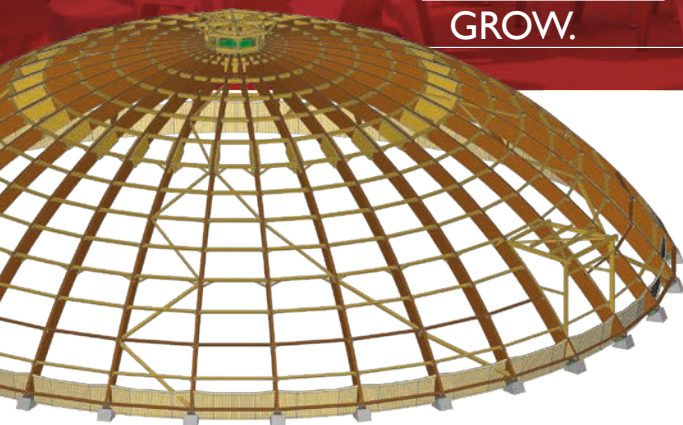




WHERE
IDEAS
CAN
GROW.

M  **M**
MAYR MELNHOF HOLZ



MM complete

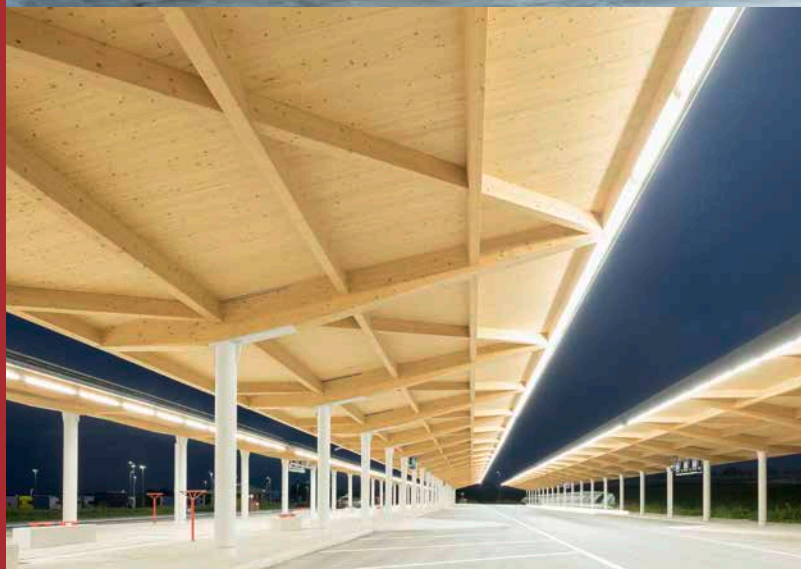
Timber engineering & turn-key construction
by HÜTTEMANN 





WHERE IDEAS CAN GROW.

Mayr-Melnhof Holz Holding AG is one of the leading and most prominent companies in the timber-processing industry in Europe, a market-leading producer of glued laminated timber, and a driving force in the advance of cross laminated timber, the material for buildings of the future. With the integration of the Hüttemann companies into the Mayr-Melnhof Holz Group in 2018, the decades of expertise in timber engineering and hall construction have been included in the comprehensive product portfolio. With its own engineering office, the group of companies is the perfect provider of "MM complete, timber engineering & total solutions by Hüttemann" for commercial customers in the area of complete solutions. If you have strong roots you can grow beyond your own limits. The roots of the Mayr-Melnhof Holz group of companies go back all the way to 1850. Our group of companies has more than 170 years of experience in processing timber, harvested exclusively from sustainably managed forests. Secure raw material supply, chain of custody traceability, transparent product quality assurance and ongoing process optimization are the foundations of reliability and product quality at Mayr-Melnhof Holz.





Products of Mayr-Melnhof Holz



MM masterline
Glued-laminated timber



MM vistaline
Duo-/Trio beams



MM profideck
Glulam ceiling elements



MM blockdeck
Floor and wall beams



MM HBE
Solid timber
construction element



MM crosslam
Cross-laminated timber



K1 yellowplan
Formwork panels



HT 20plus
Formwork beams

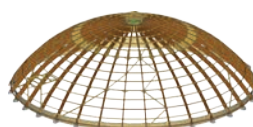


MM sawn timber

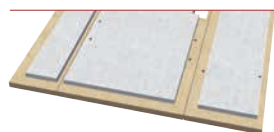


MM royalpellets

Custom elements & engineering solutions



MM complete
Timber engineering & turn-key construction
by HUTEMANN



X-LAM CONCRETE
Timber-concrete composite element
by MMK

CONTENTS

Properties	4
Range of services	5
Areas of use & applications	5
Timber construction elements	6
Standard hall supporting structures	8
Assembly & site coordination	9
References	10



Facts
Timber engineering,
hall constructions &
complete solutions
MM complete by Hüttemann

- Turnkey solutions – everything from a single source, from planning to acceptance and handover
- Decades of experience in timber engineering & hall construction
- High-quality in-house production of all wooden components including joinery in standard shapes and special shapes
- PEFC-certified quality products from Mayr-Melnhof Holz made of glued-laminated timber and cross-laminated timber, optionally in visible quality or industrial quality
- High degree of prefabrication
- Coordination of all trades involved
- Externally monitored operation

Everything from a single source!

