# Autodesk® Revit® Architecture for 2D and 3D Building Enclosure Detailing

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Sr. Manager, Digital Design  SOM

# Class Summary

In this class we will review the concepts, processes, and tools
in Revit 2013 to efficiently design and document building enclosures.

Details from large-scale projects will be used to illustrate the concepts.

Topics will include:

   2D drafting in overlay & drafting views

   Team, model, & detail "kit of parts" organization strategies

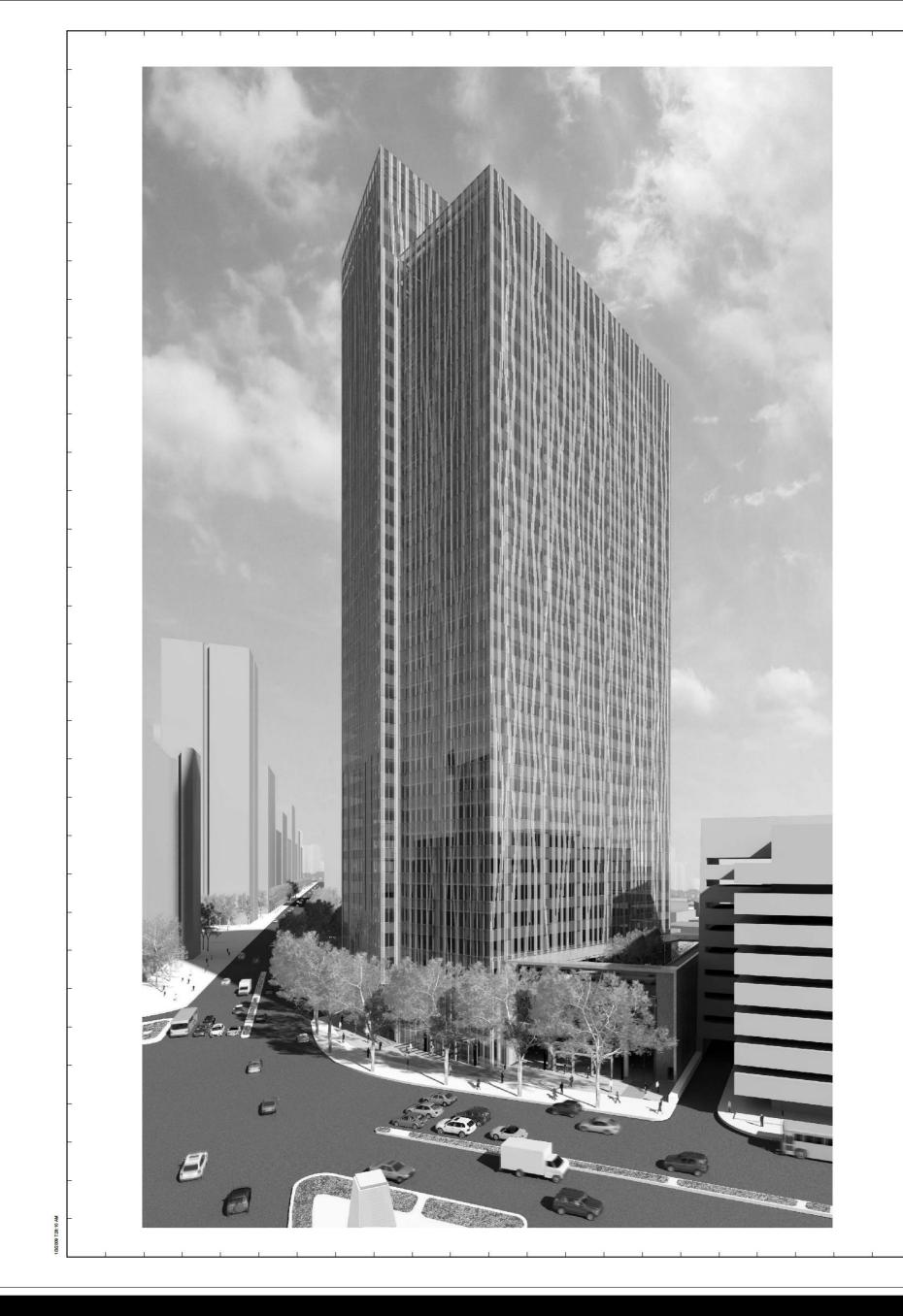   Embedding 2D details in curtain wall panels

