

LEED Green Associate

Activity #2 – Integrative Process (IP)

Before completing this Activity Read GA09 Integrative Process – Pgs. 9-11

Note the following abbreviations are used in this activity:

- NC LEED BD+C: New Construction and Major Renovation
- CS LEED BD+C: Core and Shell Development
- S LEED BD+C: Schools
- R LEED BD+C: Retail
- DC LEED BD+C: Data Centers
- WDC LEED BD+C: Warehouses and Distribution Centers
- HOS LEED BD+C: Hospitality
- HC LEED BD+C: Healthcare

Although the LEED BD+C reference guide does not number the LEED prerequisites and credits, for this exercise they have been numbered in the order presented in each credit category.

Integrative Process (IP)

Fill-In, Multiple Choice, Matching

- Test your knowledge of how well you know the names of the prerequisites and credits for the Integrative Process credit category:

P / C	Name
P1	Integrative Project Planning and Design
C1	Integrative Process

- Match the intent to the prerequisite or credit:

Prerequisite/Credit	ANS
IP – P1	B
IP – C1	A

	INTENT
A	To support high-performance, cost-effective project outcomes through an early analysis of the interrelationships among systems.
B	Maximize opportunities for integrated, cost-effective adoption of green design and construction strategies, emphasizing human health as a fundamental evaluative criterion for building design, construction and operational strategies. Utilize innovative approaches and techniques for green design and construction.

- The Integrative Project Planning and Design prerequisite requires that all projects use cross-discipline design and decision making, beginning in the healthcare and pre-design phase. programming

- List the process that at a minimum the project team must ensure that they follow:

- Owner's Project Requirements Document
- Preliminary Rating Goals
- Integrated Project team
- Design charrette

5. What must be incorporated into the Owner's Project Requirements?

Health mission statement

6. What must the health mission statement address?

"triple bottom line" values - economic, environmental, and social. Include goals and strategies to safeguard the health of building occupants, the local community and the global environment, while creating a high-performance healing environment for the building's patients, caregivers and staff.

7. As early as practical and preferably before Schematic design, conduct a preliminary LEED meeting with a minimum of four key project team members and the owner or owner's representative.

8. List what the LEED action plan should include, at a minimum:

1. LEED certification level
2. LEED credits to pursue
3. Responsible parties to ensure LEED requirements are met

9. The integrative project team should include a minimum of four professionals in addition to the owner or owner's representative.

10. What is the goal of the design charrette?

Optimize the integration of green strategies across all aspects of building design, construction and operations, drawing on the expertise of all participants.

11. Complete the following:

Abbreviation Name

OPR Owner's Project Requirements

BOD Basis of Design

12. List the systems that projects must perform an analyses for the IP Credit Integrative Process:

1. Energy-Related
2. Water-Related

13. List the preliminary analysis projects must complete before the completion of schematic sign:

1. simple box energy modeling
2. water budget

14. In an integrative process the team members collaborate to enhance the efficiency and effectiveness of every system.

15. What EPA tool can projects use to benchmark energy performance for the project's type, scope, occupancy, and location?

16. List the Energy-Related potential strategies that projects can access from the preliminary "simple-box" energy modeling analysis:

1. Site Conditions
2. Massing and Orientation
3. Basic envelope attributes
4. Lighting levels
5. Plug and Process load needs
6. Programmatic and operational parameters

17. List the potential water supply sources and water demand volumes projects must assess and estimate:

1. indoor water demand
2. outdoor water demand
3. Process water demand
4. Supply Sources

18. List examples of process water demand:

1. Kitchen
2. laundry
3. cooling tower

19. List examples of nonpotable water supply sources:

1. rainwater
2. graywater
3. municipally supplied nonpotable water
4. HVAC equipment condensate

20. List the systems that the preliminary water budget analysis can be used for by the project to demonstrate how the analysis informed the design of the project, as applicable:

1. plumbing systems
2. Sewage conveyance and/or on-site treatment systems
3. rainwater quantity and quality management systems
4. landscaping, irrigation, and site elements
5. roofing systems and/or building form and geometry
6. other systems