Mayr-Melnhof Holz acts as a full-service supplier for engineered timber and hall construction and delivers turnkey solutions. Timber engineering & hall construction **MM complete** by Hüttemann stands for decades of experience in technically demanding timber construction. The range of services includes the technical preliminary and detail planning, the production and joinery of the timber construction elements, the logistics by means of special transports, the assembly at the construction site as well as the handling and coordination of in-house and sub-trades. Mayr-Melnhof Holz can draw on numerous successfully completed projects in hall and industrial construction, sports facilities and leisure facilities as well as residential and commercial construction. There are hardly any limits to the variety of designs. Static, construction and installation plans are prepared in our engineering office or in close cooperation with selected partners. All important business parameters, such as short construction times, flexible room layout and optimum material flow, are taken into account during planning.



Certificate according to
the Construction Product
Regulation - CPR
 EN 14080:2013



Promoting
 Sustainable Forest
 Management
www.pefc.org



Environmental Seal
of Approval
 (IBR Rosenheim)

Range of products

From simple load-bearing systems or complex wooden structures to kits or complete solutions – with **MM complete** by Hüttemann we provide our business partners with experts at every stage of their construction project. From planning to joinery, from transport to installation, they ensure the best result with precision, experience and cross-trade service.

- Architect and builder consultation
- Static and structural design
- Technical development
- Planning according to new Energy Saving Regulation (Germany)
- Fire protection & soundproofing expertise on request
- Building physics calculation
- In-house production and CNC joinery
- Logistics & just-in-time delivery to the construction site
- Assembly by qualified personnel
- Handling of in-house and sub-trades as well as site organisation



Areas of use & applications



Turnkey solutions including coordination of all trades for

- Commercial, office and industrial buildings
- Warehouses and exhibition halls
- Municipal buildings such as kindergartens, schools and nursing homes
- Tourism buildings, such as hotel and restaurant buildings
- Recreational facilities, such as gymnasiums and swimming pools
- Residential construction

Scope of our in-house trades


- Timber engineering
- Columns, pillars and supporting structures
- Roof structures
- Solid wood walls, wall cladding and façades
- Wood ceilings

Sub-trades

- Civil engineering and surface paving
- Master builder works
- Roofing with SHE and tinsmith work
- Gates, doors, windows and glazing
- ... other trades: technical equipment (project-related)

MM complete timber construction elements

MM complete by Hüttemann ensures the optimum use and perfect interplay between the high-quality, PEFC-certified timber building products from Mayr-Melnhof Holz, optionally in visible or industrial quality, manufactured with a passion for wood in our own factories in accordance with product standard EN 14080:2013.

- **MM masterline** Glued-laminated timber
- **MM masterline** Glued-laminated timber special components
- **MM crosslam** Cross-laminated timber
- **MM vistaline** Duo-/Trio beams
- **MM profideck** Glulam ceiling elements
- **MM HBE** Solid timber construction element
-  Timber concrete composite element
- 3-layer panels

Advantages of timber as a building material

- Low dead weight and high load capacity
- Space gains due to low thicknesses
- Solid, value-retaining construction with visible wood surface
- Good behaviour in case of fire – wood burns predictably and slower than other building materials
- Excellent dimensional stability
- Large spans
- Due to the large product range, the right product for the respective application is always available
- Free forms and various dimensions
- Simple assembly of prefabricated elements
- Short construction time



Technical specifications

On request, Mayr-Melnhof Holz offers the installation of steel and connecting parts. Pre-assembly in the factory has a cost-saving effect on subsequent assembly on the construction site and simplifies processes.

MM masterline Glued-laminated timber

Wood species	Spruce (Picea Abies), Larch (Larix)
Strength class	GL 24c, GL 24h, GL 28c, GL 28h, GL 30c: Available on request: GL 30h and GL 32c
Surface	Planed and chamfered on 4 sides
Quality	Visible (SI), Industrial (NSI)
Thickness	6 cm - 28 cm
Height	10 cm - 224 cm
Lengths	4 m - 56.3 m

MM crosslam Cross-laminated timber

Wood species	Spruce (Picea Abies)
Strength class	C24
Surface	Sanded
Quality	Non-visible (NSI) Industrial (ISI) Residential (WSI)
Thickness	60 mm - 320 mm (PUR) und 60 mm - 300 mm (MUF)
Height	3.5 m (PUR) und 3.0 m (MUF)
Lengths	16.0 m (PUR) und 16.5 m (MUF)

Beam systems

Load-bearing glulam structures

- Parallel beams
- Monopitch roof beams
- Saddle roof girders
- Arched girders
- Fish belly girders
- Frame systems

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purchase transaction. This printed material does not constitute an offer and/or contract of any type. We also recommend that you consult our staff during the planning of your projects. They will be happy to assist you on a non-binding basis. Any reproduction of this work, even in part, is only permitted with the express permission in writing by the Mayr-Melnhof Holz Group.

