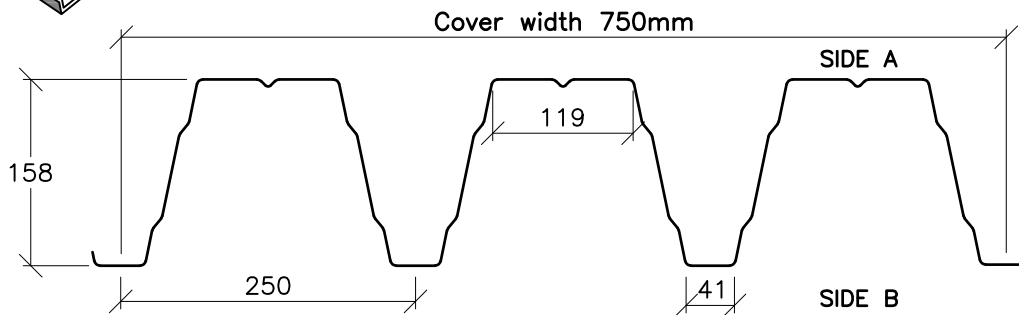


# AP1600 DECKING

| STEEL PROFILE     |        |
|-------------------|--------|
| 2020              | Sheet  |
| Cl/SfB<br>27, Nh2 | 30.s.6 |

## PROFILE DESCRIPTION



Available as web or fully perforated - refer to APL for load/span information

## SECTION PROPERTIES

| NOMINAL THICKNESS     | mm                 | 0.80 | 0.90 | 1.10 | 1.25 | 1.50 |
|-----------------------|--------------------|------|------|------|------|------|
| LOWER YIELD POINT     | N/mm <sup>2</sup>  | 320  | 320  | 320  | 320  | 320  |
| MOMENT OF INERTIA     | cm <sup>4</sup> /m | 465  | 544  | 617  | 768  | 917  |
| WEIGHT INCL. SIDE LAP | kg/m <sup>2</sup>  | 12   | 14   | 16   | 20   | 24   |
| MAXIMUM SHEET LENGTH  | m                  | 15   | 15   | 15   | 15   | 15   |

## SPAN TABLES

(Deflection limited to Span/200) – Maximum safe working loads including safety factor of 1.6

| Thk (mm) | Span (m) | Maximum Total Safe Working Load (kN/m <sup>2</sup> ) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----------|----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|          |          | 5.4  | 5.6  | 5.8  | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  |
| 0.80     |          | 2.19   | 2.04 | 1.89 | 1.71 | 1.55 | 1.41 | 1.28 | 1.17 | 1.08 | 0.99 | 0.91 | 0.84 | 0.78 | 0.72 | 0.67 | 0.62 | 0.58 |
| 0.90     |          | 2.78   | 2.49 | 2.24 | 2.02 | 1.83 | 1.67 | 1.52 | 1.39 | 1.27 | 1.17 | 1.08 | 1.00 | 0.92 | 0.85 | 0.79 | 0.74 | 0.69 |
| 1.00     |          | 3.17   | 2.84 | 2.56 | 2.31 | 2.09 | 1.90 | 1.74 | 1.59 | 1.46 | 1.34 | 1.23 | 1.14 | 1.05 | 0.97 | 0.91 | 0.84 | 0.78 |
| 1.25     |          | 3.99   | 3.58 | 3.22 | 2.91 | 2.64 | 2.40 | 2.19 | 2.00 | 1.83 | 1.69 | 1.55 | 1.43 | 1.33 | 1.23 | 1.14 | 1.06 | 0.99 |
| 1.50     |          | 4.82   | 4.33 | 3.89 | 3.52 | 3.19 | 2.90 | 2.64 | 2.42 | 2.21 | 2.04 | 1.87 | 1.73 | 1.60 | 1.48 | 1.38 | 1.28 | 1.19 |

| Thk (mm) | Span (m) | Maximum Total Safe Working Load (kN/m <sup>2</sup> ) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----------|----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|          |          | 5.4  | 5.6  | 5.8  | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  |
| 0.80     |          | 2.27   | 2.13 | 2.00 | 1.88 | 1.78 | 1.68 | 1.59 | 1.51 | 1.44 | 1.37 | 1.31 | 1.25 | 1.19 | 1.14 | 1.09 | 1.03 | 0.99 |
| 0.90     |          | 3.06   | 2.87 | 2.70 | 2.55 | 2.41 | 2.28 | 2.16 | 2.05 | 1.95 | 1.86 | 1.76 | 1.67 | 1.59 | 1.51 | 1.44 | 1.37 | 1.31 |
| 1.00     |          | 3.91   | 3.67 | 3.45 | 3.26 | 3.08 | 2.91 | 2.76 | 2.63 | 2.50 | 2.38 | 2.25 | 2.14 | 2.03 | 1.93 | 1.84 | 1.75 | 1.67 |
| 1.25     |          | 4.95   | 4.65 | 4.37 | 4.12 | 3.90 | 3.69 | 3.50 | 3.33 | 3.16 | 2.99 | 2.83 | 2.68 | 2.55 | 2.42 | 2.31 | 2.20 | 2.10 |
| 1.50     |          | 5.98   | 5.62 | 5.29 | 4.99 | 4.71 | 4.46 | 4.23 | 4.02 | 3.83 | 3.62 | 3.42 | 3.25 | 3.08 | 2.93 | 2.79 | 2.66 | 2.54 |

Loads are **SAFE WORKING LOADS** and already incorporate a factor of safety therefore design loads do not need to incorporate any safety factor.

When using deck in conjunction with RAC bars as part of a twin skin roof build up – refer to APL for improved load/span characteristics

Loads are for a minimum end support width of 50mm and intermediate support width of 160mm\*, and can be from vertical downward loading or wind uplift. Higher values may be acceptable under certain conditions.

Walkability must be taken into account when considering maximum span tables.

Contact Architectural Profiles Ltd regarding maximum sheet lengths available.

Please note that all dimensions and thicknesses are nominal as coated and/or as finished, and are subject to coil and manufacturing tolerances.

Please consult our experienced staff for all technical enquiries.

Whilst every endeavour is made to keep literature up to date, specifications may change without prior notice due to a policy of continued research and development.

Architectural Profiles Limited cannot be held responsible for the mis-use of span tables and its contents.

\* Lesser support widths are structurally acceptable, but will effect the max permissible spans

E&OE

## Architectural Profiles Ltd.

53 Crockhamwell Road, Woodley, Reading,

Berks. RG5 3JP. Telephone: 0118 927 2424 Fax: 0118 927 2400

