

**CombiSteel** catering  
equipment



**CE**

**INSTRUCTIONS**  
**EXP**

## GENERAL RULES

- **Read the instructions in this manual carefully. After all, they provide important information about the safety, use and maintenance of the appliance.**
- Keep this manual close at hand for future reference.
- After unpacking, check that all parts are present and that everything is in order. If in doubt, do not use the appliance and contact a professional immediately.
- Before connecting the appliance, check that the information on the data plate corresponds to that of the gas distribution network.
- This appliance is only intended for the use for which it was specially designed. Any other use should be considered improper and therefore dangerous.
- The appliance may only be used by a person who has been trained in its use and who has read the contents of this manual.
- For repairs, contact an after-sales service authorised by the manufacturer and require original replacement parts.
- Failure to follow these instructions may compromise the safety of the device.
- Never use a high-pressure cleaner for cleaning and never direct the water jet at the appliance.
- Never cover the openings for heat supply and exhaust.



THIS APPLIANCE MUST BE INSTALLED BY AN AUTHORISED GAS APPLIANCE INSTALLER. OTHERWISE, THE WARRANTY WILL BE ENTIRELY VOID.

THE MANUFACTURER DISCLAIMS ANY LIABILITY FOR INJURY TO PERSONS OR DAMAGE TO GOODS IF THE INSTRUCTIONS IN THIS MANUAL ARE NOT FOLLOWED BY THE USER OR THE INSTALLER.

THE MANUFACTURER DISCLAIMS ANY LIABILITY IN RESPECT OF THE CONSEQUENCES OF ANY INACCURACIES RESULTING FROM TRANSCRIPTION OR PRINTING ERRORS. THE MANUFACTURER ALSO RESERVES THE RIGHT TO MAKE CHANGES TO THE PRODUCTS WHICH IT CONSIDERS HELPFUL OR NECESSARY WITHOUT CHANGING THE MAIN CHARACTERISTICS.

# — 1. TECHNICAL DATA

## Extractor hoods plug&play model EXP

PRO CODE	7333.0730	7333.0735	EXP-1509552-H	7333.0740	7333.0745	7333.0750	EXP-2509552-H	7333.0755
Dimensions in mm (LxDxH)	1000X950X520	1200X950X520	1500X950X520	1600X950X520	2000X950X520	2400X950X520	2500X950X520	3000X950X520
Labyrinth Filters 400x400x25	0	0	0	0	0	0	0	0
Labyrinth Filters 500x500x25	1	1	2	2	3	3	4	5
Fan DDM 7/7 (230/1/50 - 1,6A - 147W - 1400 Rpm)	1	1	1	1				
Fan DDM 9/9 (230/1/50 - 1,6A - 147W - 1400 Rpm)					1	1	1	1
Airflow in m <sup>3</sup> /h	1500	1500	1500	1500	2500	2500	2500	2500
Digital speed controller with solenoid valve and electric switch	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W
Kg without packaging	70	75	78	83	88	93	96	110

PRO CODE	7333.0760	7333.0765	EXP-1509552-B	7333.0770	7333.0775	7333.0780	EXP-2509552-B	7333.0785
Dimensions in mm (LxDxH)	1000X950X520	1200X950X520	1500X950X520	1600X950X520	2000X950X520	2400X950X520	2500X950X520	3000X950X520
Labyrinth Filters 400x400x25	0	0	0	0	0	0	0	0
Labyrinth Filters 500x500x25	1	1	2	2	3	3	4	5
Fan DDM 7/7 (230/1/50 - 1,6A - 147W - 1400 Rpm)	1	1	1	1				
Fan DDM 9/9 (230/1/50 - 1,6A - 147W - 1400 Rpm)					1	1	1	1
Airflow in m <sup>3</sup> /h	1500	1500	1500	1500	2500	2500	2500	2500
Digital speed controller with solenoid valve and electric switch	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W
Kg without packaging	80	84	88	92	98	103	106	120

