



Innovations and Additions (IA) Library

BSL has curated a credit library for innovation items. "***List of Pre-approved IA Items***" comprises acceptable innovation items while "***List of Unaccepted Cases***" summarizes items that were evaluated but not endorsed as innovation items. By sharing this information, we aim to provide Applicants with a clearer understanding of which categories of innovation items are considered acceptable and which are not. Our goal is to provide Applicants with additional information to enhance their confidence regarding their submissions for innovation items, thereby improving the overall quality and relevance of the proposals.

Validity of Innovation Items:

Each innovation has a validity period. However, the expiry of this period does not automatically result in the removal of the innovation item from "***List of Pre-approved IA Items***". Instead, a periodic review will assess whether an item remains suitable for inclusion in the list. This evaluation process aims to ensure that the list remains dynamic and considers factors such as environmental impact, technical feasibility, long term sustainability and industry relevance. Some formerly accepted innovation items may evolve into mainstream industry practices and consequently be removed from the list.

Individual Merit:

Notwithstanding that an item is included in the list, each submission by the Applicant will be considered on its own merits. The list is solely promulgated to assist the Applicant in better understanding which items are more likely to be accepted. It is important to recognize that BSL rigorously evaluates the context and application of each innovation. Inclusion on the list does not guarantee acceptance.

Encouragement of Novel Submissions:

While the lists provide guidance, we strongly encourage Applicants to submit novel and unique innovations that may not be represented in "***List of Pre-approved IA Items***". BSL is committed to fostering creativity and innovation, and we welcome submissions that push the boundaries of current industry practices.

Disclaimer:

Please note that *Innovations and Additions (IA) Library* serves as a reference guide and does not assure the acceptance of any specific item. Each submission will undergo a thorough review process.

