

**CETRIS® cement bonded particleboard** is a construction material of excellent qualities. It is best suited for floor systems, attic adaptations, loft superstructures, ventilated façades, balconies, fire protection applications, systems of permanent shuttering and other applications.



**CETRIS®**  
www.cetris.cz

Europe's biggest producer of cement bonded particleboards

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## Main advantages of CETRIS® boards

### Basic physical and mechanical properties of the CETRIS® board

|   |                             |       |
|---|-----------------------------|-------|
| Density   | min. 1000 kg/m <sup>3</sup> |       |
| Bending tensile strength  | min. 9.0 N/mm <sup>2</sup>  |       |
| Modulus of elasticity   | min. 4500 N/mm <sup>2</sup> |       |
| Tensile strength perpendicularly to board plane (internal bond)           | min. 0.5 N/mm <sup>2</sup>  |       |
| Mass balanced moisture at 20 °C and relative humidity 50 %                | 9 ± 3 %                     |       |
| Linear expansion at change of air humidity from 30 % to 85 % at 20 °C     | max. 0.2 %                  |       |
| Thermal expansion coefficient   | 0.11 mm/m °C                |       |
| Water absorption after 24 hours submersion in water                       | max. 32 %                   |       |
| Thickness swelling after 24 hours submersion in water                     | max. 1.5 %                  |       |
| Reaction to fire according to EN 13501-1:2002                             | A2 -s1, d0                  |       |
| Heat conductivity coefficient   | max. 0.35 W/mK              |       |
| Sound transmission loss according to ČSN 730513:                          | thickness 8 mm              | 30 dB |
|   | thickness 12 mm             | 31 dB |
|   | thickness 20 mm             | 32 dB |
| Vapour resistance factor according to EN 12 572                           | min. 52,8                   |       |
| Internal bond after cycling in humid environment according to EN 321      | min. 0.3 N/mm <sup>2</sup>  |       |
| Thickness swelling after cycling in humid environment according to EN 321 | max. 1.5 %                  |       |
| Frost resistance at 100 cycles according to EN 1328                       | R <sub>f</sub> > 0.7        |       |

### Environment Friendliness

The cement-bonded particleboards are ecological and environment friendly. They do not contain hazardous substances such as asbestos or formaldehyde and are resistant to petrol and oils.



### Fire Resistance

CETRIS® cement-bonded particleboard is fire resistant and pursuant to the European standard EN 13 501-1 falls into the A2-s1,d0 class with respect to the reaction to fire – non-flammable.



### Perfect Sound Barrier

CETRIS® boards absorb sound (airborne sound transmission loss 30–35 dB).



### Resistance Against Weather Conditions

CETRIS® cement-bonded particleboard is the best material for wet environment as well as exteriors thanks to its resistance to moisture.



### Frost Resistance

CETRIS® cement-bonded particleboards are frost resistant; they have been tested for 100 freezing cycles pursuant to EN 1328.



### No Hygienic Risks

CETRIS® boards cause no hygienic risk, do not stink and do not contain any hazardous substances.



### Resistance Against Moulds And Fungi

Thanks to the resistance of CETRIS® boards against moisture the surface is resistant against mould growth.



### Resistance Against Insects

Thanks to their cement content CETRIS® cement-bonded particleboards are absolutely resistant against insects.



### Low Weight

CETRIS® boards are classified as light material (a 10-mm board weighs only 14.0 kg/m<sup>2</sup>).



### Elasticity

The module of elasticity of a CETRIS® board is greater than 4,500 N/mm<sup>2</sup> and the bending strength of boards exceeds 9 N/mm<sup>2</sup>.



### Easy Workability

CETRIS® cement-bonded particleboards can be processed by common wood processing machines. The boards may be drilled, cut, milled and sanded.