PRO CODE	7333.0700	7333.0705	EXP-1507054-H	7333.0710	7333.0715	7333.0720	EXP-2507054-H	7333.0725
Dimensions in mm (LxDxH)	1000X950X520	1200X950X520	1500X950X520	1600X950X520	2000X950X520	2400X950X520	2500X950X520	3000X950X520
Labyrinth Filters 400x400x25	1	2	2	2	3	4	4	5
Labyrinth Filters 500x500x25	0	0	0	0	0	0	0	0
Fan DDM 7/7 (230/1/50 - 1,6A - 147W - 1400 Rpm)	1	1	1	1				
Fan DDM 9/9 (230/1/50 - 1,6A - 147W - 1400 Rpm)					1	1	1	1
Airflow in m <sup>3</sup> /h	1500	1500	1500	1500	2500	2500	2500	2500
Digital speed controller with solenoid valve and electric switch	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W
Kg without packaging	72	75	79	82	87	92	95	110

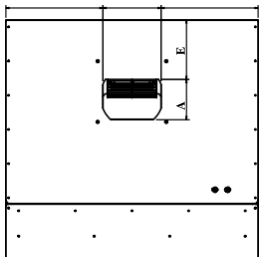
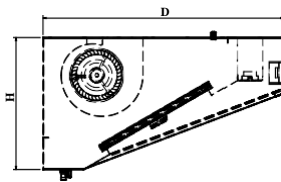
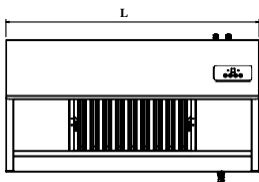
PRO CODE	7333.1100	7333.1105	EXP-15011054-H	7333.1110	7333.1115	7333.1120	EXP-25011054-H	7333.1125
Dimensions in mm (LxDxH)	1000X1100 X540	1200X1100 X540	1500X1100 X540	1600X1100 X540	2000X1100 X540	2400X1100 X540	2500X1100 X540	3000X1100 X540
Labyrinth Filters 400x400x25	-	-	-	-	-	-	-	-
Labyrinth Filters 500x500x25	1	2	2	2	3	4	4	5
Fan DDM 7/7 (230/1/50 - 1,6A - 147W - 1400 Rpm)	1	1	1	1				
Fan DDM 9/9 (230/1/50 - 1,6A - 147W - 1400 Rpm)					1	1	1	1
Airflow in m <sup>3</sup> /h	1500	1500	1500	1500	2500	2500	2500	2500
Digital speed controller with solenoid valve and electric switch	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W	5A/230W
Kg without packaging	80	85	89	94	98	103	106	120

### Characteristics

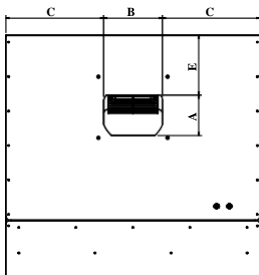
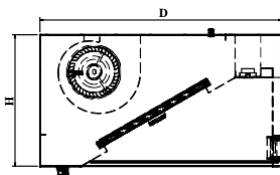
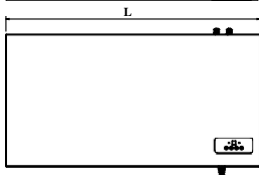
- Mono block extractor hood made of stainless steel with brushed and polished finish.
- Extractor hood mounted by electric spot welding.
- Labyrinth filters en inox network.
- Edge channel for collecting fats.
- Drain valve.

### Where provided:

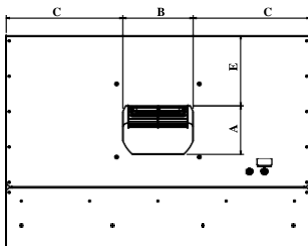
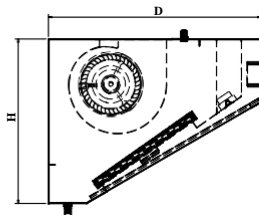
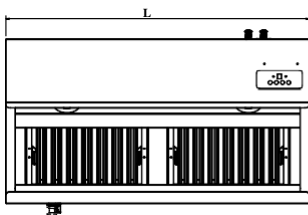
- IP45 lamp with or without built-in lighting.
- Built-in vacuum 230/1/50 IP55, ERP 2015.
- Speed controller 5A IPSS.
- Welded edge channel for collecting grease on the extractor hood with built-in lighting.