IA ID Code	Name of Innovative Application	Narrative Description	Example(s)	Tool(s)	Version(s)	IA Credit	Assessment Criteria	Applicable Aspect(s)	Extent of Application	Supporting Documents		Source of IA	Validity		Remarks
							Compliance Checking (e.g. coverage, %, scope, etc.)		Building Type(s)	Provisional Assessment (PA)/ Compliance Assessment (CA)	Final Assessment (FA)	(e.g. Precedent Case, CIC features, HKGBC, Stakeholder Enquiry, etc.)	Published/ Effective Date	Valid Through	
IA_0001	Battery Energy Storage System in Construction	(i) Adopt battery energy storage system to provide electricity for construction sites, to replace diesel usage in generator and/ or construction site equipment.	(i) Ampd Eneartainer (CIC CITF Ref: PA20-045); (ii) Container Energy Storage System C.E.S.S. (CIC CITF Ref: PA22-021); (iii) Battery energy storage system (CIC CITF Ref: PA22-031, PA23-002, PA23-059); (iv) Lithium iron phosphate battery (LiFePO4) storage system (CIC CITF Ref: PA24-005)	NB	2.0	IA 1	(i) Apply in all construction stages (including foundation and superstructure stages)	CEM	All Buildings	(i) Narrative report (ii) Contract specifications/ Declaration letter endorsed by project owner/ Architect's instruction for contractors specifying the application (iii) Product catalogue of application with material approval record* (iv) Implementation record (e.g. site photos or delivery notes) showing application in all construction stages (including foundation and superstructure stages)* (v) Percentage of total energy consumption for construction replaced by energy discharged from battery energy storage system (threshold is not required)*	(i) Narrative report (ii) Product catalogue of application with material approval record (iii) Implementation record (e.g. site photos or delivery notes) showing application in all construction stages (including foundation and superstructure stages) (iv) Percentage of total energy consumption for construction replaced by energy discharged from battery energy storage system (threshold is not required)	- Precedent cases - CIC's CITF Pre-approved list	22-Jan-2025	21-Jan-2027	
IA_0002	Hard-Paved Construction	(i) Adopt precast and reusable concrete paving panel or metal plates for paving on Project site during construction stages.		NB	2.0	IA 1	(i) Apply in all construction stages (including foundation and superstructure stages); (ii) Apply hard pavers by using precast concrete panel and/ or metal plates; (iii) Apply hard pavers at construction plant operating areas (where the plant is stationed or manoeuvring); AND (iv) Transfer the used hard pavers to another work site(s) for reuse	CEM	All Buildings	(i) Narrative report (ii) Contract specifications/ Declaration letter endorsed by project owner/ Architect's instruction for contractors specifying the application (iii) Preliminary site plans indicating the areas with hard paver (iv) Implementation record (e.g. site plans indicating the areas with hard paver/ delivery notes/ site photos, etc.) showing application in all construction stages (including foundation and superstructure stages)* (v) Record (e.g. transfer records, etc.) demonstrating that the used paver(s) is transferred to another work site(s) for reuse*	(i) Narrative report (ii) Implementation record (e.g. site plans indicating the areas with hard paver/ delivery notes/ site photos, etc.) showing application in all construction stages (including foundation and superstructure stages) (iii) Record (e.g. transfer records, etc.) demonstrating that the used paver(s) is transferred to another work site(s) for reuse	- Precedent cases	22-Jan-2025	21-Jan-2027	
IA_0003	UV Sterilizing Device for Ventilating Pipe of Drainage System	(i) Install UV steriliser at the final outlet of ventilating pipe in the development, which sterilises the outgoing air from the ventilating pipe, to reduce the chance of cross contamination as well as the risk of spreading virus through the system.		NB	2.0	IA 1	(i) Adopt UV Sterilizing Device for 100% of ventilating pipe in drainage system	HWB	All Buildings	(i) Narrative report (ii) Contract specifications/ Declaration letter endorsed by project owner/ Architect's instruction for contractors specifying the application (iii) Schematic drawings highlighting the application and demonstrating coverage	(i) Narrative report (ii) Product catalogue of application with material approval record (iii) Schematic drawings highlighting the application and demonstrating coverage	- Precedent cases	22-Jan-2025	21-Jan-2027	
IA_0004	Sustainable Home Information Display System	(i) Provide a digital platform (i.e. mobile app) for each residential unit, which provides (a) water consumption information (e.g. residential units, common areas, facilities rooms, etc.); (b) energy consumption information (e.g. real-time electricity consumption for each residential flat); (c) waste management information (e.g. domestic waste data on each residential floor), and (d) indoor air quality (e.g. temperature, relative humidity (RH), carbon dioxide (CO ₂), particulate matters (PM _{2.5}) and total volatile organic compounds (TVOC)), to raise the environmental awareness of building users.		NB	2.0	IA 1	(i) Make 100% provision for all residential units and at least 1 platform in each residential unit; AND (ii) Include at least 3 of the following information in the system: - Home Water consumption; - Home Energy consumption; - Waste management information; and - Indoor air quality	EU, WU, MW, HWB	Residential Buildings	(i) Narrative report (ii) Contract specifications/ Declaration letter endorsed by project owner/ Architect's instruction for contractors specifying the application (iii) Proposed brochure/ design/ technical specification illustrating the compliance (iv) Location plan (if applicable)	(i) Narrative report (ii) Product catalogue of application with material approval record/ user manual illustrating the compliance (iii) Site photos (iv) Location plan (if applicable)	- Precedent cases	22-Jan-2025	21-Jan-2027	
IA_0005	GPS Truck Tracking System	(i) Adopt concrete mixer truck(s) with GPS tracking system, which enables the following functions: (a) real-time location monitoring; (b) route optimization; (c) real-time road traffic information; and (d) communication platform, to reduce emission from concrete truck idling.		NB	2.0	IA 1	(i) Apply in all construction stages (including foundation and superstructure stages)	CEM	All Buildings	(i) Narrative report (ii) Contract specifications/ Declaration letter endorsed by project owner/ Architect's instruction for contractors specifying the application (iii) Implementation record (e.g. screenshots of the record of monitoring system) showing application in all construction stages (including foundation and superstructure stages)*	(i) Narrative report (ii) Implementation record (e.g. screenshots of the record of monitoring system) showing application in all construction stages (including foundation and superstructure stages)	- Precedent cases	22-Jan-2025	21-Jan-2027	
IA_0006	Smart Site Management Hub	(i) Provide a centralised platform or system (i.e. Common Data Environment) for integrating multiple technologies and tools to manage and monitor different aspects of a site, including workflow enabled modules: (a) Building Information Modelling (BIM); (b) Artificial Intelligence (AI); (c) Internet of Things (IoT); and (d) real-time communication, to facilitate resource allocation, time management and production cost effectively.	(i) Smart Site Management Hub (SSMH)	NB	2.0	IA 1	(i) Apply in all construction stages (including foundation and superstructure stages)	CEM	All Buildings	(i) Narrative report (ii) Contract specifications/ Declaration letter endorsed by project owner/ Architect's instruction for contractors specifying the application (iii) Proposed brochure/ design / technical specification illustrating compliance (iv) Product catalogue of application with material approval record/ user manual illustrating the compliance* (v) Implementation record (e.g. screenshots of the record of common data environment) showing application (including all applicable modules) in all construction stages (including foundation and superstructure stages)*	(i) Narrative report (ii) Product catalogue of application with material approval record/ user manual illustrating the compliance (iii) Implementation record (e.g. screenshots of the record of common data environment) showing application (including all applicable modules) in all construction stages (including foundation and superstructure stages)	- Precedent cases	22-Jan-2025	21-Jan-2027	

