

CW-C4000 Series

Paper Feeder/Paper Rewinder

Designer's Guide

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Paper Feeder/Paper Rewinder Design Guide

The CW-C4000 Series is designed to print on roll paper fed from inside the printer or on fanfold paper fed from outside the printer.

If you use an external large diameter roll paper feeder and/or paper rewinder with the printer, read this section carefully to know required settings and requirements for using the external devices, and perform adequate verification before starting actual printing.

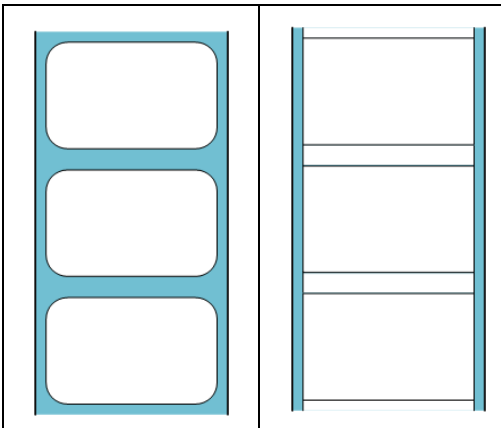
Supported Paper

The following types of paper are supported when using an external large diameter roll paper feeder and/or paper rewinder with CW-C4000 Series printers.

Forms of paper	Paper types	Paper shapes	Roll paper core	Label length
Continuous paper (without black marks)	Plain paper	Roll paper	Outer diameter: $\phi 82$ mm {3.23"} (Example: Inner diameter: $\phi 3$ inches, paper tube thickness: 3 mm {0.12"} or more)	Label length: Page 5
Continuous paper (with black marks)	Matte paper			
	Glossy paper			
Die-cut label (Gap)	Plain paper label			
Die-cut label (Black Marks)	Matte label			
	Synthetic label			
	Glossy label			
	Texture label			
	Glossy film label			
	High glossy label			

Label Length

The length of the label that can be used depends on the paper specifications. For details, see the following table.



Paper types	Forms of paper	Label length	Paper without waste part	Paper without waste part on left and right sides only	
Plain paper label Matte label Texture label Glossy label High glossy label	Die-cut label (Gap) Die-cut label (Black Marks)	8 to less than 25.4 mm (0.31 to less than 1 inch)	× Not supported	✓ Supported	
		25.4 to 406.4 mm (1 to 16 inch)	✓ Supported	✓ Supported	
Synthetic label Glossy film label		8 to less than 50.8 mm (0.31 to 2 inch)	× Not supported	✓ Supported	
		50.8 to 406.4 mm (2 to 16 inch)	✓ Supported	✓ Supported	

1. For the latest information on detailed paper specifications and the base paper used in roll paper, contact qualified service personnel.
2. For details on paper without waste part and paper without waste part on the left and right sides only, see the CW-C4000 Series Technical Reference Guide.
3. Continuous paper cannot be used with a paper rewinder, because continuous paper must be cut for each page.

Preparation before Use

If you use an external large diameter roll paper feeder and/or paper rewinder with the printer, perform the following items before use.

Install the Fanfold Paper Feed Guide

Install the "Fanfold Paper Feed Guide". For details on the installation method, see the CW-C4000 Series User's Guide.

Set the Media Source to [External Feed]

Set the Media Source to [External Feed]. For details on this setting, refer to the CW-C4000 Series User's Guide.

