



# Product Catalogue 2022

[www.roofmetalindustries.com](http://www.roofmetalindustries.com)



**Roof Metal Industries L.L.C**, manufacturer of corrugated sheets in insulated and single skin for warehouses, roof and wall panels, Z-purlins, flashings and accessories, is dedicated to provide high quality products and technical support.

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# VISION

## Teamwork

The commitment to working together towards a shared goal.

## Customer satisfaction

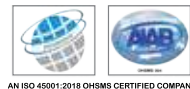
The belief that customers are our most important consideration and deserve our most concentrated attention.

## Innovation

The realization that a spark or genius properly applied is the ultimate catalyst for achievement.

## Quality

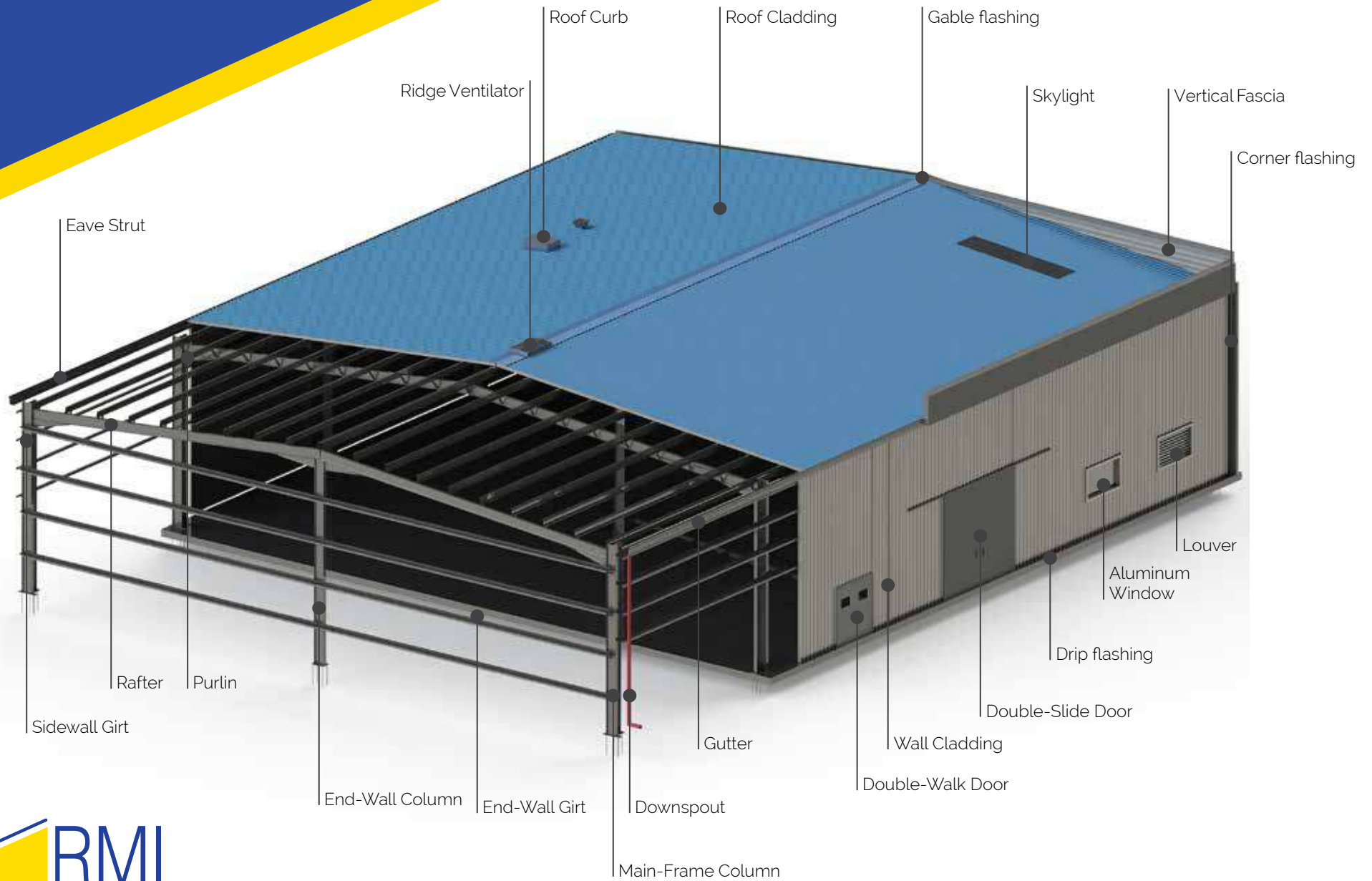
The knowledge that nothing less than the best is good enough.





# BUILDING TERMINOLOGY

# BUILDING TERMINOLOGY



A photograph of an industrial manufacturing environment. In the foreground, a large roll of white material is being processed by a machine with orange and blue components. The machine has a large orange roller and a blue frame. In the background, there are more industrial machines, including a blue table with a white surface, and a white control cabinet with a screen and buttons. The floor is concrete with a yellow safety line. The overall scene is a busy factory floor.

# MACHINES

# MACHINES



PU AND ROCKWOOL LINE

ROCKWOOL LINE

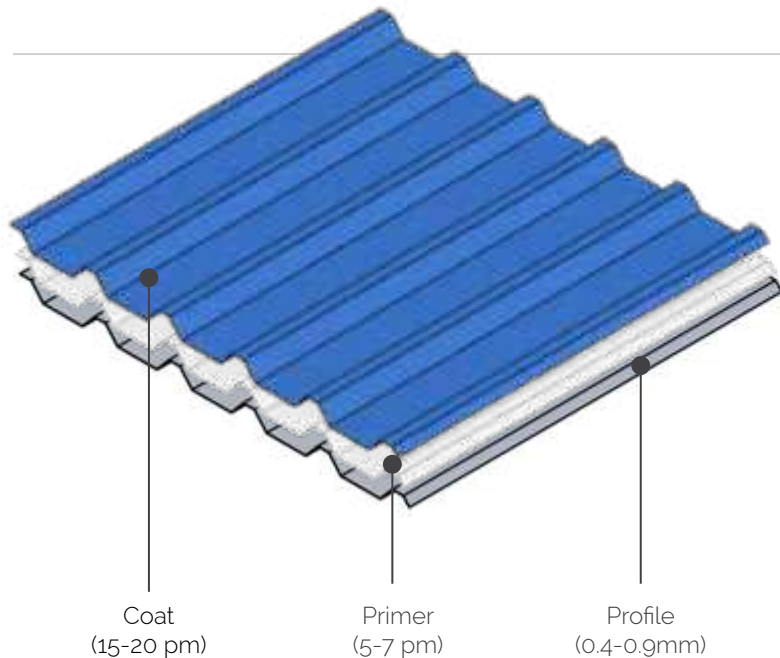


# SPECIFICATION SHEETS



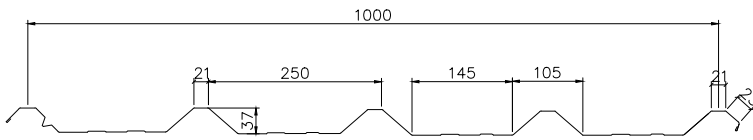
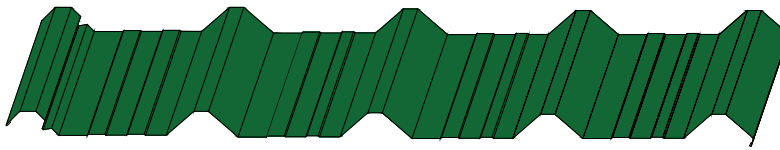
# PROFILED STEEL SHEETS

Steel sheets are produced using Base Material  
ASTM A653

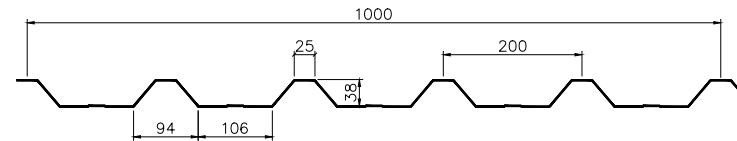
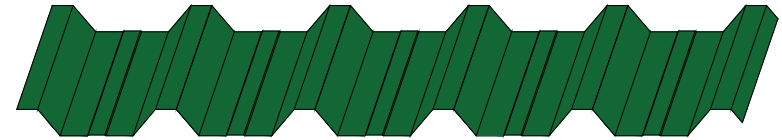


|                   |   |   |
|-------------------|---|---|
| <b>Physical</b>   | Composition   | C 0.4 Cu0.2 P 0.2<br>So.04 Fe 99 w%     |
|                   | Density   | 7.80 Kg.m <sup>3</sup>                  |
|                   | Surface area  | 2.09 m <sup>2</sup>                     |
| <b>Mechanical</b> | Tensile Strength, Ultimate  | 450 MPa                                 |
|                   | Tensile Strength, Yield   | 345 MPa                                 |
|                   | Bulk Modulus  | 160 GPa                                 |
|                   | Shear Modulus   | 80 -                                    |
| <b>Thermal</b>    | Thermal expansion coefficient   | 12 · 10 <sup>-6</sup> °C <sup>-1</sup>  |
|                   | Avg. thermal conductivity   | 48 W.m <sup>-1</sup> .K <sup>-1</sup>   |
|                   | Specific heat capacity  | 420 J.Kg <sup>-1</sup> .K <sup>-1</sup> |
|                   | Max. mechanical temperature   | 405 °C                                  |
| <b>Corrosion</b>  | Direct contact with steel, copper, brass, lead, mortar, and concrete should be avoided by using a separating element such as PVC, tape, bitumen, or alternatively, using zinc or aluminum paint. Timber parts which in contact with aluminum should be treated with impregnating agents which do not contain copper salts, mercury salts, phenol compounds or fluorine compounds. |   |

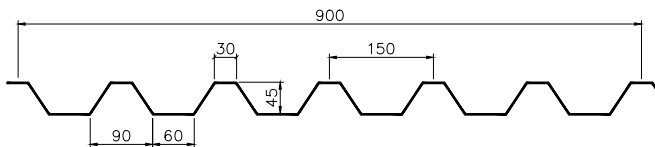
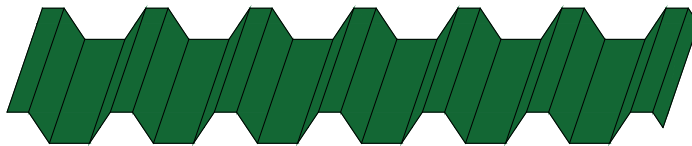
# Single Skin Sheets



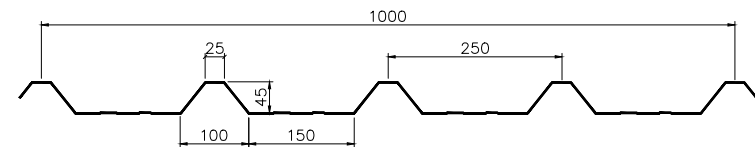
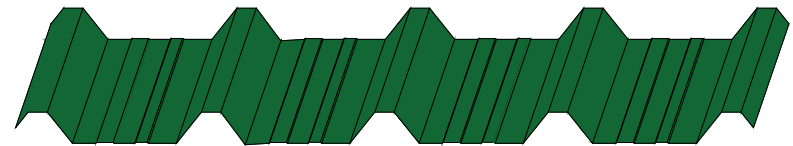
**RM SINGLE SKIN 37-250**



**RM SINGLE SKIN 38-200**



**RM SINGLE SKIN 45-150**



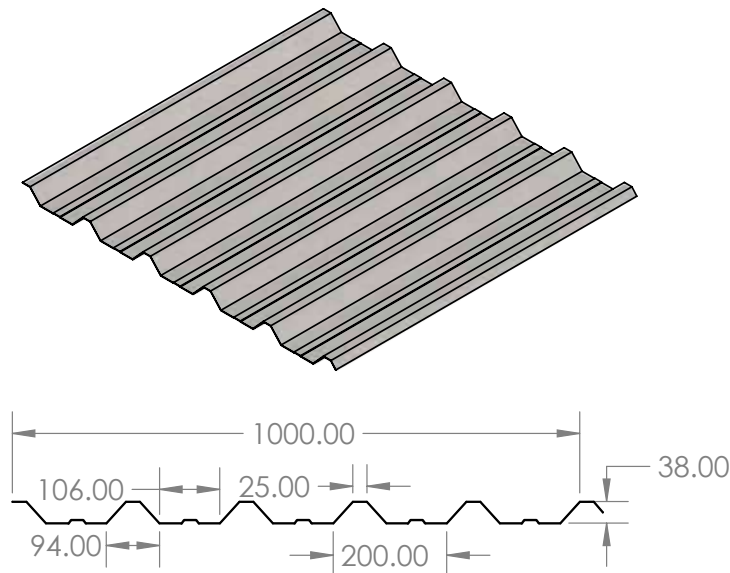
**RM SINGLE SKIN 45-250**

# STEEL RM 38/200

Roof and wall sheet

Allowable load table (N/m<sup>2</sup>)

| Thick-ness | Span condi-tion | Purlins centers in mm |      |      |      |      |      |      |        |                    |                    |
|------------|-----------------|-----------------------|------|------|------|------|------|------|--------|--------------------|--------------------|
|            |                 | 1000                  | 1250 | 1500 | 1750 | 2000 | 2250 | 2500 |        | ZxTop              | ZxBott.            |
|            |                 | mm                    |      |      |      |      |      |      |        | mm <sup>4</sup> .M | mm <sup>3</sup> .M |
| 0.40       | ┌┌              | 4332                  | 2773 | 1925 | 1415 | 1083 | 806  | 587  |        |                    |                    |
|            | ┌┌┌             | 5415                  | 3464 | 2407 | 1768 | 1354 | 1070 | 866  | 113782 | 4536               | 8809               |
| 0.50       | ┌┌              | 5260                  | 3367 | 2338 | 1718 | 1315 | 978  | 713  |        |                    |                    |
|            | ┌┌┌             | 6575                  | 4208 | 2922 | 2142 | 1644 | 1299 | 1052 | 138092 | 5508               | 10681              |
| 0.60       | ┌┌              | 6176                  | 3953 | 2745 | 2017 | 1544 | 1147 | 836  |        |                    |                    |
|            | ┌┌┌             | 7720                  | 4941 | 3431 | 2521 | 1930 | 1525 | 1235 | 162054 | 6467               | 12523              |
| 0.70       | ┌┌              | 6625                  | 4243 | 2946 | 2165 | 1657 | 1231 | 898  |        |                    |                    |
|            | ┌┌┌             | 8287                  | 5303 | 3683 | 2706 | 2072 | 1637 | 1326 | 173906 | 6942               | 13433              |
| 0.80       | ┌┌              | 7527                  | 4817 | 3345 | 2458 | 1882 | 1397 | 1019 |        |                    |                    |
|            | ┌┌┌             | 9408                  | 6021 | 4181 | 3072 | 2352 | 1858 | 1505 | 197353 | 7881               | 15230              |
| 0.90       | ┌┌              | 8412                  | 5384 | 3793 | 2747 | 2103 | 1561 | 1138 |        |                    |                    |
|            | ┌┌┌             | 9408                  | 6730 | 4673 | 3433 | 2629 | 2077 | 1682 | 220460 | 8809               | 16997              |



Units in millimeters (mm.)

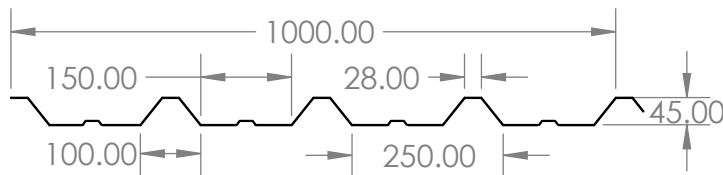
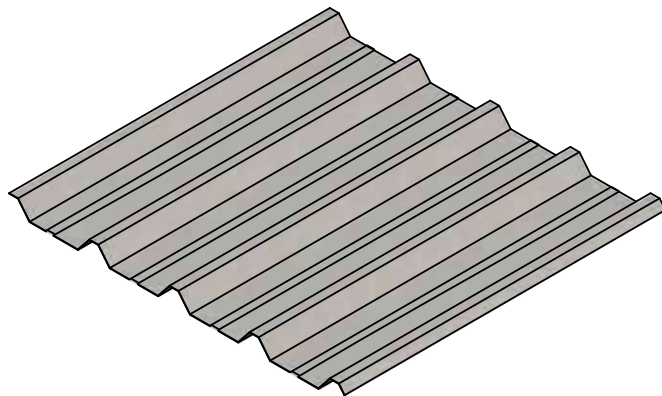
Limiting deflection is L/200

# STEEL RM 45/250

Roof and wall sheet

Allowable load table (N/m<sup>2</sup>)

| Thick-ness | Span condi-tion | Purlins centers in mm |      |      |      |      |      |      |        |                    |                    |
|------------|-----------------|-----------------------|------|------|------|------|------|------|--------|--------------------|--------------------|
|            |                 | 1000                  | 1250 | 1500 | 1750 | 2000 | 2250 | 2500 |        | ZxTop              | ZxBott.            |
|            |                 | mm                    |      |      |      |      |      |      |        | mm <sup>4</sup> .M | mm <sup>3</sup> .M |
| 0.40       | ∟∟              | 4086                  | 2654 | 1843 | 1354 | 1037 | 807  | 654  |        |                    |                    |
|            | ∟∟∟             | 5184                  | 3270 | 2271 | 1693 | 1296 | 1024 | 818  | 136430 | 4256               | 10393              |
| 0.50       | ∟∟              | 4968                  | 3180 | 2240 | 1646 | 1260 | 981  | 795  |        |                    |                    |
|            | ∟∟∟             | 6210                  | 3974 | 2760 | 2057 | 1575 | 1244 | 994  | 165723 | 5178               | 12265              |
| 0.60       | ∟∟              | 5838                  | 3791 | 2595 | 1934 | 1481 | 1170 | 984  |        |                    |                    |
|            | ∟∟∟             | 7298                  | 4671 | 3290 | 2384 | 1851 | 1462 | 1185 | 194650 | 6290               | 14107              |
| 0.70       | ∟∟              | 6270                  | 4071 | 2786 | 2077 | 1567 | 1256 | 1018 |        |                    |                    |
|            | ∟∟∟             | 7837                  | 5088 | 3483 | 2596 | 1958 | 1570 | 1272 | 208977 | 6520               | 15017              |
| 0.80       | ∟∟              | 7125                  | 4560 | 3165 | 2360 | 1781 | 1428 | 1158 |        |                    |                    |
|            | ∟∟∟             | 9806                  | 5782 | 3953 | 2950 | 2259 | 1786 | 1448 | 237361 | 7418               | 16814              |
| 0.90       | ∟∟              | 7970                  | 5175 | 3594 | 2640 | 1993 | 1597 | 1294 |        |                    |                    |
|            | ∟∟∟             | 9963                  | 6376 | 4492 | 3253 | 2491 | 1996 | 1594 | 265386 | 8306               | 18581              |



Units in millimeters (mm.)

