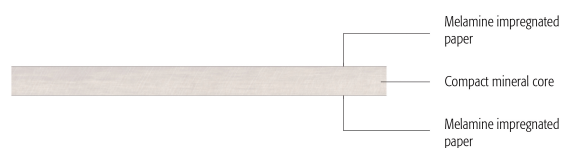


## flame(protect compact

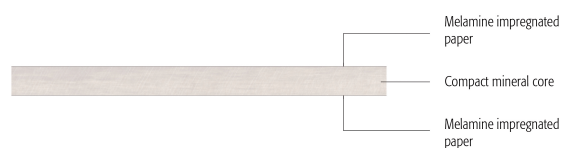
Non-combustible fire protection panel consisting primarily of mineral components; with a white core and decorative melamine resin surfaces on both sides.



Spezification								Unit	Standard
Nominal thickness	3	4	5	6	7	8	9	mm	
Length	2,750	2,750	2,750	2,750	2,750	2,750	2,750	mm	
Width	2,020	2,020	2,020	2,020	2,020	2,020	2,020	mm	
Thickness tolerance	± 0.75	± 0.75	± 0.75	± 0.75	± 0.75	± 0.75	± 0.75	mm	EN 438-2
Length tolerance	+ 10	+ 10	+ 10	+ 10	+ 10	+ 10	+ 10	mm	EN 438-2
Width tolerance	+ 10	+ 10	+ 10	+ 10	+ 10	+ 10	+ 10	mm	EN 438-2
Straightness of edges	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	mm/m	EN 438-2
Squareness	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	mm/m	EN 438-2
Flatness (length)	≤ 8	≤ 8	≤ 8	≤ 5	≤ 5	≤ 5	≤ 5	mm/m	EN 438-2
Flatness (width)	≤ 8	≤ 8	≤ 8	≤ 5	≤ 5	≤ 5	≤ 5	mm/m	EN 438-2
Edge defects	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	mm	EN 438-2
Surface defects	≤ 1 <sup>1</sup> ≤ 10 <sup>2</sup>	≤ 1 <sup>1</sup> ≤ 10 <sup>2</sup>	≤ 1 <sup>1</sup> ≤ 10 <sup>2</sup>	≤ 1 <sup>1</sup> ≤ 10 <sup>2</sup>	≤ 1 <sup>1</sup> ≤ 10 <sup>2</sup>	≤ 1 <sup>1</sup> ≤ 10 <sup>2</sup>	≤ 1 <sup>1</sup> ≤ 10 <sup>2</sup>	mm <sup>2</sup> /m <sup>2</sup> mm/m <sup>2</sup>	leaned on EN 438-4
Density	1,900	1,900	1,900	1,900	1,900	1,900	1,900	kg/m <sup>3</sup>	ISO 1183
Density range	± 50	± 50	± 50	± 50	± 50	± 50	± 50	kg/m <sup>3</sup>	ISO 1183
Thermal conductivity	env. 0.45	env. 0.45	env. 0.45	env. 0.45	env. 0.45	env. 0.45	env. 0.45	W/(mK)	EN 12664
Bending strength	> 40	> 40	> 40	> 40	> 40	> 40	> 40	N/mm <sup>2</sup>	EN ISO 178
Flexural modulus	> 6,000	> 6,000	> 6,000	> 6,000	> 6,000	> 6,000	> 6,000	MPa	EN ISO 178
Resistance to axial withdrawal of screws	-	-	-	≥ 600	≥ 600	≥ 600	≥ 1,000	N	ISO 13894-1
Resistance to impact (large diameter ball)	-	-	-	> 1,000	> 1,000	> 1,000	> 1,000	mm	EN 438-2
Resistance to crazing	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	rating	EN 438-2
Dimensional stability at elevated temperature (length)	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	%	EN 438-2
Dimensional stability at elevated temperature (width)	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	%	EN 438-2

## flame(protect compact

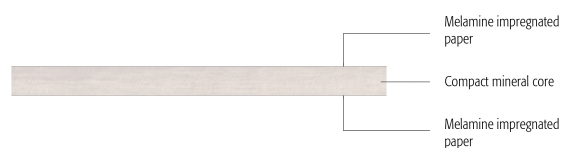
Non-combustible fire protection panel consisting primarily of mineral components; with a white core and decorative melamine resin surfaces on both sides.



