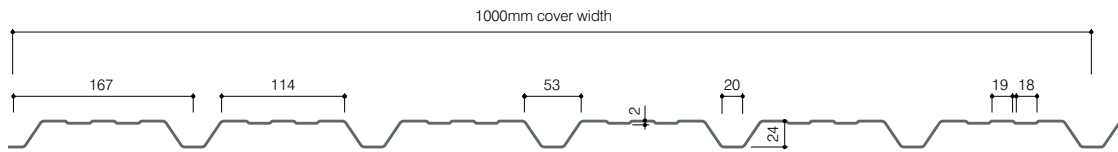


# AS SERIES ROOF & WALL PROFILES

## AS24/1000 wall profile

A medium profile wall sheet available in 0.5mm and 0.7mm thicknesses.



### AS24/1000W steel wall profile • Thickness 0.5mm • Weight 4.57 kg/m<sup>2</sup>

<b>Bottom flange in compression</b> Moment capacity: 0.457 kNm/m Moment of inertia: 3.673 cm <sup>4</sup> /m		<b>Bottom flange in tension</b> Moment capacity: 0.469 kNm/m Moment of inertia: 3.661 cm <sup>4</sup> /m		Support width: 40mm Web crushing: 8.007 kN/m Youngs modulus E: 210 kN/mm <sup>2</sup>													
Positive	Working load UDL (kN/m <sup>2</sup> ) Deflection limit L/90																
Span / m	<b>1.20</b>	<b>1.30</b>	<b>1.40</b>	<b>1.50</b>	<b>1.60</b>	<b>1.70</b>	<b>1.80</b>	<b>1.90</b>	<b>2.00</b>	<b>2.10</b>	<b>2.20</b>	<b>2.30</b>	<b>2.40</b>	<b>2.50</b>	<b>2.60</b>	<b>2.70</b>	<b>2.80</b>
Single	1.74	1.48	1.28	1.11	0.98	0.87	0.77	0.69	0.63	0.57	0.52	0.47	0.43	0.40	0.37	0.34	0.30
Double	1.43	1.25	1.10	0.98	0.88	0.79	0.71	0.65	0.59	0.54	0.50	0.46	0.42	0.39	0.36	0.33	0.31
Multiple	1.74	1.52	1.34	1.19	1.07	0.96	0.87	0.79	0.72	0.66	0.61	0.57	0.52	0.49	0.45	0.42	0.39
<b>Bottom flange in compression</b> Moment capacity: 0.469 kNm/m Moment of inertia: 3.661 cm <sup>4</sup> /m		<b>Bottom flange in tension</b> Moment capacity: 0.457 kNm/m Moment of inertia: 3.673 cm <sup>4</sup> /m		Support width: 40mm Web crushing: 8.007 kN/m Young modulus: 210 kN/mm <sup>2</sup>													
Negative	Working load UDL (kN/m <sup>2</sup> ) Deflection limit L/90																
Span / m	<b>1.20</b>	<b>1.30</b>	<b>1.40</b>	<b>1.50</b>	<b>1.60</b>	<b>1.70</b>	<b>1.80</b>	<b>1.90</b>	<b>2.00</b>	<b>2.10</b>	<b>2.20</b>	<b>2.30</b>	<b>2.40</b>	<b>2.50</b>	<b>2.60</b>	<b>2.70</b>	<b>2.80</b>
Single	1.69	1.44	1.24	1.08	0.95	0.84	0.75	0.68	0.61	0.55	0.50	0.46	0.42	0.39	0.36	0.33	0.30
Double	1.46	1.28	1.12	1.00	0.89	0.80	0.73	0.66	0.60	0.55	0.51	0.47	0.43	0.40	0.37	0.34	0.32
Multiple	1.77	1.55	1.37	1.22	1.09	0.98	0.89	0.81	0.74	0.68	0.62	0.58	0.53	0.50	0.46	0.43	0.40

### AS24/1000W steel wall profile • Thickness 0.7mm • Weight 6.49 kg/m<sup>2</sup>

<b>Bottom flange in compression</b> Moment capacity: 0.695 kNm/m Moment of inertia: 5.546 cm <sup>4</sup> /m		<b>Bottom flange in tension</b> Moment capacity: 0.695 kNm/m Moment of inertia: 5.546 cm <sup>4</sup> /m		Support width: 40mm Web crushing: 18.218 kN/m Youngs modulus E: 210 kN/mm <sup>2</sup>													
Positive	Working load UDL (kN/m <sup>2</sup> ) Deflection limit L/90																
Span / m	<b>1.20</b>	<b>1.30</b>	<b>1.40</b>	<b>1.50</b>	<b>1.60</b>	<b>1.70</b>	<b>1.80</b>	<b>1.90</b>	<b>2.00</b>	<b>2.10</b>	<b>2.20</b>	<b>2.30</b>	<b>2.40</b>	<b>2.50</b>	<b>2.60</b>	<b>2.70</b>	<b>2.80</b>
Single	2.57	2.19	1.89	1.65	1.45	1.28	1.14	1.03	0.93	0.84	0.77	0.70	0.64	0.59	0.55	0.50	0.45
Double	2.37	2.06	1.81	1.60	1.43	1.28	1.14	1.03	0.93	0.84	0.77	0.70	0.64	0.59	0.55	0.51	0.47
Multiple	2.89	2.52	2.21	1.96	1.75	1.57	1.42	1.28	1.16	1.05	0.96	0.88	0.80	0.74	0.69	0.64	0.59
<b>Bottom flange in compression</b> Moment capacity: 0.695 kNm/m Moment of inertia: 5.546 cm <sup>4</sup> /m		<b>Bottom flange in tension</b> Moment capacity: 0.695 kNm/m Moment of inertia: 5.546 cm <sup>4</sup> /m		Support width: 40mm Web crushing: 18.218 kN/m Youngs modulus E: 210 kN/mm <sup>2</sup>													
Negative	Working load UDL (kN/m <sup>2</sup> ) Deflection limit L/90																
Span / m	<b>1.20</b>	<b>1.30</b>	<b>1.40</b>	<b>1.50</b>	<b>1.60</b>	<b>1.70</b>	<b>1.80</b>	<b>1.90</b>	<b>2.00</b>	<b>2.10</b>	<b>2.20</b>	<b>2.30</b>	<b>2.40</b>	<b>2.50</b>	<b>2.60</b>	<b>2.70</b>	<b>2.80</b>
Single	2.57	2.19	1.89	1.65	1.45	1.28	1.14	1.03	0.93	0.84	0.77	0.70	0.64	0.59	0.55	0.50	0.45
Double	2.37	2.06	1.81	1.60	1.43	1.28	1.14	1.03	0.93	0.84	0.77	0.70	0.64	0.59	0.55	0.51	0.47
Multiple	2.89	2.52	2.21	1.96	1.75	1.57	1.42	1.28	1.16	1.05	0.96	0.88	0.80	0.74	0.69	0.64	0.59

#### BS EN 1991-1-4:

Appendix C.5.6.4: Partial safety factors for limit state design.  
Load factors included within the load/span tables:

- Variable loads factor 1.5
- Permanent load factor 1.35
- Accidental load factor 1.0
- Serviceability load factor 1.0

#### Deflection

- Roofs - imposed loads - L/200
- Roofs - wind L/90
- Walls - wind L/90