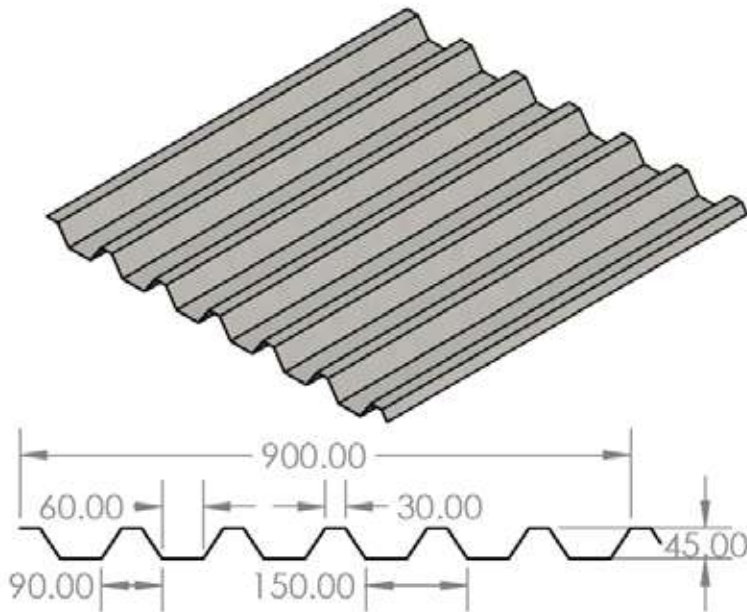
Limiting deflection is L/200

# STEEL RM 45/150

Roof and wall sheet

Allowable load table (N/m<sup>2</sup>)

| Thick-ness | Span condi-tion | Purlins centers in mm |      |      |      |      |      |      |        |                    |                    |  |
|------------|-----------------|-----------------------|------|------|------|------|------|------|--------|--------------------|--------------------|--|
|            |                 | 1000                  | 1250 | 1500 | 1750 | 2000 | 2250 | 2500 |        | ZxTop              | ZxBott.            |  |
| mm         |                 |                       |      |      |      |      |      |      |        | mm <sup>4</sup> .M | mm <sup>3</sup> .M |  |
| 0.40       | ┌┌              | 5013                  | 3208 | 2228 | 1637 | 1253 | 990  | 802  |        |                    |                    |  |
|            | ┌┌┌             | 6266                  | 4010 | 2785 | 2046 | 1567 | 1238 | 1238 | 159883 | 8367               | 6176               |  |
| 0.50       | ┌┌              | 6227                  | 3985 | 2767 | 2033 | 1557 | 1230 | 1230 |        |                    |                    |  |
|            | ┌┌┌             | 7783                  | 4981 | 3459 | 2542 | 1946 | 1537 | 1537 | 198571 | 10390              | 7671               |  |
| 0.60       | ┌┌              | 7425                  | 4752 | 3300 | 2425 | 1856 | 1467 | 1467 |        |                    |                    |  |
|            | ┌┌┌             | 9282                  | 5940 | 4125 | 3031 | 2320 | 1833 | 1833 | 236756 | 12385              | 9148               |  |
| 0.70       | ┌┌              | 8609                  | 5509 | 3826 | 2811 | 2152 | 1700 | 1700 |        |                    |                    |  |
|            | ┌┌┌             | 10761                 | 6887 | 4783 | 3514 | 2690 | 2126 | 2126 | 274441 | 14353              | 10604              |  |
| 0.80       | ┌┌              | 9777                  | 6257 | 4345 | 3192 | 2444 | 1931 | 1931 |        |                    |                    |  |
|            | ┌┌┌             | 12221                 | 7821 | 5431 | 3990 | 3055 | 2414 | 2414 | 311630 | 16295              | 12044              |  |
| 0.90       | ┌┌              | 10930                 | 6995 | 4858 | 3569 | 2732 | 2160 | 2160 |        |                    |                    |  |
|            | ┌┌┌             | 13662                 | 8744 | 6072 | 4461 | 3416 | 1269 | 2699 | 348329 | 18210              | 13464              |  |



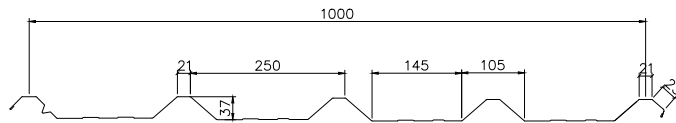
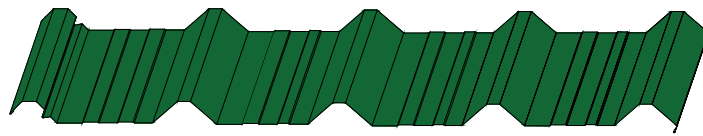
Units in millimeters (mm.)

Limiting deflection is L/200

# Steel - RM 37/250

Roof and wall sheet

Allowable load table (N/m<sup>2</sup>)

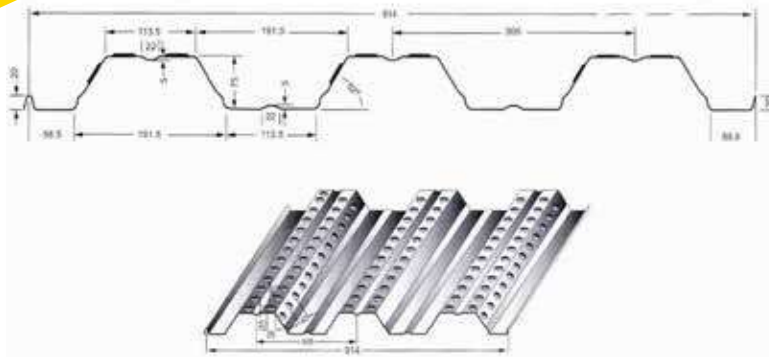


Units in millimeters (mm.)

|      | Span condition | Purlins centers in mm |      |      |      |      |      |      |        | mm <sup>4</sup> /M | ZxTop              | ZxBott. |
|------|----------------|-----------------------|------|------|------|------|------|------|--------|--------------------|--------------------|---------|
|      |                | 1000                  | 1250 | 1500 | 1750 | 2000 | 2250 | 2500 |        |                    |                    |         |
| mm   |                |                       |      |      |      |      |      |      |        | mm <sup>3</sup> /M | mm <sup>3</sup> /M |         |
| 0.40 |                | 4086                  | 2654 | 1843 | 1354 | 1037 | 807  | 654  | 136430 | 4256               | 10393              |         |
|      |                | 5184                  | 3270 | 2271 | 1693 | 1296 | 1024 | 818  |        |                    |                    |         |
| 0.50 |                | 4968                  | 3180 | 2240 | 1646 | 1260 | 981  | 795  | 165723 | 5178               | 12265              |         |
|      |                | 6210                  | 3974 | 2760 | 2057 | 1575 | 1244 | 994  |        |                    |                    |         |
| 0.60 |                | 5838                  | 3791 | 2595 | 1934 | 1481 | 1170 | 984  | 194650 | 6290               | 14107              |         |
|      |                | 7298                  | 4671 | 3290 | 2384 | 1851 | 1462 | 1185 |        |                    |                    |         |
| 0.70 |                | 6270                  | 4071 | 2786 | 2077 | 1567 | 1256 | 1018 | 208977 | 6520               | 15017              |         |
|      |                | 7837                  | 5088 | 3483 | 2596 | 1958 | 1570 | 1272 |        |                    |                    |         |
| 0.80 |                | 7125                  | 4560 | 3165 | 2360 | 1781 | 1428 | 1158 | 237361 | 7418               | 16814              |         |
|      |                | 9806                  | 5782 | 3953 | 2950 | 2259 | 1786 | 1448 |        |                    |                    |         |
| 0.90 |                | 7970                  | 5175 | 3594 | 2640 | 1993 | 1597 | 1294 | 265386 | 8306               | 18581              |         |
|      |                | 9963                  | 6376 | 4492 | 3253 | 2491 | 1996 | 1594 |        |                    |                    |         |

Working load in N/m<sup>2</sup> and limiting deflection L/200

# RM 75/305



## Application Specification

- Steel Decking
- Sheets are galvanized & Color coated steel
- Based Material conforms to EN10147 Fe 350 Z27 / ASTM A653 GD 90
- Hot dip galvanized process with G90 or Z27 coating
- Color RAL Color, subject to availability
- Coating is regular polyester, 25mic/7mic
- Yield Strength 350N/mm<sup>2</sup>
- Thickness from 0.7mm to 1.5mm

## Section Properties (per meter of coverage width)

| Thickness<br>mm | Weight<br>Kg/m <sup>2</sup> | Area<br>cm <sup>2</sup> | Top in Compression |                        |                           |         | Bottom in Compression |                        |                           |         | Shear   |
|-----------------|-----------------------------|-------------------------|--------------------|------------------------|---------------------------|---------|-----------------------|------------------------|---------------------------|---------|---------|
|                 |                             |                         | ix cm <sup>4</sup> | Sx Top cm <sup>3</sup> | Sx Bottom cm <sup>3</sup> | Ma KN-m | ix cm <sup>4</sup>    | Sx Top cm <sup>3</sup> | Sx Bottom cm <sup>3</sup> | Ma KN-m | Va KN   |
| 0.70            | 7.283                       | 9.290                   | 71.761             | 16.687                 | 22.165                    | 5.548   | 66.660                | 20.702                 | 15.437                    | 5.133   | 50.858  |
| 0.80            | 8.322                       | 10.614                  | 87.284             | 21.077                 | 25.650                    | 7.008   | 78.133                | 23.832                 | 18.317                    | 6.091   | 66.288  |
| 0.90            | 9.360                       | 11.939                  | 99.980             | 24.351                 | 29.028                    | 8.096   | 89.908                | 26.978                 | 21.319                    | 7.088   | 78.229  |
| 1.00            | 10.398                      | 13.263                  | 112.882            | 27.706                 | 32.421                    | 9.213   | 101.948               | 30.137                 | 24.430                    | 8.122   | 86.670  |
| 1.20            | 12.473                      | 15.910                  | 139.200            | 34.620                 | 39.243                    | 11.511  | 126.675               | 36.479                 | 30.932                    | 10.284  | 103.401 |
| 1.50            | 15.592                      | 19.888                  | 179.717            | 45.383                 | 49.566                    | 15.090  | 165.205               | 46.050                 | 41.319                    | 13.739  | 128.978 |

# RM 75/305

## Ultimate Uniform Load Capacities (KN/m<sup>2</sup>)

1/2

| Thickness | No. of Spans | Load         | Span in Meters |        |        |        |        |        |        |       |       |
|-----------|--------------|--------------|----------------|--------|--------|--------|--------|--------|--------|-------|-------|
| mm        | No's         | Case         | 1              | 1.25   | 1.5    | 1.75   | 2      | 2.25   | 2.5    | 2.75  | 3.00  |
| 0.70      | Single Spans | Imposed Load | 44.387         | 28.408 | 18.452 | 11.620 | 7.785  | 5.467  | 3.986  | 2.995 | 2.307 |
|           |              | Wind Load    | 41.063         | 26.280 | 18.250 | 13.408 | 10.266 | 7.618  | 5.554  | 4.172 | 3.214 |
|           | Multi Spans  | Imposed Load | 55.484         | 35.510 | 24.659 | 18.117 | 13.871 | 10.316 | 7.520  | 5.650 | 4.352 |
|           |              | Wind Load    | 51.329         | 32.850 | 22.813 | 16.760 | 12.832 | 10.139 | 8.213  | 6.787 | 5.703 |
| 0.80      | Single Spans | Imposed Load | 56.066         | 35.882 | 22.444 | 14.134 | 9.469  | 6.650  | 4.848  | 3.642 | 2.805 |
|           |              | Wind Load    | 48.726         | 31.185 | 21.656 | 15.911 | 12.182 | 8.929  | 6.509  | 4.297 | 3.767 |
|           | Multi Spans  | Imposed Load | 70.082         | 44.852 | 31.148 | 22.884 | 17.521 | 12.547 | 9.147  | 6.872 | 5.293 |
|           |              | Wind Load    | 60.908         | 38.981 | 27.070 | 19.888 | 15.227 | 12.031 | 9.745  | 8.054 | 6.768 |
| 0.90      | Single Spans | Imposed Load | 64.770         | 41.453 | 25.709 | 16.190 | 10.846 | 7.617  | 5.553  | 4.172 | 3.214 |
|           |              | Wind Load    | 56.704         | 36.291 | 25.202 | 18.516 | 14.176 | 10.275 | 7.490  | 5.628 | 4.335 |
|           | Multi Spans  | Imposed Load | 80.962         | 51.816 | 35.983 | 26.437 | 20.241 | 14.372 | 10.477 | 7.872 | 6.063 |
|           |              | Wind Load    | 70.880         | 45.363 | 31.502 | 23.145 | 17.720 | 14.001 | 11.341 | 9.373 | 7.876 |



# RM 75/305

## Ultimate Uniform Load Capacities (KN/m<sup>2</sup>)

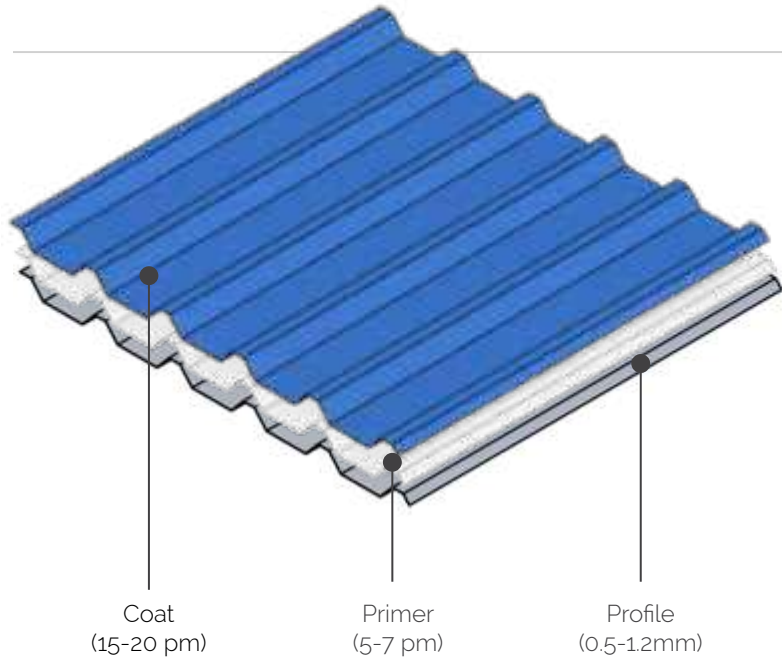
2/2

| Thickness | No. of Spans | Load         | Span in Meters |        |        |        |        |        |        |        |        |
|-----------|--------------|--------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|
| mm        | No's         | Case         | 1              | 1.25   | 1.5    | 1.75   | 2      | 2.25   | 2.5    | 2.75   | 3.00   |
| 1.00      | Single Spans | Imposed Load | 73.701         | 47.169 | 29.026 | 18.279 | 12.245 | 8.600  | 6.270  | 4.710  | 3.628  |
|           |              | Wind Load    | 64.980         | 41.587 | 28.880 | 21.218 | 16.245 | 11.651 | 8.494  | 6.381  | 4.915  |
|           | Multi Spans  | Imposed Load | 92.127         | 58.961 | 40.945 | 30.082 | 23.032 | 16.227 | 11.830 | 8.888  | 6.846  |
|           |              | Wind Load    | 81.225         | 51.984 | 36.100 | 26.522 | 20.306 | 16.044 | 12.996 | 10.740 | 9.025  |
| 1.20      | Single Spans | Imposed Load | 92.090         | 58.937 | 35.794 | 22.541 | 15.100 | 10.606 | 7.731  | 5.809  | 4.474  |
|           |              | Wind Load    | 82.274         | 52.656 | 36.566 | 26.865 | 20.569 | 14.477 | 10.554 | 7.929  | 6.107  |
|           | Multi Spans  | Imposed Load | 115.112        | 73.672 | 51.161 | 37.588 | 28.491 | 20.010 | 14.588 | 10.960 | 8.442  |
|           |              | Wind Load    | 102.843        | 65.820 | 45.708 | 33.581 | 25.711 | 20.315 | 16.455 | 13.599 | 11.427 |
| 1.50      | Single Spans | Imposed Load | 120.722        | 77.262 | 46.212 | 29.101 | 19.496 | 13.692 | 9.982  | 7.499  | 5.776  |
|           |              | Wind Load    | 109.909        | 70.342 | 48.849 | 35.889 | 26.882 | 18.880 | 13.764 | 10.341 | 7.965  |
|           | Multi Spans  | Imposed Load | 150.902        | 96.577 | 67.068 | 49.274 | 36.784 | 25.835 | 18.834 | 14.150 | 10.899 |
|           |              | Wind Load    | 137.387        | 87.927 | 61.061 | 44.861 | 34.347 | 27.138 | 21.982 | 18.167 | 15.028 |

1. Sheeting design is based on AISI - 2001 (LRFD) or qui BS5950 P5  
 2. Imposed Load = Dead Load + Live Load (Deflection Limitation: Span /180)  
 3. Wind Load = Wind Uplift (Deflection Limitation : Span / 120)

# PROFILED ALUMINIUM SHEETS

Aluminium sheets are produced using aluminium alloy  
AA3105 / H16 TEMPER



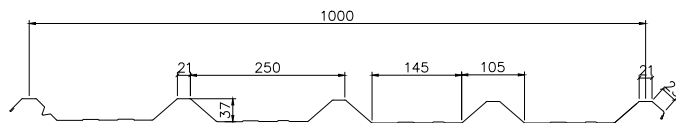
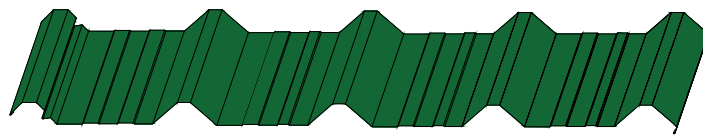
|                   |   |   |
|-------------------|---|---|
| <b>Physical</b>   | Composition   | Al 97 Mn 0.8 Mg<br>0.8 Fe 0.7 Zn 0.4<br>Cu 0.3 w% |
|                   | Density   | 2720 Kg.m <sup>-3</sup>                           |
|                   | Surface area  | 2.09 m <sup>2</sup>                               |
| <b>Mechanical</b> | Tensile Strength, Ultimate  | 152 MPa   |
|                   | Tensile Strength, Yield   | 124 MPa   |
|                   | Bulk Modulus  | 68 GPa  |
|                   | Shear Modulus   | 26 GPa  |
| <b>Thermal</b>    | Thermal expansion coefficient   | 23.3 · 10 <sup>-6</sup> °C <sup>-1</sup>          |
|                   | Avg. thermal conductivity   | 160-175 W.m <sup>-1</sup> .K <sup>-1</sup>        |
|                   | Specific heat capacity  | 900 J.Kg <sup>-1</sup> .K <sup>-1</sup>           |
|                   | Max. mechanical temperature   | 180 °C  |
| <b>Corrosion</b>  | Direct contact with steel, copper, brass, lead, mortar, and concrete should be avoided by using a separating element such as PVC, tape, bitumen, or alternatively, using zinc or aluminum paint. Timber parts which in contact with aluminum should be treated with impregnating agents which do not contain copper salts, mercury salts, phenol compounds or fluorine compounds. |   |

# Aluminium - RM 37/250

Roof and wall sheet

Allowable load table (N/m<sup>2</sup>)

|      | Span condition | Purlins centers in mm |      |      |      |      | MI                 |                   |                    |                    |
|------|----------------|-----------------------|------|------|------|------|--------------------|-------------------|--------------------|--------------------|
|      |                | 1000                  | 1250 | 1500 | 1750 | 2000 | mm <sup>4</sup> /M | Weight            | ZxTop              | ZxBott.            |
| mm   |                |                       |      |      |      |      |                    | KG/M <sup>2</sup> | mm <sup>2</sup> /M | mm <sup>2</sup> /M |
| 0.50 | LL             | 2100                  | 1344 | 934  | 686  | 508  | 151122             | 1.67              | 4743               | 11506              |
|      | LLL            | 2625                  | 1650 | 1167 | 857  | 658  |                    |                   |                    |                    |
| 0.60 | LL             | 2505                  | 1604 | 1114 | 818  | 606  | 180232             | 2.00              | 5659               | 13705              |
|      | LLL            | 3133                  | 2005 | 1392 | 1023 | 783  |                    |                   |                    |                    |
| 0.70 | LL             | 2908                  | 1881 | 1292 | 949  | 702  | 208977             | 2.33              | 6585               | 15871              |
|      | LLL            | 3634                  | 2326 | 1615 | 1187 | 909  |                    |                   |                    |                    |
| 0.80 | LL             | 3304                  | 2115 | 1469 | 1079 | 798  | 237361             | 2.66              | 7460               | 18004              |
|      | LLL            | 4130                  | 2643 | 1836 | 1349 | 1038 |                    |                   |                    |                    |
| 0.90 | LL             | 3695                  | 2366 | 1643 | 1207 | 892  | 265386             | 3.00              | 8346               | 20104              |
|      | LLL            | 4620                  | 2957 | 2054 | 1509 | 1155 |                    |                   |                    |                    |
| 1.00 | LL             | 4084                  | 2614 | 1815 | 1333 | 985  | 293056             | 3.33              | 9220               | 22173              |
|      | LLL            | 5105                  | 3267 | 2269 | 1667 | 1278 |                    |                   |                    |                    |
| 1.20 | LL             | 4845                  | 3101 | 2154 | 1582 | 1167 | 347340             | 4.00              | 10941              | 26213              |
|      | LLL            | 6057                  | 3876 | 2692 | 1978 | 1514 |                    |                   |                    |                    |



Units in millimeters (mm.)

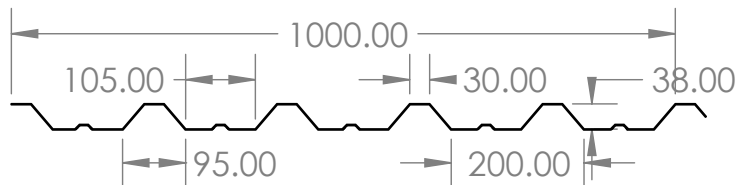
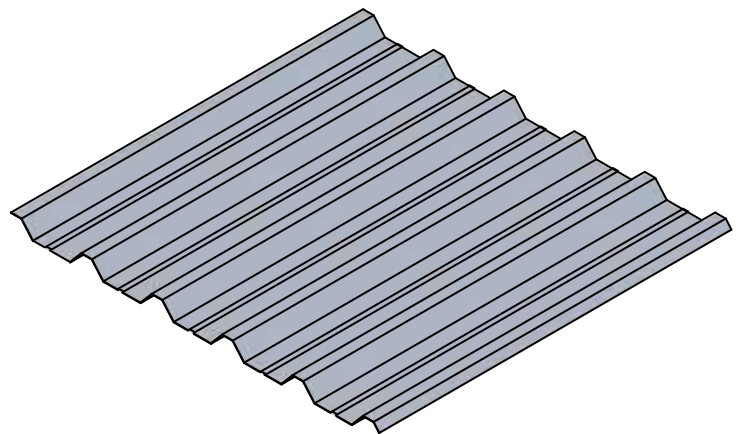
Working load in N/m<sup>2</sup> and limiting deflection L/200

# ALUMINIUM RM 38/200

Roof and wall sheet

Allowable load table (N/m<sup>2</sup>)

| Thickness | Span condition | Purlins centers in mm |      |      |      |      |                    |                    |         |
|-----------|----------------|-----------------------|------|------|------|------|--------------------|--------------------|---------|
|           |                | 1000                  | 1250 | 1500 | 1750 | 2000 |                    | ZxTop              | ZxBott. |
| mm        |                |                       |      |      |      |      | mm <sup>4</sup> .M | mm <sup>3</sup> .M |         |
| 0.50      | ┌┌             | 2225                  | 1424 | 989  | 632  | 423  | 125981             | 5024               | 9748    |
|           | ┌┌┌            | 2781                  | 1780 | 1236 | 908  | 677  |                    |                    |         |
| 0.60      | ┌┌             | 2653                  | 1698 | 1179 | 753  | 504  | 150116             | 5989               | 11606   |
|           | ┌┌┌            | 3316                  | 2122 | 1474 | 1083 | 807  |                    |                    |         |
| 0.70      | ┌┌             | 3074                  | 1968 | 1366 | 872  | 584  | 173906             | 6942               | 13433   |
|           | ┌┌┌            | 3843                  | 2460 | 1708 | 1255 | 935  |                    |                    |         |
| 0.80      | ┌┌             | 3491                  | 2234 | 1551 | 990  | 663  | 197355             | 7882               | 15229   |
|           | ┌┌┌            | 4363                  | 2792 | 1939 | 1425 | 1061 |                    |                    |         |
| 0.90      | ┌┌             | 3901                  | 2497 | 1734 | 1106 | 471  | 220460             | 8809               | 16997   |
|           | ┌┌┌            | 4876                  | 3121 | 2167 | 1592 | 1185 |                    |                    |         |
| 1.00      | ┌┌             | 4306                  | 2756 | 1914 | 1220 | 817  | 243231             | 972                | 18735   |
|           | ┌┌┌            | 5383                  | 3445 | 2392 | 1758 | 1308 |                    |                    |         |
| 1.20      | ┌┌             | 5100                  | 3264 | 2267 | 1443 | 967  | 287776             | 11515              | 22124   |
|           | ┌┌┌            | 6376                  | 4080 | 2833 | 2082 | 1547 |                    |                    |         |

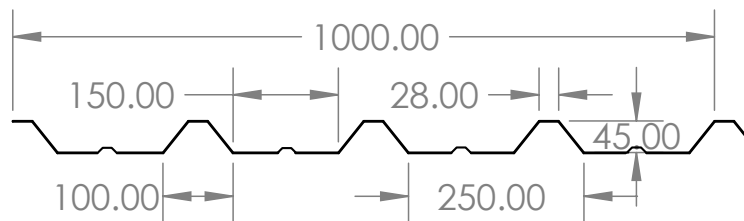
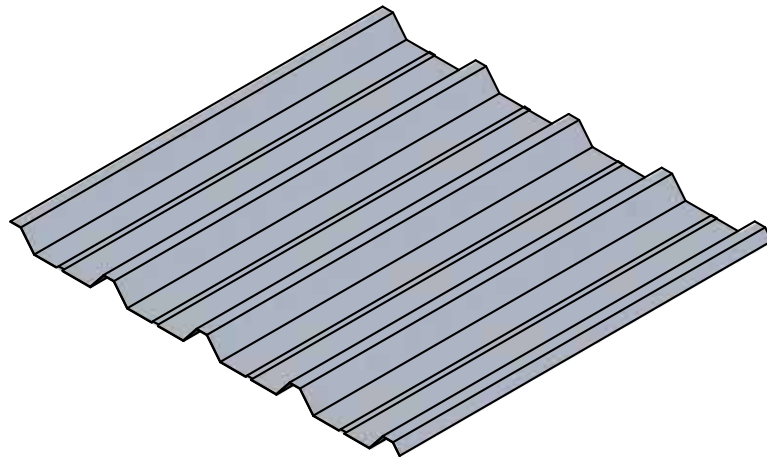


Units in millimeters (mm.)

Limiting deflection is L/200

# ALUMINIUM RM 45/250

Roof and wall sheet



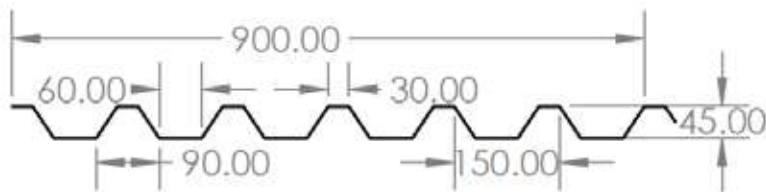
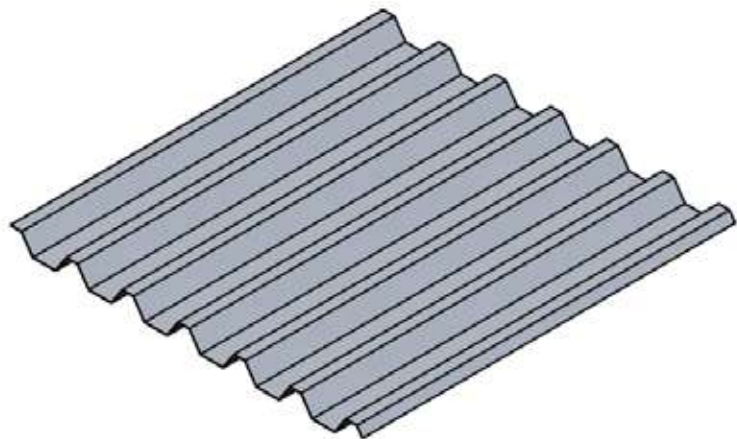
Units in millimeters (mm.)



| Thick-ness | Span condi-tion | Purlins centers in mm |      |      |      |      |                    |                    |                     | Weight |
|------------|-----------------|-----------------------|------|------|------|------|--------------------|--------------------|---------------------|--------|
|            |                 | 1000                  | 1250 | 1500 | 1750 | 2000 |                    | ZxTop              | ZxBott.             |        |
| mm         |                 |                       |      |      |      |      | mm <sup>4</sup> .M | mm <sup>3</sup> .M | Kg. m <sup>-2</sup> |        |
| 0.50       | ┌┌              | 2100                  | 1344 | 934  | 686  | 508  | 151122             | 4743               | 11506               | 1.67   |
|            | ┌┌┌             | 2625                  | 1650 | 1167 | 857  | 658  |                    |                    |                     |        |
| 0.60       | ┌┌              | 2505                  | 1604 | 1114 | 818  | 606  | 180232             | 5659               | 13705               | 2.00   |
|            | ┌┌┌             | 3133                  | 2005 | 1392 | 1023 | 783  |                    |                    |                     |        |
| 0.70       | ┌┌              | 2908                  | 1881 | 1292 | 949  | 702  | 208977             | 6585               | 15871               | 2.33   |
|            | ┌┌┌             | 3634                  | 2326 | 1615 | 1187 | 909  |                    |                    |                     |        |
| 0.80       | ┌┌              | 3304                  | 2115 | 1469 | 1079 | 798  | 237361             | 7460               | 18004               | 2.66   |
|            | ┌┌┌             | 4130                  | 2643 | 1836 | 1349 | 1038 |                    |                    |                     |        |
| 0.90       | ┌┌              | 3695                  | 2366 | 1643 | 1207 | 892  | 265386             | 8346               | 20104               | 3.00   |
|            | ┌┌┌             | 4620                  | 2957 | 2054 | 1509 | 1155 |                    |                    |                     |        |
| 1.00       | ┌┌              | 4084                  | 2614 | 1815 | 1333 | 985  | 293056             | 9220               | 22173               | 3.33   |
|            | ┌┌┌             | 5105                  | 3267 | 2269 | 1667 | 1278 |                    |                    |                     |        |
| 1.20       | ┌┌              | 4845                  | 3101 | 2154 | 1582 | 1167 | 347340             | 10941              | 26213               | 4.00   |
|            | ┌┌┌             | 6057                  | 3876 | 2692 | 1978 | 1514 |                    |                    |                     |        |

# ALUMINIUM RM 45/150

Roof and wall sheet



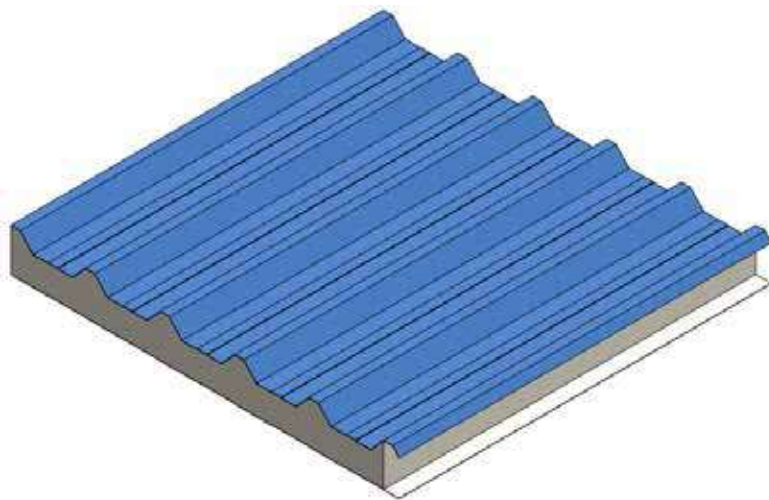
Units in millimeters (mm.)



| Thick-ness | Span condi-tion | Purlins centers in mm |      |      |      |      |                    |                    |         | Weight              |
|------------|-----------------|-----------------------|------|------|------|------|--------------------|--------------------|---------|---------------------|
|            |                 | 1000                  | 1250 | 1500 | 1750 | 2000 |                    | ZxTop              | ZxBott. |                     |
| mm         |                 |                       |      |      |      |      | mm <sup>4</sup> .M | mm <sup>3</sup> .M |         | Kg. m <sup>-2</sup> |
| 0.50       | ┌┌              | 3325                  | 2128 | 1476 | 996  | 667  | 198571             | 7671               | 10389   | 1.85                |
|            | ┌┌┌             | 4156                  | 2660 | 1847 | 1357 | 1039 |                    |                    |         |                     |
| 0.60       | ┌┌              | 5963                  | 2536 | 1761 | 1187 | 795  | 236756             | 9147               | 12385   | 2.22                |
|            | ┌┌┌             | 4954                  | 3170 | 2302 | 1618 | 1338 |                    |                    |         |                     |
| 0.70       | ┌┌              | 4593                  | 2939 | 2041 | 1376 | 922  | 274441             | 10605              | 14353   | 2.59                |
|            | ┌┌┌             | 5741                  | 3674 | 2552 | 1875 | 1435 |                    |                    |         |                     |
| 0.80       | ┌┌              | 5214                  | 3337 | 2317 | 1563 | 1047 | 311630             | 12044              | 16294   | 2.96                |
|            | ┌┌┌             | 5518                  | 4171 | 2897 | 2128 | 1629 |                    |                    |         |                     |
| 0.90       | ┌┌              | 5527                  | 3729 | 2590 | 1747 | 1170 | 348329             | 13464              | 18209   | 3.33                |
|            | ┌┌┌             | 7264                  | 4662 | 3237 | 2376 | 1821 |                    |                    |         |                     |
| 1.00       | ┌┌              | 6431                  | 4116 | 2657 | 1929 | 1929 | 384540             | 14867              | 20098   | 3.70                |
|            | ┌┌┌             | 8039                  | 5145 | 2573 | 2625 | 2010 |                    |                    |         |                     |
| 1.20       | ┌┌              | 7615                  | 4874 | 3355 | 2285 | 1531 | 455519             | 17616              | 23797   | 4.44                |
|            | ┌┌┌             | 9591                  | 6092 | 4231 | 3108 | 2350 |                    |                    |         |                     |

# PROFILED COMPOSITE PIR/PUR SHEETS

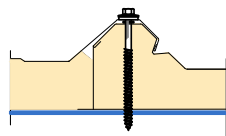
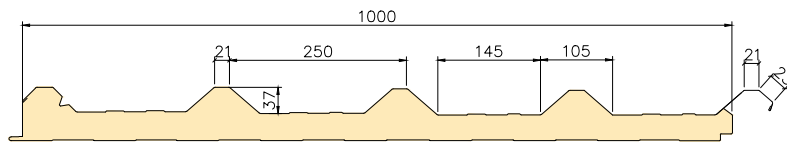
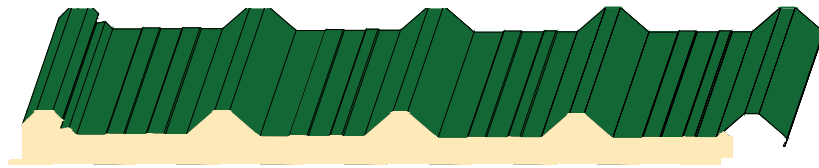
Aluminum and steel sheets can be made into insulated sandwich panels containing PIR(polyisocyanurate)/PUR(polyurethane) foam with different thicknesses



|              |                               |   |
|--------------|-------------------------------|---|
| Physical     | Composition                   | Polyurethane 99<br>Water 1 (after 24h) V% |
|              | Density                       | 38-40 Kg.m <sup>-3</sup>                  |
|              | Weight                        | 3.43 Kg.m <sup>-1</sup>                   |
| Mechanical   | Tensile Strength, Ultimate    | 150 KPa                                   |
|              | Compression resistance        | 100 KPa                                   |
|              | Shear resistance              | 100 KPa                                   |
| Thermal      | Avg. thermal conductivity     | 0.0236 W.m <sup>-1</sup> .K <sup>-1</sup> |
|              | Thermal expansion coefficient | 56 · 10 <sup>-6</sup> °C <sup>-1</sup>    |
| Flammability | Standard                      | B2 as per DIN 4102                        |

# COMPOSITE RM 37/250

Roof and wall sheet



**SIDE LAP DETAIL**

## General Features

### a. Mechanical Characteristic of the foam (At Overall Density of 38 - 40 kg/m<sup>3</sup>)

- Tensile stress: 150 kpa
- Compression resistance: 100 kpa
- Shear resistance: 100 kpa
- Fire property: B2 as per DIN 4102

### b. Insulation capacity

- K value (Thermal Conductivity of PIR) - 0.0236 W/mK
- Tolerance + / - 0.002

### c. Water absorption of the foam

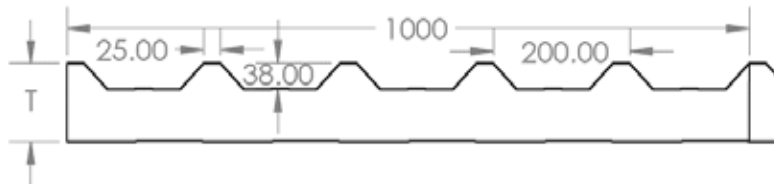
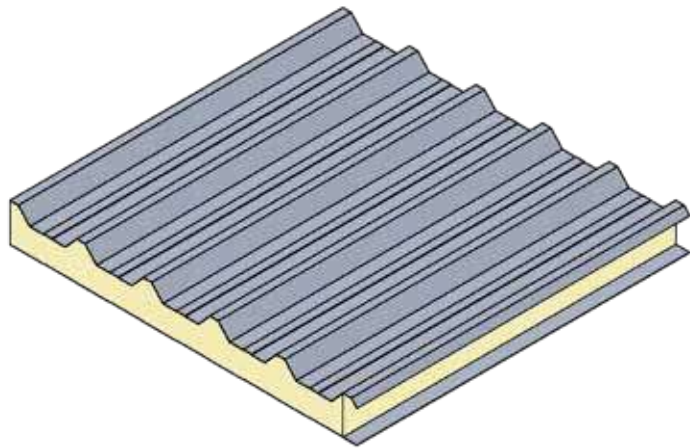
- After 24 hours: 1.0% of volume

| Core thickness T (mm) | Thermal Conductance U-Value (W/m <sup>2</sup> k) | Thermal Resistance R-Value (W/m <sup>2</sup> k) |
|-----------------------|--|---|
| 50                    | 0.397  | 2.515   |
| 75                    | 0.279  | 3.574   |
| 100                   | 0.215  | 4.633   |



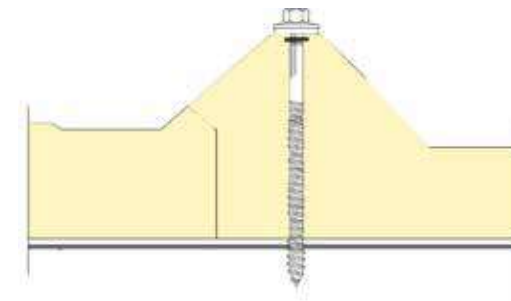
# COMPOSITE RM 38/200

Roof and wall sheet



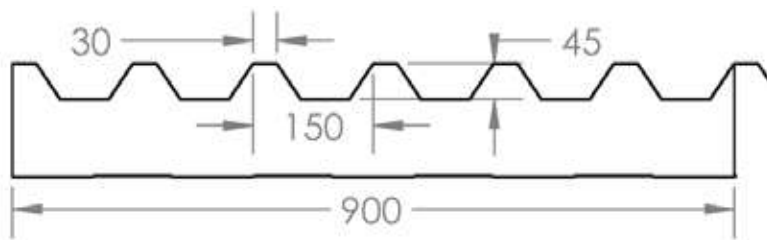
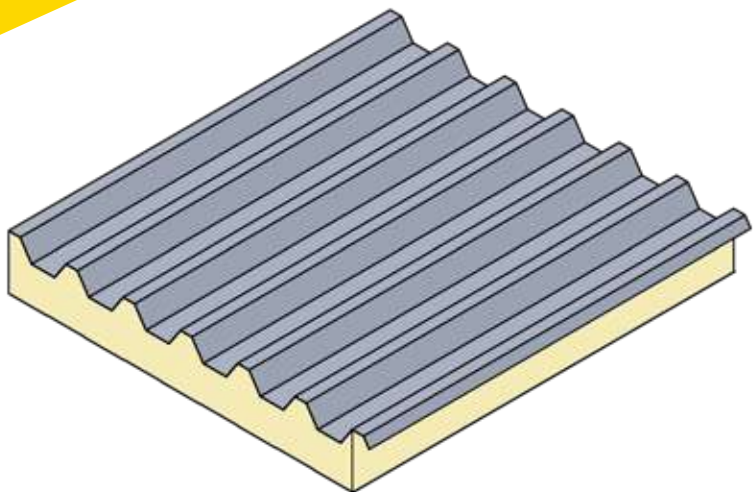
Units in millimeters (mm.)

| Core thickness T (mm) | Thermal conductance (W.m <sup>-1</sup> .K <sup>-1</sup> ) | Thermal resistance (m.K.W <sup>-1</sup> ) |
|-----------------------|---|---|
| 35                    | 0.504   | 1.970                                     |
| 50                    | 0.383   | 2.605                                     |
| 75                    | 0.272   | 3.667                                     |
| 100                   | 0.211   | 4.725                                     |



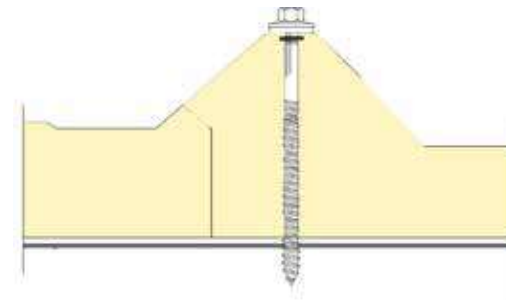
# COMPOSITE RM 45/150

Roof and wall sheet



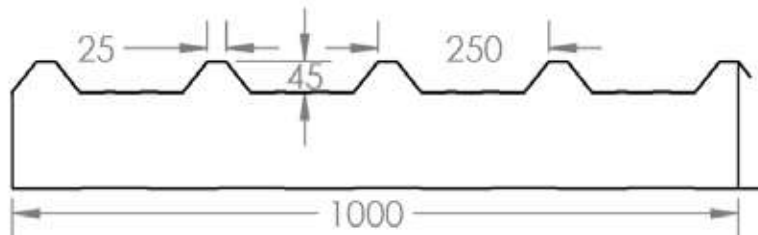
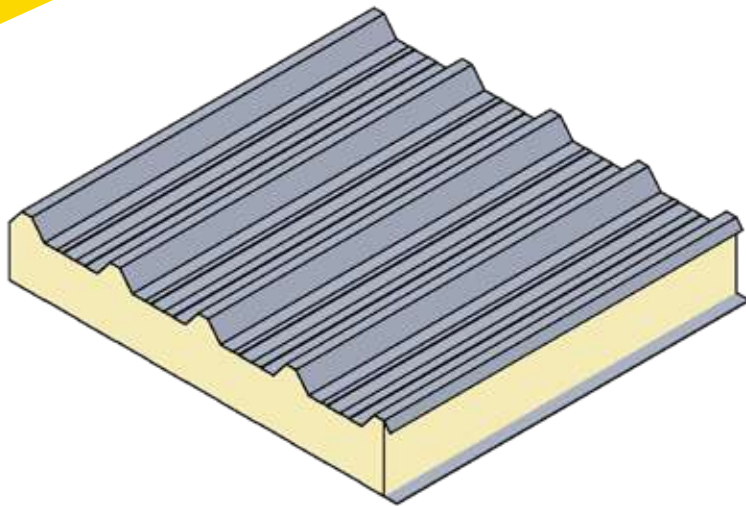
Units in millimeters (mm.)

| Core thickness T (mm) | Thermal conductance ( $W.m^{-1}.K^{-1}$ ) | Thermal resistance ( $m.K.W^{-1}$ ) |
|-----------------------|---|-------------------------------------|
| 35                    | 0.445                                     | 2.245                               |
| 50                    | 0.347                                     | 2.881                               |
| 75                    | 0.253                                     | 3.940                               |
| 100                   | 0.200                                     | 5.000                               |



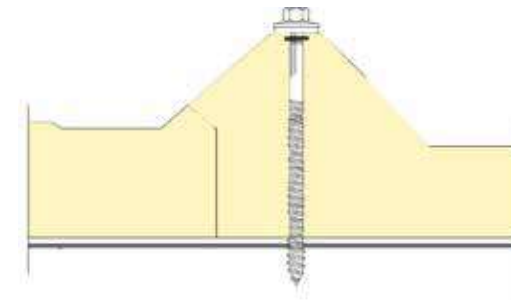
# COMPOSITE RM 45/250

Roof and wall sheet



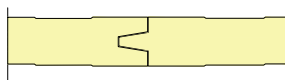
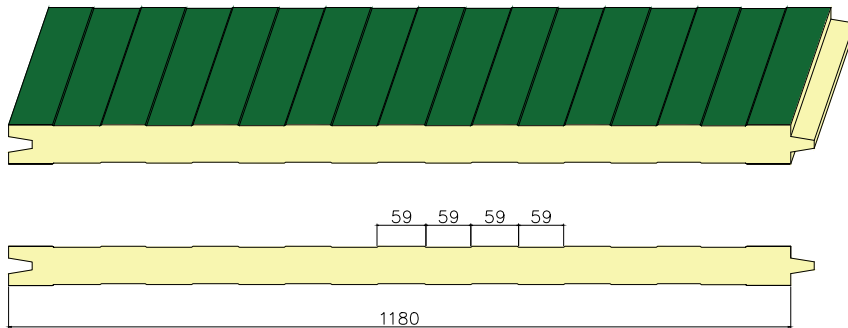
Units in millimeters (mm.)

| Core thickness T (mm) | Thermal conductance ( $W.m^{-1}.K^{-1}$ ) | Thermal resistance ( $m.K.W^{-1}$ ) |
|-----------------------|---|-------------------------------------|
| 35                    | 0.504                                     | 1.970                               |
| 50                    | 0.383                                     | 2.605                               |
| 75                    | 0.272                                     | 3.667                               |
| 100                   | 0.211                                     | 4.725                               |



# Flat Panel - Tongue and Groove with Cam lock

Wall sheet



**SIDE LAP DETAIL**



## General Features

### a. Mechanical Characteristic of the foam (At Overall Density of 38 - 40 kg/m<sup>3</sup>)

- Tensile stress: 150 kpa
- Compression resistance: 100 kpa
- Shear resistance: 100 kpa
- Fire property: B3 as per DIN 4102

### b. Insulation capacity

- K value (Thermal Conductivity of PIR) - 0.0236 W/mK
- Tolerance + / - 0.002

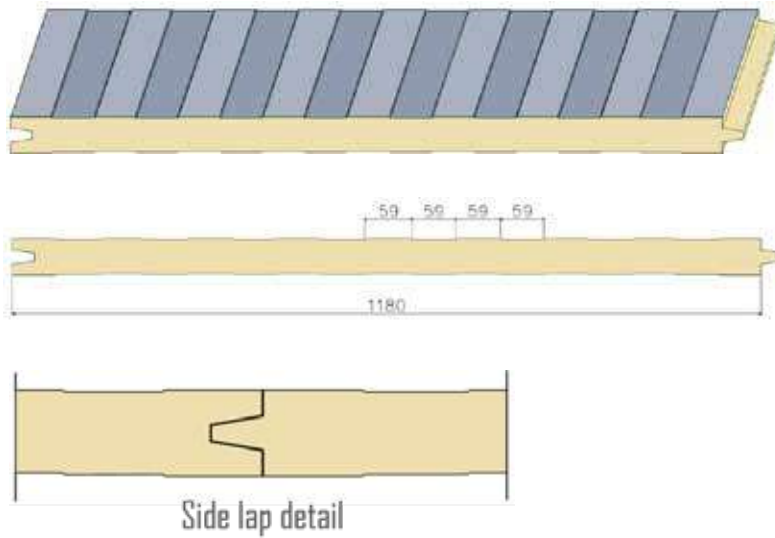
### c. Water absorption of the foam

- After 24 hours: 1.0% of volume

| Core thickness (mm) | Thermal Conductance U-Value (W/m <sup>2</sup> k) | Thermal Resistance R-Value (W/m <sup>2</sup> k) |
|---------------------|--|---|
| 35                  | 0.674  | 1.483   |
| 50                  | 0.472  | 2.118   |
| 75                  | 0.314  | 3.178   |
| 100                 | 0.236  | 4.237   |

