



Placing Rebar

Theory:

Clearance

Sizes

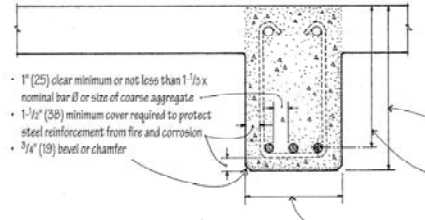
Wall to floor connections

Beam to floor connections

Lab [Computer Topics]:

- a. Wall to floor connections
- b. Beam to floor connections

Rules of Thumb



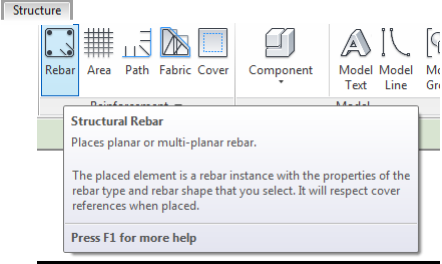
- 1" min clear between unattached bar
- 1.5" min. cover to edge
- Rebar extends down and into beam column or wall for structural continuity

Top bars are for tension, but are not always necessary.

ARCH 2430

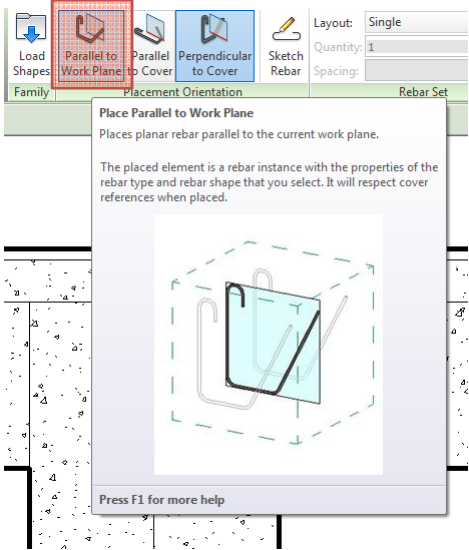
Prepared by: Alexander Aptekar Ed. Barbara Mohara © 2012

- First we will place 2 sections through our model:
 - One at a beam to floor connection, the other to a wall to floor connection.
- Then we turn on fine detail and set the scale to $1\frac{1}{2}'' = 1'-0''$



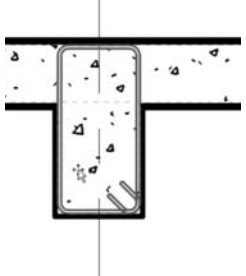
Placing Rebar

- Go to the structural tab, then to Rebar



Placing Rebar

- There are three ways to place rebar:
 - Parallel to work plane** (place in same plane as the section)
 - Parallel to cover** (place perpendicular to plane as the section and parallel to nearest edge)
 - Perpendicular to cover** (place perpendicular to plane as the section and parallel to nearest edge)



Placing Rebar

- There are three ways to place rebar:
 - **Parallel to work plane** (place in same plane as the section)
 - **Parallel to cover** (place perpendicular to plane as the section and parallel to nearest edge)
 - **Perpendicular to cover** (place perpendicular to plane as the section and parallel to nearest edge)

Placing Rebar

- There are three ways to place rebar:
 - **Parallel to work plane** (place in same plane as the section)
 - **Parallel to cover** (place perpendicular to plane as the section and parallel to nearest edge)
 - **Perpendicular to cover** (place perpendicular to plane as the section and parallel to nearest edge)

Place Perpendicular to Work Plane and Perpendicular to Nearest Cover Reference
Places planar rebar perpendicular to the work plane and perpendicular to the nearest cover reference.

The placed element is a rebar instance with the properties of the rebar type and rebar shape that you select. It will respect cover references when placed.

Press F1 for more help

Placing Rebar

- You can place a single element or multiple by selecting different option next to layout.
 - Using a set number or a maximum amount of space in between, following suggested guidelines.