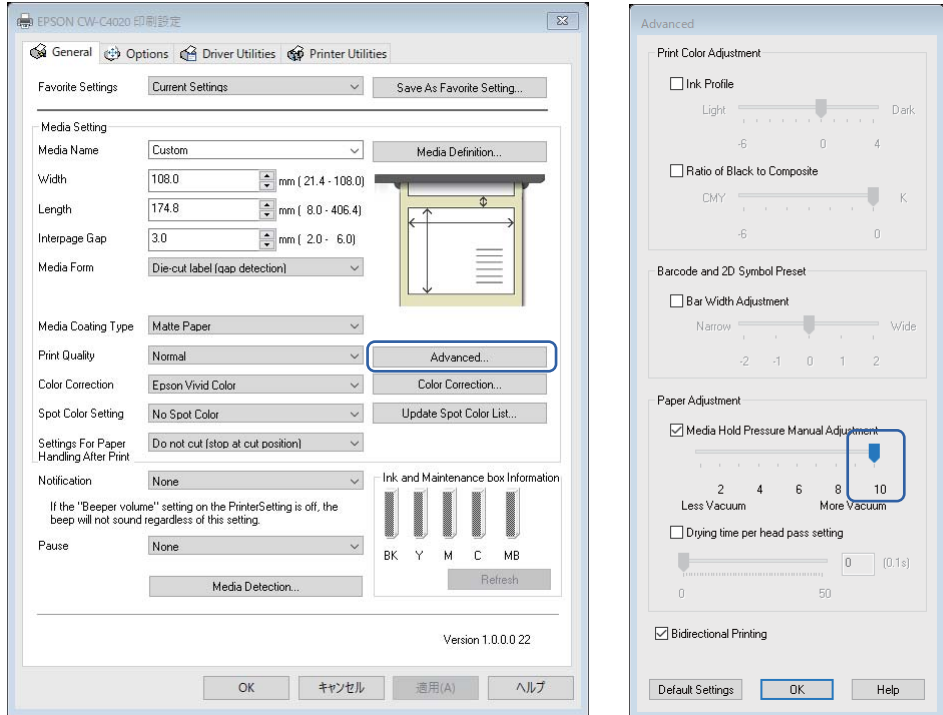


- Do not use [Stop at Peel-Off Position] in the Print Mode.
 - * The printer preforms a back feed operation of a length determined by Print Mode.
 - * If you use an external large diameter roll paper feeder and/or paper rewinder with the printer, a paper jam might occur when feeding paper backward from the peel-off position. Therefore, do not use [Print Mode] - [Stop at Peel-Off Position].
 - * Make sure that the external large diameter roll paper feeder and/or paper rewinder does not interfere with the back feed in the following Print Mode.
 - Stop at Cut Position Back feed amount Approx. 32 mm {1.26"}
 - Stop at Print End Position Back feed amount Approx. 32 mm {1.26"}
- When using the printer in an environment with high humidity, use the following method to load paper.
 - * In an environment with high humidity, paper jams might occur when paper is inserted from the rear. In such cases, use the following method to load paper.
 1. Open the front cover.
 2. Feed the paper from the rear of the printer to the front.
 3. Close the front cover, and then press the  (Pause) button.

Set the Printer Driver

- 1 Click [Advanced] on the [General] tab.
- 2 Select the check box for [Paper Adjustment] - [Paper Vacuum Manual Adjustment].
- 3 Move the slide bar to adjust the vacuum.

 It is recommended to select [Strong] for the vacuum.



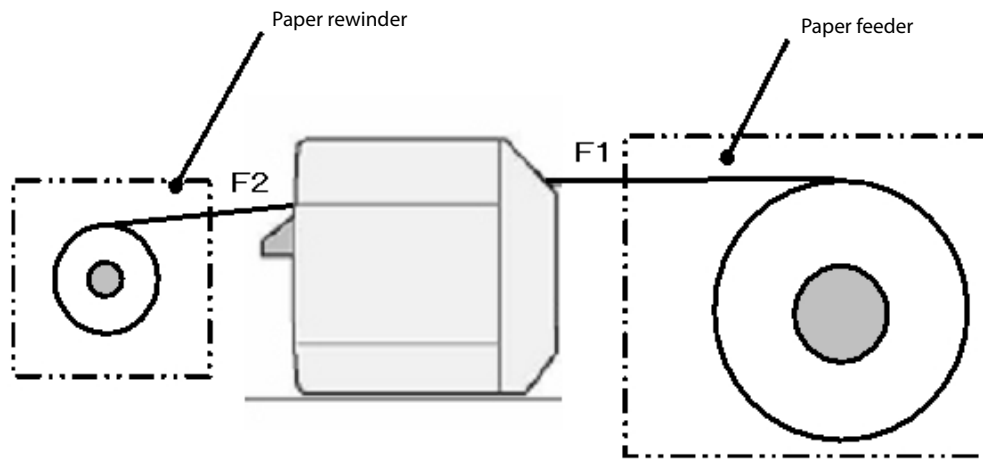
Paper Feed Speed

The following table shows the paper feed speeds of this printer.

Paper Feed Speed	Example of Use
254 mm {10"}/s	Printing, feeding paper before/after printing (paper width detection, cut position movement, etc.)
127 mm {5"}/s	Printing, feeding paper when the Feed button is pressed
25.4 mm {1"}/s	Printing, feeding paper when it is loaded

Paper Load

The allowable values of tension (F1, F2) applied to paper between the printer and a paper feeder or rewriter (or backing paper rewriter) are as follows.



