





BEAM Plus Interiors - Residential

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

category.

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
 2. Green+ Rating: Achievement of at least 45 items of the whole

checklist, with fulfilment of at least 1 item for each performance

Integrated Design and Construction Management (IDCM)

		Items and requirements	Photo and/or basic description
		Practice under items 1- 5 aim at reducing air pollution during fit- out activities.	
P	1.	Provide walk-off mats at entryways to prevent carrying dust from shoes into common corridor.	
P	2.	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.	
P	3.	Cover up cement, sand, debris or other dusty materials stored on-site and keep materials organised to improve housekeeping.	
	4.	Conduct flush-out ¹ by mechanical or natural means for a week as minimum before occupancy to remove pollutant residue from finishes and furnishings.	
F	5.	No noisy activities before 9 am and after 6 pm 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 to avoid causing noise nuisance to the neighbours.	
P	6.	Treat and dispose of chemical waste ² properly to reduce potential chemical waste problems.	
P	7.	Recycle waste from fit-out activities to reduce burden on landfill.	
	8.	Adopt easy-to-clean and easy-to-maintain designs to facilitate unit maintenance. For example, a ceiling is painted properly without any false ceiling.	
	9.	Minimise paper usage during renovation to treasure tree resources. For example, using digital tools for design presentations.	
	10.	Select transformable furniture ³ to accommodate different functions of interior spaces.	
	11.	Involve a BEAM Pro ⁴ in the whole design process to facilitate BEAM Plus certification.	
	12.	Involve a BEAM Pro ⁴ in the whole build process to facilitate BEAM Plus certification.	
		Total	/12

Materials and Waste (MW)

		Items and requirements	Photo and/or basic description
	1.	Procure certified green products endorsed by Construction Industry Council (CIC) Green Product Certification ⁵ or internationally recognised standards ⁶ for each of the following items to support products with less carbon footprint:	
		a. Paint & coating;	
		b. Adhesive & sealant;	
		c. Others to be proposed by the Applicant; and	
Щ		d. Others to be proposed by the Applicant.	
	2.	Provide a recycling bin or dedicated sorting area for each of the following items to cultivate recycling habits:	
		a. Paper;	
		b. Metal;	
		c. Plastic; and	
		d. Glass bottle.	
	3.	Purchase regional building materials ⁷ , including paint, wall coverings and floorings, to reduce carbon footprint from transportation.	
	4.	Purchase at least 1 reused, second-hand or environmentally certified ⁷ furniture to minimise environmental impact.	
	5.	Adopt environmentally certified ⁶ flooring to all spaces to encourage the use of green products that have low environmental impacts.	
	6.	Install a food waste processor/ composter for kitchen to encourage best practices for food waste management. For example, food waste grinders.	
	7.	No demolition for each of the following items from the original setting to reduce waste generated:	
		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. For example, original 2 bathtubs and therefore need to reuse 1 bathtub) to extend their life cycle:	Require photo records showing before and after fit-out works

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			\square Bathtubs \square Faucets \square WC closets \square Doors \square Sinks	
			☐ Ventilation fans ☐ Built-in furniture ☐ Windows	
			☐ Others to be proposed by the Applicant.	
		9.	Reuse the following electrical appliances (at least 50% extent of applications in any selected items. For example, original 4 AC units and therefore need to reuse 2 AC units) to reduce unnecessary wastage:	
			a. Air-conditioners;	Require photo records showing before and after fit-
			b. Washing machines;	out works Require photo records showing before and after fit-
			c. Refrigerators;	out works Require photo records showing before and after fit-
			d. Dehumidifiers;	out works Require photo records showing before and after fit-
			e. Televisions;	out works Require photo records showing before and after fit-
			f. Induction cookers;	out works Require photo records showing before and after fit-
			g. Water heaters;	out works Require photo records showing before and after fit-
			h. Range hoods;	out works Require photo records showing before and after fit- out works
			i. Light fittings; and	Require photo records showing before and after fit-
			j. Others to be proposed by the Applicant.	Require photo records showing before and after fit-
			Total	/ 26
Ene	rgy	, Us	se (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) ⁸ for each of the following items to encourage wider use of energy-efficient appliances:	4000ptio
			a. Air-conditioners;	
			b. Washing machines;	
			c. Refrigerators;	