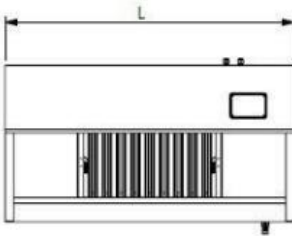
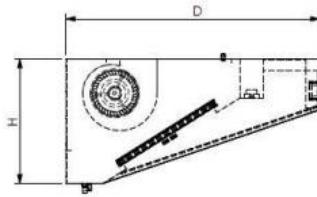
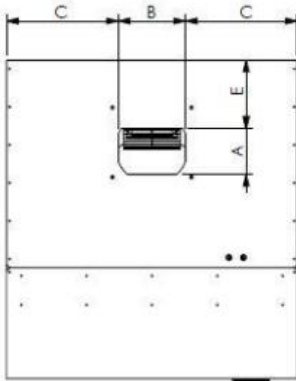
EXTRACTOR HOOD PLUG & PLAY							
PRODUCT CODE	L (mm)	D (mm)	H (mm)	B (mm)	A (mm)	C (mm)	E (mm)
7333.0730	1000	950	520	230	160	384	235
7333.0735	1200	950	520	230	160	484	235
EXP-1509552-H	1500	950	520	230	160	634	235
7333.0740	1600	950	520	230	160	684	235
7333.0745	2000	950	520	295	176	852	227
7333.0750	2400	950	520	295	176	1052	227
EXP-2509552-H	2500	950	520	295	176	1102	227
7333.0755	3000	950	520	295	176	1352	227



EXTRACTOR BOX PLUG & PLAY							
PRODUCT CODE	L (mm)	D (mm)	H (mm)	B (mm)	A (mm)	C (mm)	E (mm)
7333.0760	1000	950	520	230	160	384	235
7333.0765	1200	950	520	230	160	484	235
EXP-1509552-B	1500	950	520	230	160	634	235
7333.0770	1600	950	520	230	160	684	235
7333.0775	2000	950	520	295	176	852	227
7333.0780	2400	950	520	295	176	1052	227
EXP-2509552-B	2500	950	520	295	176	1102	227
7333.0785	3000	950	520	295	176	1352	227



EXTRACTOR HOOD PLUG & PLAY							
PRODUCT CODE	L (mm)	D (mm)	H (mm)	B (mm)	A (mm)	C (mm)	E (mm)
7333.0700	1000	700	540	230	160	384	230
7333.0705	1200	700	540	230	160	484	230
EXP-1507054-H	1500	700	540	230	160	634	230
7333.0710	1600	700	540	230	160	684	230
7333.0715	2000	700	540	230	160	884	230
7333.0720	2400	700	540	295	176	1052	222
EXP-2507054-H	2500	700	540	295	176	1102	222
7333.0725	3000	700	540	295	176	1352	222



EXTRACTOR HOOD PLUG & PLAY							
PRODUCT CODE	L (mm)	D (mm)	H (mm)	B (mm)	A (mm)	C (mm)	E (mm)
7333.1100	1000	1100	540	230	160	384	235
7333.1105	1200	1100	540	230	160	484	235
EXP-1507054-H	1500	1100	540	230	160	634	235
7333.1110	1600	1100	540	230	160	684	235
7333.1115	2000	1100	540	295	176	852	227
7333.1120	2400	1100	540	295	176	1052	227
EXP-2507054-H	2500	1100	540	295	176	1102	227
7333.1125	3000	1100	540	295	176	1352	227

### General information

This manual is addressed to manufacturers, installers and service agents of ventilation equipment specialised in the application, installation and adaptation of industrial fans.

#### Purpose and limits of using the manual:

This manual is intended for specialised and adequately trained personnel in the realisation of machines or equipment using centrifugal electric fans, thus avoiding common errors associated with the use and installation of such devices. However, the present recommendations are not the only methods, procedures or other devices for obtaining safety in the situations represented. You should always exercise rigorous care when working around moving parts or under live parts. Safety depends only on skill, experience and reasonable attention in the actions performed on the machine.



**Movement, installation and maintenance must always be carried out by trained and skilled technicians.**  
**Any installation by unskilled workers is therefore prohibited.**

In addition to these recommendations, before performing any activities related to the use of this machine, you must be informed of the required safety applications based on the laws, rules and standards applicable at the installation site.