# Learning Objectives

At the end of this class, you will be able to:


- Where to find knowledge resources for detailing in Revit
- Plan your transition from CAD drafting to Revit 2D & 3D Detailing
- Describe & use Revit's detailing tools
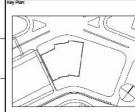- Create details directly from within Revit

# ZUELLIG BUILDING
## MAKATI CITY, PHILIPPINES

100% DESIGN DEVELOPMENT

January 02, 2009

**ZUELLIG BUILDING**
MAKATI CITY, MANILA

Owner:
**BRIDGEBURY CORPORATION**
Zuellig Building
Sen. Gil J Puyat Avenue
Makati City, Metro Manila Philippines

Architect:
**SOM**
Skidmore, Owings & Merrill LLP
14 Wall Street
New York, NY 10005

Project Architect
**W. V. COSCOLLUELA & ASSOCIATES**
107 Perea Street
Legaspi Village
Makati City, Metro Manila, Philippines
1200

Construction Project Manager
**DESIGN COORDINATES, Inc.**
Suite 202, ITC Building
337 Sen. Gil J Puyat Avenue
Makati City, Metro Manila Philippines

Structural, MEP and Fire Protection Engineer
**MEINHARDT PHILIPINES**
25th Floor Chatham House
116 Valero Cor. V. A. Rufino Streets
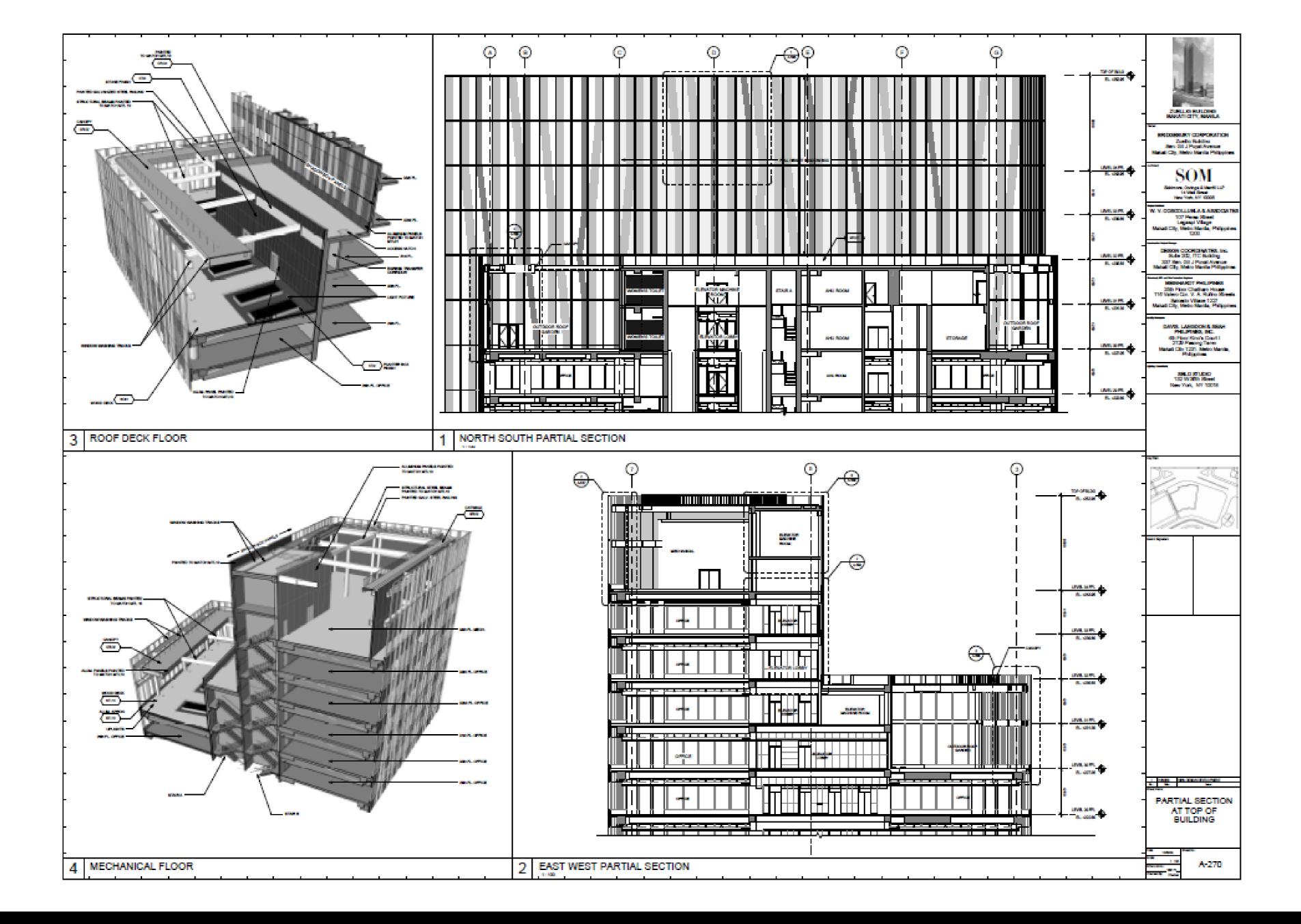Salcedo Village 1227
Makati City, Metro Manila, Philippines