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Element shapes

Static system		
Parallel beams / single span 	Rib and box elements 	Finger joint
Parallel beams / multi-span 	Trusses 	Three-hinge system with finger jointed frame corner
Parallel beams with static cantilever 	Arched beams 	Three-hinge system with curved frame corner
Monopitch roof beams 	Saddle roof beams with curved lower boom 	Trussed systems with straight beam
Saddle roof beams with straight lower boom 	Fish belly beams 	Trussed systems with curved beams
Block gluing 	Free forms 	<p>d = lamella thickness l = span h = height b = width \bar{U} = preamber * recommended roof pitch</p>

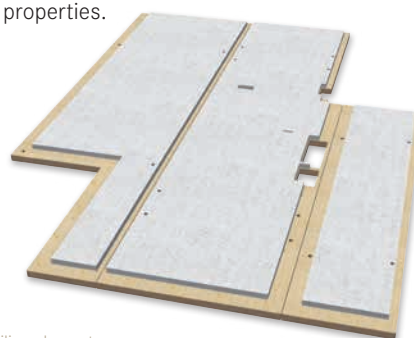
Cross-laminated planar load-bearing timber elements

- Ceiling structures
- Roof structures
- Load-bearing and bracing wall, ceiling and roof elements
- Wall structures and fire walls
- Possibility of combination with other building materials (insulation facades, XC® wood-concrete composite ceiling elements)

Wood-concrete composite elements XC® by MMK

XC® prefab elements are prefabricated, large-format and standardised panel-shaped wood-concrete composite components for structural applications in building construction. The hybrid is used, for example, for high-quality floor and partition ceilings. XC® optimally combines material properties: The cross laminated timber absorbs the tensile forces occurring in the lower cross-section of the structural element, while the concrete absorbs the

compressive forces in the upper cross-section area. As a structural element, the XC® wood-concrete composite element manages large spans with improved vibration behaviour and good sound insulation properties.

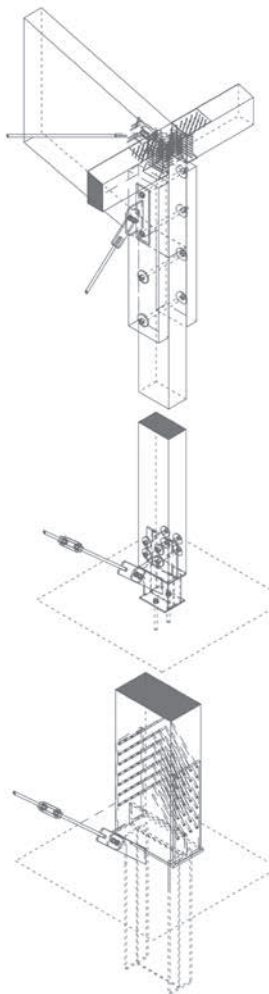


XC® living ceiling elements
 (Example configuration, assembled according to customer specifications)

Standard hall supporting structures

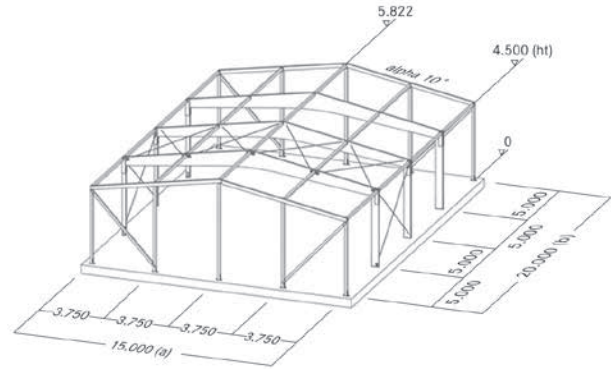
To enable us to serve our customers even faster, we have defined standard hall types. The **MM complete** by Hüttemann standard halls are not halls with fixed standard dimensions, but variable system halls, optionally available with a saddle roof or monopitch roof and, if desired, including solar power systems.

Our individual approach makes it possible to adapt the hall dimensions precisely to the construction project's respective requirements and to implement the project in a way that saves raw materials and is therefore economically efficient. In order to optimally design the respective structure with variable dimensions, we have standardised the connections within the structure and its connection to the foundation. The details are based on many years of experience in the fields of statics, production, joinery and assembly. For each hall, we prepare a project-specific verifiable statics.