### Description and technical characteristics

#### Description:

For a description of the fan, consult a manual.

#### Technical characteristics and expected use:

The current electric fan is adapted to transfer non-toxic, non-flammable, non-corrosive air without liquid or solid or abrasive particles and whose temperature does not exceed 40 °C (UNI EN ISO 13349). Different temperatures and humidity restrictions are indicated on the fan label. The electric fan should only be operated with the electric supply provided by the indications on the label.



**Note: The current electric fan is built to be mounted in a machine and therefore cannot be used autonomously.**

### Safety measure

In order to work safely on the electronic fan during installation and maintenance, individual protective equipment must be used (e.g. Gloves) as provided for in Directive 89/686/CEE (and its successive amendments).



**Note: The current electric fan must be protected against mechanical type risks, risks from projection of objects, risks from electrical energy and risks from extreme temperatures (the motor can reach temperatures above 70 °C). In any case, the electric fan must be installed on the machine, taking into account all necessary safety measures, in order to avoid danger arising from its application, by meeting the requirements of machine directive 200/42/CE (and subsequent amendments). As an indication, we recommend applying the contents of UNI EN ISO 12100, UNI EN ISO 13857, CEI EN 60204, UNI EN ISO 12499 technical standards**



**NOTE: The sound power level emitted by the machine is indicated on the label if it is greater than  $L_{eq} = 85\text{dB (A)}$ . The weight of the fan is indicated on the label when it exceeds 30 kg. These indications must be taken into account to provide the appropriate protections for the machine.**

### Installation process

Correct installation of the fan guarantees the solution of many problems that may arise during operation.



**Attention: The displacement of the electric fan can be difficult due to its shape and the uneven distribution of the weights**

Installation stages:

- a) Check whether parts are damaged or missing;
- b) Check that the wheel turns freely and that there are no signs of excessive imbalance or too much play on the drive shaft;
- c) Place the fan in the machine by securing it with the anchor holes on the fan housing or by means of de gaten op de flens, indien voorzien, of gaten van de steunen die deel uitmaken van de levering. De elektroventilator must have a space between the suction ports and the walls of the machine in order not to penalize the aerodynamic and sound characteristics, this distance must be at least once the diameter of the wheel. The diameter of the wheel can be found in the description on the label, which is expressed in pulses (if it is three digits, it is expressed in millimeters);



**Note: Turn off the machine power before starting the installation process.**

**Note: The electric fan must be installed with the motor shaft positioned horizontally to the ground**

- d) Connect the electric fan according to the supplied connection diagram and diagram present on the electric fan itself. Also make sure that the current voltage for the test does not exceed the voltage indicated on the electric fan label;
- e) During the test phases of the machine, check that the direction of rotation corresponds to the one indicated by the orientation arrow on the fan and that the current absorption does not exceed the one indicated on the label;
- f) Controleer de door het project gespecificeerde beschermingen, zodat de machine voldoet aan de eisen van Richtlijn 89/392/EEC to protect the electric fan and ensure that it is installed correctly.

### Use and Operation

The electric fan may only be used for the purpose for which it was designed (par.2.2.2) and introduced in the machine equipped with all protections to avoid risks to people and things.



**Precaution: Before operating the electric fan, check that the voltage of the power supply matches that on the label**

**Note: The electric fan should only operate within the operating limits (power supply, temperature, etc.) specified on the label**

Operation outside the pre-set limits can lead to dangerous situations that are not considered and are independent of the manufacturer's responsibility.



**Precaution: Do not remove the supplied safety protection, do not grip the electric fan without first switching off the power and wait until the wheel has come to a complete stop.**



# Certificate of Approval

This is to certify that the Management System for:

## Torin-Sifan Ltd

Greenbridge, Swindon, SN3 3JB, United Kingdom

has been approved by LRQA to the following  
standards: ISO 9001:2015



David Derrick - Area Operations Manager UK & Ireland

Issued by Lloyd's Register Quality Assurance Limited

This certificate is valid only in association with the certificate schedule bearing the same number in which the locations applicable to this approval are limited.

Current date: 13 January 2019  
Expiry date: 12 January 2022  
Certificate identity number: 10157934

Original approval(s):  
ISO 9001 - 13 January 2010

Approval number(s): ISO 9001 - 00002618

The scope of this approval is applicable to:

Design and manufacture of fans, blowers and ventilators for the international heating, ventilation, air conditioning, business machine, electronics cooling, telecom and domestic appliance industries.