10005  
OF POSSIBILITIES

A4-3L/IMG/EN/5000/06-2011

10005  
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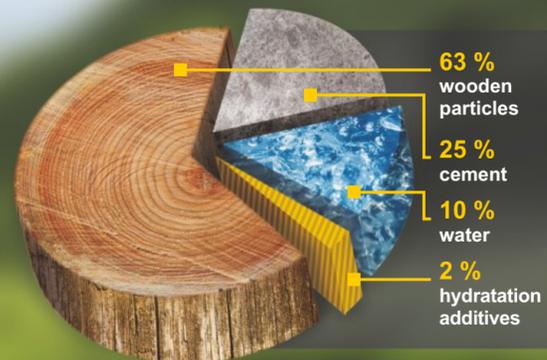
**CETRIS® cement bonded particleboard is a construction material of excellent qualities suited for all types of constructions and reconstructions.**

The CETRIS® cement bonded particleboards can be used in all prefab systems and in the most sophisticated projects. They are perfect for dry constructions and for applications everywhere there, where other positive qualities of this building material are manifested.

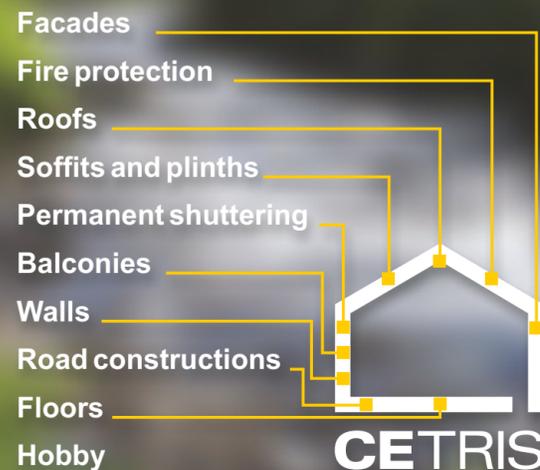


CETRIS® cement bonded particleboards are produced by pressing a mixture of wooden particles and portland cement with water. The surface is smooth, the color is cement-like grey.

Cetris® cement bonded particleboard is used as a construction material where resistance against humidity, strength, incombustibility, hygienic and ecological purity is needed. The Cetris® boards are free of asbestos and formaldehyde, resistant against insect and fungi attacks, incombustible and sound-insulating.



**i** For more information, please visit our website [www.cetris.cz](http://www.cetris.cz) or ask for printed documents or DVD with detailed technical specifications.



**Types of CETRIS® cement bonded particleboard**

**CETRIS® boards without surface finish**

**CETRIS® BASIC**

A basic type of the cement bonded particleboard with a smooth cement grey surface. The standard production thicknesses are 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 and 32 mm. On special request also boards 34, 36, 38 and 40 mm thick can be produced. The basic size of the board is 3350 x 1250 mm. The boards can be delivered cut down to a requested size. The edges can be straight or rounded or chamfered at 45° angle. They can be also milled to the semigroove (12 mm or thicker boards) or the tongue-and-groove (16 mm or thicker boards) profiles. Holes can be also predrilled in the boards.



**CETRIS® PD**

A flooring cement bonded particleboard in the size 1250 x 625 mm (including the tongue) designed for dry flooring systems. The standard thicknesses of the CETRIS® PD are 16, 18, 20, 22, 24, 26 and 28 mm. Other thicknesses can be delivered on special request. The boards are furnished with tongue-and-groove profile around all edges. They are designed to be laid on beams or on old floors that are being renovated.



**CETRIS® PDB**

A cement bonded particleboard calibrated by sanding in the size 1250 x 625 mm (including the tongue) designed for dry flooring systems. The thickness tolerance is reduced by sanding to less than ±0.3 mm. The standard thicknesses of the CETRIS® PDB are 16, 18, 20, 22, 24, 26 and 28 mm. Other thicknesses can be delivered on special request. The boards are furnished with tongue-and-groove profile around all edges. They are designed to be laid on beams or on old floors that are being renovated.



**CETRIS® PROFIL**

A cement bonded particleboard 10 or 12 mm thick with an embossed pattern of wood or slate stone, primed and painted with a finish paint according to the RAL or NCS colour tables. By special order also the boards 34, 36, 38 and 40 mm thick can be produced. The basic size of the board is 3350 x 1250 mm. Other services (custom sizing) can be ordered similar as with the CETRIS® BASIC board. Due to their decorative appearance, CETRIS® PROFIL boards are used mainly as façade cladding panels and as interior panelling.



