

Infinity 1051 Site Preparation Guide



Contents

Customer Responsibilities	3
Change History	4
Related Manuals	4
Safety Notices	5
Safety Notice to Users	5
Technical Specifications	6
Environment	6
Inlet Conditions	6
Outlet Gas	6
General	6
Site preparation	7
Environmental control	7
Space provision	8
Unpacking	10
Space Required	10
Tubing lengths	11
Copper Tubing	11

Customer Responsibilities

To ensure a successful and timely installation of your Peak generator, please refer to this set of requirements.

Correct site preparation is the first key step in ensuring that your generator and systems operate reliably over an extended lifetime.

This document is an information guide and checklist that outlines the requirements for your site.

It is essential your site meets the following specification prior to the installation date.

For details, see specific sections within this document

- The necessary spatial requirements are met.
- The correct environment is provided for the generator.
- Electrical outlet locations and quantities are planned.
- Adequate exhaust ventilation is provided.
- The correct tubing lengths and diameters are used in relation to the distance from the instrument.

Failure to meet the Site requirements of your Peak generator as stated above and detailed in this document could result in the unit underperforming and **possible loss of warranty.**

Please sign below to confirm your compliance with the aforementioned requirements.

Once complete please return to Peak Scientific, or whomever the unit was purchased from.

Return addresses can be found on the back page of this document.

Name: _____ Company: _____

Signed: _____ Date: _____

Model: _____ Cust. Sales Order No.: _____

Change History

Rev.	Comment	Name	Date
1			
2			
3			
4			

Related Manuals

Document number	Manual name	Description
UM-Infinity1051	Infinity 1051 User Manual	Describes the operation of the generator and all service requirements. Supplied with the generator.
IG-Infinity1051	Infinity 1051 Installation Guide	Details the installation process of the generator. Supplied with the generator.

Safety Notices

Symbols

This manual uses the following symbols to highlight specific areas important to the safe and proper use of the Generator:

	<p>A WARNING notice denotes a hazard. It calls attention to an operating procedure, process or similar, which if not correctly performed or adhered to, could cause personal injury or in the worst case death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood or met.</p>
	<p>A CAUTION notice denotes a hazard. It calls attention to an operating procedure, process or similar, which if not correctly performed or adhered to, could cause damage to the Generator or the application. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood or met.</p>

Safety Notice to Users



This site preparation guide must be read thoroughly and understood before installation and operation of your Peak Infinity 1051 Generator. Incorrect preparation or use of the Generator in a manner not specified by Peak Scientific MAY impair the SAFETY provided by the equipment.



When handling, operating or preparing for installation, personnel must employ safe practices and observe all relevant local health and safety requirements and regulations. The attention of UK users is drawn to the Health and Safety at Work Act 1974.

Infinity 1051 Site Preparation Guide

Technical Specifications

Environment

	1051
Min/Max Air Operating Temperature	5°C - 30°C / 41°F - 86°F
Maximum Relative Humidity	70%
Min/Max Storage Temperature	-20°C - 60°C / -4°F - 140°F

Inlet Conditions

Min/Max Air Inlet Pressure	8.3-10 bar / 120-145 psi / 830-1000 kPa
Minimum Air inlet Flow	110 L/min

Outlet Gas

Maximum Gas output Pressure	110 psig / 760 kPa
Maximum Pressure Drop (Outlet-Inlet)	8 psig / 56 kPa
Max Nitrogen gas output flow	25 L/min (0.88 cfm)*
Max Air output flow	25 L/min (0.88 cfm)*
Start up time for purity	60 minutes
Particles	0.01µm

* Refer to Gas Flow Combinations section in User Manual.

General

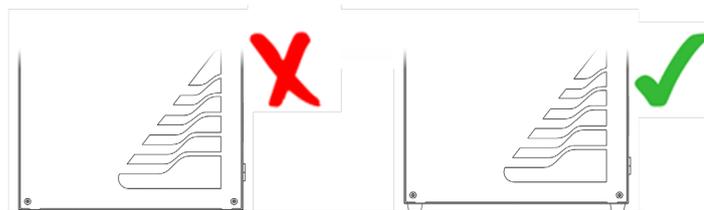
Dimensions (cm) WxDxH	31x25x73
Dimensions (ins) WxDxH	12x10x29
Generator Weight (Kg/lbs)	21.3 / 47
Shipping Weight (Kg/lbs)	29.3 / 64.5

Infinity 1051 Site Preparation Guide

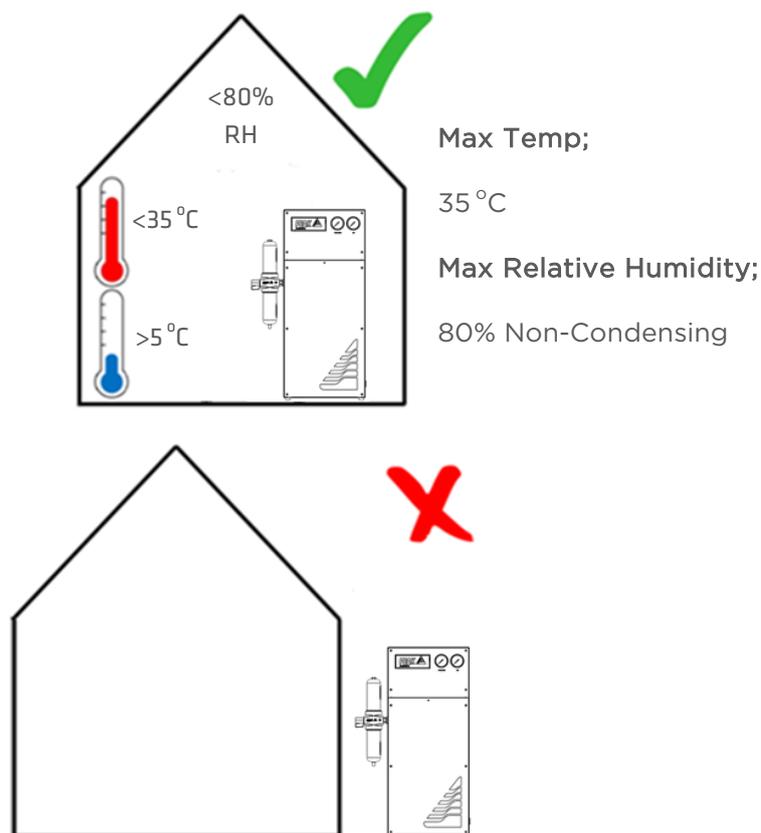
Site preparation

Environmental control

The generator must remain on its feet to allow air intake from the bottom of the generator.



If the generator is stored in an enclosed space the environment must be controlled via an air conditioner or extraction fan.

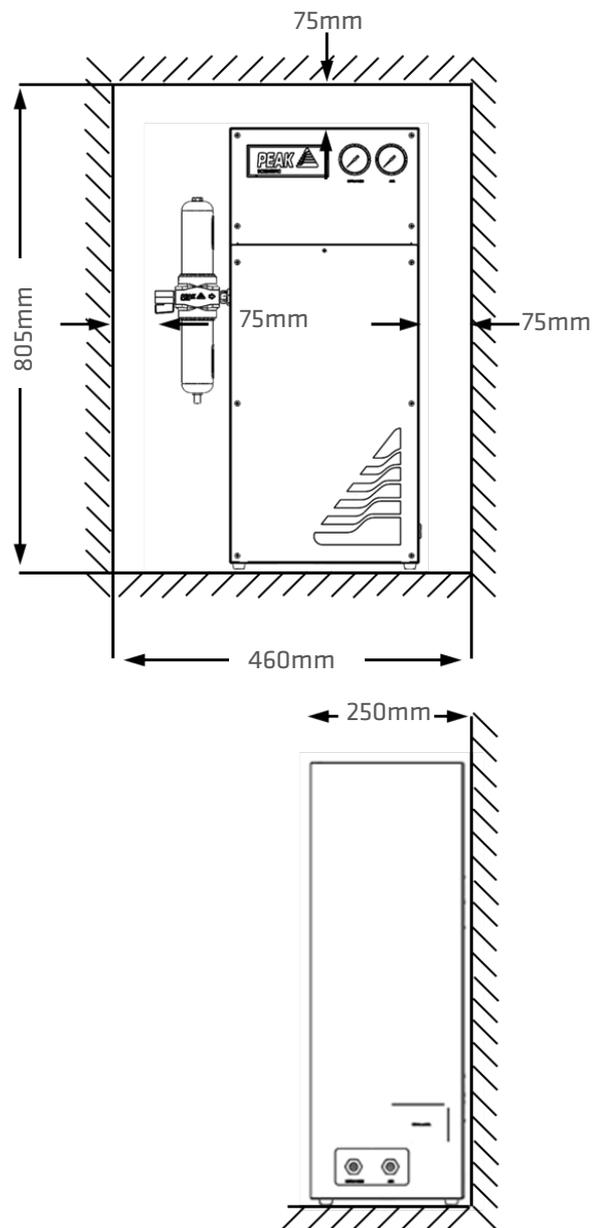


Generator MUST NOT be stored or installed outside.

