Dear Applicant,

Thank you for your interest in the SkyLab at Building and Construction Authority of Singapore.

BCA SkyLab - The World's First High-Rise Rotatable Laboratory for the Tropics

The BCA SkyLab is the world's first high-rise rotatable laboratory for the tropics, with state-of-the-art facilities for the testing and development of innovative energy-efficient building technologies. In collaboration with US-based Lawrence Berkeley National Laboratory, the BCA SkyLab is modelled after the FLEXLAB (the Facility for Low Energy Experiment in Buildings) in California, and is adapted to Singapore's tropical environment and urban setting.

The key features of the BCA SkyLab are its rotatable outdoor testbed, and its integrative plug-and-play testing capabilities. Beyond technical purposes, the BCA SkyLab also serves as an education and engagement platform to catalyze co-innovation of the industry and academia.

The objective of the BCA SkyLab is to accelerate the pace of research, development and deployment of energy efficient technologies, exemplifying Singapore's ambition towards a global leader in Green Buildings for the tropics and sub-tropics. Its capability of testing technology performance in "real-world" conditions, individually or as an integrated system, will take Singapore's RD&D capability in green buildings to a new level, and support the industry adoption of these innovative technologies.

Please complete the application form and email the completed form with the necessary documents to BCA_Skylab@bca.gov.sg.

Part 1 – Details of Proposal

1. Proposal

Title:
Innovation focus areas: ☐ Sustainability ☐ Construction Productivity ☐ Quality ☐ Maintainability ☐ Safety

Area of technology tested:

- ☐ Façade
- ☐ Shades (External / Internal)
- ☐ ACMV
- ☐ PV
- ☐ Lightings
- ☐ Energy simulation
- ☐ Plug loads
- ☐ Sensors
- ☐ Building Management System
- ☐ Integration of technologies
- ☐ Comparative study
- ☐ Others: _____

2. Applicant

Type of applicant:	Applicant
☐ Public/ Private Developers	Name :
☐ Consultants	Designation :
☐ Builders	Organisation/Company:
☐ System Specialists	Contact No :
☐ Supplier	Address:
☐ Research Institution	
☐ Building owners	Email :
☐ Others, please specify:	
	Local Representative/ Contact Person
	Name:
	Contact No :
	Identification Number:
	Address:
	Email:

3. Collaborators

Name	Designation	Organisation	Contact No.	Email

4. Research Personnel

Name	Designation	Organisation	Contact No.	Email

5. Description

Proposal narrative – Main Text

Give a concise description of the proposal, including background, scope of work, objectives and deliverables. In addition, elaborate and describe the following:

i) Novelty of proposed design tools, methods and technologies
ii) Potential impact to improve energy efficiency/ construction productivity
iii) Potential replicability, scalability and commercialization plan
iv) Proof of concept, preliminary testing results and current implementation at site and projects incorporating technology
v) Competency and track record of the applicant and project team

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Background:

Scope of work:

Objectives:

i) Novelty of proposed design tools, methods and technologies

ii) Potential impact to improve energy efficiency/construction productivity

iii) Potential replicability, scalability and commercialization plan

vi) Proof of concept, preliminary testing results and current implementation at site and projects incorporating technology

iv) Competency and track record of the applicant and project team

6. Test Procedures and Requirements

Please include the test procedures, requirements, test parameters and duration.

7. Test Report Submission

Please submit all available laboratory test reports completed along with this application form.

Type of Test Report:

- ☐ U-value Test
- ☐ G-value Test
- ☐ Accelerated Test
- ☐ Fire Resistance Test
- ☐ Water Penetration Test
- ☐ Wind Load Resistance Test
- ☐ Air Leakage Resistance Test
- ☐ Energy Generation Test
- ☐ Energy Simulation Test
- ☐ Others, please specify:

Part 2 - Applicant Information

1. General

Address	
ACRA Ref. No. and Date of Registration	
Registered as:	☐ Sole Proprietorship ☐ Partnership Private Limited (non-exempt limited by shares) ☐ Public Limited (limited by shares) ☐ Others (Please specify):
Company Profile and Background	

2. Major Products/ Services & Principal Clients

Products/Services	Principal Clients

I hereby declare that the information provided are true and correct.

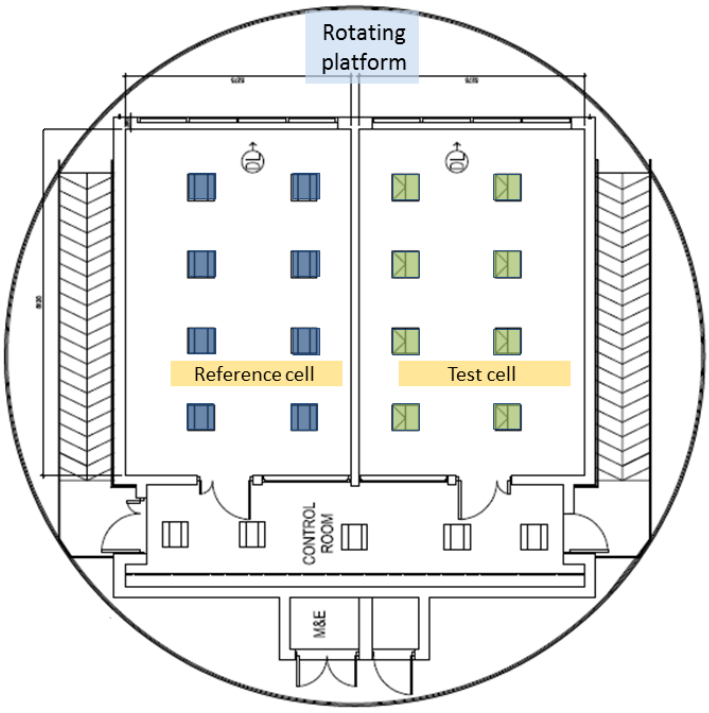
_____

Signature of Applicant's Representative

_____ _____

Name & Designation Contact No.

Appendix A



Specifications of SkyLab:

Area of SkyLab	132 m^2
Area of each test cell	40m^2 with 3.46m ceiling height
Sensors Available	Global & Diffuse Irradiance Incident Solar Radiation Outdoor metrological station Surface Temperature Illuminance Sensor Heat Flux Sensor Interior Mean Radiant Temperature Dry Bulb Temperature Relative Humidity Stratification Temperature Sensor CO_2 Sensor Chilled water flow and temperature sensors Extensive energy meters
Services covered	ACMV Lightings PV Façade Comparative study