# **Exterior Wall (GROS)**

Plines are drawn on the **GROS** layer to represent the **Exterior Face** of the exterior wall and the predominant **Interior Face** of the exterior wall.



When these are linked to the Archibus database, the plines are changed to the GROS\$ layer.

### **Interior Spaces (RM)**

Plines are drawn on the RM layer to represent all spaces within the interior GROS\$ pline. When these are linked to the Archibus database, the plines are changed to the RM\$ layer. The interior GROS\$ pline will be the outermost boundary for the spaces that are along the exterior of the floorplan.



The above illustrates that the RM pline abuts the interior GROS\$ pline and is drawn to the interior face of all interior walls (no wall area is captured with the RM plines).

## **Cubicles / Workstations (RM)**

Plines representing cubicles / workstations will include the outside panels and will equally share the interior panel (draw at the centerline of the panel):



### **Corridors (RM)**

Plines representing corridors will be drawn to the inside face of all walls. Where corridors about each other, the pline boundaries will about each other:



Corridors around workstations cannot contain the area of the workstations, and are therefore drawn around the workstations:



# **Void Spaces**

Void spaces are not captured with plines:



# **General Drafting Requirements / Recommendations**

#### Background Drawing

- o All objects are to be 2D for AutoCAD
- o Make sure that the insbase is set to 0,0.
- o Reduce the number of layers to something that is manageable in the Space Console. Recommendations include (these are TBD by Montclair State University):
  - A-FURN (all furniture)
  - A-EQUIP (all equipment)
  - A-PLUMB (all plumbing)
  - A-SHELL (all walls, doors, windows, etc. basically everything except A-FURN, A-EQUIP & A-PLUMB)
- Archibus Drawing
  - o Set the XREF layers colors to a consistent color (white, gray, etc.)
  - o Set the XREF layers state to on/off/freeze/thaw so that only desired geometry is visible
  - o Set the XREF layers line weight to 'Default.'
  - o Set the system variable VISRETAIN to 1 to instruct AutoCAD to have all xref-dependent layers take on the property set in the Archibus drawing (outlined above)
  - o Make sure that the insbase is set to 0,0 to ensure that geometry does not appear to be shifted in the Space Console
  - o Plines should have Z coordinates of 0 for all vertices.
  - o Plines should not overlap.
  - o Osnap should be used to ensure that plines are drafted to correct geometry locations.
  - o All Archibus room numbers are 4 digits with the 1<sup>st</sup> digit being the floor number

# **Overall Goal**

The sum of the areas of the RM\$ plines should equal the area of the internal GROS\$ plines minus the area not captured with RM\$ plines (void areas and interior walls).