Spezification								Unit	Standard
Nominal thickness	3	4	5	6	7	8	9	mm	
Length	2,750	2,750	2,750	2,750	2,750	2,750	2,750	mm	
Width	2,020	2,020	2,020	2,020	2,020	2,020	2,020	mm	
Resistance to dry heat / 180 °C (smooth finishes)	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	rating	EN 438-2
Resistance to dry heat / 180 °C (textured finishes)	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	rating	EN 438-2
Resistance to immersion in boiling water (smooth finishes)	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	rating	EN 438-2
Resistance to immersion in boiling water (textured finishes)	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	rating	EN 438-2
Resistance to immersion in boiling water	≤ 6 <sup>3</sup>	≤ 6 <sup>3</sup>	≤ 6 <sup>3</sup>	≤ 6 <sup>3</sup>	≤ 6 <sup>3</sup>	≤ 6 <sup>3</sup>	≤ 6 <sup>3</sup>	%	EN 438-2
Initial wear point (IP)	≥ 150 <sup>4</sup> < 50 <sup>5</sup>	≥ 150 <sup>4</sup> < 50 <sup>5</sup>	≥ 150 <sup>4</sup> < 50 <sup>5</sup>	≥ 150 <sup>4</sup> < 50 <sup>5</sup>	≥ 150 <sup>4</sup> < 50 <sup>5</sup>	≥ 150 <sup>4</sup> < 50 <sup>5</sup>	≥ 150 <sup>4</sup> < 50 <sup>5</sup>	U	EN 14323
Wear resistance (WR)	≥ 350 <sup>4</sup> < 150 <sup>5</sup>	≥ 350 <sup>4</sup> < 150 <sup>5</sup>	≥ 350 <sup>4</sup> < 150 <sup>5</sup>	≥ 350 <sup>4</sup> < 150 <sup>5</sup>	≥ 350 <sup>4</sup> < 150 <sup>5</sup>	≥ 350 <sup>4</sup> < 150 <sup>5</sup>	≥ 350 <sup>4</sup> < 150 <sup>5</sup>	U	EN 14323
Resistance to scratching (smooth finishes)	min. 2	min. 2	min. 2	min. 2	min. 2	min. 2	min. 2	rating	EN 438-2
Resistance to scratching (textured finishes)	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	rating	EN 438-2
Stain resistance (groups 1 & 2)	min. 5	min. 5	min. 5	min. 5	min. 5	min. 5	min. 5	rating	EN 438-2
Stain resistance (group 3)	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	rating	EN 438-2
Resistance to cigarette burns	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	rating	EN 438-2
Resistance to water vapour (smooth finishes)	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	rating	EN 438-2

## flame(protect compact

Non-combustible fire protection panel consisting primarily of mineral components; with a white core and decorative melamine resin surfaces on both sides.



Spezification									Unit	Standard
Nominal thickness	3	4	5	6	7	8	9	mm		
Length	2,750	2,750	2,750	2,750	2,750	2,750	2,750	mm		
Width	2,020	2,020	2,020	2,020	2,020	2,020	2,020	mm		
Resistance to water vapour (textured finishes)	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	rating	EN 438-2	
Light fastness (xenon arc light)	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	grey scale rating	EN 438-2	
Calorific value	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	MJ/kg	ISO 1716	
Reaction to fire	non-combustible	non-combustible	non-combustible	non-combustible	non-combustible	non-combustible	non-combustible			
Reaction to fire (Euroclass)	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0		EN 13501-1	
Formaldehyde emission class	E1	E1	E1	E1	E1	E1	E1		EN 717-1	

<sup>1</sup> dirt, spots and similar surface defects

<sup>2</sup> fibres, hairs and scratches

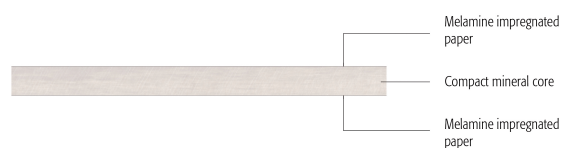
<sup>3</sup> thickness increase

<sup>4</sup> plain colours

<sup>5</sup> printed designs

## flame(protect compact

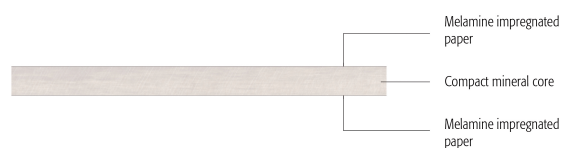
Non-combustible fire protection panel consisting primarily of mineral components; with a white core and decorative melamine resin surfaces on both sides.



