

Presite Survey H1650iLED

[Onderwerp]

Issue date **2018-01-03**

Author **Vaccina , Franco , amcyu**

Reference ID **Presite Survey H1650iLED v1.5**

1. Version history

Version	Release date	Comment
1.2	03/01/2018	Updated crate information
1.3	14/03/2018	Updated drawings and latest shared info with the team FV
1.4	07/05/2018	Added that an 8mm nut-bit and a Phillips screwdriver bit needed to open the wooden box. BTU rating under power consumption. US has three different three-phase power systems. How to pull out of a standard truck the printer.
1.5	15/05/2018	Update power supply chapt. for US
1.5 R2	05/07/2018	Removed the "white ink stirrer active" from the "air consumption"

2. Content

1.	Version history	1
2.	Content	1
3.	About this Pre-Site Survey	2
4.	System Dimensions	3
5.	General Requirements for the Installation Room	3
5.1.	Installation Space	3
5.2.	Accessibility	5
5.3.	Floor	5
5.4.	Temperature/ Humidity	5
5.5.	Environment	5
5.6.	Air Conditioning System	5
5.6.1.	Maximum heat production:	6
5.6.2.	Nominal heat production:	6
5.7.	Compressed Air	6
5.8.	Storage Area	7
5.9.	UV Curable Ink/ Storage flush	7
5.10.	Print Media	7
6.	Electrical Specifications	7
6.1.	Power Supply	7
6.2.	Power Consumption	8
6.3.	Network Requirements	8
7.	Transport Requirements	9
7.1.	The Crates	9
7.2.	Handling the Crates	9

7.3.	Checking the Crates for Damage	9
7.4.	Means of Transport	10
7.5.	Required Width/ Height for Transport	11
7.6.	Required Space for Unpacking	11
8.	Presite Inspection checklist	12
9.	Sign the Checklist	13
10.	Pre-Site Checklist Notes	14
11.	Customer System Layout	15

3. About this Pre-Site Survey

The Pre-Site Survey is intended to provide all necessary information to allow the customer and the service technician to prepare the installation of the Anapurna H1650i LED so that the system installation occurs smoothly, professionally and under optimum conditions.

Only Agfa distributors or local distributors are allowed to examine the site survey into detail with the customer, using this Pre-Site Survey document. If the Pre-Site visit does not give any problem then the basic conditions are met for the installation of the Anapurna H1650i LED.

The pre-site visitor and the customer are to notify Global Services as soon as all recommendations mentioned in this Pre-Site Survey have been accomplished. Therefore, they should sign the “Pre-Site Inspection Checklist” from this document.

This document needs to be completed for each installation.

Only qualified Agfa Trained Service Engineers are allowed to unpack and install the Anapurna H1650i LED.

Related Documentation: more information can be found in Anapurna H1650i LED Installation manual.

4. System Dimensions



The system dimensions for the Anapurna H1650i LED are:

Unit	Width	Height	Depth	Weight
Anapurna H1650i LED	3907 mm* (12.8 ft)	1655 mm** (5.4 ft)	1470 mm (4.8 ft)	1020 kg (2249 lb)
Small table	1685 mm (5.5 ft)	1060 mm (3.5 ft)	700 mm (5.4 ft)	50 kg (110 lb)
Large table	1685 mm (5.5 ft)	1060 mm (3.5 ft)	1300 mm (4.3 ft)	80 kg (176 lb)

* Without monitor arm (check floor plan for details)

** Wheels 20mm free above floor level (printer levelled)

5. General Requirements for the Installation Room

The following aspects should be checked at the site before installation.