Quantity Surveyors
**DAVIS, LANGDON & SEAH
PHILIPINES, INC.**
4th Floor King's Court I
2129 Pasong Tamo
Makati City 1231, Metro Manila,
Philippines

Lighting Consultants
**SBLD STUDIO**
132 W 36th Street
New York, NY 10018

Key Plan:

Seal & Signature:

| No. | Date | Issue: |
|---|---|---|
| 5 | 01/02/09 | 100% DESIGN DEVELOPMENT |
| 4 | 11/17/08 | 90% DESIGN DEVELOPMENT |
| 3 | 10/29/08 | 50% DESIGN DEVELOPMENT |
| 2 | 09/23/08 | 100% SCHEMATIC DESIGN |
| 1 | 09/01/08 | 90% SCHEMATIC DESIGN |

Sheet Name:
TITLE SHEET

Date: 12/31/08
Scale:
SOM Job No.: 2009172
Checked By: Checker

Sheet No.
**G-001**

**3** ROOF DECK FLOOR



**1** NORTH SOUTH PARTIAL SECTION



**4** MECHANICAL FLOOR



**2** EAST WEST PARTIAL SECTION

# Who's Detailing in Revit?

# Raise your hand if you are:

An Architect or Interior Designer

# Raise your hand if you are:

An Engineer

**Raise your hand if you are:**

BIM, CAD, or Digital Design Manager?

# Raise your hand if you are:

New to using Revit?

**Raise your hand if you are:**

Who's using Revit to model and create plans, elevations, and sections…

but not to detail?

# Where To Find Additional Resources
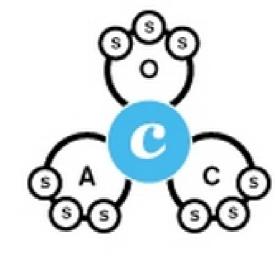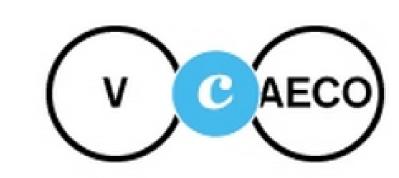
case-inc.com