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							Compliance Checking (e.g. coverage, %, scope, etc.)		Building Type(s)	Provisional Assessment (PA)/ Compliance Assessment (CA)	Final Assessment (FA)		Published/ Effective Date	Valid Through	
IA_0007	Digital Works Supervision System	(i) Provide a digital platform (i.e. mobile app and web portal) for supporting the entire process of site activities, including workflow enabled modules: (a) request for inspection/ survey check form; (b) site diary/ site record book; (c) site safety inspection records; (d) cleansing inspection checklists; (e) labour return record; and (f) contract management.	(i) Digital Works Supervision System (DWSS); (ii) Development and Construction Site Mobile System (DCSMS)	NB	2.0	IA 1	(i) Apply in all construction stages (including foundation and superstructure stages)	CEM	All Buildings, unless those specified under Remarks.	(i) Narrative report (ii) Contract specifications/ Declaration letter endorsed by project owner/ Architect's instruction for contractors specifying the application (iii) Proposed brochure/ design/ technical specifications illustrating the compliance (iv) Product catalogue of application with material approval record/ user manual illustrating the compliance* (v) Implementation record (e.g. screenshots of the record) showing application (including all applicable modules) in all construction stages (including foundation and superstructure stages)*	(i) Narrative report (ii) Product catalogue of application with material approval record/ user manual illustrating the compliance (iii) Implementation record (e.g. screenshots of the record) showing application (including all applicable modules) in all construction stages (including foundation and superstructure stages)	- Precedent cases	22-Jan-2025	21-Jan-2027	The Development Bureau Technical Circulars, such as Technical Circular (Works) No. 2/2023, mandate the adoption of DWSS for public works projects with estimates exceeding \$30 million. Therefore, for projects making their first assessment submission on or after August 1, 2025, DWSS will not be eligible as an innovative item if they are required to comply with the DWSS adoption conditions outlined in these Circulars.
IA_0008	Construction & Demolition Materials Disposal Tracking System	(i) Provide a digital platform (i.e. web portal) for easily logging and tracking the construction and demolition waste transaction records including the weight of waste dump, images of loading conditions and plate number of dump trucks.	(i) Construction & Demolition Materials Disposal Tracking System (CMDTS) (ii) EPD C-Easy System (voluntary use)	NB	2.0	IA 1	(i) Apply in all construction stages (including foundation and superstructure stages)	CEM	All Buildings	(i) Narrative report (ii) Contract specifications/ Declaration letter endorsed by project owner/ Architect's instruction for contractors specifying the application (iii) Proposed brochure/ design / technical specifications illustrating the compliance (iv) Product catalogue of application with material approval record/ user manual illustrating the compliance* (v) Implementation record (e.g. monitoring report/ site photos/ screenshots of the system) showing application in all construction stages (including foundation and superstructure stages)*	(i) Narrative report (ii) Product catalogue of application with material approval record/ user manual illustrating the compliance (iii) Implementation record (e.g. monitoring report/ site photos/ screenshots of the system) showing application in all construction stages (including foundation and superstructure stages)	- Precedent cases	22-Jan-2025	21-Jan-2027	
IA_0009	Smart Drainage Sensor Alert System	(i) Install a set of advanced water level sensor and advanced flow rate meter in terminal double sealed stormwater manhole and water pipes for monitoring real-time water level around the manhole and pipes. It enables the transmission of hydrological information of each monitoring spot to building operator for detection of abnormal water level and flow rate inside manhole and pipes.	(i) Ultrasonic water level sensor(s) and ultrasonic flow rate meter(s)	NB	2.0	IA 1	(i) Make 100% provision for all stormwater manhole(s) and water pipes	SS	All Buildings	(i) Narrative report (ii) Contract specifications/ Declaration letter endorsed by project owner/ Architect's instruction for contractors specifying the application (iii) Schematic drawings illustrating the compliance	(i) Narrative report (ii) Product catalogue of application with material approval record (iii) Schematic diagrams indicating the areas with Smart Drainage Sensor Alert System	- Precedent cases	22-Jan-2025	21-Jan-2027	
IA_0010	Demolition Robot	(i) Adopt remote-controlled electrically-driven demolition robot on construction site for a higher demolition efficiency and better safety on site.	(i) Brokk Demolition Robots (CIC CITF Ref: PA19-002); (ii) Husqvarna DXR 145 / Husqvarna DXR 305 (CIC CITF Ref: PA23-057);	NB	2.0	IA 1	(i) Apply in demolition stage	CEM	All Buildings	(i) Narrative report (ii) Contract specifications/ Declaration letter endorsed by project owner/ Architect's instruction for contractors specifying the application (iii) Proposed brochure/ design / technical specifications illustrating the compliance (iv) Product catalogue of application with material approval record* (v) Implementation record (e.g. site photos or delivery notes) showing application*	(i) Narrative report (ii) Product catalogue of application with material approval record (iii) Implementation record (e.g. site photos or delivery notes) showing application	- CIC's CITF Pre-approved list	22-Jan-2025	21-Jan-2027	

*Evidence of compliance for construction works started not less than 3 months prior to the first submission of PA (or CA) shall be submitted in PA (or CA).