



# Wonnemann - Composite elements

## Combine function with a beautiful design!

Wonnemann sandwich panels are combined with 16 mm rigid foam cores using state-of-the-art production techniques. This creates pressure-resistant composite elements with a symmetrical structure of 4 / 16 / 4 mm. A special adhesive ensures firm and tight bonding of the components.

Rigid foam cores are light, CFC-free and have good heat-insulating properties. The polyurethane rigid foam (PUR/AL) is continuously foamed. An extremely high degree of moisture resistance is obtained by the diffusion-tight aluminium film located on both sides. Elements manufactured from extruded polystyrene rigid foam (XPS) are fire resistant.

Composite elements can be finished very easily. When applied with the corresponding surface treatment they are particularly suitable for outdoor use and can be used as:

- ▶ cross lamination,
- ▶ entrance door panels,
- ▶ garage door panels,
- ▶ wall and ceiling panels,
- ▶ partition walls.

Of course you also get the composite elements in a soundproof and burglar-resistant construction.

### Combine lightweight composite elements with high technical requirements!

Our know-how allows us to provide you with lightweight, decorative panels that fulfil the highest technical requirements. This ensures noise, moisture and the cold remain outside!

Wonnemann composite elements are available in various configurations in order to fulfil individual market requirements.



Specifications ▶ ▶ ▶



**WONNEMANN**  
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## Specifications

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### A: Composite elements

weight 350 kg/m<sup>3</sup>

**Face and backing:** Wonnemann fancy veneered plywood

**Core:** **PUR/AL** – polyurethane rigid foam with vapour seal on both sides or  
**XPS** – extruded polystyrene rigid foam

**Thicknesses:** 24 mm

**Layers:** 3-ply

**Configuration:** 4 / 16 / 4 mm

**Panel sizes:** 2500 x 1700 mm

**Bonding:** AW according to DIN 68705

**Wood types:** Okoumé sliced and peeled veneer, Carolina Pine, Oak, Spruce, Calabrian Pine, Sapele, Moabi, Okoumé Finline

**Special features:** Top layers are also available with 9.5 mm profile plywood (total thickness: 35 mm). Other thicknesses, wood types and dimensions are available on request.

### U-Values (W/m<sup>2</sup>K)

Configuration	XPS	PUR-AL
4-16-4 = 24	1.465	1.12
4-20-4 = 28	1.093	0.945
4-25-4 = 33	0.92	0.789
4-32-4 = 40	0.753	0.642

**special sizes on request**

### B: Fancy veneered plywood for Composite elements

weight 480 kg/m<sup>3</sup>

**Face veneers:** selected peeled veneers and glue jointed sliced veneers

**Core:** tight, joint-free Fuma peeled veneer

**Thicknesses:** 4 mm

**Layers:** 3-ply

**Panel sizes:** 2500 x 1700 mm      2500 x 1250 mm  
2200 x 1100 mm      2150 x 920 mm

**Bonding:** AW according to DIN 68705

**Wood types:** see above

**Special features:** use for composite elements

**Available from stock.**

**For more information, see our price list.**

In order to be able to address your individual needs please provide us with details of the intended use, dimensions, your requirements and quality criteria. We would be pleased to implement your requests.

**We promise you top quality!**