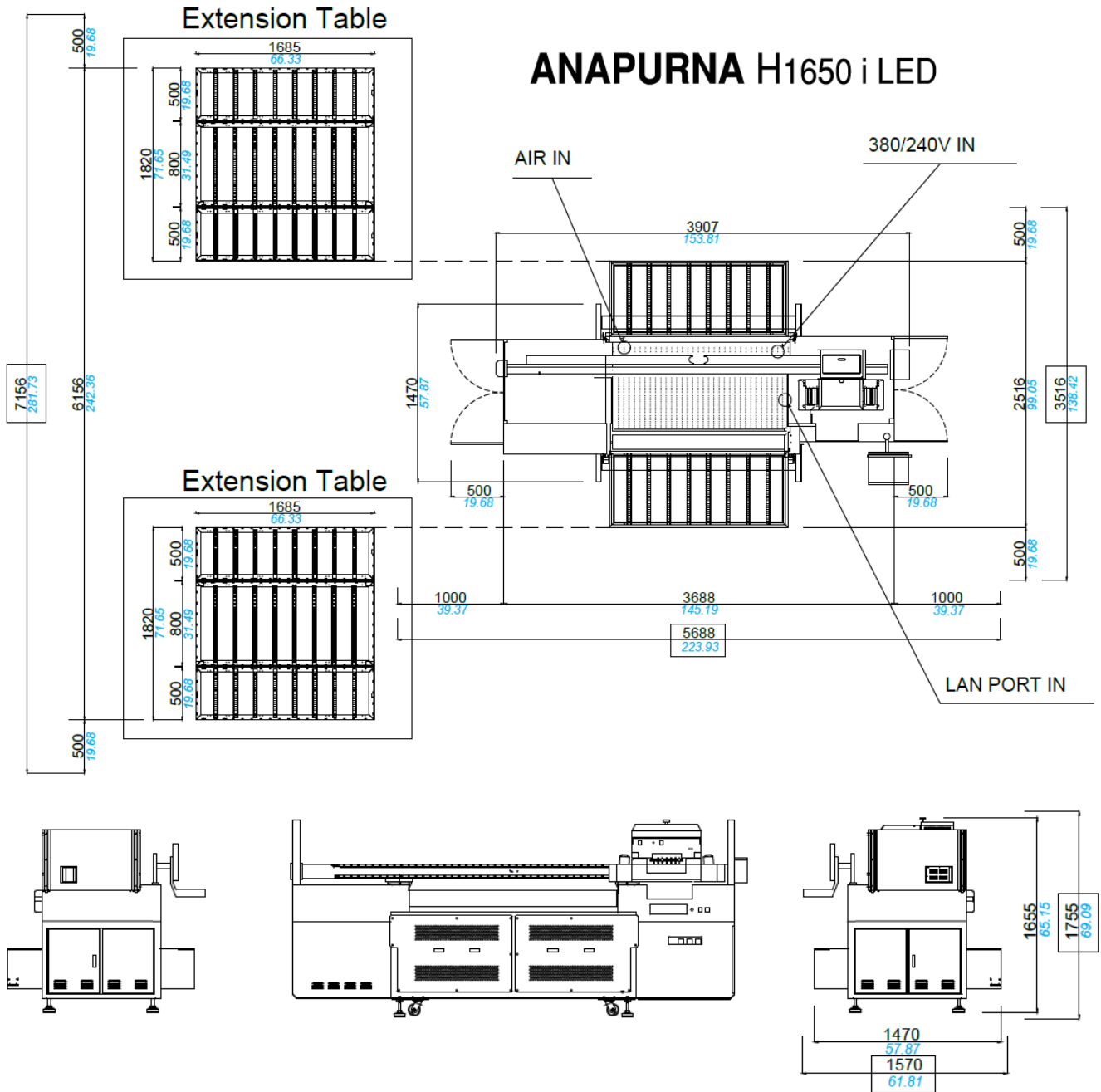
5.1. Installation Space

The illustrations below show the minimum required space around the Anapurna H1650i LED for operation and servicing.

Required space above the Anapurna H1650i LED = 1m (3.3 ft)

Required space to fully install the Anapurna H1650i LED with all 4 tables in use:

- Footprint with large extension tables: 7.2m x 5.7m (24 ft x 19 ft)
- Footprint without large extension tables: 3.6m x 5.7m (12 ft x 19 ft)



5.2. Accessibility

The accessibility of the site is of key importance during the installation.

The Anapurna H1650i LED is secured with bolts to a wooden pallet inside a crate for transport. The crate is large and heavy and therefore special attention must be paid to the entrance doors and ceiling heights. Check all entrance doors and passageways through where the crate is to be transported.

It is the customer's responsibility to have the Anapurna H1650i LED moved to the installation site where the Anapurna H1650i LED will be installed. An AGFA Service representative will be present to assist with moving the equipment.