**CETRIS® AKUSTIC**

CETRIS® AKUSTIC cement bonded particleboard is made by processing (drilling of regularly spaced holes with the diameter of 12 mm) in the CETRIS® BASIC board type. The standard board size is 1,250 by 625 mm and the thickness is 8 or 10 mm. The board surface is smooth, cement grey (without surface finish). Drilling of regularly spaced holes results, in addition to the existing high mechanical strength values in improved acoustic properties. CETRIS® AKUSTIC is a board used for acoustic cladding especially in sporting facilities, spaces with varying temperature and humidity and special demand buildings.



**CETRIS® HOBBY PLANK**

CETRIS® HOBBY PLANK is a cement-bonded particleboard of 8 mm thickness designed primarily for vented facades in the PLANK overlapped system. Overall size of the board is 1 250 x 240 mm, visible size is 1 250 x 200 mm. Horizontal joint is always overlapped by 40 mm, and only the vertical joint is visible. The boards are delivered without surface finish in packages of 6 pc, including 24 screws.



**CETRIS® boards with surface finish**

**CETRIS® PLUS**

A cement bonded particleboard 8 to 32 mm thick with a smooth surface. By special order also the boards 34, 36, 38 and 40 mm thick can be produced. The surface of the board on both sides and all edges is treated with a white primer. Single layer of primer is applied on bottom side and all edges and double layer on the top side. The basic size of the board is 3350 x 1250 mm. Other services (customizing) can be ordered similar as with the CETRIS® BASIC board. Priming improves the adhesion between the board and the final paint layer and reduces the consumption of the top layer paint.



**CETRIS® PROFIL PLUS**

A cement bonded particleboard 10 or 12 mm thick with an embossed pattern of wood or slate stone. The surface of the board on both sides and all edges is treated with a white primer. Priming improves the adhesion between the board and the final paint layer and reduces the consumption of the top layer paint. The basic size of the board is 3350 x 1250 mm. Other services (customizing) can be ordered similar as with the CETRIS® BASIC board. Due to their decorative appearance, CETRIS® PROFIL PLUS boards are used mainly as façade cladding panels and as interior panelling.



**CETRIS® FINISH**

A cement bonded particleboard 10 to 32 mm thick with a smooth surface, primed and painted with a finish paint according to the RAL or NCS colour tables. By special order also the boards 34, 36, 38 and 40 mm thick can be produced. The basic size of the board is 3350 x 1250 mm. Other services (customizing) can be ordered similar as with the CETRIS® BASIC board. CETRIS® FINISH boards are used mainly as façade cladding panels and as interior panelling. CETRIS® FINISH boards are made to order. Minimum order quantity is 50m². Suitability of the requested colour shade should be consulted with the producer.



**CETRIS® PROFIL FINISH**

A cement bonded particleboard 10 or 12 mm thick with an embossed pattern of wood or slate stone, primed and painted with a finish paint according to the RAL or NCS colour tables. The basic size of the board is 3350 x 1250 mm. Other services (customizing) can be ordered similar as with the CETRIS® BASIC board. Due to their decorative appearance, CETRIS® PROFIL FINISH boards are used mainly as façade cladding panels and also as interior panelling. CETRIS® FINISH boards are made to order. Minimum order quantity is 50m². Suitability of the requested colour shade should be consulted with the producer.



**CETRIS® AKUSTIC FINISH**

CETRIS® AKUSTIC FINISH cement-bonded particleboard is the result of treating (drilling evenly spaced 12mm diameter holes) the basic board type. The standard size of the board is 1 250 x 625 mm with thickness of 8 or 10 mm. The particleboard has a smooth surface treated with primer coat and surface finish as per the RAL, NCS color tables. The boards can be delivered with predrilled fixing holes and milled edges. They are made to order only. Minimum order quantity is 50m². Suitability of the requested colour shade should be consulted with the producer.



**CETRIS® GARDEN PATCH KERB**

CETRIS® GARDEN PATCH KERB is a CETRIS® cement-bonded particleboard of rectangular format, thickness of 28 mm and size of 1,250x250 mm, made by cutting the CETRIS® BASIC board. Both sides of the top edge are chamfered, side edges are milled to allow joining (tongue+groove). Kerbs may be cut, drilled or milled. Kerbs may be set in concrete, or directly in a trench to be filled with soil.

