Global Services North America
Wilmington MA 01887

:ANAPURNA M4F

AGFA UV INKJET PRINTER

SITE PREPARATION GUIDE

Distribution:
Customer
Sales
Service
Dealer

01/03/11 Revision 5.4

Table of Contents

Global Services North America
Wilmington MA 01887

Purpose

The purpose of this document is to assist the local service representative, who is responsible for configuring and installing the :Anapurna. This document will help to ensure the site will be ready and the customer is informed of their responsibilities. Please go through all the information provided in this document thoroughly with the customer. Have the customer sign the :Anapurna System Site Check List. You should write down any notes on the Note page of the Site Check List that may be necessary for a successful installation. Make a copy for the customer to keep on site, and one for you.

Scope

This document specifies the site requirements for the :Anapurna System and the preparations needed before the installation. It will be the intent of this document to inform the customer of what the requirements are for the :Anapurna System and inform them of their responsibilities. Together this will help in producing a successful installation.

General

The customer is responsible for the preparation of the site to fulfill the requirements of the :Anapurna System as outlined in this document.

4 Major Project Elements

Dock & building access

Compressed Air Supply

PC Platform & RIP Software

AC Power Requirements

Dock & building access

System Dimensions and Weights

Dimensions Uncrated	Dimensions Crated	Weight:
H = 5.3 Feet (1.6M)	H = 6.9 Feet (2.1M)	Crated: 3644 lbs (1653 Kg)
W = 11.8 Feet (3.6M)	W = 13 Feet (3.9M)	Uncrated:2165 lbs (980 Kg)
D = 4.8 Feet (1.5 M)	D = 7.2 Feet (2.2M)	

NOTE:

The Anapurna M4F ships in a single wooden crate with the standard media tables inside. The crate panels and top cover are secured with 8 mm hex head bolts. Riggers will be required to open the crate and lift the printer off the pallet to move it to position.

Shipping and Delivery

***No Truck Height Loading Dock*:** Due to the width of the Anapurna M4F crate (13 Feet) it is important that the freight vehicle delivering the printer have a lift gate. This will allow the forklift to pull the crate length-wise to the lift gate and together with the forklift supporting one end. The crate can then be safely lowered to the ground.

***With Truck Height Loading Dock**:* The load dock area must have enough vertical height and space for the forklift to be able to lift the printer off the pallet.

Forklift Requirements

4409 lbs or 2000 Kg or higher capacity to lift the printer crate.

The forklift blades should be at least 60 inches or 1500 mm in length.

The distance between the fork lift blades should be 41 inches or 1050 mm apart.

Floor Strength and Flatness

The floor must be level with a maximum incline or waviness of +/- 1.3 cm across the footprint.
Do not install on carpet.

Doors and Hallway Access

The customer must provide free access through doors and hallways from the entrance to the Anapurna location so that the printer can be rolled to its position. It will be the customer's responsibility to have the system moved to the location of where the Anapurna will be installed. An AGFA Service representative will be present to assist with moving the equipment. Once on its wheels the printer can be rolled to position, make sure to provide ramps as necessary to clear any thresholds.