WARNING: Keep in mind the following passageway requirements:

Entrance door: minimum width 2m25 (7.4 ft)

Passageways: Be aware of the large turning circle of the crate.

5.3. Floor

The floor should be a flat, stable, and concrete surface. Note that the Anapurna H1650i LED is supported on 4 main feet of each 78,5cm² supporting the entire weight.

Keep in mind the following floor stability requirements:

- Wooden floors or raised floors are to be avoided
- The selected floor covering should not attract dust, not produce static electricity (e.g. avoid carpets) and should be easy to clean.
- The floor should not be subject to excessive vibrations from other sources, as this may disturb the operation of the Anapurna H1650i LED.

5.4. Temperature/ Humidity

For optimal quality and throughput, the temperature must be 22°C (72 F) and the relative humidity must be 50%.

NOTE: Keep in mind the following maximum permissible temperature/humidity range for the engine. The temperature must be between 18 °C (64 F) and 26 °C (79 F) and the relative humidity must be between 35% and 75%.

5.5. Environment

The room must be clean and dust free so that no contamination can pollute the print heads and the media you are printing on.

5.6. Air Conditioning System

It is allowed to install an air conditioning system in the direct area of the Anapurna H1650i LED.

It is strongly advised to ventilate at least 5 times per hour the air contained in the room where the print engine stands. For small rooms, this needs to go up to 10 times.

Important is that temperature and humidity levels are preserved in spite of this ventilation.

5.6.1. Maximum heat production:

UV LED Units: (at 100%)	2x 1200W	60% = Heat	1440W
Ring Blower (PID 100)	2200W	40% = Heat	880W
PC + Power supply's + ...:	1000W	20% = Heat	200W

5.6.2. Nominal heat production:

UV LED Units: (60/60)	2x 720W	60% = Heat	864W
Ring Blower (PID 50)	1100W	40% = Heat	440W
PC + Power supply's + ...:	500W	20% = Heat	100W

Nominal heat production = +/-1400W and max heat production = +/-2500W

5.7. Compressed Air

The customer needs to provide compressed air twenty-four hours a day. It should comply with the following specifications:

- The compressed air supply should be dry and free from oil.
- The reinforced compressed air hose must be 6 mm (outside diameter) - 4 mm (inside).

“Free from Oil” means that the total oil (aerosol liquid and vapour) may not exceed 0.01 mg/m³. This corresponds with the oil specification part out of Class 1 according ISO 8573-1 2010).

It is advised to choose a compressor that runs without oil (oil-free compressor), as removing oil out of the air is very difficult.

“Dry air” means a vapor pressure dew point < -40°C. This corresponds with the water specification part out of Class 2 according ISO 8573-1 2010.

NOTE: The “air tank” inside the engine can gather condensation water daily and need to be drained regularly. Condensation will certainly happens when there is a longer tube length between compressor and engine, or when the tube passes zones with different ambient temperatures. In case of high condensation rate, an external water separator need to be mounted upfront the engine.

Air consumption:

Air consumption H1650i LED in standby mode = maximum 5 l/min.

Air consumption H1650i LED printing = minimum 5 l/min (@ 6bar), peak load approx. 30 l/min (during toggling pneumatic switches).

Consumption of an Optional Air Ionizing Gun = 150 l/min.

Minimum requirements air compressor printer only:

Motor: minimum 2.0HP/1.5kW

Capacity: minimum 300 l/min (79 gal/min) combination with a minimum barrel capacity of 24 liter (6 gal.)

minimum 160 l/min (42 gal/min) in combination with a minimum barrel capacity of 50 liter (12 gal.)

Output Pressure: minimum 6 bar (~ 6kg/cm²)

5.8. Storage Area

The storage area for supplies (e.g. ink, print media, ...) and spare parts needs to be provided close to the installation and must meet to the same temperature/humidity specifications as established for the installation room ("Temperature/Humidity" on page 5).

Recommended ink storage temperature: between 4°C (39 F) and 23°C (73 F).

Ideal ink storage temperature: between 20°C (68 F) and 23°C (73 F).