Infinity 1051 Site Preparation Guide

Space provision

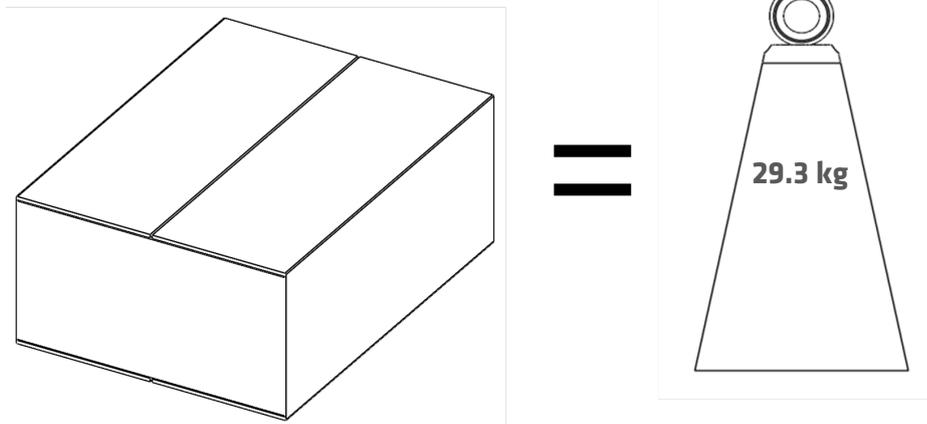
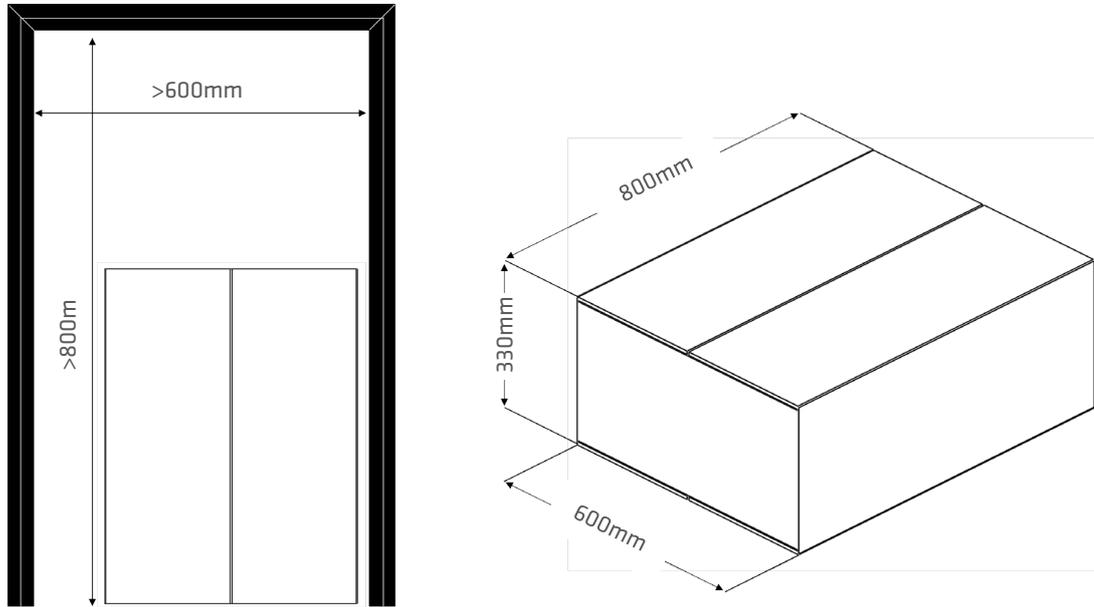
The minimum space should be provided as follows...