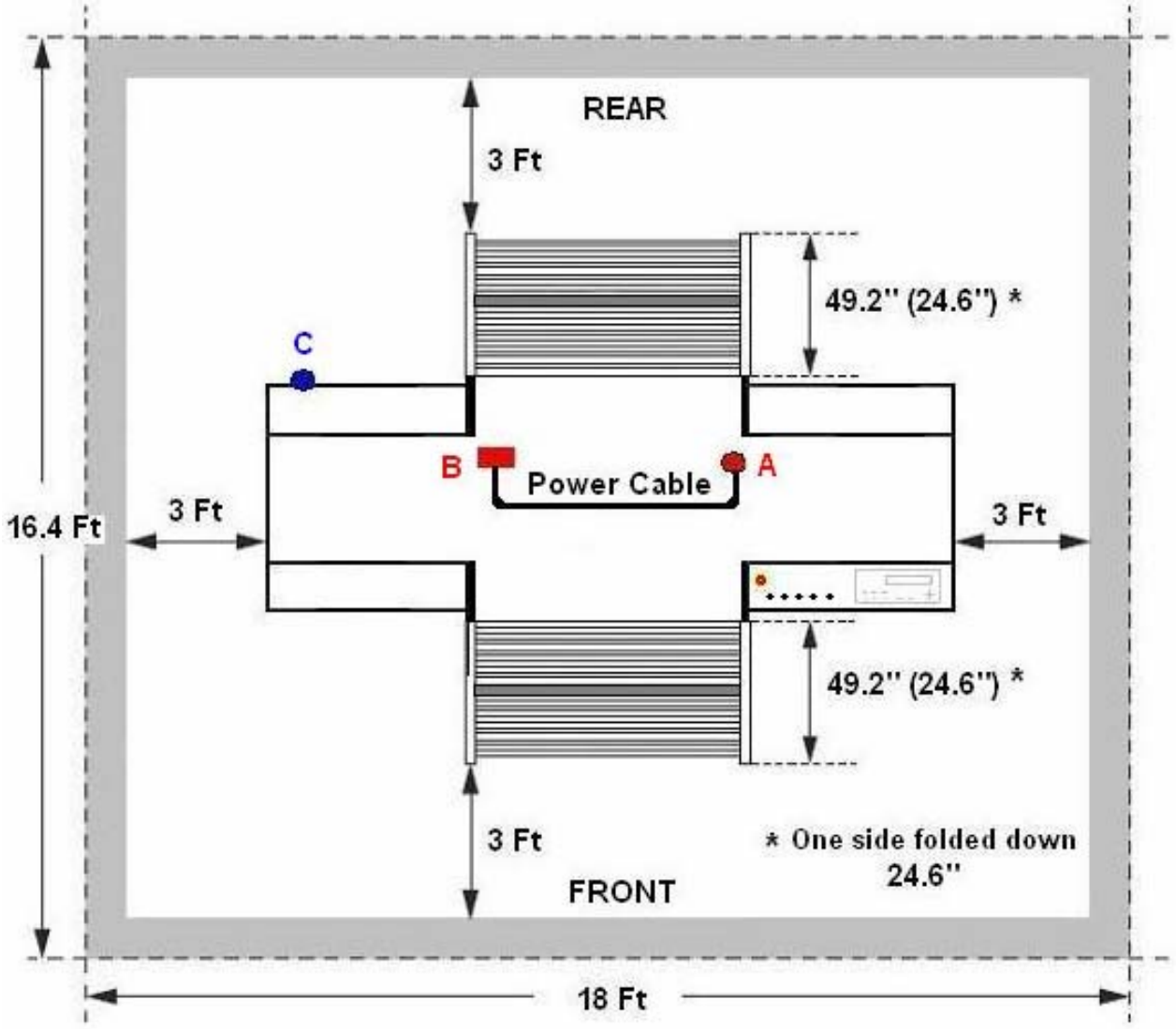
Minimum Door Way Width: 58 (Inches) or 147.3 (CM) Uncrated **
62 (Inches) or 157.5 (CM) Crated

** Roll to Roll brackets come preinstalled, they can be removed to reduce the door way width requirement to 43.3 inches or 1100mm.

Minimum Door Way Height: 7.0 (feet) or 213 (CM) Uncrated
7.0 (feet) or 213 (CM) Crated

Foot Print and Working Area:

(Top view)



Power and Air Connection Points:

The power/air connection points are indicated in the diagram above with the letters **A**, **B**, and **C**

A – The power cable entry point lower chassis – near the rear left leveling foot.

B – Electrical terminal block location inside the printer, where the power cable connects.

NOTE: The distance between point **A** and **B** or power cable length inside the printer is approximately 9 feet. Note: Add enough cable; wall outlet or electrical drop plus the 9 feet.