5.9. UV Curable Ink/ Storage flush

The UV curable ink and the storage flush are not supplied in the crates. The customer needs to order for each color (C, M, Y, K, Lm, Lc and W) at least two liter of ink and four liter of storage flush. The ink is available in bottles of one liter, packed per two.

NOTE: Note that you already need approximately two liters of ink of each color when installing the engine.

5.10. Print Media

Print Media, is not supplied in the crates.

The customer needs to provide 1 roll Metamark MD5 media (minimum width 1.2 m) for the alignment and the "running-in" of the printer.

6. Electrical Specifications

6.1. Power Supply

The electrical installation should be done in accordance with the local regulations and guidelines. The power supply requirements for the Anapurna H1650i LED are:

Continent	Voltage (V)	Frequency (Hz)	Max current/phase (A)	Fuse protection (internal)
Europe	3 phase with neutral with ground star 400V +/- 10%	50Hz	21A	3 x 30A
US*	3 phase no neutral with ground 230V +/- 10%	60 Hz	24A	3 x 30A

* 208Y (Wye), 208D (Delta), or 240D (Delta) Three Phase configurations power can be used.

Customers that do not have three-phase power can purchase a power converter. This electrical device uses the existing single-phase power to create three-phase power. There are two types: Rotary and Digital Phase Converters.

Note: if there is any risk on exceeding the min or max voltages, a "voltage monitoring relay" EMR5 can be installed locally. More info can be found at the end of this document.

Function of a voltage monitoring relay:

Preventing electrical damage, because of under or over voltage, by switching the printer off. The switch off happens when the electric power exceeds the limits, as set by the technician on the relay (as specified above).

A circuit breaker with the corresponding current should be applied:

- For USA, the circuit breaker should be listed and certified to UL 489.
- For Canada, the circuit breaker should be listed and certified to CSA 22.2 No. 5.1.

NOTE: The mains connection should be available within 10 m (32.8 ft) of the Anapurna H1650i LED. The cross section of the cabling has to be minimum 6 mm². The engine does not come with any wire or connectors.

You need a stable power supply. If you experience problems, a UPS (power stabilizer) must be installed.

