancy is extended to 40+ years, based on tests, experiences and existing projects.

INDOOR LIGHT EXPERIENCE

Both membranes in DMS™ technology are highly translucent, therefore the use of lighting system is not required during the daytime, creating pleasant indoor environment.

PERFECT WHITENESS

DUOL membranes are totally self-cleaning and highly resistant to chemicals. High and consistent transparency & luminosity reduce cleaning costs and reduce lights usage.

FIRE RESISTANCE

All membranes are fire retardant, certificated by following certificates: M2/NFP 92-507, TEST 2/NFPA 701, CSFM T19, B1/DIN 4102-1, BS 7837, B1/ONORM B 3800-1, M2/UNE 23.727, VKF 5.3/SN 198898 and others.





ALL WEATHER COMFORT

DMS™ membrane system is designed for extreme climate conditions, for temperature range from -50 to +70 degrees. Facts are confirmed in a practice too, as DUOL's references are installed all over the world, from Arctic Circle to hot areas of Middle East.



WOODEN STRUCTURES: QUICK, SAFE, ECOLOGICAL

Glued Laminated Timber (GLT) is a material which does not only convince in economical and aesthetical terms but also drives the world of construction in many ways. High quality GLT is characterized by high load capacity, dimensional stability, and the manipulation of timber parts into any shape.



DUOL GLT elements are subjected to severe testing before they are considered for further application. In our work we comply with DIN, EN, OENORM, EUROCODE standard and we have an ISO 9001 certification. Numerous quality labels guarantee the workmanship of our products.

DUOL Wooden structures:

- Long-standing experience in GLT structures
- Ultra-modern and high-tech manufacturing facility
- Internal and external quality assurance (Certified ISO 9001:2008)
- Expertise of an experienced team of structural engineers, civil engineers and skilled workers
- Turn-key services





COMPETENCE TO THE LEAST DETAIL

Since quality makes itself felt in the detail, DUOL has the know-how for proven detail solutions. With state-of-the-art CNC-controlled equipment we oversee your trimming needs to your specifications.



GLULAM WITH STEEL PARTS

Everything from an experienced hand! Save time, money and hassle: Our engineering department will develop standard details for steel connections which can withstand any structural analysis and which are available as a kit in a short time frame. Our clients benefit from well-conceived solutions and convenient service under one roof!



QUALITY: THE FOUNDATION OF OUR WORK!

Just like in all other sectors we are committed to top quality in element construction, which we guarantee by using carefully selected timber, employing perfectly trained personnel and applying extremely efficient production processes. For DUOL a tight quality assurance system and continuous inspection are a matter of daily routine.



