

**Homework 3:****Sections Through Envelope in General****Question to Answer:****Become aware of materials incorporated into contemporary building envelopes**

- 1 Study the following documents on the website:

Design-Strategies-for Moisture-Control.pdf

making-air-barriers-that-work.pdf

Understanding-Vapor-Barriers.pdf

[http://www.mass.gov/?pageID=eopsterminal&L=4&L0=Home&L1=Consumer+Protection+%26+Business+Licensing&L2=License+Type+by+Business+Area&L3=Construction+Supervisor+License&sid=Eeops&b=terminalcontent&f=dps\\_inf\\_bbrs\\_sample\\_detail&csid=Eeops](http://www.mass.gov/?pageID=eopsterminal&L=4&L0=Home&L1=Consumer+Protection+%26+Business+Licensing&L2=License+Type+by+Business+Area&L3=Construction+Supervisor+License&sid=Eeops&b=terminalcontent&f=dps_inf_bbrs_sample_detail&csid=Eeops)

<http://www.marazzi.it/en/marazzi-engineering/ventilated-walls/functionality-and-benefits>

- 2 Explain your strategy for moisture control for your ventilated screen wall facing the Street.
- 3 Continuing the ideas from your in-class work, describe what changes, if any, you would make to your wall section if the building were located in a) Mobile, Alabama and b) Santa Fe, New Mexico

**Drawing Work****Become familiar with the design by drawing it,****Create and draw the configuration and sizes of a structural concept**

Building on the ideas developed during class and answering the questions, illustrate your detailed strategy for the building envelope by designing a building cross section: scale: 1/2" = 1'-0"

Section location is indicated on the design problem sketches.

Use cuts as needed to fit all the element of the drawing onto the sheet.

**Criteria for marking this homework:****General Criteria**

Homework will be marked from '4' to '0.'

Answers to questions count as 1/3 of the mark for the homework

Drawings designed count as 2/3 of the mark for the homework

**Criteria for Answers to questions**

General: The response to this question is written, criteria are based on recommendations from

'Understanding by Design,' page 175

Requirements for a mark of '4' - "A clear, well developed [explanation] that deals in a sophisticated fashion with [key] components of the question.

Requirements for a mark of '3' - "Clear, developed [explanation] that deals with [key [components of the question]]."

Requirements for a mark of '2' - General [explanation] responding to all components superficially."

Requirements for a mark of '0' - "Little or no analysis."

**Criteria for quality of drawings**

General:

Drawings are evaluated in terms of completeness, accuracy, and legibility

Specific Criteria

Requirements for a mark of '4' -

Work product capable of being incorporated into a project using building information management.

Requirements for a mark of '3' -

Work product could be submitted to a plans examiner. Criteria are as described by Liebling (Wiley, publisher) and in material provided in class web site.

Requirements for a mark of '2' -

Work product could be used to present an idea to a job captain

Requirements for a mark of '0' - Minimal drawing