001



# Certificate Schedule

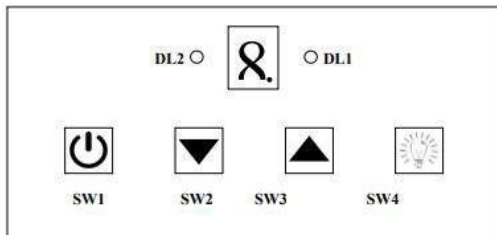
Certificate identity number: 10157934

Location	Activities
Greenbridge, Swindon, SN3 3JB, United Kingdom	ISO 9001:2015 Design and manufacture of fans, blowers and ventilators for the international heating, ventilation, air conditioning, business machine, electronics cooling, telecom and domestic appliance industries.
Unit 4, Pagoda Park, Westmead Drive, Swindon, SN5 7UN, United Kingdom	ISO 9001:2015 Design and manufacture of fans, blowers and ventilators for the international heating, ventilation, air conditioning, business machine, electronics cooling, telecom and domestic appliance industries.



001

## Information data plate



### Technical and functional features:

Built-in digital speed regulator with 4-key keypad + 2 LED p

/ n FE1038 (basic version)

p/n FE1038/T (with NTC temperature probe)

Technical features

Mains power supply: 220 - 240 Vac - 50 Hz

MAX. applicable load 230 V LIGHT output: 2 A

MAX. load applicable 230 V MOTOR output: 4.5A

Protection fuse: 8AT

Electronic microprocessor control system.

2 relay outputs:

RL1 relay of 7 A for activation of GAS SOLENOID

VALVE;

RL2 relay of 7 A for activation of LIGHT load;

4-key keyboard for controlling loads and for managing the configuration

menu.

Seven-segment display for displaying the indications of the regulator's operation.

Light signals via 1 red LED (filter alarm) and 1 yellow LED (on/off gas solenoid valve). Possibility to set the value of the minimum, maximum and starting speed of the motor.

Automatic operation mode management with temperature measurement via NTC probe (only for

p/n FE1038/T).

Management of a digital input, as an alternative to the NTC temperature probe, for the control of a

thermal contact (normally closed) typically intended for the protection of the motor windings (only for p/n

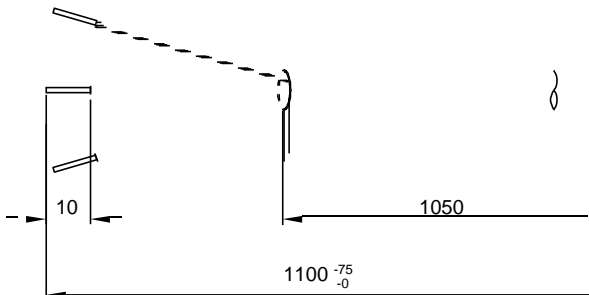
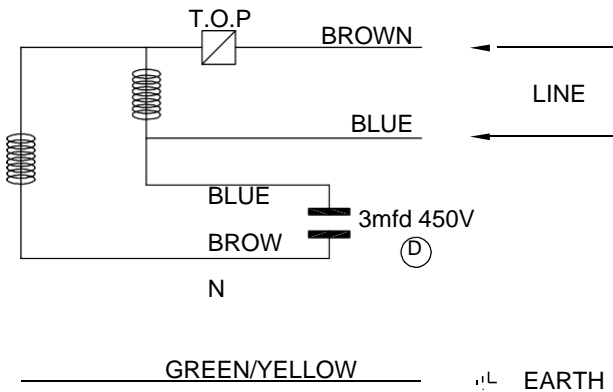
FE1038/T).