# COMPOSITE FLAT PANEL (MICRO RIB)

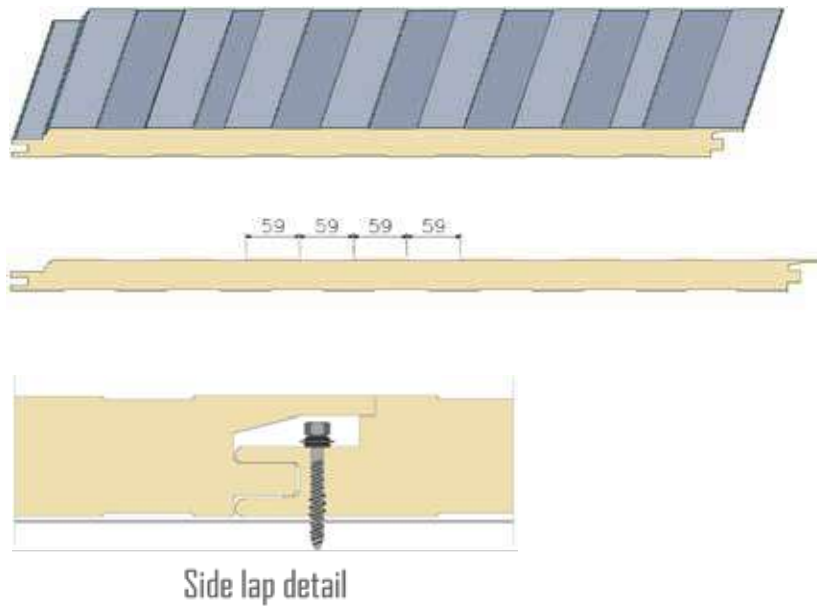
Tongue and groove



| Core thickness T (mm) | Thermal conductance ( $W.m^{-2}.K^{-1}$ ) | Thermal resistance ( $m.K.W^{-1}$ ) |
|-----------------------|---|-------------------------------------|
| 35                    | 0.674                                     | 1.483                               |
| 50                    | 0.472                                     | 2.118                               |
| 75                    | 0.314                                     | 3.178                               |
| 100                   | 0.236                                     | 4.237                               |

# COMPOSITE FLAT PANEL (MICRO RIB)

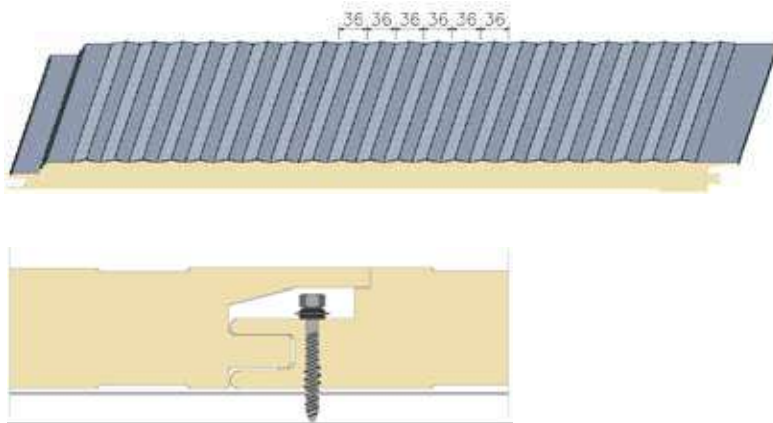
Hidden fix



| Core thickness T (mm) | Thermal conductance ( $W.m^{-2}.K^{-1}$ ) | Thermal resistance ( $m.K.W^{-1}$ ) |
|-----------------------|---|-------------------------------------|
| 50                    | 0.472                                     | 2.118                               |
| 75                    | 0.314                                     | 3.178                               |
| 100                   | 0.236                                     | 4.237                               |

# COMPOSITE FLAT PANEL (MICRO WAVE)

Hidden fix

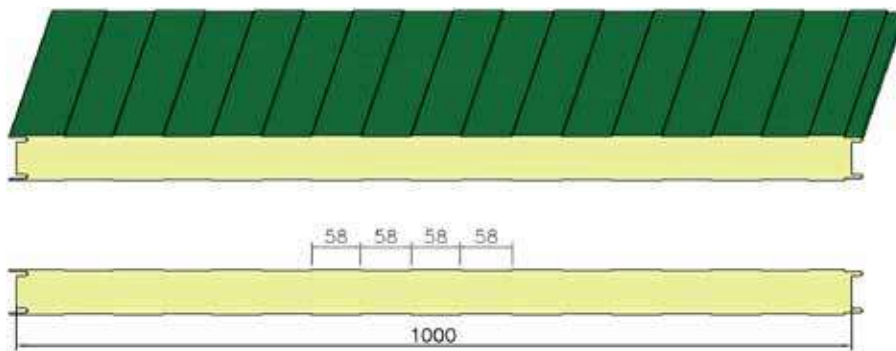


Side lap detail

| Core thickness T (mm) | Thermal conductance ( $W.m^{-2}.K^{-1}$ ) | Thermal resistance ( $m.K.W^{-1}$ ) |
|-----------------------|---|-------------------------------------|
| 50                    | 0.472                                     | 2.118                               |
| 75                    | 0.314                                     | 3.178                               |
| 100                   | 0.236                                     | 4.237                               |

# Composite Flat Panel

Slip Joint



**SIDE LAP DETAIL**

## General Features

a. Mechanical Characteristic of the foam (At Overall Density of 38 - 40 kg/m<sup>3</sup>)

- Tensile stress: 150 kpa
- Compression resistance: 100 kpa
- Shear resistance: 100 kpa
- Fire property: B3 as per DIN 4102

b. Insulation capacity

- K value (Thermal Conductivity of PIR) - 0.0236 W/mK
- Tolerance + / - 0.002

c. Water absorption of the foam

- After 24 hours: 1.0% of volume

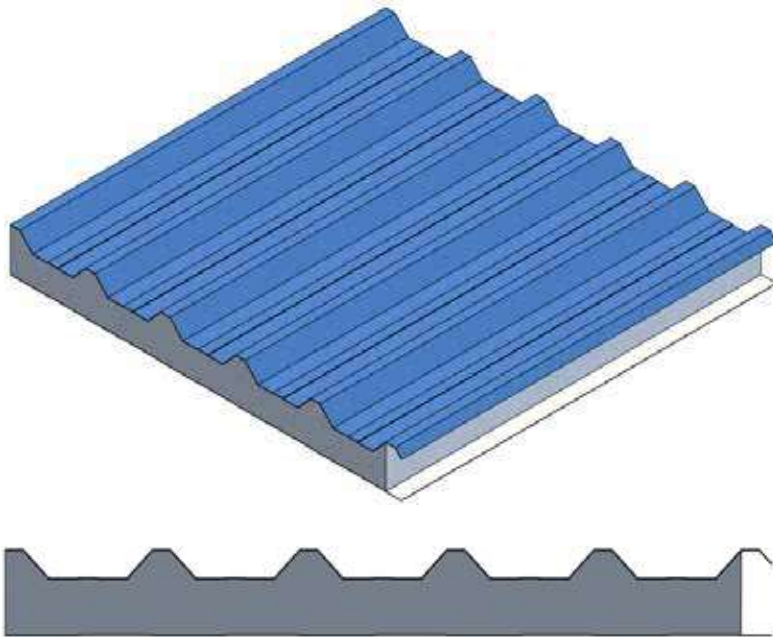
| Core thickness (mm) | Thermal Conductance U-Value (W/m <sup>2</sup> k) | Thermal Resistance R-Value (W/m <sup>2</sup> k) |
|---------------------|--|---|
| 50                  | 0.472  | 2.118   |
| 75                  | 0.314  | 3.178   |
| 100                 | 0.236  | 4.237   |



# PROFILED COMPOSITE ROCKWOOL SHEETS

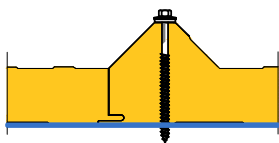
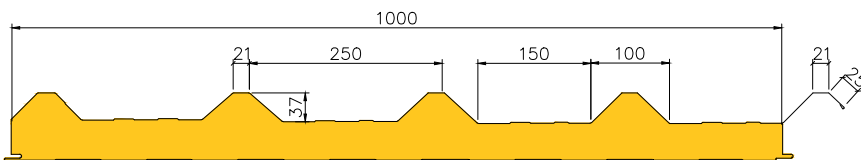
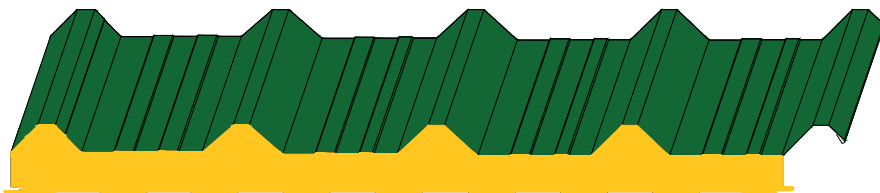
Aluminum and steel sheets can be made into insulated sandwich panels containing rockwool foam with different thicknesses

## Rockwool



|              |                               |  |
|--------------|-------------------------------|--|
| Physical     | Composition                   | Rockwool                                     |
|              | Density                       | 80-100 Kg.m <sup>-3</sup>                    |
| Mechanical   | Tensile Strength, Ultimate    | 15 KPa                                       |
|              | Compression resistance        | 55 KPa                                       |
|              | Shear resistance              | 35 KPa                                       |
| Thermal      | Avg. thermal conductivity     | 0.0351 W.m <sup>-1</sup> .K <sup>-1</sup>    |
|              | Thermal expansion coefficient | 20 ·10 <sup>-6</sup> °C <sup>-1</sup>        |
| Flammability | Non-inflammable               | Fire resistant (A1 grade EN13501-1 standard) |

# Rockwool Panel - RM 37/250



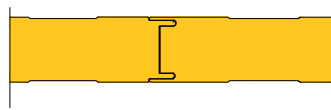
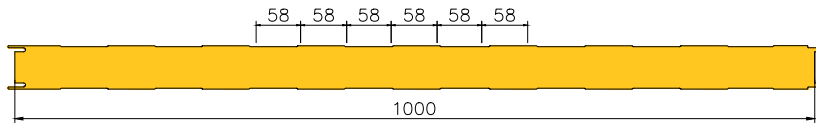
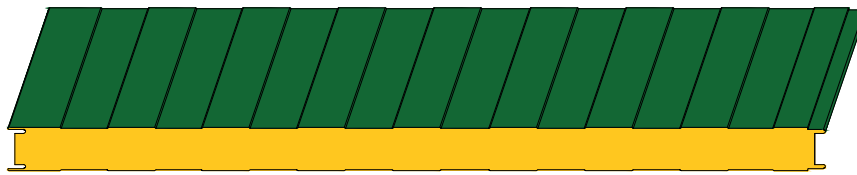
**SIDE LAP DETAIL**

## Advantages

- Perfect Fire resistance with A1 grade (EN 13501-1) inammable mineral rockwool
- Heat insulation
- Perfect acoustic solutions with perforated models
- Energy saver
- Economy in construction cost
- Requires less joint splice as a result of continuos production
- Custom designed production with continuous process
- Easy installation
- Color variety
- Long life cycle
- Environment friendly product
- Foam, CC, HCFC free
- Non- combustible

| Core thickness (mm) | Thermal Conductance U-Value (W/m <sup>2</sup> k) | Thermal Resisance R-Value (W/m <sup>2</sup> k) |
|---------------------|--|--|
| 50                  | 0.623  | 1.648  |
| 75                  | 0.438  | 2.280  |
| 100                 | 0.338  | 2.955  |

# Rockwool Panel - Flat Panel Slip Joint



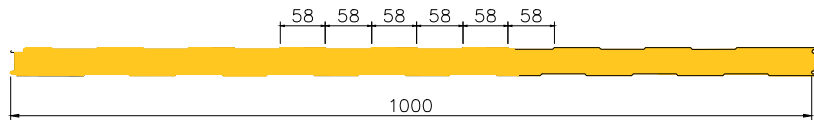
**SIDE LAP DETAIL**

## Advantages

- Perfect Fire resistance with A1 grade (EN 13501-1) inammable mineral rockwool
- Heat insulation
- Perfect acoustic solutions with perforated models
- Energy saver
- Economy in construction cost
- Requires less joint splice as a result of continuos production
- Custom designed production with continuous process
- Easy installation
- Color variety
- Long life cycle
- Environment friendly product
- Foam, CC, HCFC free
- Non- combustible

| Core thickness (mm) | Thermal Conductance U-Value (W/m <sup>2</sup> k) | Thermal Resisance R-Value (W/m <sup>2</sup> k) |
|---------------------|--|--|
| 50                  | 0.740  | 1.351  |
| 75                  | 0.493  | 2.027  |
| 100                 | 0.370  | 2.702  |

# Rockwool Panel - Flat Panel Hidden Fix



**SIDE LAP DETAIL**

## Advantages







- Perfect Fire resistance with A1 grade (EN 13501-1) incombustible mineral rockwool
- Heat insulation
- Perfect acoustic solutions with perforated models
- Energy saver
- Economy in construction cost
- Requires less joint splice as a result of continuous production
- Custom designed production with continuous process
- Easy installation
- Color variety
- Long life cycle
- Environment friendly product
- Foam, CC, HCFC free
- Non- combustible

| Core thickness (mm) | Thermal Conductance U-Value (W/m <sup>2</sup> k) | Thermal Resistance R-Value (W/m <sup>2</sup> k) |
|---------------------|--|---|
| 50                  | 0.740  | 1.351   |
| 75                  | 0.493  | 2.027   |
| 100                 | 0.370  | 2.702   |



# ACCESSORIES

## ACCESSORIES

| IMAGE   | ACCESSORY  | APPLICATION  | DESCRIPTION  |
|---|--|--|--|
|    | <p><b>Self-drilling screws</b></p> <p><b>Self-tapping screws</b></p> | <p>Fixing of thin sandwich panels and single skin sections.</p> <p>Fixing of thick sandwich panels and single skin sections.</p>   | <p>Type A: Thread of 2.54cm – pointed end. Use on wood and steel purlins (&lt;3mm in thickness). 19mm diam. washer.<br/>6.5x25 mm<br/>6.5 x 75 mm<br/>6.5 x 115 mm</p> <p>Type B: Thread of 1.81cm – Flat end. Use on steel purlins (&gt;3mm in thickness). 19mm diam. washer. WxH dimensions same as above.</p> |
|    | <b>Screw cap (optional)</b>  | Colored plastic caps to fit hexagonal head of screw and cover washer.  |  |
|   | <b>POP blind rivets</b>  | Sealed type – 99.5% pure aluminum material composition to match BS1475 A199.5 alloy standards.<br>Mandrel: Aluminum (Al). PD 68A 48x11.4 mm. Both Tensile and Shear strengths: 1060N (240 lbf) |  |
|  | <b>Butyl strip</b>   | By hand direct from roll. Apply firmly to one joint surface, remove backing paper, and press another surface firmly onto strip face.   | Roofing and cladding – gutter joints, side and end laps (special U-shape strip available for double seal on end laps), joining single skin roof lights.<br>Composition: blend of cross-linked butyl and inert fillers extruded into strip or bead to form a roll, with a paper backing.                          |
|  | <b>Purlin tape</b>   | Polyester / cotton cloth laminated to a polyethylene backing with a high tack, natural rubber adhesive.<br>Color: silver.  |  |
|  | <b>Filler block Top and bottom</b>                                   | Sealing all roofing/cladding profiles against water/water vapors ingress. Roof light fillers. Eaves and ridge fillers.   |  |

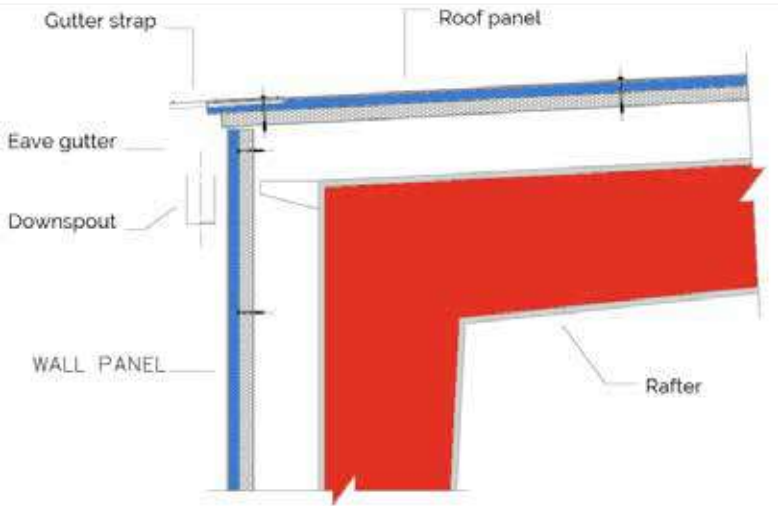
A wide-angle photograph of a large industrial manufacturing facility. The floor is filled with complex machinery, primarily painted in a bright blue color. A long, continuous white material, possibly a film or sheet, is being processed by a series of rollers and guides. The machinery is supported by a sturdy blue metal frame. In the foreground, there are several white electrical control cabinets. The background shows a high ceiling with a grid of lights and structural beams, indicating a large-scale industrial environment.