BEING YEARS AHEAD IN TECHNOLOGY IS THE SECRET OF OUR SUCCESS

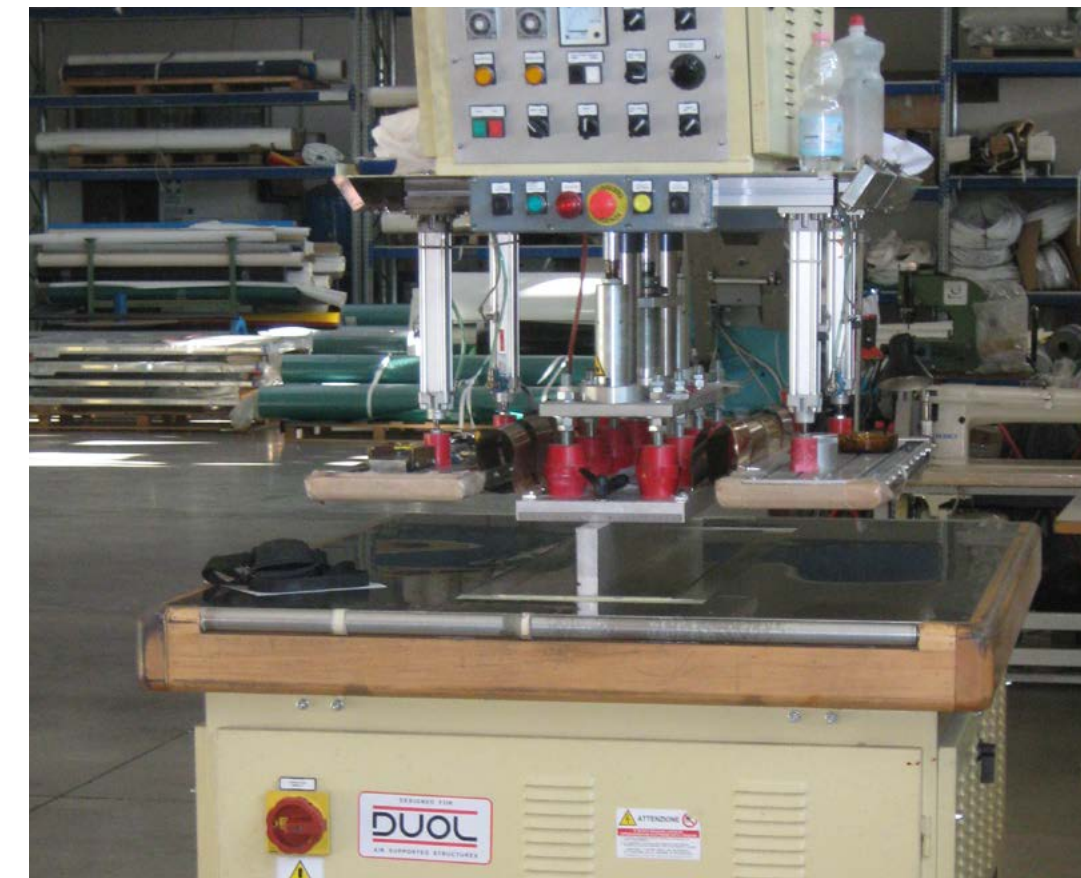
In cooperation with our partners we can optimize costs in production with the most modern production plant in Europe.

In our work we comply with DIN, EN, PEFC, OENORM, EUROCODE, and we have an ISO 9001 certification.



