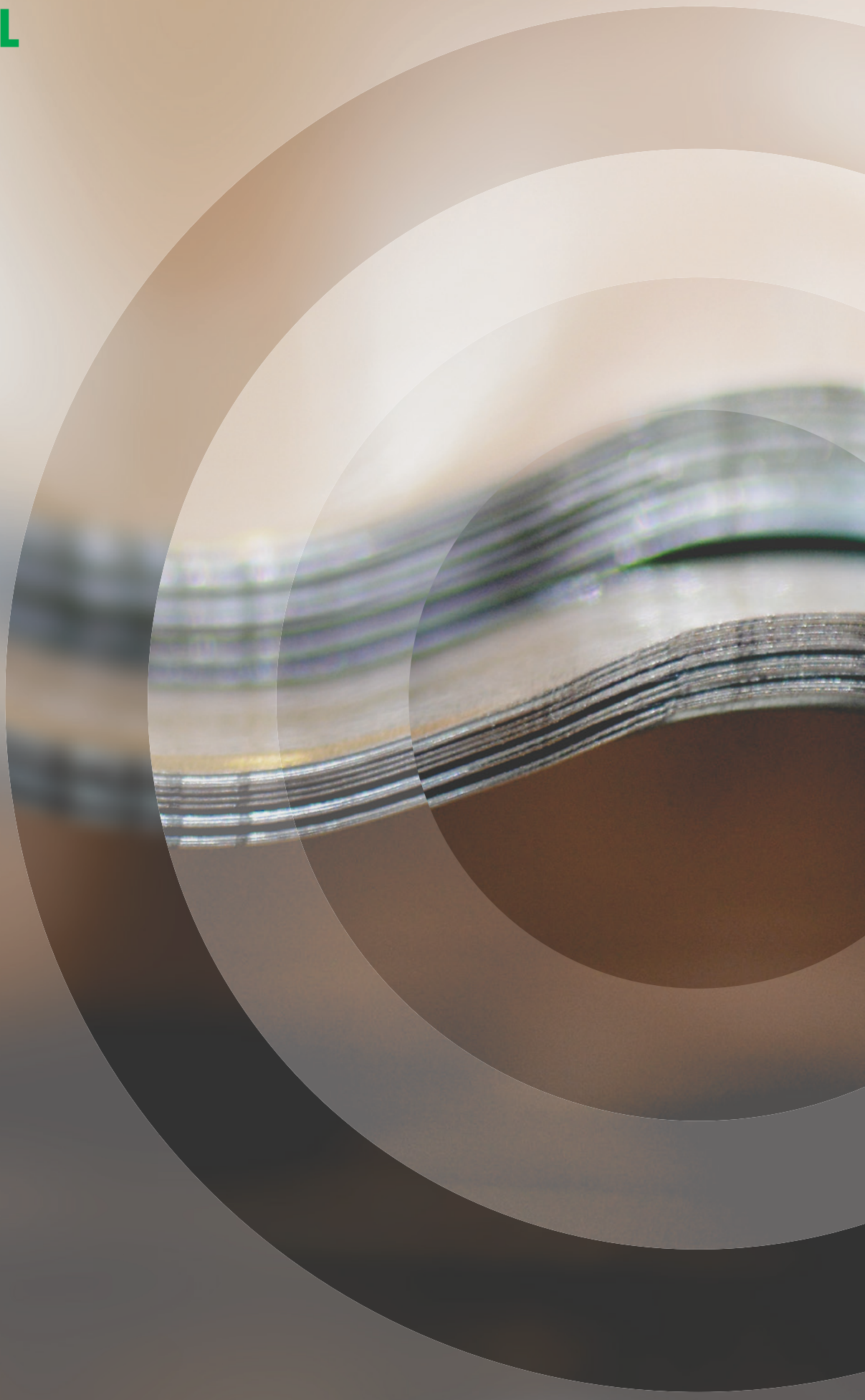
