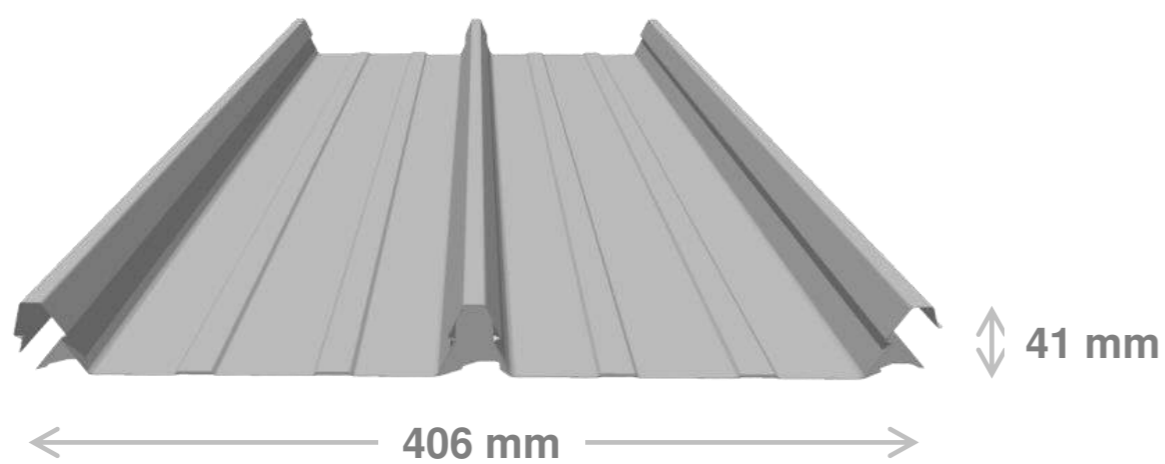


## KLIP-LOK® 406

LYSAGHT® KLIP-LOK® 406 is a strong, versatile long-length roofing or walling.

Concealed fastening method and smart fluted pans for clean smooth lines enables its use on many applications from low pitched roofs to vertical or horizontal ribbed walling.

### PROFILE DETAILS



### PROFILE PROPERTIES

|  |  |
|--|--|
| <b>Application</b>                                     | Roofing  |
| <b>Shape Capability</b>                                | Straight and Spring Curve Sheets               |
| <b>Finishes Available</b>                              | ZINCALUME® Steel<br>COLORBOND® Steel           |
| <b>Effective Width</b>                                 | 406 mm   |
| <b>Rib Depth</b>                                       | 41 mm  |
| <b>Pan Width</b>                                       | 165 mm   |
| <b>Rib Distance</b>                                    | 203 mm   |
| <b>Standard Thickness (BMT)</b>                        | 0.45 mm  |
| <b>Roof Length</b><br><i>(Manufactured in factory)</i> | Min. 500 mm<br>Max. 18500 mm                   |
| <b>Tolerance</b>                                       | Length +10 mm; -0 mm<br>Effective Width ± 5 mm |
| <b>Minimum Roof Slope</b>                              | 2°   |
| <b>Curving Data</b>                                    | Spring Curve<br>R+ >80m                        |
| <i>Convex (R+)</i>                                     |  |
| <i>Concave (R-)</i>                                    |  |

### Material Specification

ZINCALUME® steel complying with AS1397-2001 G550, AZ150 (550 MPa minimum yield stress, 150gr/m<sup>2</sup> minimum coating mass).

COLORBOND® steel complies with AS/NZ2728:1997.

### PROFILE WEIGHT (KG)

| THICKNESS (BMT) | COLORBOND® XRW | ZINCALUME® |
|-----------------|----------------|------------|
| 0.45 mm         | 5.33           | 5.25       |

### MAXIMUM SUPPORT SPACING

#### ROOFS

| THICKNESS (mm BMT) | Single (mm) | End (mm) | Internal (mm) |
|--------------------|-------------|----------|---------------|
| 0.40               | 1400        | 1460     | 1800          |
| 0.45               | 1650        | 2050     | 2250          |

