# **BEAM Plus Interiors**

Version 2.0 (Beta 0) 02.2022

# Checklist for Residential Units





### **Disclaimers of BEAM Plus Interiors V2.0 (Beta 0)**

The BEAM Plus Interiors V2.0 (Beta 0) is released as a beta version for pilot use. This must not be taken as an official launch of the final version which is subject to changes in due course.

In no circumstances shall a reader rely on this version for any purpose other than treating this as a beta version for pilot use.

BEAM Society Limited, its commissioned consultant, participants of Steering Committee and all individuals involved in the revamp of BEAM Plus Interiors accept no liability for any loss or damage arising from any use or misuse of or reliance on any information in this manual/ checklist.



## **BEAM Plus Interiors V2.0**

### Checklist for Residential Units

### Instruction

This checklist provides a set of items and requirements towards rating achievement of BEAM Plus Interiors V2.0 for Residential Units. Photo records are required for each attempted item, with optional description. A set of annotated floor plans before and after renovation shall also be prepared for submission.

The checklist items are categorised based on the construction cycle of residential units. The Applicant can find out the material timeline of each item clearly to avoid any delay in incorporating related features into the design.



Construction Cycle of Residential Units

### **Rating Methodology**

1.	Green Rating: Achievement of at least 30 items of the whole checklist,	
	with fulfilment of at least 1 item for each performance category; or	172
2	Green+ Rating: Achievement of at least 45 items of the whole checklist	114

# **Integrated Design and Construction Management (IDCM)**

with fulfilment of at least 1 item for each performance category.

# Items and requirements For items 1 - 5, each of the following practices shall be adopted during fit-out activities to reduce air pollution: 1. Provide walk-off mats at entryways. Only use windows for ventilation. Keep the main door closed and seal all gaps with coverings or wet towels to avoid causing nuisance to the neighbours.

J	3.	Cover up cement, sand, debris or other dusty materials stored on-site and keep materials organised to improve safety as well as indoor air quality.	
	4.	Conduct flush-out <sup>1</sup> by mechanical or natural means before occupancy.	
F	5.	No noisy activities before 9am and after 6pm or within operation hours as agreed with the property management company and no noisy fit-out activities are carried out on Sundays and public holidays.	
P	6.	Treat and dispose of chemical waste <sup>2</sup> properly.	
P	7.	Recycle waste from fit-out activities.	
	8.	Adopt easy-to-clean and easy-to-maintain design. For example, a ceiling is painted properly without any false ceiling.	
	9.	Minimise paper usage during renovation. For example, using digital tools for design presentations.	
	10.	Select transformable furniture <sup>3</sup> to accommodate different functions of interior spaces.	
	11.	Involve a BEAM Pro <sup>4</sup> in the whole design or build process.	
		Total	/11
4	 		

waterials and waste (ww)							
			Items and requirements	Photo and/or basic description			
		1.	Procure certified green products endorsed by Construction Industry Council (CIC) Green Product Certification <sup>5</sup> or regionally or internationally recognised standards for each of the following items:	·			
			a. Paint & coating;				
			b. Adhesive & sealant;				
			c. Flooring; and				
뼅			d. Others to be proposed by the Applicant.				
		2.	Provide a recycling bin or dedicated sorting area for each of the following items:				
			a. Paper;				

### **BEAM Plus Interiors V2.0**

### Checklist for Residential Units

		b. Metal;	
		c. Plastic; and	
		d. Glass bottle.	
	3.	Purchase regional materials <sup>6</sup> .	
Ħ	4.	Purchase at least 1 reused, second-hand or environmentally certified <sup>7</sup> furniture.	
	<b>5</b> .	Adopt environmentally certified <sup>7</sup> flooring.	
ď	6.	Install a food waste processor/ composter for kitchen. For example, food waste grinders.	
	7.	For items 6-8, no demolition for each of the following items from the original setting:	
		a. False ceiling;	
		b. Wall; and	
		c. Flooring.	
	8.	Reuse at least 3 of the following items (at least 50% extent of applications in any selected items):	
		$\square$ Bathtubs $\square$ Faucets $\square$ WC closets $\square$ Doors $\square$ Sinks	Require photo records showing
		☐ Ventilation fans ☐ Built-in furniture ☐ Windows	before and after fit-out works
		☐ Others to be proposed by the Applicant.	
	9.	Reuse the following electrical appliances (at least 50% extent of applications in any selected items):	
		a. Air-conditioners;	Require photo records showing before and after fit-out works
		b. Washing machines;	Require photo records showing
		c. Refrigerators;	before and after fit-out works  Require photo records showing
		d. Dehumidifiers;	before and after fit-out works  Require photo records showing
0 4		<b>T</b> 1 · · ·	before and after fit-out works  Require photo records showing
			before and after fit-out works
		f. Induction cookers;	Require photo records showing before and after fit-out works
		g. Water heaters;	Require photo records showing before and after fit-out works
		h. Range hoods;	Require photo records showing before and after fit-out works
		i. Light fittings; and	Require photo records showing
			DATORA SING SITAL III-OLII WORKS