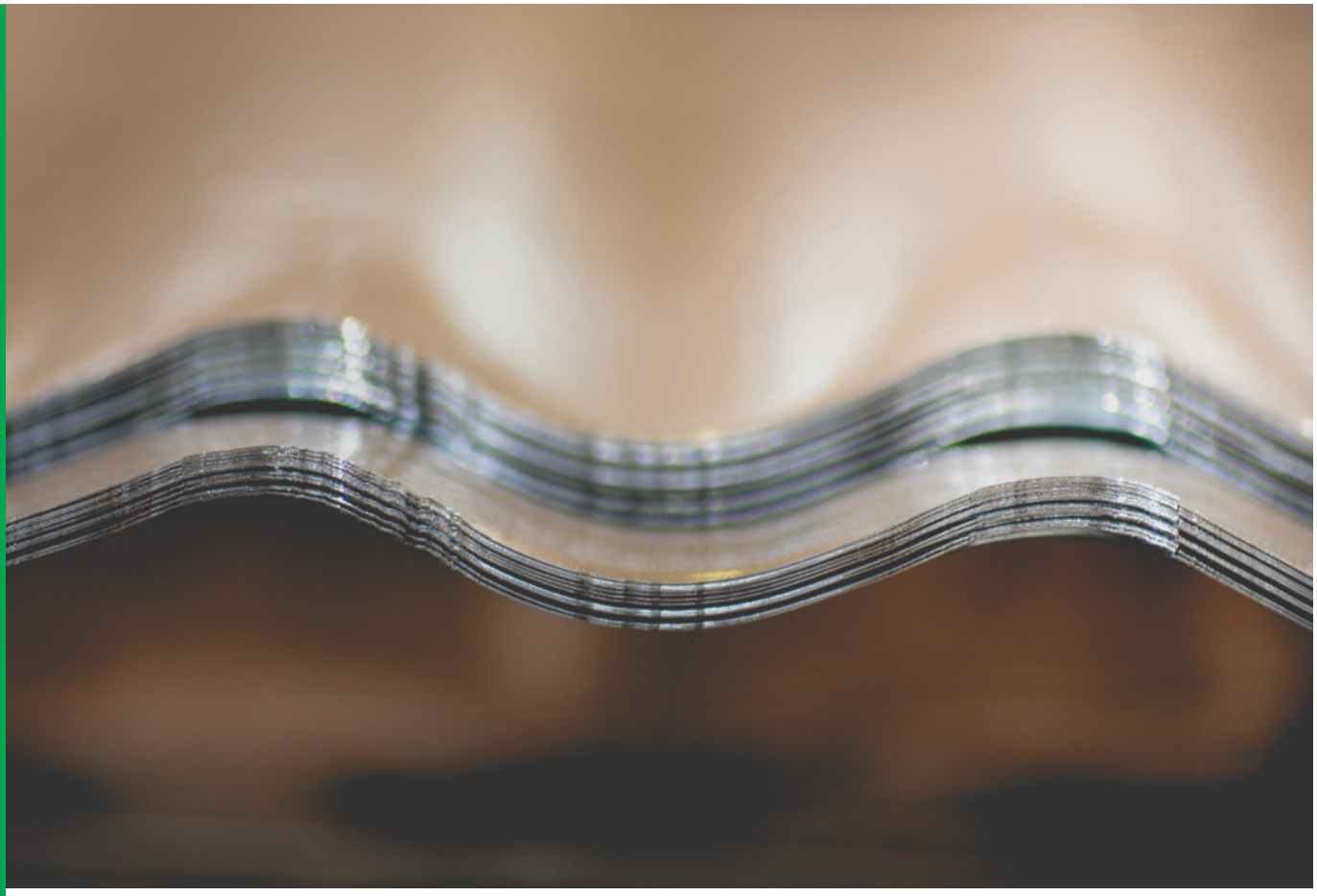
CLOTAN STEEL