# The Aubin Academy Master Series: Revit Architecture 2013 and Beyond
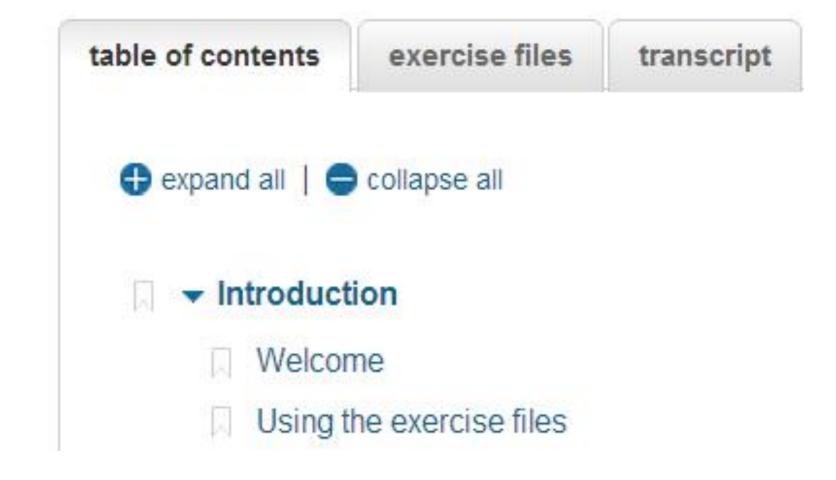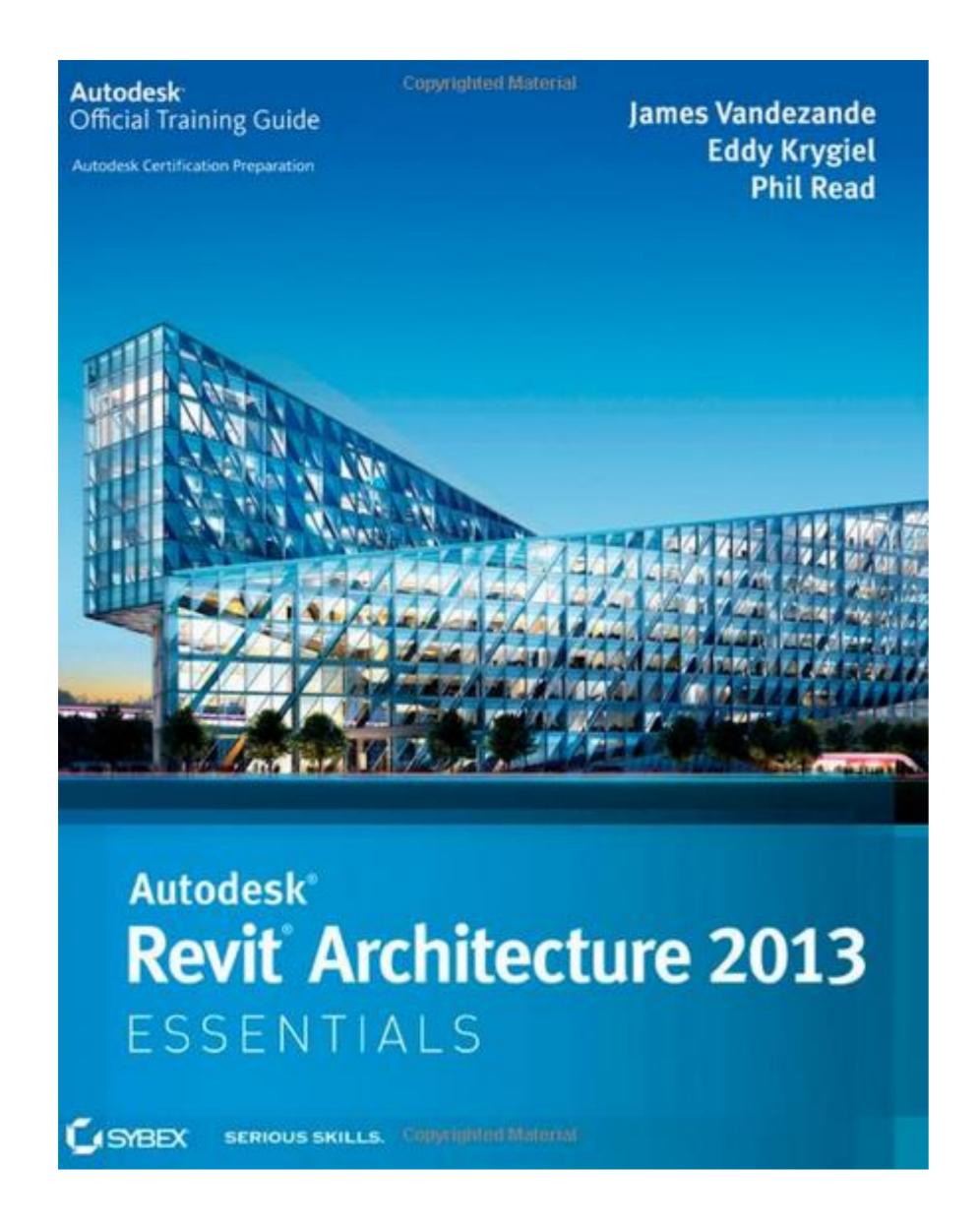
# www.lynda.com
# Paul F. Aubin