Failing to provide adequate cooling space around the generator may cause damage to the membranes. This will reduce service life and invalidate warranty.

On-Site Transit

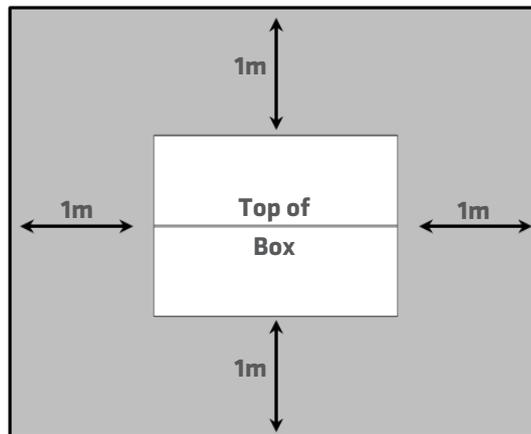
When moving the generator in its shipping crate, doorways and other openings such as elevators must fit with the sizes in the figure below.



Unpacking

Space Required

The image below shows the minimum space required to unpack the generator from its shipping box.

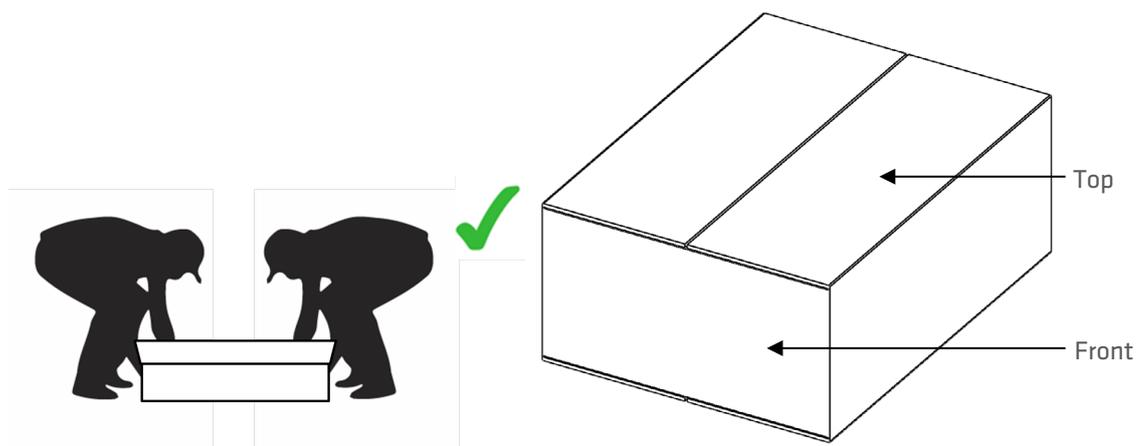


Unpacking

The top of the shipping box should be carefully opened and the cardboard insert removed.

The generator weighs 21.3 kg and as such constitutes a two-man lift. Ensure safe lifting practices are adhered to.

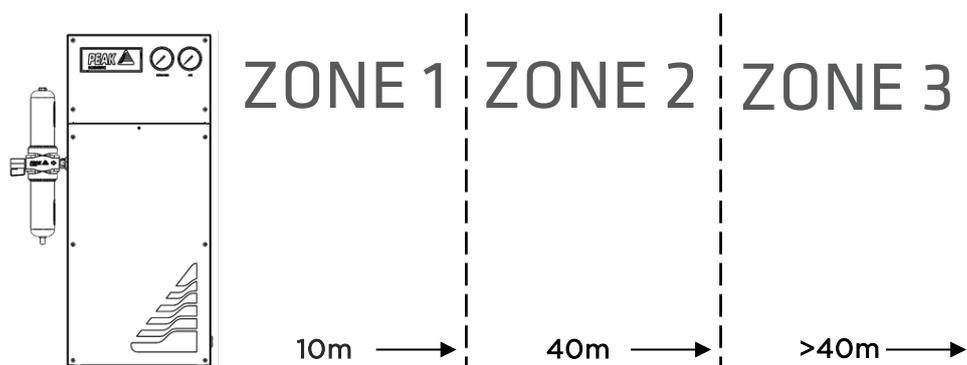
All packaging should be retained for future transit.



Infinity 1051 Site Preparation Guide

Tubing lengths

Tubing sizes should be chosen with accordance to the diagram below.