Ora et Labora

Corrugated sheeting



Corrugated roof sheeting



Corrugated
Roof sheeting

Corrugated sheeting is the traditional and familiar S-Rib profile for roofing and cladding applications. It is the oldest and most commonly used roofing profile because of its easy handling and fixing properties and related strength. The S-rib is derived from sinus curve and offers very strong and structural properties.

Corrugated cover width

Clotan Steel offers two types of corrugated product options: an 8.5 Corrugated and a 10.5 Corrugated. The rib height will be 17.5 mm.

8.5 Corrugated provides an effective cover width of 610 mm
10.5 Corrugated provides an effective cover width of 762 mm

The Corrugated roof sheeting profile virtually eliminates oil canning and the sheeting can be factory cranked, curved and bullnosed to various radii depending on customer requirements.

Structural guidelines of corrugated sheeting

Corrugated roof sheets are available in a wide range of materials displaying various structural properties. It should be noted that the load span characteristics are only to be used as a broad guideline. Purlin spacing is also dependant on other factors such as:

- Prevailing winds in a particular area
- Snow during winter periods
- The presence of dust and other particles in industrial areas as well as the type of structure that is being erected.

We therefore recommend that a qualified engineer be consulted to determine the purlin spacing for a specific application.

Recommended maximum purlin spacing (metres) - Corrugated

Thickness	0.40 mm	0.47 mm	0.50 mm	0.55 mm	0.58 mm	0.80 mm
Steel Grade	ISQ550	G550 ISQ550	ISQ550 G550	G550	ISQ300	ISQ230
Roof – single span	0.60	0.90	0.90	0.90	0.90	1.20
Roof – double span	0.80	1.10	1.10	1.20	1.20	1.50
Cantilever – roof	0.15	0.25	0.25	0.30	0.30	0.45
Vertical cladding	1.00	1.40	1.40	1.40	1.40	1.80
Weight per metre	2.974 kg	3.495 kg	3.718 kg	4.090 kg	4.313 kg	5.949 kg
Weight per m^2	3.90 kg	4.59 kg	4.88 kg	5.37 kg	5.66 kg	7.81 kg

Available dimensions

Corrugated sheeting is available in standard lengths of 1.8m to 14m. The permissible length tolerance for the standard length range will be -0 +5 mm. Sheets outside these parameters are available on request and may be subject to special pricing arrangements. The maximum height which can be transported is 4.3m. This factor should be considered when bullnoses and curves are designed.

Roof pitch

When using Corrugated, the recommended minimum pitch for roof slopes in excess of 15 m is 10.0° and for slopes less than 15 m is 7.5°. When Corrugated roof sheets are end-lapped the roof pitch should be considered.

The minimum end laps for roof pitches in excess of 15° is 150 mm and for other roofs a minimum of 250 mm is recommended. End laps for side sheeting should be at least 100 mm. It is recommended that end and side laps on low pitch roofs be sealed to ensure water tightness. (Available in pre-painted colour options)

Installation procedure

The required number of corrugated sheets can be calculated as follow:

Number of sheets for 8.5 Corrugated = Length of building ÷ 0.610 m (Cover width of sheet)
Number of sheets for 10.5 Corrugated = Length of building ÷ 0.762 m (Cover width of sheet)