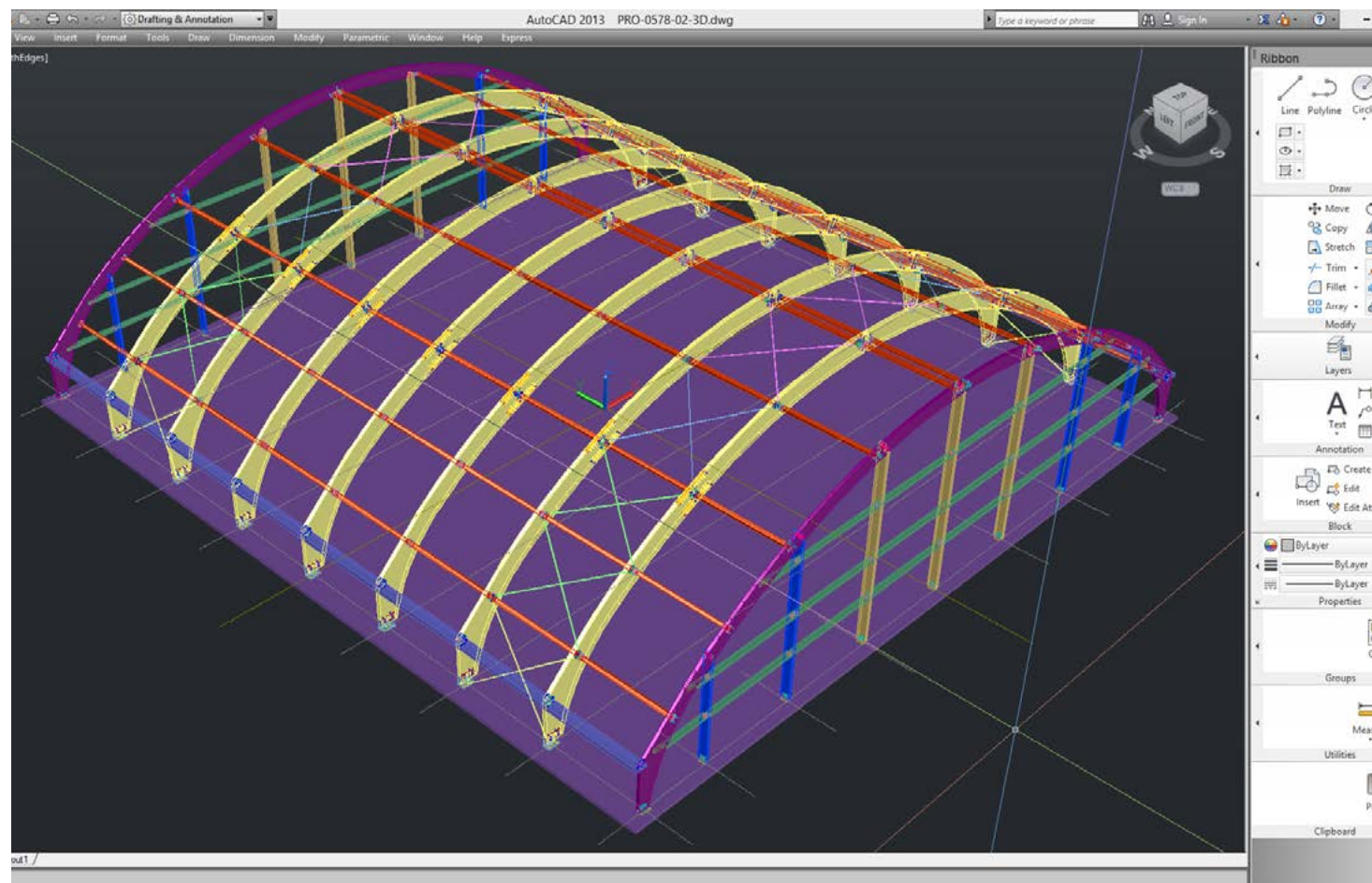
ONLY THE BEST WILL GET AHEAD

Constant checks using ultraviolet light, x-ray and laser technology guarantee outstanding quality. State-of-the-art production facility, experienced team and strict quality controls ensure that the highest of standards are met.



ENGINEERING / CONSTRUCTION

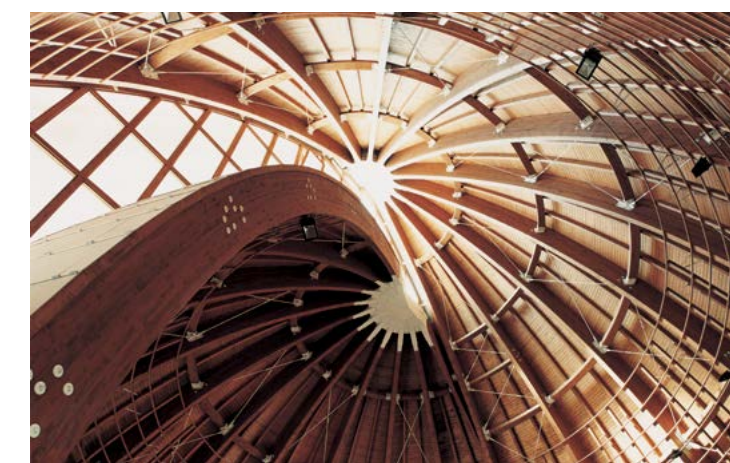
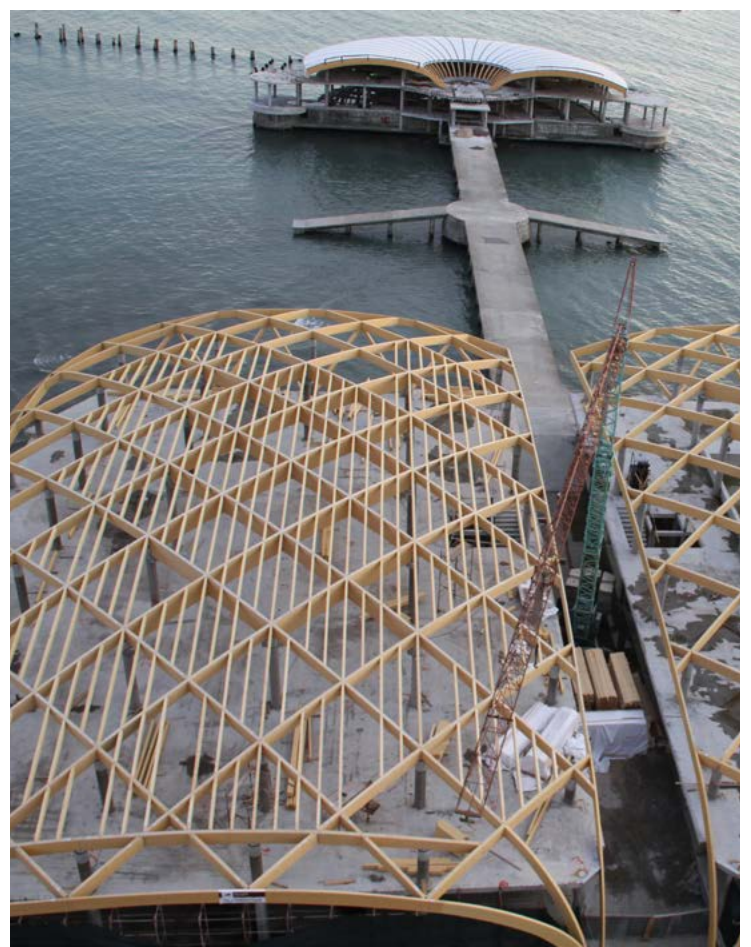
CAD-competence and project-optimizing with internationally known engineers economic, ecological and esthetic solutions, individual design.