C – Air line connection, outside rear right. A 6 mm OD tube is provided with the printer.

☆ **Floor Space required for <u>Standard tables shown</u> above is: 16.4 feet/5m for depth, 18 feet/5.5 m for width.**

☆ **<u>For 8 – 12 foot rigid media the Optional Extension tables are required.</u> Floor Space needed: 24.6 feet or 7.5 m for depth and 18 feet /5.5m width.**

AGFA

Global Services North America
Wilmington MA 01887

Compressed Air Supply

Printer Air Connection: An adapter (shown below) is needed to connect the air hose from the air regulator to the printer. *This should be purchased locally.*

Printer Air Pressure: **24/7 air regulation is required to avoid ink contamination. A regulator must be supplied by the customer and located near the printer. The regulator should be set to 80 PSI.**

Compressor: **3 - 5 HP, Min 60 - 80 gallons** or better tank. The compressors regulator should be set between 105 - 110 PSI for trip OFF and to 85 PSI to trip ON.

Printer Air Volume: .28 CFM or 2 gallons/per minute
Compressor Air Quality: Air Filters are required to eliminate moisture (No Water/No Oil)

Customers must provide: Air - Water – Oil filtration and in situations where the compressor is over 100 feet away from the printer, provide the proper air line diameter to minimize loss.

The 6 mm tube which is supplied with the printer fits into the adapter then into a similar port on the . The threaded 3/8" end then screws into the air regulator.

Sample regulator for 3/8" fittings with regulator and filtration. It can be mounted on the printer or closest wall.

Recommended:

Compressor, 60 G 5HP
Compressor Single Stage Compressor, Motor Running HP 5, Free Air CFM @ 90 PSI 16.0, @ Max Pressure 14.2, Volts 208-230, Phase 3, Amp Draw 13.4-13.2/6.6, Tank 60 Gal, Tank Type Vertical, FNPT Outlet 3/4 In, Maximum Pressure 140 PSI, Duty Cycle 80/20, Pump Type Cast Iron, Pump Oil Capacity 17 Oz, Splash Lubrication, Torxter Not Required, Thermal Protection, Stationary, For Shop or Maintenance Facility General Air Tool Operation, Length 23 In, Width 31 In, Height 71 Inches

Source: www.grainger.com item # 4ME98

Compressor, 3 HP
High Performance Cast Iron Air Compressor, Motor Running Power 3.0 HP, Free Air Flow @ Maximum Pressure 10.3 CFM, Free Air Flow @ 90 psi 11.3 CFM, Maximum Pressure 135 PSI, Phase Single, Voltage Rating 230 Volts, Current Rating 14.7 Amps, Tank Capacity 60 Gallons, Tank Type Vertical, Height 66 Inches, Length 20 Inches, Width 23 Inches, NPT Outlet (F) 1/2 Inches, 60 Hz

Source: www.grainger.com item # 4YW09

RIP Software and PC Platform

Wasatch RIP

The Wasatch SoftRip is provided for raster image processing of images. Install the Wasatch SoftRIP on a PC, which meets the following platform specifications.

Minimum Recommended System requirements for Anapurna M4F

- CPU Type: Core 2 Duo, 3.06 GHz or faster
- 4 Gigabytes Ram
- Two Physical hard drives, 120 - 160 gigs size, 10K RPMs, one for the OS, one for the Rip
- Windows XP, or Server OS, Windows 7, (Vista is not supported)

- **2 NETWORK CARDS,** The RIP Computer requires two network cards, one for the connection between the RIP and the printer. The second network card is needed for the connection between the customer's network and the RIP computer. A **crossover cable** is supplied with the unit and is used to connect the Anapurna directly to the RIP computer. **The Anapurna cannot be connected directly to the customer's network and will not be able to function as a network printer .**

- **MULTIPLE HARD DRIVES**, by purchasing a PC with **2 physical hard-drives** this will speed up the processing of large image files and improve the reliability of the .