TERRASSE ETAGE 09
/ TERRACE LEVEL 09

TOIT VERT ET TERRASSES
/ GREEN ROOF AND TERRACES

TERRASSE ETAGE 06-07
/ TERRACE LEVEL 06-07

FACADE RIDEAU
/ CURTAIN WALL

NOYAU 3 - ESCALIERS 4 & 8
/ CORE 3 - STAIRS 4 & 8

NOYAU 2 - ESCALIERS 5 & 9
/ CORE 2 - STAIRS 5 & 9

DALLES ET NOYAUX
/ SLABS AND CORES

NOYAU 4 - ESCALIERS 6 & 10
/ CORE 4 - STAIRS 6 & 10

NOYAU 1 - ESCALIERS 1, 2 & 7
/ CORE 1 - STAIRS 1, 2 & 7

AMENAGEMENTS EXTERIEURS
/ LANDSCAPE

RAMPES DE PARKING
/ CAR PARK RAMPS

OEUVRE D'ART DE LA COUR
/ COURTYARD ARTWORK

ENTREE PRINCIPALE
/ MAIN ENTRANCE

A10 | DESSIN ECLATE / STACKING DIAGRAM
NTS

H EHRHDSFHK HIHDFJHSKDF
DHASDN A DJ AD FKJ4EUR KJ A DF
ENYIHNKN UYUEU UYEBLL3
ET DUTIH HUJDHP DII TIHH YDYUI8
OKH WSS YIE DKJIUT ODJ YYY
RO5JF DHE LKJLT RF ET
23 DJFE D DJFD EE DKUEYL

70 MIN.
55 MIN.

PT01

PT01

254

EQ

2134

EQ

254

965 UNO

150

THERMOSTAT/ TEMPERATURE SENSOR

CARD READER

SWITCH

455

1065

1370

OUTLETS

CALL BUTTON

1065

MTL11

1140

FLOOR IDENTIFICATION (ADA)

1524

2120

1676

SPEAKER/ STROBE

PULL STATION

FIRE WARDEN STATION

2032

1065

1065 UNO

TYPICAL DOOR

ELEVATOR DOOR

HOSE CABINET

FIRE EXTINGUISHER CABINET

FIRE ALARM PULL STATION

REAR WALL OF STALL

SIDE WALL OF STALL

455

1065    305

170    915

TA04

1751

838

ADA

2395

MTL15

305

TA01

1520

TA02

TA03

1220

430

610

915

WATER CLOSET

URINAL

GRAB BARS

GRAB BARS

TOILET PARTITIONS

PAPER TOWEL DISPENSER AND DISPOSAL UNIT

TOILET SEAT COVER & DUAL ROLL TOILET PAPER DISPENSER UNIT

TOILET SEAT COVER, SANITARY NAPKIN & DUAL ROLL TOILET PAPER DISPENSER UNIT

5    TYPICAL MOUNTING HEIGHTS

1 : 50

# Detailing Revit Overview

Detailing in Revit is similar to detailing in traditional drafting

In Revit, you base your detail on data that are automatically generated in the views of the model.