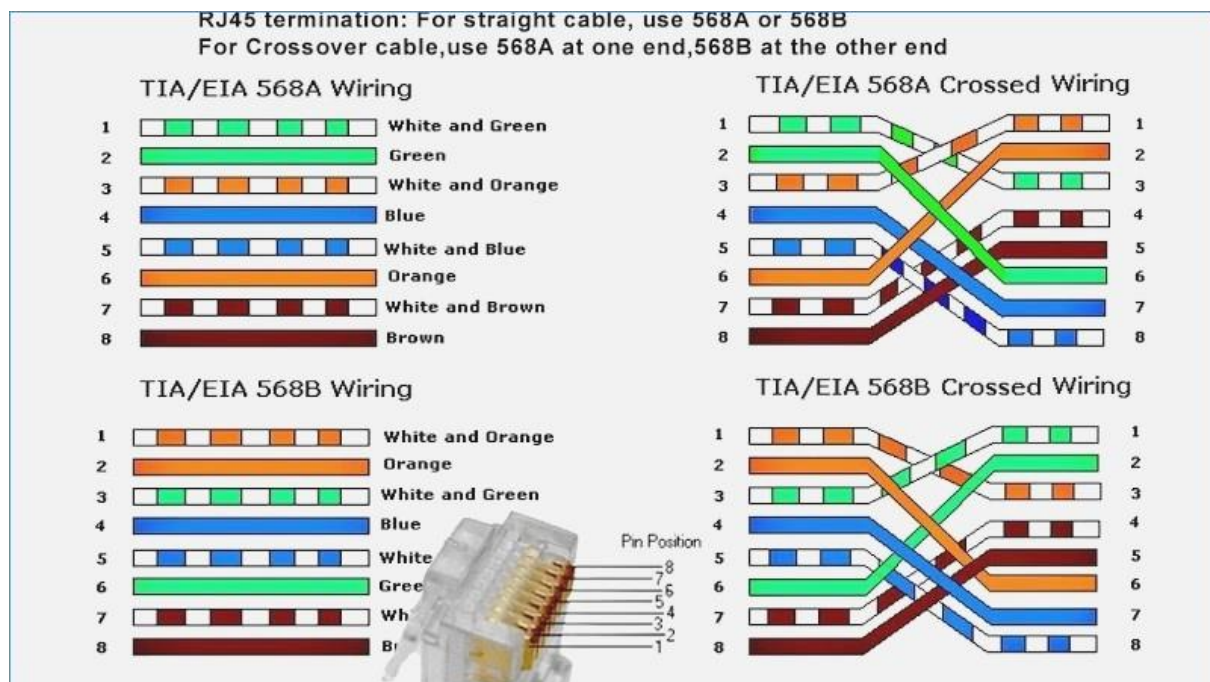
6.2. Power Consumption

The maximum power dissipation of the Anapurna H1650i LED is 6kW or 20460 BTUs (start-up with UV LED Units). The nominal Heat Production: 2,5kW or 8525 BTUs (Heat production while printing).

6.3. Network Requirements

The network requirements for the Anapurna H1650i LED are:

- Ethernet / connectors: RJ45 UTP, 1GBaseT in accordance with the IEC601 standard.
- Network protocol: RTL FTP, Telnet, HTTP, SNMP, SMTP, LPD.
- You need a 1GB network. The RIP network card and the HUB, should be 1GB supporting



7. Transport Requirements

7.1. The Crates





The Anapurna H1650i LED ships in a wooden crate on a wooden skid, sealed inside a protective foil bag. An electrical screwdriver with an 8mm nut-bit and a Phillips screwdriver bit are needed to remove the screws from the wooden box.

The small extension tables are inside the same box with the printer. The RTR Option and the Extension Table Options arrive in separate boxes. The table below lists the packaging dimensions and weight.

Unit	Width	Height	Depth	Weight
Anapurna H1650i LED	4285 mm (15 ft)	2235 mm (7.3 ft)	2114 mm (6.9 ft)	1992 Kg (4392 lb)
Extension Table Option	1939 mm (6.3 ft)	2139 mm (7 ft)	1299 mm (4.3 ft)	328 Kg (723 lb)
RTR Option	1940 mm (6.4 ft)	400 mm (1.3 ft)	460 mm (1.5 ft)	71 Kg (157 lb)

7.2. Handling the Crates

The icons on the crate indicate how to handle the box during transport and storage.

Icon	Meaning	Icon	Meaning
	Ensure that the side indicated by the arrows is always up.		Never expose the box to water, or place it in a high-humidity location.
	Handle the packing box with care.		Certified wood

Verify whether shipment is complete.

7.3. Checking the Crates for Damage

Make a report on any incompleteness or damage of crates and report this to your local Agfa service organization before unpacking the Anapurna H1650i LED.

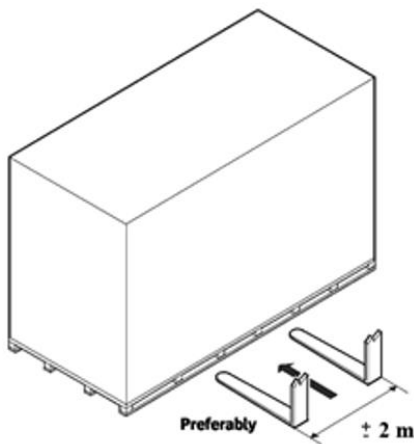
If one of the shock watches is tripped (red) make a note on the bill of lading (truck documents) and mention it in the PIT report. Do not refuse shipment.

7.4. Means of Transport

The crate of the print engine is large and heavy. Therefore only special trained movers using specific material handling systems (e.g. levers, forklift, stepladder ...) and uncrate tools are allowed to transport the Anapurna H1650i LED to the installation site.

Use a forklift to move the largest crate to the installation site. Always transport the crate upright and insert the forks of the forklift only into the desired entries (see illustration below).

NOTE: It is advised to take the largest crate out of the transport vehicle (e.g. truck) with the forks inserted at the long side of the crate. Provide a truck that can be loaded/ unloaded from the side. If this is not possible, two forklifts are need: One forklift pulls the crate out of the truck enough for the second fork lift to supports it from the center, then the truck pulls away.



OR



NOTE: Forklift requirements:

The minimum load weight of the forklift must be 4000 kg (8818 lb).