- **CPU SPEED,** The faster the CPU, the faster the software will process your files. Purchase the fastest available computer you can. More RAM will also help speed up the processing; it is the speed of the CPU that directly affects how fast SoftRIP runs. If you are processing large files over 500 MB in size, it is also important to have a minimum of 4 GB of memory.

- **WASATCH,** Wasatch SoftRIP can process more than one file at a time and takes advantage of multiple CPUs for this purpose. For every additional processor in your computer, it is recommended to purchase the maximum amount of RAM for your CPU. It is important to use multi-gigabyte disk drives on computers that are intended for use in high resolution printing, especially if you plan to keep the Ripped files available in the Wasatch Print Queue.

Buying a robust PC platform will provide a quick payback in faster output speeds and greater reliability!

AC Power Requirements

Power Consumption:

Maximum Power: 4 KW
BTUs (Max): 13648.57

Power Requirements for the Anapurna M4F:

The following electrical requirements must be provided to your electrician.

- Single phase, 208 Volts
- 40 Amp, 60Hz, dedicated circuit with ground, no neutral
- The electrician must provide the proper power cord. (See Note 3)
- The printer should have a twist lock plug/receptacle (L6-30 R/P). So that Agfa service can disconnect power when needed.
- Buck boost transformer wiring diagram is on page 10

Important

1. **The printer operating voltage range is: 230 – 240 VAC, we need to increase the 208 Voltage to this range for the UV lamps to properly cure the ink. A Buck/Boost transformer will be required to increase the 208 volts to this range. See pages 9, 10, and 11 for transformer data, configuration, and a sample transformer.**
2. **To minimize voltage loss the buck boost transformers should always be located near the .**
3. **The length of the power cord should be 9 Feet plus the distance to the outlet or power drop. The plug/receptacle should be a twist lock (Ex: Hubbell L6-30 P/R) design in accordance with local electrical codes. Agfa Service will need to be able to disconnect power when required.**

If your electrician has any questions please contact AGFA at 1 800 879 2432

AGFA
Global Services North America
Wilmington MA 01887

AC Power Requirements

The Buck/Boost Transformer

The Anapurna M4F printer requires power in the 230 – 240 VAC range for the UV lamps to properly cure the ink. At 208 Volts the customer will have curing problems and the lamps will fail prematurely.

Buck/Boost Transformer and Specifications:

- **KVA Rating: 1.5**
- **Primary Volts: 120/240**
- **Secondary Volts: 16/32**
- **Sola Hevi Duty Catalog #: HS20F1.5A**
- **Sola Hevi Duty Website is: www.solaheviduty.com**

Another source for the 1.5 KVA Buck/Boost transformers is Grainger.com, search for Item # "2CL93".