### WIND UPLIFT CAPACITY (kPa)

#### THICKNESS 0.40 mm BMT

| Span     | Limit State | Span (mm) |      |      |      |      |      |
|----------|-------------|-----------|------|------|------|------|------|
|          |             | 900       | 1200 | 1500 | 1800 | 2100 | 2400 |
| Single   | Serv.       | 1.51      | 1.29 | 1.12 | 0.99 | 0.86 | 0.77 |
|          | Strength    | 3.18      | 2.92 | 2.58 | 2.15 | 1.76 | 1.29 |
| End      | Serv.       | 1.59      | 1.51 | 1.42 | 1.29 | 1.16 | 1.03 |
|          | Strength    | 2.67      | 2.41 | 2.11 | 1.85 | 1.55 | 1.25 |
| Internal | Serv.       | 1.51      | 1.38 | 1.38 | 1.38 | 1.33 | 1.20 |
|          | Strength    | 2.58      | 2.41 | 2.19 | 1.98 | 1.72 | 1.46 |

#### THICKNESS 0.45 mm BMT

| Span     | Limit State | Span (mm) |      |      |      |      |      |
|----------|-------------|-----------|------|------|------|------|------|
|          |             | 900       | 1200 | 1500 | 1800 | 2100 | 2400 |
| Single   | Serv.       | 2.04      | 1.80 | 1.57 | 1.35 | 1.13 | 0.92 |
|          | Strength    | 3.25      | 3.16 | 3.01 | 2.77 | 2.41 | 2.00 |
| End      | Serv.       | 1.87      | 1.72 | 1.59 | 1.45 | 1.32 | 1.19 |
|          | Strength    | 3.02      | 2.90 | 2.77 | 2.54 | 2.26 | 1.96 |
| Internal | Serv.       | 2.03      | 1.97 | 1.90 | 1.82 | 1.69 | 1.48 |
|          | Strength    | 2.95      | 2.62 | 2.30 | 2.03 | 1.74 | 1.48 |

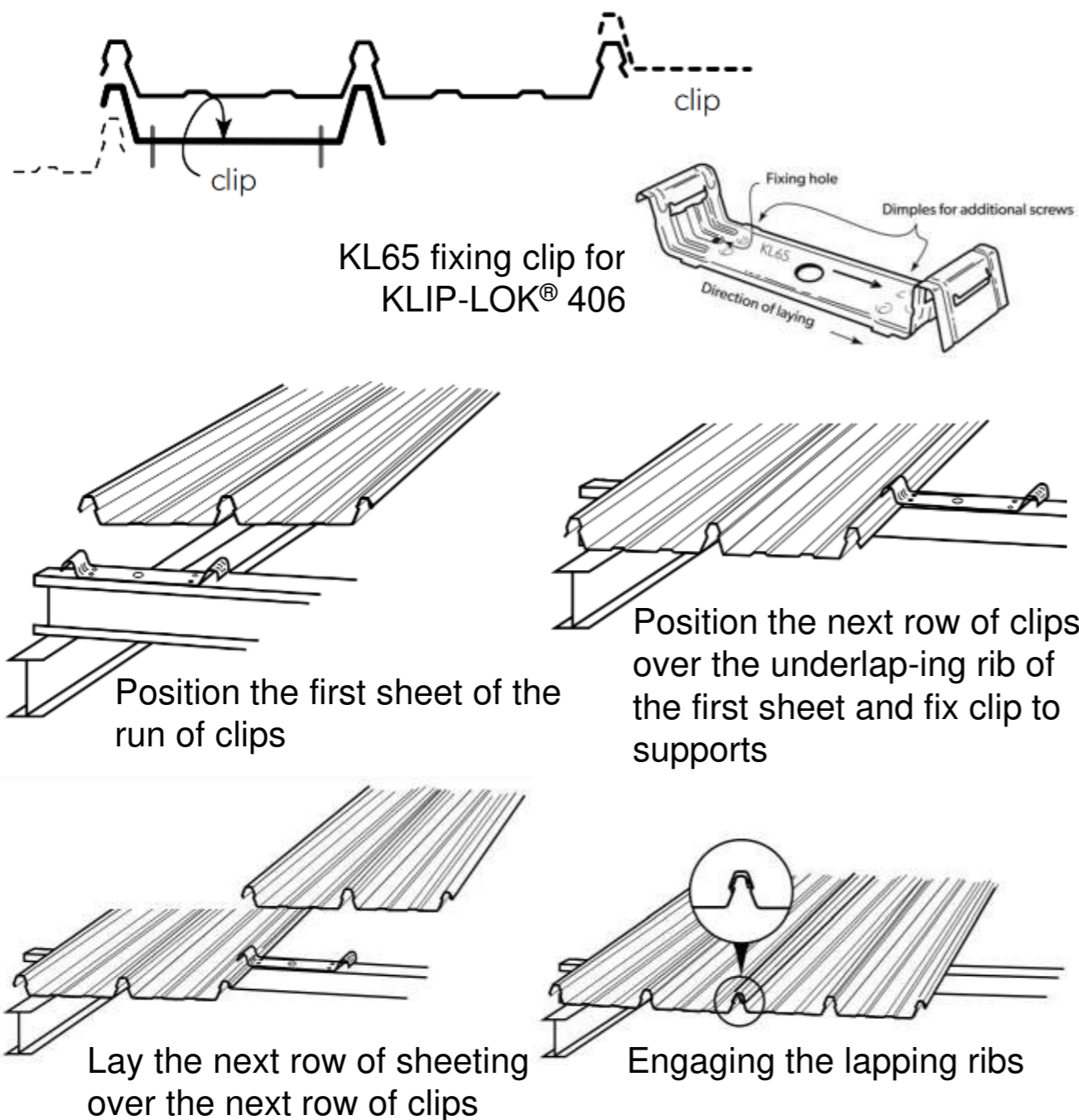
These capacities are based on tests conducted at BlueScope's NATA registered testing laboratory using a direct pressure testing rig. Testing was conducted in accordance with AS 1562.1—1992 design and installation of Sheet Roof And Wall Cladding—Metal, and AS 4040.2—1992 resistance to Wind Pressure For Non-Cyclonic Regions. The pressure capacities for serviceability are based on a deflection limit of (span/120) + (maximum fastener pitch/30). The pressure capacities for strength have been determined by testing the cladding to failure (ultimate capacity). These pressures are applicable when the cladding is fixed to a minimum of 1.0 mm, G550 steel.

