

## Smooth Transition Overlap Method for CP301 Sheet

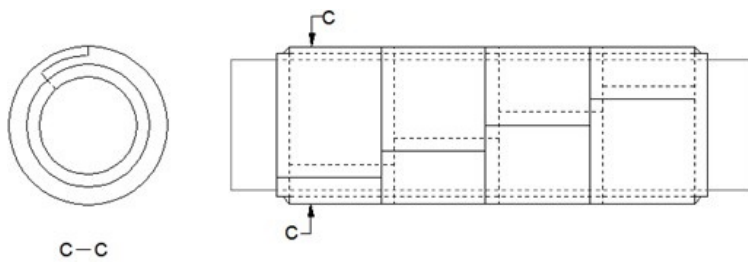
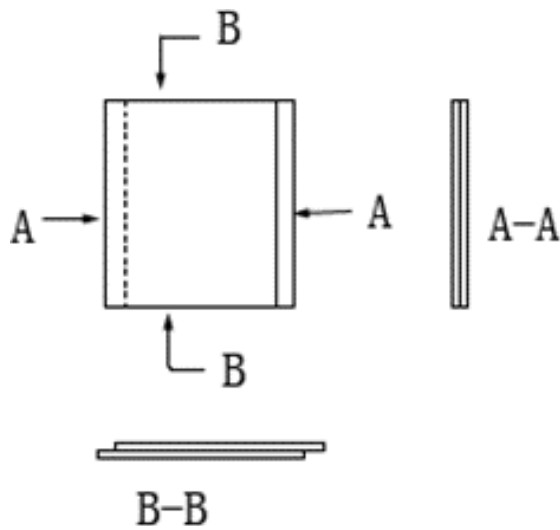


Diagram of Product Wrapping on the Pipeline

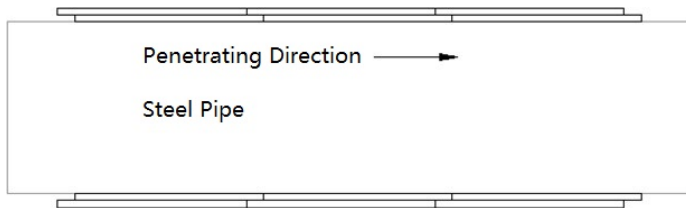


Diagram of CP301 Pre-impregnated Sheet  
Internal Embedding Lap Joint Structure

CP301 adopts a double-layer staggered edge structure. For example, when using a double-layer fiberglass cloth with a width of 850mm to produce CP301, the staggered edge is 50mm, resulting in an actual material width of 900mm and an effective usable width of 850mm.

The circumferential overlap length ( $H$ ) is generally around 100mm. The larger the pipe diameter, the longer the recommended overlap length.

### Calculation of CP301 Material Usage:

$$M = (\pi \times D + H) \times L$$

Unit: square meters.

Where:

- $L$ : the length of the pipeline.
- $D$ : the diameter of the pipeline.
- $\pi$ : the pi constant (approx. 3.1416).

### Calculation of Epoxy Adhesive Usage:

$$R = M \times 0.3$$

Unit: kilograms.

0.3kg of adhesive is used per square meter of sheet material.



Packaging and Transportation Form

# Installation Procedure

## 1. Surface Treatment of the Substrate:

- For 3PE surfaces: Grinding and flame polarization treatment are required.
- For FBE surfaces: Sandpaper matte grinding treatment is required.
- After treatment, apply interface adhesive to the substrate surface.



**Roughening Treatment**



**Flame Polarization**

## 2. Adhesive Application and CP301 Sheet Installation:

- After applying the adhesive, open the CP301 packaging, remove the lower film, and tightly adhere it to the pipe wall.
- Pull firmly to ensure the sheet surface is smooth, then remove the outer film and wrap it with PET film.
- Ensure there are no air bubbles between the sheet and the pipe wall.



**Sheet Adhesion**



**Sheet Adhesion**

## 3. Curing and Maintenance:

- Use sunlight or UV lamps to irradiate for a certain period to ensure the sheet is completely cured.
- After curing, remove the surface film.
- Curing time depends on UV intensity. Under general conditions, with UVA intensity of  $2.0\text{mW}/\text{cm}^2$ , curing takes approximately 35 minutes.
- Use hardness as the inspection criterion.

## 4. Quality Inspection and Acceptance:

- Inspection items include: appearance, dimensions, air bubble rate, and Barcol hardness.

## 5. Pipeline Pullback.