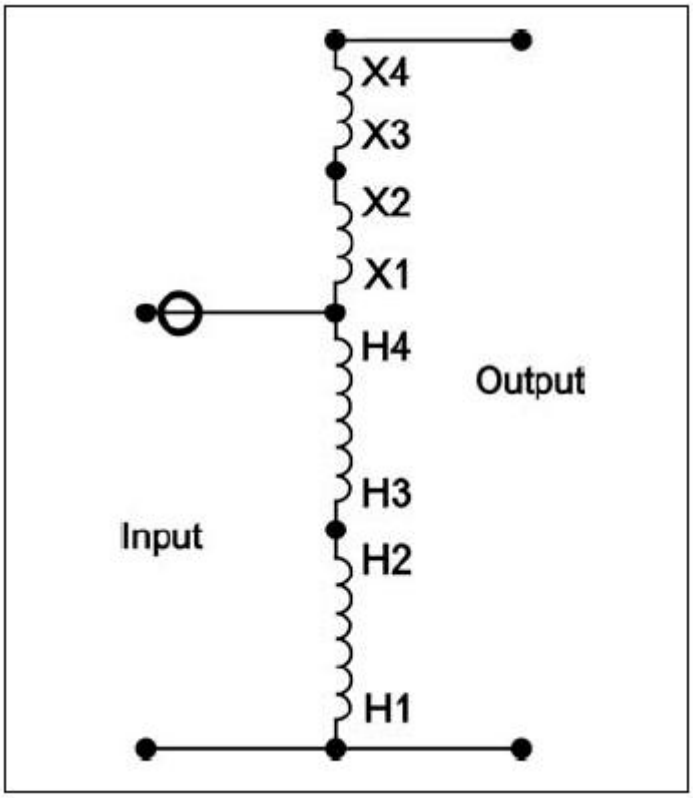
SPECIAL NOTE FOR CANADIAN CUSTOMERS PLEASE READ CAREFULLY

ELECTRICIANS IN CANADA MAY REFER TO A "BUCK BOOST" TRANSFORMER AS AN "AUTO TRANSFORMER".

INSTEAD THE TERM "ISOLATION TRANSFORMER WITH STEP UP" SHOULD BE USED SO THAT THE ELECTRICIAN WILL ORDER THE CORRECT TRANSFORMER FOR THE PRINTER.

AC Power Requirements

Wiring Diagram to Boost Voltage (+32) for Single Phase Power:



Input Voltage = 208 V
Output Voltage = 236 V

This diagram illustrates how to connect a 1.5 KVA, 16/32 Volt buck boost transformer. This wiring configuration boosts the line voltage from 208 to 236 Volts.

Diagrams such as this one is provided by the Buck Boost transformer manufacturer. It is normally found on the data sheet that ships with each transformer.

AC Power Requirements

Sample Buck/Boost Transformer:

This photo is showing a sample Buck Boost Transformer from Sola Hevi-Duty, it is a 1.5 KVA version, catalog # HS20F1.5A and it weights approximately 38 pounds or 17.2 Kgs.

AGFA

Global Services North America
Wilmington MA 01887

Site Readiness Check List

Information to Check		Yes	No
Forklift	Lateral fork movement capability. Proper lifting rating? (Pg.4)		
	Length of forks should be 60 inches (152.4cm) minimum		
Loading Dock	If the customer does not have a loading dock, then the freight truck delivering the Anapurna will need a lift gate to lower the crate to the ground along with the forklift		
Compressed Air Supply	3 - 5 HP, 60 - 80 gallon or better Capacity Compressor?		
	24/7 Operation is required. The compressors regulator should be set to 105 - 110 PSI for trip OFF and to 85 PSI to trip ON. Printer air volume is: .28 CFM See page 6		
	Air filtration for moisture and particles?		
	Air regulator for the Printer?		
Humidity	Range 35% to 75% RH (non-condensing) Ideal 40% ?		
Air Temperature	Not to exceed 126º F or 52 ºC		
Room Temperature	Range 68° F to 80° F (20 – 26.6° C) Ideal 72° F (22° C) ? Room air exchange should be 10 times per hour ? page 14		
RIP Computer Specs Met?	Refer to page 7 for details. Windows Vista operating system can not be used.		
Line voltage for the printer	208 V, Single Phase, 60 Hz		
	40 Amp breaker circuit?		
	Dedicated Circuit?		
	A Buck/Boost transformer maybe required to bring the voltage up to 230 - 240 VAC Range. See page 9.		
Floor Area	Floor should be concrete, flat and stable, No Carpet.		
	Load per foot on the floor: 156 lbs/ft² (70 kg/m²). Floor Space: Depth 16.4 feet (5m) x Width 18 feet (5.5m). For 8 – 12 foot boards optional tables are required. Floor Space: Depth 24.6 feet (7.5m) x Width 18 feet (5.5m)		
Ceiling Height	Check for clearance (uncrated). No less than 7 foot or 213 cm high. (Pg.4)		
	Check doorways for clearance (height, width)		
	Check path from loading dock to installation location		
System Orientation	Is there room for the removal and replacement of parts for servicing? (Pg. 5)		
	Can all printer doors open fully?		
Head Wipes	Customer informed of proper heads wipes required? (Pg 14)		

Global Services North America
Wilmington MA 01887

Customer Responsibilities

The following information has been explained to the customer during the site preparation visit.

