

## Frame extension elements for wooden and wood-metal lifting sliding doors Standard

### UNTREATED

<b>Cover panel and surface</b>	<b>Chipboard P5, E1, untreated, 10 mm (PEFC-certified)</b>
<b>Thermal insulation</b>	<b>Expanded rigid polystyrene foam (EPS), 15 kg/m<sup>3</sup>, 80-200 mm</b>
<b>Bonding</b>	Water-resistant D3 (EN 204-D3)
<b>Edge band</b>	<b>Plywood, circumferential</b> Special edge bands can be inset according to your requirements
<b>Edge milling</b>	<b>All possible CNC edge profile work is performed on all sides according to your profile specifications</b> Special CNC processing like cut-outs, ventilation slots or surface grooves are also possible
<b>Thicknesses</b>	<b>Thicknesses from 100 mm to 220 mm can be produced</b> For thicknesses below 100 mm, see frame extension elements for wooden and wood-metal windows
<b>Formats</b>	<b>All formats from 500 × 95 mm to 3588 × 1294 mm can be produced</b>

Element thicknesses from 100 mm to 220 mm can be produced. For further U-value calculations, please contact our consultants.

<b>Element thickness</b>	<b>mm</b>	<b>100</b>	<b>110</b>	<b>120</b>	<b>130</b>	<b>140</b>	<b>150</b>	<b>160</b>
<b>Thickness cover panel</b>	<b>mm</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
Thickness thermal insulation	mm	80	90	100	110	120	130	140
<b>U-value</b>	<b>W/m<sup>2</sup>K</b>	<b>0,414</b>	<b>0,373</b>	<b>0,340</b>	<b>0,312</b>	<b>0,288</b>	<b>0,268</b>	<b>0,250</b>
<b>Airborne sound insulation</b>	<b>26 dB</b> , element thickness: 165 mm; test surface: 1.9 m <sup>2</sup> (download test reports)							
Weight	kg/m <sup>2</sup>	16,0	16,2	16,3	16,5	16,6	16,8	16,9

<b>Element thickness</b>	<b>mm</b>	<b>170</b>	<b>180</b>	<b>190</b>	<b>200</b>	<b>210</b>	<b>220</b>
<b>Thickness cover panel</b>	<b>mm</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
Thickness thermal insulation	mm	150	160	170	180	190	200
<b>U-value</b>	<b>W/m<sup>2</sup>K</b>	<b>0,235</b>	<b>0,221</b>	<b>0,209</b>	<b>0,198</b>	<b>0,188</b>	<b>0,179</b>
<b>Airborne sound insulation</b>	<b>26 dB</b> , element thickness: 165 mm; test surface: 1.9 m <sup>2</sup> (download test reports)						
Weight	kg/m <sup>2</sup>	17,1	17,2	17,4	17,5	17,7	17,8

## UNTREATED

<b>Cover panel and surface</b>	<b>Biofaser Hydropan BF-STX hardboard, untreated, 8 mm</b> (certified FSC, PEFC, CE)
<b>Thermal insulation</b>	<b>Expanded rigid polystyrene foam (EPS), 15 kg/m<sup>3</sup>, 84–204 mm</b>
<b>Bonding</b>	Water-resistant D3 (EN 204-D3)
<b>Edge band</b>	<b>Spruce, circumferential or on the longitudinal edges</b> (PEFC-certified) Other types of wood available; special edge bands can be inset according to your requirements
<b>Edge milling</b>	<b>All possible CNC edge profile work is performed on all sides according to your profile specifications</b> Special CNC processing such as cut-outs, round and segment arches, ventilation slots or surface grooves are also possible
<b>Thicknesses</b>	<b>Thicknesses from 100 mm to 220 mm can be produced</b> For thicknesses below 100 mm, see frame extension elements for wooden and wood-metal windows
<b>Formats</b>	<b>All formats from 500 × 95 mm to 3588 × 1294 mm can be produced</b>

Element thicknesses from 100 mm to 220 mm can be produced. For further U-value calculations, please contact our consultants.

Element thickness	mm	100	110	120	130	140	150	160
<b>Cover panel thickness</b>	<b>mm</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>
Thermal insulation thickness	mm	84	94	104	114	124	134	144
<b>U-value</b>	<b>W/m<sup>2</sup>K</b>	<b>0,401</b>	<b>0,363</b>	<b>0,331</b>	<b>0,304</b>	<b>0,282</b>	<b>0,262</b>	<b>0,245</b>
<b>Airborne sound insulation</b>	<b>26 dB</b> , element thickness: 165 mm; test surface: 1.9 m <sup>2</sup> (download test reports)							
Weight	kg/m <sup>2</sup>	15,7	15,8	15,9	16,1	16,2	16,4	16,5

Element thickness	mm	170	180	190	200	210	220
<b>Cover panel thickness</b>	<b>mm</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>
Thermal insulation thickness	mm	154	164	174	184	194	204
<b>U-value</b>	<b>W/m<sup>2</sup>K</b>	<b>0,231</b>	<b>0,217</b>	<b>0,206</b>	<b>0,195</b>	<b>0,186</b>	<b>0,177</b>
<b>Airborne sound insulation</b>	<b>26 dB</b> , element thickness: 165 mm; test surface: 1.9 m <sup>2</sup> (download test reports)						
Weight	kg/m <sup>2</sup>	16,7	16,9	17,0	17,2	17,3	17,4

## PRIMER FOIL

<b>Cover panel and surface</b>	<b>Chipboard P5, E1, with white primer foil, 10 mm (PEFC-certified)</b>
<b>Thermal insulation</b>	<b>Expanded rigid polystyrene foam (EPS), 15 kg/m<sup>3</sup>, 80–200 mm</b>
<b>Bonding</b>	Water-resistant D3 (EN 204-D3)
<b>Edge band</b>	<b>Plywood, circumferential</b> Special edge bands can be inset according to your requirements
<b>Edge milling</b>	<b>All possible CNC edge profile work is performed on all sides according to your profile specifications</b> Special CNC processing like cut-outs, ventilation slots or surface grooves are also possible
<b>Thicknesses</b>	<b>Thicknesses from 100 mm to 220 mm can be produced</b> For thicknesses below 100 mm, see frame extension elements for wooden and wood-metal windows
<b>Formats</b>	<b>All formats from 500 × 95 mm to 3588 × 1294 mm can be produced</b>

Element thicknesses from 100 mm to 220 mm can be produced. For further U-value calculations, please contact our consultants.

<b>Element thickness</b>	<b>mm</b>	<b>100</b>	<b>110</b>	<b>120</b>	<b>130</b>	<b>140</b>	<b>150</b>	<b>160</b>
<b>Thickness cover panel</b>	<b>mm</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
Thickness thermal insulation	mm	80	90	100	110	120	130	140
<b>U-value</b>	<b>W/m<sup>2</sup>K</b>	<b>0,414</b>	<b>0,373</b>	<b>0,340</b>	<b>0,312</b>	<b>0,288</b>	<b>0,268</b>	<b>0,250</b>
<b>Airborne sound insulation</b>	<b>26 dB</b> , element thickness: 165 mm; test surface: 1.9 m <sup>2</sup> (download test reports)							
Weight	kg/m <sup>2</sup>	16,0	16,2	16,3	16,5	16,6	16,8	16,9

<b>Element thickness</b>	<b>mm</b>	<b>170</b>	<b>180</b>	<b>190</b>	<b>200</b>	<b>210</b>	<b>220</b>
<b>Thickness cover panel</b>	<b>mm</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
Thickness thermal insulation	mm	150	160	170	180	190	200
<b>U-value</b>	<b>W/m<sup>2</sup>K</b>	<b>0,235</b>	<b>0,221</b>	<b>0,209</b>	<b>0,198</b>	<b>0,188</b>	<b>0,179</b>
<b>Airborne sound insulation</b>	<b>26 dB</b> , element thickness: 165 mm; test surface: 1.9 m <sup>2</sup> (download test reports)						
Weight	kg/m <sup>2</sup>	17,1	17,2	17,4	17,5	17,7	17,8

<b>Cover panel and surface</b>	<b>Medium-density fibreboard (MDF) P3, E1, with white primer foil, 10 mm</b>
<b>Thermal insulation</b>	<b>Expanded rigid polystyrene foam (EPS), 15 kg/m<sup>3</sup>, 80-200 mm</b>
<b>Bonding</b>	Water-resistant D3 (EN 204-D3)
<b>Edge band</b>	<b>Plywood, circumferential</b> Special edge bands can be inset according to your requirements
<b>Edge milling</b>	<b>All possible CNC edge profile work is performed on all sides according to your profile specifications</b> Special CNC processing like cut-outs, ventilation slots or surface grooves are also possible
<b>Thicknesses</b>	<b>Thicknesses from 100 mm to 220 mm can be produced</b> For thicknesses below 100 mm, see frame extension elements for wooden and wood-metal windows
<b>Formats</b>	<b>All formats from 500 × 95 mm to 3588 × 1294 mm can be produced</b>

Element thicknesses from 100 mm to 220 mm can be produced. For further U-value calculations, please contact our consultants.

<b>Element thickness</b>	<b>mm</b>	<b>100</b>	<b>110</b>	<b>120</b>	<b>130</b>	<b>140</b>	<b>150</b>	<b>160</b>
<b>Thickness cover panel</b>	<b>mm</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
Thickness thermal insulation	mm	80	90	100	110	120	130	140
<b>U-value</b>	<b>W/m<sup>2</sup>K</b>	<b>0,404</b>	<b>0,365</b>	<b>0,333</b>	<b>0,306</b>	<b>0,283</b>	<b>0,264</b>	<b>0,247</b>
<b>Airborne sound insulation</b>	<b>26 dB</b> , element thickness: 165 mm; test surface: 1.9 m <sup>2</sup> (download test reports)							
Weight	kg/m <sup>2</sup>	16,6	16,8	16,9	17,1	17,2	17,4	17,5

<b>Element thickness</b>	<b>mm</b>	<b>170</b>	<b>180</b>	<b>190</b>	<b>200</b>	<b>210</b>	<b>220</b>
<b>Thickness cover panel</b>	<b>mm</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
Thickness thermal insulation	mm	150	160	170	180	190	200
<b>U-value</b>	<b>W/m<sup>2</sup>K</b>	<b>0,232</b>	<b>0,218</b>	<b>0,206</b>	<b>0,196</b>	<b>0,186</b>	<b>0,178</b>
<b>Airborne sound insulation</b>	<b>26 dB</b> , element thickness: 165 mm; test surface: 1.9 m <sup>2</sup> (download test reports)						
Weight	kg/m <sup>2</sup>	17,7	17,8	18,0	18,1	18,3	18,4

## VENEERED

<b>Cover panel and surface</b>	<b>Chipboard P5, E1, 10 mm, with real wood veneer (unsanded), 1 mm</b> (PEFC-certified) All types of real wood veneers available: spruce, pine, larch, fir, oak, etc. (FSC- or PEFC-certified) Veneer quality A/B (inside A/outside B) or A/A (inside A/outside A)
<b>Thermal insulation</b>	<b>Expanded rigid polystyrene foam (EPS), 15 kg/m<sup>3</sup>, 78–198 mm</b>
<b>Bonding</b>	Water-resistant D3 (EN 204-D3)
<b>Edge band</b>	<b>Plywood, circumferential</b> Special edge bands can be inset according to your requirements
<b>Edge milling</b>	<b>All possible CNC edge profile work is performed on all sides according to your profile specifications</b> Special CNC processing like cut-outs, ventilation slots or surface grooves are also possible
<b>Thicknesses</b>	<b>Thicknesses from 100 mm to 220 mm can be produced</b> For thicknesses below 100 mm, see frame extension elements for wooden and wood-metal windows
<b>Formats</b>	<b>All formats from 500 × 95 mm to 3588 × 1294 mm can be produced</b>

Element thicknesses from 100 mm to 220 mm can be produced. For further U-value calculations, please contact our consultants.