Dimensions: 160x90x65mm

Protection degree: IP56

Weight: 0.4 kg

## Connection diagram



### — 3. DIGITAL SPEED CONTROL

#### General information

The SAT230 controller is an advanced electronic microprocessor control system dedicated to manual or automatic speed control of a single-phase induction motor (typically intended for the extraction of air),

on the management of the lighting system and of a gas solenoid valve (or another type of load, for example an external solenoid valve for opening a chimney)

Precision and convenience are guaranteed by using a new generation microprocessor and digital controls placed on the front panel:



Image1

Image 2 and the following user description describe the functions of the SAT230 control unit, they are the ideal solution for many applications in the field of air extraction in domestic as well as professional environments (extractor hood for odours, smoke, vapour, domestic extractor hoods, automated and intelligent systems for the decontamination and treatment of air, etc.) Special attention is dedicated to the realisation of an innovative electronic control system in the design of the SAT230, characterised by the lowest standby energy consumption currently on the market for this category of products.

This feature is particularly appreciated today, combined with the ability to automate the suction function via the optional sensor connection, allows an advanced air treatment system in all types of environment, characterized by high dynamics and efficiency.

The additional possibility of using wireless transmitters with remote control (RADIO cod.FE1004) and serial communication RS-485 transforms the SAT230 system into a «smart» controller with which new functionalities can be implemented according to customer requirements.

#### **WARNINGS:**

- Before installing and activating the product, check if the assessment data and specifications in this manual are compatible with the specifications for the power supply, motor, lighting system and gas solenoid valve used (or other type of load).
- Always use electrical cables of sufficient quality and cross-section to connect the controller to the supply voltage and load.
- The cables must be kept short to avoid contact with certain components that can reach high temperatures.
- Install the controller/regulator in well-ventilated areas outside the heat, especially if current consumption values are comparable to the maximum reported values.
- Make sure to connect the cable on the motor (or chassis) to the circuit board and the latter to the network ground system.
- To avoid the risk of fire, electric shock or malfunction, please do not expose the device to rain, moisture, prefer installation in dry places.
- It is recommended not to install the controller/regulator in areas exposed to condensation, steam or gas, avoid direct sources of sunlight or heat that may affect the power drain into the unit.
- The controller/regulator must be installed and operated in accordance with the intended conditions of use, the manufacturer declines any responsibility in the event of incorrect use of the device (use of the device for applications other than those for which it was designed) or in the event of non-conformity with the warnings

The manufacturer confirms that the product is free from manufacturing defects.

The warranty is 12 months providing the product is used correctly.

The manufacturer reserves the right to change the machine or its documentation without prior notice to improve its performance

### Installation of the regulator

After removing the cover, make the necessary holes for the passage of the cables on the box. Then attach the box to the desired support and make the connections with the terminal block on the board according to fig. 3 afgebeelde aansluitschema.

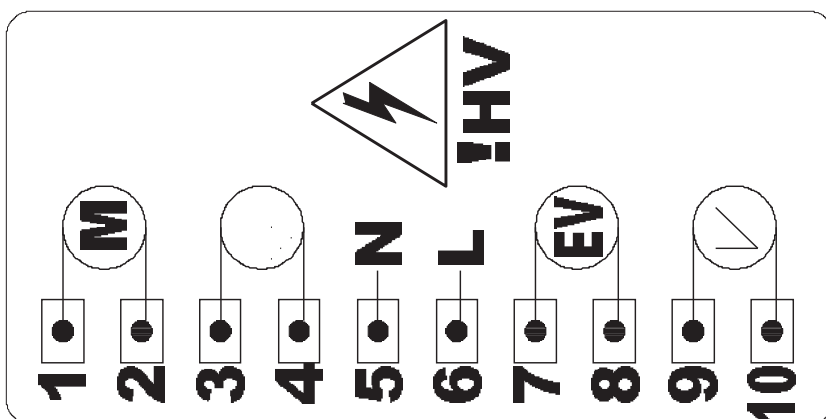
Note: If the motor used in the installation has a metal chassis, it is recommended to connect it to one of the two earth terminals on the board.

The second terminal is connected to the mass of the electrical network. After making the necessary connections, turn on the regulator.

This stays in the Low Power (stand-by) mode until the loads are activated or you have access to the configuration menu.

Check the correct operation of the loads using special buttons on the front panel. Then close the housing with the screws

The appliance is ready for operation.



The logo features the word "CombiSteel" in a bold, black, sans-serif font. The letters are contained within a thick, black, horizontal oval shape that is slightly wider than the text. To the right of the oval, the words "catering" and "equipment" are stacked vertically in a smaller, bold, black, sans-serif font.

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