The Customer and his operator(s) are responsible to be skilled in:

- Knowledge of PC's and Networking environment
- Knowledge of Windows and Windows Applications
- Knowledge in RIP software
- Knowledge of wide format Inkjet applications

The Customer is Responsible to provide:

- **Compressed air** with the specifications as outlined in this document on page 6.
- **Electrical service** and a power cord to the printer and a twist lock plug and matching receptacle, as outlined in this document see page 8.
- **Proper environmental conditions**, room ventilation, temperature, humidity, and a clean dust free area for the printer as outlined in this document page 14.
- **Suitable RIP computer and RIP software** with the specifications as outlined in this document, page 7.
- **Adequate space** for the Agfa Anapurna, as described in this document, page 5
- **Transportation of the shipping crates** to the installation location in the building.

Recommend Customer Supplies:

1. Denatured Alcohol
2. Spray bottles for Alcohol
3. Head Wipes see bottom of page 14
4. Funnels for loading ink
5. Grease gun for bearing lubrication see photo →

_____ _____

Customer Signature AGFA Service Representative Signature

Indicate your compliance with the terms noted above in an e-mail to: robert.sudol@agfa.com

Global Services North America
Wilmington MA 01887

General Information

Environmental Requirements

Room Operating Temperature: Range 68° F to 83° F (20 - 28° C) Ideal 72° F (22° C)
(Room air temperature should not to exceed 126º F or 52 ºC)

Humidity: Range 35% to 75% RH (non-condensing) Ideal 40%
Room Air Exchange: 10 times per hour.

The room must be clean and dust free so that no contamination can adversely affect the print heads and print quality.

Manual Load or Roll feed Rigid materials loaded by hand, or roll to roll material

Resolution: 720 x 720 dpi (4 Pass) and 720 x 1440 dpi (8 Pass)

Manual unload or Roll feed Material exits on the table or can be automatically rolled up.

Air Internally regulated to control ink flow and pneumatics

Vacuum A ring blower is used to generate vacuum for the feed table.

Ventilation Room air exchange is required, 10 times per hour.

Software RIP Wasatch RIP Includes dongle, software and installation key.

Heads Konica Minolta 512 Nozzles, 14 pl

Ink Curing Two UV curing lamps

Inks UV curable: Anapurna inks, four ink tanks (K, C, M, Y)

Media Media Width: up to 160 cm (63 inch) Printable width: up to 158 cm (62 inch) [Borderless 152 cm (60 inch)] Maximum Roll media weight: 50 kg or 110lbs Minimum thickness = 1mm and maximum thickness = 45 mm

Printing Speed

4 Pass Bi directional	13.8 m²/hr (149 ft2/hr)
4 Pass Uni directional	8.1 m²/hr (87 ft2/hr)
8 Pass Bi directional	7.5 m²/hr (81 ft2/hr)
8 Pass Uni directional	4.0 m²/hr (43 ft2/hr)

Printer AC Voltage Single phase power 208 V, 60HZ, with a 230 – 240 Voltage range is required with ground, no neutral, 40 Amp dedicated circuit. A Buck/Boost transformer may be needed to reach the 230 – 240 Volts range.

Head Wipes **Do not use cotton, poly or silk material on print heads, Agfa Recommends:**

Company:	Harmony Business Supplies (www.harmonycr.com)
Phone Number:	800-899-1255
Product Code:	CT 604
Description:	Pre Cut 4” x 4”, Hydrosorb 1 Wipes, 1200/Bag
Cost:	Approximately $30.00