Spezification							Unit	Standard
Nominal thickness	10	11	12	13	14	15	mm	
Length	2,750	2,750	2,750	2,750	2,750	2,750	mm	
Width	2,020	2,020	2,020	2,020	2,020	2,020	mm	
Thickness tolerance	± 0.75	± 0.75	± 0.75	± 0.75	± 0.75	± 0.75	mm	EN 438-2
Length tolerance	+ 10	+ 10	+ 10	+ 10	+ 10	+ 10	mm	EN 438-2
Width tolerance	+ 10	+ 10	+ 10	+ 10	+ 10	+ 10	mm	EN 438-2
Straightness of edges	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	mm/m	EN 438-2
Squareness	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	mm/m	EN 438-2
Flatness (length)	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	mm/m	EN 438-2
Flatness (width)	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	mm/m	EN 438-2
Edge defects	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	mm	EN 438-2
Surface defects	≤ 1 <sup>1</sup> ≤ 10 <sup>2</sup>	≤ 1 <sup>1</sup> ≤ 10 <sup>2</sup>	≤ 1 <sup>1</sup> ≤ 10 <sup>2</sup>	≤ 1 <sup>1</sup> ≤ 10 <sup>2</sup>	≤ 1 <sup>1</sup> ≤ 10 <sup>2</sup>	≤ 1 <sup>1</sup> ≤ 10 <sup>2</sup>	mm <sup>2</sup> /m <sup>2</sup> mm/m <sup>2</sup>	leaned on EN 438-4
Density	1,900	1,900	1,900	1,900	1,900	1,900	kg/m <sup>3</sup>	ISO 1183
Density range	± 50	± 50	± 50	± 50	± 50	± 50	kg/m <sup>3</sup>	ISO 1183
Thermal conductivity	env. 0.45	env. 0.45	env. 0.45	env. 0.45	env. 0.45	env. 0.45	W/(mK)	EN 12664
Bending strength	> 40	> 40	> 40	> 40	> 40	> 40	N/mm <sup>2</sup>	EN ISO 178
Flexural modulus	> 6,000	> 6,000	> 6,000	> 6,000	> 6,000	> 6,000	MPa	EN ISO 178
Resistance to axial withdrawal of screws	≥ 1,000	≥ 1,000	≥ 1,200	≥ 1,200	≥ 1,200	≥ 1,200	N	ISO 13894-1
Resistance to impact (large diameter ball)	> 1,000	> 1,000	> 1,000	> 1,000	> 1,000	> 1,000	mm	EN 438-2
Resistance to crazing	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	rating	EN 438-2
Dimensional stability at elevated temperature (length)	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	%	EN 438-2
Dimensional stability at elevated temperature (width)	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	%	EN 438-2

## flame(protect compact

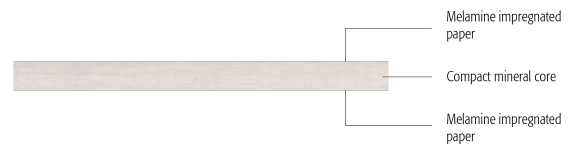
Non-combustible fire protection panel consisting primarily of mineral components; with a white core and decorative melamine resin surfaces on both sides.