# COMPONENTS

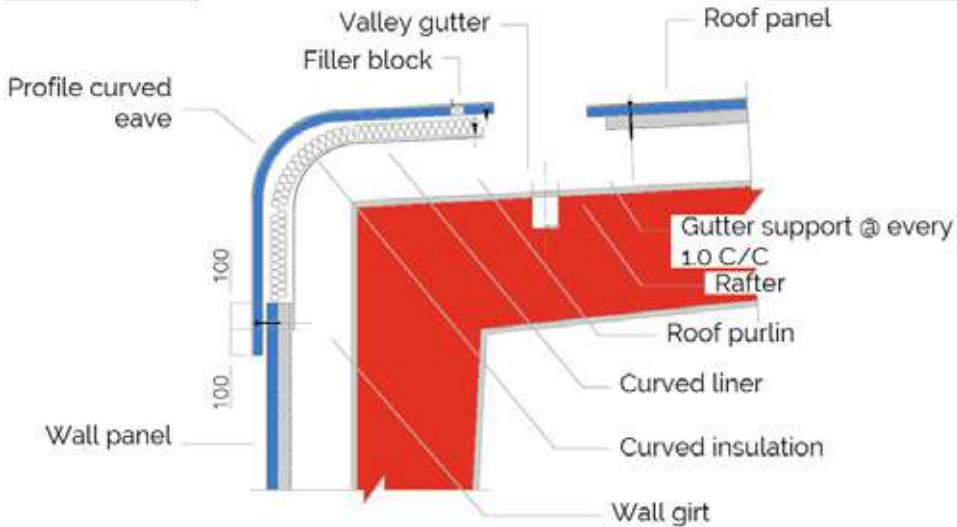
# CURVED EAVES

Optional curved eaves are available in lieu of gutters and downspouts. They are available in different sizes and shapes

Eave gutter



Curve eave with valley gutter

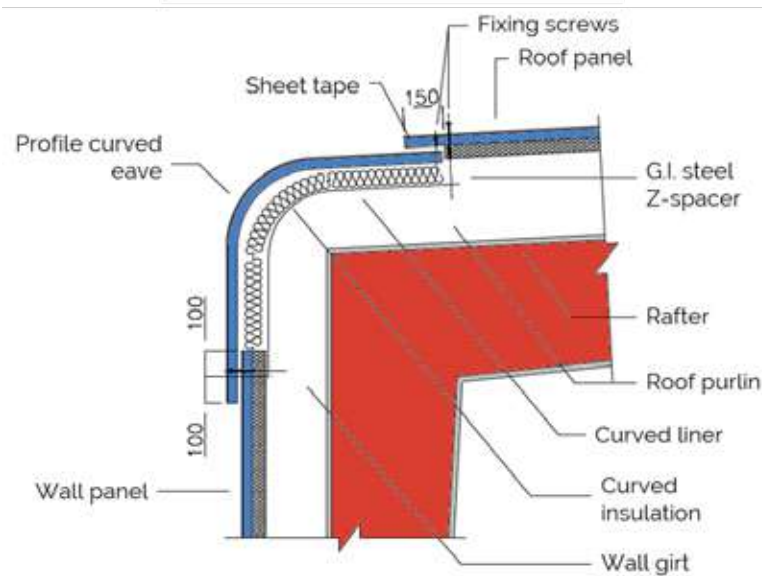




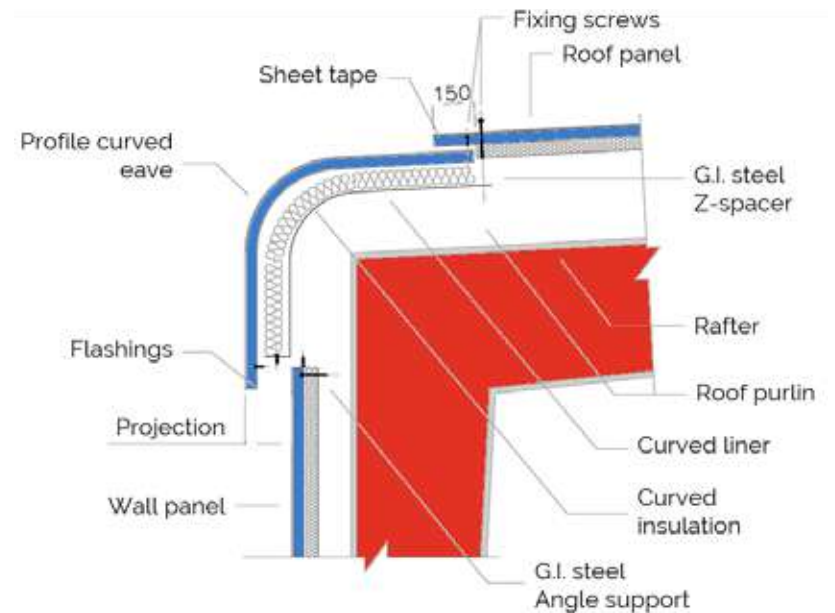
# CURVED EAVES

Optional curved eaves are available in lieu of gutters and downspouts. They are available in different sizes and shapes

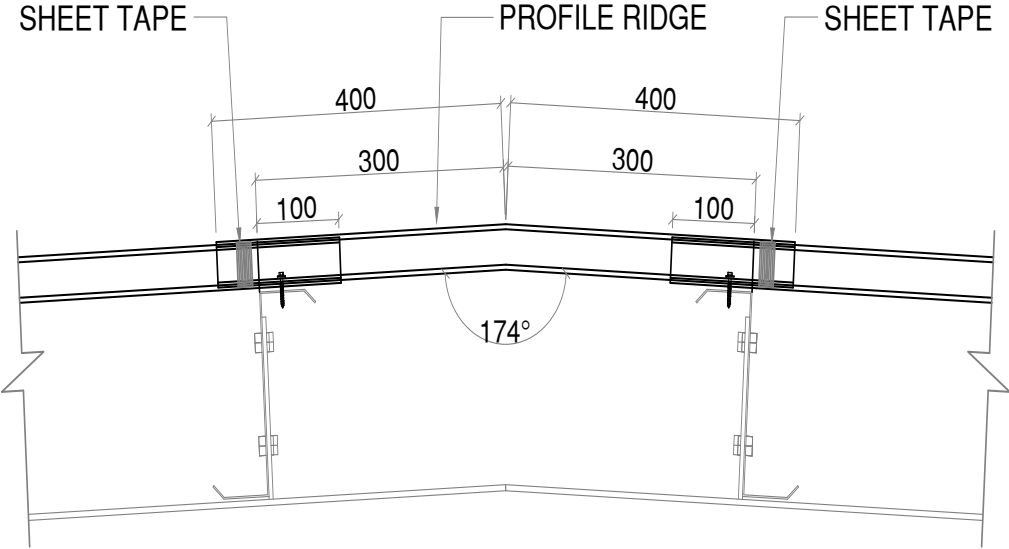
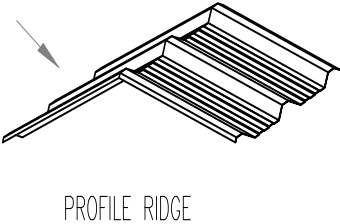
Curve eave without projection



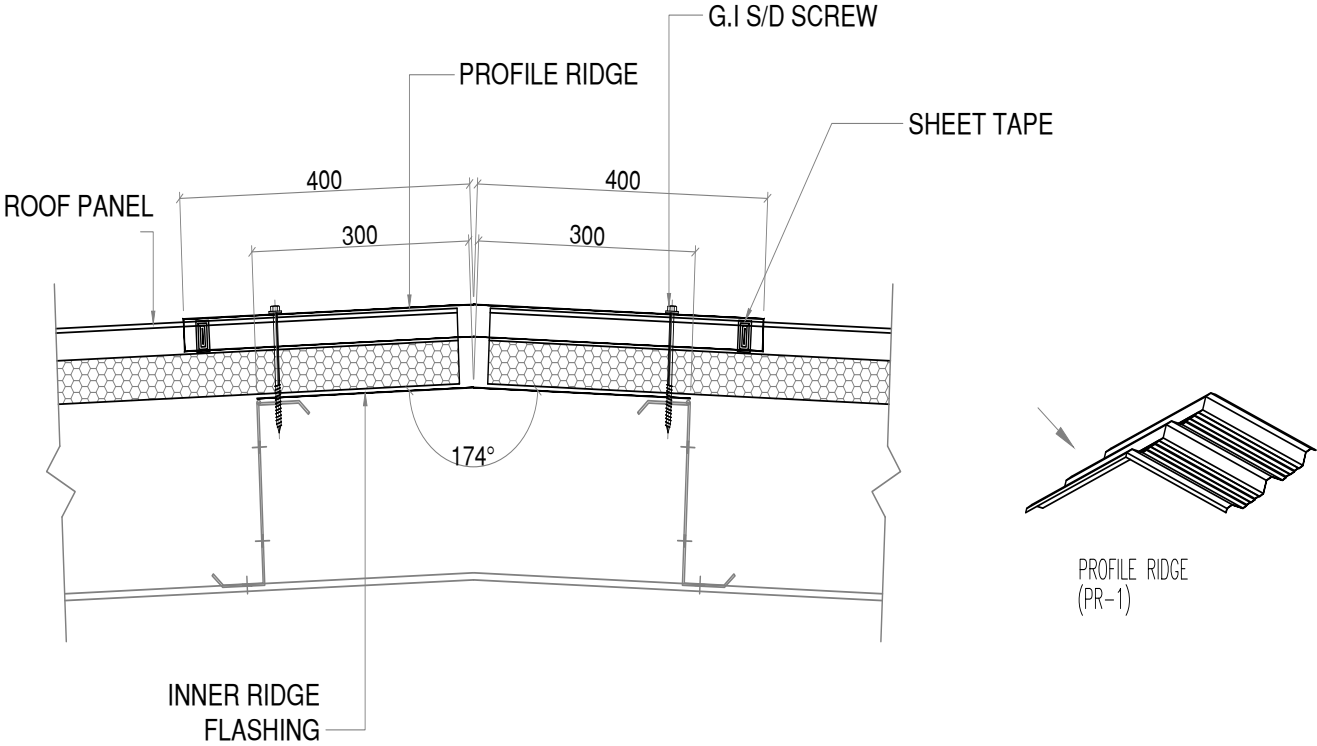
Curve eave with projection



# RIDGES for Single skin

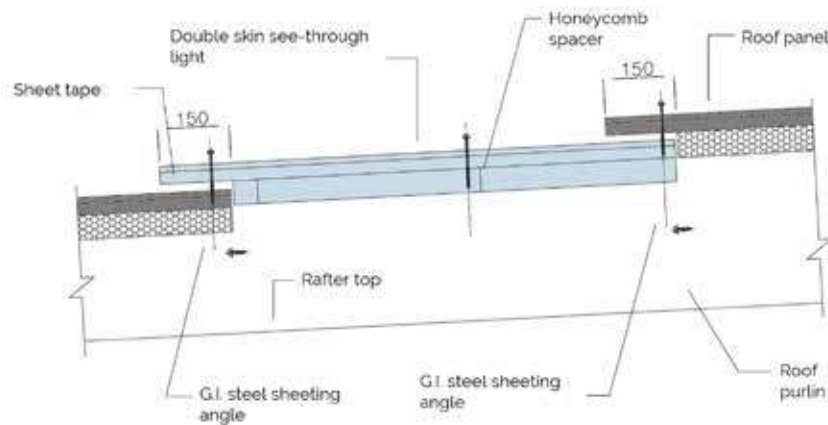


# RIDGES for Sandwich Panel



# SKYLIGHT PANEL

Double skin



## General Features

### a. Mechanical Data

- **Thickness** : 1.5 mm top profile sheet & 1mm liner sheet
- **Colour** : Translucent
- **Tensile strength**: 85 N/mm<sup>2</sup>
- **Impact strength**: 75 mJ/mm<sup>2</sup>
- **Flexural strength**: 140 N/mm<sup>2</sup>
- **Shear strength**: 70 N/mm<sup>2</sup>
- **Elastic modulus**: 8000 N/mm<sup>2</sup>
- **Flexural modulus**: 6000 N/mm<sup>2</sup>
- **Hardness**: 40 to 45

### b. Thermal data

- Thermal Conductivity (K-value): 0.145 W/mK
- Thermal transmittance (U-value): 2.15 W/mK
- Thermal expansion coefficient:  $24 \times 10^{-6}$  m/c<sup>o</sup>
- Operating temperature: -20 oC to +90 °C

**c. Water absorption**: 0.3% by mass after 24 hrs at 22 °C

**d. Transmission of light (VLT)**: 65-75 %

**e. Recommended purlin spacing**: 1500 mm or less

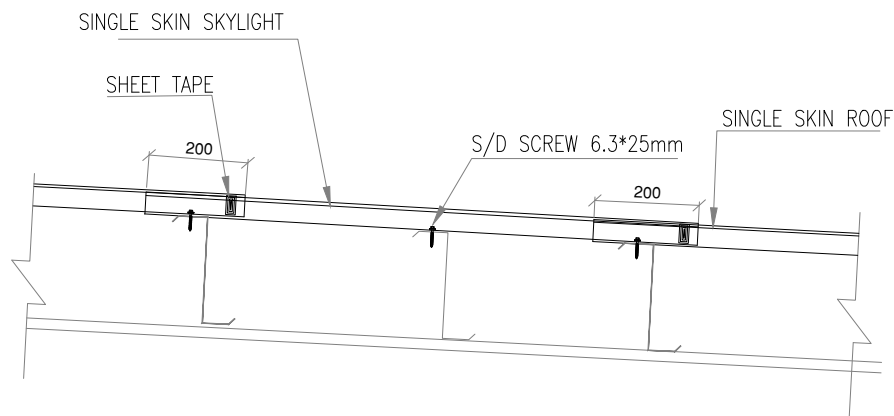
**f. Dimensional Tolerance**: Length:  $\pm 5$ mm // Width:  $\pm 5$ mm

**Caution**: Not suitable for foot traffic.

**Note**: End lap and side lap seating may have slight gaps due to difference in material, thickness and manufacturing process, these gaps at end and side lap to be resolved by providing extra sealant and pop rivets.

# SKYLIGHT PANEL

Single skin



## General Features

### a. Mechanical Data

- Thickness : 1 mm
- Colour : Clear
- Tensile strength: 85 N/mm<sup>2</sup>
- Impact strength: 75 mJ/mm<sup>2</sup>
- Flexural strength: 140 N/mm<sup>2</sup>
- Shear strength: 70 N/mm<sup>2</sup>
- Elastic modulus: 8000 N/mm<sup>2</sup>
- Flexural modulus: 6000 N/mm<sup>2</sup>
- Hardness: 40 to 45

### b. Thermal data

- Thermal Conductivity (K-value): 0.145 W/mK
- Thermal transmittance (U-value): 2.15 W/mK
- Thermal expansion coefficient:  $24 \times 10^{-6}$  m/c<sup>o</sup>
- Operating temperature: -20 oC to +90 °C

**c. Water absorption:** 0.3% by mass after 24 hrs at 22 °C

**d. Transmission of light (VLT):** 70-80 %

**e. Recommended purlin spacing:** 1500 mm or less

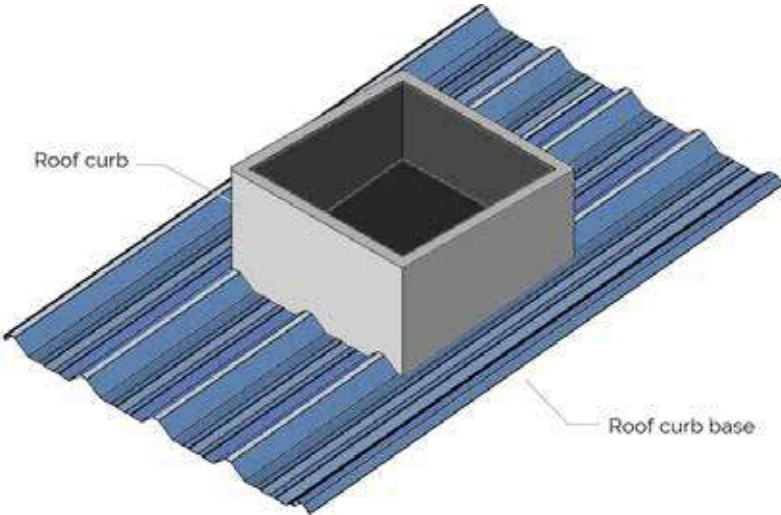
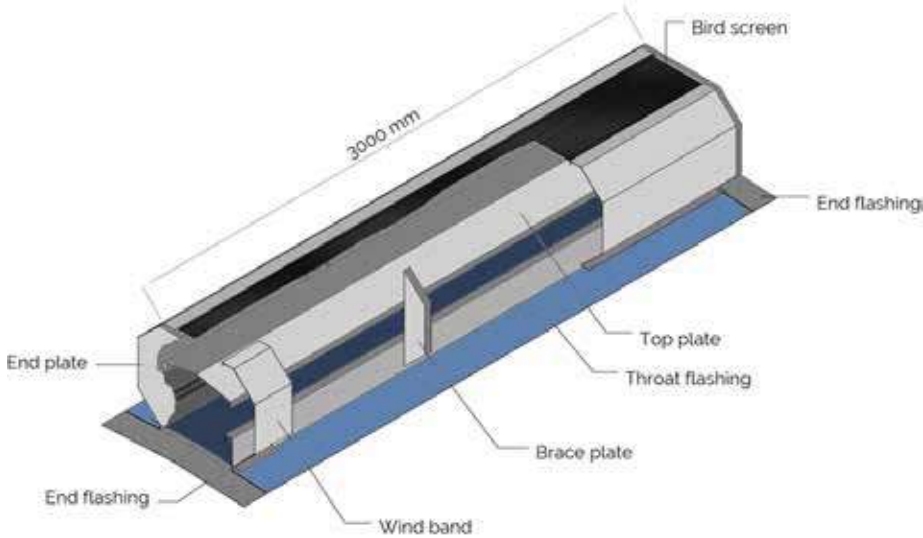
**f. Dimensional Tolerance:** Length: ± 5mm // Width: ± 5mm

**Caution:** Not suitable for foot traffic.

**Note:** End lap and side lap seating may have slight gaps due to difference in material, thickness and manufacturing process, these gaps at end and side lap to be resolved by providing extra sealant and pop rivets.