The forks must have a length of at least 2,5m (8.2 ft) and the distance between the forks must be minimum 0,6m (2 ft).



The Anapurna H1650i LED should be shipped using a 'Taut liner' or a covered flatbed truck so that the Anapurna engine can be off-loaded from the side. If a standard truck is used, read the note above in this page.

7.5. Required Width/ Height for Transport

The accessibility of the site is of key importance during the transport. As the crate is large and heavy, special attention must be paid to the entrance doors and ceiling heights.

Please select a path free from inclinations and thresholds for moving the crate from the discharging quay to the installation site. Check all entrance doors and passageways through which the crate has to be transported.

WARNING: Keep in mind the following passageway requirement: Entrance door (minimum): 2m25 x 2m12 (6.64 ft x 6.6 ft) (WxH)

WARNING: Be aware of the large turning circle of the large crate

NOTE: If it is not possible to uncrate the system on site for installation, then unpacked the crate off site and transport the printer on the pallet with an open-air truck. Unpack and lift the printer off the pallet and then roll it into the installation site. This reduces the required height from 2m12 (6.6 ft) to 1.77 m (5.8 ft) (which is approximately the height of the Anapurna H1650i LED).

7.6. Required Space for Unpacking

A total area of at least 8 m x 8 m (26.2 ft x 26.2 ft) is required, since the top and side covers are entirely removed sideways using the forks of the forklift. Total area = area of the crate + area next to the crate to remove the pallet + working space for the forklift. Front and rear are marked on the crate.

To lift the printer off the pallet the above head clearance or ceiling height must be at least (2,4 + X) m (7.9 ft + X) is required.



8. Pre-Site Inspection checklist

Please ask the customer to answer the following questions in order to ensure a trouble-free installation of the Anapurna H1650i LED:

Delivery and transport		Yes	No
Forklift available	Load weight: min. 4000 kg (8818 lb) Fork length: min. 2,5 m (8.2 ft)		
Uncrate Tools available			
Accessibility	Passageways large enough (height, width entrance doors) Passageway path free from inclinations, thresholds, corners, ...		

Room requirements		Yes	No
Installation	Space above and next to Anapurna OK for operation and maintenance		
Floor	Flat Stable Concrete surface		
Temperature Conditions	range: 18 °C - 26 °C (64.4 F – 78.8 F) optimal: 22 °C (71.6 F)		
Humidity Conditions	range: 35% - 75% optimal: 50%		
Compressed Air Conditions	Twenty-four hours a day Dry and free from oil Pressure: min. 6 bar (~ 6kg/cm ²) Flow: min. 5l/min (1.3 gal) @ 6bar		
Storage Area Conditions	Room for stock of print medium and ink Temperature and humidity conditions OK		

Electrical Requirements		Yes	No
Power Supply	Electrical supply 3 phase available Write the main supply here: Twenty-four hours a day		
Network	Network cable installed?		

UV Ink and Storage flush		Yes	No
UV curable LED ink	2 liters of C, M, Y, K, Lc, Lm, W curable ink ordered depending on printer configuration (4C+W or 6C)		
Storage flush	4 liter of Storage flush ordered		

Customer responsibilities before installation	Yes	No
Compressed Air available with the specifications as specified in this Pre-Site Survey.		
Electrical power and environmental conditions as specified in this Pre-Site Survey.		
Power cable and plug are supplied		
Room ventilation as specified in this Pre-Site Survey.		
Adequate space for the Anapurna H1650i LED as described in this Pre-Site Survey.		
Transportation of the shipping crates to the installation location in the building		
Network connection close to the machine		
Internet access for remote support capabilities		

Customer responsibilities during installation		
A qualified electrician needs to be available		
A forklift must have the ability to lift more than 4000 kg (8818 lb) for the Anapurna H1650i LED.		
Operator(s) available for training courses?		
General knowledge of PC's and network is recommended for the operators		

9. Sign the Checklist

This checklist should be signed and sent to Product Champion of the LCC (The Local Competence Center of the region).

Engine Model:

Engine Serial Number:

Company:

Customer Name:

Date:

.....
Customer signature

.....
Agfa Service representative Signature

11. Customer System Layout

The space below can be used for the disposition of the various supplies and of the equipment at the installation site:

