



# BEMO-COMBI

## HEAT PROTECTION

<b>relative halter height in mm:</b>	80	100	120	140	160	180	200	220	240	260
<b>Thick insulation layer in mm:</b>	120	140	160	180	200	220	240	260	280	300
<b>Total thickness roof construction in mm:</b>	215	235	255	275	295	315	335	355	375	395
<b>U-value without considering punctiform thermal bridges:</b>	0.290	0.251	0.221	0.197	0.178	0.163	0.150	0.138	0.129	0.120

### U-value considering punctiform thermal bridges

<b>Aluminium Halter height:</b>	80+TK5	100+TK5	120+TK5	140+TK5	160+TK5	180+TK5	200+TK5	220+TK5	220+TK15	260 fictive
<b>U-value:</b>	0.488	0.440	0.401	0.368	0.341	0.316	0.295	0.276	0.258	0.242
<b>GFK Halter height:</b>	85	105	125	145	165	185	205	225	245	245+DK20
<b>U-value:</b>	0.306	0.266	0.234	0.209	0.188	0.172	0.157	0.143	0.133	0.123

## SOUND PROTECTION

<b>Weight per m<sup>2</sup> in kg:</b>	22.45	22.85	23.25	23.65	24.05	24.45	24.85	25.25	25.65	26.05
<b>predictable sound reduction index R in dB:</b>	39.00	39.16	39.31	39.46	39.60	39.74	39.89	40.02	40.16	40.30

### Measures to improve sound insulation:

Use of insulating materials with 70kg/m<sup>3</sup>

<b>Weight per m<sup>2</sup> in kg:</b>	24.43	27.83	31.23	34.63	38.03	41.43	44.83	48.23	51.63	55.03
<b>predictable sound reduction index R in dB:</b>	39.74	40.87	41.87	42.77	43.58	44.33	45.01	45.65	46.24	46.79

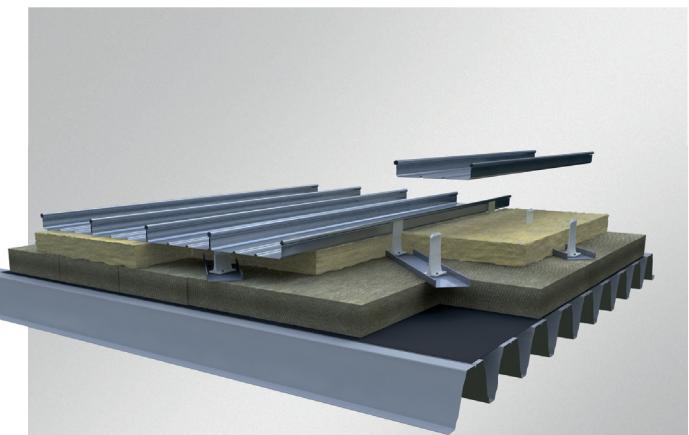
### Installation of a layer of gypsum board with 8.5 kg/m<sup>2</sup>:

<b>Weight per m<sup>2</sup> in kg:</b>	30.95	31.35	31.75	32.15	32.55	32.95	33.35	33.75	34.15	34.55
<b>predictable sound reduction index R in dB:</b>	41.79	41.90	42.01	42.12	42.23	42.34	42.44	42.54	42.65	42.75

### Installation of a soundproofing panel with 17.5kg/m<sup>2</sup>

<b>Weight per m<sup>2</sup> in kg:</b>	39.95	40.35	40.75	41.15	41.55	41.95	42.35	42.75	43.15	43.55
<b>predictable sound reduction index R in dB:</b>	44.01	44.10	44.18	44.27	44.35	44.43	44.52	44.60	44.68	44.76

The values mentioned are reference values.



- BEMO standing seam profile 65-400, 1.0 mm aluminium
- Aluminium-Halter incl. 5 mm TK Thermal Spacer GFK Halter 1.5 pcs/m<sup>2</sup>
- 1st layer of stone wool insulation o37, 100 kg/m<sup>3</sup> 10 cm
- 2nd layer Mineral wool insulation o35, 20 kg/m<sup>3</sup>
- Vapour barrier
- Decking 0.75 mm steel

## Main uses

- Structures of steel, timber or concrete
- Buildings with increased requirements for heat and sound protection

## Benefits

- Reduction of thermal bridge
- High sound insulation
- Good summer heat protection