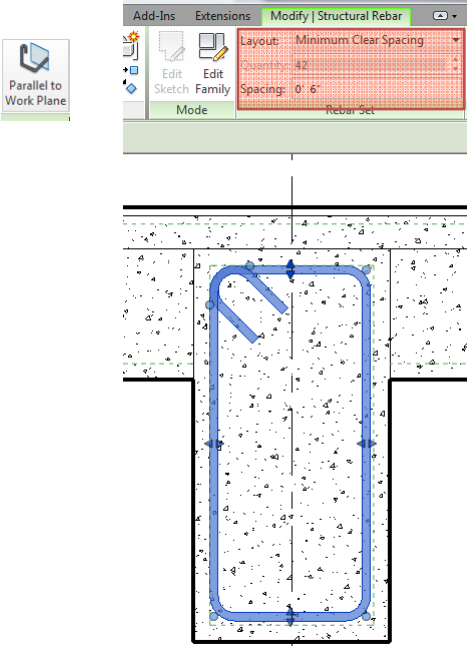
1

2

Placing Rebar

Beam to Floor Connection

- lets load in all of the rebar shapes, from the structural rebar folder.
- click on ... to close or open shape browser

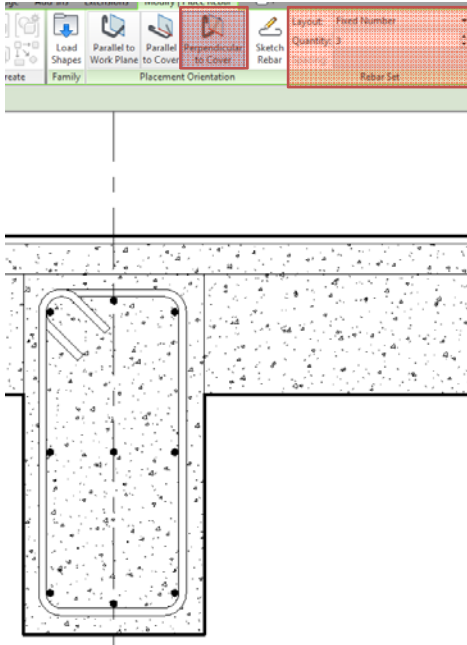


Placing Rebar
Beam to Floor Connection

We can place shape T1 from the shape browser; using parallel to work plane button

lets place the bars with a minimum clear spacing of 6" on the layout panel

we can adjust the bars using the triangular buttons, if necessary.



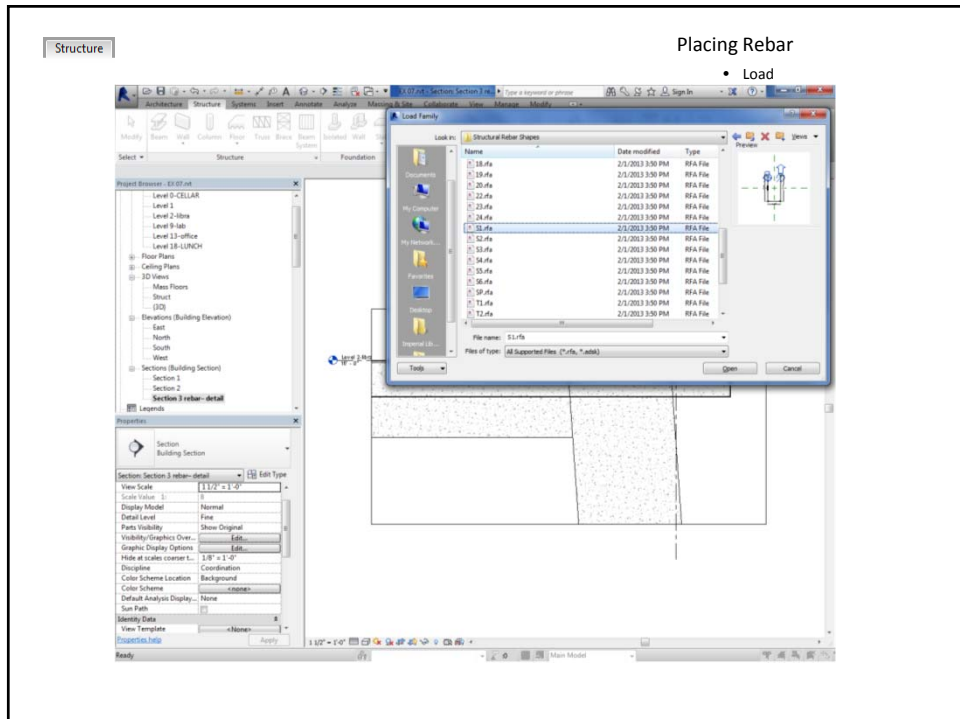
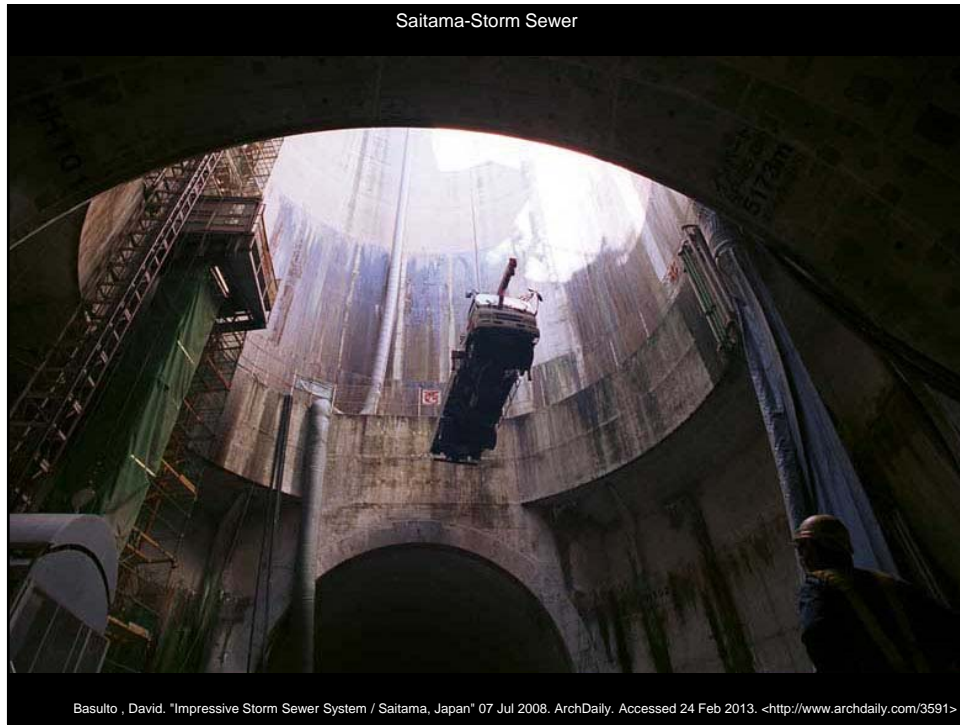
Placing Rebar
Beam to Floor Connection

