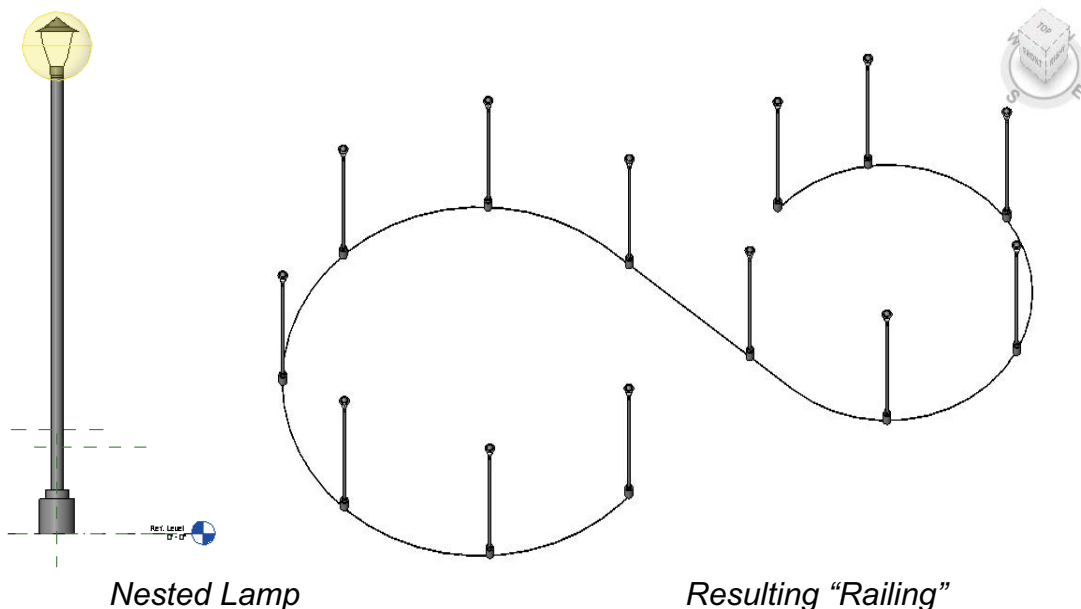


Railings as Repetitive System

It's unfortunate that Revit doesn't yet allow components to be quickly and easily distributed along a user-defined path. There are "line" based families – but these don't work in curved conditions. In the meantime, you can use the railing tool to distribute elements along paths that are straight, curved or both within the same sketch. This is really helpful when you're trying to accurately distribute components!

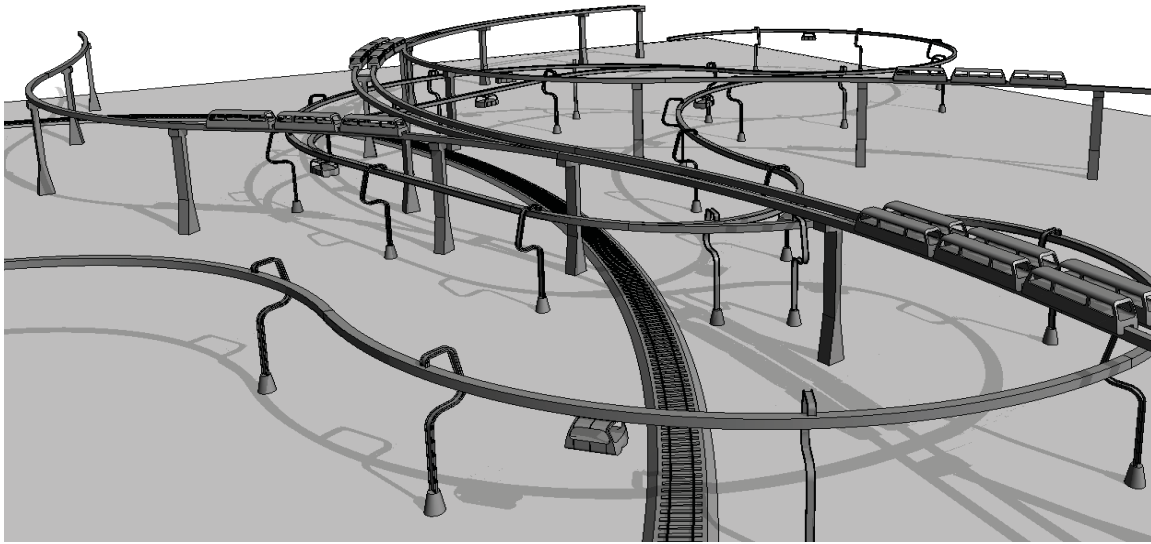
Couple of Rules:

1. Nest the desired component family in Baluster Post family
2. FYI - Don't expect it to schedule or tag. Don't "Share" parameters of nested Family in an attempt to schedule. It won't schedule. It'll break.
3. Railings **don't** have to contain handrail profiles! It's easy:
 - a. Set the Top of the railing to **Host**
 - b. Give the baluster a positive Top Offset value
 - c. Delete the railing profile. This hosts the baluster by the "Host" rather than the railing profile. Picking any of the "balusters" will allow you to edit the sketch.