Hinged support (top) and built-in support (bottom). The galvanized steel shoes are already mounted at the factory, as are the lugs made of wood at the support head (fork restraint).

Standard hall with saddle roof trusses (example)

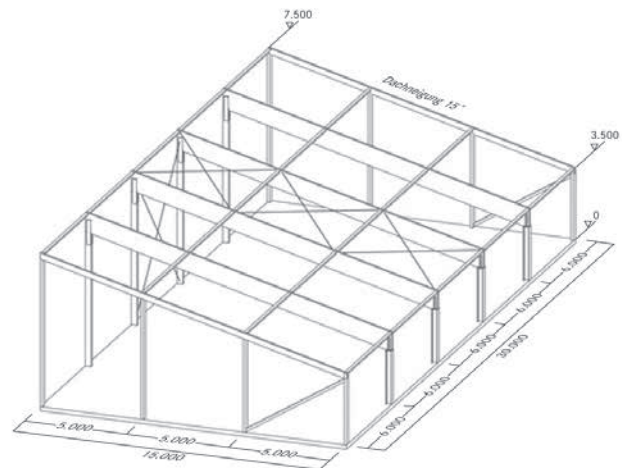


Dimensions (variable)

- Floor plan: (a x b) = 15.00 m x 30.00 m = 450 m²
- Eaves height (ht) = 3.50 m
- Ridge height = 7.50 m
- Roof pitch (alpha) = 15° monopitch roof

Standard hall with monopitch roof: (example)

This hall construction is ideally suited for equipping with a solar power system.



Dimensions (variable)

- Hall width: 15.00 / 17.50 / 20.00 m
- Hall length according to customer requirements: from 20.00 m in 5.00 or 6.00 m Raster
- Eaves height: 4.50 – 6.00 m
- Roof pitch: 10° saddle roof

Assembly & site coordination

We have been working closely with our partner companies for many years. Together, we erect the entire supporting structure, including the roof structure, on your construction site, thus ensuring a qualitatively flawless, expert and efficient installation. However, we will also gladly take care of the entire management of the construction site for you, up to the building including walls and roof construction, act as a general contractor or, if you wish, hand over your commissioned building as a turnkey project.

Scope of project services

- Statics and works planning
- Production and delivery
- Assembly of the roof structure
- Hull watertight
- General contractor
- Turnkey execution



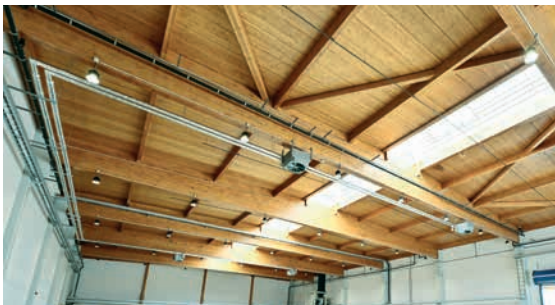
References

Gebrüder Becker GmbH Oberflächentechnik Iserlohn | DE

Services rendered:

- Statics and works planning
- Production and delivery
- Assembly of the roof structure
- Hull watertight
- General contractor
- Partially turnkey execution

Completion: 2020



Landwehr Bauschuttdepot GmbH & Co. KG Rheda-Wiedenbrück | DE

Services rendered:

- Statics and works planning
- Production and delivery

Completion: 2021



Trilux GmbH & Co. KG Wiebelsheide | DE

Services rendered:

- Statics and works planning
- Production and delivery
- Assembly of the roof structure
- Hull watertight
- General contractor
- Turnkey execution

Completion: 2008



Witter-Wirsam Grundstücksverwaltung GmbH & Co KG

Holzland Hasselbach in Rosdorf bei Göttingen | DE

Services rendered:

- Statics and works planning
- Production and delivery
- Assembly of the roof structure
- Hull watertight

Completion: 2010



References

Holzindustrie Gustav Hassel GmbH Stockum Püschchen | DE

Services rendered:

- Statics and works planning
- Production and delivery
- Assembly of the roof structure
- Roof watertight

Completion: 2020



Schwimmbad Aquafun Soest | DE

Services rendered:

- Statics and works planning
- Production and delivery
- Assembly of the roof structure

Completion: 2005



SKW Stickstoffwerke Piesteritz GmbH Lutherstadt Wittenberg | DE

Services rendered:

- Statics and works planning
- Production and delivery
- Assembly of the roof structure
- Hull watertight

Completion: 2013



Kaschke Components GmbH Göttingen | DE

Services rendered:

- Statics and works planning
- Production and delivery
- Assembly of the roof structure
- Hull watertight

Completion: 2012



Our sites



**KAUFMANN
BAUSYSTEME**



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