### **BEAM Plus Interiors V2.0**

Checklist for Residential Units

		Total	4.00
J.	Others to be proposed by the Applicant.		before and after fit-out works

Total / 26

# **Energy Use (EU)**

		Items and requirements	Photo and/or basic description
	1.	Install all new home appliances with Grade 1 Energy Label (Mandatory Energy Efficiency Labelling Scheme) <sup>8</sup> for each of the following items:	
Ħ		a. Air-conditioners;	
		b. Washing machines;	
Ħ		c. Refrigerators;	
Ħ		d. Dehumidifiers;	
Ħ		e. Televisions; and	
Ħ		f. Induction cookers.	
<b>=</b>	2.	Install either Grade 1 (Mandatory Energy Efficiency Labelling Scheme) <sup>8</sup> new storage type electric water heaters or new domestic gas instantaneous water heaters with recognised label.	
	3.	Adopt double layered external windows or innovative insulators, such as solar films, for windows facing east or west at least.	
	4.	Establish clear light zoning for ease of control of lighting.	
	5.	Keep refrigerators away from sunlight and well-ventilated.	
P	6.	Install sockets with an on/off button.	
	7.	Provide a drying rack or retractable clothesline for drying clothes.	
Ħ	8.	Use LED lighting in all light fittings.	
	9.	Comply with the manufacturer's recommended installation position of air conditioners regarding internal spaces, unobstructed air circulation and minimum width of any external recess for heat rejection. (Submittals include the manufacturer's recommended installation dimensions and photos showing installation dimensions of air conditioners)	

		10.	Install smart home devices <sup>9</sup> to manage household energy and drive behavioural change.	
			Total	/ 15
Wat	er	Us	e (WU)	
			Items and requirements	Photo and/or basic description
		1.	Install water taps or flow controllers for water taps with Grade 1 Label (Voluntary Water Efficiency Labelling Scheme) <sup>10</sup> .	
		2.	Install shower heads or flow controllers for shower heads with Grade 1 Label (Voluntary Water Efficiency Labelling Scheme) <sup>10</sup> .	
		3.	Install new washing machines with Grade 1 Label (Voluntary Water Efficiency Labelling Scheme) <sup>10</sup> .	
		4.	Install dual flush water closets.	
		5.	Do not install rain showers.	
			Total	/5
			Total	/5
Hea	lth	an	d Wellbeing (HWB)	/5
Hea	lth	an		Photo and/or basic description
Hea	olth	an	d Wellbeing (HWB)	Photo and/or basic
	olth 		d Wellbeing (HWB)  Items and requirements  Ensure at least a pair of adequately sized windows <sup>11</sup> can be	Photo and/or basic
	olth	1.	d Wellbeing (HWB)  Items and requirements  Ensure at least a pair of adequately sized windows <sup>11</sup> can be opened for cross ventilation <sup>12</sup> .	Photo and/or basic
	olth	1.	d Wellbeing (HWB)  Items and requirements  Ensure at least a pair of adequately sized windows <sup>11</sup> can be opened for cross ventilation <sup>12</sup> .  Install a sizable ceiling fan <sup>13</sup> to enhance ventilation.	Photo and/or basic
	olth	1. 2. 3.	d Wellbeing (HWB)  Items and requirements  Ensure at least a pair of adequately sized windows <sup>11</sup> can be opened for cross ventilation <sup>12</sup> .  Install a sizable ceiling fan <sup>13</sup> to enhance ventilation.  Use water-based or low-VOC paints.  Install a sizable indoor air purifier <sup>13</sup> for reducing TVOC &	Photo and/or basic
	olth o	1. 2. 3. 4.	d Wellbeing (HWB)  Items and requirements  Ensure at least a pair of adequately sized windows <sup>11</sup> can be opened for cross ventilation <sup>12</sup> .  Install a sizable ceiling fan <sup>13</sup> to enhance ventilation.  Use water-based or low-VOC paints.  Install a sizable indoor air purifier <sup>13</sup> for reducing TVOC & Particulates.	Photo and/or basic
		1. 2. 3. 4.	d Wellbeing (HWB)  Items and requirements  Ensure at least a pair of adequately sized windows <sup>11</sup> can be opened for cross ventilation <sup>12</sup> .  Install a sizable ceiling fan <sup>13</sup> to enhance ventilation.  Use water-based or low-VOC paints.  Install a sizable indoor air purifier <sup>13</sup> for reducing TVOC & Particulates.  Floor drains are easily accessible.	Photo and/or basic