<b>Element thickness</b>	<b>mm</b>	<b>100</b>	<b>110</b>	<b>120</b>	<b>130</b>	<b>140</b>	<b>150</b>	<b>160</b>
<b>Cover board thickness</b>	<b>mm</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
Veneer thickness	mm	1	1	1	1	1	1	1
Thermal insulation thickness	mm	78	88	98	108	118	128	138
<b>U-value</b>	<b>W/m<sup>2</sup>K</b>	<b>0,420</b>	<b>0,378</b>	<b>0,344</b>	<b>0,316</b>	<b>0,291</b>	<b>0,271</b>	<b>0,253</b>
<b>Airborne sound insulation</b>	<b>26 dB</b> , element thickness: 165 mm; test surface: 1.9 m <sup>2</sup> (download test reports)							
Weight	kg/m <sup>2</sup>	16,9	17,0	17,2	17,4	17,5	17,6	17,8

<b>Element thickness</b>	<b>mm</b>	<b>170</b>	<b>180</b>	<b>190</b>	<b>200</b>	<b>210</b>	<b>220</b>
<b>Cover board thickness</b>	<b>mm</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
Veneer thickness	mm	1	1	1	1	1	1
Thermal insulation thickness	mm	148	158	168	178	188	198
<b>U-value</b>	<b>W/m<sup>2</sup>K</b>	<b>0,237</b>	<b>0,223</b>	<b>0,211</b>	<b>0,200</b>	<b>0,190</b>	<b>0,181</b>
<b>Airborne sound insulation</b>	<b>26 dB</b> , element thickness: 165 mm; test surface: 1.9 m <sup>2</sup> (download test reports)						
Weight	kg/m <sup>2</sup>	18,0	18,1	18,2	18,4	18,5	18,7

## VENEERED

<b>Cover panel and surface</b>	<b>Biofaser Hydropan BF-STX hardboard, untreated (unsanded) 1,4 mm</b> (certified FSC, PEFC, CE) All types of real wood veneers available: spruce, pine, larch, fir, oak, etc. (FSC- or PEFC-certified) Veneer quality A/B (inside A/outside B) or A/A (inside A/outside A)
<b>Thermal insulation</b>	<b>Expanded rigid polystyrene foam (EPS), 15 kg/m<sup>3</sup>, 82–202 mm</b> Other types of thermal insulation such as expanded rigid polystyrene foam with graphite additive (EPS lambda), glass wool, cork, etc., are also available
<b>Bonding</b>	Water-resistant D3 (EN 204-D3)
<b>Edge band</b>	<b>Spruce, circumferential or on the longitudinal edges</b> (PEFC-certified) Other types of wood available; special edge bands can be inset according to your requirements
<b>Edge milling</b>	<b>All possible CNC edge profile work is performed on all sides according to your profile specifications</b> Special CNC processing such as cut-outs, round and segment arches, ventilation slots or surface grooves are also possible
<b>Thicknesses</b>	<b>Thicknesses from 100 mm to 220 mm can be produced</b> For thicknesses below 100 mm, see frame extension elements for wooden and wood-metal windows
<b>Formats</b>	<b>All formats from 500 × 95 mm to 3588 × 1294 mm can be produced</b>

Element thicknesses from 100 mm to 220 mm can be produced. For further U-value calculations, please contact our consultants.

Element thickness	mm	100	110	120	130	140	150	160
<b>Cover panel thickness</b>	mm	8	8	8	8	8	8	8
Veneer thickness	mm	1	1	1	1	1	1	1
Thermal insulation thickness	mm	82	92	102	112	122	132	142
<b>U-value</b>	<b>W/m<sup>2</sup>K</b>	<b>0,406</b>	<b>0,367</b>	<b>0,335</b>	<b>0,308</b>	<b>0,285</b>	<b>0,265</b>	<b>0,248</b>
<b>Airborne sound insulation</b>	<b>26 dB</b> , element thickness: 165 mm; test surface: 1.9 m <sup>2</sup> (download test reports)							
Weight	kg/m <sup>2</sup>	16,5	16,7	16,9	17,0	17,2	17,3	17,5

Element thickness	mm	170	180	190	200	210	220
<b>Cover panel thickness</b>	mm	8	8	8	8	8	8
Veneer thickness	mm	1	1	1	1	1	1
Thermal insulation thickness	mm	152	162	172	182	192	202
<b>U-value</b>	<b>W/m<sup>2</sup>K</b>	<b>0,233</b>	<b>0,219</b>	<b>0,207</b>	<b>0,197</b>	<b>0,187</b>	<b>0,178</b>
<b>Airborne sound insulation</b>	<b>26 dB</b> , element thickness: 165 mm; test surface: 1.9 m <sup>2</sup> (download test reports)						
Weight	kg/m <sup>2</sup>	17,6	17,8	17,9	18,1	18,2	18,4