# ROOF CURB

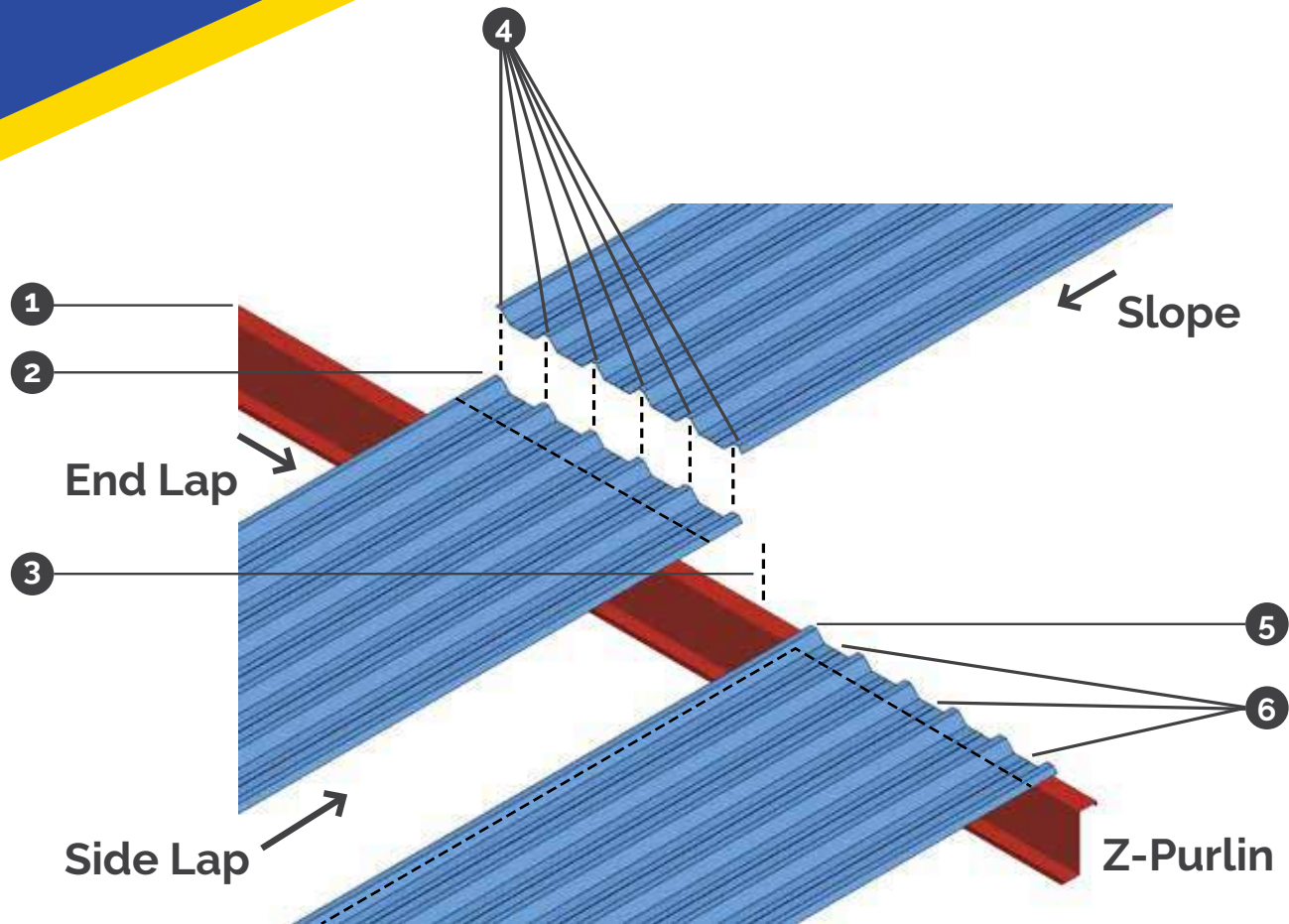
Optional curved eaves are available in lieu of gutters and downspouts. They are available in different sizes and shapes











**ASSEMBLY**

# ERECTION INSTRUCTIONS



|          |   |   |
|----------|---|---|
| <b>1</b> |    | Purlin tape for aluminum sheet or lining only.  |
| <b>2</b> |   | Sheet tape  |
| <b>3</b> |  | Pop rivets fixing C/C 300mm   |
| <b>4</b> |  | S/S G.I. Steel screw with washer fixing through every crown / valley on end laps        |
| <b>5</b> |  | Sheet tape  |
| <b>6</b> |  | S/S G.I. Steel screw with washer fixing through second valley/all valleys as per design |

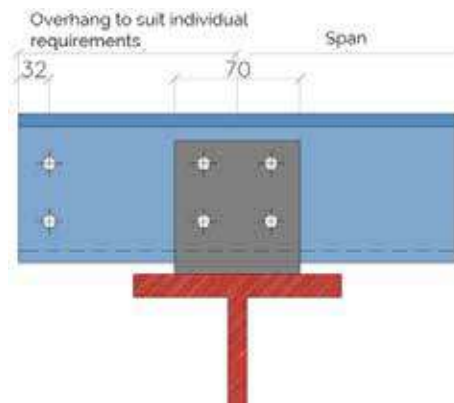




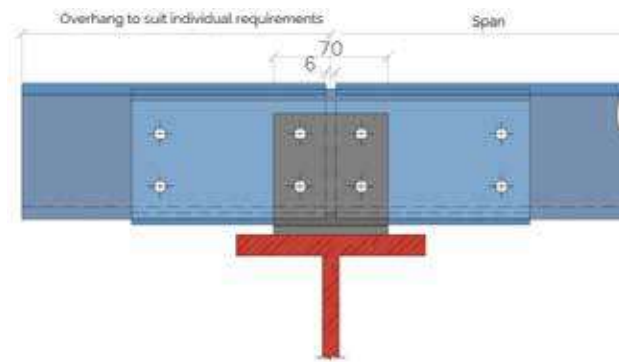
# PURLINS

# PURLIN SLEEVE SYSTEM

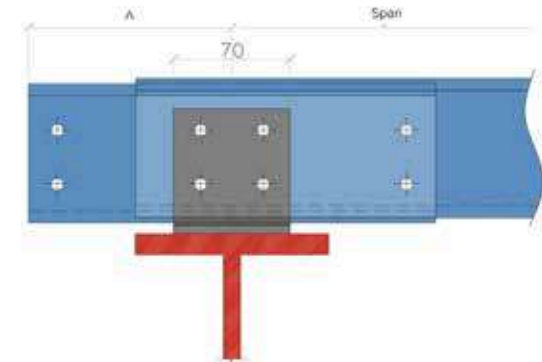
Purlins are normally produced with standard end holes in every purlin. Overhang fixing holes are then added to suit individual requirements.



**Permanent gable**  
Purlin or side rail extended in length to suit desired overhang.



**Future extension gable**  
Stub purlin used to achieve desired overhang is greater than half of the standard sleeve length.



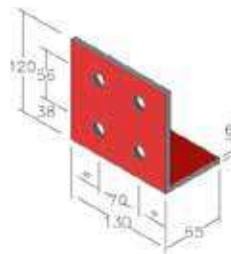
**Future extension gable**  
Standard sleeve cut down to suit desired overhang.

**Purlins or max. overhang**

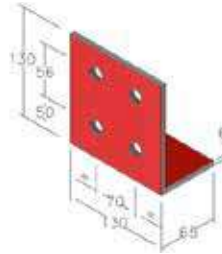
| Side Rail        | 122 Series | 142 Series | 172 Series | 202 Series | 232 Series | 262 Series | 300 Series |
|------------------|------------|------------|------------|------------|------------|------------|------------|
| Dimension A (mm) | 252        | 307        | 357        | 417        | 477        | 485        | 500        |

# STANDARD PURLIN/RAIL CLEATS

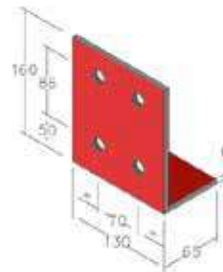
Standard cleats are normally supplied in back-bare metal suitable for welding into rafters. By arrangements, cleats can be supplied with additional holes in the base of angled-cleats for easier bolting into rafters. A hot-dipped finishing (galvanized or painted with a primer) is available upon request.



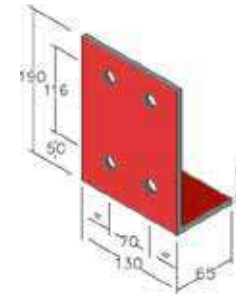
**Serie 122**  
weight = 1.10kg



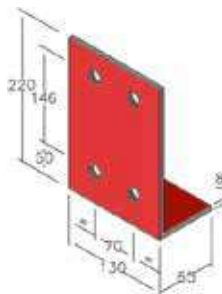
**Serie 142**  
weight = 1.12kg



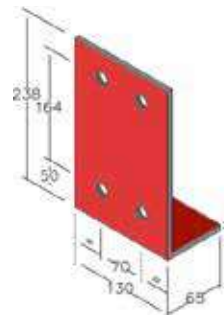
**Serie 172**  
weight = 1.30kg



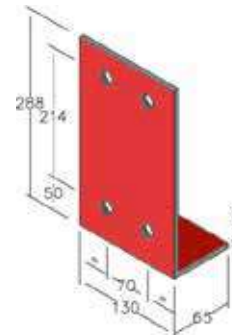
**Serie 202**  
weight = 1.49kg



**Serie 232**  
weight = 2.00kg



**Serie 250**  
weight = 2.34kg



**Serie 300**  
weight = 2.75kg

# STANDARD PURLIN/RAIL CLEATS (1/2)

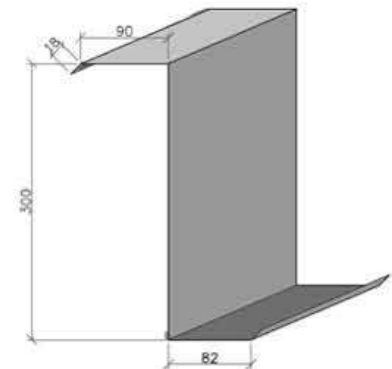
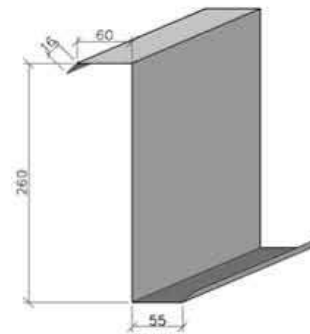
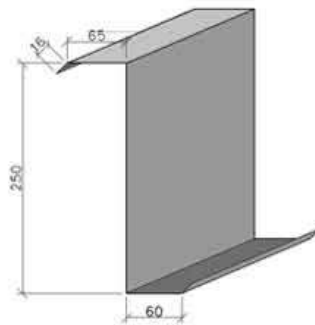
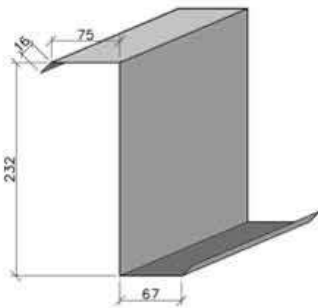
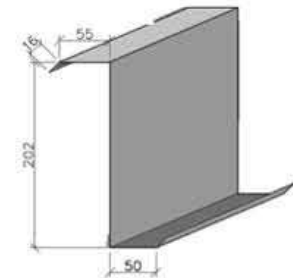
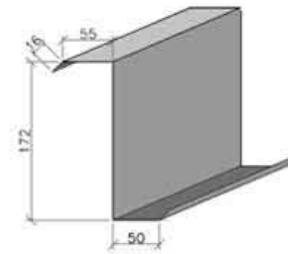
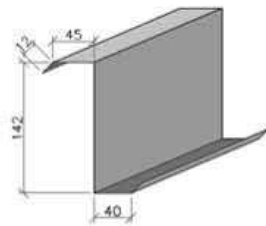
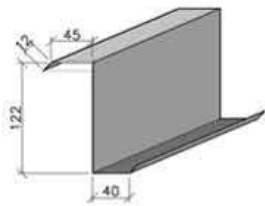
|            | Standard piercing  | Sleeves   | Cleats                  |
|------------|--|---|-------------------------|
| Series 122 | <p>Overall Length</p> <p>Wide Flange</p> <p>Span</p> <p>Anti sag rod holes if required</p> <p>Rafter ⌀</p> | <p>122</p> <p>34</p> <p>32 185 70 185 32</p> <p>504</p> | <p>70</p> <p>38 56</p>  |
| Series 142 | <p>Overall Length</p> <p>Wide Flange</p> <p>Span</p> <p>Anti sag rod holes if required</p> <p>Rafter ⌀</p> | <p>142</p> <p>44</p> <p>32 240 70 240 32</p> <p>614</p> | <p>70</p> <p>50 56</p>  |
| Series 172 | <p>Overall Length</p> <p>Wide Flange</p> <p>Span</p> <p>Anti sag rod holes if required</p> <p>Rafter ⌀</p> | <p>172</p> <p>44</p> <p>32 290 70 290 32</p> <p>714</p> | <p>70</p> <p>50 86</p>  |
| Series 202 | <p>Overall Length</p> <p>Wide Flange</p> <p>Span</p> <p>Anti sag rod holes if required</p> <p>Rafter ⌀</p> | <p>202</p> <p>44</p> <p>32 350 70 350 32</p> <p>834</p> | <p>70</p> <p>50 116</p> |

# STANDARD PURLIN/RAIL CLEATS (2/2)

|            | Standard piercing | Sleeves | Cleats |
|------------|-------------------|---------|--------|
| Series 232 |                   |         |        |
| Series 250 |                   |         |        |
| Series 300 |                   |         |        |

# PURLINS

## Z-Purlins



# Z-PURLINS LOADS

| Section Reference | Weight Kg/m | Depth mm | Top mm | Bottom mm | Thick. mm | Ixx Cm <sup>4</sup> | Iyy Cm <sup>4</sup> | Zxx Cm <sup>3</sup> | Zyy Cm <sup>3</sup> | rxx mm | ryy mm |
|-------------------|-------------|----------|--------|-----------|-----------|---------------------|---------------------|---------------------|---------------------|--------|--------|
| 122 Z 15          | 2.72        | 142      | 45     | 40        | 1.50      | 71.00               | 31.30               | 14.52               | 4.66                | 46.25  | 17.84  |
| 122 Z 20          | 3.63        | 142      | 45     | 40        | 2.00      | 92.00               | 33.50               | 19.20               | 6.02                | 45.98  | 17.58  |
| 122 Z 25          | 4.53        | 142      | 45     | 40        | 2.50      | 138.90              | 35.70               | 23.68               | 7.27                | 45.74  | 17.32  |
| 142 Z 15          | 2.94        | 142      | 45     | 40        | 1.50      | 111.54              | 35.70               | 19.34               | 6.12                | 54.61  | 19.64  |
| 142 Z 20          | 3.93        | 142      | 45     | 40        | 2.00      | 146.28              | 46.20               | 25.40               | 7.96                | 54.36  | 19.30  |
| 142 Z 25          | 4.91        | 142      | 45     | 40        | 2.50      | 180.15              | 55.40               | 31.54               | 7.96                | 54.12  | 19.12  |
| 172 Z 15          | 3.59        | 172      | 55     | 50        | 1.50      | 228.10              | 44.20               | 26.25               | 6.97                | 66.37  | 25.33  |
| 172 Z 20          | 4.79        | 172      | 55     | 50        | 2.00      | 300.20              | 57.40               | 34.55               | 9.09                | 66.08  | 25.14  |
| 172 Z 25          | 5.99        | 172      | 55     | 50        | 2.50      | 370.40              | 69.80               | 42.63               | 11.10               | 65.84  | 24.95  |
| 202 Z 15          | 3.92        | 202      | 55     | 50        | 1.50      | 332.20              | 44.20               | 32.59               | 6.97                | 76.52  | 24.17  |
| 202 Z 20          | 5.23        | 202      | 55     | 50        | 2.00      | 437.70              | 57.40               | 42.94               | 9.08                | 76.31  | 23.98  |
| 202 Z 25          | 6.54        | 202      | 55     | 50        | 2.50      | 540.70              | 51.10               | 53.04               | 11.09               | 76.05  | 23.75  |
| 232 Z 15          | 4.79        | 232      | 72     | 65        | 1.50      | 500.40              | 65.00               | 42.59               | 8.78                | 89.82  | 32.68  |