Uses – Any repetitive elements that must be placed on center and evenly distributed along a path:

- Outdoor Lighting
- Outdoor Planting
- Pipe Bollards
- Light Rail Sections



Transportation Systems

Railing as Repetitive Component

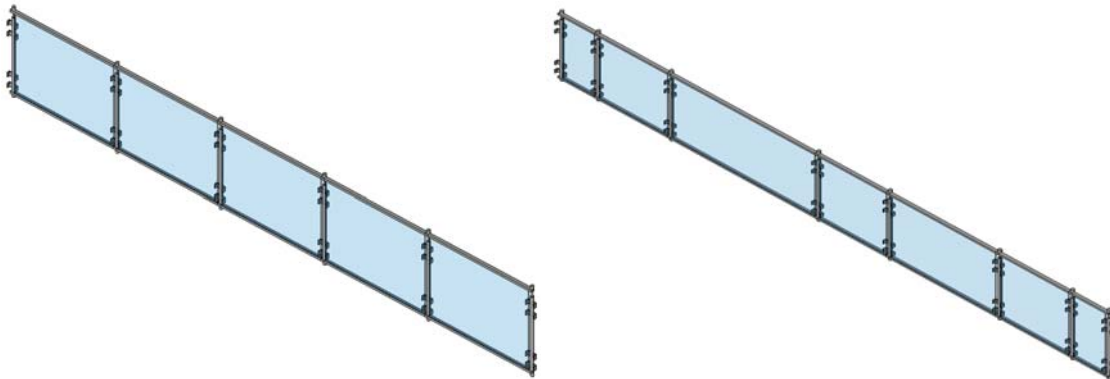
Creating small and highly repetitive railing systems and then Grouping and Copying takes *considerably* longer to update than modeling a railing-shaped Family Component and copying the family throughout a project.

For example, hotel balconies contain small railing segments. And a modest project of this type can contain hundreds of railing segments (one for each room's balcony). But the benefits of updating a Family Component compared to a Group is significant:

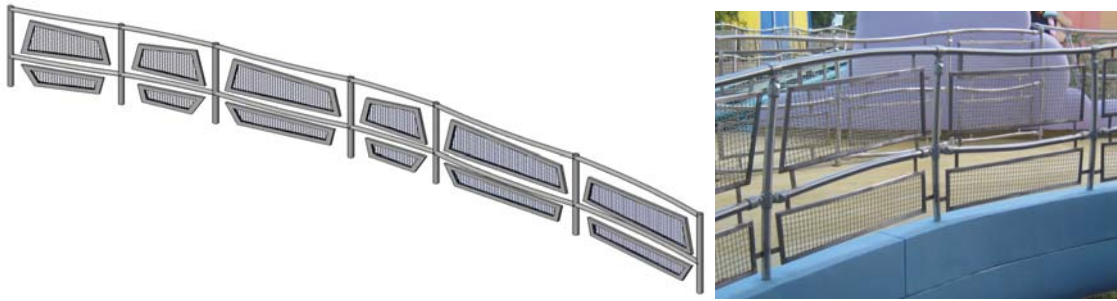
- Reload 1000 Families: **<5 seconds**
- Update 1000 Groups: **>5 minutes**

Railing as Walls and Curtain Walls – Advantages

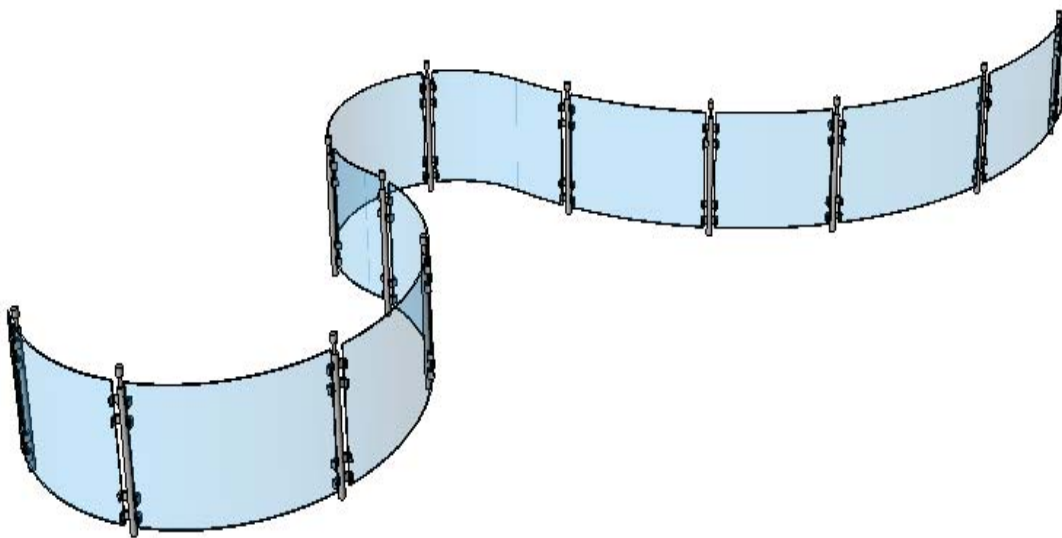
- Arbitrarily Placed / Relocated Balusters
- Arbitrarily Curved Panels
- New grids may be added, unpinned and easily exchanged when adding or modifying panels



Curtain Wall as Railing – Additional Panels Placed and Unlocked



*“Seuss Railing” – The Curved Handrails are **not** part of the sketch. Note the 3D pattern file applied to the panels to simulate wire mesh*



Wall as Railing – The wall is being intersected by a wall hosted “baluster” that “splits” the glazing on placement of the baluster creating individual “panels”

Overall

- Using Curtain Panels as a process for making chain link fences is really great and in many cases is superior to the OOTB railing tool. Be sure to modify the panel with a 3D model pattern file.
- Ability to “unpin” and modify the baluster and panel location and sizes *graphically* a fantastic advantage of using this process. Otherwise, you have to go back and forth between a spreadsheet-like dialogs with little indication of the results until you finish. And often making it work in one condition – only to discover the rule ‘breaks’ somewhere else.
- Being able to contain space is another significant advantage of using walls and curtain walls as a railing. Otherwise you need to draw (and manually coordinate) Room Separation lines concurrent with railing locations.