		9.	Adopt acoustic features to eliminate possible noise nuisance. For example, acoustic panels, carpets, door seal, etc.	
THE STATE OF THE S		10.	Provide planting per habitable space.	
ř		11.	Install a piece of fitness equipment at home. For example, a dumbbell.	
		12.	Adopt design for special needs. For example, design for elderly or disability.	
		13.	Adopt ergonomic features in the design.	
		14.	Install window blinds to reduce glare.	
		15.	Install clothes sanitising machine near the main door.	
			Total	/ 15
nn	OVa	atio	ns and Additions (IA)	
		Items	and requirements	Photo and/or basic description
	1.	and/ asso	ent evidence of the application of new practices, technologies or techniques that are not described in this checklist; and the ciated benefits in addressing sustainability objectives for ential units:	
		a. F	Proposal 1;	
		b. F	Proposal 2;	
		c. F	Proposal 3;	
		d. F	Proposal 4;	
		e. F	Proposal 5;	
		f. F	Proposal 6;	
		g. F	Proposal 7;	
		h. F	Proposal 8;	
		i. F	Proposal 9; and	
		j. F	Proposal 10.	
			Total	/ 10

BEAM Society Limited

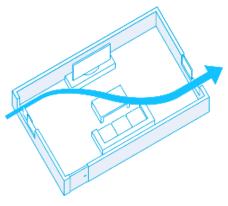
- End of checklist -

6

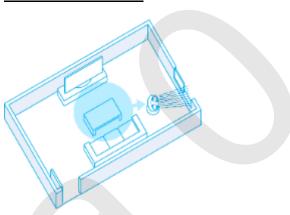
### **Supplementary Notes**

1. Flush out: An air flush is a technique whereby air is forced through a residential unit prior to occupancy in order to remove or reduce pollutants, such as VOCs and particulate matter.

### Rooms with 2 opposite windows



**Rooms with 1 window** 



(Source: https://www.hotaidev.com.tw/ventilation/#cnt1)

- 2. Chemical waste, such as paint, solvent, etc.
- 3. Transformable furniture, such as foldable bed, expandable table, etc.
- 4. BEAM Professional with a valid credential for BEAM Plus Interiors V2.0.
- 5. Reference Label of CIC Green Product Certification:











Regional materials: The point of raw materials and manufacture shall be located within an 800km radius of the HKSAR by road transportation; within a 1,600km radius by rail transportation; or within a 4,000km radius by sea transportation.



Examples of Environmentally Certified Label:



Good Environmental Choice Australia (GECA)





Deutsches Institut für Bautechnik (DIBT) U Mark





Programme for the

**Endorsement of Forest** 

Certification Schemes (PEFC)







The Singapore Green Labelling Scheme (SGLS)



**UL** Certification









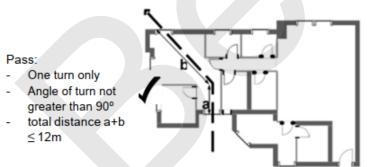
(Source: https://www.emsd.gov.hk/en/energy\_efficiency/mandatory\_energy\_efficiency\_labelling\_scheme/)

- 9. Smart home devices, such as smart lighting control, smart plug, etc.
- 10. Voluntary Water Efficiency Labelling Scheme



 $(Source: \underline{https://www.wsd.gov.hk/en/plumbing-engineering/water-efficiency-labelling-scheme/index.html})\\$ 

- 11. Adequately sized windows: Do not change the openable window areas from original building layout plan.
- 12. Cross ventilation:



- 13. Sizable ceiling fan/ indoor air purifier: "Sizable" means the operation of fans or indoor air purifiers can cover the size of room where you place them. The recommended covered area shall base on the manufacturer's manual.
- 14. Colour Rendering Index (CRI): The ability of a light source to reveal colours of objects. High CRI means that the appearance of objects is revealed close to natural light.



(Source: https://www.usa.lighting.philips.com/consumer/led-lights/quality-of-light-led-lighting)