# Revit's Detailing Tools

## The Primary Tools Used in Revit Detailing:

–Detail Lines      –Detail Components      –Detail Groups

–Filled Regions      –Repeating Details

# Revit's Detailing Tools (part 2)

- **The "Other" Tools Needed to Complete a Detail:**

  – Text                –Line Work
  – Dimensions          –Show/Remove Hidden Line
  – Move                –Spell Check
  – Copy                –Edit Cut Profile
  – Array               –Split
  – Rotate              –Offset
  – Mirror              –Scale
  – Align               –Pin
  – Trim                –Create Similar
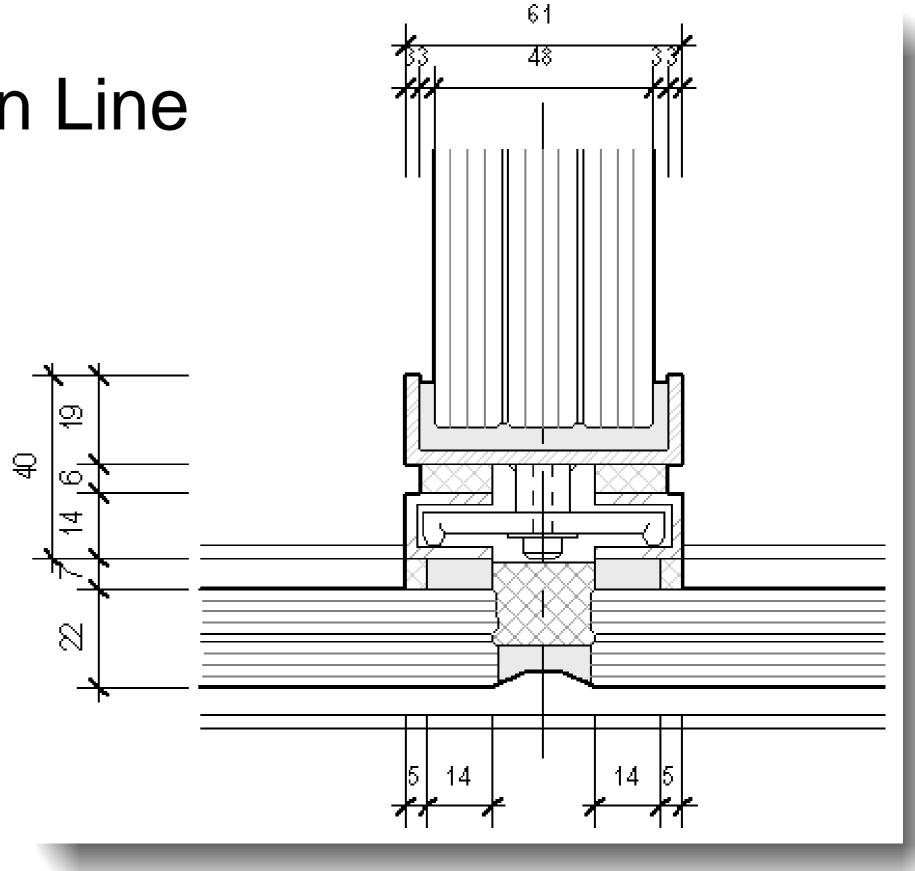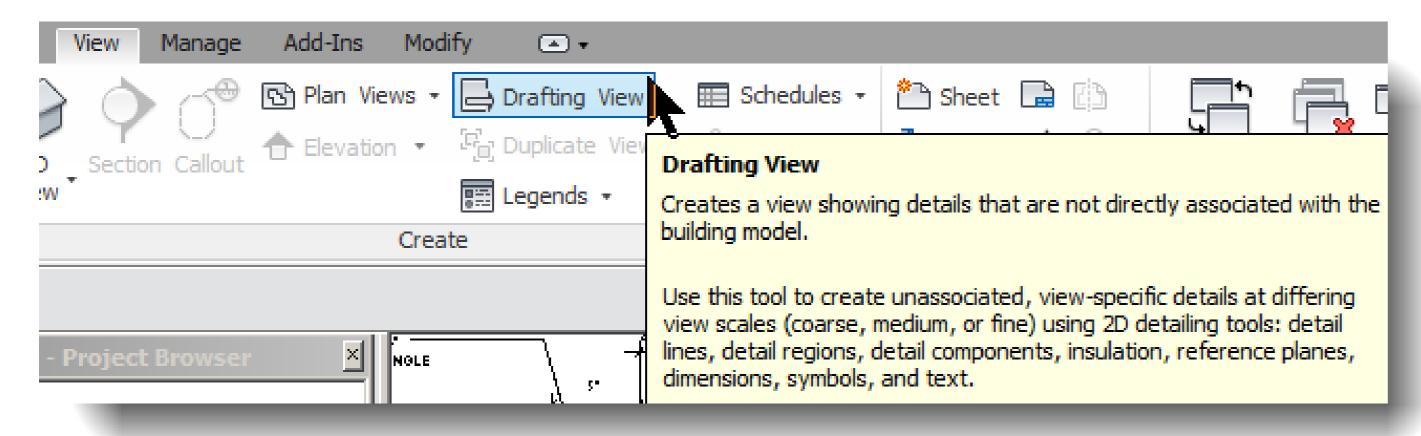
# Revit's Detailing Tools (part 3)

