

Product data sheet	System Combi T – 36 GFV – 6	
<b>System sketch:</b>		
	<p>1 Panel 600 x 600 mm type tooth milling (ZF)</p> <p>2 Self-adhesive foam tape</p> <p>3 Pedestal glued with panel and subfloor (type of construction depending on floor height)</p> <p>4 Reinforcement</p>	
<b>System:</b>		
Panel:	fibre-reinforced calcium sulphate panel, 36 mm	
Panel dimensions:	600 x 600 mm (ZF)	
System weight:	~ 59 kg/m <sup>2</sup>	
<b>Substructure:</b>		
Pedestal grid:	600 x 600 mm	
Reinforcement in perimeter area:	stringer or additional pedestal	
Pedestal material:	galvanized steel	
Construction height:	60 - 2000 mm FFH	
<b>Floor coverings:</b> <sup>1)</sup>		
	textile and elastic coverings, parquet, natural stone, artificial stone, stoneware (see info regarding stone covering on page 2)	
<b>Load values:</b>		
Concentrated load:	6,000 N	
Deflection without covering at ≤ 0,5 mm:	3,000 N	
Deflection without covering at ≤ 0,92 mm:	5,500 N	
Deflection without covering at 6,000 N concentrated load:	≤ 1,0 mm	
Tested acc. to DIN EN 13213:	class 6	
Ultimate load:	≥ 12,000 N	
Safety factor:	≥ 2,0	
Certificate of conformity:	load step 6,000 N	
<b>Fire protection:</b>		
Building material class of panel:	A1	
Acc. to EN 13501-1:	F30 possible up to FFH 1230 mm	
Fire resistance class (DIN 4102-2):		
<b>Sound insulation:</b> <sup>2)</sup>		
	horizontal	vertical
	Sound reduction index $R_{L,W,P}$ or Normalized flanking sound level difference $D_{n,f,W,P}$ in [dB]	Normalized impact sound pressure level $L_{n,W,P}$ or Normalized flanking impact sound pressure level $L_{n,f,W,P}$ in [dB]
		Improvement of sound pressure level red. $\Delta L_{w,P}$ or Reduction of impact sound pressure level $\Delta L_{w,P}$ in [dB]
		Standard with pads <sup>3)</sup> $t = 6 \text{ mm}$
		Sound reduction index $R_{w,P}$ in [dB] <sup>7)</sup>
Soft covering surface <sup>5)</sup>	40 <sup>4)</sup>	51 <sup>4)</sup>
Hard covering surface <sup>6)</sup>	40 <sup>4)</sup>	83 <sup>4)</sup>
Textile covering surface with separating cut (with partition)	50 (54) <sup>4)</sup>	38 (33) <sup>4)</sup>
Hard covering surface with separating cut (with partition)	51 (55) <sup>4)</sup>	60 (43) <sup>4)</sup>
1)	The MERO hollow floor corresponds to DIN EN 13213. The admissible deflections must be considered during the planning stage of the other trades.	
2)	Coverings have to be considered. The acoustic values were tested in laboratory conditions. Conditions at site have to be considered differently- see norm VDI 3782. Test values of the basic system with panel thickness of 36 mm.	
3)	Load values can be reduced through the use of sound absorbing pads.	