## ROOF DRAINAGE (length of sheet in m')

| Rainfall Intensity<br>(mm/hour) | Slope (°) |     |     |     |
|---------------------------------|-----------|-----|-----|-----|
|                                 | 3         | 5   | 7   | 10  |
| 100                             | 548       | 682 | 813 | 934 |
| 200                             | 274       | 341 | 406 | 467 |
| 300                             | 183       | 227 | 271 | 311 |
| 400                             | 137       | 170 | 203 | 234 |
| 500                             | 110       | 136 | 163 | 187 |

## FASTENING METHOD

LYSAGHT® KLIP-LOK® 406 is a concealed-fixed profile. Concealed-fixing is the method of fixing sheets using fasteners which do not pass through the sheet. Instead, the cladding is held in place with clips.



**CLIPS & FASTENERS ESTIMATION:**  
 Number of clips = (number of supports) x (number of sheets + 1)  
 Number of fasteners = number of clips x 2

LYSAGHT® KLIP-LOK® 406 is using 10-24x22 WAF Wafer Head with corrosion class 3 screw for roof without insulation or with maximum 10 mm thickness insulation. It is recommended to use spacer for thicker insulation such as mineral wool.

Pierce-fixing of concealed-fixed claddings is not normally recommended. Please contact us for guidance.

To prevent concealed-fixed cladding from sliding downward in the fixing clips, on very steep pitches, you should pierce-fix through each sheet under the flashing or capping, along the top of the sheets, but not less than 25mm from the ends of a sheet.

## OVERLAPPING

End-lap with minimum overlap 200 mm

## MANUFACTURING

LYSAGHT® KLIP-LOK® 406 produced in Cibitung and Sidoarjo factory.

Also available in extra long lengths, produced by our on-site mobile rollformer/roll on-site. This service is available based on enquiry.

## OIL CANNING

OIL CANNING can be defined as a perceived waviness in the flat areas of metal roofing and metal cladding panels. Generally the period and amplitude of the wave depend on the continuous width of the flat section of the profile. Oil canning is an inherent part of light gauge cold formed metal products, particularly those with broad flat areas.

Since many uncontrollable factors are involved, no manufacturer can realistically assure the total elimination of oil canning. With careful attention to the production and selection of material, to the panel design, and to installation practice, oil canning can be effectively minimised.

Unless specific tolerances have been incorporated into the contract documents and accepted by the panel provider and panel manufacturer, and if reasonable precautions have been taken, oil canning is not grounds for panel rejection.

## COLOR CHOICE

Standard & Non-standard colors can be selected from Colorbond® brochure available in [www.colorbond.id/product](http://www.colorbond.id/product).

## CERTIFICATION

- Green Label Indonesia
- TKDN

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## VISIT US

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