- **Detailing Views:**
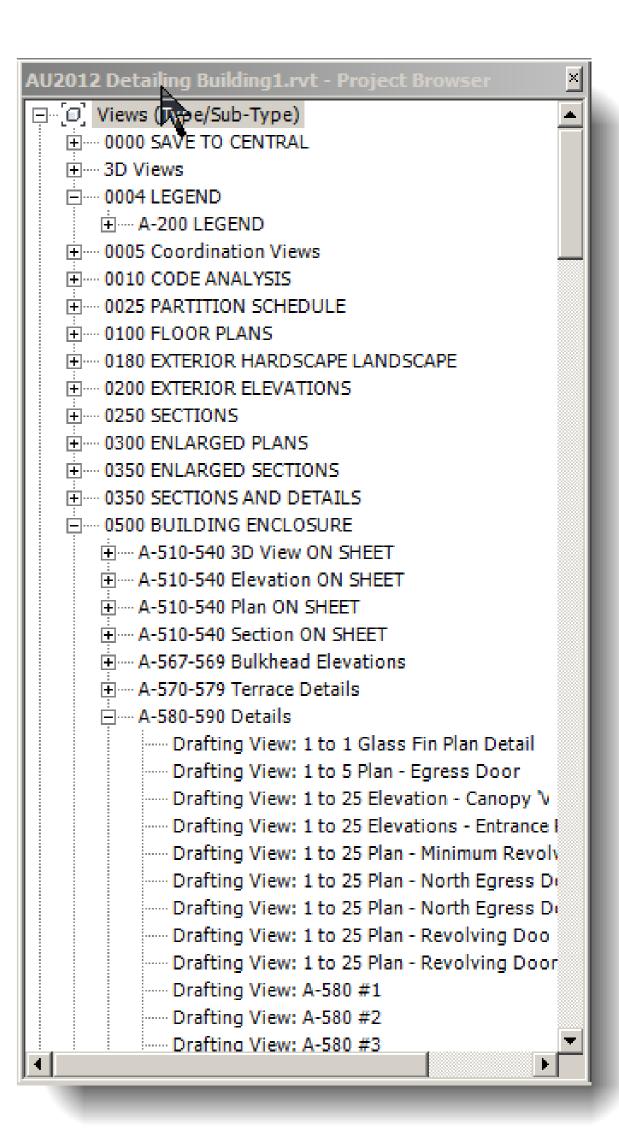
  - Plans
  - Elevations
  - Sections
  - Callouts
  - Drafting Views

- **Imported & Linked Details**

  - Vector (DWG, DXF, DGN)
  - Raster (JPG, BMP, PNG)

SECTION

BVA WALL PROFILES

PLAN

3 (WALL THICKNESS EXCEPT WHERE INDICATED OTHERWISE)

TYPICAL

REV  26 JAN 10

SOM  20 JAN 10

# Let's Fire Up Revit and do some Detailing...
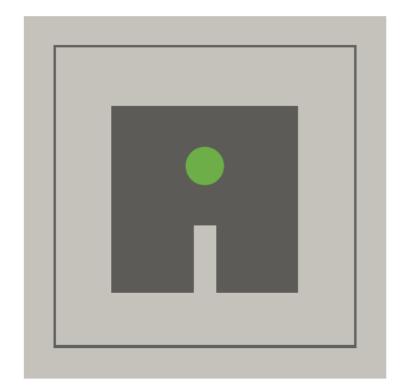
# What We Covered…

- Where to find knowledge resources for detailing in Revit
- Plan your transition from CAD drafting to Revit 2D & 3D Detailing
- Revit's tools used for detailing
- Create details directly from within Revit

# Questions?

## robert.mencarini@som.com

# an SOM / *case* social networking initiative



**AEC-APPS**.com
a not-for-profit online community by and for professionals, academics & students

## user collect
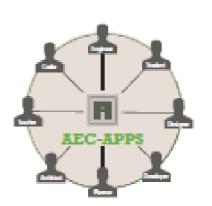The user profile is how others see you on AEC-APPS and how you follow other user activity.