Finally we can place a fixed number of 3 shape 00 bars perpendicular to section and along the edge of beam.

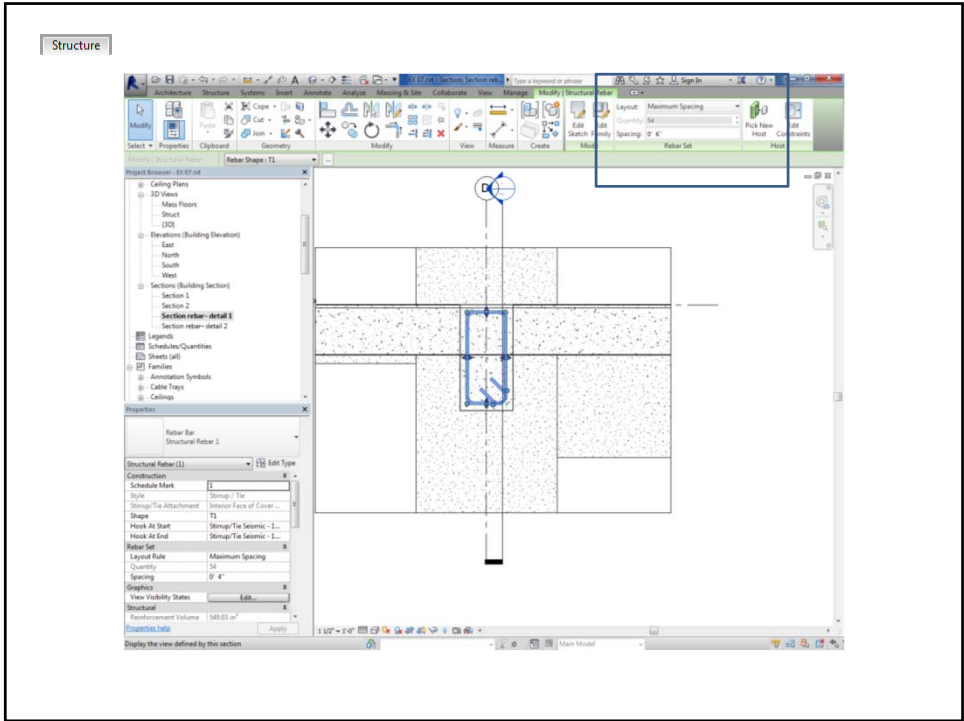
using the perpendicular to cover button.

adjust as necessary.

