



**ARCH 2431 BUILDING TECH III**

**FACADE CASE STUDY ASSIGNMENT 03**

**Facade case study**

*This assignment is a detailed research based case study of two building facades. One façade must be a curtain wall and the second must be of another material (precast, stone panels, steel panel, etc.) Masonry building facades are not allowed. The two systems selected may be part of a single building or from two separate buildings. The focus here is not on the entire building but on the façade alone.*

*When looking at the façade you should focus on 6 primary questions.*

- *How does it function structurally?*
- *How does it function thermally?*
- *What is the waterproofing strategy?*
- *How is it fireproofed?*
- *How does it allow for movement? (expansion and contraction) & (assembly adjustment)*
- *What was the order of assembly?*

*To answer these questions you will have to understand the buildings structural elements and look at how the facade is connected to the building. The first part of the assignment is to present your research and the second part is to model the two facades in 3D using Revit. You will be producing two detailed studies – each on several sheets.*

**Selecting a Project:**

*The façade studies need to meet the following criteria:*

- *Located in NYC (one of the five boroughs) so that you can visit it often*
- *Public access is helpful but not required as you will be focusing on the façade.*
- *Multistory (4 or more floors)*
- *Large public lobby/atrium with a double height space – typically this is for the curtain wall study.*

**Coordinated Views:**

- *Detail studies will consist of multiple sets of three or more coordinated views as well as an isometrics with annotations and dimensions.*

**Case studies drawing set:** *at a minimum the drawing set should include:*

- *Cover sheet – with 3D images and a drawings list. This should include a 3D model of the building showing the façade.*
- *Architectural Floor plans – (entry level) – can include just the exterior façade and main structural elements. Wall section studies must be keyed on the plans.*
- *Wall Sections and Detail Studies – produce case study detail studies of chosen building.*

**Research:**

*The most critical part of the case study assignment is to conduct thorough research and then to embody this research in the drawings you produce. To identify your chosen façade types you must also identify and research manufacturers' websites for resource materials.*

**The Team & the Individual:**

*This is an individual assignment – however presentations will be grouped by façade type so that students who are presenting similar facades will be assigned to present on the same days.*

**Reviews:**

*There will be a series of graded reviews throughout the semester that will contribute to a cumulative grade.*

**Grading:**

*\*\*Case study research and presentation projects represent 40% of your semester grade.*