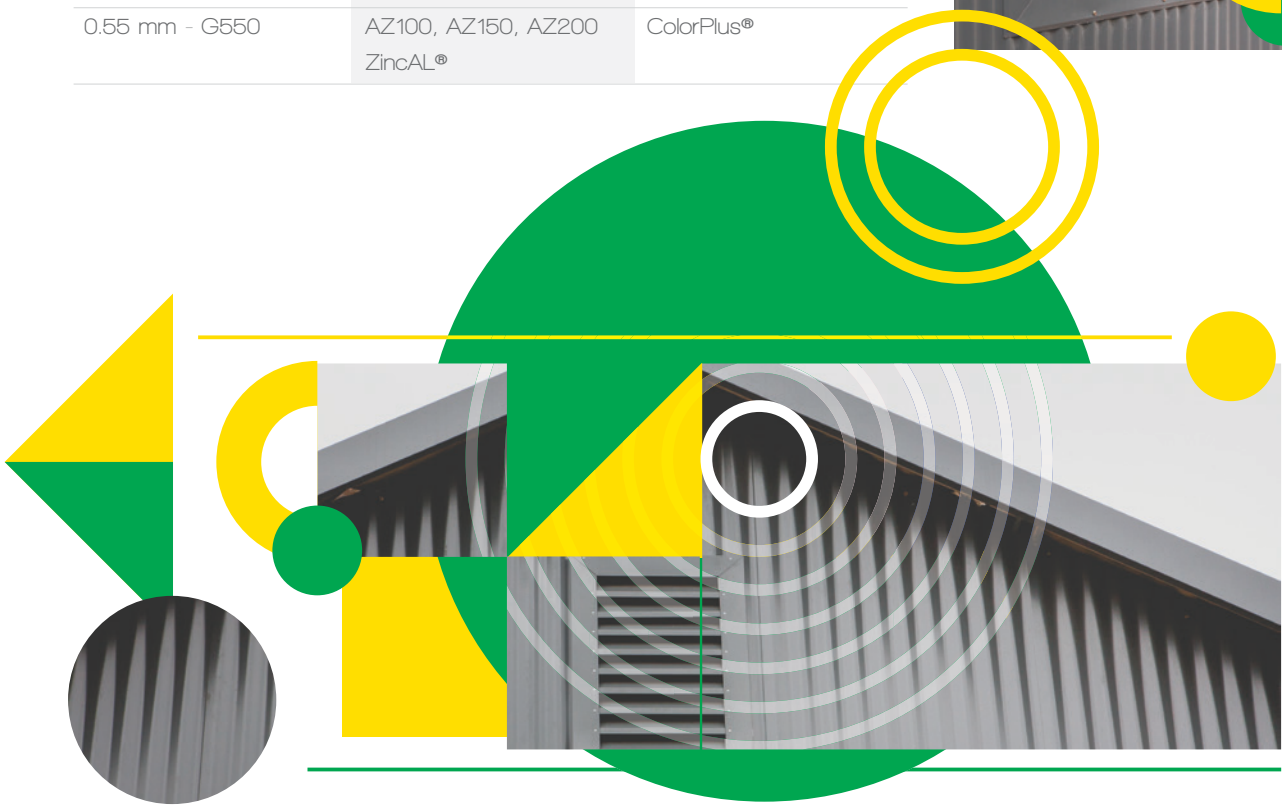
Roof sheets and vertical wall cladding (side cladding) must be laid with one and a half corrugation side lap and must be fixed through the crests of alternate flutes to purlins using 50 mm Top Speed or Tex screws into steel purlins and 65 mm Tex or Top Speed screws in the case of timber supports. All fasteners must incorporate 19 mm dia bonded washers. In order to qualify for a guarantee on Zincalume®, Colorbond®, ColorPlus® and ZincAL® sheets the following fasteners supplied by Buildex Industries should be used: Metaltex Climaseal 3 for steel purlins and Timbertex Zacs 4 for timber purlins. The use of these fasteners will dramatically increase the life span of the roof sheeting as corrosion caused by fasteners is avoided. When Corrugated sheeting is double overlapped the covering width for 8.5 Corrugated changes to 535 mm and for 10.5 Corrugated changes to 686 mm.

