



AIA|DC VIRTUAL BOOKCLUB



Refabricating Architecture: How Manufacturing Methodologies Are Poised to Transform Building Construction. Stephen Kieran and James Timberlake (New York: McGraw-Hill Companies, 2004)

Please fill out the test below, adding paper if you need to, and return it to the Washington AIA 1777 Church Street, NW Washington DC 20036. (FAX: 202-667-4327) All tests must include your AIA number and your signature or they will be returned. We will not grade the test if you have not paid your \$10 processing fee. You will be notified by e-mail when your test has been graded and your learning units logged. If you have discussed the book as a group – please take the test on your own. Identical answers will disqualify the whole lot of you.

The questions listed below are weighted differently. Some are there just to make sure you actually cracked the spine of the book. Others require you to think and respond using the knowledge you've gained from the book. Passing grade is 70 percent.

1. What is a process engineer?
2. Describe the difference between mass production and mass customization.
3. Explain why gravity has influenced the construction of buildings.
4. Why are “chunks” so important in modifying construction methods?
5. Why do the authors believe that if construction methods are not modified this will “increase the irrelevance of architects?”
6. Why do the authors believe architects should pay more attention to materials science?
7. What is the authors’ opinion of Sweets? Explain.

8. What do the authors think of the standard AIS owner/architect organizational chart?

9. Why is the process of design chaotic?

10. Why should the process of construction be more like quilting?

11. What, in the opinion of the authors, is the difference between representation and modeling?

12. Explain the “1-3-8” rule.

13. Explain Smart Modules.

14. Why is it better to have a smaller number of pieces that are assembled on site?

15. Conventional materials use a large amount of material for little strength. More modern materials use a smaller amount of material for greater strength. Explain the weight difference in the original vs. the more recent model of the Farnsworth House.

16. How do the authors believe the construction process might be improved for construction workers?

17. What is the difference in the percentage of building systems between the beginning of the 20th and the beginning of the 21st Centuries?

18. Why is Dell an exemplar of new construction methods?

19. Why is information science so important to transform production?

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