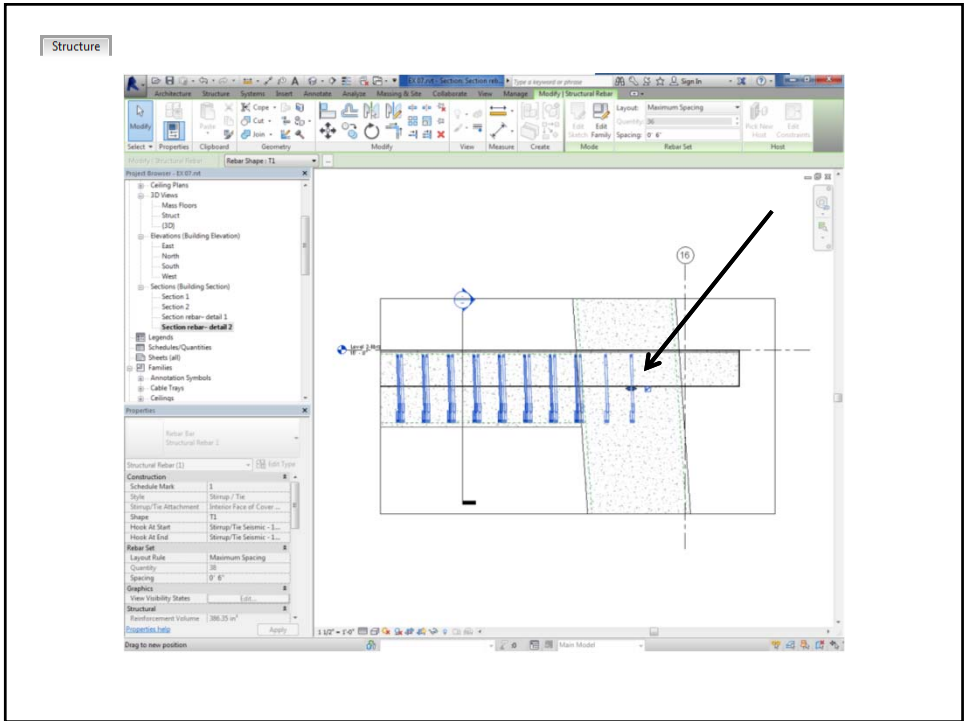
Add more bars and repeat as necessary on the wall to floor detail.



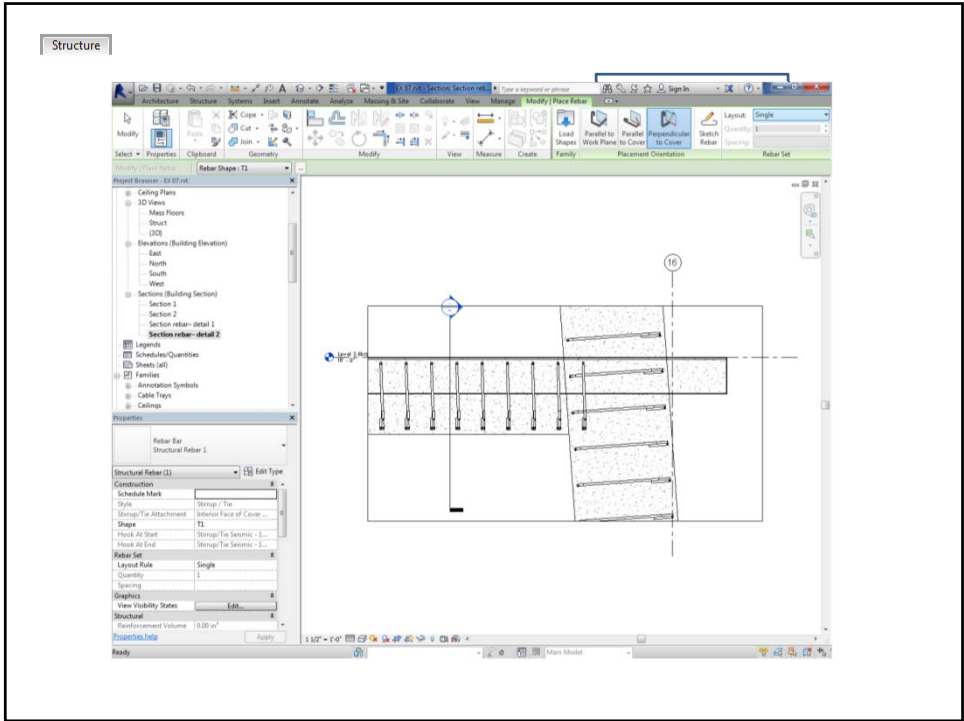
Structure



Structure



Structure



Structure