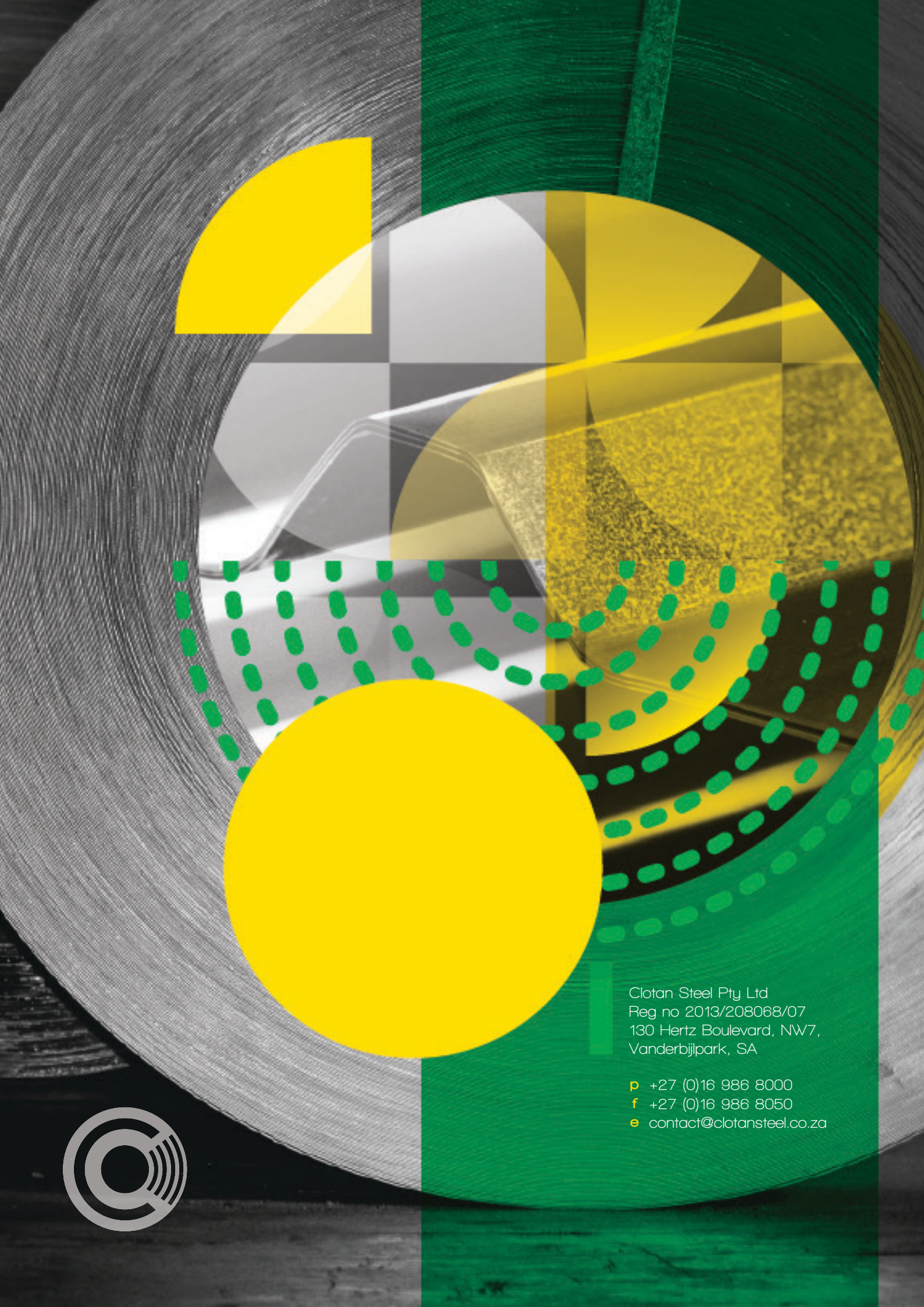
Specification for erection

Specification (*refer to table indicated below)

*(*Thickness & material quality)* Clotan Steel 101½ Corrugated/galvanized *(*zinc coating)* steel roof sheeting and accessories with (Chromadek®/Colorbond®/ColorPlus®/Zincalume®/ZincAl®) finish on one side and protective primer coating on the reverse side fixed to *(timber/steel)* purlins or rails with a *(*refer to table)* spacing. All sheeting is to be clearly marked on the reverse side at one-metre intervals, indicating thickness, material quality, coating thickness and paint system. View our pre-painted color options.

Thickness & quality	Coating	Available paint system
0.40 mm – ISQ550	Z100 - Z150 Galvanised*	
0.47 mm - ISQ550	Z150 - Z275 Galvanised*	
0.50 mm - ISQ550	Z150 - Z275 Galvanised*	Chromadek® Chromadek Ultim®
0.58 mm - ISQ300	Z100 - Z150 Galvanised*	Chromadek® Chromadek Ultim®
0.80 mm - ISQ230	Z100 - Z150 Galvanised*	Chromadek® Chromadek Ultim®
0.47 mm - G550	AZ150 Zincalume	Colorbond®
0.55 mm - G550	AZ150 Zincalume	Colorbond®
0.50 mm - G550	AZ100, AZ150, AZ200 ZincAL®	ColorPlus®
0.55 mm - G550	AZ100, AZ150, AZ200 ZincAL®	ColorPlus®





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