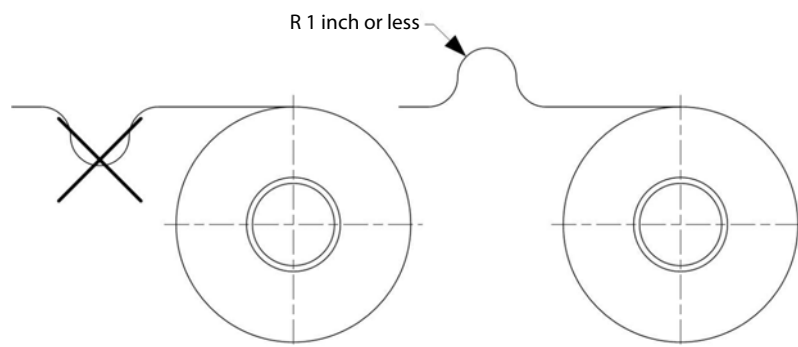
Paper feeder side	Paper tension (F1)	2N or less
	Amplitude	If there is fluctuation in tension: Set the cycle to 1 inch.
Paper (backing paper) rewriter side	Paper tension (F2)	0.2N or less
	Amplitude	0.1N or less

Paper Curl

When using a paper feeder, follow the guidelines below to prevent paper from curling.

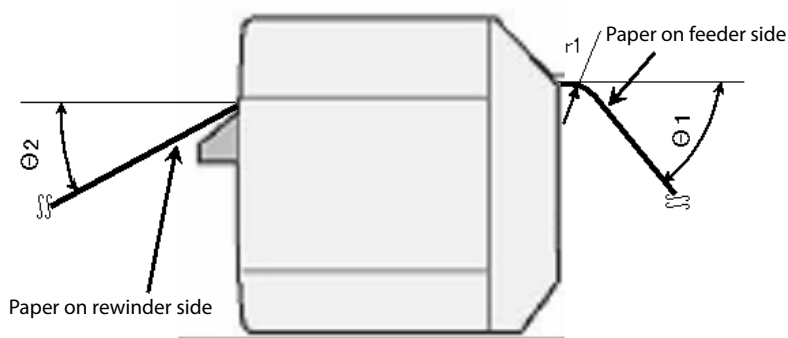
When leaving the printer and the paper feeder unused for a long term, place the paper feeder so that paper is not curled in the direction opposite to the roll winding direction.

In addition, avoid letting the paper curl with a radius of 1.0 inches or less even if the paper is curled in the roll winding direction.



Paper Angle for Feeding and Ejecting

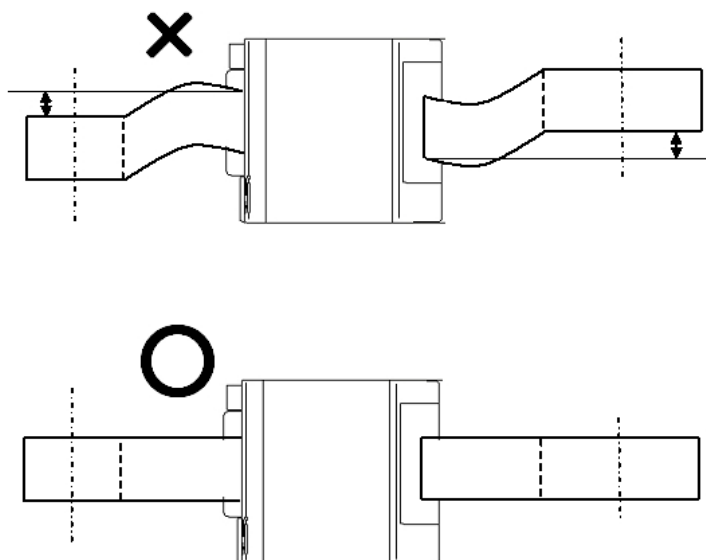
The allowable values of angle for feeding paper from a paper feeder (θ_1) and for ejecting paper to a paper rewriter (θ_2) are as follows.



Angle for paper feeding: θ_1	0° When $r_1 > 1$ inch: $0^\circ \leq \theta_1 \leq 60^\circ$
Angle for ejecting paper: θ_2	$0^\circ \leq \theta_2 \leq 30^\circ$

Position of Paper Feeder and Paper Rewinder

Place a paper feeder and paper rewriter so that paper is fed or ejected straight to/from the printer.



If you find that paper is skewed before it reaches the printer or rewriter, adjust the position of the paper feeder or the paper rewriter.

Locations of Holes on the Bottom Case

There are holes in the bottom case of the printer as shown in the figures below. They can be used as necessary for positioning the printer, etc. Note that the dimensions shown in the figures are for reference only.