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			d. Dehumidifiers;	
			e. Televisions; and	
Ħ			f. Induction cookers.	
		2.	Install either Grade 1 (Mandatory Energy Efficiency Labelling Scheme) ⁸ new storage type electric water heaters or new domestic gas instantaneous water heaters with recognised label to encourage wider use of energy-efficient appliances.	
		3.	Adopt double layered external windows or innovative insulators, such as solar films, for windows facing east or west at least, to reduce solar heat gain through windows.	
		4.	Establish clear light zoning for ease of control of lighting based on usage.	
		5.	Keep refrigerators away from sunlight and well-ventilated to reduce energy wastage due to overheating.	
P		6.	Install sockets with an on/off button at exposed areas to reduce energy wastage under idling mode.	
Ä		7.	Provide a drying rack or retractable clothesline to encourage use of natural resources for clothes drying purpose.	
••		8.	Use LED lighting in all light fittings (except decorative lighting) to reduce energy consumption.	
		9.	Comply with the manufacturer's recommended installation position of all air conditioners regarding internal spaces, unobstructed air circulation and minimum width of any external recess for heat rejection to enhance working efficiency. (Submittals include the manufacturer's recommended installation dimensions and photos showing installation dimensions of air conditioners)	
		10.	Install smart home devices ⁹ to manage household energy and drive behavioural change.	
			Total	/ 15
Wat	er	Use	e (WU)	
				Photo and/or basic
			Items and requirements	description
		1.	Install all water taps or flow controllers for water taps with Grade 1 Label (Voluntary Water Efficiency Labelling Scheme) ¹⁰ to reduce consumption of fresh water.	
 		2.	Install all shower heads or flow controllers for shower heads with Grade 1 Label (Voluntary Water Efficiency Labelling Scheme) ¹⁰ to reduce consumption of fresh water.	

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	3.	Install all new washing machines with Grade 1 Label (Voluntary Water Efficiency Labelling Scheme) ¹⁰ to encourage wider use of water efficient facilities.	
	4.	Install dual flush water closets at all bathrooms to reduce burden on the municipal sewage treatment facilities.	
	5.	Do not install rain showers at all bathrooms to reduce fresh water usage during bathing.	
		Total	/5

Health and Wellbeing (HWB)

		Items and requirements	Photo and/or basic description
	1.	Ensure at least a pair of adequately sized windows ¹¹ can be opened to promote cross ventilation ¹² .	
	2.	Install a sizable ceiling fan ¹³ to enhance ventilation.	
Ħ	3.	Use water-based or low-VOC paints to minimise the impacts on indoor air quality.	
	4.	Install a sizable indoor air purifier ¹³ to reduce TVOC & Particulates.	
	5.	All floor drains are easily accessible to facilitate drainage maintenance.	
	6.	Use all light fittings with CRI ¹⁴ greater than 80 (excluding decorative lighting) to ensure that the appearance of objects is revealed close to its original colour.	
	7.	Do not block all windows from having daylighting and outside view to enhance circadian and psychological health.	
	8.	Separate zone with noisy activities from that of quieter ones to prevent acoustical disturbance.	
	9.	Adopt acoustic features to eliminate possible noise nuisance. For example, acoustic panels, carpets, door seal, etc.	
Ä	10.	Provide at least one potted plant per habitable space to have constant interaction with natural elements.	
Ä	11.	Install a piece of fitness equipment at home to promote regular physical activity. For example, a dumbbell.	
	12.	Adopt family-friendly design to cater the needs across different family members. For example, design for elderly or disability.	
	13.	Adopt ergonomic features in the design to reduce physical strain and injury.	

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		14.	Install window blinds at all spaces (other than storage) to reduce glare.	
		15.	Install a clothes sanitising machine to kill germs and bacteria adhered on our clothes.	
			Total	/ 15
Inn	ova	atio	ns and Additions (IA)	
		Item	s 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

- End of checklist -

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.
- Chemical waste, such as paint, solvent, etc.
- Transformable furniture with space saving fittings or multifunction, such as foldable bed, expandable table,
- BEAM Professional with a valid credential for BEAM Plus Interiors V2.0.
- Reference Label of CIC Green Product Certification:

Platinum Gold Silver Bronze Green CIC GREEN CIC GREEN CIC GREEN CIC GREEN CIC GREEN PRODUCT CERTIFICATION PRODUCT CERTIFICATION PRODUCT CERTIFICATION PRODUCT CERTIFICATION PRODUCT CERTIFICATION



7. 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.



8. Mandatory Energy Efficiency Labelling Scheme



(Source: https://www.emsd.gov.hk/en/energy_efficiency/mandatory_energy_efficiency_labelling_scheme/)

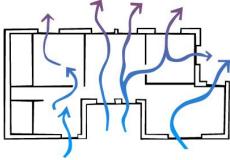
- 9. Smart home devices, such as smart lighting control, smart plug, etc.
- 10. Voluntary Water Efficiency Labelling Scheme



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

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

12. Cross ventilation: Units can be considered to have good cross ventilation when the air flow path between facade openings if relatively unobstructed. All openable windows and internal doors (excluding the main entrance) within units can be counted for ventilation.



(Source: https://build.com.au/wind-ventilation-and-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)