## app discover
The App Profile is a snapshot of an enterprise application, applet, plugin, script, or code snippet rated and reviewed by other users.

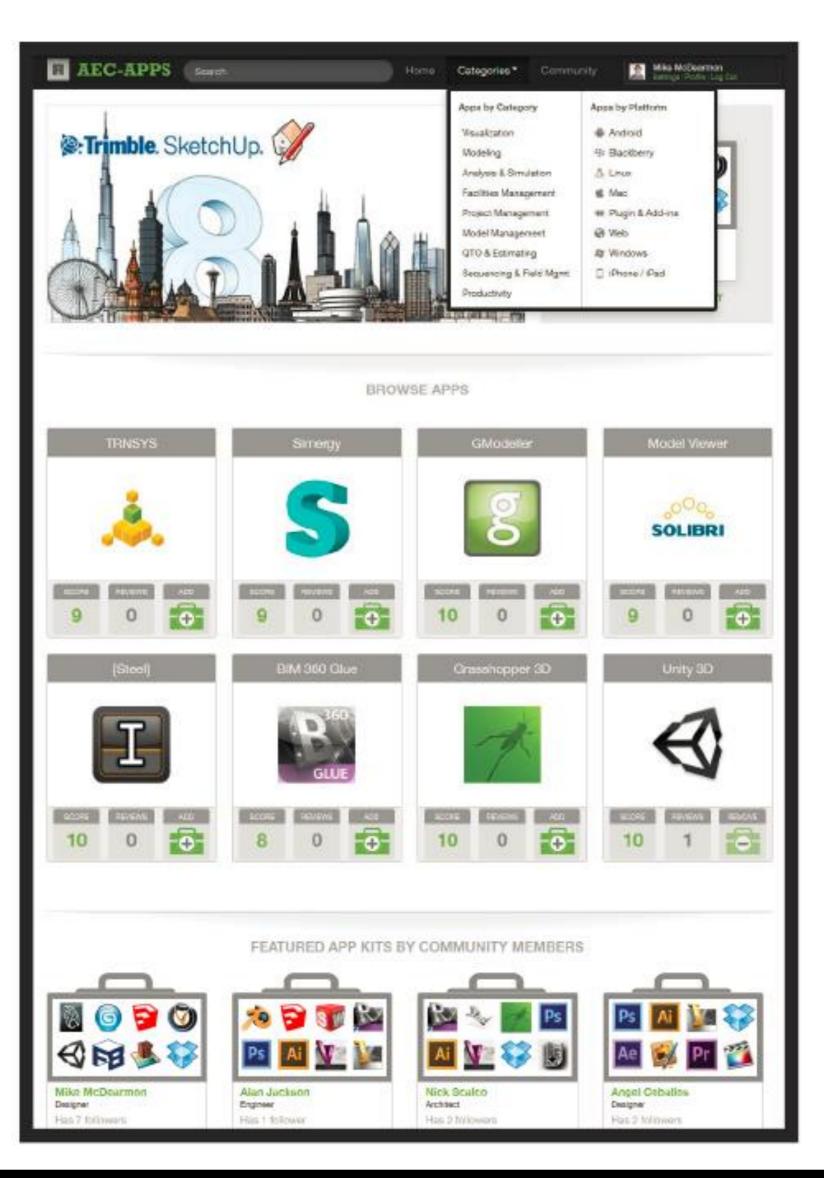## app kit share
Apps are collected and shared via a user's App Kit.

## aec apps community
An egalitarian dialogue between diverse but like-minded users.

# Thanks!

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