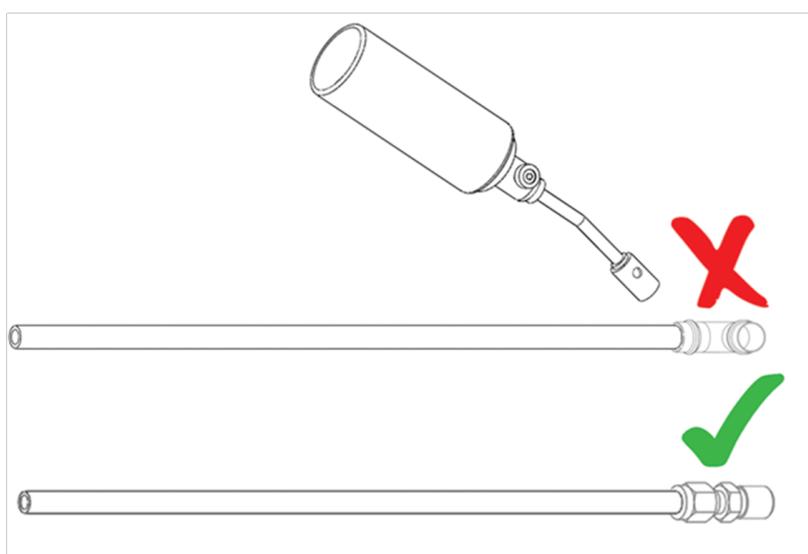


Zone	Distance from Instrument	Tubing Thickness OD/ID mm (Inches)
1	Up to 10m	6mm/4mm (1/4" 3/16")
2	Up to 40m	10mm/8mm (3/8" 5/16")
3	Over 40m	Consult Peak Scientific



The diameter of the tubing which will be connected to the gas outlet is important and is determined by the length of tubing required. Failure to follow these recommendations could lead to accelerated compressor wear.

Copper Tubing



Soldering may lead to contamination. Compression fittings recommended.

Peak Scientific UK

Fountain Crescent
Inchinnan Business Park
Inchinnan
PA4 9RE
Scotland, UK

Tel: +44 (0)141 812 8100
Fax: +44 (0)141 812 8200

Peak Scientific Germany

Herriotstrasse 1
60528 Frankfurt

Germany

Tel: +49 (0)69 677 33 490
Fax: +49 (0)69 677 33 200

Peak Scientific Taiwan

4F.-6, No.736
Zhongzheng Rd.
Zhonghe Dist.
New Taipei City

Tel: +886 2 8226 2383
Fax: +886 2 8226 9499

Peak Scientific North America

19 Sterling Road
Suite #1
Billerica, MA 01862

USA

Tel: +1 866 647 1649
Fax: +1 978 608 9503

Peak Scientific China

Room 606 Building 1
Lane 2277 Zuchongzhi Road
Pudong New Area
Shanghai
201203, China

Tel: +86 21 5079 1190
Fax: +86 21 5079 1191

Peak Scientific Brazil

Peak Scientific Brasil
Av. Quieroz Filho
1700 - torre Sunny-Conj. 602
São Paulo SP Brasil

Tel: +1 866 647 1649

Peak Scientific India

202, Amsri Shamira
Old Lancer Line
Opp. St. Mary's Degree College
S.D. Road Secunderabad
500 025, India

Tel: +91 40 2780 0663
Fax: +91 40 2780 0663

Peak Scientific Mexico

Solon 352
Col. Los Morales Polanco
11530 Mexico, D.F.

Mexico

Tel: +1 866 647 1649
Fax: +1 978 608 9503

Peak Scientific Japan K.K.

2-7-56, 2F Fuji Building 28
Kita Aoyama, Minato-Ku
Tokyo, Japan
107-0061

Tel: +81 3-6864-0468

Peak Scientific Africa

PO Box 478
Somerset Mall
7137

South Africa

Tel: +27 (0)2185 16542
Fax: +27 (0)8654 64473

Peak Scientific Australia

PO Box 65
Belmont
Victoria 3216

Australia

Tel: +61 1300 965 352

Peak Scientific Singapore

3 Science Park Drive
#03-14 The Franklin
Science Park Drive 1
Singapore, 118223

Tel: +65-6777 1966
Fax: +65-6777 1978