4)	According to DIN EN ISO 717-1 resp. -2	
5)	With textile covering ( $\Delta L_w = 29 \text{ dB}$ )	
6)	With elastic covering ( $\Delta L_w = 5 \text{ dB}$ )	
7)	Without covering	

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<p><b><u>Structural-physical material data:</u></b></p> <table border="0"> <tr> <td>Volume weight</td> <td>≥ 1500 kg/m<sup>3</sup></td> </tr> <tr> <td>Surface Brinell hardness</td> <td>≥ 40 N/mm<sup>2</sup></td> </tr> <tr> <td>Tensile bond strength</td> <td>≥ 1,0 N/mm<sup>2</sup></td> </tr> <tr> <td>Value of the thermal conductivity λ<sub>R</sub></td> <td>0,44 W/(mK)</td> </tr> <tr> <td>Base value of the floor heating is λ<sub>10</sub></td> <td>0,30 W/(mK)</td> </tr> <tr> <td>Water vapor diffusion resistance rate μ</td> <td>30 / 50</td> </tr> <tr> <td>Specific thermal capacity c</td> <td>&gt; 1000 J/(kgK)</td> </tr> <tr> <td>Coefficient of thermal expansion α</td> <td>12,9*10<sup>-6</sup> 1/K</td> </tr> <tr> <td>Elongation at temperature change</td> <td>≤ 0,02 mm/(mK)</td> </tr> <tr> <td>Elongation at change of relative humidity at 20°C by 30%</td> <td>0,6 mm/m</td> </tr> <tr> <td>Hygrothermal assembly conditions (on site)</td> <td>min. +13°C approx. 40-65% r. h.</td> </tr> <tr> <td>Hygrothermal assembly conditions (on site)</td> <td>20°C ±5°C approx. 40-65% r. h.</td> </tr> </table> <p><b><u>Surface treatment and floor coverings</u></b></p> <p>Cut floor covering always according to the expansion and connection joints of the Combi T.</p> <p>Chair castor resistance is given for all MERO Combi T floors without additional procedures.</p> <p>Primers, putties and adhesives must fit together with the system related fleeces and cloths. It is recommended to demand an installation guideline of the intended gluing system from the manufacturer.</p> <p><u>Textile coverings</u> (depending on the type of carpet) can be laid without putting the whole area, joint areas may be have to be leveled.</p> <p><u>Elastic coverings</u> (e.g. PVC, Linoleum, Rubber) usually require a whole area leveling of min. 2mm thickness.</p> <p><u>Ceramic tiles and natural stone coverings</u> can only be applied on approved systems. Should the allowed deflections due to the expected loads on the MERO Combi T be higher than the accepted deformations of the floor covering, additional measures have to considered. Ways to limit the deflection would be the use of thicker elements or additional pedestals. We would like to point out that depending on the covering and gluing type, the deflection can be reduced considerably. Project related tests are possible. Depending on tile size and installation method, flexible and fast curing adhesives may be necessary. Any moisture ingress to the carrier panel due to air humidity, sealants, mortars, etc. must be avoided. We recommend to use reaction based gluing systems and a moisture barrier to the bottom side of the panel (e.g. laminated aluminum foil).</p> <p><u>Parquet</u> to be executed as floating parquet or parquet ≤ 2/3 of the carrier panel thickness. Stave parquet or solid floorboards need to be considered separately. The use of grain-cut timber parquet is not recommended.</p> <p><u>Liquid coatings</u> must be elasticized. Always aim for a max. deflection of 0,5 mm at 600 mm pedestal grid. Consider the structural and physical conditions before choosing the coating system. We recommend to use a moisture barrier to the bottom side of the panel (e.g. laminated aluminum foil).</p>			Volume weight	≥ 1500 kg/m <sup>3</sup>	Surface Brinell hardness	≥ 40 N/mm <sup>2</sup>	Tensile bond strength	≥ 1,0 N/mm <sup>2</sup>	Value of the thermal conductivity λ <sub>R</sub>	0,44 W/(mK)	Base value of the floor heating is λ <sub>10</sub>	0,30 W/(mK)	Water vapor diffusion resistance rate μ	30 / 50	Specific thermal capacity c	> 1000 J/(kgK)	Coefficient of thermal expansion α	12,9*10 <sup>-6</sup> 1/K	Elongation at temperature change	≤ 0,02 mm/(mK)	Elongation at change of relative humidity at 20°C by 30%	0,6 mm/m	Hygrothermal assembly conditions (on site)	min. +13°C approx. 40-65% r. h.	Hygrothermal assembly conditions (on site)	20°C ±5°C approx. 40-65% r. h.
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