CUSTOMIZED DIVERSITY

High precision and room for architectural creativity are guaranteed as the production process is CNC-controlled from beginning to end.





FULL SERVICE “UNDER ONE ROOF“

We offer our customers an integrated and complete one-stop solution – from hall design to production and logistics to installation including roof covering.



COMPLETE TURN KEY PROJECT

As company involved in sport area for more than 20 years, we have the knowledge to offer completely equipped sport arena.

We are closely linked to trusted suppliers of sports equipment and sport floorings, offering highest quality products, designed using the latest technology and certified by international sports associations.





SHORT ASSEMBLY TIME

The long-time experience of our static and logistics experts provides for smooth workflows; extensive prefabrication processes and a well-rehearsed installation team guarantee short installation times. With one-stop construction, production and installation sequences DUOL offers future-proof overall solutions and trouble-free implementations even with short-term target dates.







ENVIRONMENTAL COMMITMENT

Lightweight and durable, Duol fabrics are also recyclable. The unique industrial technology guarantees 100% of fabric components to be recycled.



DUOL wooden structures are built from natural, regrowing, sustainable material - wood. Our structures require less fossil energy in manufacture than comparable projects using other materials. DUOL wooden structures covered with latest membrane technology are durable and energy efficient. This saves energy and minimizes emissions. Additionally, timber contributes to the reduction of CO² and can be thermally recycled at the end of its utilization phase.



OPTIONAL ELEMENTS

Lightning system

The white translucent roof provides a good level of natural light during day-light housing. However, we can design and install complete lighting and electrical requirements to suit the activity within the building. Lighting is provided by metal-halogen projectors 400W, which are fixed on top of wooden construction. No. of projectors depends on a kind of sports activities in a hall.



Heating system / Cooling system

Heating and cooling system provides ideal climate conditions inside the construction. It can be equipped only with one system or with both heating and cooling system. Standard Cooling units have 100 kW, 150 kW, 250 kW of cooling capacity.



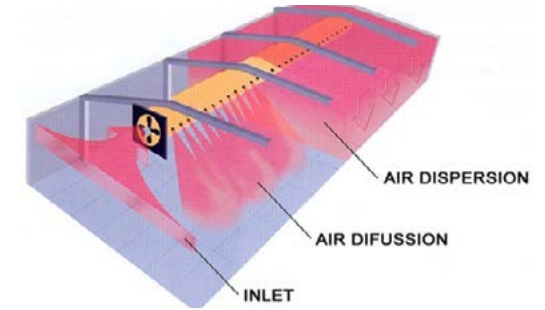
Double membrane system

A unique solution of double membrane system guarantees resistance to harsh climatic conditions and ensure the highest temperature isolation.



De-stratification system

Air blow tube works in a function of air de-stratificator, providing regular heat distribution inside the wooden construction. It is mounted on the top of the construction.



Transportation entrance and Emergency door

Transportation entrance allows easy access to a hall. Entrance is made by steel frame, width 4,5m and used height 4,30m. It is closing with sliding membrane.

The construction is equipped by proper quantity of one-wing pedestrian doors, mounted on both side walls of the construction. Doors are made from aluminum. Opening with special secure hook also allows to be used in an emergency situation.



WOODEN STRUCTURES

DUOL

Kapalniska pot 2, 1351, Brezovica, Slovenia

Tel: +386 (0) 1 3601 400

Fax: +386 (0) 1 3601 438

duol@duol.si

www.duol.eu