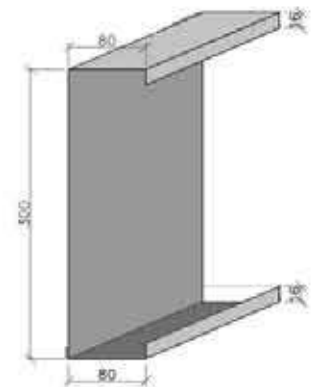
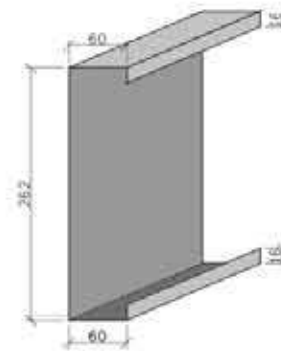
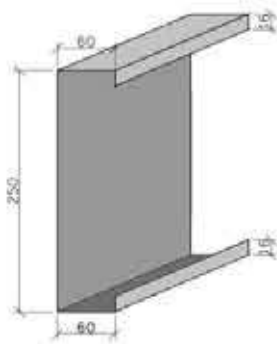
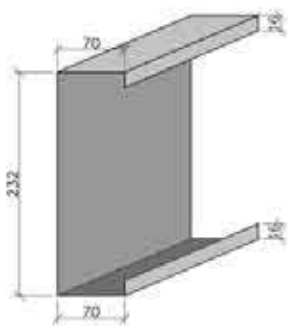
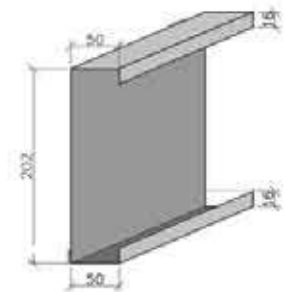
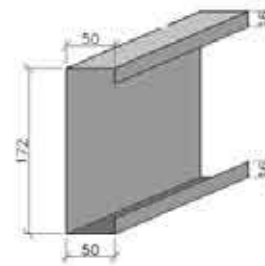
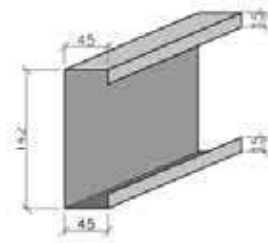
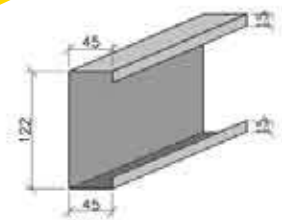
# Z-PURLINS LOADS

| Section Reference | Weight Kg/m | Depth mm | Top mm | Bottom mm | Thick. mm | Ixx Cm <sup>4</sup> | Iyy Cm <sup>4</sup> | Zxx Cm <sup>3</sup> | Zyy Cm <sup>3</sup> | rxx mm | ryy mm |
|-------------------|-------------|----------|--------|-----------|-----------|---------------------|---------------------|---------------------|---------------------|--------|--------|
| 232 Z 20          | 6.39        | 232      | 72     | 65        | 2.00      | 660.30              | 84.60               | 56.20               | 11.47               | 89.54  | 32.54  |
| 232 Z 25          | 7.99        | 232      | 72     | 65        | 2.50      | 816.80              | 103.30              | 69.51               | 14.04               | 89.28  | 32.35  |
| 250 Z 15          | 4.79        | 250      | 65     | 60        | 1.50      | 592.50              | 70.04               | 47.62               | 9.26                | 94.28  | 27.25  |
| 250 Z 20          | 6.39        | 250      | 65     | 60        | 2.00      | 781.85              | 91.20               | 62.73               | 12.07               | 93.94  | 27.05  |
| 250 Z 25          | 7.99        | 250      | 65     | 60        | 2.50      | 967.65              | 111.30              | 77.62               | 14.78               | 93.68  | 26.86  |
| 250 Z 30          | 9.58        | 262      | 65     | 60        | 3.00      | 1136.65             | 127.60              | 90.33               | 16.92               | 93.40  | 26.64  |
| 262 Z 15          | 4.79        | 262      | 60     | 55        | 1.50      | 728.30              | 78.10               | 54.83               | 10.03               | 98.25  | 26.84  |
| 262 Z 20          | 6.39        | 262      | 60     | 55        | 2.00      | 903.40              | 95.90               | 68.01               | 12.34               | 97.98  | 26.65  |
| 262 Z 25          | 7.99        | 262      | 60     | 55        | 2.50      | 1118.50             | 117.10              | 84.20               | 15.13               | 97.72  | 26.40  |
| 262 Z 30          | 9.58        | 262      | 60     | 55        | 3.00      | 1287.40             | 133.40              | 96.91               | 17.27               | 97.46  | 26.14  |
| 302 Z 15          | 5.89        | 302      | 90     | 82        | 1.50      | 1362.70             | 135.70              | 89.15               | 15.48               | 115.82 | 37.45  |
| 302 Z 20          | 7.85        | 302      | 90     | 82        | 2.00      | 1362.70             | 135.70              | 89.15               | 15.48               | 115.60 | 37.28  |
| 302 Z 25          | 9.81        | 302      | 90     | 82        | 2.50      | 1689.00             | 166.20              | 110.50              | 19.01               | 115.36 | 37.08  |
| 302 Z 30          | 11.78       | 302      | 90     | 82        | 3.00      | 1945.90             | 189.60              | 127.31              | 21.73               | 115.08 | 36.92  |



# PURLINS

## C-Purlins



# C-PURLINS LOADS

| Section Reference | Weight Kg/m | Area cm <sup>2</sup> | Depth mm | Flange mm | Thick. mm | Ixx Cm <sup>4</sup> | Iyy Cm <sup>4</sup> | Zxx Cm <sup>3</sup> | Zyy Cm <sup>3</sup> | rx mm | ry mm |
|-------------------|-------------|----------------------|----------|-----------|-----------|---------------------|---------------------|---------------------|---------------------|-------|-------|
| 120 C 15          | 2.87        | 3.81                 | 112.00   | 45.00     | 1.50      | 81.35               | 20.19               | 14.52               | 4.66                | 4.62  | 2.30  |
| 120 C 20          | 3.83        | 6.04                 | 112.00   | 45.00     | 2.00      | 106.54              | 26.20               | 19.20               | 6.02                | 4.60  | 2.28  |
| 120 C 25          | 4.79        | 6.04                 | 112.00   | 45.00     | 2.50      | 131.25              | 32.48               | 23.64               | 7.48                | 4.56  | 2.27  |
| 142 C 15          | 2.94        | 4.30                 | 142.00   | 40.00     | 1.50      | 142.40              | 23.50               | 20.05               | 5.28                | 5.53  | 2.32  |
| 142 C 20          | 3.93        | 5.68                 | 142.00   | 40.00     | 2.00      | 187.00              | 30.50               | 26.34               | 6.86                | 5.70  | 2.30  |
| 142 C 25          | 4.91        | 5.68                 | 142.00   | 40.00     | 2.50      | 228.48              | 36.94               | 32.68               | 8.45                | 2.89  | 2.28  |
| 172 C 15          | 3.59        | 4.91                 | 172.00   | 50.00     | 1.50      | 233.80              | 30.70               | 27.18               | 6.24                | 6.85  | 2.48  |
| 172 C 20          | 4.79        | 6.48                 | 172.00   | 50.00     | 2.00      | 307.60              | 39.90               | 35.77               | 8.13                | 6.83  | 2.46  |
| 172 C 25          | 5.99        | 8.01                 | 172.00   | 50.00     | 2.50      | 379.50              | 48.70               | 44.13               | 9.92                | 6.80  | 2.44  |
| 202 C 15          | 3.92        | 5.36                 | 202.00   | 50.00     | 1.50      | 339.20              | 32.20               | 33.58               | 6.35                | 7.90  | 2.43  |
| 202 C 20          | 5.23        | 7.08                 | 202.00   | 50.00     | 2.00      | 446.90              | 41.90               | 44.25               | 8.26                | 7.88  | 2.41  |
| 202 C 25          | 6.54        | 8.76                 | 202.00   | 50.00     | 2.50      | 551.90              | 51.10               | 54.65               | 10.09               | 7.85  | 2.39  |
| 232 C 15          | 4.79        | 6.11                 | 232.00   | 70.00     | 1.50      | 503.00              | 44.40               | 43.36               | 7.90                | 9.04  | 2.69  |

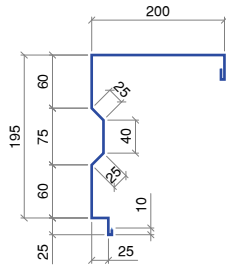
# C-PURLINS LOADS

| Section Reference | Weight Kg/m | Area cm <sup>2</sup> | Depth mm | Flange mm | Thick. mm | Ixx Cm <sup>4</sup> | Iyy Cm <sup>4</sup> | Zxx Cm <sup>3</sup> | Zyy Cm <sup>3</sup> | rx mm | ry mm |
|-------------------|-------------|----------------------|----------|-----------|-----------|---------------------|---------------------|---------------------|---------------------|-------|-------|
| 232 C 20          | 6.39        | 8.08                 | 232.00   | 70.00     | 2.00      | 663.70              | 57.90               | 57.22               | 10.31               | 9.02  | 2.66  |
| 232 C 25          | 7.99        | 10.01                | 232.00   | 70.00     | 2.50      | 820.90              | 70.80               | 70.77               | 12.61               | 8.99  | 2.64  |
| 252 C 15          | 4.79        | 6.11                 | 262.00   | 60.00     | 1.50      | 551.00              | 46.40               | 49.72               | 8.54                | 9.52  | 2.72  |
| 252 C 20          | 6.39        | 8.08                 | 262.00   | 60.00     | 2.00      | 721.40              | 59.60               | 66.24               | 10.82               | 9.49  | 2.70  |
| 252 C 25          | 7.99        | 10.01                | 262.00   | 60.00     | 2.50      | 878.50              | 72.80               | 82.84               | 13.18               | 9.48  | 2.68  |
| 252 C 25          | 9.58        | 10.94                | 262.00   | 60.00     | 3.00      | 1035.25             | 85.60               | 99.45               | 15.40               | 9.46  | 2.65  |
| 262 C 15          | 4.79        | 7.10                 | 262.00   | 60.00     | 1.50      | 733.90              | 55.30               | 56.03               | 9.19                | 10.12 | 2.78  |
| 262 C 20          | 6.39        | 8.82                 | 262.00   | 60.00     | 2.00      | 910.40              | 68.00               | 69.49               | 11.31               | 10.10 | 2.76  |
| 262 C 25          | 7.99        | 10.94                | 262.00   | 60.00     | 2.50      | 1127.00             | 83.20               | 86.03               | 13.85               | 10.08 | 2.74  |
| 262 C 30          | 9.58        | 10.94                | 262.00   | 60.00     | 3.00      | 1342.00             | 98.40               | 102.58              | 16.72               | 10.06 | 2.72  |
| 302 C 15          | 5.89        | 8.68                 | 300.00   | 80.00     | 1.50      | 1171.90             | 82.50               | 77.40               | 12.40               | 11.63 | 3.07  |
| 302 C 20          | 7.85        | 10.06                | 300.00   | 80.00     | 2.00      | 1369.30             | 95.70               | 90.68               | 14.22               | 11.61 | 3.05  |
| 302 C 25          | 9.81        | 11.52                | 300.00   | 80.00     | 2.50      | 1566.70             | 108.80              | 103.76              | 16.17               | 11.59 | 3.03  |
| 302 C 30          | 11.78       | 12.49                | 300.00   | 80.00     | 3.00      | 1697.20             | 117.30              | 112.40              | 17.45               | 11.58 | 3.02  |

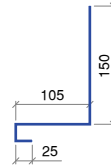


# FLASHING

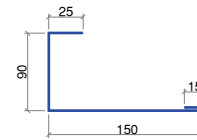
# FLASHING



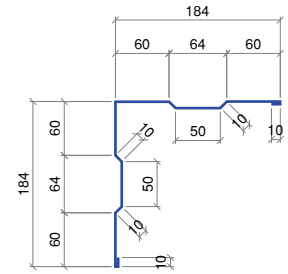
Cap Trim



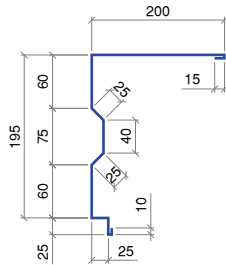
Drip Trim



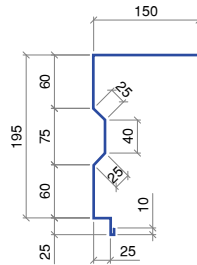
Framed Opening Trim



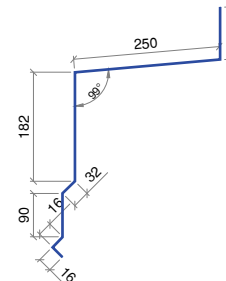
Corner Trim



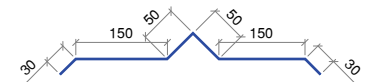
Gable Trim



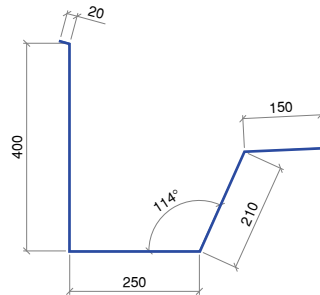
Eave Trim



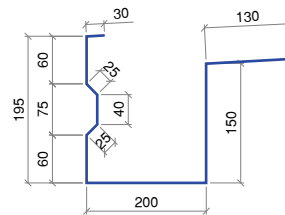
Door Hood Trim



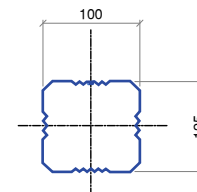
Expansion Joint Trim



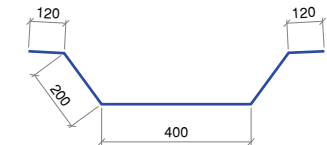
Valley Gutter Parapet Wall



Eave Gutter



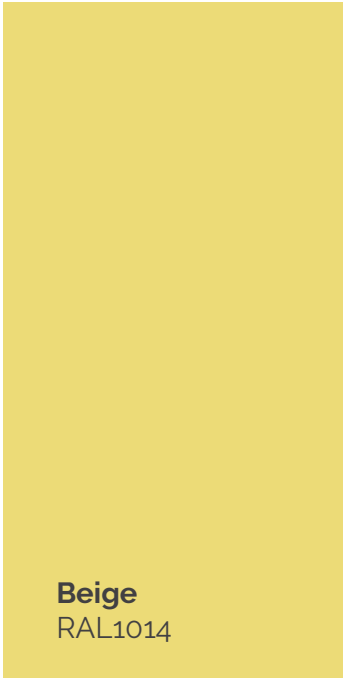
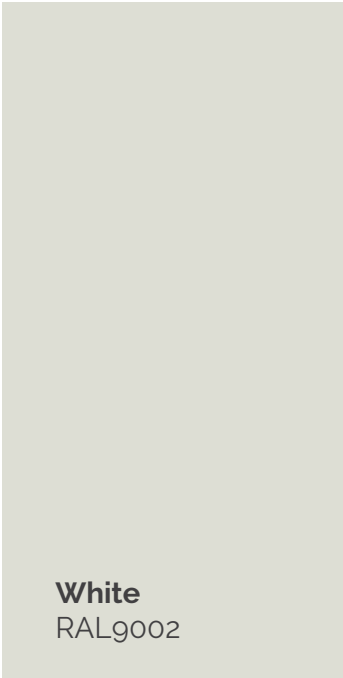
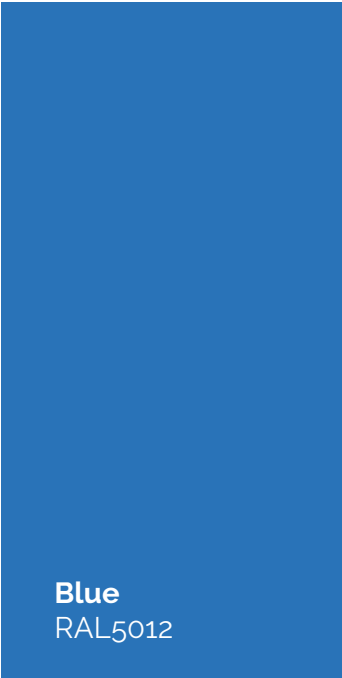
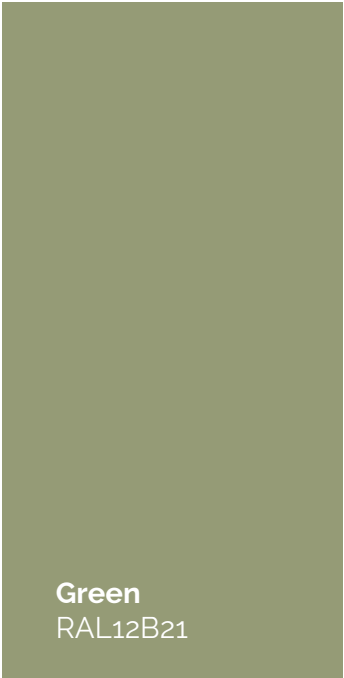
Down Spout



Valley Gutter



# Color Chart

|   |  |   |   |
|---|--|---|---|
|  <p><b>Beige</b><br/>RAL1014</p> |  <p><b>White</b><br/>RAL9002</p> |  <p><b>Blue</b><br/>RAL5012</p> |  <p><b>Green</b><br/>RAL12B21</p> |
|---|--|---|---|

This color chart displays samples of color only. You are advised to obtain a metal sample for specific color matches.



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Roof Metal Industries LLC | Product Catalogue | 2022