Spezifikation							Unit	Standard
Nominal thickness	10	11	12	13	14	15	mm	
Length	2,750	2,750	2,750	2,750	2,750	2,750	mm	
Width	2,020	2,020	2,020	2,020	2,020	2,020	mm	
Resistance to dry heat / 180 °C (smooth finishes)	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	rating	EN 438-2
Resistance to dry heat / 180 °C (textured finishes)	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	rating	EN 438-2
Resistance to immersion in boiling water (smooth finishes)	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	rating	EN 438-2
Resistance to immersion in boiling water (textured finishes)	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	rating	EN 438-2
Resistance to immersion in boiling water	≤ 6 <sup>3</sup>	≤ 6 <sup>3</sup>	≤ 6 <sup>3</sup>	≤ 6 <sup>3</sup>	≤ 6 <sup>3</sup>	≤ 6 <sup>3</sup>	%	EN 438-2
Initial wear point (IP)	≥ 150 <sup>4</sup> < 50 <sup>5</sup>	≥ 150 <sup>4</sup> < 50 <sup>5</sup>	≥ 150 <sup>4</sup> < 50 <sup>5</sup>	≥ 150 <sup>4</sup> < 50 <sup>5</sup>	≥ 150 <sup>4</sup> < 50 <sup>5</sup>	≥ 150 <sup>4</sup> < 50 <sup>5</sup>	U	EN 14323
Wear resistance (WR)	≥ 350 <sup>4</sup> < 150 <sup>5</sup>	≥ 350 <sup>4</sup> < 150 <sup>5</sup>	≥ 350 <sup>4</sup> < 150 <sup>5</sup>	≥ 350 <sup>4</sup> < 150 <sup>5</sup>	≥ 350 <sup>4</sup> < 150 <sup>5</sup>	≥ 350 <sup>4</sup> < 150 <sup>5</sup>	U	EN 14323
Resistance to scratching (smooth finishes)	min. 2	min. 2	min. 2	min. 2	min. 2	min. 2	rating	EN 438-2
Resistance to scratching (textured finishes)	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	rating	EN 438-2
Stain resistance (groups 1 & 2)	min. 5	min. 5	min. 5	min. 5	min. 5	min. 5	rating	EN 438-2
Stain resistance (group 3)	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	rating	EN 438-2
Resistance to cigarette burns	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	rating	EN 438-2
Resistance to water vapour (smooth finishes)	min. 3	min. 3	min. 3	min. 3	min. 3	min. 3	rating	EN 438-2

## flame(protect compact

Non-combustible fire protection panel consisting primarily of mineral components; with a white core and decorative melamine resin surfaces on both sides.



Spezifikation							Unit	Standard
Nominal thickness	10	11	12	13	14	15	mm	
Length	2,750	2,750	2,750	2,750	2,750	2,750	mm	
Width	2,020	2,020	2,020	2,020	2,020	2,020	mm	
Resistance to water vapour (textured finishes)	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	rating	EN 438-2
Light fastness (xenon arc light)	min. 4	min. 4	min. 4	min. 4	min. 4	min. 4	grey scale rating	EN 438-2
Calorific value	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	MJ/kg	ISO 1716
Reaction to fire	non-combustible	non-combustible	non-combustible	non-combustible	non-combustible	non-combustible		
Reaction to fire (Euroclass)	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0		EN 13501-1
Formaldehyde emission class	E1	E1	E1	E1	E1	E1		EN 717-1

<sup>1</sup> dirt, spots and similar surface defects

<sup>2</sup> fibres, hairs and scratches

<sup>3</sup> thickness increase

<sup>4</sup> plain colours

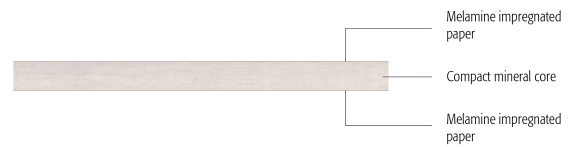
<sup>5</sup> printed designs

### Additional Information

Special	<ul style="list-style-type: none"> <li>The coarser the structure and the lighter the decor, the greater the scratch resistance.</li> <li>The smoother the structure and the the darker the decor, the more sensitive it gets to stains.</li> <li>Holoheral metallic designs can show because of light refraction certain optical area effects which also can be directional and slightly higher differences in the colour connection in comparison to classic plain colours.</li> <li>Please consider that metallic designs react more sensitive to scratching and abrasion as well as to humidity as normal printed designs. The sensitivity of the surface increases with growing metallic content.</li> </ul>
Chemical resistance	<ul style="list-style-type: none"> <li>Resistant to organic solvents, weak acids, petrol and oil.</li> </ul>
Product safety	<ul style="list-style-type: none"> <li>The surface is physiologically safe, and approved for direct contact with food.</li> <li>The decorative coating consists of printed or dyed décor papers. They are saturated in the duroplast melamine-formaldehyde resin, which then hardens during the laminating process to form a highly resistant, non-reactive material.</li> <li>We manufacture the panels without the use of halogens, heavy metals, preservatives, wood protectors or organic solvents.</li> <li>This product is following the REACH regulation EG 1907/2006 an article. Following Article 7 it needs not to be registered.</li> <li>The material is not rated as hazardous material.</li> </ul>

## flame(protect compact

Non-combustible fire protection panel consisting primarily of mineral components; with a white core and decorative melamine resin surfaces on both sides.



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